Public Works Traffic Analysis Comments

Date: 7-2-2024

Subject: Doral International Towers Traffic Impact Analysis

Permit: LAND-2205-0003

Date Submitted: 6-21-2024

4th Review

Results of the Review:

[X] **Recommends Conditional Approval**

The Doral Public Works Department has completed its review of the Traffic Impact Analysis submittal prepared by BCC Engineering for the proposed Doral International Towers. At this time, the applicant is proposing a redevelopment of the existing 55.8-Acre parcel that is currently occupied by a 650-room hotel, 85,391 square foot ballroom, a spa and clubhouse that compromises a total of 216,931 square feet located on the northwest corner of the NW 36 Street Extension/Doral Boulevard and NW 87th Avenue/Galloway Road intersection in the City of Doral. The project is proposing a 470-room hotel, 1,498 apartment units and 578,978 square-foot for non-residential use that would include the spa, clubhouse, ballroom, residential amenities, and retail space (141,649 Sq. Ft). The Public Works Department recommends approval with the following condition that will be assessed at the time of building permit as described below.

- Prior to the issuance of 50% Certificate of Occupancy (C.O) the City holds the right to request an operational analysis at the intersection of NW 87 Ave and NW 41 St to assess driveway operations in the event that additional intersection mitigation may be required. The City will then hold the right to request the construction of required improvements by the applicant.

Advisory comments below are necessary during site plan review process and implementation of the project:

- Applicant agreed that modifications to left-turn phasing will require coordination with Miami-Dade County. During Building permit process, the PW department will request an update on the coordination with Miami-Dade County on any signal timing changes that may need to be implemented to ensure traffic growth is mitigated as stated in this traffic analysis.
- Any changes to the approved site plan under this permit will require an updated traffic study to be submitted.
- Approval is subject to review from City of Doral Public Works Department - Plans Review.
- Compliance with the applicable sections of the City's Land Development Code Chapter 77.
- Implementation of the proposed project dealing with roadway construction work, installation of signage, pavement markings and other needed items shall conform to all applicable requirements, standards and regulations of the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), City of Doral, Miami-Dade County Department of Transportation and Public Works, and Miami-Dade Fire Rescue Department.

Memorandum

Date: Thursday, December 21, 2023

Subject: DR 2022006813
Applicant Name: Doral International Towers

PROJECT DESCRIPTION

The proposed redevelopment will include a 470-room hotel, 1,739 apartment units, and 409,754 square-feet for non-residential use that would include the spa, clubhouse, ballroom, and retail space. Trip generation calculations indicate that the proposed development will generate 577 net new trips during the weekday AM peak hour and 593 net new trips during the weekday PM peak hour. The project is expected to be completed by the year 2027. Access to the development will be via seven driveways connecting to NW 87th Avenue and Doral Boulevard as detailed below:

- Driveway 1. Right-in only inbound and right-out only outbound driveway pair on NW 87th Avenue providing access to Building 1.
- Driveway 2. Right-in only inbound and right-out only outbound driveway pair on NW 87th Avenue providing access to Building 2.
- Driveway 3. Full access signalized driveway on NW 87th Avenue providing access to Building 3, Hotel, Ballroom and Clubhouse.
- Rideshare Drop-Off Loop. Right-in only inbound on Doral Boulevard and right-out only outbound driveway pair on NW 87th Avenue providing rideshare vehicles access to Building 3, and adjacent buildings.
- Driveway 4. Full access signalized driveway on Doral Boulevard providing access to Building 3, Building 4, Building 5, Ballroom, spa, and Clubhouse.
- Driveway 5. Right-in only inbound and right-out only outbound driveway pair on Doral Boulevard providing access to Building 4.
- Driveway 6. Right-in/right-out only driveway on Doral Boulevard providing access to Building 6 and the spa. While this driveway currently aligns with an existing full median opening, the development proposes a right-in/right-out only restricted access for the site at this location.

PROJECT LOCATION

The proposed redevelopment is located on a parcel of land within the Trump National Resort Doral located on the northwest corner of the intersection of NW 36th Street Extension/Doral Boulevard and NW 87th Avenue/Galloway Road in the City of Doral.

COMMENTS/RECOMMENDATION

Miami-Dade County Department of Transportation and Public Works (DTPW) Traffic Engineering Division has reviewed the subject application and has no objections to this application, subject to the following conditions:

1. Construct an exclusive right-turn deceleration lanes at Driveway 1, 2, 3, 4 and 5 as well as at the westbound entrance to the rideshare drop off loop on Doral Boulevard.
2. Construct an exclusive southbound right-turn lane at the intersection of Doral Boulevard/NW 36th Street and NW 87th Avenue.
3. Construct an exclusive northbound left-turn/U-turn Lane at the median opening on NW 87th Avenue and Windsor Doral apartments.
4. Install high emphasis cross walks at the intersection of Doral Boulevard/NW 36th Street and NW 87th Avenue and at the intersection of NW 87th Avenue with NW 41st Street.
5. Install a channelized island on Doral Boulevard to physically restrict left-turns at the western most project Driveway (Driveway 6) which also aligns with the driveway to the AT&T field office on the southside.
6. Install bus shelters at existing transit stops on westbound Doral Boulevard 480 feet west of NW 87th Avenue and on southbound NW 87th Avenue 200 feet north of NW 41st Street.
7. Extend the eastbound left-turn lane at the intersection of Doral Boulevard/NW 36th Street and NW 87th Avenue. This improvement would require closing the existing directional median opening 350 feet west of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage.
8. Extend the northbound left-turn lane at the intersection of NW 87th Avenue and NW 41st Street (Driveway 3). This improvement would require closing the existing directional median opening 300 feet south of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage.
9. The Highway Division has provided its approval for the typical sections. Please ensure that the conditions outlined by the Highway Division are met as follows:
   - The typical sections along NW 36th Street are acceptable. The through lanes are to be 11 feet wide and the asphalt shall be comprised of two inches of structural course and one inch of friction course.
   - The typical sections along NW 87th Avenue are acceptable except that the proposed U-turn at approximately sta. 55 will not work unless you widen the southbound pavement (extend the southbound right-turn lane). The through lanes are to be 11 feet wide and the asphalt shall be comprised of two inches of structural course and one inch of friction course.
10. Please ensure that all trees within the sight triangles must comply with the FDOT standards outlined in the "Tree Spacing Table" provided below.

considered.

TREE SPACING TABLE **

Description	Design Speed (mph)													
	30		35		40		45		50		55		60	
Diameter (Within Limits Of Sight Window)	(Inches)													
	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18
	(Feet)													
Minimum Spacing (c. to c. Of Trunk)	25	90	30	105	35	120	40	135	50	150	55	165	60	180

If you have any questions concerning the comments, or wish to discuss this matter further, please contact Leanne Garcia Fernandez at (305) 439-6491.

DORAL INTERNATIONAL TOWERS
CITY OF DORAL, FLORIDA

TRAFFIC IMPACT ANALYSIS





PREPARED BY:

bcc engineering

6401 SW 87 AVENUE, SUITE 200
MIAMI, FL 33713

JUNE 2024

TRAFFIC IMPACT ANALYSIS



Doral International Towers
City of Doral, FL

Prepared by:

BCC Engineering, LLC
6401 SW 87th Avenue, Suite 200
Miami, FL 33173

June 2024

Engineer's Certification

I Lorin R.C. Brissett, P.E. # 56846, certify that I currently hold an active Professional Engineer's License in the State of Florida and am qualified through education or experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions and recommendations made herein are true and correct to the best of my knowledge and ability.

Project Description:

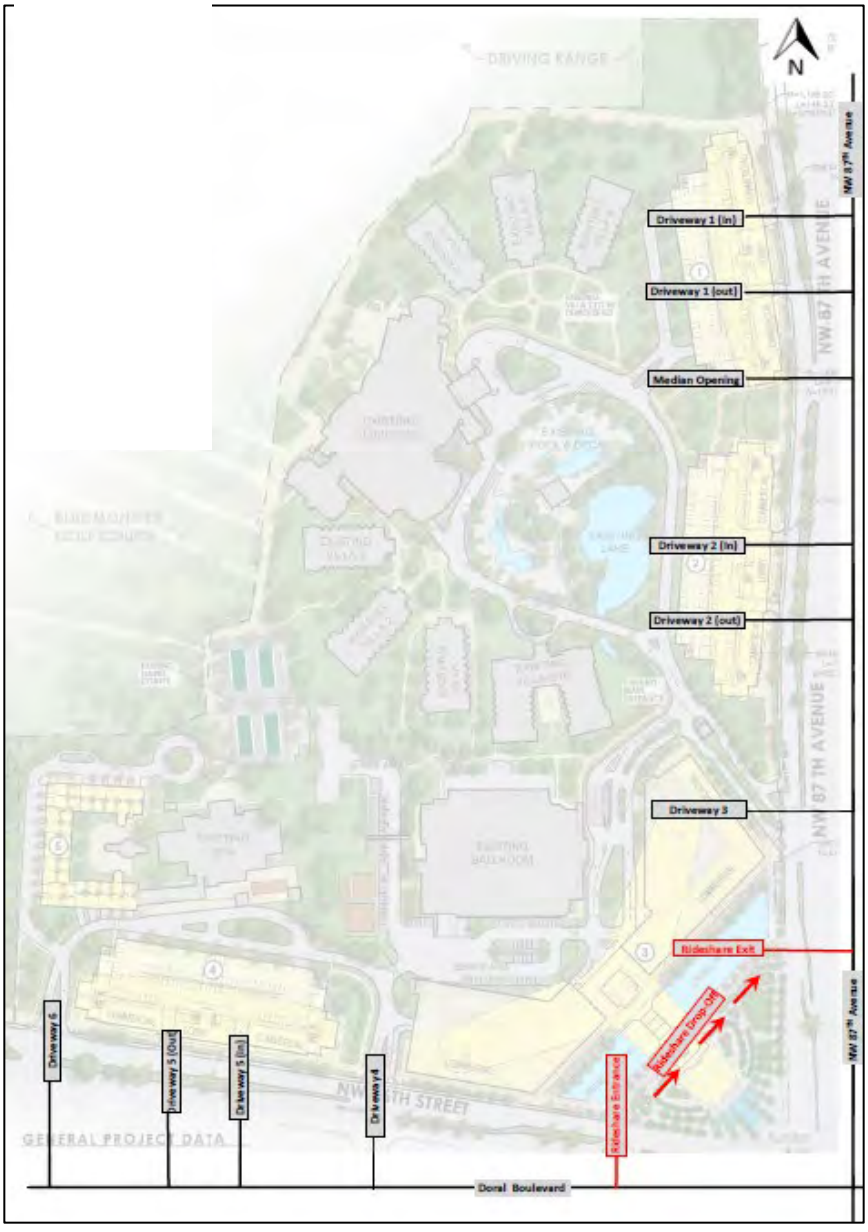
Doral International Towers (formerly known as TNR Doral)
Traffic Impact Analysis for Site Development

Lorin R.C. Brissett, P.E.
Florida Registration P.E. No. 56846
BCC Engineering, Inc.
4901 NW 17th Way | Suite 506
Fort Lauderdale, Florida 33309
CA No.7184

EXECUTIVE SUMMARY

BCC Engineering, LLC was retained by Trump Endeavor 12, LLC to prepare a traffic impact study as part of the site plan review for the proposed redevelopment for the parcel of land within Trump National Resort Doral located on the northwest corner of the intersection of NW 36th Street Extension/Doral Boulevard and NW 87th Avenue/Galloway Road as shown. The 56.4-acre parcel is currently occupied by a 643-room hotel, 85,391 square foot ballroom, a spa and clubhouse that comprise a total of 216,931 square feet. Existing ballroom, spa and clubhouses are expected to remain. The hotel will also remain, but the number of rooms will be reduced from the existing 643 rooms to 470 rooms.

The proposed redevelopment will include a 470-room hotel, 1,498 apartment units, and 671,350 square-feet for non-residential use that would include the spa, clubhouse, ballroom, and retail space. Project build-out is planned for the end of 2027. Trip generation calculations indicate that the proposed development will generate 572 net new trips during the weekday A.M. peak hour and 572 net new trips during the weekday P.M. peak hour.



This traffic impact study demonstrates that the roadway segments significantly impacted by the proposed development of Doral International Towers are projected to operate within the LOS 'D' threshold without and with the inclusion of project traffic in 2027. However, the following multimodal improvements are proposed to enhance the operations adjacent to the site:

- Right Turn Deceleration lanes at Driveway Nos. 1, 2, 3, 4 & 5 as well as at the westbound entrance to the rideshare drop off loop on Doral Boulevard.
- Construct an exclusive southbound right turn lane at the intersection of Doral Boulevard/NW 36th

Street with NW 87th Avenue.

- Construct an exclusive northbound left-turn/U-turn Lane at the median opening on NW 87th Avenue and Windsor Doral apartments.
- Install high emphasis cross walks at the intersection of Doral Blvd/NW 36th Street with NW 87th Avenue and at the intersection of NW 87th Avenue with NW 41st Street (Driveway 3).
- Install bus shelters (per Resolution No. 19-193 for the approval of bus shelter concepts) at existing transit stops on westbound Doral Boulevard 480 feet west of NW 87th Avenue and on southbound NW 87th Avenue 200 feet north of NW 41st Street.
- Channelize western most project Driveway (#6) on Doral Boulevard to physically restrict entering and exiting left-turns. This driveway aligns with the AT&T field office on the southside (see right insert). This modification will create right-in/right out operations for the project site at Driveway #6 but will not restrict the movements currently allowed for AT&T.
- The Signal timing optimization is recommended for all the signalized intersections in the study area.
- The figure below shows the proposed turn lane improvements at the intersections.

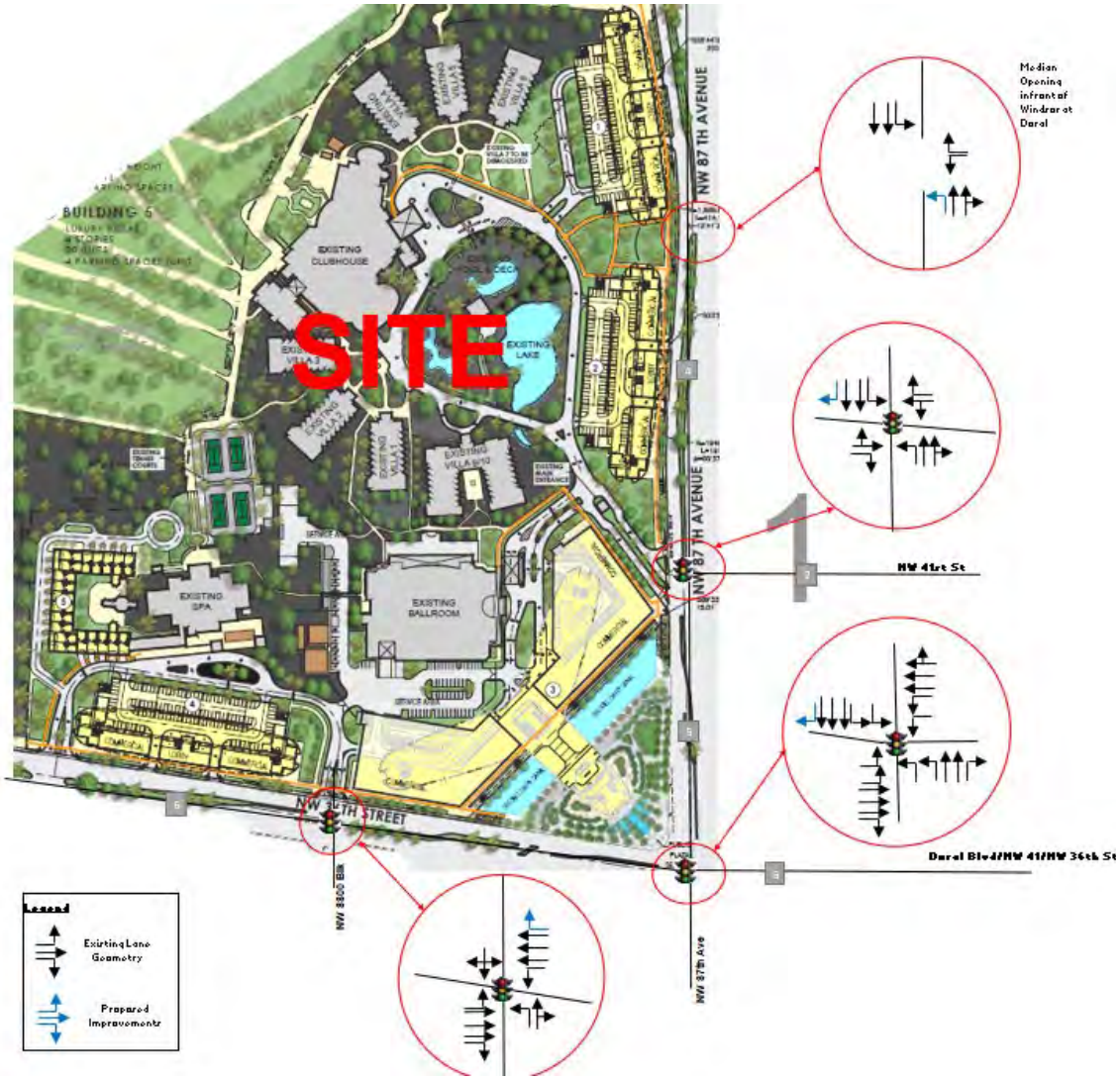


Illustration of Proposed Turn Lane Improvements at Adjacent Intersections

- Additional improvements associated with potential median closures to achieve further improved operations beyond the signal timing optimization and the aforementioned lane additions were also evaluated. These additional improvements are explained below:
    - Extend the eastbound left turn lane at the intersection of Doral Boulevard/NW 36th Street with NW 87th Avenue. This improvement would require closing the existing directional median opening 350 feet west of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage (see diagram below).
    - Extend the northbound left turn lane at the intersection of NW 87th Avenue with NW 41st Street (Driveway 3). This improvement would require closing the existing directional median opening 300 feet south of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage (see diagram below).
    - These median closures would require coordination with affected stakeholders and agency approval.
    - These median closure scenarios are only being considered to accommodate the vehicular queueing demands at the following locations:
        - Eastbound left-turn movement on Doral Boulevard approaching NW 87th Avenue where excessive peak hour queues exist today and,
        - Northbound left-turn movement on NW 87th Avenue at NW 41st Street the main project driveway (#3) to provide additional storage due to increased project traffic at this location. No excessive queueing demand exists today.

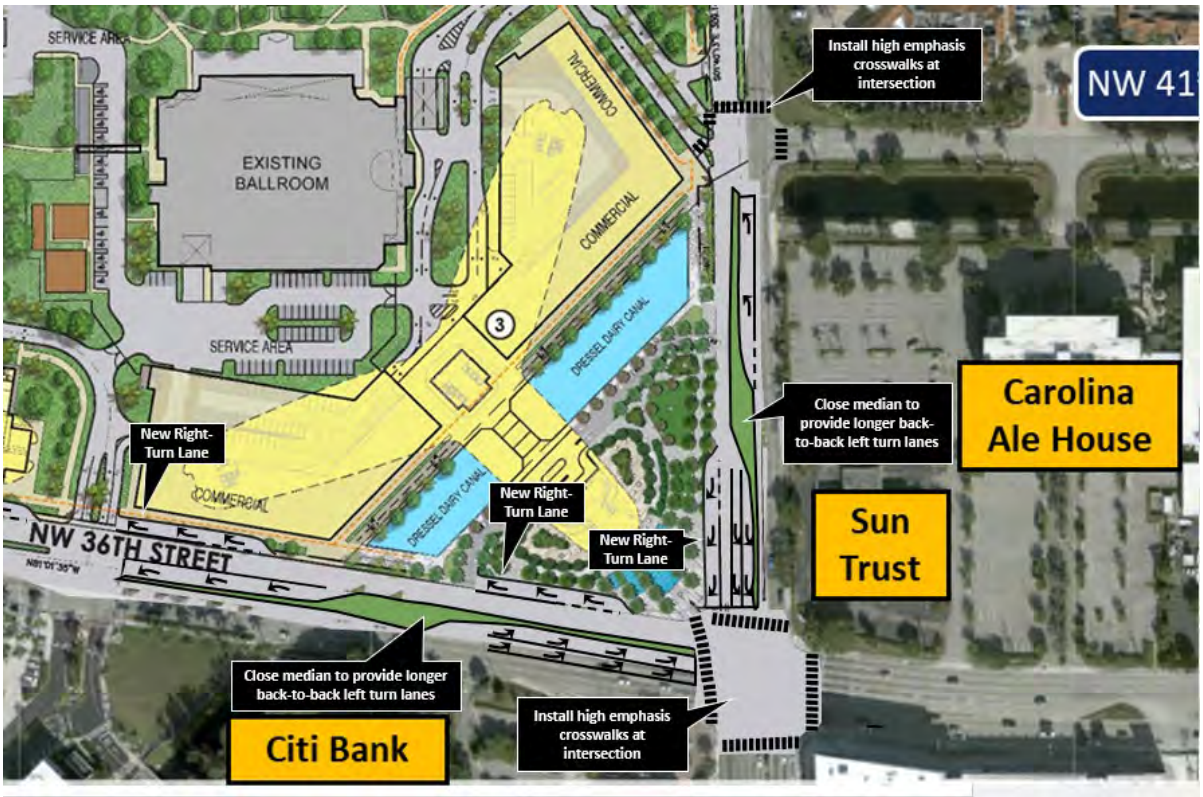


Illustration of Proposed Improvements Adjacent to the Site

During its initial traffic study methodology review and subsequent rounds of traffic study review including the last round of comments issued on June 16, 2023 as well as in various comment resolution meetings, the City of Doral has consistently reiterated, traffic study approval is

required from Miami-Dade County prior to ultimate approval from the City itself for the Doral International Towers project. To ensure the City's directive that the project obtain County approval of the traffic study and improvements impacting County roads prior to City approval, extensive coordination including multiple comment resolution meetings as well as a couple follow up submittals to the County by the project, were made.

This project coordination with the County has led to them issuing a "No Objection Memorandum" regarding the Doral International Towers Application #2022006813. **Appendix J** includes the approval letter and comments from the County.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
1.0 INTRODUCTION 1

2.0 STUDY AREA 3
2.1 Roadway Segments 3
2.2 Study Intersections 3

3.0 INVENTORY AND PLANNING DATA 5
3.1 Existing Traffic Count Data 5
3.2 Historical Traffic Count Data 6
3.3 Committed Developments 6
3.4 Programmed Roadway Improvements 6
3.5 Traffic Signal Timing Data 7
3.6 Site Planning Data 7

4.0 EXISTING CONDITIONS TRAFFIC ANALYSIS 8

5.0 PROJECT TRAFFIC 11
5.1 Trip Generation 11
5.2 Traffic Distribution 13
5.3 Traffic Assignment 13

6.0 FUTURE TRAFFIC 17

7.0 FUTURE BUILDOUT INTERSECTION ANALYSIS 21

8.0 ROADWAY SEGMENT ANALYSIS 31

9.0 DRIVEWAY ANALYSIS 33

10.0 BICYCLE, PEDESTRIAN, AND TRANSIT EXISTING CONNECTIVITY 37

11.0 MIAMI-DADE COUNTY TRAFFIC STUDY APPROVAL 38

12.0 PROPOSED IMPROVEMENTS & CONCLUSION 39

APPENDIX A: Methodology & Criteria ..... A
APPENDIX B: Data Analyzed ..... B
APPENDIX C: Historical Data and Growth Calculations C
APPENDIX D: Committed Developments ..... D
APPENDIX E: Signal Timing ..... E
APPENDIX F: Intersection Analysis Tables ..... F
APPENDIX G: Synchro Sheets ..... G
APPENDIX H: Driveway Analysis Ordinance and Queueing Analysis for Driveway#3 and Rideshare ..... H
APPENDIX I: Bicycle and Transit Amenities I
APPENDIX J: County Approval Documentation ..... J

LIST OF EXHIBITS

Exhibit 1-1: Project Location Map 2
Exhibit 2-1: Existing Lane Geometry 4
Exhibit 5-1: Roadway Segment Traffic Assignment Map 14
Exhibit 5-2: Driveway & Adjacent Intersections Traffic Assignment 15
Exhibit 5-3: Driveway & Adjacent Intersections Project Traffic Assignment 16
Exhibit 6-1: Background Traffic Volumes Without Project Trips 18
Exhibit 6-2: Total Traffic Volumes with Project Trips 19
Exhibit 6-3: Total Traffic Volumes with Project Trips with median closures 20
Exhibit 9-1: Driveway Volumes 34
Exhibit 12-1: Proposed Lane Geometry for Project Build Conditions (without Median Closures) 40
Exhibit 12-2: Proposed Lane Geometry at Median Closures 41

LIST OF TABLES

Table 4-1: Existing Traffic Operations 8
Table 5-1: Trip Generation Analysis 12
Table 7-1: Level of Service Analyses - Study Intersections (2027 Future with Project Traffic No-Build Conditions vs 2027 Background) 25
Table 7-2: Level of Service Analyses - Study Intersections (2027 Future Improvements with median closures vs 2027 Background) 26
Table 7-3: Level of Service Analyses - Study Intersections (2027 Future Improvements without median closures vs 2027 Background) 27
Table 7-4: 95th Percentile Queue Lengths 29
Table 8-1: 2027 Roadway Segment Analysis 32

1.0 INTRODUCTION

BCC Engineering, LLC was retained by Trump Endeavor 12, LLC to prepare a traffic impact study as part of the site plan review for the proposed redevelopment for the parcel of land within Trump National Resort Doral located on the northwest corner of the intersection of NW 36th Street Extension/Doral Boulevard and NW 87th Avenue/Galloway Road as shown in **Exhibit 1-1**. The 56.4-acre parcel is currently occupied by a 643-room hotel, 85,391 square foot ballroom, a spa and clubhouse that comprise a total of 216,931 square feet. Existing ballroom, spa and clubhouses are expected to remain. The hotel will also remain, but the number of rooms will be reduced from the existing 643 rooms to 470 rooms.

The proposed redevelopment will include a 470-room hotel, 1,498 apartment units, and 671,350 square-feet of non-residential use that would include the spa, clubhouse, ballroom and retail space. This traffic study was prepared based on a methodology that was developed consistent with the *Doral Traffic Impact Analysis Methodology Guidelines - 5-11-2006* and accepted by the city of Doral and Miami-Dade County Department of Transportation and Public Works (See **Appendix 'A'**). Additionally, the review comments issued by the City as well as the Miami-Dade County Department of Transportation and Public Works Department and the responses to those comments are also included in **Appendix A**.

Based on the anticipated trip generation from the project site, a Level 3 Traffic Study was performed. A 5-year project build out timeframe (year 2027) is anticipated.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

Exhibit 1-1: Project Location Map



2.0 STUDY AREA

Several roadway segments and intersections comprise the study area established as part of the traffic study methodology for the Doral International Towers project.

2.1 Roadway Segments

Study roadway segments include:

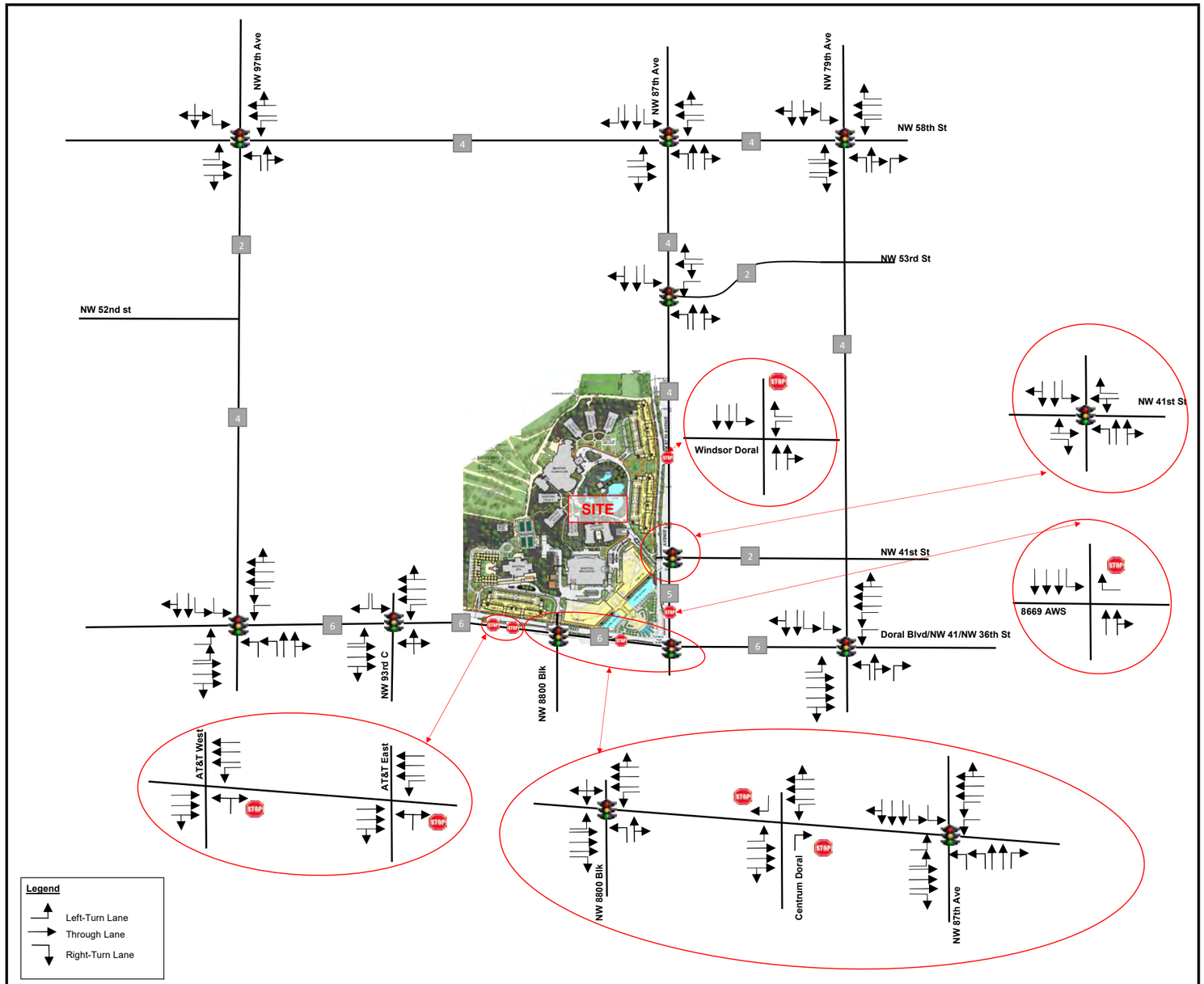
- NW 58th Street
  - Between NW 97th Avenue and NW 87th Avenue,
  - Between NW 87th Avenue and NW 79th Avenue.
- NW 53rd Street between NW 87th Avenue and NW 79th Avenue,
- Doral Blvd/NW 41st/NW 36th Street
  - Between NW 97th Avenue and NW 87th Avenue,
  - Between NW 87th Avenue and NW 79th Avenue.
- NW 97th Avenue
  - Between Doral Blvd/NW 41st/NW 36th Street and NW 52nd Street,
  - Between NW 52nd Street and NW 58th Street.
- NW 87th Avenue
  - Between Doral Blvd/NW 41st/NW 36th Street and NW 33rd Street,
  - Between Doral Blvd/NW 41st/NW 36th Street and NW 53rd Street ,
  - Between NW 53rd Street and NW 58th Street.
- NW 79th Avenue between Doral Blvd/NW 41st/NW 36th Street and NW 58th Street.

2.2 Study Intersections

For the Doral International Towers project, ten (10) study intersections were identified for the proposed development. These intersections include:

- NW 87th Avenue and Doral Blvd/NW 41st/NW 36th Street,
- NW 87th Avenue and NW 41st Street,
- NW 87th Avenue and NW 53rd Street,
- NW 87th Avenue and NW 58th Street,
- Doral Blvd/NW 41st/NW 36th Street and NW 8800 Block,
- Doral Blvd/NW 41st/NW 36th Street and NW 93rd Court,
- Doral Blvd/NW 41st/NW 36th Street and NW 97th Avenue,
- NW 97th Avenue and NW 58th Street,
- NW 58th Street and NW 79th Avenue,
- NW 36th Street and NW 79th Avenue.

Exhibit 2-1 on the next page shows the existing lane geometry of the study intersections identified for the analysis. The number of lanes on the street system surrounding the proposed development is also depicted in the Exhibit.



Project Name: **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **Existing Lane Geometry**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 2-1 *Page no:* 4 *Date:* 8/30/23

3.0 INVENTORY AND PLANNING DATA

The data used in this analysis included:

- Existing Traffic Count Data
  - Seventy-two (72)-hour traffic volumes,
  - Intersection turning movement counts for AM and PM Peak Hours.
- Roadway geometrics,
- Historical count data,
- Committed Development Traffic,
- Programmed Roadway Improvements,
- Traffic Signal Timing Data for Signalized Intersections obtained from Miami-Dade County Traffic Division,
- Site Planning Data.

Following is a more in-depth discussion of some of the data elements:

3.1 Existing Traffic Count Data

BCC Engineering, LLC. in association with Caltran Engineering Group, Inc. collected traffic counts during typical weekdays on several roadway segments and intersections within the study area.

Seventy-two (72) hours of continuous roadway segment counts were collected for the ten study roadway segments on May 3, 4, and 5, 2022.

Intersection turning movement counts were also collected on May 3, 2022; during two-hour peak periods (7:00 A.M. – 9:00 A.M. and 4:00 P.M. – 6:00 P.M.) at the ten study intersections.

Additionally, turning movement counts were collected on October 27, 2022; during two-hour peak periods (7:00 A.M. – 9:00 A.M. and 4:00 P.M. – 6:00 P.M.) at six locations with median openings, listed below:

- NW 87th Avenue at Windsor at Doral
- NW 87th Avenue at 8669 American Welding Society Headquarters Plaza (250 ft north of Doral Boulevard)
- Doral Blvd/NW 41st/NW 36th Street at 8750 Centrum Doral
- Doral Blvd/NW 41st/NW 36th Street at AT&T Facility – East Driveway
- Doral Blvd/NW 41st/NW 36th Street at AT&T Facility – West Driveway

Appendix B contains all the counts that were collected.

3.2 Historical Traffic Count Data

Historical traffic data were obtained from portable count stations (maintained by the Florida Department of Transportation - FDOT) on area roadways. These data were used to determine the prevailing growth trends in the study area to estimate the future background traffic demand at Project Build out. Historical traffic data from the count stations identified are included in **Appendix C**.

An areawide growth trend analysis was performed using the FDOT Traffic Trend Analysis Tool with inputs comprising aggregated historical traffic volumes from the FDOT portable count stations. The analysis resulted in a negative growth rate, Based on this analysis, a nominal growth rate of 0.5 percent (0.5%) was selected for use in calculating future background traffic at project build-out. Growth rate calculations are also included in **Appendix C**.

3.3 Committed Developments

Committed development trips (from other developments with comparable build-out time frames to the Doral International Towers) were compiled from traffic analysis studies provided by the City of Doral for known developments near the project area. These developments have entered the concurrency application process, yet have not been constructed, within the study area. They included Doral Central Park, Downtown Doral Hi-Rise, NW 87th Doral Retail Development, The Shoppes at 97th Ave, Skilled Nursing Facility, and Downtown Doral Living Facility.

Of the seven (7) committed developments, all but the Skilled Nursing Facility noted overlapping roadway study segments with Doral International Towers, that were included in the 2027 background traffic. The NW 87th Doral Retail Development and The Shoppes at 97th Ave were the only two developments that included overlapping study intersections with Doral International Towers. **Appendix D** contains excerpts from the traffic studies that were used to compile the committed development information analyzed in this traffic study.

3.4 Programmed Roadway Improvements

A review of the City of Doral Capital Improvement Project list, Florida Department of Transportation 5-year Work Program and the Miami-Dade TPO's Transportation Improvement Program was conducted to identify pertinent planned or programmed roadway improvements necessary to consider in this traffic study. This review yielded the following:

- NW 97th Avenue widening project from 2 to 4 lanes from NW 52nd Street to NW 70th Street that includes the segment from NW 52nd Street to 58th Street which is scheduled to start construction by 2026 based on its Priority 2 designation in the Miami Dade TPO's 2045 Long Range Transportation Plan,
- NW 58th Street reconstruction from NW 97th Avenue to SR 826 project is currently under design,

Based on the proposed improvements, the roadway segment of NW 97th Avenue between NW 52nd Street and NW 58th Street was analyzed as a four-lane roadway in the build-out analysis.

3.5 Traffic Signal Timing Data

Existing Signal Timing Plan Data for analyzed signalized intersections were obtained from the Miami-Dade Traffic Signs & Signals Division database and are included in **Appendix E**. These signals are semi-actuated and coordinated. The Traffic Signal Timing Plans in effect during the AM and PM Peak hours were obtained from the data gathered and were used as a starting point for the analyses of future build out conditions.

3.6 Site Planning Data

Site development information was provided from Pascual, Perez, Kiliddjian, Starr Architects & Planners. The 56.4-acre parcel is currently occupied by a 643-room hotel, 85,391 square foot ballroom, a spa and clubhouse that comprise a total of 216,931 square feet. Existing ballroom, spa and clubhouses are expected to remain. The hotel will also remain, but the number of rooms will be reduced from the existing 643 rooms to 470 rooms.

The proposed redevelopment will include a 470-room hotel, 1,498 apartment units, and 671,350 square-feet for non-residential use that would include the spa, clubhouse, ballroom, and retail space.

The project site will be served by seven (7) driveways including a rideshare drop-off in front of the main Building 3. A copy of the site plan is included in **Appendix A** (as Attachment 'B' to the approved methodology.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

4.0 EXISTING CONDITIONS TRAFFIC ANALYSIS

The existing year (2022) traffic analysis was performed at the study intersections for the critical AM and PM peak periods. This analysis was conducted using the SYNCHRO version 10 software which is based on the latest edition of the Highway Capacity Manual published by the National Transportation Research Board (TRB) and accepted by the State of Florida.

The traffic analysis was performed, and the intersection and approach delays and levels of service were summarized as measures of effectiveness for existing intersection operations. The results are summarized in **Table 4-1.**

Table 4-1: Existing Traffic Operations

		2022 Existing Conditions - Intersection Operations									
					Approach						
			Overall		Eastbound		Westbound		Northbound		Southbound	
Corridor	Intersection	Peak Period	Delay (s/veh	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
NW 87TH AVENUE	at DORAL BLVD	AM	83.3	F	69.2	E	56.5	E	100.7	F	139.2	F
		PM	76.4	E	56.6	E	52.1	D	81.1	F	130.2	F
	at 8669 AWS (Unsignalized)	AM	0.1	-	-	-	9.5	A	-	-	0	A*
		PM	0.1	-	-	-	9.7	A	-	-	10.8	B*
	at NW 41ST STREET	AM	37.1	D	85.8	F	102.3	F	42.1	D	10.5	B
		PM	29.6	C	90.0	F	127.6	F	11.6	B	13.6	B
	at Windsor at Doral (Unsignalized)	AM	3.2	-	-	-	73.6	F	-	-	10.4	B*
		PM	1.6	-	-	-	57.8	F	-	-	10.8	B*
	at NW 53RD STREET	AM	19.8	B	36.9	D	34.0	C	18.6	B	17.5	B
		PM	23.5	C	37.2	D	33	C	24.3	C	18.6	B
	at NW 58TH STREET	AM	57.8	E	43.8	D	31.5	C	88.7	F	72.9	E
		PM	55.8	E	41.6	D	47.5	D	62.8	E	69.2	E
DORAL BLVD	at Centrum Doral (Unsignalized)	AM	0.3	-	11.7	B*	19.5	C*	9.5	A	9.4	A
		PM	0.4	-	12	B*	14	B*	10.4	B	9.8	A
	at 8800 BLOCK	AM	17.5	B	18.9	B	11.2	B	64.4	E	64.3	E
		PM	15.7	B	8.8	A	13	B	75.6	E	78.3	E
	at AT&T East Driveway (Unsignalized)	AM	0.1	-	-	-	21.5	C*	17.1	C	-	-
		PM	0.1	-	-	-	13.3	B*	12.1	B	-	-
	at AT&T West Driveway (Unsignalized)	AM	0.1	-	-	-	19.7	C	11.1	B	-	-
		PM	0.1	-	-	-	12.2	B	45.7	E	-	-
	at NW 93RD COURT	AM	19	B	13.6	B	18.1	B	85.5	F	88	F
		PM	11.3	B	8	A	8.9	A	57.1	E	32.7	C
	at NW 97TH AVENUE	AM	60.7	E	51.8	D	53.1	D	83.3	F	75.2	E
		PM	62.5	E	50.6	D	63.2	E	71.2	E	67.2	E
NW 97TH AVENUE AND NW 58TH STREET		AM	78.8	E	59.5	E	40.4	D	145.8	F	134.6	F
		PM	106.1	F	50.8	D	146.2	F	92.1	F	92.7	F
NW 58TH STREET AND NW 79TH AVENUE		AM	75.6	E	47.1	D	36.1	D	220.8	F	102	F
		PM	115.2	F	54.8	D	43.8	D	285.9	F	71.1	E
NW 36TH STREET AND NW 79TH AVENUE		AM	49.6	D	47.9	D	36.5	D	92	F	75.4	E
		PM	65.1	E	32.6	C	43.7	D	232.7	F	80.8	F

** The left turn lane delay and LOS values are shown for these approaches on unsignalized intersections*

As can be seen from the **Table 4-1**:

- NW 87th Avenue at Doral Boulevard: The overall intersection operates at LOS 'F' or fails in the AM peak hour and at LOS 'E' in the PM peak hour. The northbound and southbound approaches are shown to fail, eastbound approach is operating at LOS 'E'.
- NW 87th Avenue at Driveway to American Welding Society (AWS) & Carolina Ale House: Minimal number of southbound left-turns were observed destined to the AWS parking lot (0 in the AM peak hour and 4 in the PM peak hour). The westbound approach operates at LOS 'A' and southbound left-turn approach at LOS 'B' in the PM peak hour.
- NW 87th Avenue at NW 41st Street: The overall intersection operates acceptably at LOS 'D' and 'C' in the AM and PM peak hours respectively. The eastbound and westbound approaches are shown to fail in both the peak hours.
- NW 87th Avenue at Windsor: This is an unsignalized intersection with stop control on the westbound approach (originating from Windsor apartment complex). The westbound approach fails in both the peak hours with heavy delays in AM peak hour.
- NW 87th Avenue at NW 53rd Street: The overall intersection operates acceptably at LOS 'B' and 'C' in the AM and PM peak hours respectively. No delay issues were observed on any approach.
- NW 87th Avenue at NW 58th Street: The overall intersection operates at LOS 'E' in both the AM and PM peak hours. The northbound approach is shown to fail in the AM peak hour and the southbound approach operates at LOS 'E' in both the peak hours.
- Doral Boulevard at Centrum Doral Driveway: This is an unsignalized intersection with directional median opening on Doral Boulevard and right-out only on minor approaches of north and southbound. All the approaches operate at LOS 'C' or better in both the AM and PM peak hours.
- Doral Boulevard at 8800 Block: The overall intersection operates acceptably at LOS 'B' in both the AM and PM peak hours. The northbound and southbound approaches are operating at LOS 'E' in both the peak hours.
- Doral Boulevard at AT&T Driveway (east): This is an unsignalized intersection with full median opening on Doral Boulevard with stop-control on northbound approach. All the approaches operate at LOS 'C' or better in both the AM and PM peak hours.
- Doral Boulevard at AT&T Driveway (west): This is an unsignalized intersection with full median opening on Doral Boulevard with stop-control on northbound approach. All the approaches operate at LOS 'C' or better in both the AM and PM peak hours except for the northbound approach in the PM peak hour which operates at LOS 'E'.
- Doral Boulevard at NW 93rd Court: The overall intersection operates at LOS 'B' in both the AM and PM peak hours. The eastbound and westbound approaches are shown to fail in both the peak hours.
- Doral Boulevard at NW 97th Avenue: The overall intersection operates at LOS 'E' in both the AM and PM peak hours. The northbound approach is projected to fail in the AM peak hour and operates at LOS 'E' in the PM peak hour. Additionally, the southbound approach operates at LOS 'E' in both peak hours.
- NW 97th Avenue at NW 58th Street: The overall intersection operates at LOS 'E' and 'F' in the AM and PM peak hours respectively. The northbound and southbound approaches are operating at LOS 'F' in both the peak hours. Additionally, the westbound approach operates at LOS 'F' in the PM peak hour.
- NW 79th Avenue at NW 58th Street: The overall intersection operates at LOS 'E' and 'F' in the AM and PM peak hours respectively. The northbound and southbound approaches are operating at LOS 'F' in both the peak hours.

- NW 79th Avenue at NW 36th Street: The overall intersection operates at LOS 'D' and 'E' in the AM and PM peak hours respectively. The northbound and southbound approaches are operating at LOS 'F' in both the peak hours.

The synchro sheets for the intersections are included in **Appendix G.**

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

5.0 PROJECT TRAFFIC

5.1 Trip Generation

Trip generation calculations for the proposed development were performed using the Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 11th Edition*. ITE Land Use Code 330 is assumed for the hotel component, 310 for the ballroom, 495 for the spa and clubhouse, 222 for the apartments, and 821 for retail component. The site plan is contained in **Appendix A**.

Internal capture is expected between the complementary land uses within the project. Internal capture was determined based upon the methodology contained in the *NCHRP Report 8-51*, which is a part of ITE's *Trip Generation Manual 11th Edition*. The A.M. and P.M. peak internal capture rate for in and out trips for each applicable land use was utilized as shown in **Table 5-1**. The updated internal capture spreadsheets are included in **Appendix A.**

Pass-by capture volumes were calculated for site using rates outlined in the ITE's Trip Generation Manual, 11th Edition. The average pass-by capture rate of 40 percent (40%) was calculated for retail. However, the actual pass-by capture used was capped at 10% of adjacent street traffic.

The trip generation calculations indicate that the proposed development will generate 572 new trips during the weekday A.M. peak hour and 572 new trips during the weekday P.M. peak hour.

Table 5-1 on the next page**,** summarizes the trip generation comparison of the proposed future land use development compared with the current land use designation. As shown in **Table 5-1**, this project is expected to result in a net increase in generated trips.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

Doral International Towers

Table 5-1 Trip Generation Analysis

	Land Use	ITE Code	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Existing Uses	**Hotel***	330	643 Rooms	4,289	206	148	58	279	120	159
	Ballroom**	310	85 Employee	1,219	60	36	25	79	43	36
	Spa and Clubhouse	495	216,931 Sq. Ft.	6,252	414	273	141	542	255	287
			Gross Generated Trips	**11,760**	**680**	**457**	**223**	**900**	**418**	**483**

	Land Use	ITE Code	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Future Uses	**Residential (high-rise)**	222	1,498 Dwelling Units	6,010	404	105	299	479	297	182
	Hotel*	330	470 Rooms	3,088	150	108	42	189	81	108
	Ballroom**	310	85 Employee	1,219	60	36	25	79	43	36
	Spa and Clubhouse	495	216,931 Sq. Ft.	6,252	414	273	141	542	255	287
	Retail	821	141,694 Sq. Ft.	9,567	245	152	93	735	360	375
			Gross Generated Trips	**26,135**	**1,275**	**674**	**600**	**2,025**	**1,036**	**989**
			Less, Overall Internal Capture	**562**	**22**	**11**	**11**	**321**	**160**	**161**
			Residential Trips	**181**	**5**	**2**	**3**	**140**	**98**	**42**
			%	3.01%		2.00%	1.00%		33.00%	23.00%
			Hotel Trips	**93**	**6**	**-**	**6**	**25**	**19**	**6**
			%	3.01%		0.00%	14.00%		23.00%	6.00%
			Retail Trips	**288**	**11**	**9**	**2**	**156**	**43**	**113**
			%	3.01%		6.00%	2.00%		12.00%	30.00%
			Less, Pass-By (LUC 821 - Retail = 40%)* **	3,712	-	-	-	232	114	118
			Net New Trips	**21,861**	**1,253**	**663**	**589**	**1,472**	**763**	**710**

Δ Trips (Future less Existing)				**10,101**	**572**	**206**	**366**	**572**	**345**	**227**

Notes: Trip generation was calculated using the following data:

Daily Traffic Generation

Resort Hotel	[ITE 330]	=	LUC 330 does not have a daily trip equation/rate. Hence the daily trips from LUC 310 was used using proportionate values by comparing AM/PM trips.
Ballroom*	[ITE 310]	=	T = 14.34 trips per 1000 s.f./1 employee
Spa and Clubhouse	[ITE 495]	=	T = 28.82 trips per 1000 s.f.
High-Rise Residential	[ITE 222]	=	T =3.76* (x) +377.04 d.u.
General Office	[ITE 710]	=	Ln(T) = 0.87 * Ln(X) + 3.05
General Retail (40 - 150k)	[ITE 821]	=	T = 67.52 trips per 1000 s.f.

AM Peak Hour Traffic Generation

Resort Hotel	[ITE 330]	=	T = 0.32 trips/room; (72% in, 28% out)
Ballroom*	[ITE 310]	=	T = 0.71 trips/1000 SF or 1 employee; (59% in, 41% out)
Spa and Clubhouse	[ITE 495]	=	T = 1.91 trips/1000 SF; (66% in, 34% out)
High-Rise Residential	[ITE 222]	=	T = 0.27 trips/dwelling unit; (26% in, 74% out)
General Office	[ITE 710]	=	Ln(T) = 0.86 * Ln(X) + 1.16; (88% in, 12% out)
General Retail (40 - 150k)	[ITE 821]	=	T = 1.73 trips/1000 SF; (62% in, 38% out)

PM Peak Hour Traffic Generation

Resort Hotel	[ITE 330]	=	T = 0.52 * (X) - 55.42; (43% in, 57% out)
Ballroom*	[ITE 310]	=	T = 0.93 trips/1,000 sf or 1 employee (54% in, 46% out)
Spa and Clubhouse	[ITE 495]	=	T = 2.5 trips/1,000 sf (47% in, 53% out)
High-Rise Residential	[ITE 222]	=	T = 0.32 trips/1,000 sf (62% in, 38% out)
General Office	[ITE 710]	=	Ln(T) = 0.83 * Ln(X) + 1.29; (17% in, 83% out)
General Retail (40 - 150k)	[ITE 821]	=	T = 5.19 trips/1,000 sf (49% in, 51% out)

**Total Daily Trips per LUC 310 for 643 Room hotel are 6.622 trips for a 470 room hotel Daily Trip total are 4.671.*

*** 85,391 square feet of ball room, assumed 1 employee per 1,000 square foot.*

**** The pass-by trips were capped at 10% of adjacent street traffic. Since retail uses are adjacent to both NW 87th Avenue and Doral Boulevard, the average ADT for the year 2022 (from data collection) for these two facilities was used as the level of adjacent street traffic (i.e., average [32,260 $_{NW\ 87th\ Ave}$, 46,790 $_{Doral\ Blvd}$] = 39,525 vehicles per day).*

5.2 Traffic Distribution

Trip distribution was determined using the cardinal distribution from the appropriate Traffic Analysis Zone (TAZ) in the Miami-Dade County's TPO 2045 Directional Trip Distribution report, supporting documentation is contained in **Appendix A**(as an Attachment 'C' to the approved methodology)**.** The appropriate TAZ for this development is 725. The traffic assignment proposed to be used is illustrated in **Exhibit 5-1**. The distribution from the 2045 Cost Feasible Plan table, by cardinal direction for the project site's traffic analysis zone (TAZ 725), is summarized below:

North-Northeast	14.5%
East-Northeast	13.8%
East-Southeast	22.4%
South-Southeast	15.6%
South-Southwest	16.5%
West-Southwest	8.4%
West-Northwest	2.6%
North-Northwest	6.2%

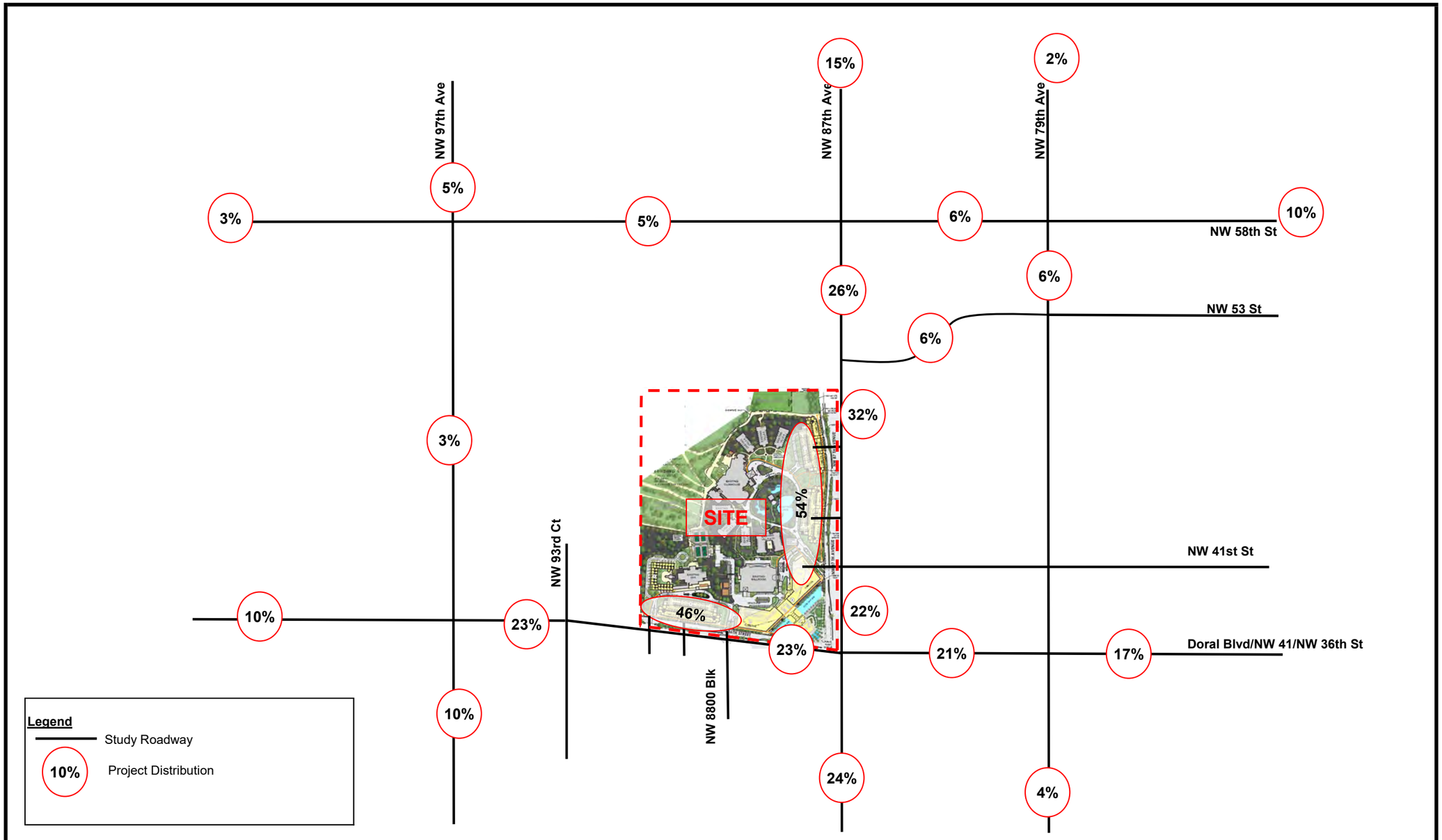
The distributed external trips for the project were assigned to the roadway links within the study area.

5.3 Traffic Assignment

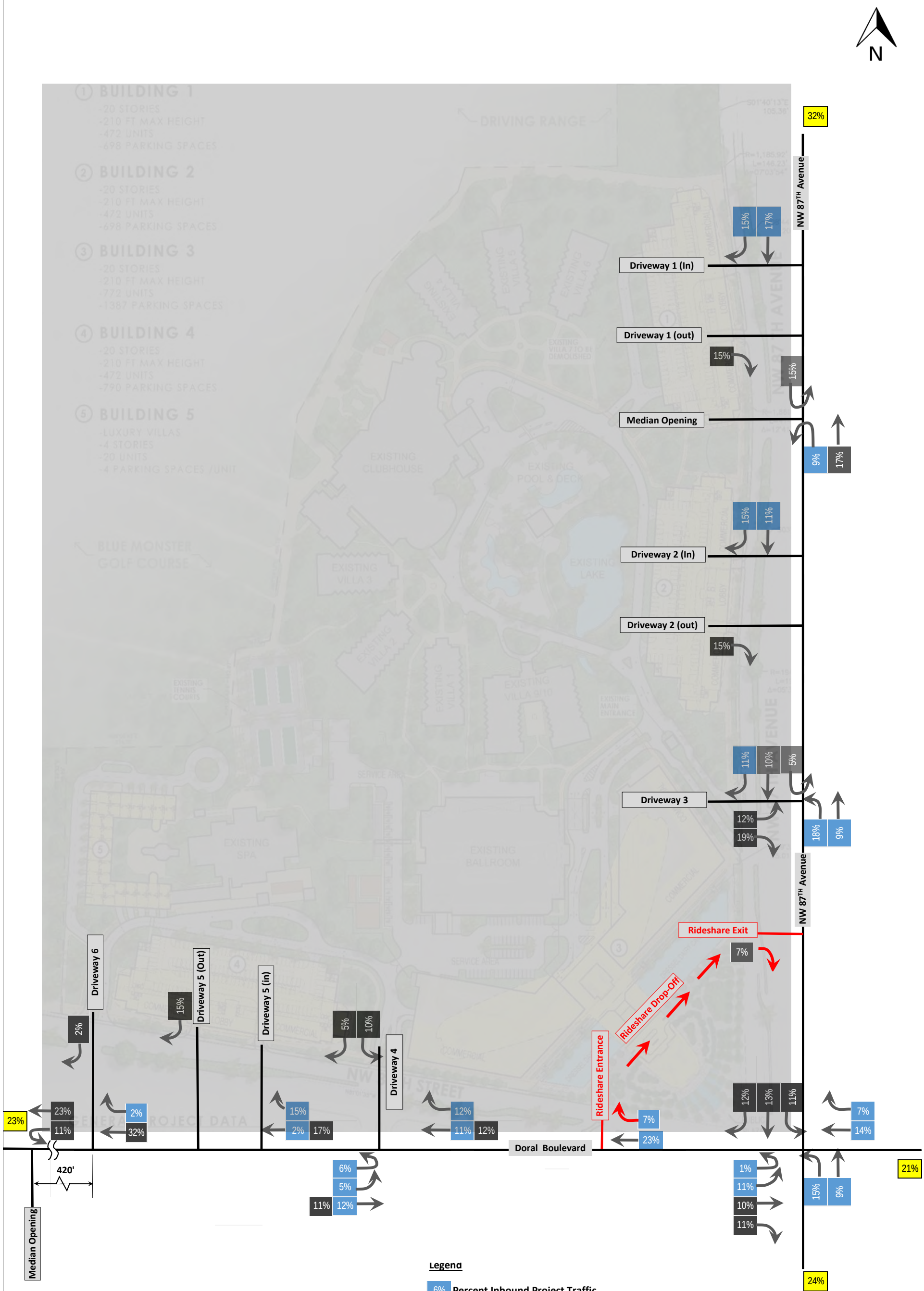
The expected trips were assigned to roadway segments and intersections with the study area with consideration of the arterial network and its travel time characteristics. The distributed external trips for the project in 2027 were assigned to the roadways within the study area, in terms of, A.M., and P.M. peak hour external trips.

The roadway segment traffic assignment is illustrated in **Exhibit 5-1** on the following page. The traffic assignment at the site's driveways and adjacent intersections is depicted in **Exhibit 5-2**. The project traffic volumes being added to each intersection based on AM and PM Peak hour is depicted in **Exhibit 5-3**.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]



Project Name: **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **Traffic Assignment Map**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 5-1 *Page no:* 14 *Date:* 8/30/23



Project Name: **Doral International Towers** By: Trump Endeavor 12, LLC	Exhibit Name: **Driveway Traffic Assignment**	Report Title: **Traffic Impact Study**	Exhibit No: 5-2 Page no: 15 Date: 3/15/23

① **BUILDING 1**
-20 STORIES
-210 FT MAX HEIGHT
-472 UNITS
-698 PARKING SPACES

② **BUILDING 2**
-20 STORIES
-210 FT MAX HEIGHT
-472 UNITS
-698 PARKING SPACES

③ **BUILDING 3**
-20 STORIES
-210 FT MAX HEIGHT
-772 UNITS
-1387 PARKING SPACES

④ **BUILDING 4**
-20 STORIES
-210 FT MAX HEIGHT
-472 UNITS
-790 PARKING SPACES

⑤ **BUILDING 5**
-LUXURY VILLAS
-4 STORIES
-20 UNITS
-4 PARKING SPACES /UNIT

N

DRIVING RANGE

BLUE MONSTER GOLF COURSE

EXISTING VILLA 4
EXISTING VILLA 5
EXISTING VILLA 6
EXISTING VILLA 7 TO BE DEMOLISHED
EXISTING CLUBHOUSE
EXISTING POOL & DECK
EXISTING LAKE
EXISTING VILLA 3
EXISTING VILLA 2
EXISTING VILLA 1
EXISTING VILLA 9/10
EXISTING TENNIS COURTS
EXISTING SPA
EXISTING BALLROOM
EXISTIING MAIN ENTRANCE
SERVICE AREA

NW 87TH AVENUE

Driveway 1 (In)
Driveway 1 (out)
Median Opening
Driveway 2 (In)
Driveway 2 (out)
Driveway 3
Driveway 4
Driveway 5 (In)
Driveway 5 (Out)
Driveway 6
Rideshare Drop-Off
Doral Boulevard
Median Opening
420'

GENERAL PROJECT DATA

Total New Trip Volumes (veh/hr)

Period	Total	In	Out
AM Peak	570	204	366
PM Peak	568	344	224

Legend

1000 AM Peak Hour Volume
(1000) PM Peak Hour Volume

Project Name: **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **AM/PM Peak Hour Project Traffic Assignment**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 5-3 *Page no:* 16 *Date:* 12/26/23

6.0 FUTURE TRAFFIC

Future traffic for the proposed 2027 build-out year were developed and comprises two scenarios. The first scenario reflects project buildout conditions without the proposed project and the second scenario adds the new trips anticipated to be generated by the project.

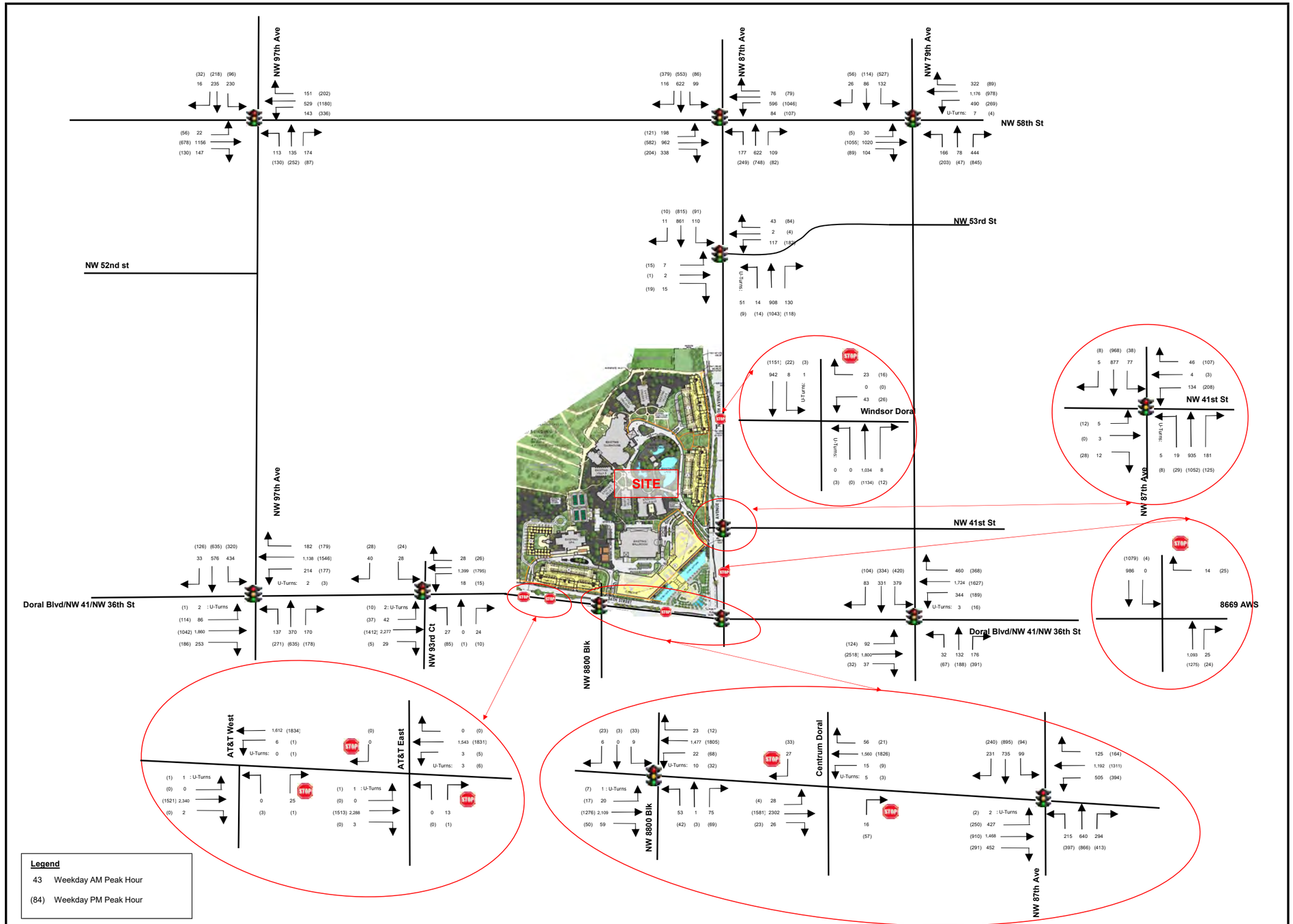
To develop year 2027 traffic volumes (development anticipated to be built and operational by the year 2027), without the proposed development, two separate analyses were undertaken. The first analysis adjusts existing peak hour traffic counts collected in the field to average peak season conditions. Based on FDOT's 2019 Peak Season Factor Category report, a factor of 0.99 is required to adjust traffic counts collected during the first week of May to average peak season conditions (refer to **Appendix B**). The second analysis incorporates a growth factor to project 2022 average peak season traffic volumes to the year 2027. Based on traffic growth data published by the FDOT for several nearby traffic count stations, traffic growth calculated was negative 1.5 percent (-1.5%) during the past six years within the study area (refer to **Appendix C**). As documented in **Appendix C**, a nominal 0.5% growth rate was used for purposes of this study.

Traffic from the following committed developments were also added to the background traffic volumes:

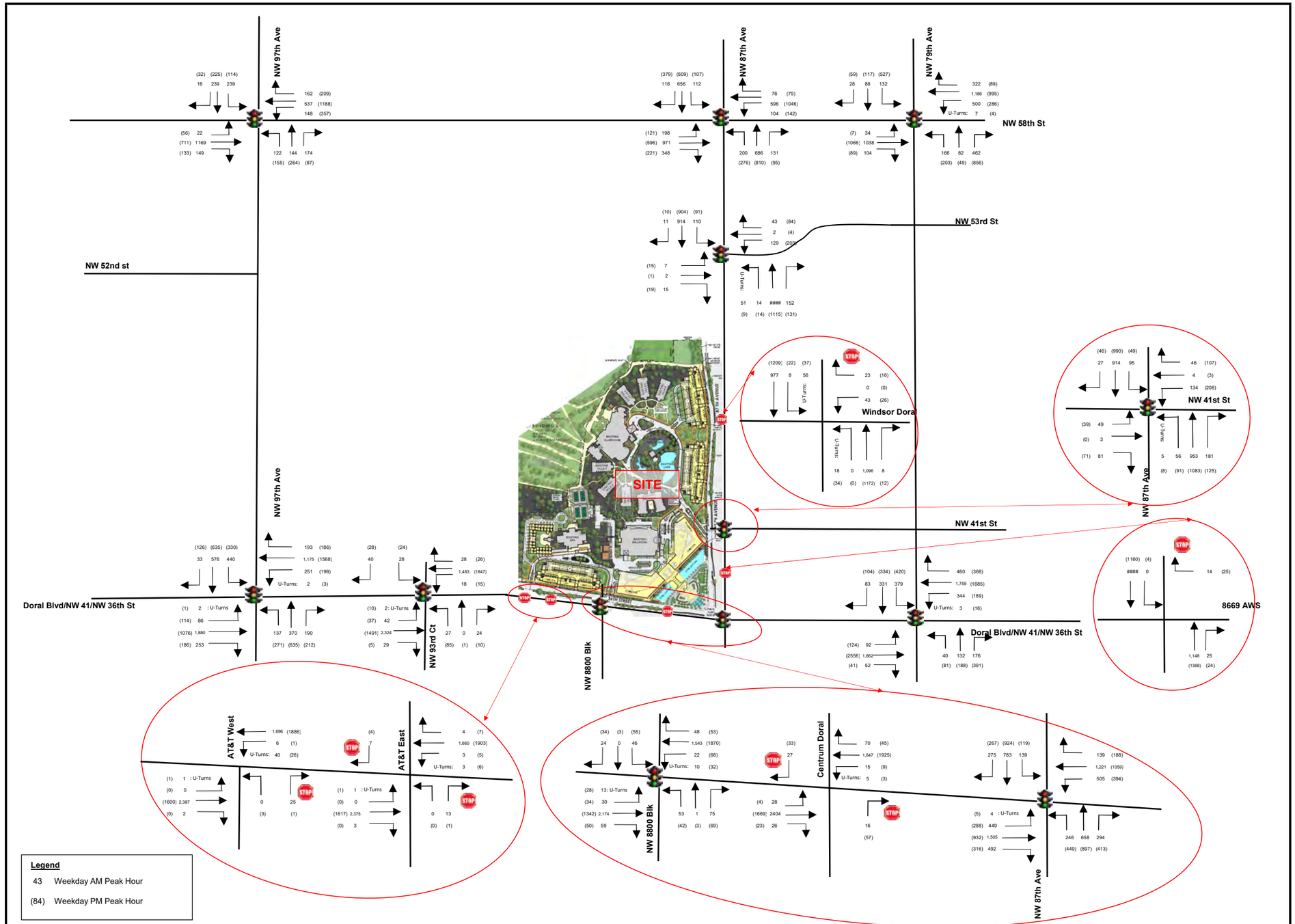
1. The NW 87th Doral Retail Development
2. The Shoppes at 97th Avenue
3. Doral Central Park
4. Downtown Doral High-Rise
5. Downtown Doral Living Facility

Committed development information at the intersection and roadway segment level was available for the first and second developments listed above and were included in the analysis. However, while developments 3 through 5, did not include analysis of intersections overlapping with Doral International Towers, enough data were available for roadway segments overlapping with Doral International Towers to allow their inclusion at the roadway segment level.

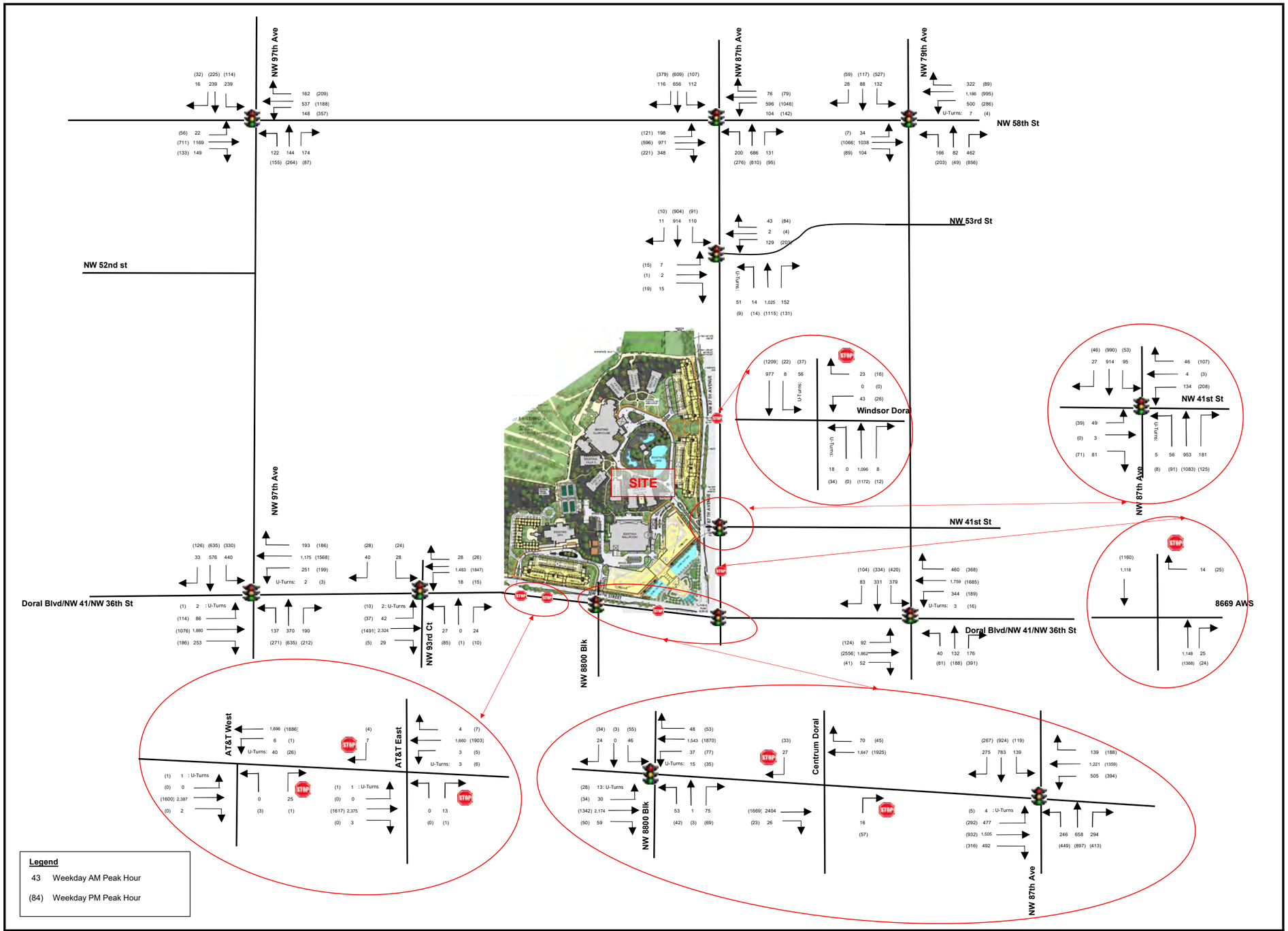
New trips generated by the proposed development were added to the 2027 background traffic in order to develop total future traffic conditions. The future traffic projections for the ten (10) study intersections, peak season adjustments, committed development traffic, growth rate and project traffic are presented in tabular format in **Appendix F**. **Exhibits 6-1, 6-2** and **6-3** present the year 2027 future traffic volumes for the study area. **Exhibit 6-1** documents future background traffic volumes while **Exhibit 6-2** presents the total traffic volume projections for the anticipated project buildout year of 2027 and **Exhibit 6-3** documents the total traffic volume projections for the anticipated project buildout year including diversions due to potential median closures.



Project Name: bcc engineering **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **2027 Background Traffic Volumes** **<u>Without</u> Project Trips**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 6-1 *Page no:* 18 *Date:* 8/30/23



Project Name: bcc engineering **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **2027 Total Traffic Volumes With Project Trips**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 6-2 *Page no:* 19 *Date:* 12/26/23



Project Name: bcc engineering **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **2027 Total Traffic Volumes** **<u>With</u> Project Trips With Median Closure**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 6-3 *Page no:* 20 *Date:* 12/26/23

7.0 FUTURE BUILDOUT INTERSECTION ANALYSIS

Intersection operational analyses were performed for the Build-Out conditions for the AM and PM peak traffic periods (without and with project traffic) using SYNCHRO Version 10 Traffic Software which is based on the procedures promulgated in the *Highway Capacity Manual (HCM) Version 6*. The primary Measures of Effectiveness (MOEs) used were total delay (seconds per vehicle), Level of Service (LOS) and queue lengths (feet) for the turn lanes. The results for the comparison of background without project traffic and background with project traffic (no-build conditions) are summarized in **Table 7-1** and the comparison of background without project traffic and, background with project traffic.

As part of this traffic study, an additional scenario was evaluated to improve traffic operations at a couple of intersections as follows:

- At the intersection of Doral Boulevard at NW 87th Avenue, excessive vehicular queueing demand is projected for the eastbound left turn movement (i.e., approximately 400 feet in the future scenario with an available storage of 170 feet). Therefore, the directional median into Centrum Doral (just west of the intersection) is proposed to be closed in order to mitigate the queueing issue. This excessive queueing will already be an issue in the background conditions, but the project traffic is projected to add an extra 73 feet (3 vehicles) of demand during the PM peak hour. The overall intersection operations (LOS and delays) remain approximately same. With the potential median closure, the existing westbound left-turns being made into Centrum Doral can be made at the downstream intersection of Doral Boulevard at NW 8800 Block.

- Similarly, at the intersection of NW 87th Avenue at NW 41st Street, which is a major project driveway, an additional improvement of closing the median into American Welding Society (AWS) Plaza (to the south) would create additional storage for northbound left turn vehicles entering the property. With this potential median closure, the existing left-turns currently being made into the (AWS) Plaza can be made earlier at the intersection of NW 87th Avenue at NW 41st Avenue. The volume collected at this driveway (southbound left-turn) shows a negligible demand of 0 vehicles per hour in the AM peak hour and 4 vehicles in the PM peak hour.

These potential median closures would require coordination with affected stakeholders and County approval.

Background conditions without project traffic was compared to the background with project traffic (improvements with potential median closures) and background with project traffic (improvements without median closures) which are summarized in **Tables 7-2 and 7-3** respectively.

The results of the analyses indicate that:

Six of the ten signalized intersections analyzed are projected to operate at levels of service that exceed the Target LOS 'D' threshold at project build out with and without project traffic. For those intersections not meeting the LOS Target, the analysis shows that a combination of signal timing optimization (including modifications to timing splits, offsets and lead-lag optimization for

left-turn phases) and specific roadway improvements can alleviate the future background and project demand.

- The intersection of **Doral Boulevard and NW 97th Avenue** is projected to operate at LOS 'E' in the 2027 background traffic in both AM and PM peak hour. The inclusion of project traffic is projected to increase the overall delay by 5% and 4% in the AM and PM peak hour while maintaining LOS 'E' operations. With signal timing optimization, the overall intersection delay is projected to decrease by 13% and 7% compared to the background conditions for the AM and PM peak hour respectively with intersection projected to operate at LOS 'D' in the AM peak hour and 'E' (slightly above the LOS 'D' threshold) in the PM peak hour,
- The intersection of **Doral Boulevard and NW 93rd Court** is projected to operate at LOS 'B' and 'A' in the 2027 background traffic in the AM and PM peak hours respectively. With the inclusion of project traffic and signal timing optimization, the intersection is projected to operate at LOS 'A' in both the AM and PM peak hours. No improvements are proposed at this intersection except for minor signal timing optimization,
- The intersection of **Doral Boulevard and NW 8800 Block** is projected to operate at LOS 'B' in the 2027 background traffic in both AM and PM peak hour. The inclusion of project traffic is projected to increase the overall delay by 1.7 seconds/vehicle and 2.3 seconds/vehicle in the AM and PM peak hour while operating at LOS 'C' and 'B' in the AM and PM peak hours respectively. An exclusive westbound right turn lane is proposed at this intersection along with the signal timing optimization.
    - The overall intersection is projected to operate at LOS 'B' with the proposed improvements even considering an increase in westbound left turn demand from diversions due to the potential median closure at Centrum Doral, just east of the intersection,
    - Similar to the previous scenario, the intersection is projected to operate at LOS 'B' with the proposed improvements (without closure of median at Centrum Doral).
- Intersection of **Doral Boulevard and NW 87th Avenue** is projected to operate at LOS 'F' in the AM peak hour and LOS 'E' in the PM peak hour for 2027 background traffic conditions. The inclusion of project traffic is projected to increase the overall delay by 13% and 16% in the AM and PM peak hours respectively with a degradation to LOS 'F' in the PM peak hour. With potential improvements including:
    - The addition of an exclusive southbound right turn lane, increasing eastbound left turn lane storage to 400 feet made possible by the potential median closure at Centrum Doral, and signal timing optimization, is projected to result in a reduction in overall intersection delay of 37% and 24% for the AM and PM peak hour operations respectively,
    - The addition of an exclusive southbound right turn lane without the median closure at Centrum Doral, and signal timing optimization, a reduction in overall intersection delay of 37% and 26% is observed for the AM and PM peak hour operations respectively.
- The intersection of **Doral Boulevard and NW 79th Avenue** is projected to operate at LOS 'D' and 'E' in the 2027 background traffic in AM and PM peak hours respectively. With the inclusion of project traffic, the intersection is projected to operate at similar LOS and delays. Signal timing optimization was performed at this intersection with a projected reduction in delays by 20% and 12% in the AM and PM peak hours respectively with no change to the LOS,

- The intersection of **NW 41st Street and NW 87th Avenue** (one of the main site driveway's), is projected to operate at LOS'D' and LOS 'C' in the AM and PM peak hours respectively (background and with project) and results in a 13% and 12% increase in overall intersection delay in the AM and PM peak hours respectively compared to operations due to background traffic. Potential improvements analyzed at this intersection included:
    - Signal timing optimization and increasing the northbound left turn lane storage made possible by the potential median closure (just south of this intersection) that provides access into American Welding Society building. These improvements are projected to result in a 41% reduction in intersection delay with an improvement in the letter grade LOS from 'D' to 'C' for the AM peak hour. For the PM peak hour there is a reduction in delay of 17%, with similar LOS as background traffic conditions,
    - The sole improvement of signal timing optimization without median closure provides similar LOS and delays as the previous scenario.
- The intersection of **NW 58th Street and NW 97th Avenue** is projected to operate at LOS 'E' in the 2027 background traffic in both AM and PM peak hour with the programmed roadway widening project from Miami-Dade County. As previously noted in Section 3.4 of this report, the NW 97th Avenue corridor from NW 52nd Street to NW 70th Street is being widened from 2 to 4 lanes, intersection geometry is assumed to add an additional through lane in the north and southbound directions. The inclusion of project traffic is projected to increase the overall delay by 2% and 3% in the AM and PM peak hour while maintaining LOS 'E' operations. With signal timing optimization, equal operations are projected for the AM peak hour and a 1% reduction in delay for the PM peak hour at the intersection,
- The intersection of **NW 58th Street and NW 87th Avenue** is projected to operate at LOS 'E' in 2027 background traffic in both AM and PM peak hours. The inclusion of project traffic is projected to increase the overall delay by 20% and 8% in the AM and PM peak hour while maintaining LOS 'E' in both the AM and PM peak hours. With signal timing optimization, the overall intersection delay is still projected to remain the same in the AM peak hour while a reduction of 4% is projected in the PM peak hour while maintaining the same LOS compared to the background traffic conditions,
- The intersection of **NW 58th Street and NW 79th Avenue** is projected to operate at LOS 'E' and 'F' in the AM and PM peak hours respectively during the 2027 background conditions. The inclusion of project traffic is projected to increase the overall delay by 8% and 6% in the AM and PM peak hour with LOS 'F' in both the AM and PM peak hours. With signal timing optimization, the overall intersection delay is projected to operate equal to or better than background conditions i.e., a reduction in delay of 22% and 34% in the AM and PM peak hours respectively compared to background traffic conditions,
- The intersection of **NW 87th Avenue and NW 53rd Street** is projected to operate at LOS 'C' in both the 2027 background AM and PM peak hours even with the inclusion of project traffic. There is a slight increase in delays but operating at acceptable LOS. No improvements are anticipated at this intersection except for minor signal timing optimization.

The following intersections are unsignalized intersections. Synchro does not give an overall intersection 'LOS' value; only the average delay, stop controlled approach delay and LOS, and the delay and LOS of exclusive left turn lanes on the uncontrolled approaches of the unsignalized intersection is shown on **Tables 7-1** and **7-2**.

- The intersection of **Centrum Doral and Doral Boulevard** is shown to have an average delay of 0.3 and 0.4 sec/veh in the 2027 background AM and PM peak hours respectively.
    - The potential closure of this median to allow for the extension of the eastbound left turn lane storage at NW 87th Avenue and Doral Boulevard was reviewed at the intersection. The average delay is expected to decrease with the improvement when compared to the background traffic conditions (since there will be no eastbound and westbound left-turning volumes). While the stop controlled northbound and southbound right turn delays remained similar to the operations in the background conditions,
- The intersection of **NW 87th Avenue at 8669 American Welding Society (AWS) Plaza** is projected to maintain an average delay of 0.1 sec/veh with and without project traffic. With the proposed median closure, the southbound left turn lane is eliminated. The westbound vehicles turning left onto NW 87th Avenue from the plaza are projected to have minor increases in delay when compared to background traffic, while still operating at LOS 'A,'
- The intersections of **Doral Boulevard and the east and west AT&T driveways** are projected to operate at comparable delays in the AM and PM peak hours. There is a slight increase in delay of 0.1 sec/veh at the east driveway in the AM peak hour. There is a proposed driveway which is a stop controlled southbound right-turn only, that is observed to operate at LOS 'A' in both AM and PM peak hours. No other improvements are anticipated at these intersections except for a traffic separator on Doral Boulevard to physically restrict left-turns from the proposed westernmost project driveway (Driveway 6),
- The intersection of **NW 87th Avenue and Windsor Doral Apartments** is projected to have a delay of 3.8 and 1.8 sec/veh in the AM and PM peak hour during background conditions. With the inclusion of project traffic, the intersection is projected to experience an increase in overall delay by 21% and 11% in the AM peak hour and PM peak hours respectively. With the potential improvement of adding an exclusive northbound U-turn Lane, the delay is projected to increase an additional 24% and 17% in the AM and PM peak hours respectively, to be 4.7 and 2.1 sec/veh in the AM and PM peak hours while maintaining LOS 'A'. The southbound left turn lane is observed to still operate at LOS 'B' in both AM and PM peak with and without project traffic. The westbound stop-controlled approach is observed to have an increase in delay of 31% and 18% in the AM and PM peak hour respectively when compared to background traffic. The approach was already projected to be operating at LOS 'F' in the background conditions.

The synchro output sheets for the study intersections and signal timing comparison for the proposed and existing scenarios are included in **Appendix G.**

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

Table 7-1: Level of Service Analyses - Study Intersections (2027 Future with Project Traffic No-Build Conditions vs 2027 Background)

		2027 Future Background Without Project Traffic												2027 Future With Project Traffic (No-Build Conditions)												2027 Future With Project Traffic vs 2027 Future Background											
			Approach												Approach												Approach											
			Overall		Eastbound		Westbound		Northbound		Southbound				Overall		Eastbound		Westbound		Northbound		Southbound				Overall		Eastbound		Westbound		Northbound		Southbound		
Corridor	Intersection	Peak Period	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Peak Period	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Peak Period	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS		
NW 87TH AVENUE	at DORAL BLVD	AM	86.9	F	70.1	E	58.7	E	105.9	F	149.3	F	AM	98.6	F	69.9	E	59.9	E	124.6	F	188.3	F	AM	13%	Same	0%	Same	2%	Same	18%	Same	26%	Same		
		PM	79.7	E	57.3	E	52.9	D	84.8	F	139.9	F	PM	92.7	F	62.8	E	55.1	E	103.9	F	168.5	F	PM	16%	Lower	10%	Same	4%	Lower	23%	Same	20%	Same		
	at 8669 AWS (Unsignalized)	AM	0.1	-	-	-	9.6	A	-	-	0.0	A	AM	0.1	-	-	-	9.9	A	-	-	0.0	A	AM	0%	Same	-	Same	3%	Same	-	Same	-	Same		
		PM	0.1	-	-	-	9.8	A	-	-	11.0	B	PM	0.1	-	-	-	9.9	A	-	-	11.7	B	PM	0%	Same	-	Same	1%	Same	-	Same	6%	Same		
	at NW 41ST STREET	AM	37.9	D	85.8	F	103.1	F	43.3	D	10.8	B	AM	43.0	D	83.4	F	102.9	F	47.3	D	14.2	B	AM	13%	Same	-3%	Same	0%	Same	9%	Same	31%	Same		
		PM	30.9	C	90.0	F	134.6	F	12.1	B	13.8	B	PM	34.7	C	86.9	F	134.4	F	15.9	B	18.0	B	PM	12%	Same	-3%	Same	0%	Same	9%	Same	30%	Same		
	at Windsor at Doral (Unsignalized)	AM	3.8	-	-	-	85.0	F	-	-	10.6	B	AM	4.6	-	-	-	108.6	F	-	-	10.8	B	AM	21%	Same	-	Same	28%	Same	-	Same	2%	Same		
		PM	1.8	-	-	-	68.6	F	-	-	10.9	B	PM	2.0	-	-	-	78.6	F	-	-	11.0	B	PM	11%	Same	-	Same	15%	Same	-	Same	1%	Same		
	at NW 53RD STREET	AM	20.1	C	36.9	D	34.0	C	19.0	B	17.9	B	AM	22.0	C	36.9	D	34.5	C	21.9	C	19.1	B	AM	9%	Same	0%	Same	1%	Same	15%	Lower	7%	Same		
		PM	24.0	C	37.2	D	33.2	C	25.0	C	19.0	B	PM	26.8	C	37.2	D	33.4	C	29.0	C	21.6	C	PM	12%	Same	0%	Same	1%	Same	16%	Same	14%	Lower		
	at NW 58TH STREET	AM	64.1	E	47.4	D	33.7	C	103.7	F	78.0	E	AM	76.6	E	49.4	D	35.8	D	140.2	F	87.2	F	AM	20%	Same	4%	Same	6%	Lower	35%	Same	12%	Lower		
		PM	61.1	E	46.7	D	50.3	D	73.2	E	72.4	E	PM	65.9	E	48.3	D	51.7	D	87.3	F	73.5	E	PM	8%	Same	3%	Same	3%	Same	19%	Lower	2%	Same		
DORAL BLVD	at Centrum Doral (Unsignalized)	AM	0.3	-	11.9	B	20.4	C	9.5	A	9.5	A	AM	0.3	-	12.6	B	22.1	C	9.6	A	9.6	A	AM	0%	Same	-	-	8%	Same	1%	Same	1%	Same		
		PM	0.4	-	12.2	B	14.3	B	10.5	B	9.9	A	PM	0.3	-	12.9	B	15.1	C	10.5	B	10.0	B	PM	-25%	Same	-	-	6%	Lower	0%	Same	1%	Lower		
	at 8800 BLOCK	AM	18.4	B	19.3	B	11.4	B	66.0	E	64.3	E	AM	20.1	C	19.8	B	12.3	B	66.1	E	70.3	E	AM	9%	Lower	3%	Same	8%	Same	0%	Same	9%	Same		
		PM	16.1	B	8.8	A	13.9	B	75.7	E	78.3	E	PM	18.4	B	9.6	B	16.4	B	75.7	E	84.9	F	PM	14%	Same	9%	Lower	18%	Same	0%	Same	8%	Lower		
	at AT&T East Driveway (Unsignalized)	AM	0.1	-	-	-	22.5	C	17.5	C	-	-	AM	0.2	-	-	-	24.0	C	17.7	C	9.0	A	AM	100%	Same	-	Same	7%	Same	1%	Same	-	-		
		PM	0.1	-	-	-	13.6	B	12.2	B	-	-	PM	0.1	-	-	-	14.5	B	12.6	B	9.1	A	PM	0%	Same	-	Same	7%	Same	3%	Same	-	-		
	at AT&T West Driveway (Unsignalized)	AM	0.1	-	-	-	20.5	C	10.9	B	-	-	AM	0.1	-	-	-	21.1	C	10.7	B	-	-	AM	0%	Same	-	Same	3%	Same	-2%	Same	-	Same		
		PM	0.1	-	-	-	12.4	B	48.4	E	-	-	PM	0.1	-	-	-	12.9	B	55.9	F	-	-	PM	0%	Same	-	Same	4%	Same	15%	Lower	-	Same		
	at NW 93RD COURT	AM	19.0	B	14.0	B	18.0	B	81.4	F	86.2	F	AM	19.7	B	14.2	B	19.6	B	81.4	F	86.2	F	AM	4%	Same	1%	Same	9%	Same	0%	Same	0%	Same		
		PM	9.9	A	6.9	A	8.5	A	43.6	D	33.6	C	PM	9.7	A	6.3	A	8.7	A	43.6	D	33.6	C	PM	-2%	Same	-9%	Same	2%	Same	0%	Same	0%	Same		
	at NW 97TH AVENUE	AM	63.0	E	57.0	E	54.1	D	82.7	F	75.3	E	AM	66.1	E	61.7	E	57.7	E	84.7	F	75.8	E	AM	5%	Same	8%	Same	7%	Lower	2%	Same	1%	Same		
		PM	64.3	E	52.4	D	66.8	E	71.4	E	67.3	E	PM	66.8	E	55.7	E	72.0	E	71.3	E	66.5	E	PM	4%	Same	6%	Lower	8%	Same	0%	Same	-1%	Better		
NW 97TH AVENUE AND NW 58TH STREET		AM	57.2	E	49.4	D	34.4	C	81.5	F	93.8	F	AM	58.4	E	50.4	D	34.9	C	81.6	F	97.3	F	AM	2%	Same	2%	Same	1%	Same	0%	Same	4%	Same		
		PM	55.9	E	51.9	D	44.9	D	79.7	E	83.9	F	PM	57.8	E	52.5	D	48.7	D	79.6	E	82.9	F	PM	3%	Same	1%	Same	8%	Same	0%	Same	-1%	Same		
NW 58TH STREET AND NW 79TH AVENUE		AM	79.9	E	48.2	D	39.7	D	232.7	F	103.2	F	AM	85.9	F	49.0	D	44.4	D	248.4	F	104.9	F	AM	8%	Lower	2%	Same	12%	Same	7%	Same	2%	Same		
		PM	122.0	F	57.0	E	46.9	D	305.5	F	72.1	E	PM	129.8	F	58.0	E	54.4	D	326.5	F	72.4	E	PM	6%	Same	2%	Same	16%	Same	7%	Same	0%	Same		
NW 36TH STREET AND NW 79TH AVENUE		AM	50.8	D	48.9	D	37.3	D	99.6	F	75.8	E	AM	50.8	D	48.0	D	37.7	D	99.8	F	76.4	E	AM	0%	Same	-2%	Same	1%	Same	0%	Same	1%	Same		
		PM	68.0	E	33.5	C	44.7	D	251.3	F	81.5	F	PM	68.5	E	34.3	C	45.8	D	248.3	F	83.0	F	PM	1%	Same	2%	Same	2%	Same	-1%	Same	2%	Same		

The left turn lane delay and LOS values are shown for these approaches on unsignalized intersections

Table 7-2: Level of Service Analyses - Study Intersections (2027 Future Improvements with median closures vs 2027 Background)

		2027 Future Background Without Project Traffic											2027 Future With Project Traffic (Improvements with median closure)											2027 Future With Project Traffic vs 2027 Future Background										
					Approach										Approach											Approach									
			Overall		Eastbound		Westbound		Northbound		Southbound			Overall		Eastbound		Westbound		Northbound		Southbound			Overall		Eastbound		Westbound		Northbound		Southbound	
Corridor	Intersection	Peak Period	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Peak Period	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Peak Period	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS
NW 87TH AVENUE	at DORAL BLVD	AM	86.9	F	70.1	E	58.7	E	105.9	F	149.3	F	AM	54.8	D	46.4	D	47.9	D	69.7	E	67.5	E	AM	-37%	Better	-34%	Better	-18%	Better	-34%	Better	-55%	Better
		PM	79.7	E	57.3	E	52.9	D	84.8	F	139.9	F	PM	60.6	E	55.3	E	50.9	D	71.2	E	66.3	E	PM	-24%	Same	-3%	Same	-4%	Same	-16%	Better	-53%	Better
	at 8669 AWS (Unsignalized)	AM	0.1	-	-	-	9.6	A	-	-	0.0	A	AM	0.1	-	-	-	9.9	A	-	-	0.0	A	AM	0%	Same	-	Same	3%	Same	-	Same	-100%	Better
		PM	0.1	-	-	-	9.8	A	-	-	11.0	B	PM	0.1	-	-	-	9.8	A	-	-	0.0	A	PM	0%	Same	-	Same	0%	Same	-	Same	-100%	Better
	at NW 41ST STREET	AM	37.9	D	85.8	F	103.1	F	43.3	D	10.8	B	AM	22.3	C	83.7	F	86.3	F	5.3	A	12.8	B	AM	-41%	Better	-2%	Same	-16%	Same	-88%	Better	19%	Same
		PM	30.9	C	90.0	F	134.6	F	12.1	B	13.8	B	PM	25.7	C	89.9	F	88.4	F	3.2	A	23.0	C	PM	-17%	Same	0%	Same	-34%	Same	-74%	Better	67%	Lower
	at Windsor at Doral (Unsignalized)	AM	3.8	-	-	-	85.0	F	-	-	10.6	B	AM	4.7	-	-	-	111.2	F	-	-	10.9	B	AM	24%	Same	-	Same	31%	Same	-	Same	3%	Same
		PM	1.8	-	-	-	68.6	F	-	-	10.9	B	PM	2.1	-	-	-	80.7	F	-	-	11.0	B	PM	17%	Same	-	Same	18%	Same	-	Same	1%	Same
	at NW 53RD STREET	AM	20.1	C	36.9	D	34.0	C	19.0	B	17.9	B	AM	19.1	B	37.2	D	46.7	D	17.0	B	15.4	B	AM	-5%	Better	1%	Same	37%	Lower	-11%	Same	-14%	Same
		PM	24.0	C	37.2	D	33.2	C	25.0	C	19.0	B	PM	23.8	C	71.3	E	32.4	C	22.6	C	19.7	C	PM	-1%	Same	92%	Lower	-2%	Same	-10%	Same	4%	Lower
	at NW 58TH STREET	AM	64.1	E	47.4	D	33.7	C	103.7	F	78.0	E	AM	64.2	E	61.5	E	30.9	C	80.1	F	78.8	E	AM	0%	Same	30%	Lower	-8%	Same	-23%	Same	1%	Same
		PM	61.1	E	46.7	D	50.3	D	73.2	E	72.4	E	PM	58.9	E	51.8	D	43.9	D	65.9	E	73.0	E	PM	-4%	Same	11%	Same	-13%	Same	-10%	Same	1%	Same
DORAL BLVD	at Centrum Doral (Unsignalized)	AM	0.3	-	11.9	B	20.4	C	9.5	A	9.5	A	AM	0.1	-	0.0	A	0.0	A	9.7	A	9.8	A	AM	-67%	Same	-	-	-100%	Better	2%	Same	3%	Same
		PM	0.4	-	12.2	B	14.3	B	10.5	B	9.9	A	PM	0.3	-	0.5	A	0.0	A	9.9	A	10.1	B	PM	-25%	Same	-	-	-100%	Better	-6%	Better	2%	Lower
	at 8800 BLOCK	AM	18.4	B	19.3	B	11.4	B	66.0	E	64.3	E	AM	11.6	B	8.2	A	6.5	A	67.0	E	71.6	E	AM	-37%	Same	-58%	Better	-43%	Better	2%	Same	11%	Same
		PM	16.1	B	8.8	A	13.9	B	75.7	E	78.3	E	PM	13.1	B	13.9	B	5.0	A	69.4	E	73.2	E	PM	-19%	Same	58%	Lower	-64%	Better	-8%	Same	-7%	Same
	at AT&T East Driveway (Unsignalized)	AM	0.1	-	-	-	22.5	C	17.5	C	-	-	AM	0.2	-	-	-	24.0	C	17.7	C	8.9	A	AM	100%	Same	-	Same	7%	Same	1%	Same	-	-
		PM	0.1	-	-	-	13.6	B	12.2	B	-	-	PM	0.1	-	-	-	14.5	B	12.6	B	9.2	A	PM	0%	Same	-	Same	7%	Same	3%	Same	-	-
	at AT&T West Driveway (Unsignalized)	AM	0.1	-	-	-	20.5	C	10.9	B	-	-	AM	0.1	-	-	-	21.1	C	10.7	B	-	-	AM	0%	Same	-	Same	3%	Same	-2%	Same	-	Same
		PM	0.1	-	-	-	12.4	B	48.4	E	-	-	PM	0.1	-	-	-	12.8	B	54.5	F	-	-	PM	0%	Same	-	Same	3%	Same	13%	Lower	-	Same
	at NW 93RD COURT	AM	19.0	B	14.0	B	18.0	B	81.4	F	86.2	F	AM	4.7	A	0.4	A	1.3	A	79.1	E	86.2	F	AM	-75%	Better	-97%	Better	-93%	Better	-3%	Better	0%	Same
		PM	9.9	A	6.9	A	8.5	A	43.6	D	33.6	C	PM	9.2	A	3.5	A	10.3	B	40.0	D	32.6	C	PM	-7%	Same	-49%	Same	21%	Lower	-8%	Same	-3%	Same
	at NW 97TH AVENUE	AM	63.0	E	57.0	E	54.1	D	82.7	F	75.3	E	AM	54.7	D	53.4	D	22.1	C	100.0	F	78.1	E	AM	-13%	Better	-6%	Better	-59%	Better	21%	Same	4%	Same
		PM	64.3	E	52.4	D	66.8	E	71.4	E	67.3	E	PM	60.1	E	55.2	E	47.6	D	77.8	E	69.6	E	PM	-7%	Same	5%	Lower	-29%	Better	9%	Same	3%	Better
NW 97TH AVENUE AND NW 58TH STREET		AM	57.2	E	49.4	D	34.4	C	81.5	F	93.8	F	AM	57.2	E	48.0	D	35.2	D	95.7	F	82.9	F	AM	0%	Same	-3%	Same	2%	Lower	17%	Same	-12%	Same
		PM	55.9	E	51.9	D	44.9	D	79.7	E	83.9	F	PM	55.2	E	50.1	D	37.9	D	93.0	F	93.8	F	PM	-1%	Same	-3%	Same	-16%	Same	17%	Lower	12%	Same
NW 58TH STREET AND NW 79TH AVENUE		AM	79.9	E	48.2	D	39.7	D	232.7	F	103.2	F	AM	62.0	E	51.6	D	49.6	D	87.6	F	132.0	F	AM	-22%	Same	7%	Same	25%	Same	-62%	Same	28%	Same
		PM	122.0	F	57.0	E	46.9	D	305.5	F	72.1	E	PM	80.6	F	71.8	E	57.6	E	100.6	F	105.6	F	PM	-34%	Same	26%	Same	23%	Lower	-67%	Same	46%	Lower
NW 36TH STREET AND NW 79TH AVENUE		AM	50.8	D	48.9	D	37.3	D	99.6	F	75.8	E	AM	40.5	D	12.5	B	43.5	D	80.7	F	78.9	E	AM	-20%	Same	-74%	Better	17%	Same	-19%	Same	4%	Same
		PM	68.0	E	33.5	C	44.7	D	251.3	F	81.5	F	PM	59.9	E	36.1	D	65.9	E	97.2	F	85.2	F	PM	-12%	Same	8%	Lower	47%	Lower	-61%	Same	5%	Same

The left turn lane delay and LOS values are shown for these approaches on unsignalized intersections

Table 7-3: Level of Service Analyses - Study Intersections (2027 Future Improvements without median closures vs 2027 Background)

		2027 Future Background Without Project Traffic										2027 Future With Project Traffic (Improvements without median closure)										2027 Future With Project Traffic vs 2027 Future Background									
					Approach										Approach										Approach							
			Overall		Eastbound		Westbound		Northbound		Southbound		Overall		Eastbound		Westbound		Northbound		Southbound		Overall			Eastbound		Westbound		Northbound		Southbound	
Corridor	Intersection	Peak Period	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Peak Period	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Peak Period	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS	Delay % Δ	Δ LOS
NW 87TH AVENUE	at DORAL BLVD	AM	86.9	F	70.1	E	58.7	E	105.9	F	149.3	F	AM	54.9	D	46.4	D	47.9	D	69.7	E	67.5	E	AM	-37%	Better	-34%	Better	-18%	Better	-34%	Better	-55%	Better
		PM	79.7	E	57.3	E	52.9	D	84.8	F	139.9	F	PM	58.8	E	58.3	E	41.7	D	73.2	E	64.7	E	PM	-26%	Same	2%	Same	-21%	Same	-14%	Better	-54%	Better
	at 8669 AWS (Unsignalized)	AM	0.1	-	-	-	9.6	A	-	-	0.0	A	AM	0.1	-	-	-	9.9	A	-	-	0.0	A	AM	0%	Same	-	Same	3%	Same	-	Same	-	Same
		PM	0.1	-	-	-	9.8	A	-	-	11.0	B	PM	0.1	-	-	-	9.8	A	-	-	11.7	B	PM	0%	Same	-	Same	0%	Same	-	Same	6%	Same
	at NW 41ST STREET	AM	37.9	D	85.8	F	103.1	F	43.3	D	10.8	B	AM	22.4	C	83.7	F	86.3	F	5.3	A	12.8	B	AM	-41%	Better	-2%	Same	-16%	Same	-88%	Better	19%	Same
		PM	30.9	C	90.0	F	134.6	F	12.1	B	13.8	B	PM	25.7	C	89.9	F	88.5	F	3.1	A	23.1	C	PM	-17%	Same	0%	Same	-34%	Same	-74%	Better	67%	Lower
	at Windsor at Doral (Unsignalized)	AM	3.8	-	-	-	85.0	F	-	-	10.6	B	AM	4.7	-	-	-	111.2	F	-	-	10.9	B	AM	24%	Same	-	Same	31%	Same	-	Same	3%	Same
		PM	1.8	-	-	-	68.6	F	-	-	10.9	B	PM	2.1	-	-	-	81.0	F	-	-	11.1	B	PM	17%	Same	-	Same	18%	Same	-	Same	2%	Same
	at NW 53RD STREET	AM	20.1	C	36.9	D	34.0	C	19.0	B	17.9	B	AM	19.1	B	37.2	D	46.7	D	17.0	B	15.4	B	AM	-5%	Better	1%	Same	37%	Lower	-11%	Same	-14%	Same
		PM	24.0	C	37.2	D	33.2	C	25.0	C	19.0	B	PM	23.8	C	71.3	E	32.4	C	22.6	C	19.7	C	PM	-1%	Same	92%	Lower	-2%	Same	-10%	Same	4%	Lower
	at NW 58TH STREET	AM	64.1	E	47.4	D	33.7	C	103.7	F	78.0	E	AM	64.2	E	61.5	E	30.9	C	80.1	F	78.8	E	AM	0%	Same	30%	Lower	-8%	Same	-23%	Same	1%	Same
		PM	61.1	E	46.7	D	50.3	D	73.2	E	72.4	E	PM	58.9	E	51.8	D	43.9	D	65.9	E	73.0	E	PM	-4%	Same	11%	Same	-13%	Same	-10%	Same	1%	Lower
DORAL BLVD	at Centrum Doral (Unsignalized)	AM	1.1	-	37.9	E	61.4	F	37.9	E	21.6	C	AM	1.1	-	38.2	E	71.3	F	41.5	E	21.7	C	AM	0%	Same	-	-	16%	Same	9%	Same	0%	Same
		PM	1.0	-	33.6	D	26.9	D	10.5	B	9.9	A	PM	1.0	-	38.9	E	30.0	D	26.9	D	27.5	D	PM	0%	Same	-	-	12%	Same	156%	Lower	178%	Lower
	at 8800 BLOCK	AM	18.4	B	19.3	B	11.4	B	66.0	E	64.3	E	AM	10.8	B	7.1	A	5.9	A	67.0	E	71.6	E	AM	-41%	Same	-63%	Better	-48%	Better	2%	Same	11%	Same
		PM	16.1	B	8.8	A	13.9	B	75.7	E	78.3	E	PM	13.0	B	13.8	B	4.9	A	69.4	E	73.2	E	PM	-19%	Same	57%	Lower	-65%	Better	-8%	Same	-7%	Same
	at AT&T East Driveway (Unsignalized)	AM	0.1	-	-	-	22.5	C	17.5	C	-	-	AM	0.2	-	-	-	24.0	C	17.7	C	8.9	A	AM	100%	Same	-	Same	7%	Same	1%	Same	-	-
		PM	0.1	-	-	-	13.6	B	12.2	B	-	-	PM	0.1	-	-	-	14.5	B	12.6	B	9.2	A	PM	0%	Same	-	Same	7%	Same	3%	Same	-	-
	at AT&T West Driveway (Unsignalized)	AM	0.1	-	-	-	20.5	C	10.9	B	-	-	AM	0.1	-	-	-	21.1	C	10.7	B	-	-	AM	0%	Same	-	Same	3%	Same	-2%	Same	-	Same
		PM	0.1	-	-	-	12.4	B	48.4	E	-	-	PM	0.1	-	-	-	12.8	B	54.2	F	-	-	PM	0%	Same	-	Same	3%	Same	12%	Lower	-	Same
	at NW 93RD COURT	AM	19.0	B	14.0	B	18.0	B	81.4	F	86.2	F	AM	4.7	A	0.4	A	1.3	A	79.1	E	86.2	F	AM	-75%	Better	-97%	Better	-93%	Better	-3%	Better	0%	Same
		PM	9.9	A	6.9	A	8.5	A	43.6	D	33.6	C	PM	9.2	A	3.5	A	10.3	B	40.0	D	32.6	C	PM	-7%	Same	-49%	Same	21%	Lower	-8%	Same	-3%	Same
	at NW 97TH AVENUE	AM	63.0	E	57.0	E	54.1	D	82.7	F	75.3	E	AM	54.7	D	53.4	D	22.1	C	100.0	F	78.1	E	AM	-13%	Better	-6%	Better	-59%	Better	21%	Same	4%	Same
		PM	64.3	E	52.4	D	66.8	E	71.4	E	67.3	E	PM	60.1	E	55.2	E	47.6	D	77.8	E	69.6	E	PM	-7%	Same	5%	Lower	-29%	Better	9%	Same	3%	Better
NW 97TH AVENUE AND NW 58TH STREET		AM	57.2	E	49.4	D	34.4	C	81.5	F	93.8	F	AM	57.2	E	48.0	D	35.2	D	95.7	F	82.9	F	AM	0%	Same	-3%	Same	2%	Lower	17%	Same	-12%	Same
		PM	55.9	E	51.9	D	44.9	D	79.7	E	83.9	F	PM	55.2	E	50.1	D	37.9	D	93.0	F	93.8	F	PM	-1%	Same	-3%	Same	-16%	Same	17%	Lower	12%	Same
NW 58TH STREET AND NW 79TH AVENUE		AM	79.9	E	48.2	D	39.7	D	232.7	F	103.2	F	AM	62.0	E	51.6	D	49.6	D	87.6	F	132.0	F	AM	-22%	Same	7%	Same	25%	Same	-62%	Same	28%	Same
		PM	122.0	F	57.0	E	46.9	D	305.5	F	72.1	E	PM	80.6	F	71.8	E	57.6	E	100.6	F	105.6	F	PM	-34%	Same	26%	Same	23%	Lower	-67%	Same	46%	Lower
NW 36TH STREET AND NW 79TH AVENUE		AM	50.8	D	48.9	D	37.3	D	99.6	F	75.8	E	AM	40.5	D	12.5	B	43.5	D	80.7	F	78.9	E	AM	-20%	Same	-74%	Better	17%	Same	-19%	Same	4%	Same
		PM	68.0	E	33.5	C	44.7	D	251.3	F	81.5	F	PM	59.9	E	36.1	D	65.9	E	97.2	F	85.2	F	PM	-12%	Same	8%	Lower	47%	Lower	-61%	Same	5%	Same

The left turn lane delay and LOS values are shown for these approaches on unsignalized intersections

Along with the delays and the LOS at each intersection, **Table 7-4** on the following page summarizes the queue lengths for turn lanes at each intersection.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

Table 7-4 - 95th Percentile Queue Length on Turn Lanes at Intersections (feet)

Intersection	AM Peak					PM Peak					Available Storage	Notes
	2022 Existing	2027 Background	2027 Background with project traffic	Background with project traffic (Improvements w/o med closures)	Background with project traffic (Improvements w med closures)	2022 Existing	2027 Background	2027 Background with project traffic	Background with project traffic (Improvements w/o med closures)	Background with project traffic (Improvements w med closures)		
Doral Boulevard @ NW 97 Avenue												
Eastbound left-turn	90	93	93	N/A	95	112	115	115	N/A	#135	180	No issues observed
Westbound left-turn	189	194	#232	N/A	#238	145	151	169	N/A	178	150	Issues already exist in the background condition, project traffic adds about a couple of vehicle to existing scenario. There are back to back turn lanes, so extension is not possible
Northbound left-turn	127	128	128	N/A	134	225	230	230	N/A	235	120	Similar to background conditions
Southbound left-turn	356	372	#379	N/A	#391	259	266	275	N/A	276	175	Issues already present in existing condition, project traffic adds about 10 to 15 feet (less than one vehicle) to the background scenario
Doral Boulevard @ NW 93 Court												
Eastbound left-turn	18	18	m18	N/A	m2	26	31	m33	N/A	m13	200	No issues observed
Westbound left-turn	19	18	16	N/A	2	6	6	6	N/A	10	200	
Doral Boulevard @ NW 8800 Block												
Eastbound left-turn	4	4	26	15	15	12	12	33	40	40	200	No issues observed
Westbound left-turn	5	6	m1	m6	m36	51	52	m51	m17	m19	190	No issues observed
Doral Boulevard @ NW 87 Avenue												
Eastbound left-turn	357	363	388	387	#415	231	238	#311	#298	270	170	Issues already exist in the backgorund condition, provide 400 feet of storage as part of this project
Eastbound right-turn	478	494	557	198	192	300	311	339	150	148	170	Issues already exist in the background condition, project traffic adds about 3 vehicle lengths of queue. There is an access just west of where the taper for eastbound right turn lane starts which makes the extension of this turn lane not possible.
Westbound left-turn	458	475	#477	m#438	m#438	287	300	302	m328	m328	330	Similar to background condition in AM peak hour and no issues observed in the PM peak hour
Northbound left-turn	231	239	#284	202	202	382	397	#478	#407	#407	400	No issues observed
Northbound right-turn	136	147	159	121	121	364	385	404	336	336	Full lane	No issues observed
Southbound left-turn	97	98	m134	124	123	96	97	m120	#142	#139	190	No issues observed
Southbound through	613	637	#730	#442	#441	672	697	m#778	#538	#526	550	Issues exist in the background condition. An exclusive right-turn lane of 300 feet is provided on the southbound approach as part of this project
Southbound right-turn				197	197				115	151		
Doral Boulevard @ NW 79 Avenue				N/A					N/A			
Eastbound left-turn	227	229	m#214	N/A	m144	288	299	m#296	N/A	m#324	400	No issues observed
Westbound left-turn	274	279	279	N/A	284	188	193	193	N/A	#232	425	No issues observed
Northbound left-turn	79	79	92	N/A	94	142	146	173	N/A	173	220	No issues observed
Northbound right-turn	165	171	171	N/A	121	442	458	#458	N/A	281	Full lane	No issues observed
Southbound left-turn	298	306	306	N/A	#332	348	357	357	N/A	#424	160	Similar to background conditions
NW 41 Street @ NW 87 Avenue												
Northbound left-turn	33	33	**m82**	N/A	m14	2	3	m11	m24	m24	120	This is a major driveway and 225 feet of storage is provided as part of the project
Southbound left-turn	37	38	55	N/A	59	22	23	30	52	55	185	No issues observed
NW 58 Street @ NW 97 Avenue				N/A								
Eastbound left-turn	25	25	25	N/A	23	74	58	59	N/A	45	220	No issues observed
Westbound left-turn	242	257	#265	N/A	#252	778	733	#765	N/A	484	650	Issues exist in the AM and PM background conditions. Project traffic adds less than 10 feet/ 1 vehicle length in the AM peak hour
Northbound left-turn	201	215	222	N/A	#255	208	260	262	N/A	280	200	Similar to background conditions
Southbound left-turn	413	465	#485	N/A	#426	158	187	201	N/A	213	170	Issues already present in the AM peak hour background condition, project traffic adds about 1 vehicle length but signal timing optimization makes it equal to or better than background condition

Table 7-4 - 95th Percentile Queue Length on Turn Lanes at Intersections (feet)

Intersection	AM Peak					PM Peak					Available Storage	Notes
	2022 Existing	2027 Background	2027 Background with project traffic	Background with project traffic (Improvements w/o med closures)	Background with project traffic (Improvements w med closures)	2022 Existing	2027 Background	2027 Background with project traffic	Background with project traffic (Improvements w/o med closures)	Background with project traffic (Improvements w med closures)		
NW 58 Street @ NW 87 Avenue				N/A								
Eastbound left-turn	154	157	157	N/A	168	172	197	#200	N/A	#196	200	No issues observed
Westbound left-turn	100	122	#159	N/A	m#152	100	115	133	N/A	m133	210	No issues observed
Northbound left-turn	316	344	#391	N/A	#348	357	428	#498	N/A	#445	260	Issues already exist in the backgound condition, project traffic adds about 1 vehicle length in both the AM and PM peak hours. Back to back turn lanes are present, so no chance to increase the storage length.
Southbound left-turn	124	144	144	N/A	#167	96	133	133	N/A	123	215	No issues observed
Southbound right-turn	47	47	47	N/A	32	371	399	403	N/A	382	600	No issues observed
NW 58 Street @ NW 79 Avenue				N/A								
Eastbound left-turn	19	19	22	N/A	m25	9	9	11	N/A	m9	220	No issues observed
Eastbound right-turn	11	14	14	N/A	m12	0	1	1	N/A	m18	70	No issues observed
Westbound left-turn	750	794	#850	N/A	#872	495	517	#572	N/A	#541	650	Issues exist in the AM peak background condition, project traffic adds about 2 vehicles length.
Westbound right-turn	40	45	47	N/A	55	24	26	26	N/A	26	Full lane	No issues observed
Northbound left-turn	343	354	#354	N/A	261	412	427	#427	N/A	312	200	Similar to background conditions
Northbound right-turn	197	205	217	N/A	152	624	666	#686	N/A	#413	Full lane	No issues observed
Southbound left-turn	206	213	#218	N/A	#231	453	473	#473	N/A	#568	170	Issues already present in existing condition, adds 10 to 15 feet (less than one vehicle) to the existing scenario.
NW 53 Street @ NW 87 Avenue												
Northbound left-turn	29	30	32	N/A	24	20	20	m20	N/A	m24	150	No issues observed
Southbound left-turn	55	56	59	N/A	46	53	57	57	N/A	#97	120	
Centrum Doral @ Doral Boulevard												
Eastbound left-turn	5	5	6	N/A	0	1	1	1	N/A	1	160	No issues observed. Eastbound and Westbound left turns proposed to be closed as part of this project. Additionally westbound right-tun lane into rideshare drop off proposed as part of this project
Westbound left-turn	5	5	6	N/A	0	2	2	3	N/A	0	80	
Southbound right-turn	3	3	3	N/A	3	4	5	5	N/A	5	Full lane	
NW 87th Avenue @ 8669 AWS												
Westbound right-turn	1	2	2	N/A	2	3	3	3	N/A	3	Full lane	No issues observed. Southbound left-turn proposed to be closed as part of this project
Southbound left-turn	0	0	0	N/A	0	0	0	1	N/A	0	140	
AT&T East Driveway @ Doral Boulevard												
Westbound left-turn	3	3	3	N/A	3	2	2	2	N/A	2	160	No issues observed
AT&T West Driveway @ Doral Boulevard												
Westbound left-turn	4	4	4	N/A	4	1	1	1	N/A	1	160	No issues observed
NW 87th Avenue @ Windsor Doral												
Northbound through	0	0	0	N/A	0	0	0	0	N/A	0	Full lane	No issues observed. Exclusive northbound left turn at median opening proposed as part of this project.
Northbound left-turn				N/A	0				N/A	0	80	
Southbound left-turn	2	2	2	N/A	2	4	4	4	N/A	4	140	

95th percentile volume exceeds capacity, queue may be longer.

m Volume for 95th percentile queue is metered by upstream signal.

8.0 ROADWAY SEGMENT ANALYSIS

Roadway segment traffic data collected was used to develop the two-way peak hour volumes for the roadway segment and is presented in **Table 8-1** on the following page. As presented in the table, all of roadway segments near the development have adequate capacity to accommodate the additional trips generated by Doral International Towers.

Growth rate for the roadways was determined from an analysis of historical annual average daily traffic. This information is documented in the **Appendix C**. Given a negative growth rate was determined for the area wide analysis, a nominal growth rate of 0.5% was applied to the traffic data collected. Committed development traffic compiled from **Section 6.0** of this report, was then added to develop the 2027 background volumes. The total future 2027 demand was derived from adding the net increase in trips (from the proposed future land use less the existing uses). **Table 8-1** on the following page presents a summary of the 2027 short range analysis with and without the future amendment traffic. The analysis summarizes if the proposed redevelopment significantly impacts roadway segments (i.e., 5% of the existing LOS 'D' target on each link) within the study area, as well as if the future LOS 'D' Target will be achieved without and with project traffic.

As can be seen from **Table 8-1** The significantly impacted segments all meet the LOD 'D' target without and with project traffic.

Table 8-1: 2027 Two-Way Peak Hour Roadway Segment Analysis

Roadway Segment		Existing		Committed		2022 Peak Hour Volume[3]	2027 Background Traffic			Project Traffic				2027 Total Traffic	2027 Total Traffic LOS	Meets LOS 'D' Target?	
From	To	Number Of Lanes	LOS 'D' Target[1]	Number Of Lanes	LOS 'D' Target		Committed	Historical Growth Rate	Committed & Historical	Assignment	Net Traffic	% Impact	Significant ?[4]			w/o project	w project
NW 58th Street																	
NW 97th Avenue	NW 87th Avenue	4LU	3,230	4LU	3,230	2,364	119	0.50%	2,542	5%	74	2.29%	No	2,616	C	Yes	Yes
NW 87th Avenue	NW 79th Avenue	4LU	3,390	4LU	3,390	2,012	83	0.50%	2,145	6%	88	2.60%	No	2,233	C	Yes	Yes
NW 53rd Street																	
NW 87th Avenue	NW 79th Avenue	2LD	1,260	2LD	1,260	479	0	0.50%	492	6%	88	6.98%	Yes	580	C	Yes	Yes
Doral Blvd/NW 41/NW 36th Steet																	
NW 97th Avenue	NW 87th Avenue	6LD	5,100	6LD	5,100	3,281	0	0.50%	3,364	23%	339	6.65%	Yes	3,703	C	Yes	Yes
NW 87th Avenue	NW 79th Avenue	6LD	5,100	6LD	5,100	3,340	0	0.50%	3,424	21%	309	6.06%	Yes	3,733	C	Yes	Yes
NW 97th Avenue																	
Doral Blvd/NW 41/NW 36 St	NW 52 Street	4LD	3,230	4LD	3,230	1,924	111	0.50%	2,084	3%	44	1.36%	No	2,128	C	Yes	Yes
NW 52nd Street	NW 58th Street	2LU	1,520	4LD[2]	3,230	1,246	111	0.50%	1,389	3%	44	2.89%	No	1,433	C	Yes	Yes
NW 87th Avuenue																	
South of Doral Blvd/NW 41/NW 36 St		6LD	4,860	6LD	4,860	3,345	111	0.50%	3,541	24%	353	7.26%	Yes	3,894	C	Yes	Yes
Doral Blvd/NW 41/NW 36 St	NW 53 Street	4LD	3,390	4LD	3,390	2,404	228	0.50%	2,693	27%	398	11.74%	Yes	3,091	D	Yes	Yes
NW 58 Street	NW 53 Street	4LD	3,390	4LD	3,390	2,250[5]	228	0.50%	2,535	26%	383	11.30%	Yes	2,918	C	Yes	Yes
NW 79th Avenue																	
Doral Blvd/NW 41/NW 36 St	NW 58 Street	4LU	3,230	4LU	3,230	1,783	63	0.50%	1,891	6%	88	2.72%	No	1,979	C	Yes	Yes

1 LOS D Capacity based on Peak hour

2 Assuming the programmed roadway improvement project to widen NW 97th Street from NW 52th Street to NW 70th Street from 2 Lane 4 lane keeps typical section of NW 97th Ave South of NW 52nd Street

3 Reflects average of 72-hour counts collected the week of 5/3-5/5/22 and adjusted to average peak conditions (i.e, seasonal factor of 0.99) using FDOT 2019 Peak Season Factor Category Report

4 Roadways are significantly impacted if project impact is greater than 5%

5 Roadway segment peak hour volume was derived from ratio between turning-movement count data from intersections of NW 53 Street and NW 58 Street on NW 87 Avenue and the counts taken for the segment south of NW 53 Street

9.0 DRIVEWAY ANALYSIS

Access to the development will be via seven driveways connecting to NW 87th Avenue and Doral Boulevard respectively. The driveways are described as follows:

- ***Driveway # 1*** - a right-in only inbound and right-out only outbound driveway pair on NW 87th Avenue providing access to Building 1.
- ***Driveway # 2*** - a right-in only inbound and right-out only outbound driveway pair on NW 87th Avenue providing access to Building 2.
- ***Driveway # 3*** - a full access signalized driveway on NW 87th Avenue providing access to Building 3, Hotel, Ballroom and Clubhouse.
- ***Rideshare Drop-Off Loop*** - a right-in only inbound on Doral Boulevard and right-out only outbound driveway pair on NW 87th Avenue providing rideshare vehicles access to Building 3, and adjacent buildings.
- ***Driveway # 4*** - a full access signalized driveway on Doral Boulevard providing access to Building 3, Building 4, Building 5, Ballroom, spa and Clubhouse.
- ***Driveway # 5*** - a right-in only inbound and right-out only outbound driveway pair on Doral Boulevard providing access to Building 4.
- ***Driveway # 6***- a right-in / right-out only driveway on Doral Boulevard providing access to Building 6 and the spa. While this driveway currently aligns with an existing full median opening, the development proposes a right-in/right-out only restricted access for the site at this location.

While the existing guardhouse at Driveway #3 will be maintained, there will be no gates at any driveways. **Exhibit 8-1** on the next page shows driveway volumes.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

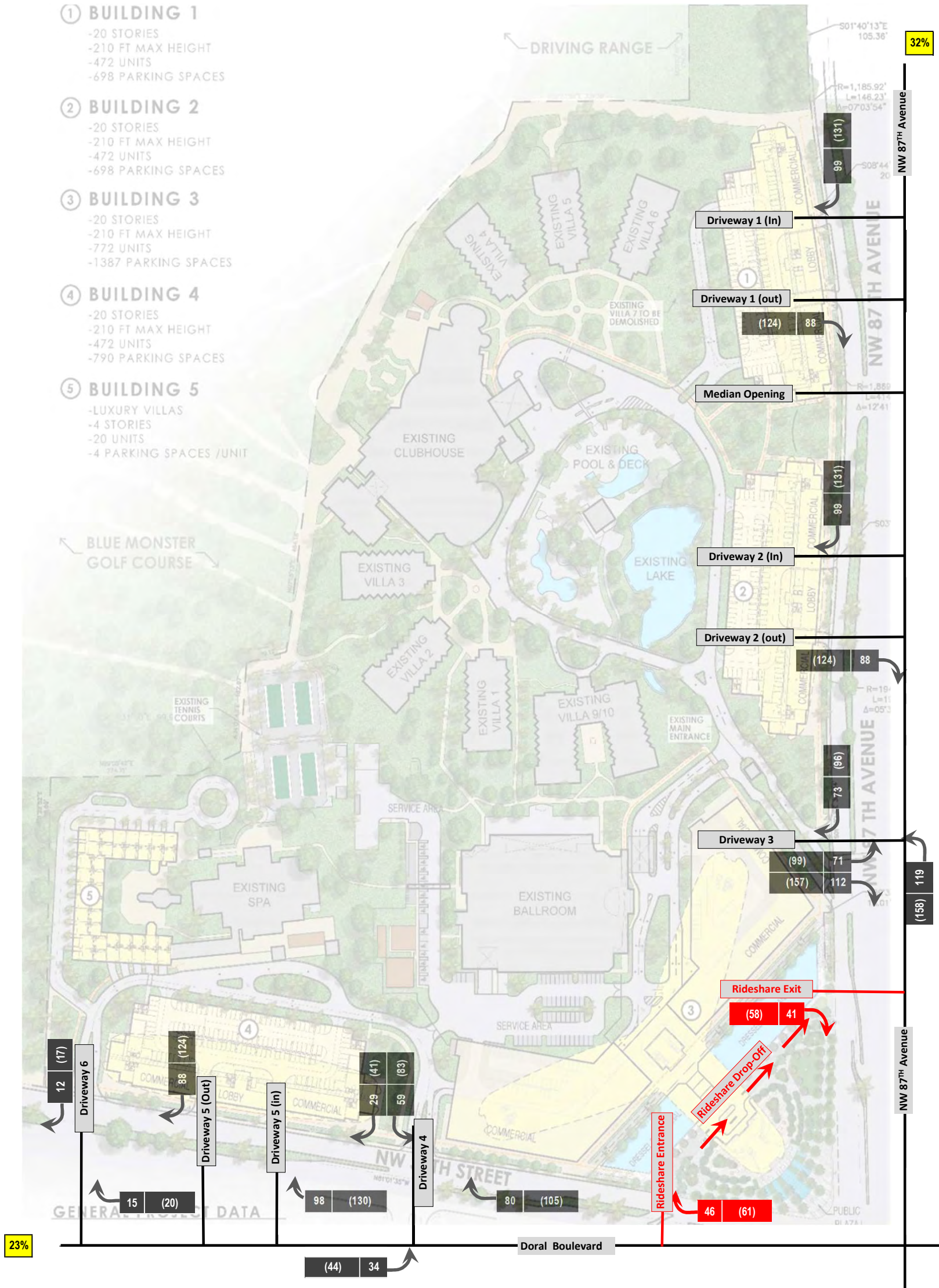
① **BUILDING 1**
-20 STORIES
-210 FT MAX HEIGHT
-472 UNITS
-698 PARKING SPACES

② **BUILDING 2**
-20 STORIES
-210 FT MAX HEIGHT
-472 UNITS
-698 PARKING SPACES

③ **BUILDING 3**
-20 STORIES
-210 FT MAX HEIGHT
-772 UNITS
-1387 PARKING SPACES

④ **BUILDING 4**
-20 STORIES
-210 FT MAX HEIGHT
-472 UNITS
-790 PARKING SPACES

⑤ **BUILDING 5**
-LUXURY VILLAS
-4 STORIES
-20 UNITS
-4 PARKING SPACES /UNIT



Total Driveway Volumes (veh/hr)

Period	Total	In	Out
AM Peak	1253	663	590
PM Peak	1704	876	828

Legend

1000 AM Peak Hour Volume
(1000) PM Peak Hour Volume
24% Project % Distribution

Project Name: **Doral International Towers** By: Trump Endeavor 12, LLC	*Exhibit Name:* **AM/PM Peak Hour Driveway Volumes**	*Report Title:* **Traffic Impact Study**	*Exhibit No:* 9-1 *Page no:* 34 *Date:* 12/26/23

Driveway Classification

According to Ordinance No 2008-01 that amended the City of Doral's Land Development Code, it is necessary to classify project driveways as minor, intermediate, or major according to the following criteria:

- ***Minor*** - Provides for a maximum average peak hour volume of 50 vehicles,
- ***Intermediate*** - Provides services for a maximum average peak hour volume of 150 vehicles,
- ***Major*** - Provides service for a maximum average peak hour volume of 500 vehicles.

Using these criteria, the following driveway classifications apply:

Driveway Number
1Intermediate
2Intermediate
3Major
Rideshare Intermediate
4 Major
5Intermediate
6Minor

Turn Lane Requirements

Chapter IX. Roads and Vehicular Use Areas, Section 2 General Provisions (1) b. of the amended code via Ordinance No 2008-01 states that a right turn deceleration lane is required at each access point when the speed limit equals or exceeds 35 miles per hour or if the development will generate 100 or more right turn movements during the peak hour. This criteria results in the determination that a right-turn ingress lane would be warranted at all driveways except Driveway # 6.

Queueing Analysis for Driveway#3 (Main Project Driveway on NW 87th Avenue)

The existing control at driveway #3 is a guard house with an attendant which will result in intermittent interruptions for traffic entering from NW 87th Avenue at NW 41st Street. Therefore, an analysis of the potential queueing resulting from guard house interruptions was performed using procedures contained in *Parking, Eno Foundation for Transportation*. The assumptions for the future condition are as follows:

- Unlike for the existing conditions where everyone is a guest, future traffic using this entrance will include residents living in the high rise apartment units. As such, for the future condition, a conservative 50-50 split between residents and guests for vehicles entering the property is assumed,
- Considering the 50-50 proportion between future residents and guests, an average service rate was determined assuming control at the gate will be a blend of coded-card reader for residents and fixed fee to cashier without a gate for guests,
- Additionally, the minimum available storage at the driveway (for vehicles entering from the northbound left and westbound through) is 225 feet as measured from the service point at the guard house to the west leg crosswalk at the intersection. Vehicles entering from the southbound right turn would have even more distance to queue from the

service point at the guard house considering the exclusive right turn deceleration lane that is being proposed at the driveway. Even so, the projected queue demand at this driveway is less than the minimum 225 feet available.

Based on the estimated driveway demand and access operation, it was estimated the existing guard house would need to provide a minimum of eight (8) vehicle length storage for vehicles during the PM peak hour to avoid spillback into NW 87th Avenue assuming a single lane of access will be maintained for the entrance. The existing storage of 225 feet meets the minimum required storage of eight (8) vehicles considering the total entering demand at this driveway from all directions (turning movements). Therefore, it is anticipated the driveway will not have a queuing issue with the increased driveway volume at build-out.

Queueing Analysis for Rideshare Drop-Off Loop

As noted, the existing driveway west of NW 87th Avenue on Doral Boulevard will be repurposed to be only used as a rideshare drop-off entrance. An analysis of the potential queueing resulting from rideshare vehicles was performed using procedures contained in *Parking, Eno Foundation for Transportation*. As rideshare is not a specified type of control, an assumed control type of 'fixed fee to cashier with gate' was used in analysis. Based on the estimated driveway demand and access operation, it was estimated that the rideshare loop would need to provide a minimum of two (2) vehicle length storage for vehicles to avoid spillback into Doral Boulevard assuming a single lane of access will be maintained for the entrance. The internal storage of approximately 250 feet and the added right turn lane of 80 feet of storage exceeds the minimum required storage of two (2) vehicles. Therefore, it is anticipated the driveway will not have a queuing issue with the increased driveway volume at build-out.

Appendix H provides an excerpt of the relevant sections from Ordinance No 2008-01 and calculations of queueing analysis for driveway #3 and rideshare drop-off loop with appropriate references.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

10.0 BICYCLE, PEDESTRIAN, AND TRANSIT EXISTING CONNECTIVITY

An assessment of bicycle, pedestrian and transit connectivity has been conducted as part of this study.

The study area has existing connecting sidewalks along NW 87th Avenue and along Doral Blvd/NW 41st/NW 36th Street on both sides of the roadway. The existing signalized intersections along these roadways have at least one leg the intersection with a marked crosswalk provided.

Using the guidelines specified in the 2023 Florida Quality/Level of Service Handbook developed by the Florida Department of Transportation, Doral Boulevard from NW 97th Avenue to NW 87th Avenue and NW 87th Avenue from Doral Boulevard to NW 58th Street were assessed for pedestrian level of traffic stress (PLTS). The PLTS categories are defined by continuous sidewalk presence, posted speed limit, and separation of pedestrian facilities from roadway. Both roadways have continuous sidewalk and a posted speed limit of 40 miles per hour, at some points the sidewalk is separated from the roadway by guardrail or landscaping. The areas with no separation have categorized to have PLTS 4, segments with separation have PLTS of 3. These are defined as:

- **PLTS 3**: The level where some users are willing to use this facility, but others may only use the facility when there are limited route and mode choices available.
- **PLTS 4**: The facility is difficult or impossible by a wheeled mobility device or users with other limitations in their movement and most likely used by users with limited route and mode choice.

It was noted that the intersections of NW 87th Avenue and NW 41st Street, NW 87th Avenue and Doral Boulevard/NW 36TH Street, and Doral Boulevard/NW 36TH Street and NW 8800 Block; have standard pavement markings. These could be updated to special emphasis pavement markings to improve crosswalk conspicuity thereby enhancing pedestrian safety at these intersections.

Currently, NW 87th Avenue and Doral Blvd/NW 41st/NW 36th Street adjacent to the site area do not have dedicated bicycle lanes or sharrows. Existing dedicated bike lanes in the area are located towards the east on NW 53rd Terrace/NW 53rd Street from NW 87th Avenue to 79th Avenue, and on NW 85th Avenue between NW 53rd Terrace and south of NW 47th Avenue in the Downtown Doral Area. Existing sharrows are on NW 53rd Street from east of NW 87th Ave to NW 53rd Terrace. Dressel's Dairy Trail, which is a shared use path, runs parallel to the canal south of NW 41st Street and is also adjacent to the project area.

Miami-Dade County Metro Bus routes 87, 36, 132, and 95 have stops along NW 87th Avenue and/or Doral Blvd/NW 41st/NW 36th Street in the study area. Additionally, City of Doral Trolley service routes 1 and 2 also have stops along NW 87th Avenue and/or Doral Blvd/NW 41st/NW 36th Street.

There are two existing bus stops adjacent to the development, on NW 87th Avenue north of NW 41st Street and on Doral Boulevard east of NW 8800th Block. These bus stops currently have benches but do not have shelters.

Appendix I includes maps of existing bike-ped amenities and existing transit routes in the area.

11.0 MIAMI-DADE COUNTY TRAFFIC STUDY APPROVAL

During its initial traffic study methodology review and subsequent rounds of traffic study review including the last round of comments issued on June 16, 2023 as well as in various comment resolution meetings, the City of Doral has consistently reiterated, traffic study approval is required from Miami-Dade County prior to ultimate approval from the City itself for the Doral International Towers project. The relevant City comments are summarized as follows:

- **6/13/2023 City Public Works – Plans Division, Traffic Study Comment:** Provide any permit number or process number issued by MDCPW for the review of this project to assist Doral Public Works staff in acquiring an approval or "not applicable response from MDCPW Highway Division, Traffic Signals & Signs Division, and Traffic Division.
- **6/13/2023 City Public Works - Plans Division, Traffic Study Comment:** Provide approval from Miami-Dade County Public Works for the driveways on NW 36 Street/NW 87 Avenue and for any modifications within the NW 36 Street R/W.
- **4/21/2022 City Public Works – Traffic Division, Traffic Methodology:** Please note methodology will be required to be submitted to Miami-Dade County Traffic division for review.

Parallel submittals to the City and County were made up to the last traffic study submitted for City review that was based on the development program reflected in Plans prepared by Pascual Perez Kiliddjian Starr, dated stamped received April 4, 2023. To ensure the City's directive that the project obtain County approval of the traffic study and improvements impacting County roads prior to City approval, extensive coordination including multiple comment resolution meetings as well as a couple follow up submittals to the County by the project, were made following the June 16, 2023 comments.

This project coordination with the County has led to them issuing a "No Objection Memorandum" regarding the Doral International Towers Application #2022006813. **Appendix J** includes the approval letter and comments from County and additional information.

12.0 PROPOSED IMPROVEMENTS & CONCLUSION

With the projected increase in traffic demand at project build out, the following improvements are proposed:

- Right Turn Deceleration lanes at Driveway Nos. 1, 2, 3, 4 & 5 as well as at the westbound entrance to the rideshare drop off loop on Doral Boulevard.
- Construct an exclusive southbound right turn lane at the intersection of Doral Boulevard/NW 36th Street with NW 87th Avenue.
- Construct an exclusive northbound left-turn/U-turn Lane at the median opening on NW 87th Avenue and Windsor Doral apartments.
- The above-mentioned turn lane improvements are shown in **Exhibit 12-1**.
- Install high emphasis cross walks at the intersection of Doral Boulevard/NW 36th Street with NW 87th Avenue and at the intersection of NW 87th Avenue with NW 41st Street.
- Channelize western most project Driveway (#6) on Doral Boulevard to physically restrict entering and exiting left-turns which aligns with the driveway to the AT&T field office on the southside (see right insert). This modification will create right-in/right out operations for the project site at Driveway #6 but will not restrict the movements currently allowed for AT&T.



- Install bus shelters (per Resolution No. 19-193 for the approval of bus shelter concepts) at existing transit stops on westbound Doral Boulevard 480 feet west of NW 87th Avenue and on southbound NW 87th Avenue 200 feet north of NW 41st Street.
- Additional improvements associated with potential median closures to achieve further improved operations beyond the signal timing optimization and turn lane improvements shown in **Exhibit 12-1**, are presented below:
    - Extend the eastbound left turn lane at the intersection of Doral Boulevard/NW 36th Street with NW 87th Avenue. This improvement would require closing the existing directional median opening 350 feet west of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage (see **Exhibit 12-2**).
    - Extend the northbound left turn lane at the intersection of NW 87th Avenue with NW 41st Street (Driveway 3). This improvement would require closing the existing directional median opening 300 feet south of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage (see **Exhibit 12-2**).
    - These median closures would coordination with affected stakeholders and agency approval.
    - These median closures scenarios are only being considered to accommodate the vehicular queueing demands at the following locations:
        - Eastbound left-turn movement on Doral Boulevard approaching NW 87th Avenue where excessive peak hour queues exist today and,
        - Northbound left-turn movement on NW 87th Avenue at NW 41st Street the main project driveway (#3) to provide additional storage due to increased project traffic at this location. No excessive queuing demand exists today.

The proposed improvements to the lane geometry at surrounding intersections are shown in **Exhibit 12-1** for improvements without median closures and **Exhibit 12-2** shows the geometry at medians that may potentially be closed in addition to the turn lane improvements proposed in **Exhibit 12-1**.

Exhibit 12-1: Proposed Lane Geometry for Project Build Conditions (without Median Closures)

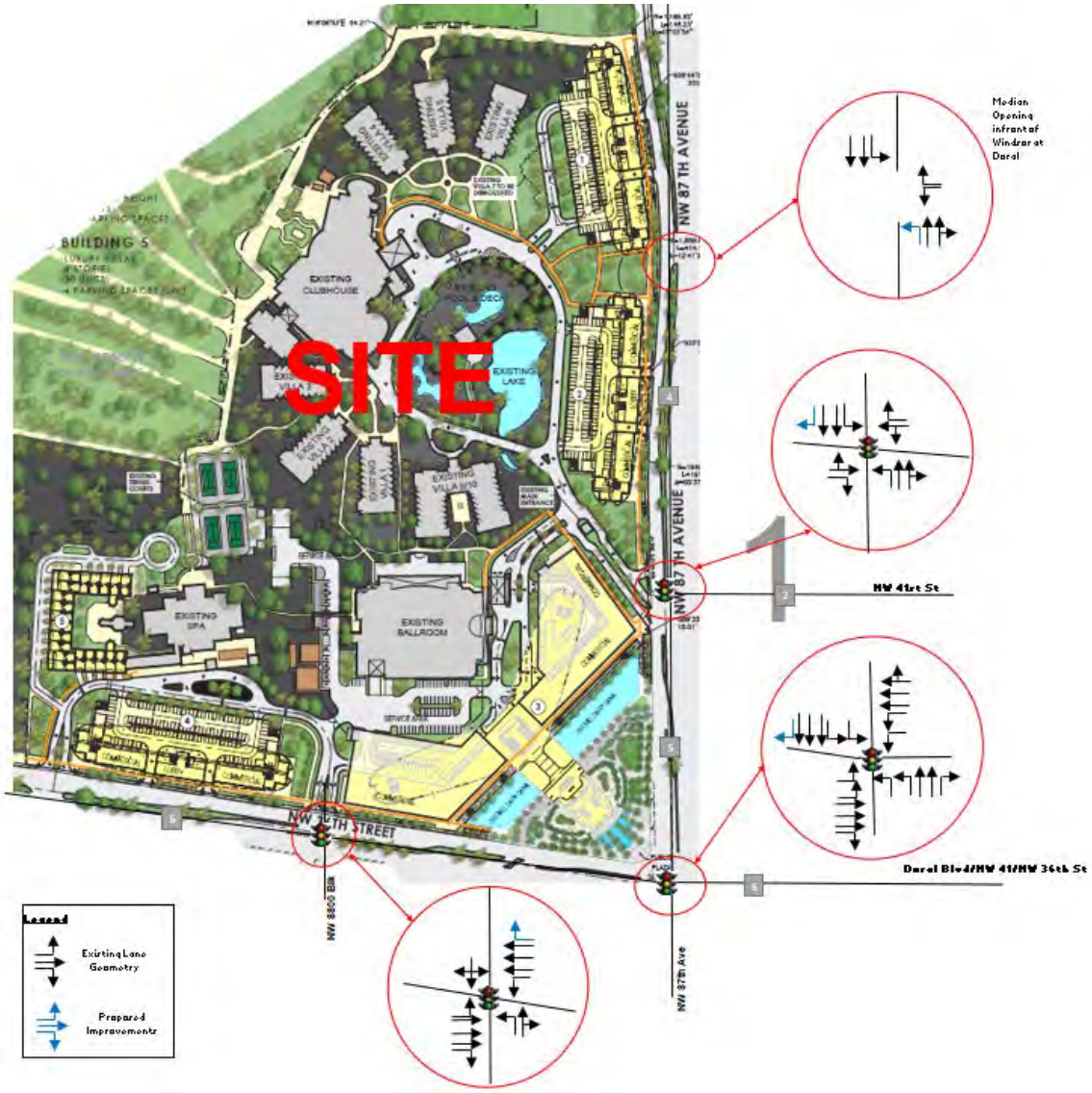
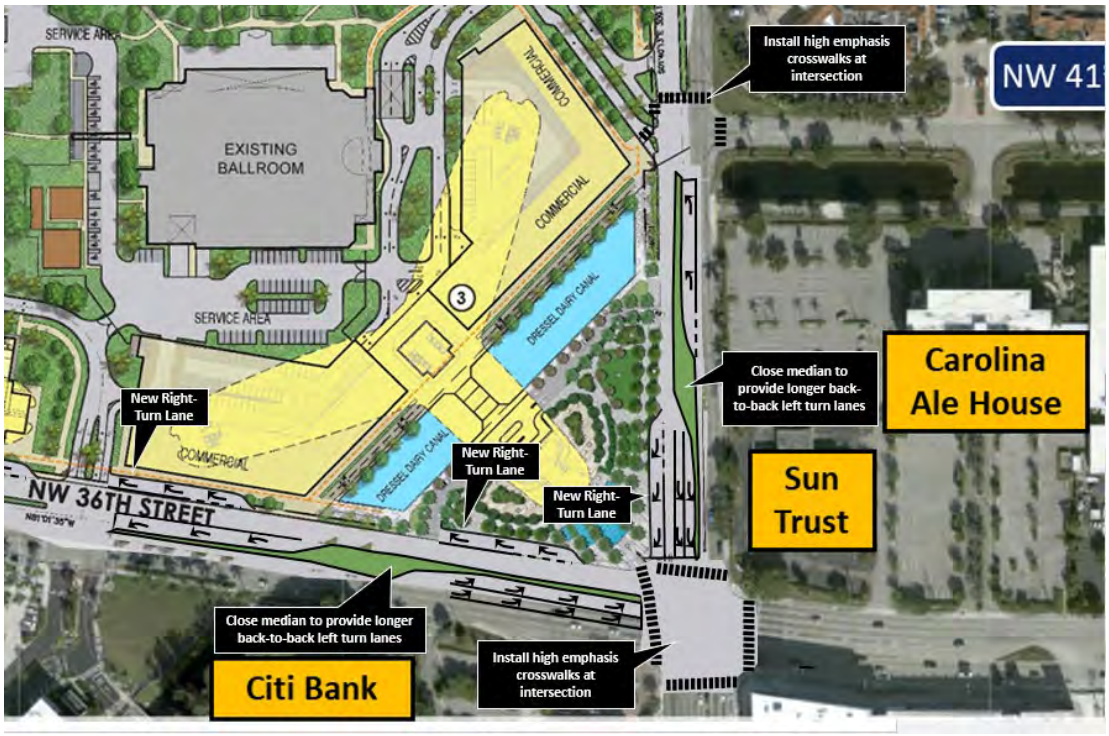


Exhibit 12-2: Proposed Lane Geometry at Median Closures



Along with the turn-lane improvements, signal timing optimization is provided at all the signalized intersections in the study.

This traffic impact analysis demonstrates that the proposed development of Doral International Towers will significantly impact the following roadway segments:

1. NW 53rd Street between NW 79th Avenue and NW 87th Avenue,
2. Doral Boulevard/NW 41st/NW 36th Street between NW 97th Avenue and NW 87th Avenue,
3. Doral Boulevard/NW 41st/NW 36th Street between NW 87th Avenue and NW 79th Avenue,
4. NW 87th Avenue between NW 58th Street and NW 53rd Street,
5. NW 87th Avenue between NW 53rd Street and Doral Boulevard,
6. NW 87th Avenue south of Doral Boulevard.

Although significantly impacted, none of the segments are projected to exceed LOS 'D' threshold without and with the inclusion of project traffic in 2027.

With the proposed intersection improvements along with the determination that the significantly impacted roadway segments will operate within the acceptable level of service target, it is concluded that the additional traffic impacts from the proposed Doral International Towers redevelopment project will be adequately addressed at the project build-out.

TRAFFIC IMPACT ANALYSIS
(Appendices)



Doral International Towers
City of Doral, FL

Prepared by:

BCC Engineering, LLC
6401 SW 87th Avenue, Suite 200
Miami, FL 33173

December 2023

APPENDIX A: Methodology & Criteria

Miami-Dade County Department of Transportation and Public Works

Comments and Responses

Doral International Towers Zoning Amendment
Review Comments from City of Doral - June 16, 2023

#	Responding	Comments & Responses
	Comments from Public Works - Plans (Bakari Smith - Plans Reviewer)	
12	**BCC Traffic**	**Comment**: Provide any permit number or process number issued by MDCPW for the review of this project to assist Doral Public Works staff in acquiring an approval or "not applicable response from MDCPW Highway Division, Traffic Signals & Signs Division, and Traffic Division. **Response:** BCC: The Miami-Dade DTPW Processing number for this project is: DR 2022006813. County has approved the study (See Appendix J for approval memo).
13	**BCC Traffic**	**Comment**: Provide approval from Miami-Dade County Public Works for the driveways on NW 36 Street/NW 87 Avenue and for any modifications within the NW 36 Street R/W. **Response:** BCC: Proposed modifications have been discussed with Miami-Dade DTPW. County has approved the study (See Appendix J for approval memo).
	Comments from Public Works - Traffic (Edna Sibila - Transportation Manager)	
14	**BCC Traffic**	**Comment:** Exhibit 2-1. The southbound lane configuration at the NW 36 St and NW 79 Avenue needs to be adjusted. There was an adjustment to the southbound lanes and the split signal phase operation was removed. The exhibit was not updated. **Response:** BCC: Agree, the exhibit will be updated to show the modified lane configuration on the southbound approach at the intersection. Synchro analysis had the correct geometry.
15	**BCC Traffic**	**Comment:** Exhibit 2-1. The southbound lanes for the NW 36 St and NW 93 Ct need to be adjusted. One lane is for right turn-only and one for left-turn only. See Miami Dade County Asset 5382 Signal Plan for lane configuration. **Response:** BCC: Agree, the exhibit will be updated to show the modified lane configuration on the southbound approach at the intersection.
16	**BCC Traffic**	**Comment:** For all analyzed scenarios in Synchro, provide the HCM signalized intersection capacity analysis and the timings sheets for review. **Response:** Agreed, the requested documentation is included in the revised report.
17	**BCC Traffic**	**Comment:** Provide an exhibit that summarizes all the existing turning movement counts including the median openings as provided for future traffic volumes. **Response:** BCC: Noted, an exhibit similar to 6-1 was included for existing traffic counts.
18	**BCC Traffic**	**Comment:** Section 5.1 – call out attachment C in text for the internal capture calculations. **Response:** BCC: Noted, the attachemnet C is called out in the report.
19	**BCC Traffic**	**Comment:** Existing uses - round values for the spa and club house in table. **Response:** BCC: Noted. The decimal points were rounded off to a whole number.
20	**BCC Traffic**	**Comment:** Future uses - for residential (high rise) the AM/PM peak in/Out values do not match ITE output. Please verify values and update calculations. **Response:** BCC: Noted. The in/out values for the residential land use were updated to show the correct values.
21	**BCC Traffic**	**Comment:** Future uses – adjust subcategory for the retail. The subcategory used is for supermarket. Based on site plan this would be all proposed retail. Adjust results and update study. **Response:** BCC: Noted. The land use category of "Supermarket - No" was used. Please note that with this change, the overall project trip generation went down. All derivative calculations and results have been updated accordingly.

Doral International Towers Zoning Amendment
Review Comments from City of Doral - June 16, 2023

#	Responding	Comments & Responses
22	**BCC Traffic**	**Comment:** January 2023 detailed site plan attached in appendix shows building 1 with 472 units, building 2 with 472 units, building 3 with 883 units, building 4 with 472 units and building 5 with 20 units which totals 2324 units. Then the second page of the provided site plan breakdown shows a total of 2209 units. Please confirm the total number of units and update traffic analysis. Also, residential internalization was calculated for 2208 units and not 1739 units as shown in trip generation. **Response:** BCC: The site development information and accompanying calculations have been revised since the last submittal and are now reflected in the revised report.
23	**BCC Traffic**	**Comment:** For internalization calculations, the proposed retail is 107,432 Sq. Ft as shown in trip generation and not 98,0384 Sq. Ft that was used in the internalization sheets. Update calculations and analysis. **Response:** BCC: The latest internal capture calculations included retail use of 107,432 Sq. Ft but was not included in the report. The value of 98,034 Sq. Ft was used during the methodology before modifying to the 107,432 Sq. Ft.
24	**BCC Traffic**	**Comment:** NW 8800 Block and Doral Blvd intersection NBL existing volume during the AM is 51 not 21. Update analysis. **Response:** BCC: Noted. Synchro 2022 AM had this typo, model file has been updated. Updated Output reports will be provided. New exhibit for existing volumes will show the correct values.
25	**BCC Traffic**	**Comment:** Provide TAZ calculations showing 2015, 2045 and build out year calculations. Values appear to be slightly off. Verify and adjust traffic analysis. **Response:** BCC: Volumes for the years 2015 and 2045 were not calculated, the trip distribution values were taken from the Miami-Dade TPO 2045 LRTP. The 2027 build-out values shown in response to previous comment were interpolated linearly from the two values.
26	**BCC Traffic**	**Comment:** Update exhibit 5-2 and 5-3 and 6-2 based on comments above. **Response:** BCC: Noted.
27	**BCC Traffic**	**Comment:** Check all the synchro project traffic improv. 2027 for the AM and PM peak. The cycle lengths were drastically modified from the existing conditions. For instance, during the morning peak at NW 87th Ave and NW 36th Street the cycle length went from 180 seconds during existing conditions to 120 seconds. This was observed to occur at all signalized intersections. If this is the proposed signal timing improvements, coordination with Miami Dade county traffic signals division will be required due to the magnitude of the proposed changes. Please note that such a difference in cycle length for the peak periods will affect signal progression along the corridors. **Response:** BCC: The following intersections were coded back to their original cycle length and offset values in both AM & PM: - 87th Ave & Doral Blvd - 87th Ave & 41st St - 8800 Blk & Doral Blvd - 97th Ave & Doral Blvd - 97th Ave & 58th St - 79th Ave & 58th St - 87th Ave & 58th St
28	**BCC Traffic**	**Comment:** Table 7-3 – provide a larger table or split into two pages. **Response:** BCC: Noted. Table 7-3 will be split into two pages.

Doral International Towers Zoning Amendment
Review Comments from City of Doral - June 16, 2023

#	Responding	Comments & Responses
29	**BCC Traffic**	**Comment:** It is recommended to analyze for the NW 87th Ave and NW 41 St signal operations to be modified for the eastbound and westbound movements to operate concurrently and remove split phase operation to reduce the overall signal delay. **Response:** BCC: Eastbound and westbound approaches cannot be operated concurrently for the following reasons: - The lane configuration on the westbound approach is a shared left-thru lane and an exclusive right turn lane. - Additionally, the eastbound approach leg (west leg) is skewed/not perpendicular and may pose safety issue if it runs concurrently due to sight distance issue.
30	**BCC Traffic**	**Comment:** Table 8-1 and exhibit 9-1 – update project traffic based on previous comments. Also attach a copy of the QLOS reference table for review. **Response:** BCC: Noted. A copy of volume for target LOS 'D' will be attached.
31	**BCC Traffic**	**Comment:** Provide left turn analysis follow Section 77-46 of city code for the median opening at NW 87th Avenue and Windsor at Doral. **Response:** BCC: Noted. An exclusive northbound left turn lane will be provided.
32	**BCC Traffic**	**Comment:** Update queuing analysis based on previous comments in regard to the trip generation results. **Response:** BCC: Noted.
33	**BCC Traffic**	**Comment:** In report text, please include the proposed Doral Blvd bus shelters as per our adopted Doral Boulevard Beautification Master Plan. **Response:** BCC: Noted.
34	**BCC Traffic**	**Comment:** Provide a right turn overlap for the proposed southbound right turn movement at the NW 87th Ave and NW 36th St intersection. **Response:** BCC: Noted.
35	**BCC Traffic**	**Comment:** For the proposed signal timing modifications, provide a summary table in report with the new proposed timings (cycle lengths and/or splits). **Response:** BCC: Noted, change in splits were summarized in a table and included in the appendix.
36	**BCC Traffic**	**Comment:** Confirm completion of the NW 97th Avenue widening project. If widening will not be completed by the time the development is open, an analysis with the current conditions is required. **Response:** BCC: Widening is County Project PW000860, it is currently funded for CST in FY 2025/26-2027/28 in the Draft FY 2024 TIP. Could indicate that project will be finalizing construction early to mid CY 2027.
37	**BCC Traffic**	**Comment:** Any changes to density please note that an updated traffic study needs to be submitted. **Response:** BCC: Noted.
38	**BCC Traffic**	**Comment:** Approval from Miami-Dade County Traffic Engineering Division is required. **Response:** BCC: Noted.

Doral International Towers Zoning Amendment
Review Comments from City of Doral - June 16, 2023

#	Responding	Comments & Responses
39	**BCC Traffic**	**Comment:** Advisory comments below are necessary during site plan review process and implementation of the project: -Approval is subject to review from City of Doral Public Works Department - Plans Review -Compliance with the applicable sections of the City's Land Development Code Chapter 77. -Implementation of the proposed project dealing with roadway construction work, installation of signage, pavement markings and other needed items shall conform to all applicable requirements, standards and regulations of the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), City of Doral, Miami-Dade County Department of Transportation and Public Works, and Miami-Dade Fire Rescue Department **Response:** BCC: Noted.

Doral International Towers Zoning Amendment
Review Comments (June 13, 2023) from Miami-Dade County DTPW Traffic Engineering Division
DR 2022006813

#	Comments & Responses
	Comments on Traffic Study
1	**Original Comment:** Please clarify if there is an internal connection with the amenities accessible through driveway #3. The queuing analysis must include the number of trips entering through driveway #3. Also, the gated entrance must comply with entrance feature requirements. **2nd Follow-up 06/13/2023: Comment partially addressed.** While the current storage capacity of 200 feet satisfies the minimum requirement of accommodating seven (7) vehicles during the AM peak period, the analysis conducted in Appendix H's queuing analysis worksheet indicates that the 95th percentile queue for the PM peak period will be 13 vehicles. Consequently, the existing storage of 200 feet is inadequate to prevent spillback into NW 87th Avenue. **Response:** BCC: Noted. Queueing analysis was revisited with new volumes based on the updated trip generation analysis and mdofications to type of control at the gate. The type of control assumed in the previous submittal was "Fixed fee to cashier-no gate", which is the existing condition. Unlike the existing condition, it has to be noted that, once the development is built, the vehicles entering will be a mix of residents (living in the high-rise apartments) as well as visitors. Hence service rates for the calculation is assumed to be an average of "Coded-card reader" and "Fixed fee to cashier-no gate" for residents and visitors respectively. Based on the above assumptions, the 95th percentile (worst queue scenario) will be be between 7 to 8 vehicles in the PM peak hour.
2	**Original Comment:** Please clarify if an exclusive right-turn lane will be provided at driveway #3. As per traffic study results, an exclusive right-turn lane is warranted. **2nd Follow-up 06/13/2023: Comment waived**. As per revised traffic study the southbound right-turn volumes at Driveway #3 do not exceed 125 right-turn vehicles per hour. As such given that the southbound through volumes are less than 600 vehicles per lane, a dedicated right-turn lane is not warranted. **Response:** BCC: Noted.
3	**Original Comment:** As per traffic study, driveway #6 is intended to be right-in / right-out only driveway on NW 36th Street providing access to Building 6 and the spa. However, given that this is a full median opening there is not physical restriction to prevent vehicles making left-turns. As such, please provide a physical restriction to avoid unintended movements. **2nd Follow-up 06/13/2023: Comment not addressed**. Considering the Detailed Site Plan from January 2023, it appears that the proposed channelization at Driveway #6 does not effectively restrict left-turn movements. In order to prevent unintended maneuvers, it is necessary to develop an appropriate design for a Driveway Channelizing Island. Additionally, the Civil drawings have not been provided. Also, please provide written approval from the Highway Division (Leandro Oña) for the proposed new driveway connections on NW 87th Avenue and NW 36th Street. **Response:** BCC: Noted. An island will be provided at driveway#6 which will make it right-in right-out only driveway in a safe manner. Site plan will be updated to show that.
4	**Original Comment:** Please ensure to include Synchro analysis for the existing conditions in traffic study. **2nd Follow-up 06/13/2023: Comment addressed**. **Response:**BCC: Noted.
5	**Original Comment:** Please evaluate the need for a dedicated northbound left-turn lane at the median opening on NW 87TH Avenue for the expected U-turns. **2nd Follow-up 06/13/2023: Comment partially addressed.** Despite being listed as part of the proposed improvements in the report, the Site Plan or Exhibit 11-1 does not present this recommendation. Please provide an updated site plan that includes all the proposed improvements. **Response:** BCC: Noted. Site plan will be updated to show the exclusive northbound left-turn lane.
6	**Original Comment:** Please show internal capture percentages with respective to each individual ITE Land Use Code. **2nd Follow-up 06/13/2023: Comment partially addressed.** Table 5-1 was updated to include internal capture percentages for each LUC, however, please explain how the numbers were calculated as the number of trips being reduced does not correspond to the percentages listed. **Response:** BCC: The internal capture percentages were calculated using the NCHRP report 584. Calculation methodology: Once the individual trips are input into the spreadsheet, the report returns internal capture percentages by land uses. Table 6-P in the respective spreadsheets/tabs (AM, PM and Daily) has internal capture values for individual land uses, which were used to discount the trips for entering and exiting trips. The internal capture volume should finally be equal to "All Person-Trips - External Vehicle-Trips".

Doral International Towers Zoning Amendment
Review Comments (June 13, 2023) from Miami-Dade County DTPW Traffic Engineering Division
DR 2022006813

#	Comments & Responses
7	**Original Comment:** Please provide mitigation for any movements and/or approaches in which the LOS/delay increases beyond the County's acceptable LOS (LOS E) due to the additional trips added by the proposed development. **2nd Follow-up 06/13/2023: Comment partially addressed.** The synchro output timing sheets are missing for some of the intersections for background conditions. Please include this information as part of the synchro output sheets. **Response:** BCC: Noted. Will include synchro sheets for all locations/scenarios.
	Comments on Site Plan
8	**Original Comment:** Exit driveways must comply with clear sight visibility requirements for both pedestrians and vehicular traffic. Provide clear sight visibility triangles on the site and landscape plans to demonstrate compliance with these requirements. **2nd Follow-up 06/13/2023: Comment not addressed.** Civil Plans and Landscape Plans have not been provided. **Response:** Plans have been included with this submittal
9	**Original Comment:** Please show location of 6' sidewalk. **2nd Follow-up 06/13/2023: Comment not addressed.** Civil Plans have not been provided. **Response:** Civil Plans have been included with this submittal.
10	**Original Comment:** Driveways must comply with FDOT Standard 515. **2nd Follow-up 06/13/2023: Comment not addressed.** Please provide an updated Site Plan that includes all the information required to conduct a comprehensive review. **Response:** See Plans that have been included with this submittal
11	**Original Comment:** Parking spaces must not be located within 25' of any stop sign or 25' from the right of way at entrance driveways (throat distance). **2nd Follow-up 06/13/2023: Comment not addressed.** Please provide an updated Site Plan that includes all the information required to conduct a comprehensive review. **Response:** See Site Plan that has been submitted.
12	**Original Comment:** Please provide a t-turnaround for all parking isles that end. **2nd Follow-up 06/13/2023: Comment not addressed.** Please provide an updated Site Plan that includes all the information required to conduct a comprehensive review. **Response:** See Site Plan that has been submitted.
13	**Original Comment:** Please provide written approval from the Highway Division for the proposed typical section/proposed driveways on NW 87TH Avenue and NW 36TH Street. Also, the traffic study recommends closing the directional median on NW 36TH Street just west of NW 87TH Avenue to extend the eastbound left-turn lane at the signalized intersection of NW 87TH Avenue and NW 36TH Street. However, please note that the Highway Division has to approve this median closure, as well as the owners of the development located on the south side of NW 36TH Street given that this opening provides access to these existing developments. **2nd Follow-up 06/13/2023: Comment not addressed.** Approval from the Highway Division (Leandro Oña) for the proposed typical section on NW 87th Avenue and NW 36th Street, as well as for the proposed directional median closure on NW 36th Street just west of NW 87th Avenue, is required. Please refer to comment No. 3. **Response:** BCC: Noted.
14	**Original Comment:** Please ensure to show the trash collection truck maneuvering wheel path around the site. Note that no backing in/out is allowed within public right-of-way. **2nd Follow-up 06/13/2023: Comment not addressed.** Civil Plans have not been provided. **Response:** See Civil Plans provided.
15	**Original Comment:** A signed and sealed site plan printed to scale must be submitted for DTPW review. Pavement widths, radii, existing and proposed driveway connections, proposed circulation paths, pedestrian pathways, ramps, sigh visibility triangles (pedestrians and vehicular), pavements markings, driveways configuration, lanes widths, signing, etc. must be shown in the submitted site plan. A minimum of 5 feet must be provided from property line to driveway. **2nd Follow-up 06/13/2023: Comment not addressed.** Please provide an updated Site Plan that includes all the information required to conduct a comprehensive review. **Response:** See signed and sealed site plan provided.
16	
17	
18	
19	
20	
21	

Doral International Tower Redevelopment Methodology Review Comments Friday, June 3, 2022
DR 2022005081

The Department of Transportation and Public Works has reviewed the methodology for the subject application and approves the methodology subject to the traffic study addressing the following comments:

1. Please advise why internal capture rates were not applied between the existing hotel and ballroom/spa/clubhouse for existing uses.
2. Study must evaluate the need and provide recommendations for dedicated left and right turn lanes at the proposed entrances.
3. Please ensure to evaluate the proposed full-access driveway connection on NW 36 Street given that the proposed westernmost connection will align with the existing driveway for AT&T.
4. Please include a queuing analysis for any proposed gated entrance.
5. Please provide bidirectional counts for the segment along NW 87 Avenue from NW 53 Street to NW 58 Street.

Please contact our office at (305) 375-2030 for any further questions.

Thank you.

To: Miami-Dade County Department of Transportation and Public Works Traffic Engineering Division

From: Lorin R.C. Brissett, P.E. / BCC Engineering, LLC
Karla Rios, EI / BCC Engineering, LLC

Date: June 21, 2022

Subject: **Project:** Doral International Towers
Review: 1st Review, Comments, Traffic Study Methodology

Here are our responses to Miami-Dade County Department of Transportation and Public Works Traffic Engineering Division comments dated June 3, 2022 concerning the proposed traffic study methodology:

1. Please advise why internal capture rates were not applied between the existing hotel and ballroom/spa/clubhouse for existing uses.

   BCC Response – The NCHRP 8-51 internal trip capture estimation tool used lists out the uses that will have internal capture as office, retail, restaurant, cinema/entertainment, residential and hotel. It was assumed that the existing ballroom, spa and clubhouse did not fall into any of those categories and did not include them in either existing or future land use calculations for internal capture.

2. Study must evaluate the need and provide recommendations for dedicated left and right turn lanes at the proposed entrances.

   BCC Response – Acknowledged. The need for dedicated left and right turn lanes at proposed entrances will be evaluated as a part of the traffic impact study.

3. Please ensure to evaluate the proposed full-access driveway connection on NW 36 Street given that the proposed westernmost connection will align with the existing driveway for AT&T.

   BCC Response – Acknowledged. It should be noted that the development proposes to restrict this the driveway that will align with this median opening to right-in right-out only access.

4. Please include a queuing analysis for any proposed gated entrance.

   BCC Response – Acknowledged. The only proposed gated entrance will be the existing entrance on NW 87th Avenue and NW 41st Street; queuing analysis will be completed for that entrance.

5. Please provide bidirectional counts for the segment along NW 87 Avenue from NW 53 Street to NW 58 Street.

   BCC Response – The initial analysis of NW 87th Avenue conservatively applied the count south of NW 53rd Street to the entire segment from Doral Boulevard/NW 36th Street to NW 58th Street. Given the

timing of schools being on summer recess, collecting additional traffic count during this period will not provide a true representation of typical weekday traffic demand on this segment of NW 87th Avenue between NW 53rd Street and NW 58th Street.

The count on the subject segment was estimated using existing turning movement counts at the intersection of NW 87th Avenue and NW 53rd Street to factor the existing bi-directional count south of NW 53rd Street to derive an equivalent bi-directional count in the subject section. This method estimated a bi-directional volume on NW 87th Avenue between NW 53rd Street and NW 58th Street to be 2,250 vehicles per hour.

City of Doral Transportation Division

Advisory Comments

From:	Marc O"Keefe (PW)
To:	Lorin Brissett
Cc:	Rita Carbonell (PW); Edna Sibila (PW); Felix Lasarte; Karla Rios; Paul Hernandez; Victor H. Herrera
Subject:	RE: Doral International Towers - Traffic Study Methodology Response to Comments
Date:	Monday, May 2, 2022 2:51:35 PM
Attachments:	image001.png image002.png image003.png 4_26_2022__Methodology_w_attachments_Trump Tower_Comments.pdf

Lorin,

Hope you had nice weekend.

Please see attached for some additional advisory comments.

Thanks. Good luck with data collection.

Marc O'Keefe

Transportation Analyst

City of Doral

8401 NW 53rd Terrace, 2nd Floor
Doral, FL 33166
T 305.593.6740 ext. 6028
F 305.593.6617
marc.okeefe@cityofdoral.com
www.cityofdoral.com

Register **NOW** for the Step Up Doral Challenge!



Connect with us on Twitter, Facebook and Instagram !



From: Marc O'Keefe (PW)
Sent: Wednesday, April 27, 2022 9:29 AM
To: Lorin Brissett <lbrissett@bcceng.com>
Cc: Rita Carbonell (PW) <Rita.Carbonell@cityofdoral.com>; Edna Sibila (PW) <Edna.Sibila@cityofdoral.com>; Felix Lasarte <Felix@lasartelaw.com>; Karla Rios <krios@bcceng.com>; Paul Hernandez <Paul@lasartelaw.com>; Victor H. Herrera <vherrera@bcceng.com>
Subject: RE: Doral International Towers - Traffic Study Methodology Response to Comments

Good Morning Lorin,

Thank you for sending the revised methodology and submitting to Miami-Dade County Traffic. We will take a

final look and let you know if have any additional comments.

Please proceed with the data collection at this time.

Thank you for your continued efforts regarding this project.

Marc O'Keefe

Transportation Analyst

City of Doral

8401 NW 53rd Terrace, 2nd Floor
Doral, FL 33166
T 305.593.6740 ext. 6028
F 305.593.6617
marc.okeefe@cityofdoral.com
www.cityofdoral.com

Register **NOW** for the Step Up Doral Challenge!



Connect with us on Twitter, Facebook and Instagram !



From: Lorin Brissett <lbrissett@bcceng.com>
Sent: Tuesday, April 26, 2022 9:34 PM
To: Marc O'Keefe (PW) <Marc.OKeefe@cityofdoral.com>
Cc: Rita Carbonell (PW) <Rita.Carbonell@cityofdoral.com>; Edna Sibila (PW) <Edna.Sibila@cityofdoral.com>; Felix Lasarte <Felix@lasartelaw.com>; Karla Rios <krios@bcceng.com>; Paul Hernandez <Paul@lasartelaw.com>; Victor H. Herrera <vherrera@bcceng.com>
Subject: RE: Doral International Towers - Traffic Study Methodology Response to Comments

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Night Marc,

Trust you are well.

Attached you will find:

1. Responses to comments on the traffic study methodology
2. Updated methodology incorporating the responses to comments

In anticipation of the City's acceptance of our responses to the comments, we have mobilized to collect the traffic data necessary to conduct the traffic study. We also anticipate the City will regard this updated methodology as a general framework for the analysis and will accept that remaining details will be

documented in the traffic study to be submitted at a later date.

As directed, we are also coordinating with Miami-Dade County to receive their input on the traffic study methodology.

Best Regards,

Lorin Brissett, PE
Planning Division Manager

bcc engineering | GETTING THERE JUST GOT EASIER™

t. 954.928.1828 | www.bcceng.com

From: Marc O'Keefe (PW) <Marc.OKeefe@cityofdoral.com>
Sent: Thursday, April 21, 2022 10:26 AM
To: Lorin Brissett <lbrissett@bcceng.com>
Cc: Rita Carbonell (PW) <Rita.Carbonell@cityofdoral.com>; Edna Sibila (PW) <Edna.Sibila@cityofdoral.com>; Felix Lasarte <Felix@lasartelaw.com>; Karla Rios <krios@bcceng.com>; Paul Hernandez <Paul@lasartelaw.com>
Subject: RE: Doral International Towers - Proposed Zoning Traffic Study Methodology (Follow Up)

Good Morning Lorin,

Please see attached methodology for comments for your review. Please send back final version when comments have been incorporated.

Let me know if you have any questions or concerns. If you would like to discuss some of the comments we can set up a phone call.

Thanks again, Lorin.

Marc O'Keefe
Transportation Analyst

City of Doral
8401 NW 53rd Terrace, 2nd Floor
Doral, FL 33166
T 305.593.6740 ext. 6028
F 305.593.6617
marc.okeefe@cityofdoral.com
www.cityofdoral.com

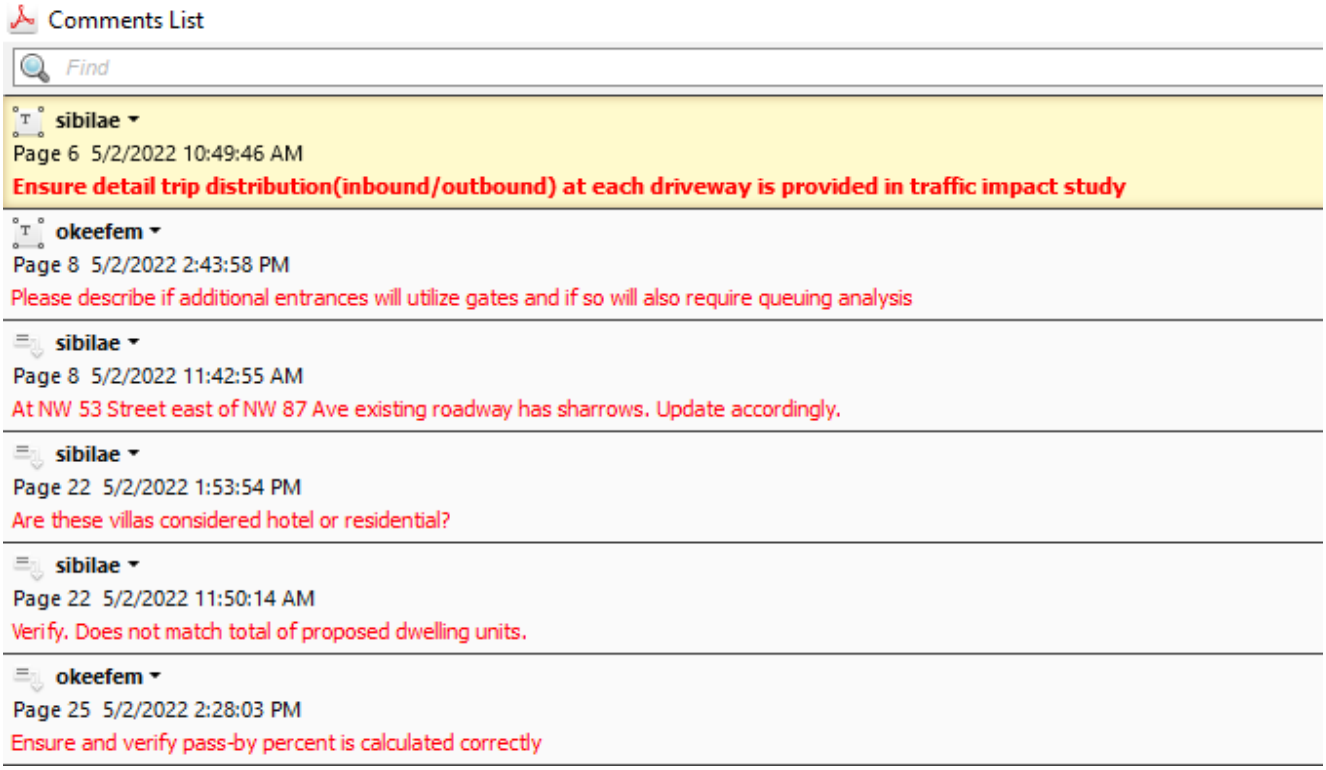
Register **NOW** for the Step Up Doral Challenge!

STEP UP YOUR HEALTH, DORAL!

Connect with us on Twitter, Facebook and Instagram !

Project: Doral International Towers – LAND-2201-0002

Review: 2nd Review Comments (May 2022), Traffic Study Methodolody.



Methodology

MEMORANDUM

To: Mr. Marc O'Keefe / Transportation Analyst, City of Doral
Ms. Edna Sibila / Transportation Manager, City of Doral

From: Mr. Lorin R.C. Brissett, P.E. / BCC Engineering, LLC
Ms. Karla Rios, EI / BCC Engineering, LLC

Date: April 26, 2022

Subject: **Doral International Towers**
Traffic Impact Study Methodology

The purpose of this memorandum is to summarize the traffic impact study methodology as part of the site plan review for the proposed redevelopment for the parcel of land within Trump National Resort Doral located on the northwest corner of the intersection of NW 36th Street Extension/Doral Boulevard and NW 87th Avenue/Galloway Road as shown in **Exhibit 1-1**. The 55.8-acre parcel is currently occupied by a 650-room hotel, 85,391 square foot ballroom, a spa and clubhouse that comprise a total of 216,931 square feet. Existing ballroom, spa and clubhouses are expected to remain. The hotel will also remain but the number of rooms will be reduced from the existing 650 rooms to 470 rooms.

The proposed redevelopment will include a 470-room hotel, 2,208 apartment units, and 578,978 square-feet for non-residential use that would include the spa, clubhouse, ballroom, residential amenities and retail space. This methodology has been developed consistent with the *Doral Traffic Impact Analysis Methodology Guidelines - 5-11-2006* (See **Attachment 'A'**). Additionally, review comments issued by the City on the study methodology and the response to those comments are also included in **Attachment 'A'**.

Based on the anticipated trip generation from the project site, a Level 3 Traffic Study is proposed. A 5-year project build out timeframe is anticipated.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

Exhibit 1-1: Project Location Map



1.0 TRAFFIC COUNTS AND ANALYSIS

1.1 Data Collection Plan

Seventy-two (72) hours of continuous roadway segment counts will be collected around the study area. Data will be collected on the ten roadway segments most impacted by the proposed development, as depicted in **Exhibit 1-2**. The following ten (10) study area roadway segments are identified for analysis:

- NW 58th Street between NW 97th Avenue and NW 87th Avenue
- NW 58th Street between NW 87th Avenue and NW 79th Avenue
- NW 53rd Street between NW 79th Avenue and NW 87th Avenue
- Doral Blvd/NW 41st/NW 36th Street between NW 97th Avenue and NW 87th Avenue
- Doral Blvd/NW 41st/NW 36th Street between NW 87th Avenue and NW 79th Avenue
- NW 97th Avenue between Doral Blvd/NW 41st/NW 36th Street and NW 52nd Street
- NW 97th Avenue between NW 52nd Street and NW 58th Street
- NW 87th Avenue between Doral Blvd/NW 41st/NW 36th Street and NW 58th Street
- NW 87th Avenue between Doral Blvd/NW 41st/NW 36th Street and NW 33rd Street
- NW 79th Avenue between Doral Blvd/NW 41st/NW 36th Street and NW 58th Street

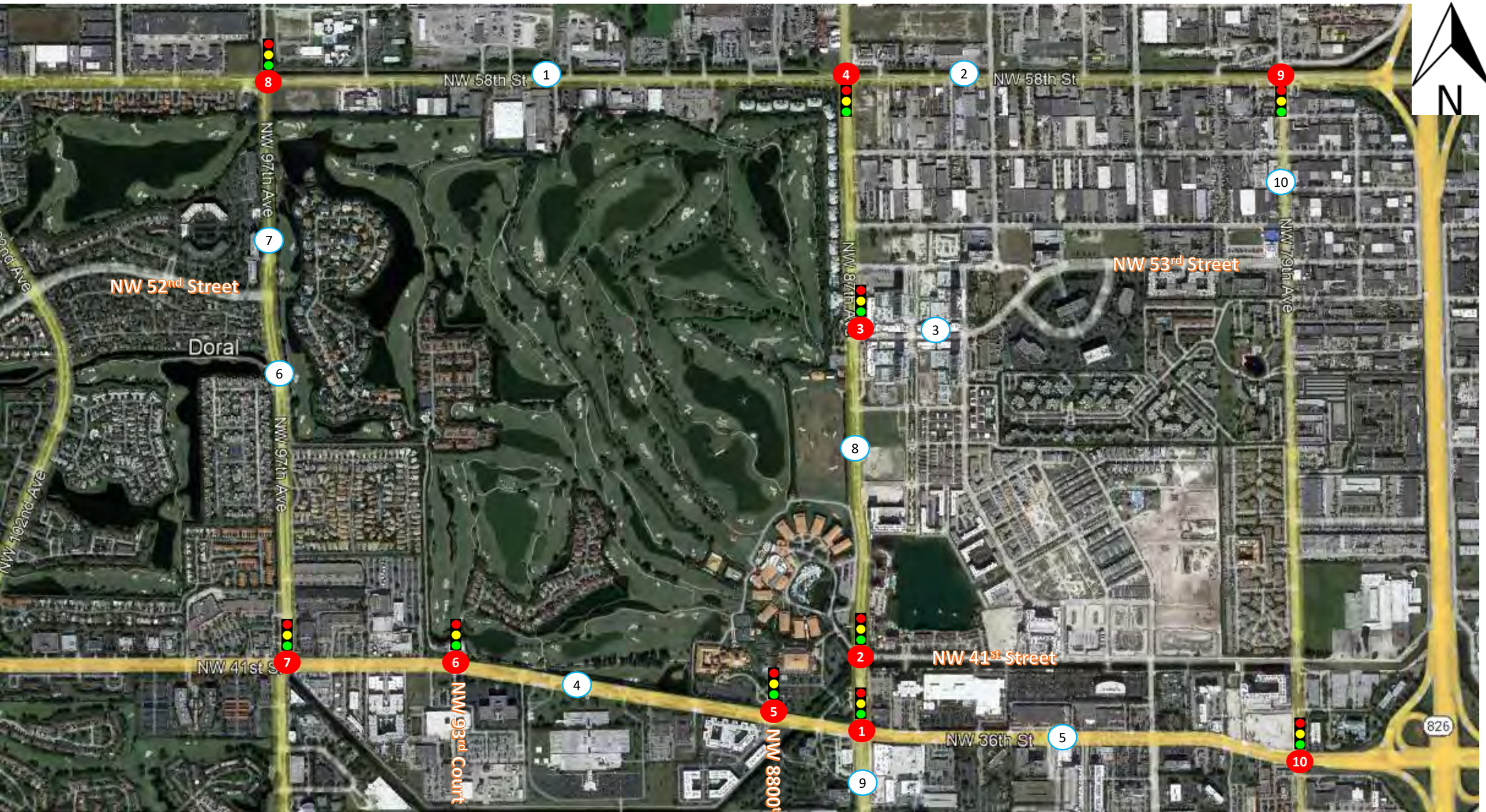
Intersection turning movement counts during two-hour peak periods (7:00 A.M. – 9:00 A.M. and 4:00 P.M. – 6:00 P.M.) on ten intersections that have been identified to be the most impacted by the proposed development as depicted in **Exhibit 1-2**, will be collected. The following ten (10) study area intersections are identified for analysis:

- NW 87th Avenue and Doral Blvd/NW 41st/NW 36th Street
- NW 87th Avenue and NW 41st Street
- NW 87th Avenue and NW 53rd Street
- NW 87th Avenue and NW 58th Street
- Doral Blvd/NW 41st/NW 36th Street and NW 8800 Block
- Doral Blvd/NW 41st/NW 36th Street and NW 93rd Court
- Doral Blvd/NW 41st/NW 36th Street and NW 97th Avenue
- NW 97th Avenue and NW 58th Street
- NW 58th Street and NW 79th Avenue
- NW 36th Street and NW 79th Avenue

All counts will adhere to the latest FDOT Manual on Uniform Traffic Studies (MUTS) manual and other applicable standards.

Traffic signals will be identified by their Miami-Dade County asset ID for analysis using their existing signal phasing/timing.

Exhibit 1-2 Data Collection Plan
Doral International Towers – Traffic Study



7 3-day, 24-Hour, Bi-Directional Counts

5 4 Hour Turning Movement Counts

2.0 TRIP GENERATION, DISTRIBUTION, AND ASSIGNMENT

2.1 Trip Generation

Trip generation calculations for the proposed development were performed using the Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 11th Edition*. ITE Land Use Code 330 is assumed for the hotel component, 310 for the ballroom, 495 for the spa and clubhouse, 222 for the apartments, and 821 for retail component. The site plan contained in **Attachment B**, for the proposed development includes 178,272 square-feet of amenities that will not be counted in the trip generation as these would only be available to residents as ancillary uses (i.e., pools, pool decks, outdoor terraces, lounges and clubrooms) and are not seen as impacting the trip totals.

Internal capture is expected between the complementary land uses within the project. Internal capture will be determined based upon the methodology contained in the *NCHRP Report 8-51*, which is a part of ITE's *Trip Generation Manual 11th Edition*. The A.M. and P.M. peak internal capture rate are expected to be 2.56 percent (2.56%) and 21.86 percent (21.86%) for the proposed development with future land use.

Pass-by capture volumes will be calculated for site using rates outlined in the ITE's Trip Generation Manual, 11th Edition. The average pass-by capture rate of 40 percent (40%) will be calculated for the retail. However, the actual pass-by capture used will be capped at 10% of adjacent street traffic.

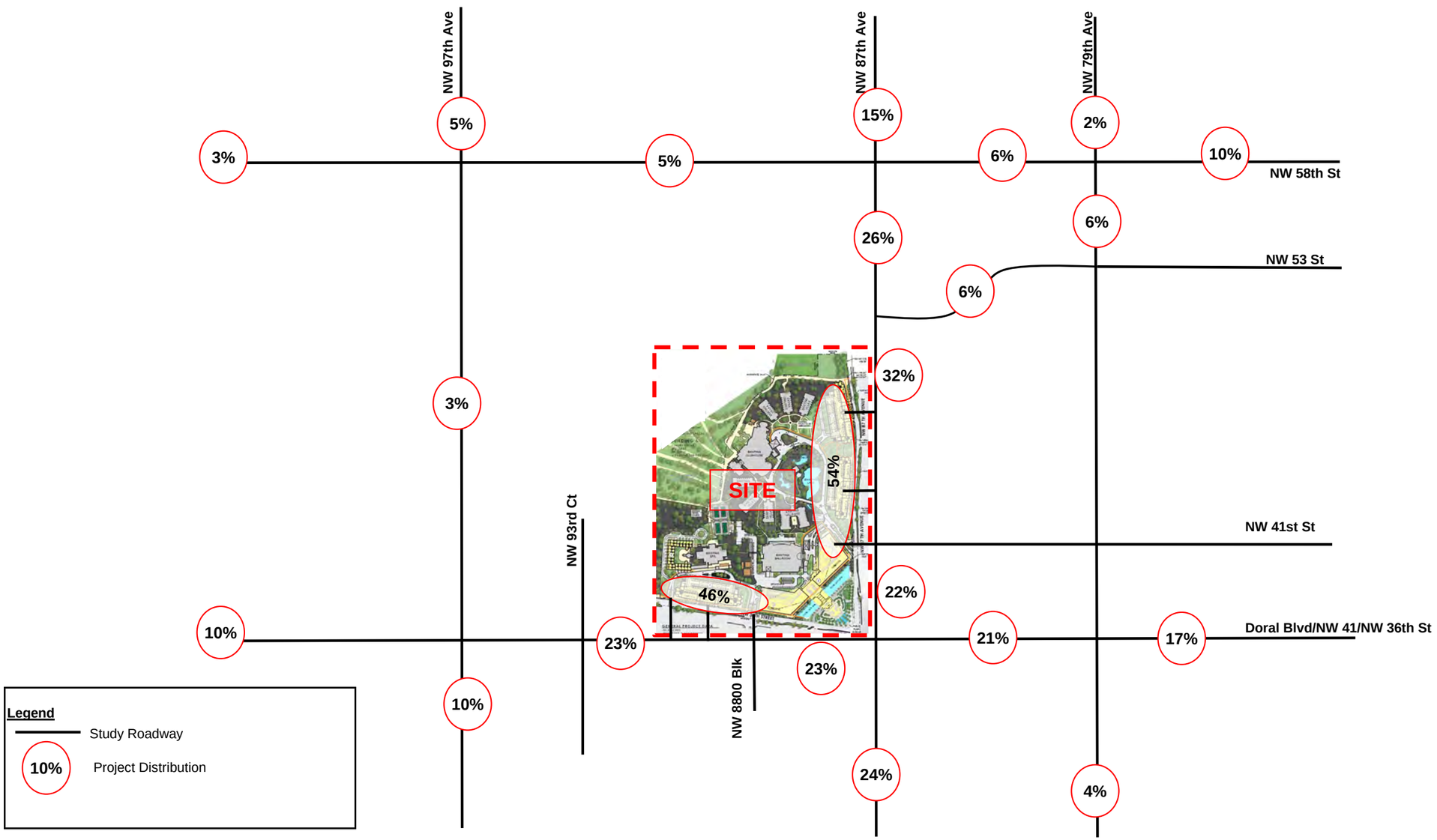
The trip generation calculations indicate that the proposed development will generate 846 new trips during the weekday A.M. peak hour and 698 new trips during the weekday P.M. peak hour. Detailed trip generation calculations are contained in **Attachment C**.

2.2 Trip Distribution

Trip distribution will be determined using the cardinal distribution from the appropriate Traffic Analysis Zone (TAZ) in the Miami-Dade County's TPO 2045 Directional Trip Distribution report, supporting documentation is contained in **Attachment C.** The appropriate TAZ for this development is 725. The traffic assignment proposed to be used is illustrated in **Exhibit 2-1**. The distribution from the 2045 Cost Feasible Plan table , by cardinal direction for the project site's traffic analysis zone (TAZ 725), is summarized below:

North-Northeast	14.5%
East-Northeast	13.8%
East-Southeast	22.4%
South-Southeast	15.6%
South-Southwest	16.5%
West-Southwest	8.4%
West-Northwest	2.6%
North-Northwest	6.2%

Exhibit 2-1: Traffic Assignment Map



Notes:

3.0 FUTURE DEVELOPMENTS

3.1 Future Transportation Projects

A review of the City of Doral Capital Improvement Project list, Florida Department of Transportation 5-year Work Program and the Miami-Dade TPO's Transportation Improvement Program was made to identify pertinent roadway improvements. The following roadway improvements were identified within the study area:

- NW 97th Avenue widening from 2 to 4 lanes from NW 52nd Street to NW 70th Street, segment from NW 52nd Street to 58th Street is scheduled to start construction by 2026 per Priority 2 status in Miami Dade TPO's 2045 Long Range Transportation Plan
- NW 58th Street reconstruction from NW 97th Avenue to SR 826 project is currently under design
- NW 87th Avenue and NW 54th Street is currently under construction to become a signalized intersection; work is expected to be completed by October 2022

Based on the proposed improvements, the roadway segment of NW 97th Avenue between NW 52nd Street and NW 58th Street will be analyzed as a four-lane roadway in the build-out analysis.

3.2 Committed Developments

Committed development trips will be compiled from traffic analysis studies provided by the City of Doral for known developments near the project area. An initial list includes Doral Central Park, Downtown Doral Hi-Rise, NW 87th Doral Retail Development, The Shoppes at 97th Ave, Skilled Nursing Facility, and Downtown Doral Living Facility. If additional developments are identified with a need to be analyzed, those will be included.

[THIS AREA WAS INTENTIONALLY LEFT BLANK]

4.0 LEVEL OF SERVICE ANALYSIS

Capacity, Level of service (LOS), and operational analysis will be conducted on the selected ten (ten) intersections and ten (10) roadway segments. Capacity analysis will be conducted for three (3) scenarios:

- Existing
- Build out without project traffic
- Build out with project traffic

All analysis will be done using the Highway Capacity Manual methodologies. Capacity and operational deficiencies will be identified along with recommendations for mitigation.

Existing guardhouse secured access currently at NW 41st Street and NW 87th Avenue is expected to remain. Vehicular queue length analysis will be conducted for that select entrance.

5.0 BICYCLE, PEDESTRIAN, AND TRANSIT EXISTING CONNECTIVITY

The traffic study will include an assessment of Bicycle, Pedestrian and transit connectivity.

The study area has existing connecting sidewalks along NW 87th Avenue and along Doral Blvd/NW 41st/NW 36th Street on both sides of the roadway. The existing signalized intersections along these roadways have at least one leg the intersection with a marked crosswalk provided.

Currently, NW 87th Avenue and Doral Blvd/NW 41st/NW 36th Street adjacent to the site area do not have dedicated bicycle lanes or sharrows. Existing dedicated bike lanes in the area are located towards the east on NW 53rd Terrace/NW 53rd Street from NW 87th Avenue to 79th Avenue, and on NW 85th Avenue between NW 53rd Terrace and south of NW 47th Avenue in the Downtown Doral Area. Dressel's Dairy Trail which a shared use path, runs parallel to the canal south of NW 41st Street and is also adjacent to the project area.

The traffic study will document the anticipated impacts the proposed development will have on the existing pedestrian and bicycle network. Complete streets elements to mitigate project impacts will be identified, including implementing high emphasis crosswalks, pavers, enhanced connectivity of bicycle amenities, and signal timing modifications to prioritize pedestrians.

Miami-Dade County Metro Bus routes 87, 36, 132, and 95 have stops along NW 87th Avenue and/or Doral Blvd/NW 41st/NW 36th Street in the study area. Additionally, City of Doral Trolley service routes 1 and 2 also have stops along NW 87th Avenue and/or Doral Blvd/NW 41st/NW 36th Street.

Attachment D includes maps of existing bike-ped amenities and existing transit routes in the area.

6.0 DOCUMENTATION

The results of the traffic impact Analysis will be summarized in a report. The report will include supporting traffic data and software output sheets. The report will also include text and graphics necessary to summarize the assumptions and analysis.

Attachments:

A. Doral Traffic Impact Analysis Methodology Guidelines - 5-11-2006
   Response to City of Doral Methodology Comments
B. Proposed Site Plan
C. Trip Generation & Cardinal Trip Distribution
D. Existing Bike-Ped Amenities and Transit Routes

ATTACHMENT 'A'

Doral Traffic Impact Analysis Methodology Guidelines - 5-11-2006
Response to City of Doral Methodology Comments

Doral Traffic Impact Analysis Methodology Guidelines

Level 1: 1 – 250 Trips (total vehicles per hour – peak hour adjacent street)

1 Project Methodology Meeting

- To be held between the applicant and the City of Doral, to discuss the methodology, study area, requirements, format and submission date(s).

2 Data Needs

- Traffic Counts – including trucks. May include pedestrians if requested by the City.
  - Two-hour peak periods (a.m. 7:00 – 9:00 and p.m. 4:00 – 6:00 or any other time period depending on the type of development) intersection turning movement counts (TMCs) on the FOUR Intersections most impacted by the proposed development.
  - Roadway Link counts (hourly for 72 hours) shall be collected on the FOUR Links most impacted by the proposed development. Additional links counts may be necessary if the site's generated impact is 10 % or more of the link's highest existing two way peak hour traffic volumes.

    All counts shall adhere to the FDOT MUTS manual and other applicable standards
- Signals Location and Timing (if applicable)
  - Traffic signals shall be identified by Miami-Dade County Asset ID. Existing Signal Phasing/Timing shall be utilized in the analysis.
- Trip Generation /Trip Distribution / Trip Assignment

  - All trip generation information should be based on the latest edition of the ITE Trip Generation Manual.

  - Trip Distribution shall begin by defining the Traffic Analysis Zone (TAZ) number for the project location. Distribute trips using the project's TAZ and related data from the current adopted Miami Dade MPO Long Range Transportation Plan.
- Committed Developments
  - All committed developments within the study area shall be quantified. This data should be collected from the City of Doral and Miami Dade County's Department of Planning and Zoning. It will include all developments that have entered the concurrency application process, yet have not been constructed, within the study area, as defined by the City Planning Department (generally within a 1 mile radius of the project.) If quantifiable data can not be reasonably obtained, an alternative method will be to apply an annual growth factor, developed according to accepted professional practice, in consultation with and approved by the City.
- Future Transportation Projects
  - To counterbalance subtractions from transportation network capacity, future transportation projects, which add capacity to the network shall be quantified. These must be represented as approved and funded projects, set for implementation within one year of project opening, within the MPO's adopted Transportation Improvement Program (TIP) and/or the City's program.
- Build Out Year
  - This represents a date in the future in which the facility/ development will be operational. It shall be used as the date for future conditions analysis.

3 Level of Service Analysis

- Capacity / LOS / operational analyses for the selected FOUR intersections and FOUR roadway link(s) for the AM & PM peak hours or any other period(s) as well as for additional intersections and/or links as may be determined by the City.
- Capacity / LOS / operational analysis on all driveways providing access to/from the site, for the same time period as above.

Level 1 continued

Using the data collected, including trucks, analyses will be undertaken to portray the existing conditions, future conditions with committed developments, and the future conditions with the project and committed developments. All analyses shall be done utilizing latest edition of the Highway Capacity Manual methodologies. Other measures such as vehicular delay, volume to capacity ratios, vehicular queue length, among others, may be required by the City. Determine site's impacts and identify improvements recommendations to mitigate impacts if applicable.

- Existing Condition
- Future Condition with Committed Developments
- Future Conditions With Project and Committed Development

If the site is to have gates to control access, then the appropriate analyses shall be performed to determine vehicular queue lengths waiting to enter the site and their impact on the adjacent roadway(s).

Level 2: 251 - 400 Trips (total vehicles per hour – peak hour adjacent street)

1 Project Methodology Meeting

- To be held between the applicant and the City of Doral to discuss the methodology, study area, requirements, format and submission date(s).

2 Data Needs

- Traffic Counts – including trucks. May include pedestrians if requested by the City
  - Two-hour peak periods (a.m. 7:00 – 9:00 and p.m. 4:00 – 6:00 or any other time period depending on the type of development) intersection turning movement counts (TMCs) on the SIX intersections most impacted by the proposed development.
  - Roadway Link counts (hourly for 72 hours) shall be collected on the SIX links most impacted by the proposed development. Additional link(s) counts may be necessary if the site's generated traffic impact is 10 % or more of the link's highest existing two way peak hour traffic volumes.

    All counts shall adhere to the FDOT MUTS manual and other applicable standards
- Signals Location and Timing (if applicable)
  - Traffic signals shall be identified by Miami-Dade County Asset ID. Existing Signal Phasing/Timing shall be utilized in the analysis.
- Trip Generation / Trip Distribution / Trip Assignment

  - All trip generation information should be based on the latest edition of the ITE Trip Generation Manual.
  - Trip Distribution shall begin by defining the Traffic Analysis Zone (TAZ) number for the project location. Distribute trips using the project's TAZ and related data from the current adopted Miami Dade MPO Long Range Transportation Plan.
- Committed Developments
  - All committed developments within the study area shall be quantified. This data should be collected from the City of Doral and Miami Dade County's Department of Planning and Zoning. It will include all developments that have entered the concurrency application process, yet have not been constructed, within the study area, as defined by the City Planning Department (generally within a 1 mile radius of the project.) If quantifiable data can not be reasonably obtained, an alternative method will be to apply an annual growth factor, developed according to accepted professional practice, in consultation with and approved by the City.

- Future Transportation Projects
  - To counterbalance subtractions from transportation network capacity, future transportation projects, which add capacity to the network shall be quantified. These must be represented as approved and funded projects, set for implementation within one year of project opening, within the MPO's adopted Transportation Improvement Program (TIP) and/or the City's program.

- Build Out Year
  - This represents a date in the future in which the facility/ development will be operational. It shall be used as the date for future conditions analysis.

3 Level of Service Analysis

- Capacity / LOS / operational analyses for the selected SIX intersections and SIX roadway links for the AM & PM peak hours, or any other period(s) as well for additional intersections and/or links as may be determined by the City.
- Capacity / LOS / operational analysis on all driveways providing access to/from the site for the same time period as above.

Using the data collected, including trucks, analyses will be undertaken to portray the existing conditions, future conditions with committed developments, and the future conditions with the project and committed developments. All analyses shall be done utilizing latest edition of the Highway Capacity Manual methodologies. Other measures such as vehicular delay, volume to capacity ratios, vehicular queue length, among others, may be required by the City. Determine site's impacts and identify improvements recommendations to mitigate impacts if applicable.

- Existing Condition
- Future Condition with Committed Developments
- Future Conditions With Project and Committed Development

If the site is to have gates to control access, then the appropriate analyses shall be performed to determine vehicular queue lengths waiting to enter the site and their impact on the adjacent roadway(s).

Level 3: 401 +Trips (total vehicles per hour – peak hour adjacent street) (Below D.R.I. thresholds)

1 Project Methodology Meeting

- To be held between the applicant and the City of Doral, to discuss the methodology, study area, requirements, format and submission date(s).

2 Data Needs

- Traffic Counts – including trucks. May include pedestrians if requested by the City
  - Two-hour peak periods (a.m. 7:00 – 9:00 and p.m. 4:00 – 6:00 or any other time period depending on the type of development) intersection turning movement counts (TMCs) on the EIGHT intersections most impacted by the proposed development.

  - Roadway Link counts (hourly for 72 hours) shall be collected on the EIGHT links most impacted by the proposed development. Additional link(s) counts may be necessary if the site's generated traffic impact is 10 % or more of the link's highest existing two way peak hour traffic volumes.
    All counts shall adhere to the FDOT MUTS manual and other applicable standards

- Signals Location and Timing (if applicable)

- Traffic signals shall be identified by Miami-Dade County Asset ID. Existing Signal Phasing/Timing shall be utilized in the analysis.

- o Trip Generation / Trip Distribution / Trip Assignment

  - All trip generation information should be based on the latest edition of the ITE Trip Generation Manual.
  - Trip Distribution shall begin by defining the Traffic Analysis Zone (TAZ) number for the project location. Distribute trips using the project's TAZ and related data from the current adopted Miami Dade MPO Long Range Transportation Plan.

- o Committed Developments
  - All committed developments within the study area shall be quantified. This data should be collected from the City of Doral and Miami Dade County's Department of Planning and Zoning. It will include all developments that have entered the concurrency application process, yet have not been constructed, within the study area, as defined by the City Planning Department (generally within a 1 mile radius of the project.) <u>If quantifiable data can not be reasonably obtained, an alternative method will be to apply an annual growth factor, developed according to accepted professional practice, in consultation with and approved by the City.</u>

- o Future Transportation Projects
  - To counterbalance subtractions from transportation network capacity, future transportation projects, which add capacity to the network shall be quantified. These must be represented as approved and funded projects, set for implementation within one year of project opening, within the MPO's adopted Transportation Improvement Program (TIP) and/or the City's program.
- o Build Out Year
  - This represents a date in the future in which the facility/ development will be operational. It shall be used as the date for future conditions analysis.

3 Level of Service Analysis

- Capacity / LOS / operational analyses for the selected <u>EIGHT intersections and EIGHT roadway links</u> for the AM & PM peak hours, or any other period(s) as well for additional intersections and/or links as may be determined by the City.
- Capacity / LOS / operational analysis on all driveways providing access to/from the site for the same time period as above.

Using the data collected, including trucks, analyses will be undertaken to portray the existing conditions, future conditions with committed developments, and the future conditions with the project and committed developments. All analyses shall be done utilizing latest edition of the Highway Capacity Manual methodologies. Other measures such as vehicular delay, volume to capacity ratios, vehicular queue length, among others, may be required by the City. <u>Determine site's impacts and identify improvements recommendations to mitigate impacts if applicable.</u>

- Existing Condition
- Future Condition with Committed Developments
- Future Conditions With Project and Committed Development

<u>If the site is to have gates to control access, then the appropriate analyses shall be performed to determine vehicular queue lengths waiting to enter the site and their impact on the adjacent roadway(s).</u>

<u>Notes Applicable to All Analysis Levels:</u>

LEVEL I, II, & III Intersection/link capacity /LOS analyses are to be based on The Highway Capacity Manual (HCM 2000) methodology (or latest acceptable HCM methodology). FDOT Art-Plan or Q/LOS methodology is acceptable. Other analysis software may be used subject to approval by the City.

Parking
The need and requirements for a parking analysis will be determined by the City in the initial project methodology meeting. Parking required for the facility will depend upon project programming, taking into account the number of units, and the square footage of the retail and commercial space. Parking analysis shall consist of determining if planned parking for the development meets or exceeds the city's requirements.

Additions, Deletions, or Changes to Existing Land Uses

If the resulting additional generated two-way hourly traffic volume (highest peak hour of adjacent street) is 10% or less of the total site's generated traffic, then there is no need to assess traffic impact, unless the additional generated traffic will cause the adjacent roadway(s) to exceed Concurrency thresholds. This shall be documented and submitted by the applicant or his/her designee.

In cases where the resulting new generated traffic will be less than the existing, it shall then be documented and submitted by the applicant or his/her designee.

Response to City of Doral Methodology Comments

To: Mr. Marc O' Keefe / Transportation Division, City of Doral

From: Lorin R.C. Brissett, P.E. / BCC Engineering, LLC
Karla Rios, EI / BCC Engineering, LLC

Date: April 25, 2022

Subject: **Project:** Doral International Towers - LAND-2201-0002
Review: 1st Review, Comments, Traffic Study Methodology

Here are our responses to the City of Doral's comments dated April 21, 2022 concerning the proposed traffic study methodology:

1. Please note methodology will be required to be submitted to Miami-Dade County Traffic division for review.

   BCC Response – Acknowledged. The methodology will be submitted to Miami-Dade County.

2. Please include figure depicting location of roadway segment counts.

   BCC Response – Acknowledged. Added Exhibit 1-2 depicts locations for roadway segment counts.

3. Please include figure depicting location of intersection turning movement counts.

   BCC Response – Acknowledged. Added Exhibit 1-2 depicts locations for intersection turning movement counts.

4. Add NW 58 Street and NW 79 Avenue, and NW 36 Street and NW 79 Street to list of intersections for turning movement counts.

   BCC Response – Acknowledged. Suggested intersections have been added to the list of study intersections.

5. Provide detail description with square footage of these amenities that will not be accounted for.

   BCC Response – These amenities are ancillary uses for the residential areas within the project and will include pools, pool decks, outdoor terraces, lounges and clubrooms

6. Provide TAZ documents utilized as appendix, including TAZ number, map and cardinal distribution. Provide supporting documentation of calculations. Show trip distribution for all proposed driveways.

BCC Response – TAZ map from the Miami-Dade TPO 2040 Long Range Transportation Plan, based on the 2010 census data and the page used from the TPO's 2045 Trip Distribution report for corresponding TAZ is now in Attachment C.

7. Analyze all proposed driveways. Show trip distribution for all driveways. it appears 54% of trips will be using the NW 87 Ave/NW 41 St only.

   BCC Response – The Exhibit has been revised to illustrate a combined 54% of trips is anticipated to use all driveways on NW 87th Avenue and, a combined 46% of trips is anticipated to use all the driveways on Doral Boulevard. The traffic study will show a more refined distribution of project trips considering in-bound and outbound percentages at each project driveway. The illustration in the methodology exhibit is intended as a more high-level illustration.

8. NW 79 Ave terminates at NW 25 St. consider some of these trips from either NW 41 St, NW 82 Ave or NW 87 Ave.

   BCC Response – Acknowledged. Trip distribution percentages have been revised to adjust the percentage on NW 79th Avenue south of Doral Boulevard. Trips have been redistributed to Doral Blv/NW 41st/NW 36th Street and NW 87th Avenue.

9. There will be a new signalized intersection located at NW 54 St and NW 87 Ave that should be analyzed as a future roadway improvements.

   BCC Response – Acknowledged. The intersection of NW 54th Street and NW 87th Avenue has been added for review.

10. Please include write-up on transit, pedestrian and bicycle amenities within the area including bus stops, existing routes, sidewalk, crosswalk inventory and bicycle facilities

    BCC Response – Acknowledged. The traffic study will include a discussion of transit, pedestrian and bicycle amenities within the area including bus stops, existing routes, sidewalk, crosswalk inventory and bicycle facilities.

11. Pedestrian Walkability / Bicycle Connectivity. The new development will generate a large amount of traffic to the area of NW 87 Avenue and NW 41 Street intersection, including pedestrian and bicycle activity. This study should analyze the multimodal impact of the development on pedestrian and bicycle network, including existing and future connectivity of the intersection, and how the future development will impact the pedestrians and bicyclists alike with new trips that will be generated by the new development. Types of potential improvements should include high emphasis crosswalks, connectivity of bicycle amenities (proposed new bike path to existing roadway network), pedestrian signal priority, pavers, and other potential complete street elements

    BCC Response – Acknowledged.

12. Pedestrian Multimodal Connectivity. Downtown Doral South. Please analyze and provide for pedestrian and bicycle connections from existing Downtown Doral South area to the new development (including bicycle lanes and/or shared use path, tunnel under NW 87 Avenue) as the new development should be expected to generate a large amount of multimodal residential trips from the Downtown Doral South area to the new development for the proposed commercial uses, golf amenities, among others.

    BCC Response – Acknowledged.

13. Trip Generation: Please describe if there will be any modifications to existing uses of including Ballroom, Hotel and Spa and Clubhouse. If none, it is not necessary to include in trip generation calculations. Hotel existing rooms are should be 235? Where did proposed 650 rooms come from?

    BCC Response – Existing uses of ballroom, spa, and clubhouse will not be modified. All existing uses will remain the same except the hotel. The number of hotel rooms will be reduced from 650 rooms to 470 rooms. The reason for the inclusion of the existing uses in the trip generation calculations is to ensure the trips from these uses that are already included in the existing counts at impacted intersections and segments are not counted twice when the trips from the proposed development are assigned to the network. Since 470 of the existing 650 room hotel will remain, for the trip generation calculations, it is necessary to first discount trips from the 650 rooms before adding the trips from the reconfigured 470 room hotel. The amount of 235 rooms was inadvertently reported as the future hotel intensity in the previous methodology submittal.

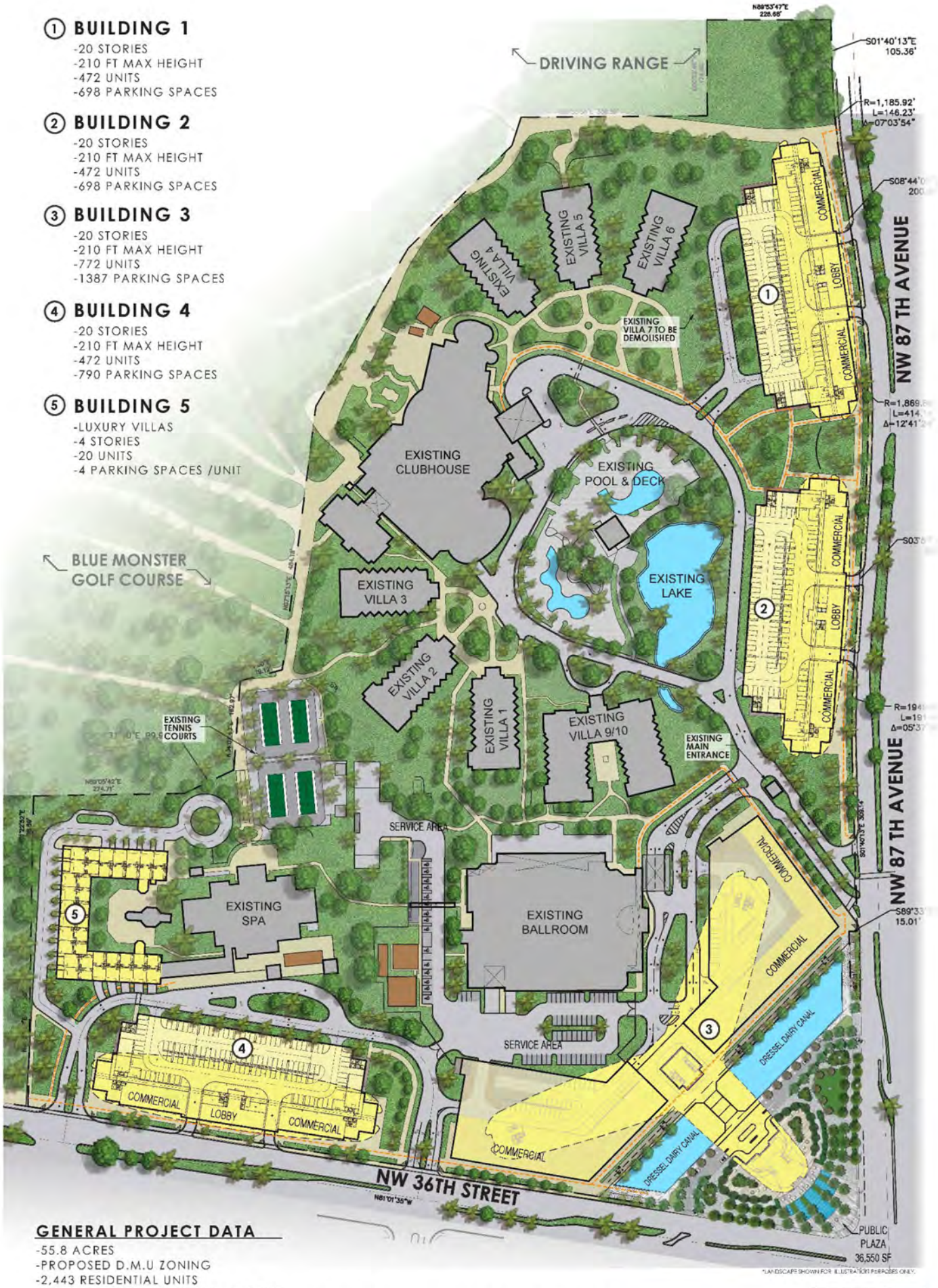
14. Provide Daily trips for ITE 310 for rooms

    BCC Response – In the request to provide the daily trips for ITE 310, it should be noted that the daily trip estimate for this land use code is only being used to derive a surrogate daily estimate for the ITE 330 given the absence of daily trip generation rate or equation for this land use code. Nonetheless, footnotes have been added to the table to show how the daily trips were derived by first estimating the trips using LUC ITE 310 and then using the max of the [AM $Peak_{ITE\ 330}$ vs $AMPeak_{ITE\ 310}$ | PM $Peak_{ITE\ 330}$ vs $PMPeak_{ITE\ 310}$] Trip generation ratios to factor the ITE 310 daily trips to derive the ITE 330 daily trips.

15. Site plan on the development data table shoes that existing includes a 85,391 SF ballroom. This is the same SF for proposed ballroom. please clarify and show in detail all existing and proposed land uses.

    BCC Response – See response to comment #13.

ATTACHMENT 'B'
Proposed Site Plan



GENERAL PROJECT DATA

-55.8 ACRES
-PROPOSED D.M.U ZONING
-2,443 RESIDENTIAL UNITS
-578,978 S.F OF NON RESIDENTIAL USE

DORAL INTERNATIONAL TOWERS TRUMP

CONCEPTUAL SITE PLAN

N

PASCUAL PEREZ KILIDDJIAN STARR
ARCHITECTS + PLANNERS
www.ppkarch.com

ATTACHMENT 'C'
Trip Generation & Cardinal Trip Distribution

Trip Generation

Doral International Towers

Trip Generation Analysis

	Land Use	ITE Code	Size		Daily Trips	AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
Existing Uses	Hotel*	330	650	Rooms	4,338	208	150	58	283	122	161
	Ballroom**	310	85	Employee	1,219	60	36	25	79	43	36
	Spa and Clubhouse	495	216,931	Sq. Ft.	6,252	414.33821	273	141	542.3275	254.893925	287.433575
	Gross Generated Trips				**11,809**	**683**	**459**	**224**	**904**	**419**	**485**

	Land Use	ITE Code	Size		Daily Trips	AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
Future Uses	Residential (high-rise)	222	2,208	Dwelling Units	8,679	596	203	393	707	396	311
	Hotel*	330	470	Rooms	3,088	150	108	42	189	81	108
	Ballroom**	310	85	Employee	1,219	60	36	25	79	43	36
	Spa and Clubhouse	495	216,931	Sq. Ft.	6,252	414	273	141	542	255	287
	Retail	821	98,384	Sq. Ft.	9,296	347	215	132	888	426	462
	Gross Generated Trips				**28,534**	**1,569**	**835**	**733**	**2,405**	**1,201**	**1,204**
	Less, Internal Capture				856	40	22	18	526	259	267
	Internal Capture Percentages				3.00%	2.56%	2.66%	2.47%	21.86%	21.59%	22.13%
	Less, Pass-By (LUC 821 - Retail = 40%)* **				3,375	-	-	-	278	133	144
	Net New Trips				**24,303**	**1,528**	**813**	**715**	**1,602**	**808**	**793**

Δ Trips (Future less Existing)					**12,494**	**846**	**354**	**491**	**698**	**389**	**309**

Notes: Trip generation was calculated using the following data:

Daily Traffic Generation

Resort Hotel	[ITE 330]	=	LUC 330 does not have a daily trip equation/rate. Hence the daily trips from LUC 310 was used using proportionate values by comparing AM/PM trips.
Ballroom*	[ITE 310]	=	T = 14.34 trips per 1000 s.f./1 employee
Spa and Clubhouse	[ITE 495]	=	T = 28.82 trips per 1000 s.f.
High-Rise Residential	[ITE 222]	=	T =3.76* (x) +377.04 d.u.
General Office	[ITE 710]	=	Ln(T) = 0.87 * Ln(X) + 3.05
General Retail (40 - 150k)	[ITE 821]	=	T = 94.49 trips per 1000 s.f.

AM Peak Hour Traffic Generation

Resort Hotel	[ITE 330]	=	T = 0.32 trips/room; (72% in, 28% out)
Ballroom*	[ITE 310]	=	T = 0.71 trips/1000 SF or 1 employee; (59% in, 41% out)
Spa and Clubhouse	[ITE 495]	=	T = 1.91 trips/1000 SF; (66% in, 34% out)
High-Rise Residential	[ITE 222]	=	T = 0.27 trips/dwelling unit; (34% in, 66% out)
General Office	[ITE 710]	=	Ln(T) = 0.86 * Ln(X) + 1.16; (88% in, 12% out)
General Retail (40 - 150k)	[ITE 821]	=	T = 3.53 trips/1000 SF; (62% in, 38% out)

PM Peak Hour Traffic Generation

Resort Hotel	[ITE 330]	=	T = 0.52 * (X) - 55.42; (43% in, 57% out)
Ballroom*	[ITE 310]	=	T = 0.93 trips/1,000 sf or 1 employee (54% in, 46% out)
Spa and Clubhouse	[ITE 495]	=	T = 2.5 trips/1,000 sf (47% in, 53% out)
High-Rise Residential	[ITE 222]	=	T = 0.32 trips/1,000 sf (56% in, 44% out)
General Office	[ITE 710]	=	Ln(T) = 0.83 * Ln(X) + 1.29; (17% in, 83% out)
General Retail (40 - 150k)	[ITE 821]	=	T = 9.03 trips/1,000 sf (48% in, 52% out)

**Total Daily Trips per LUC 310 for 650 Room hotel are 6.622 trips for a 470 room hotel Daily Trip total are 4.671.*

*** 85,391 square feet of ball room, assumed 1 employee per 1,000 square foot.*

**** The pass-by trips were capped at 10% of adjacent street traffic. Since retail uses are adjacent to both NW 87th Avenue and Doral Boulevard, the average AADT for the year 2019 for these two facilities was used as the level of adjacent street traffic (i.e., average [23,000 $_{NW\ 87th\ Ave}$, 44,500 $_{Doral\ Blvd}$] = 33,750 vehicles per day).*

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Doral International Towers	**Organization:**	BCC
Project Location:	City of Doral	**Performed By:**	KR
Scenario Description:	Mixed-Use	**Date:**	4/22/2022
Analysis Year:	2022	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821	98,384	Square FT	347	215	132
Restaurant				0		
Cinema/Entertainment				0		
Residential	222	2,208	Apartment Units	596	203	393
Hotel	330	470	Rooms	150	108	42
All Other Land Uses[2]				0		
Total				1093	526	567

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	4	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	0	0		0
Hotel	0	6	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,093	526	567
Internal Capture Percentage	3%	3%	2%
External Vehicle-Trips[3]	1,065	512	553
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	5%	3%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	0%	14%

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Doral International Towers	**Organization:**	BCC
Project Location:	City of Doral	**Performed By:**	KR
Scenario Description:	Mixed-Use	**Date:**	4/22/2022
Analysis Year:	2022	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821	98,384	Square FT	888	426	462
Restaurant				0		
Cinema/Entertainment				0		
Residential	222	2,208	Apartment Units	707	396	311
Hotel	330	470	Rooms	189	81	108
All Other Land Uses[2]				0		
Total				1784	903	881

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	120	14
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	43	0	0		9
Hotel	0	9	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,784	903	881
Internal Capture Percentage	22%	22%	22%
External Vehicle-Trips[3]	1,394	708	686
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	12%	29%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	30%	17%
Hotel	28%	8%

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Cardinal Trip Distribution

2010 TAZ Boundaries

Miami-Dade Long Range Transportation Plan Update to the Year 2040

Legend

MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION

TAZ Labels

N

0 2.5 5 Miles

MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION

NW 107 AVE
NW 87 AVE
NW 67 AVE
NW 57 AVE
NW 47 AVE
NW 27 AVE
NW 7 AVE
NE 2 AVE
NW 170 ST
NW 74 ST
NW 41 ST
NW 25 ST
SW 8 ST
SW 20 ST
SW 40 ST
SW 88 ST
SW 152 ST
SW 184 ST
SW 248 ST
SW 288 ST
SW 312 ST
SW 344 ST (PALM)
112 AVE
147 AVE
137 AVE

DOWNTOWN MIAMI

June 2015

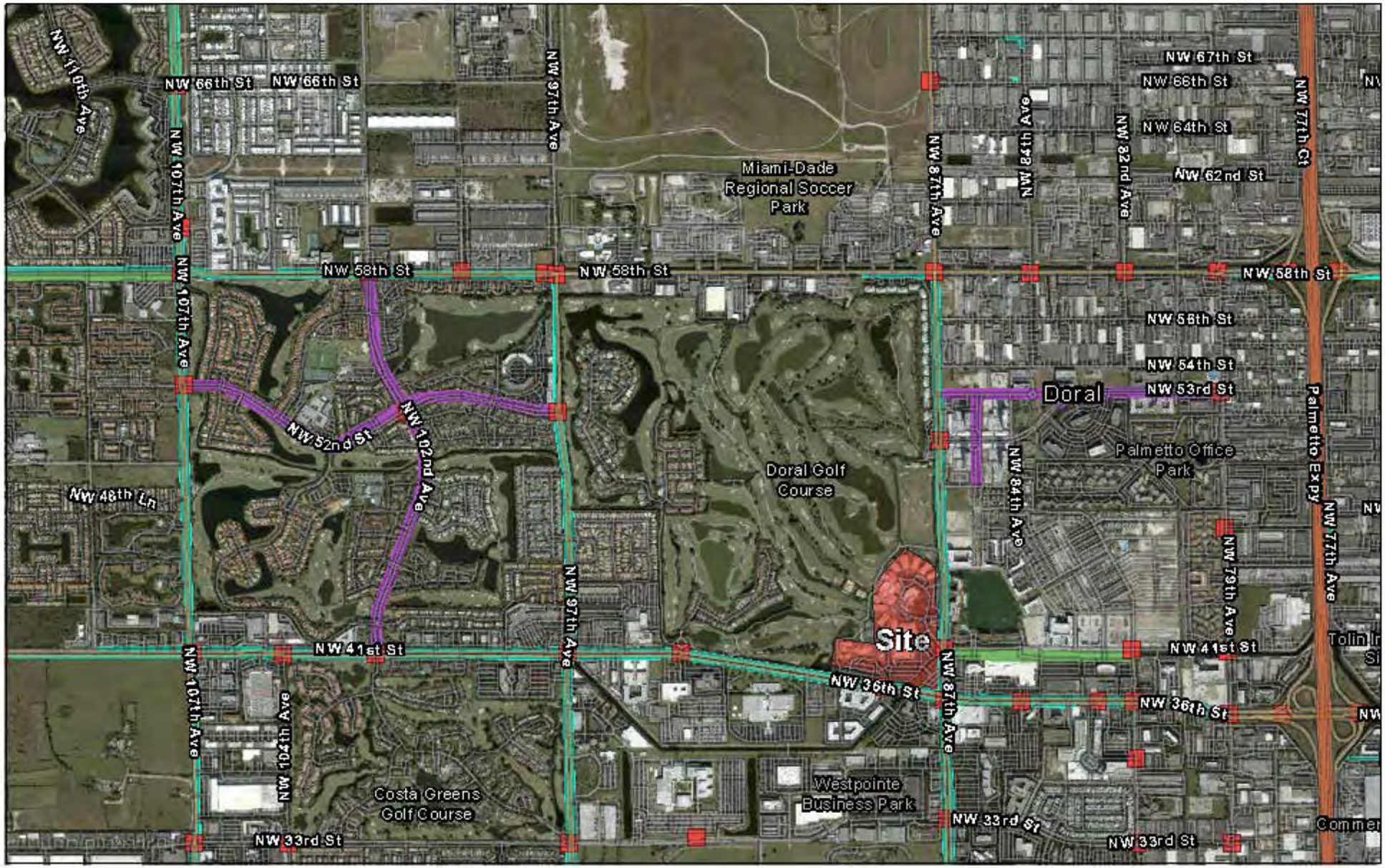
Source: Miami-Dade County Department of Planning & Zoning

Miami-Dade 2045 Cost Feasible Plan Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
703	3603	Trips	879	881	1,693	679	1,064	793	398	1,213	7,813
703	3603	Percent	11.6	11.6	22.3	8.9	14.0	10.4	5.2	16.0	
704	3604	Trips	1,278	1,253	1,816	1,456	1,431	810	563	2,101	11,090
704	3604	Percent	11.9	11.7	17.0	13.6	13.4	7.6	5.3	19.6	
705	3605	Trips	151	88	251	161	124	119	46	143	1,083
705	3605	Percent	14.0	8.1	23.2	14.8	11.4	11.0	4.3	13.2	
706	3606	Trips	485	399	813	264	410	386	176	568	3,579
706	3606	Percent	13.9	11.4	23.2	7.5	11.7	11.0	5.0	16.2	
707	3607	Trips	427	421	760	1,060	323	396	204	552	4,206
707	3607	Percent	10.3	10.2	18.3	25.6	7.8	9.6	4.9	13.3	
708	3608	Trips	755	542	931	894	670	631	198	911	5,697
708	3608	Percent	13.7	9.8	16.8	16.2	12.1	11.4	3.6	16.5	
709	3609	Trips	1,201	830	1,767	2,057	906	913	709	1,620	10,353
709	3609	Percent	12.0	8.3	17.7	20.6	9.1	9.1	7.1	16.2	
710	3610	Trips	1,067	824	1,601	888	2,156	1,107	845	1,567	10,186
710	3610	Percent	10.6	8.2	15.9	8.8	21.4	11.0	8.4	15.6	
711	3611	Trips	377	365	681	347	376	1,455	221	429	4,270
711	3611	Percent	8.9	8.6	16.0	8.2	8.8	34.3	5.2	10.1	
712	3612	Trips	1,179	981	1,265	2,017	1,110	1,007	656	1,567	9,885
712	3612	Percent	12.1	10.0	12.9	20.6	11.4	10.3	6.7	16.0	
713	3613	Trips	259	204	269	91	324	244	93	190	1,674
713	3613	Percent	15.5	12.2	16.1	5.4	19.3	14.6	5.6	11.4	
714	3614	Trips	59	49	87	19	72	42	13	65	406
714	3614	Percent	14.4	12.0	21.5	4.8	17.8	10.3	3.2	15.9	
715	3615	Trips	612	457	808	400	901	585	220	577	4,573
715	3615	Percent	13.4	10.0	17.7	8.8	19.8	12.8	4.8	12.7	
716	3616	Trips	1,947	1,909	2,655	1,678	2,809	1,939	867	2,295	16,511
716	3616	Percent	12.1	11.9	16.5	10.4	17.5	12.0	5.4	14.3	
717	3617	Trips	2,054	1,312	2,747	1,408	2,464	1,599	551	1,704	14,184
717	3617	Percent	14.8	9.5	19.9	10.2	17.8	11.6	4.0	12.3	
718	3618	Trips	1,871	1,468	1,742	1,200	1,878	1,269	490	907	11,020
718	3618	Percent	17.3	13.6	16.1	11.1	17.4	11.7	4.5	8.4	
719	3619	Trips	763	612	976	632	751	627	97	381	4,852
719	3619	Percent	15.8	12.7	20.2	13.1	15.5	13.0	2.0	7.9	
720	3620	Trips	2,130	1,578	2,276	1,464	2,393	1,338	558	1,015	13,396
720	3620	Percent	16.7	12.4	17.9	11.5	18.8	10.5	4.4	8.0	
721	3621	Trips	1,030	970	1,405	941	1,238	682	302	666	7,530
721	3621	Percent	14.2	13.4	19.4	13.0	17.1	9.4	4.2	9.2	
722	3622	Trips	1,292	951	1,801	938	1,901	720	518	979	9,222
722	3622	Percent	14.2	10.5	19.8	10.3	20.9	7.9	5.7	10.8	
723	3623	Trips	2,407	1,437	3,267	2,294	2,444	1,068	314	1,384	15,778
723	3623	Percent	16.5	9.8	22.4	15.7	16.7	7.3	2.2	9.5	
724	3624	Trips	2,372	1,345	1,961	1,681	1,994	852	325	959	12,097
724	3624	Percent	20.6	11.7	17.1	14.6	17.4	7.4	2.8	8.3	
725	3625	Trips	1,269	1,207	1,964	1,365	1,443	738	226	546	9,086
725	3625	Percent	14.5	13.8	22.4	15.6	16.5	8.4	2.6	6.2	
726	3626	Trips	1,741	1,545	2,251	1,640	1,748	1,180	469	904	11,799
726	3626	Percent	15.2	13.5	19.6	14.3	15.2	10.3	4.1	7.9	
727	3627	Trips	471	522	810	516	632	287	195	266	3,775
727	3627	Percent	12.7	14.1	21.9	14.0	17.1	7.8	5.3	7.2	
728	3628	Trips	1,651	1,795	2,256	1,404	2,697	398	301	914	11,970
728	3628	Percent	14.5	15.7	19.8	12.3	23.6	3.5	2.6	8.0	

ATTACHMENT 'D'
Existing Bike-Ped Amenities and Transit Routes

Existing Bike-Ped Amenities

Untitled map



4/25/2022

1:25,609

0 0.2 0.4 0.8 mi

0 0.3 0.6 1.2 km

Traffic Signals - TrafficSignals

Paved Path - PavedPath

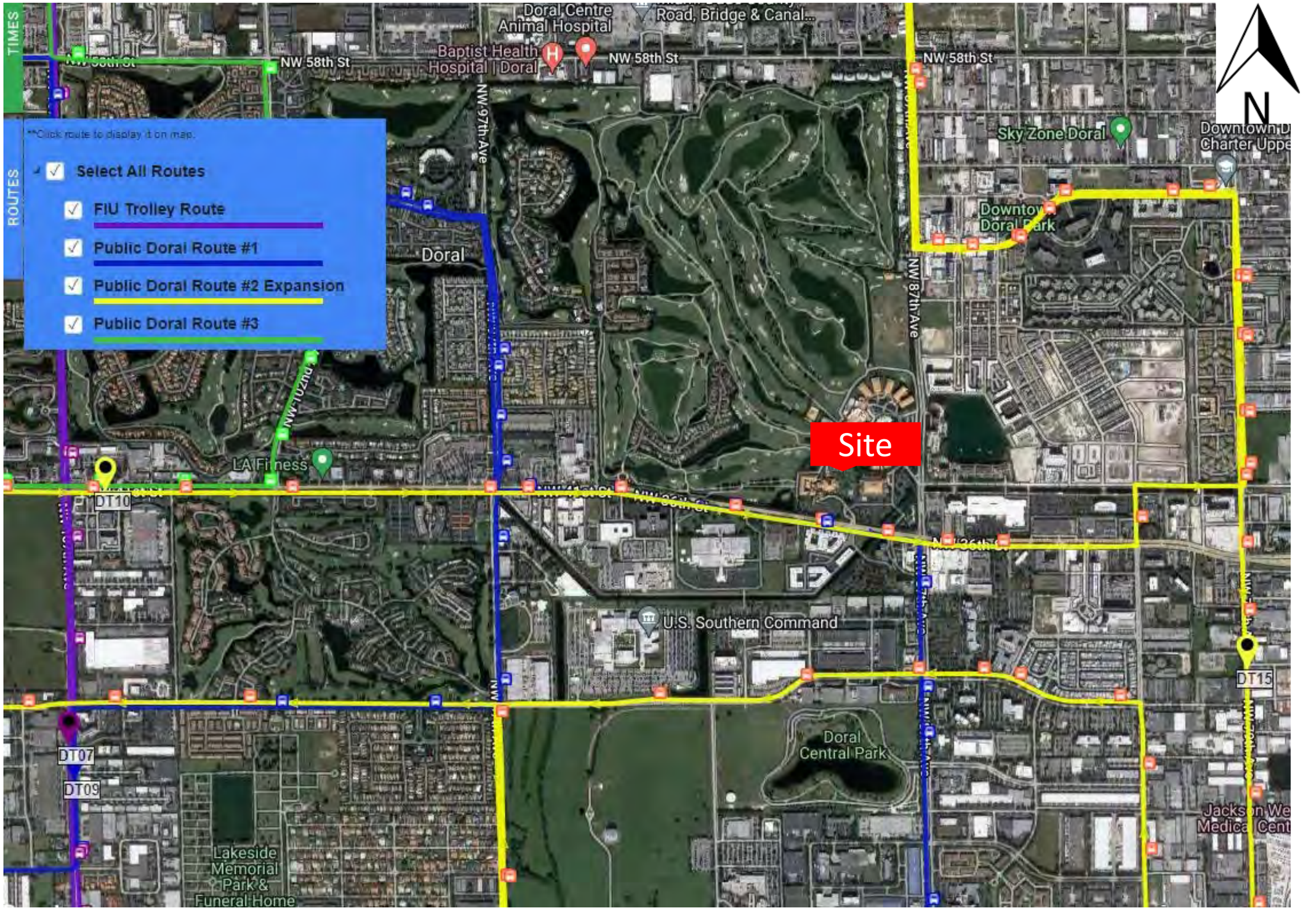
Sidewalk On County Roadways

Bike Lane - BikeLane

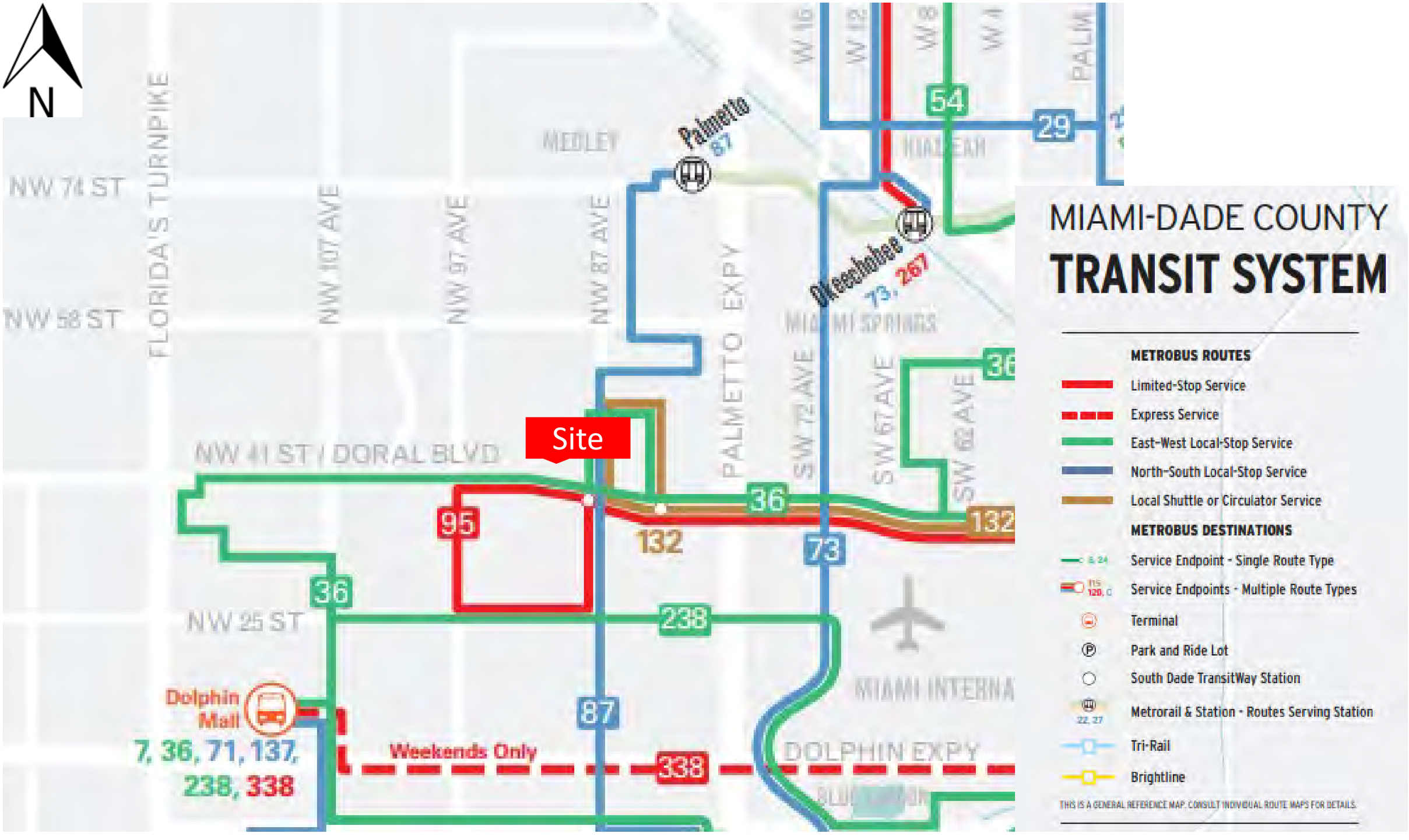
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Source: Esri, DigitalGlobe,

Transit Routes

City of Doral Trolley Network
Doral International Towers – Traffic Study



Miami-Dade Transit System Map
Doral International Towers – Traffic Study



UPDATED INTERNAL CAPTURE SPREADSHEETS

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Doral International Towers	**Organization:**	BCC
Project Location:	City of Doral	**Performed By:**	KR
Scenario Description:	Mixed-Use	**Date:**	12/28/2023
Analysis Year:	2023	**Checked By:**	
Analysis Period:	**Daily**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821	141,694	S.FT	9567	4783	4784
Restaurant				0		
Cinema/Entertainment				0		
Residential	222	1,498	Apartment Units	6010	3005	3005
Hotel	330	470	Rooms	3088	1544	1544
All Other Land Uses[2]				0		
Total				18665	9332	9333

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	60	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	30	0	0		0
Hotel	0	191	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	18,665	9,332	9,333
Internal Capture Percentage	3%	3%	3%
External Vehicle-Trips[3]	18,103	9,051	9,052
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	5%	1%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	0%	12%

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	TNR Doral	**Organization:**	BCC
Project Location:	City of Doral	**Performed By:**	KR
Scenario Description:	Mixed-Use	**Date:**	12/28/2023
Analysis Year:	2023	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821	141,964	S.FT	245	152	93
Restaurant				0		
Cinema/Entertainment				0		
Residential	222	1,498	Apartment Units	405	105	300
Hotel	330	470	Rooms	150	108	42
All Other Land Uses[2]				0		
Total				800	365	435

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	2	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	3	0	0		0
Hotel	0	6	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	800	365	435
Internal Capture Percentage	3%	3%	3%
External Vehicle-Trips[3]	778	354	424
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	6%	2%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	0%	14%

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	TNR Doral
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	152	152	1.00	93	93
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	105	105	1.00	300	300
Hotel	1.00	108	108	1.00	42	42

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	27		12	0	13	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	6	3	60	0		0
Hotel	32	6	4	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		49	0	0	0	0
Retail	0		0	0	2	0
Restaurant	0	12		0	5	4
Cinema/Entertainment	0	0	0		0	0
Residential	0	26	0	0		0
Hotel	0	6	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	9	143	152	143	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	103	105	103	0	0
Hotel	0	108	108	108	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	2	91	93	91	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	297	300	297	0	0
Hotel	6	36	42	36	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

APPENDIX B: Data Analyzed

Vehicle 72-Hour Counts

County: 99
Station: 1337
Description: NW 58TH STREET WEST OF NW 92ND AVENUE
Start Date: 05/03/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	40	36	23	20	119	37	39	27	30	133	252
0100	12	18	9	9	48	17	22	10	12	61	109
0200	14	12	8	10	44	16	9	11	7	43	87
0300	9	9	8	10	36	6	9	13	9	37	73
0400	6	6	33	40	85	13	14	24	31	82	167
0500	45	48	94	100	287	23	31	61	95	210	497
0600	78	137	200	305	720	74	102	101	154	431	1151
0700	298	267	292	379	1236	225	210	176	229	840	2076
0800	412	384	344	354	1494	242	220	201	215	878	2372
0900	299	317	265	294	1175	203	199	199	195	796	1971
1000	270	242	245	262	1019	214	183	178	212	787	1806
1100	204	222	263	217	906	205	209	198	234	846	1752
1200	216	265	220	222	923	251	233	206	211	901	1824
1300	221	226	214	209	870	257	229	218	218	922	1792
1400	259	224	298	238	1019	261	264	262	348	1135	2154
1500	286	224	284	232	1026	288	289	338	295	1210	2236
1600	213	232	275	192	912	337	322	419	397	1475	2387
1700	224	175	199	172	770	377	407	403	364	1551	2321
1800	158	184	148	193	683	397	317	316	244	1274	1957
1900	171	154	149	145	619	196	205	177	174	752	1371
2000	137	152	112	122	523	168	162	163	123	616	1139
2100	135	138	96	80	449	114	122	141	99	476	925
2200	79	48	59	57	243	99	97	90	73	359	602
2300	39	50	36	31	156	79	66	56	58	259	415
24-Hour Totals:					15362					16074	31436

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1519	745	892	745	2411
P.M.	1415	1046	1630	1600	1630	2466
Daily	745	1519	1630	1600	1630	2466

Generated by SPS 5.0.53P

County: 99
Station: 1337
Description: NW 58TH STREET WEST OF NW 92ND AVENUE
Start Date: 05/04/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	27	33	23	17	100	46	38	26	25	135	235
0100	23	12	10	13	58	27	19	12	22	80	138
0200	9	8	8	3	28	12	14	9	14	49	77
0300	9	6	8	9	32	5	14	3	13	35	67
0400	15	17	26	40	98	12	5	15	29	61	159
0500	39	53	80	118	290	21	38	57	106	222	512
0600	81	128	213	307	729	73	100	105	156	434	1163
0700	380	289	338	386	1393	202	237	206	221	866	2259
0800	401	441	375	367	1584	246	238	229	193	906	2490
0900	320	318	294	268	1200	181	178	167	210	736	1936
1000	230	245	233	236	944	192	200	200	198	790	1734
1100	229	219	222	251	921	184	215	194	216	809	1730
1200	215	213	223	243	894	263	244	223	221	951	1845
1300	224	232	240	229	925	201	255	278	269	1003	1928
1400	279	305	307	280	1171	237	245	225	329	1036	2207
1500	243	229	229	219	920	342	338	296	275	1251	2171
1600	209	187	251	200	847	306	324	367	341	1338	2185
1700	209	191	129	177	706	406	376	314	308	1404	2110
1800	153	200	149	149	651	292	319	292	285	1188	1839
1900	144	159	152	133	588	240	234	194	191	859	1447
2000	140	134	108	131	513	187	165	140	122	614	1127
2100	116	121	126	92	455	121	132	101	83	437	892
2200	89	70	73	66	298	99	89	87	88	363	661
2300	49	45	38	36	168	73	76	47	57	253	421
24-Hour Totals:					15513					15820	31333

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1603	745	934	745	2537
P.M.	1400	1171	1630	1490	1630	2341
Daily	745	1603	1630	1490	745	2537

Generated by SPS 5.0.53P

County: 99
Station: 1337
Description: NW 58TH STREET WEST OF NW 92ND AVENUE
Start Date: 05/05/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	31	19	17	24	91	43	37	35	29	144	235
0100	12	19	15	8	54	18	21	17	13	69	123
0200	7	9	8	8	32	13	16	7	11	47	79
0300	10	4	11	10	35	10	10	11	10	41	76
0400	12	17	20	44	93	5	14	20	32	71	164
0500	44	44	86	105	279	14	37	55	115	221	500
0600	83	133	189	313	718	78	96	99	166	439	1157
0700	381	273	316	382	1352	197	257	198	205	857	2209
0800	426	409	368	412	1615	230	234	217	186	867	2482
0900	319	320	307	314	1260	201	215	170	173	759	2019
1000	261	269	270	266	1066	189	180	184	190	743	1809
1100	234	221	191	222	868	225	203	218	225	871	1739
1200	251	229	234	226	940	260	257	234	226	977	1917
1300	233	240	230	227	930	241	231	90	63	625	1555
1400	201	208	236	194	839	40	31	81	180	332	1171
1500	244	264	269	242	1019	388	330	281	338	1337	2356
1600	248	199	272	182	901	329	321	392	378	1420	2321
1700	186	147	194	164	691	389	398	388	338	1513	2204
1800	188	164	174	150	676	324	338	271	271	1204	1880
1900	160	193	167	163	683	246	226	200	204	876	1559
2000	182	149	158	130	619	172	168	128	151	619	1238
2100	154	127	120	108	509	149	125	112	108	494	1003
2200	92	80	96	83	351	120	115	97	75	407	758
2300	52	60	48	39	199	84	79	84	58	305	504
24-Hour Totals:					15820					15238	31058

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	1615	715	890	800	2482
P.M.	1515	1023	1630	1557	1500	2356
Daily	800	1615	1630	1557	800	2482

Generated by SPS 5.0.53P

County: 99
Station: 1338
Description: NW 58TH STREET WEST OF NW 84TH AVENUE
Start Date: 05/03/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	47	38	21	23	129	35	28	25	28	116	245
0100	18	18	12	13	61	15	16	15	11	57	118
0200	15	14	17	9	55	14	7	7	9	37	92
0300	12	13	11	12	48	8	8	16	10	42	90
0400	14	7	33	31	85	13	30	31	44	118	203
0500	42	42	77	66	227	40	53	102	145	340	567
0600	62	103	151	227	543	108	122	138	167	535	1078
0700	243	251	254	289	1037	220	186	171	198	775	1812
0800	277	281	295	257	1110	200	198	189	194	781	1891
0900	267	259	221	252	999	230	185	196	183	794	1793
1000	243	221	206	228	898	186	168	190	204	748	1646
1100	183	169	249	203	804	196	198	195	190	779	1583
1200	216	268	220	218	922	271	259	211	209	950	1872
1300	238	235	206	218	897	258	216	200	219	893	1790
1400	228	221	258	233	940	247	243	261	309	1060	2000
1500	248	239	236	220	943	279	228	261	232	1000	1943
1600	175	177	220	151	723	301	247	304	303	1155	1878
1700	170	141	201	139	651	323	325	293	258	1199	1850
1800	115	168	141	146	570	289	265	231	175	960	1530
1900	141	123	114	134	512	174	171	178	123	646	1158
2000	134	130	110	115	489	143	139	136	108	526	1015
2100	114	120	99	71	404	112	118	104	85	419	823
2200	80	55	62	71	268	87	83	68	67	305	573
2300	52	62	38	33	185	71	57	49	45	222	407
24-Hour Totals:					13500					14457	27957

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1142	815	811	745	1927
P.M.	1430	978	1630	1255	1430	2055
Daily	745	1142	1630	1255	1430	2055

Generated by SPS 5.0.53P

County: 99
Station: 1338
Description: NW 58TH STREET WEST OF NW 84TH AVENUE
Start Date: 05/04/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	33	30	20	21	104	34	39	18	16	107	211
0100	16	13	18	12	59	14	21	10	18	63	122
0200	17	9	12	12	50	12	14	6	12	44	94
0300	9	8	15	15	47	9	11	8	16	44	91
0400	17	20	28	40	105	11	20	25	33	89	194
0500	40	39	54	87	220	47	62	91	144	344	564
0600	71	101	165	247	584	102	124	130	186	542	1126
0700	319	246	290	299	1154	190	215	173	205	783	1937
0800	273	280	313	274	1140	198	220	177	173	768	1908
0900	304	249	259	257	1069	202	174	191	206	773	1842
1000	223	232	238	202	895	176	182	198	196	752	1647
1100	217	190	229	233	869	195	173	158	206	732	1601
1200	175	228	221	171	795	263	254	212	198	927	1722
1300	145	208	211	195	759	218	236	252	249	955	1714
1400	238	260	265	267	1030	194	239	244	323	1000	2030
1500	212	213	224	186	835	284	260	226	216	986	1821
1600	168	178	207	150	703	256	241	261	268	1026	1729
1700	186	181	153	157	677	349	359	278	288	1274	1951
1800	151	147	144	132	574	221	225	215	193	854	1428
1900	130	145	135	128	538	202	194	149	157	702	1240
2000	138	125	108	138	509	142	137	128	125	532	1041
2100	93	116	122	87	418	99	112	90	67	368	786
2200	82	78	75	72	307	75	71	83	87	316	623
2300	63	53	33	47	196	71	55	45	53	224	420
24-Hour Totals:					13637					14205	27842

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	1171	745	800	745	1965
P.M.	1400	1030	1700	1274	1415	2094
Daily	815	1171	1700	1274	1415	2094

Generated by SPS 5.0.53P

County: 99
Station: 1338
Description: NW 58TH STREET WEST OF NW 84TH AVENUE
Start Date: 05/05/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	39	24	16	29	108	40	27	35	20	122	230
0100	13	14	17	11	55	21	20	14	12	67	122
0200	13	8	12	12	45	9	6	10	11	36	81
0300	8	11	13	17	49	8	11	9	12	40	89
0400	19	20	24	37	100	12	19	33	53	117	217
0500	53	39	61	75	228	29	58	96	164	347	575
0600	76	116	141	241	574	96	148	125	175	544	1118
0700	336	300	290	300	1226	215	192	154	192	753	1979
0800	270	278	325	269	1142	194	204	197	166	761	1903
0900	259	255	255	266	1035	202	199	156	181	738	1773
1000	232	241	201	218	892	168	166	188	210	732	1624
1100	210	178	202	214	804	207	217	234	218	876	1680
1200	239	219	216	238	912	263	256	252	259	1030	1942
1300	236	181	131	180	728	242	228	291	267	1028	1756
1400	199	178	163	205	745	227	243	205	282	957	1702
1500	225	238	232	207	902	262	229	274	228	993	1895
1600	197	195	228	155	775	258	246	283	284	1071	1846
1700	158	125	188	169	640	317	330	290	226	1163	1803
1800	170	133	167	147	617	267	262	221	193	943	1560
1900	147	161	155	124	587	194	171	169	146	680	1267
2000	148	120	161	128	557	157	135	112	125	529	1086
2100	132	120	118	94	464	130	112	84	98	424	888
2200	90	97	98	69	354	109	85	85	58	337	691
2300	63	64	59	53	239	67	86	65	46	264	503
24-Hour Totals:					13778					14552	28330

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	1226	745	787	700	1979
P.M.	1200	912	1645	1221	1445	1947
Daily	700	1226	1645	1221	700	1979

Generated by SPS 5.0.53P

County: 99
Station: 1339
Description: NW 53RD STREET WEST OF NW 84TH AVENUE
Start Date: 05/03/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	7	4	5	3	19	6	2	4	4	16	35
0100	7	3	2	5	17	1	1	1	1	4	21
0200	0	0	2	1	3	1	2	2	2	7	10
0300	1	2	4	0	7	1	1	3	0	5	12
0400	0	3	0	3	6	1	1	0	2	4	10
0500	2	1	3	1	7	1	2	0	11	14	21
0600	6	12	13	28	59	3	2	10	18	33	92
0700	51	40	42	49	182	26	35	28	37	126	308
0800	68	68	41	63	240	26	46	44	28	144	384
0900	55	50	53	43	201	20	30	28	35	113	314
1000	40	40	45	35	160	39	42	27	26	134	294
1100	55	33	54	45	187	38	25	42	53	158	345
1200	58	47	37	49	191	72	57	37	35	201	392
1300	44	52	51	60	207	56	43	53	42	194	401
1400	63	49	55	46	213	37	43	51	28	159	372
1500	52	44	63	51	210	35	41	43	36	155	365
1600	45	49	59	41	194	53	51	46	51	201	395
1700	47	49	42	67	205	80	75	63	59	277	482
1800	51	59	49	32	191	52	42	36	37	167	358
1900	43	24	32	30	129	37	24	31	34	126	255
2000	39	38	34	34	145	45	34	35	27	141	286
2100	33	27	17	26	103	23	22	16	14	75	178
2200	33	24	14	11	82	12	14	10	14	50	132
2300	6	11	5	4	26	7	5	9	3	24	50
24-Hour Totals:					2984					2528	5512

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	240	745	153	800	384
P.M.	1345	227	1700	277	1700	482
Daily	800	240	1700	277	1700	482

Generated by SPS 5.0.53P

County: 99
Station: 1339
Description: NW 53RD STREET WEST OF NW 84TH AVENUE
Start Date: 05/04/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	4	3	2	4	13	2	2	8	3	15	28
0100	2	6	1	4	13	1	5	3	0	9	22
0200	0	2	3	4	9	1	1	4	3	9	18
0300	1	3	1	1	6	3	0	1	0	4	10
0400	3	0	0	3	6	0	1	2	3	6	12
0500	1	1	6	1	9	2	3	4	10	19	28
0600	10	9	15	40	74	2	6	5	17	30	104
0700	82	42	35	52	211	30	42	23	41	136	347
0800	59	47	34	82	222	29	18	21	23	91	313
0900	61	53	56	43	213	26	18	33	40	117	330
1000	54	55	33	40	182	39	34	40	46	159	341
1100	30	36	45	73	184	33	32	39	60	164	348
1200	49	64	50	66	229	46	42	42	58	188	417
1300	52	59	48	60	219	46	61	37	54	198	417
1400	36	63	68	39	206	45	38	44	27	154	360
1500	29	72	41	50	192	34	56	57	37	184	376
1600	42	37	31	42	152	65	61	41	60	227	379
1700	41	51	49	55	196	70	50	67	62	249	445
1800	57	63	45	31	196	59	58	48	36	201	397
1900	47	36	35	27	145	39	45	40	26	150	295
2000	41	34	33	36	144	20	21	38	16	95	239
2100	32	31	22	27	112	22	26	18	23	89	201
2200	14	24	17	17	72	19	14	15	12	60	132
2300	10	8	12	11	41	13	14	7	13	47	88
24-Hour Totals:					3046					2601	5647

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	252	700	136	845	352
P.M.	1215	232	1700	249	1730	470
Daily	845	252	1700	249	1730	470

Generated by SPS 5.0.53P

County: 99
Station: 1339
Description: NW 53RD STREET WEST OF NW 84TH AVENUE
Start Date: 05/05/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	7	5	7	24	3	5	4	3	15	39
0100	2	2	3	4	11	4	0	1	1	6	17
0200	2	2	0	3	7	0	0	3	3	6	13
0300	0	3	0	2	5	1	4	1	1	7	12
0400	4	2	0	1	7	1	0	0	3	4	11
0500	3	2	5	14	24	1	3	5	3	12	36
0600	6	8	17	29	60	4	7	5	15	31	91
0700	71	44	39	57	211	25	39	26	23	113	324
0800	59	48	38	69	214	36	20	17	18	91	305
0900	66	54	39	56	215	18	22	23	38	101	316
1000	66	52	44	44	206	28	49	29	31	137	343
1100	47	44	65	57	213	40	30	48	57	175	388
1200	46	33	51	49	179	52	57	39	38	186	365
1300	52	41	49	56	198	57	52	46	46	201	399
1400	64	45	82	66	257	52	30	30	33	145	402
1500	60	84	61	36	241	38	43	49	38	168	409
1600	44	51	51	59	205	48	17	49	41	155	360
1700	58	68	76	54	256	62	68	69	43	242	498
1800	57	46	59	39	201	55	34	39	42	170	371
1900	38	65	58	41	202	46	43	36	26	151	353
2000	55	46	28	36	165	31	35	37	34	137	302
2100	25	32	35	27	119	27	22	25	23	97	216
2200	29	28	14	18	89	20	24	13	11	68	157
2300	8	3	7	13	31	11	3	4	8	26	57
24-Hour Totals:					3340					2444	5784

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	228	715	124	700	324
P.M.	1430	292	1700	242	1645	501
Daily	1430	292	1700	242	1645	501

Generated by SPS 5.0.53P

County: 99
Station: 1340
Description: NW 36TH STREET EAST OF NW 93RD CT
Start Date: 05/03/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	54	46	32	35	167	53	44	41	39	177	344
0100	28	18	25	27	98	27	20	31	15	93	191
0200	8	9	13	13	43	18	13	27	15	73	116
0300	12	15	12	19	58	8	19	18	12	57	115
0400	9	16	38	32	95	13	23	32	55	123	218
0500	51	80	74	99	304	50	65	79	105	299	603
0600	136	183	252	324	895	113	151	201	245	710	1605
0700	402	469	481	519	1871	280	257	292	345	1174	3045
0800	519	529	547	522	2117	383	366	360	317	1426	3543
0900	507	448	429	400	1784	300	297	283	284	1164	2948
1000	359	333	367	354	1413	283	303	277	257	1120	2533
1100	341	356	359	381	1437	303	324	294	312	1233	2670
1200	357	378	372	389	1496	347	339	339	366	1391	2887
1300	347	344	350	370	1411	383	344	317	349	1393	2804
1400	368	377	433	378	1556	349	341	386	370	1446	3002
1500	392	381	393	380	1546	414	408	372	378	1572	3118
1600	417	412	363	349	1541	416	390	358	403	1567	3108
1700	380	376	351	337	1444	484	488	435	421	1828	3272
1800	342	302	265	294	1203	386	413	385	349	1533	2736
1900	291	263	255	231	1040	302	264	252	283	1101	2141
2000	263	262	235	183	943	253	235	241	216	945	1888
2100	194	227	158	157	736	180	176	185	149	690	1426
2200	159	162	163	130	614	153	126	109	116	504	1118
2300	95	80	91	68	334	114	82	100	72	368	702
24-Hour Totals:					24146					21987	46133

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	2117	745	1454	745	3568
P.M.	1530	1602	1700	1828	1700	3272
Daily	800	2117	1700	1828	745	3568

Generated by SPS 5.0.53P

County: 99
Station: 1340
Description: NW 36TH STREET EAST OF NW 93RD CT
Start Date: 05/04/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	41	41	47	35	164	56	51	44	44	195	359
0100	38	29	19	10	96	21	28	22	29	100	196
0200	13	19	22	11	65	14	14	19	16	63	128
0300	17	10	18	15	60	15	12	14	20	61	121
0400	20	29	28	37	114	15	24	35	42	116	230
0500	53	67	82	93	295	55	42	79	111	287	582
0600	129	194	235	333	891	91	167	206	259	723	1614
0700	380	463	501	521	1865	286	247	269	343	1145	3010
0800	499	519	570	543	2131	367	344	330	326	1367	3498
0900	529	452	458	430	1869	289	303	277	303	1172	3041
1000	370	363	307	346	1386	271	296	289	281	1137	2523
1100	354	338	344	397	1433	275	338	311	307	1231	2664
1200	356	419	351	361	1487	357	315	331	374	1377	2864
1300	342	373	341	373	1429	408	362	341	392	1503	2932
1400	416	457	411	343	1627	362	335	376	349	1422	3049
1500	341	360	350	345	1396	411	370	389	312	1482	2878
1600	391	359	396	372	1518	413	372	362	404	1551	3069
1700	381	356	326	284	1347	439	456	428	411	1734	3081
1800	302	348	321	273	1244	381	400	392	364	1537	2781
1900	301	293	260	237	1091	354	318	282	255	1209	2300
2000	258	292	231	238	1019	251	219	205	218	893	1912
2100	219	229	192	182	822	174	173	175	163	685	1507
2200	176	150	147	107	580	134	135	133	115	517	1097
2300	109	115	108	64	396	136	100	91	76	403	799
24-Hour Totals:					24325					21910	46235

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	2161	745	1384	800	3498
P.M.	1345	1657	1700	1734	1630	3166
Daily	815	2161	1700	1734	800	3498

Generated by SPS 5.0.53P

County: 99
Station: 1340
Description: NW 36TH STREET EAST OF NW 93RD CT
Start Date: 05/05/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	75	60	58	39	232	67	55	42	44	208	440
0100	56	39	30	20	145	33	34	27	26	120	265
0200	26	15	8	22	71	30	17	13	19	79	150
0300	21	16	20	19	76	17	20	13	11	61	137
0400	23	20	37	47	127	14	17	43	52	126	253
0500	50	62	78	113	303	44	52	74	114	284	587
0600	121	194	237	302	854	98	161	204	254	717	1571
0700	417	501	475	511	1904	276	233	304	349	1162	3066
0800	512	540	559	500	2111	334	354	299	325	1312	3423
0900	532	469	477	406	1884	313	261	292	276	1142	3026
1000	413	357	329	360	1459	296	299	298	252	1145	2604
1100	321	358	339	399	1417	287	334	337	369	1327	2744
1200	346	363	366	365	1440	360	315	323	324	1322	2762
1300	355	385	385	425	1550	327	345	365	406	1443	2993
1400	367	425	401	425	1618	400	444	457	412	1713	3331
1500	443	406	373	337	1559	498	402	407	339	1646	3205
1600	414	406	387	398	1605	413	420	379	391	1603	3208
1700	430	384	365	298	1477	460	463	408	387	1718	3195
1800	325	353	293	300	1271	387	359	341	349	1436	2707
1900	316	282	254	263	1115	337	264	309	297	1207	2322
2000	280	275	274	257	1086	265	242	251	239	997	2083
2100	253	261	201	194	909	219	189	203	174	785	1694
2200	176	179	162	157	674	193	163	147	135	638	1312
2300	129	139	124	90	482	133	117	108	89	447	929
24-Hour Totals:					25369					22638	48007

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	2131	730	1341	745	3458
P.M.	1415	1694	1415	1811	1415	3505
Daily	815	2131	1415	1811	1415	3505

Generated by SPS 5.0.53P

County: 99
Station: 1341
Description: NW 36TH STREET WEST OF NW 83RD AVENUE
Start Date: 05/03/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	68	65	44	37	214	65	61	46	39	211	425
0100	37	37	20	41	135	23	22	32	21	98	233
0200	24	19	21	18	82	31	18	28	19	96	178
0300	16	16	18	31	81	20	18	28	26	92	173
0400	17	25	43	46	131	29	28	60	71	188	319
0500	56	81	63	93	293	72	85	110	182	449	742
0600	129	182	233	292	836	145	228	312	364	1049	1885
0700	382	419	425	428	1654	319	339	388	465	1511	3165
0800	436	444	436	460	1776	452	378	398	384	1612	3388
0900	410	403	412	411	1636	374	352	344	337	1407	3043
1000	352	351	372	353	1428	333	355	309	339	1336	2764
1100	341	368	407	371	1487	377	333	360	379	1449	2936
1200	392	410	431	388	1621	375	398	333	396	1502	3123
1300	389	431	379	334	1533	413	352	347	384	1496	3029
1400	416	416	387	408	1627	380	378	390	407	1555	3182
1500	459	429	437	397	1722	363	420	398	410	1591	3313
1600	444	402	345	351	1542	390	366	378	388	1522	3064
1700	383	358	403	346	1490	441	434	403	401	1679	3169
1800	380	368	330	305	1383	408	453	348	364	1573	2956
1900	306	295	247	235	1083	303	256	264	293	1116	2199
2000	252	279	238	170	939	240	229	261	236	966	1905
2100	193	246	195	183	817	191	208	166	186	751	1568
2200	164	189	176	157	686	180	142	132	152	606	1292
2300	127	99	110	82	418	108	88	102	85	383	801
24-Hour Totals:					24614					24238	48852

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	1776	745	1693	745	3437
P.M.	1445	1733	1700	1679	1515	3325
Daily	800	1776	745	1693	745	3437

Generated by SPS 5.0.53P

County: 99
Station: 1341
Description: NW 36TH STREET WEST OF NW 83RD AVENUE
Start Date: 05/04/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	54	82	78	56	270	77	64	59	45	245	515
0100	50	46	36	19	151	36	28	22	29	115	266
0200	19	17	26	12	74	15	22	17	22	76	150
0300	17	8	26	31	82	23	14	27	33	97	179
0400	30	27	37	57	151	25	36	63	69	193	344
0500	53	71	80	103	307	72	82	110	172	436	743
0600	126	189	215	273	803	141	233	302	348	1024	1827
0700	347	385	429	425	1586	319	302	357	430	1408	2994
0800	429	441	472	445	1787	419	399	373	378	1569	3356
0900	455	458	444	374	1731	351	328	324	321	1324	3055
1000	403	343	371	358	1475	320	328	346	324	1318	2793
1100	336	357	367	424	1484	318	322	351	325	1316	2800
1200	367	406	433	366	1572	375	389	376	413	1553	3125
1300	390	421	375	370	1556	409	364	357	404	1534	3090
1400	438	406	395	417	1656	337	367	411	377	1492	3148
1500	414	398	405	441	1658	385	340	368	278	1371	3029
1600	409	424	413	463	1709	392	345	392	379	1508	3217
1700	452	459	370	381	1662	418	421	394	317	1550	3212
1800	285	254	241	272	1052	355	378	372	337	1442	2494
1900	236	270	272	242	1020	355	335	286	268	1244	2264
2000	251	283	226	247	1007	253	244	211	217	925	1932
2100	219	246	192	172	829	169	174	187	170	700	1529
2200	201	180	181	144	706	158	152	149	132	591	1297
2300	126	151	120	104	501	146	101	97	84	428	929
24-Hour Totals:					24829					23459	48288

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	830	1830	745	1621	745	3388
P.M.	1630	1787	1645	1612	1630	3397
Daily	830	1830	745	1621	1630	3397

Generated by SPS 5.0.53P

County: 99
Station: 1341
Description: NW 36TH STREET WEST OF NW 83RD AVENUE
Start Date: 05/05/2022
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	90	88	74	55	307	72	65	58	51	246	553
0100	62	48	41	31	182	46	34	33	27	140	322
0200	28	20	17	18	83	34	26	23	33	116	199
0300	29	18	25	22	94	27	20	38	22	107	201
0400	30	30	52	55	167	23	44	60	79	206	373
0500	52	66	81	104	303	67	68	120	172	427	730
0600	133	176	204	279	792	130	244	303	343	1020	1812
0700	350	428	407	408	1593	328	331	361	434	1454	3047
0800	399	450	458	408	1715	367	379	342	375	1463	3178
0900	463	420	432	407	1722	385	306	300	367	1358	3080
1000	383	387	340	389	1499	331	325	342	342	1340	2839
1100	354	361	403	398	1516	347	379	383	392	1501	3017
1200	373	409	430	375	1587	369	350	331	329	1379	2966
1300	355	462	402	367	1586	399	365	408	360	1532	3118
1400	406	450	406	442	1704	365	406	380	430	1581	3285
1500	432	424	421	444	1721	410	391	385	365	1551	3272
1600	447	437	460	421	1765	380	354	371	407	1512	3277
1700	446	464	439	396	1745	437	387	397	393	1614	3359
1800	342	331	348	315	1336	362	349	323	341	1375	2711
1900	362	324	306	255	1247	336	300	329	318	1283	2530
2000	295	300	291	294	1180	274	300	253	267	1094	2274
2100	272	294	253	219	1038	260	219	214	185	878	1916
2200	209	229	234	174	846	196	174	169	154	693	1539
2300	175	163	167	137	642	142	140	119	122	523	1165
24-Hour Totals:					26370					24393	50763

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	1779	730	1541	815	3260
P.M.	1630	1791	1645	1628	1645	3398
Daily	1630	1791	1645	1628	1645	3398

Generated by SPS 5.0.53P

County: 99
Station: 1342
Description: NW 97TH AVENUE SOUTH OF NW 52ND STREET
Start Date: 05/03/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	18	12	15	14	59	9	14	6	6	35	94
0100	8	4	9	5	26	5	4	6	7	22	48
0200	5	2	3	10	20	3	6	3	2	14	34
0300	6	3	4	4	17	2	2	6	8	18	35
0400	10	9	9	15	43	3	2	10	11	26	69
0500	30	25	50	43	148	7	13	22	38	80	228
0600	50	70	106	125	351	53	66	71	106	296	647
0700	101	95	134	179	509	132	170	187	235	724	1233
0800	179	176	141	151	647	272	276	238	245	1031	1678
0900	137	103	121	132	493	195	162	124	160	641	1134
1000	112	97	134	111	454	150	160	126	151	587	1041
1100	110	131	127	122	490	134	143	133	147	557	1047
1200	147	140	130	150	567	165	122	140	150	577	1144
1300	176	158	149	164	647	134	131	143	162	570	1217
1400	148	169	162	195	674	140	165	204	185	694	1368
1500	201	207	164	198	770	199	219	225	209	852	1622
1600	181	210	218	186	795	220	222	211	231	884	1679
1700	233	241	247	235	956	237	251	269	283	1040	1996
1800	239	255	191	176	861	227	167	200	168	762	1623
1900	164	170	143	135	612	161	138	122	108	529	1141
2000	123	136	106	85	450	114	89	89	64	356	806
2100	84	109	78	62	333	67	63	74	41	245	578
2200	56	60	37	47	200	33	34	35	30	132	332
2300	33	28	27	23	111	22	25	21	18	86	197
24-Hour Totals:					10233					10758	20991

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	675	800	1031	745	1696
P.M.	1730	976	1700	1040	1700	1996
Daily	1730	976	1700	1040	1700	1996

Generated by SPS 5.0.53P

County: 99
Station: 1342
Description: NW 97TH AVENUE SOUTH OF NW 52ND STREET
Start Date: 05/04/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	16	20	13	8	57	13	8	17	7	45	102
0100	9	5	8	4	26	6	5	3	5	19	45
0200	4	5	2	2	13	6	0	1	3	10	23
0300	4	5	6	3	18	4	6	3	4	17	35
0400	4	6	7	14	31	2	7	7	8	24	55
0500	18	31	43	44	136	11	17	24	44	96	232
0600	50	79	92	125	346	33	53	68	104	258	604
0700	113	110	130	176	529	132	162	169	214	677	1206
0800	201	173	133	145	652	251	277	246	233	1007	1659
0900	129	123	112	112	476	183	166	183	181	713	1189
1000	86	117	103	116	422	163	165	142	160	630	1052
1100	131	145	127	120	523	158	164	165	148	635	1158
1200	157	163	148	171	639	182	157	170	187	696	1335
1300	173	179	181	175	708	165	151	193	216	725	1433
1400	189	192	153	174	708	231	190	172	190	783	1491
1500	215	181	190	188	774	168	162	217	213	760	1534
1600	186	224	189	221	820	229	197	240	232	898	1718
1700	234	242	214	214	904	246	220	230	237	933	1837
1800	227	232	222	231	912	197	229	217	193	836	1748
1900	207	164	145	142	658	198	125	95	89	507	1165
2000	140	117	109	84	450	105	99	80	69	353	803
2100	107	82	76	62	327	61	64	54	32	211	538
2200	58	66	44	43	211	39	39	35	26	139	350
2300	35	32	31	17	115	30	26	15	12	83	198
24-Hour Totals:					10455					11055	21510

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	683	800	1007	745	1671
P.M.	1800	912	1630	938	1645	1839
Daily	1800	912	800	1007	1645	1839

Generated by SPS 5.0.53P

County: 99
Station: 1342
Description: NW 97TH AVENUE SOUTH OF NW 52ND STREET
Start Date: 05/05/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	19	18	13	17	67	13	11	11	9	44	111
0100	9	8	9	5	31	9	4	4	2	19	50
0200	4	5	6	4	19	4	4	4	4	16	35
0300	4	4	4	3	15	1	2	7	4	14	29
0400	8	11	9	13	41	5	4	8	6	23	64
0500	20	21	45	43	129	9	15	23	47	94	223
0600	33	83	98	114	328	32	55	77	97	261	589
0700	88	99	133	175	495	115	165	197	213	690	1185
0800	193	182	130	139	644	258	274	244	236	1012	1656
0900	119	112	112	134	477	183	158	163	176	680	1157
1000	129	111	129	115	484	136	147	150	147	580	1064
1100	116	128	138	128	510	150	151	149	162	612	1122
1200	153	144	159	155	611	157	160	157	177	651	1262
1300	176	158	145	179	658	191	157	155	173	676	1334
1400	213	185	201	207	806	152	171	183	208	714	1520
1500	246	207	204	219	876	217	231	230	228	906	1782
1600	173	241	195	217	826	197	214	237	260	908	1734
1700	258	240	266	216	980	244	252	259	261	1016	1996
1800	226	241	205	172	844	239	230	210	186	865	1709
1900	184	179	154	124	641	163	146	130	121	560	1201
2000	135	122	113	144	514	109	101	112	79	401	915
2100	114	87	86	86	373	78	60	59	54	251	624
2200	61	56	53	49	219	53	49	33	36	171	390
2300	29	35	34	23	121	16	29	23	13	81	202
24-Hour Totals:					10709					11245	21954

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	683	800	1012	745	1669
P.M.	1645	981	1700	1016	1645	1996
Daily	1645	981	1700	1016	1645	1996

Generated by SPS 5.0.53P

County: 99
Station: 1343
Description: NW 97TH AVENUE NORTH OF NW 52ND STREET
Start Date: 05/03/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	13	6	5	11	35	9	15	4	5	33	68
0100	7	2	3	2	14	5	4	2	4	15	29
0200	5	1	2	8	16	1	5	2	1	9	25
0300	5	2	4	4	15	2	3	5	3	13	28
0400	11	8	10	19	48	3	0	7	7	17	65
0500	26	23	57	40	146	5	10	15	24	54	200
0600	48	73	83	99	303	33	42	35	67	177	480
0700	84	113	97	104	398	75	91	96	118	380	778
0800	106	118	102	117	443	154	145	129	97	525	968
0900	98	85	96	110	389	112	111	92	106	421	810
1000	90	88	102	94	374	94	93	85	114	386	760
1100	79	98	91	113	381	107	87	101	108	403	784
1200	111	112	92	125	440	134	90	110	99	433	873
1300	118	115	124	107	464	101	88	99	108	396	860
1400	107	118	121	123	469	103	125	146	136	510	979
1500	121	130	119	115	485	143	160	147	156	606	1091
1600	109	122	124	98	453	154	158	167	166	645	1098
1700	138	127	129	128	522	185	177	200	185	747	1269
1800	135	136	97	113	481	179	121	144	115	559	1040
1900	100	105	97	89	391	103	100	95	78	376	767
2000	84	78	61	49	272	69	55	65	48	237	509
2100	53	61	48	38	200	35	51	48	36	170	370
2200	36	40	22	33	131	25	23	31	20	99	230
2300	24	19	19	13	75	15	22	21	11	69	144
24-Hour Totals:					6945					7280	14225

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	443	745	546	745	976
P.M.	1730	528	1700	747	1700	1269
Daily	1730	528	1700	747	1700	1269

Generated by SPS 5.0.53P

County: 99
Station: 1343
Description: NW 97TH AVENUE NORTH OF NW 52ND STREET
Start Date: 05/04/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	13	12	9	6	40	13	6	14	8	41	81
0100	7	4	7	5	23	4	4	4	2	14	37
0200	3	6	2	1	12	6	0	2	3	11	23
0300	3	2	5	4	14	4	6	2	2	14	28
0400	5	6	7	12	30	1	5	6	4	16	46
0500	19	35	41	43	138	7	11	14	24	56	194
0600	46	82	73	110	311	20	33	48	57	158	469
0700	91	96	90	122	399	91	87	84	111	373	772
0800	120	102	109	114	445	135	133	115	117	500	945
0900	111	101	88	104	404	107	101	121	124	453	857
1000	84	93	82	114	373	105	125	100	115	445	818
1100	98	106	88	102	394	122	117	128	111	478	872
1200	111	126	103	133	473	133	108	121	118	480	953
1300	116	121	114	115	466	117	114	141	151	523	989
1400	128	137	109	110	484	123	134	118	135	510	994
1500	135	125	123	119	502	127	126	150	155	558	1060
1600	123	118	115	123	479	163	171	165	174	673	1152
1700	136	135	123	103	497	188	152	161	168	669	1166
1800	150	145	138	128	561	152	163	154	154	623	1184
1900	117	98	100	88	403	141	95	79	55	370	773
2000	93	78	55	51	277	62	67	63	49	241	518
2100	68	52	44	42	206	35	56	40	33	164	370
2200	38	41	34	30	143	31	28	30	16	105	248
2300	18	27	20	10	75	17	23	9	11	60	135
24-Hour Totals:					7149					7535	14684

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	453	800	500	745	947
P.M.	1800	561	1615	698	1645	1192
Daily	1800	561	1615	698	1645	1192

Generated by SPS 5.0.53P

County: 99
Station: 1343
Description: NW 97TH AVENUE NORTH OF NW 52ND STREET
Start Date: 05/05/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	8	8	12	13	41	8	12	9	7	36	77
0100	4	7	5	2	18	6	2	4	2	14	32
0200	3	3	5	3	14	4	3	2	4	13	27
0300	4	4	4	1	13	1	3	5	1	10	23
0400	8	8	9	16	41	3	3	7	6	19	60
0500	15	24	45	42	126	4	11	14	25	54	180
0600	32	90	78	94	294	17	31	42	59	149	443
0700	78	93	97	116	384	66	106	107	112	391	775
0800	117	110	93	113	433	151	148	131	103	533	966
0900	91	97	100	95	383	102	106	100	122	430	813
1000	114	93	86	106	399	91	96	104	103	394	793
1100	87	103	99	109	398	116	97	92	124	429	827
1200	122	94	119	124	459	118	118	126	131	493	952
1300	128	108	104	133	473	135	102	110	101	448	921
1400	138	104	134	129	505	94	104	127	138	463	968
1500	127	121	132	133	513	164	164	148	161	637	1150
1600	117	127	112	135	491	146	173	193	192	704	1195
1700	140	122	148	114	524	177	208	194	199	778	1302
1800	127	134	135	102	498	177	167	158	151	653	1151
1900	123	125	103	80	431	126	101	97	67	391	822
2000	88	78	82	93	341	78	75	71	56	280	621
2100	68	59	58	61	246	51	54	47	41	193	439
2200	47	31	34	31	143	44	33	32	30	139	282
2300	16	31	22	10	79	9	22	19	9	59	138
24-Hour Totals:					7247					7710	14957

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	440	745	542	745	978
P.M.	1645	545	1700	778	1645	1316
Daily	1645	545	1700	778	1645	1316

Generated by SPS 5.0.53P

County: 99
Station: 1344
Description: NW 87TH AVENUE NORTH OF NW 47TH STREET
Start Date: 05/03/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	20	36	17	17	90	36	27	27	20	110	200
0100	14	16	13	15	58	11	11	12	9	43	101
0200	15	13	7	9	44	13	6	5	5	29	73
0300	4	11	10	10	35	6	13	7	7	33	68
0400	8	12	22	30	72	10	19	21	24	74	146
0500	33	47	71	84	235	24	28	40	50	142	377
0600	95	113	146	255	609	75	80	170	160	485	1094
0700	190	234	234	272	930	228	223	232	248	931	1861
0800	278	252	240	243	1013	260	243	244	250	997	2010
0900	241	256	235	242	974	250	238	224	249	961	1935
1000	229	220	251	217	917	255	220	239	204	918	1835
1100	229	209	215	292	945	242	228	227	206	903	1848
1200	248	230	253	244	975	277	258	223	249	1007	1982
1300	273	258	321	292	1144	256	245	260	248	1009	2153
1400	263	264	273	273	1073	260	256	276	310	1102	2175
1500	234	264	297	313	1108	283	258	283	294	1118	2226
1600	273	235	330	262	1100	245	231	233	237	946	2046
1700	309	292	301	310	1212	233	236	240	281	990	2202
1800	289	306	259	213	1067	280	256	218	210	964	2031
1900	209	179	185	174	747	175	159	133	123	590	1337
2000	156	165	145	149	615	143	148	120	141	552	1167
2100	137	127	105	108	477	116	99	109	99	423	900
2200	102	99	101	84	386	94	91	80	59	324	710
2300	66	43	55	32	196	54	42	46	38	180	376
24-Hour Totals:					16022					14831	30853

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1042	800	997	745	2037
P.M.	1700	1212	1445	1134	1730	2263
Daily	1700	1212	1445	1134	1730	2263

Generated by SPS 5.0.53P

County: 99
Station: 1344
Description: NW 87TH AVENUE NORTH OF NW 47TH STREET
Start Date: 05/04/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	26	37	25	23	111	34	30	28	17	109	220
0100	19	16	17	12	64	19	18	10	12	59	123
0200	3	9	15	6	33	10	10	7	13	40	73
0300	3	8	23	12	46	14	13	14	8	49	95
0400	9	16	23	36	84	13	14	25	29	81	165
0500	32	53	57	84	226	20	34	32	69	155	381
0600	101	117	177	241	636	61	95	150	177	483	1119
0700	233	227	226	264	950	202	262	246	243	953	1903
0800	281	279	228	275	1063	291	331	291	232	1145	2208
0900	267	238	213	190	908	242	198	248	250	938	1846
1000	241	271	187	227	926	269	232	263	266	1030	1956
1100	250	226	234	311	1021	248	250	242	291	1031	2052
1200	235	289	295	344	1163	326	282	251	265	1124	2287
1300	263	326	283	251	1123	261	287	245	284	1077	2200
1400	278	299	289	334	1200	264	239	266	304	1073	2273
1500	284	240	284	306	1114	312	272	305	265	1154	2268
1600	323	286	318	339	1266	260	279	298	289	1126	2392
1700	325	350	328	331	1334	283	259	270	253	1065	2399
1800	302	282	289	215	1088	270	241	224	215	950	2038
1900	225	189	181	144	739	211	178	181	152	722	1461
2000	184	169	165	153	671	155	151	104	119	529	1200
2100	141	127	118	102	488	106	111	113	81	411	899
2200	86	106	62	71	325	93	93	96	81	363	688
2300	66	50	46	30	192	76	71	48	49	244	436
24-Hour Totals:					16771					15911	32682

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	1063	745	1156	745	2208
P.M.	1645	1342	1445	1193	1630	2461
Daily	1645	1342	1445	1193	1630	2461

Generated by SPS 5.0.53P

County: 99
Station: 1344
Description: NW 87TH AVENUE NORTH OF NW 47TH STREET
Start Date: 05/05/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	31	45	23	19	118	35	28	13	20	96	214
0100	16	19	16	14	65	24	24	14	14	76	141
0200	14	19	13	13	59	12	6	6	8	32	91
0300	4	6	16	10	36	13	12	14	13	52	88
0400	9	19	29	26	83	12	16	19	33	80	163
0500	33	49	58	82	222	28	27	37	81	173	395
0600	92	104	181	227	604	75	84	108	166	433	1037
0700	240	228	235	268	971	229	255	263	274	1021	1992
0800	275	268	229	265	1037	262	258	311	249	1080	2117
0900	254	220	231	220	925	228	210	235	258	931	1856
1000	264	249	222	225	960	225	247	255	238	965	1925
1100	258	204	263	295	1020	240	241	212	284	977	1997
1200	250	276	264	300	1090	270	271	310	321	1172	2262
1300	289	277	252	261	1079	271	206	346	323	1146	2225
1400	329	282	358	280	1249	353	323	319	318	1313	2562
1500	261	255	286	325	1127	308	226	247	257	1038	2165
1600	283	312	313	348	1256	312	235	286	270	1103	2359
1700	359	385	337	315	1396	305	248	269	215	1037	2433
1800	310	327	265	242	1144	239	209	231	214	893	2037
1900	205	227	176	177	785	196	200	179	155	730	1515
2000	175	199	159	168	701	154	144	139	118	555	1256
2100	167	138	149	110	564	123	131	124	122	500	1064
2200	120	106	96	87	409	124	133	100	82	439	848
2300	68	62	73	52	255	70	63	56	63	252	507
24-Hour Totals:					17155					16094	33249

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1046	745	1105	745	2145
P.M.	1645	1429	1330	1345	1400	2562
Daily	1645	1429	1330	1345	1400	2562

Generated by SPS 5.0.53P

County: 99
Station: 1345
Description: NW 87TH AVENUE SOUTH OF NW 36TH STREET
Start Date: 05/03/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	51	48	27	23	149	57	43	44	28	172	321
0100	26	30	22	32	110	20	12	18	13	63	173
0200	20	21	17	19	77	30	13	13	18	74	151
0300	13	16	12	22	63	14	22	17	30	83	146
0400	14	23	32	49	118	31	29	51	55	166	284
0500	33	63	83	98	277	69	65	93	134	361	638
0600	108	132	152	230	622	141	155	290	313	899	1521
0700	227	241	254	261	983	305	347	386	447	1485	2468
0800	289	268	259	267	1083	450	413	429	401	1693	2776
0900	242	219	265	255	981	451	434	381	376	1642	2623
1000	267	253	259	259	1038	406	413	394	370	1583	2621
1100	262	250	280	313	1105	415	363	370	362	1510	2615
1200	284	277	316	306	1183	410	436	451	477	1774	2957
1300	312	351	301	313	1277	438	445	421	514	1818	3095
1400	280	327	321	314	1242	447	502	485	503	1937	3179
1500	348	345	357	367	1417	462	435	444	439	1780	3197
1600	359	325	356	370	1410	385	339	405	341	1470	2880
1700	402	358	419	421	1600	389	390	433	412	1624	3224
1800	358	348	314	259	1279	426	453	340	334	1553	2832
1900	280	214	246	234	974	265	258	231	249	1003	1977
2000	195	210	201	172	778	207	219	213	214	853	1631
2100	165	167	178	131	641	173	147	152	149	621	1262
2200	126	115	120	105	466	142	128	111	103	484	950
2300	98	71	58	52	279	75	53	74	64	266	545
24-Hour Totals:					19152					24914	44066

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	1083	745	1739	745	2816
P.M.	1700	1600	1415	1952	1730	3270
Daily	1700	1600	1415	1952	1730	3270

Generated by SPS 5.0.53P

County: 99
Station: 1345
Description: NW 87TH AVENUE SOUTH OF NW 36TH STREET
Start Date: 05/04/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	49	71	40	48	208	53	52	40	38	183	391
0100	30	29	24	21	104	29	26	27	12	94	198
0200	12	15	20	9	56	22	16	11	26	75	131
0300	10	9	28	23	70	19	26	16	17	78	148
0400	12	20	33	58	123	28	29	43	61	161	284
0500	40	61	67	107	275	38	69	103	118	328	603
0600	119	156	174	217	666	147	168	242	293	850	1516
0700	218	222	270	248	958	289	348	417	442	1496	2454
0800	253	275	256	250	1034	434	485	476	472	1867	2901
0900	271	256	252	253	1032	419	392	387	420	1618	2650
1000	267	272	253	294	1086	466	442	404	483	1795	2881
1100	275	311	292	332	1210	491	379	458	459	1787	2997
1200	303	313	379	323	1318	508	555	505	508	2076	3394
1300	297	331	299	317	1244	441	485	462	451	1839	3083
1400	320	305	351	369	1345	447	441	402	423	1713	3058
1500	321	318	350	365	1354	451	435	495	469	1850	3204
1600	379	336	388	373	1476	452	466	504	523	1945	3421
1700	385	353	328	342	1408	478	495	422	364	1759	3167
1800	309	309	302	314	1234	359	353	370	350	1432	2666
1900	279	242	242	192	955	339	301	271	256	1167	2122
2000	222	188	194	198	802	209	224	192	175	800	1602
2100	188	157	171	118	634	162	163	143	148	616	1250
2200	138	113	128	95	474	147	130	126	113	516	990
2300	100	100	66	46	312	101	92	74	56	323	635
24-Hour Totals:					19378					26368	45746

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	1052	800	1867	815	2904
P.M.	1630	1499	1200	2076	1630	3499
Daily	1630	1499	1200	2076	1630	3499

Generated by SPS 5.0.53P

County: 99
Station: 1345
Description: NW 87TH AVENUE SOUTH OF NW 36TH STREET
Start Date: 05/05/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	56	48	36	41	181	61	51	39	37	188	369
0100	34	28	27	22	111	40	31	33	27	131	242
0200	24	20	13	13	70	26	12	13	17	68	138
0300	12	13	16	12	53	25	17	31	26	99	152
0400	18	22	40	43	123	17	34	34	62	147	270
0500	43	58	76	84	261	41	61	91	145	338	599
0600	104	133	184	211	632	143	158	207	287	795	1427
0700	227	228	239	249	943	337	392	388	477	1594	2537
0800	222	236	243	245	946	451	443	465	462	1821	2767
0900	244	226	239	230	939	433	400	374	412	1619	2558
1000	269	254	262	256	1041	441	415	410	454	1720	2761
1100	242	242	280	285	1049	455	421	426	503	1805	2854
1200	297	281	313	338	1229	457	533	520	533	2043	3272
1300	290	323	259	286	1158	543	498	484	492	2017	3175
1400	319	291	326	306	1242	483	487	464	480	1914	3156
1500	318	300	354	361	1333	460	480	524	492	1956	3289
1600	359	327	363	340	1389	466	413	434	521	1834	3223
1700	391	352	381	341	1465	421	460	502	437	1820	3285
1800	326	356	311	259	1252	429	438	417	352	1636	2888
1900	279	242	238	205	964	298	320	322	249	1189	2153
2000	227	208	203	200	838	237	254	216	190	897	1735
2100	197	176	184	149	706	201	203	182	168	754	1460
2200	168	133	140	123	564	186	157	129	113	585	1149
2300	94	96	60	69	319	101	99	87	88	375	694
24-Hour Totals:					18808					27345	46153

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	968	745	1836	745	2786
P.M.	1700	1465	1215	2129	1645	3368
Daily	1700	1465	1215	2129	1645	3368

Generated by SPS 5.0.53P

County: 99
Station: 1346
Description: NW 79TH AVENUE NORTH OF NW 55TH STREET
Start Date: 05/03/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	13	13	11	9	46	20	26	16	9	71	117
0100	8	2	11	5	26	9	10	6	4	29	55
0200	9	4	2	8	23	15	7	5	3	30	53
0300	7	2	5	3	17	2	3	6	7	18	35
0400	9	8	6	15	38	4	7	12	21	44	82
0500	16	23	41	53	133	25	29	34	48	136	269
0600	53	58	109	130	350	55	76	83	134	348	698
0700	177	179	168	171	695	195	154	164	157	670	1365
0800	165	170	154	164	653	166	186	154	194	700	1353
0900	197	159	159	160	675	198	204	199	175	776	1451
1000	152	172	161	160	645	193	183	150	193	719	1364
1100	194	177	181	217	769	181	145	186	147	659	1428
1200	213	195	232	184	824	187	196	170	178	731	1555
1300	189	187	222	187	785	183	150	168	199	700	1485
1400	195	192	233	326	946	191	202	194	199	786	1732
1500	297	282	221	202	1002	178	174	195	155	702	1704
1600	262	225	289	262	1038	126	113	116	109	464	1502
1700	290	298	319	273	1180	134	136	132	143	545	1725
1800	203	179	121	116	619	144	126	131	128	529	1148
1900	119	111	98	80	408	109	115	123	103	450	858
2000	96	115	56	65	332	86	91	78	98	353	685
2100	62	69	49	51	231	76	81	76	59	292	523
2200	55	52	38	38	183	49	54	48	46	197	380
2300	43	25	25	18	111	35	31	26	24	116	227
24-Hour Totals:					11729					10065	21794

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	695	845	795	845	1474
P.M.	1700	1180	1345	786	1430	1883
Daily	1700	1180	845	795	1430	1883

Generated by SPS 5.0.53P

County: 99
Station: 1346
Description: NW 79TH AVENUE NORTH OF NW 55TH STREET
Start Date: 05/04/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	25	18	21	14	78	21	14	11	12	58	136
0100	4	12	5	8	29	11	7	10	9	37	66
0200	11	5	9	4	29	5	12	3	10	30	59
0300	5	5	2	1	13	4	4	8	7	23	36
0400	7	11	8	8	34	9	9	14	12	44	78
0500	17	24	33	59	133	19	22	36	67	144	277
0600	43	65	115	124	347	54	82	106	155	397	744
0700	155	133	143	167	598	307	213	148	187	855	1453
0800	184	198	195	184	761	208	204	227	262	901	1662
0900	157	159	165	146	627	229	202	201	180	812	1439
1000	154	149	148	180	631	214	195	157	199	765	1396
1100	156	184	170	188	698	196	144	193	125	658	1356
1200	187	172	195	182	736	210	207	180	163	760	1496
1300	224	185	209	177	795	193	169	167	217	746	1541
1400	200	217	216	212	845	166	225	266	206	863	1708
1500	248	217	234	195	894	188	135	192	155	670	1564
1600	294	256	293	265	1108	156	136	153	131	576	1684
1700	280	281	313	270	1144	134	156	137	194	621	1765
1800	238	222	173	133	766	113	108	136	92	449	1215
1900	132	97	94	102	425	94	93	67	62	316	741
2000	90	88	74	73	325	59	104	68	71	302	627
2100	78	61	44	53	236	71	59	76	50	256	492
2200	49	49	35	46	179	85	37	35	37	194	373
2300	40	26	20	19	105	32	34	33	32	131	236
24-Hour Totals:					11536					10608	22144

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	761	815	922	800	1662
P.M.	1700	1144	1415	885	1415	1778
Daily	1700	1144	815	922	1415	1778

Generated by SPS 5.0.53P

County: 99
Station: 1346
Description: NW 79TH AVENUE NORTH OF NW 55TH STREET
Start Date: 05/05/2022
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	17	14	15	9	55	15	20	10	11	56	111
0100	10	9	9	8	36	13	11	10	4	38	74
0200	8	3	5	8	24	10	5	6	2	23	47
0300	5	11	6	4	26	7	11	8	10	36	62
0400	5	10	10	13	38	4	2	15	19	40	78
0500	20	20	31	61	132	29	28	19	49	125	257
0600	48	59	132	126	365	55	65	123	189	432	797
0700	172	169	138	161	640	326	168	143	212	849	1489
0800	170	203	174	178	725	234	191	246	272	943	1668
0900	195	153	188	172	708	206	173	149	155	683	1391
1000	147	175	178	159	659	169	178	159	154	660	1319
1100	169	164	200	182	715	145	129	167	163	604	1319
1200	211	205	212	180	808	165	142	147	185	639	1447
1300	215	199	205	195	814	160	169	188	159	676	1490
1400	190	195	245	290	920	169	176	234	202	781	1701
1500	256	185	229	205	875	139	157	155	130	581	1456
1600	265	197	221	279	962	151	141	154	144	590	1552
1700	264	280	298	229	1071	171	165	142	141	619	1690
1800	250	202	156	163	771	151	132	108	121	512	1283
1900	157	127	107	64	455	108	93	75	85	361	816
2000	78	85	64	57	284	58	71	64	63	256	540
2100	56	55	41	52	204	75	56	56	54	241	445
2200	41	38	38	47	164	61	47	45	37	190	354
2300	47	28	22	19	116	37	30	14	26	107	223
24-Hour Totals:					11567					10042	21609

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	750	800	943	800	1668
P.M.	1645	1121	1400	781	1645	1743
Daily	1645	1121	800	943	1645	1743

Generated by SPS 5.0.53P

Turning Movement Counts

NW 87th Avenue at NW 36th Street

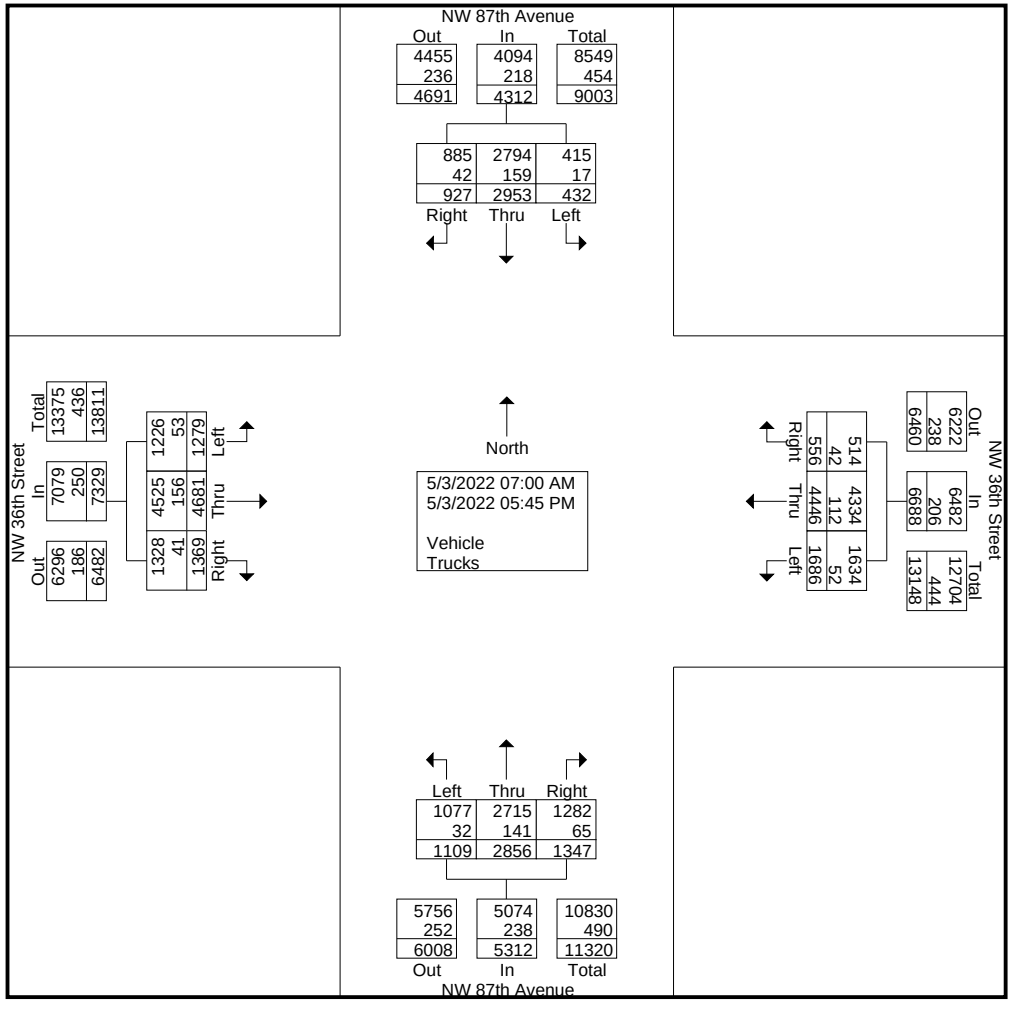
File Name : TMC-1 NW 87th Ave & NW 36th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	17	154	44	215	0	39	141	61	241	0	76	207	24	307	0	61	326	57	444	1207
07:15 AM	0	29	140	52	221	0	41	153	60	254	0	108	177	31	316	0	79	363	88	530	1321
07:30 AM	0	23	156	47	226	0	38	158	77	273	0	124	241	32	397	1	98	341	94	534	1430
07:45 AM	0	23	197	41	261	0	55	167	59	281	0	128	290	34	452	0	112	359	104	575	1569
Total	0	92	647	184	923	0	173	619	257	1049	0	436	915	121	1472	1	350	1389	343	2083	5527
08:00 AM	0	32	189	69	290	0	50	161	92	303	0	138	318	28	484	0	120	331	110	561	1638
08:15 AM	0	20	174	56	250	0	52	158	68	278	0	121	297	28	446	0	96	386	102	584	1558
08:30 AM	0	23	164	62	249	0	55	145	71	271	0	111	269	33	413	2	93	370	129	594	1527
08:45 AM	0	33	177	54	264	0	47	161	73	281	0	109	226	30	365	0	96	372	101	569	1479
Total	0	108	704	241	1053	0	204	625	304	1133	0	479	1110	119	1708	2	405	1459	442	2308	6202
*** BREAK ***																					
04:00 PM	0	35	203	63	301	1	77	204	90	372	0	85	277	37	399	0	72	296	74	442	1514
04:15 PM	2	28	153	64	247	0	78	142	105	325	0	96	307	45	448	0	76	239	73	388	1408
04:30 PM	0	34	204	67	305	1	70	215	99	385	0	111	282	45	438	0	65	198	74	337	1465
04:45 PM	0	40	160	72	272	0	114	198	85	397	0	91	263	27	381	0	60	203	76	339	1389
Total	2	137	720	266	1125	2	339	759	379	1479	0	383	1129	154	1666	0	273	936	297	1506	5776
05:00 PM	0	26	231	66	323	0	112	200	116	428	0	79	349	33	461	1	62	223	61	347	1559
05:15 PM	0	21	180	65	266	0	98	186	77	361	0	114	344	44	502	1	71	240	76	388	1517
05:30 PM	1	25	240	50	316	0	80	224	117	421	0	93	331	44	468	0	45	229	83	357	1562
05:45 PM	0	20	231	55	306	0	101	243	97	441	1	101	268	41	411	0	68	205	67	340	1498
Total	1	92	882	236	1211	0	391	853	407	1651	1	387	1292	162	1842	2	246	897	287	1432	6136
Grand Total	3	429	2953	927	4312	2	1107	2856	1347	5312	1	1685	4446	556	6688	5	1274	4681	1369	7329	23641
Apprch %	0.1	9.9	68.5	21.5		0	20.8	53.8	25.4		0	25.2	66.5	8.3		0.1	17.4	63.9	18.7		
Total %	0	1.8	12.5	3.9	18.2	0	4.7	12.1	5.7	22.5	0	7.1	18.8	2.4	28.3	0	5.4	19.8	5.8	31	
Vehicle	3	412	2794	885	4094	2	1075	2715	1282	5074	1	1633	4334	514	6482	5	1221	4525	1328	7079	22729
% Vehicle	100	96	94.6	95.5	94.9	100	97.1	95.1	95.2	95.5	100	96.9	97.5	92.4	96.9	100	95.8	96.7	97	96.6	96.1
Trucks	0	17	159	42	218	0	32	141	65	238	0	52	112	42	206	0	53	156	41	250	912
% Trucks	0	4	5.4	4.5	5.1	0	2.9	4.9	4.8	4.5	0	3.1	2.5	7.6	3.1	0	4.2	3.3	3	3.4	3.9

NW 87th Avenue at NW 36th Street

File Name : TMC-1 NW 87th Ave & NW 36th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



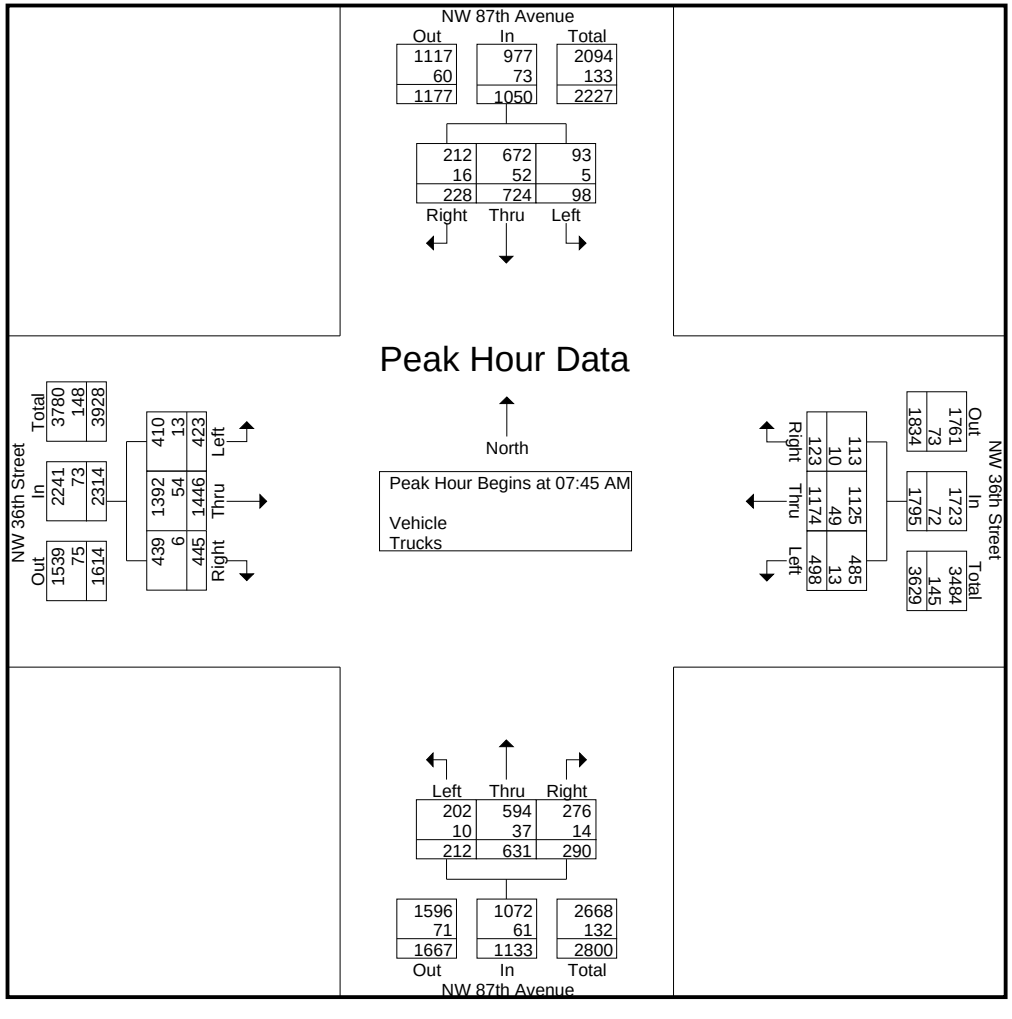
NW 87th Avenue at NW 36th Street

File Name : TMC-1 NW 87th Ave & NW 36th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	23	**197**	41	261	0	**55**	**167**	59	281	0	128	290	**34**	452	0	112	359	104	575	1569
08:00 AM	0	**32**	189	**69**	**290**	0	50	161	**92**	**303**	0	**138**	**318**	28	**484**	0	**120**	331	110	561	**1638**
08:15 AM	0	20	174	56	250	0	52	158	68	278	0	121	297	28	446	0	96	**386**	102	584	1558
08:30 AM	0	23	164	62	249	0	55	145	71	271	0	111	269	33	413	**2**	93	370	**129**	**594**	1527
Total Volume	0	98	724	228	1050	0	212	631	290	1133	0	498	1174	123	1795	2	421	1446	445	2314	6292
% App. Total	0	9.3	69	21.7		0	18.7	55.7	25.6		0	27.7	65.4	6.9		0.1	18.2	62.5	19.2		
PHF	.000	.766	.919	.826	.905	.000	.964	.945	.788	.935	.000	.902	.923	.904	.927	.250	.877	.937	.862	.974	.960
Vehicle	0	93	672	212	977	0	202	594	276	1072	0	485	1125	113	1723	2	408	1392	439	2241	6013
% Vehicle	0	94.9	92.8	93.0	93.0	0	95.3	94.1	95.2	94.6	0	97.4	95.8	91.9	96.0	100	96.9	96.3	98.7	96.8	95.6
Trucks	0	5	52	16	73	0	10	37	14	61	0	13	49	10	72	0	13	54	6	73	279
% Trucks	0	5.1	7.2	7.0	7.0	0	4.7	5.9	4.8	5.4	0	2.6	4.2	8.1	4.0	0	3.1	3.7	1.3	3.2	4.4

NW 87th Avenue at NW 36th Street

File Name : TMC-1 NW 87th Ave & NW 36th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



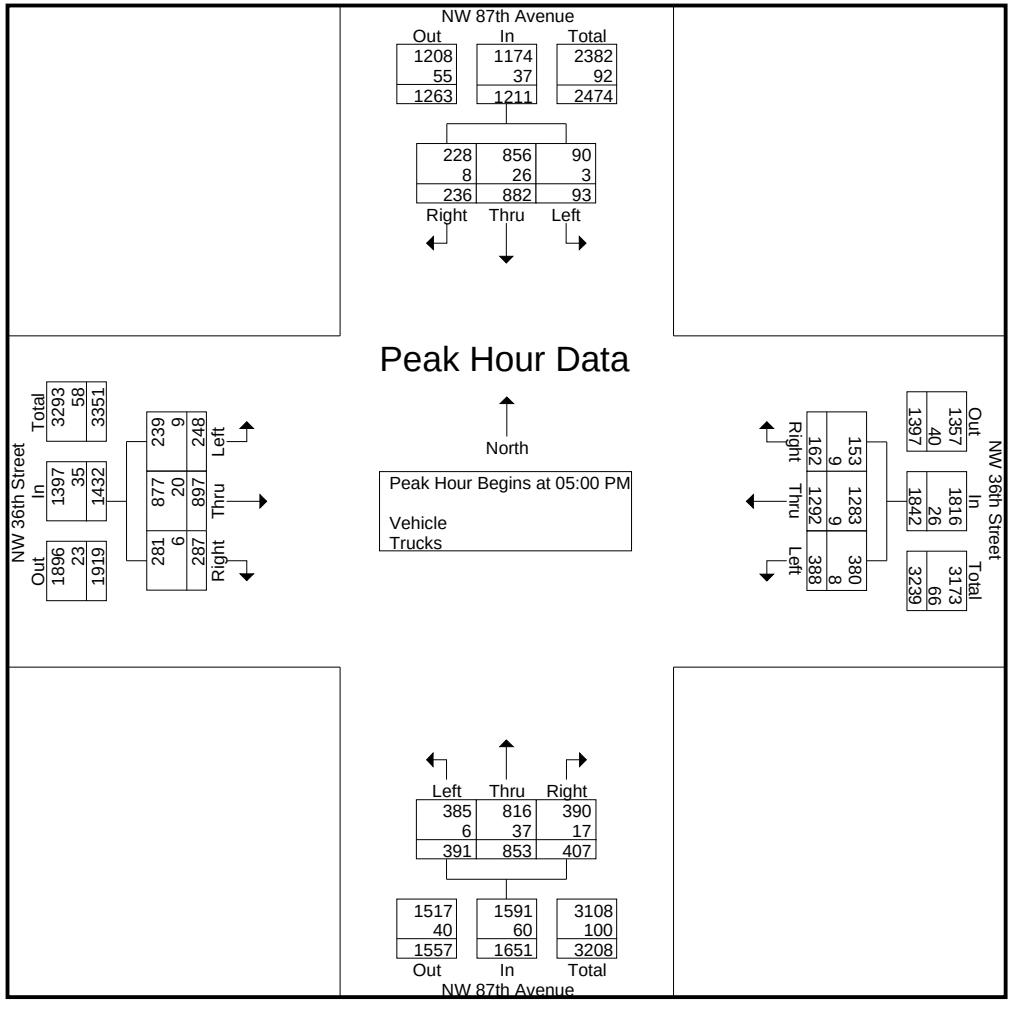
NW 87th Avenue at NW 36th Street

File Name : TMC-1 NW 87th Ave & NW 36th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	**26**	231	**66**	**323**	0	**112**	200	116	428	0	79	**349**	33	461	**1**	62	223	61	347	1559
05:15 PM	0	21	180	65	266	0	98	186	77	361	0	**114**	344	**44**	**502**	1	**71**	**240**	76	**388**	1517
05:30 PM	**1**	25	**240**	50	316	0	80	224	**117**	421	0	93	331	44	468	0	45	229	**83**	357	**1562**
05:45 PM	0	20	231	55	306	0	101	**243**	97	**441**	**1**	101	268	41	411	0	68	205	67	340	1498
Total Volume	1	92	882	236	1211	0	391	853	407	1651	1	387	1292	162	1842	2	246	897	287	1432	6136
% App. Total	0.1	7.6	72.8	19.5		0	23.7	51.7	24.7		0.1	21	70.1	8.8		0.1	17.2	62.6	20		
PHF	.250	.885	.919	.894	.937	.000	.873	.878	.870	.936	.250	.849	.926	.920	.917	.500	.866	.934	.864	.923	.982
Vehicle	1	89	856	228	1174	0	385	816	390	1591	1	379	1283	153	1816	2	237	877	281	1397	5978
% Vehicle	100	96.7	97.1	96.6	96.9	0	98.5	95.7	95.8	96.4	100	97.9	99.3	94.4	98.6	100	96.3	97.8	97.9	97.6	97.4
Trucks	0	3	26	8	37	0	6	37	17	60	0	8	9	9	26	0	9	20	6	35	158
% Trucks	0	3.3	2.9	3.4	3.1	0	1.5	4.3	4.2	3.6	0	2.1	0.7	5.6	1.4	0	3.7	2.2	2.1	2.4	2.6

NW 87th Avenue at NW 36th Street

File Name : TMC-1 NW 87th Ave & NW 36th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 87th Avenue at NW 41st Street

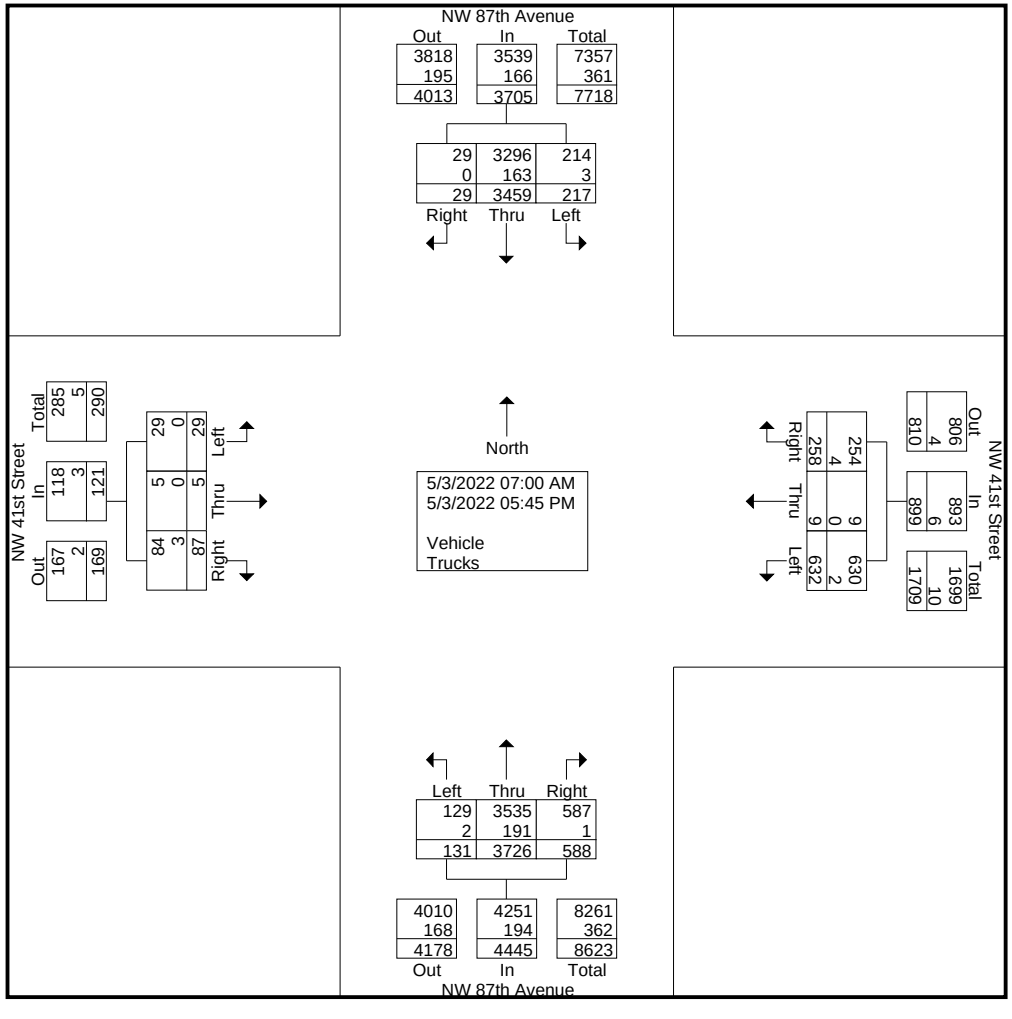
File Name : TMC-2 NW 87th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 41st Street Westbound					NW 41st Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	9	197	0	208	0	2	178	34	214	0	16	0	3	19	0	0	0	1	1	442
07:15 AM	0	16	184	2	202	1	4	207	36	248	0	24	0	7	31	0	2	0	1	3	484
07:30 AM	0	10	206	1	217	1	7	206	49	263	0	21	0	11	32	0	0	0	1	1	513
07:45 AM	1	23	213	1	238	1	6	231	55	293	0	29	0	17	46	0	1	0	6	7	584
Total	3	58	800	4	865	3	19	822	174	1018	0	90	0	38	128	0	3	0	9	12	2023
08:00 AM	0	25	225	0	250	0	4	247	44	295	0	53	1	9	63	0	2	1	2	5	613
08:15 AM	0	11	215	0	226	4	7	217	38	266	0	28	1	10	39	0	2	2	2	6	537
08:30 AM	0	16	211	4	231	0	2	226	41	269	0	22	2	9	33	0	0	0	2	2	535
08:45 AM	0	27	200	3	230	0	6	227	37	270	0	48	1	14	63	0	2	0	6	8	571
Total	0	79	851	7	937	4	19	917	160	1100	0	151	5	42	198	0	6	3	12	21	2256
*** BREAK ***																					
04:00 PM	0	6	220	4	230	3	11	240	39	293	0	50	0	18	68	1	3	0	15	19	610
04:15 PM	0	9	203	0	212	1	16	209	26	252	0	48	1	11	60	0	2	1	11	14	538
04:30 PM	0	14	225	3	242	1	7	279	25	312	0	51	0	29	80	0	2	1	7	10	644
04:45 PM	0	11	206	3	220	5	5	223	41	274	0	37	0	15	52	0	0	0	5	5	551
Total	0	40	854	10	904	10	39	951	131	1131	0	186	1	73	260	1	7	2	38	48	2343
05:00 PM	0	15	229	1	245	2	3	255	24	284	0	65	0	36	101	0	4	0	4	8	638
05:15 PM	0	3	212	3	218	3	7	247	26	283	0	53	1	23	77	0	3	0	5	8	586
05:30 PM	0	5	226	1	232	2	10	253	29	294	0	58	1	25	84	0	4	0	12	16	626
05:45 PM	1	13	287	3	304	1	9	281	44	335	0	29	1	21	51	0	1	0	7	8	698
Total	1	36	954	8	999	8	29	1036	123	1196	0	205	3	105	313	0	12	0	28	40	2548
Grand Total	4	213	3459	29	3705	25	106	3726	588	4445	0	632	9	258	899	1	28	5	87	121	9170
Apprch %	0.1	5.7	93.4	0.8		0.6	2.4	83.8	13.2		0	70.3	1	28.7		0.8	23.1	4.1	71.9		
Total %	0	2.3	37.7	0.3	40.4	0.3	1.2	40.6	6.4	48.5	0	6.9	0.1	2.8	9.8	0	0.3	0.1	0.9	1.3	
Vehicle	4	210	3296	29	3539	25	104	3535	587	4251	0	630	9	254	893	1	28	5	84	118	8801
% Vehicle	100	98.6	95.3	100	95.5	100	98.1	94.9	99.8	95.6	0	99.7	100	98.4	99.3	100	100	100	96.6	97.5	96
Trucks	0	3	163	0	166	0	2	191	1	194	0	2	0	4	6	0	0	0	3	3	369
% Trucks	0	1.4	4.7	0	4.5	0	1.9	5.1	0.2	4.4	0	0.3	0	1.6	0.7	0	0	0	3.4	2.5	4

NW 87th Avenue at NW 41st Street

File Name : TMC-2 NW 87th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



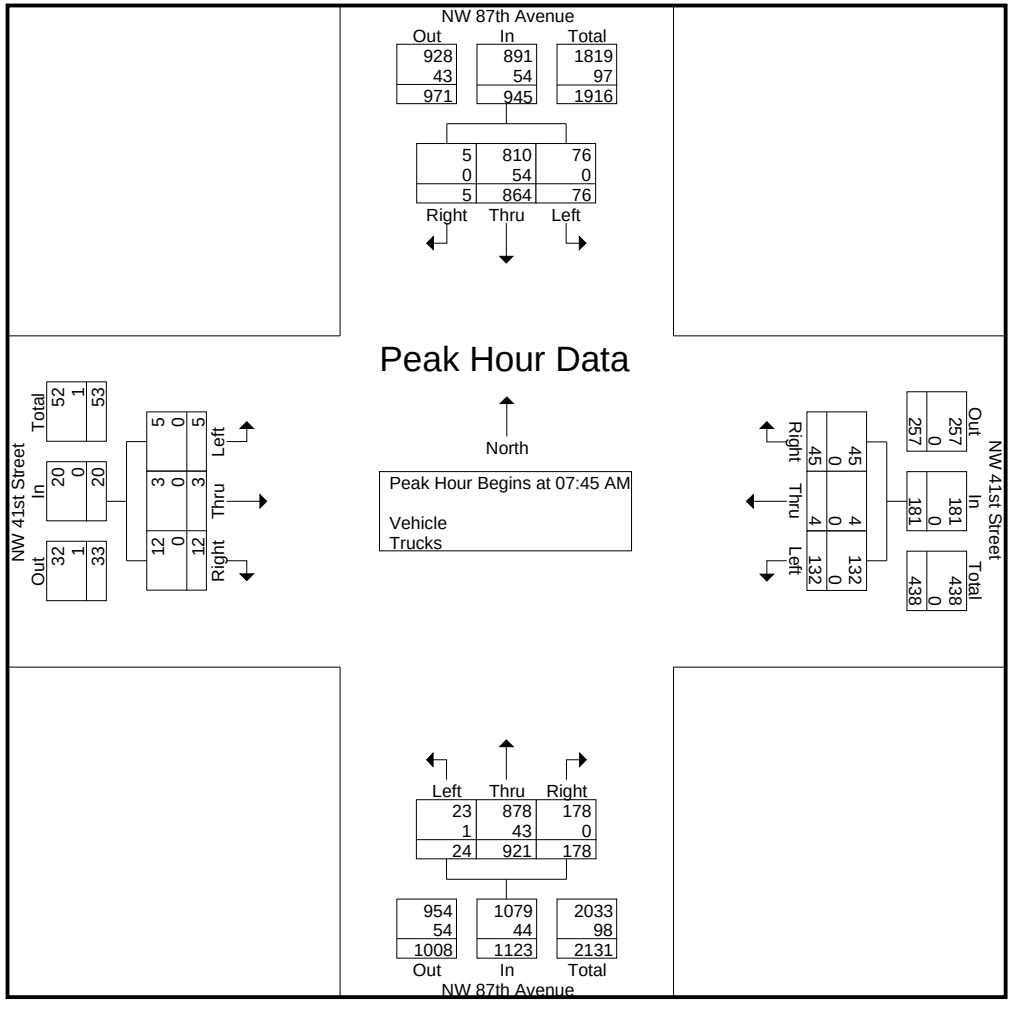
NW 87th Avenue at NW 41st Street

File Name : TMC-2 NW 87th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 41st Street Westbound					NW 41st Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**1**	23	213	1	238	1	6	231	**55**	293	0	29	0	**17**	46	0	1	0	**6**	**7**	584
08:00 AM	0	**25**	**225**	0	**250**	0	4	**247**	44	**295**	0	**53**	1	9	**63**	0	**2**	1	2	5	**613**
08:15 AM	0	11	215	0	226	**4**	**7**	217	38	266	0	28	1	10	39	0	2	**2**	2	6	537
08:30 AM	0	16	211	**4**	231	0	2	226	41	269	0	22	**2**	9	33	0	0	0	2	2	535
Total Volume	1	75	864	5	945	5	19	921	178	1123	0	132	4	45	181	0	5	3	12	20	2269
% App. Total	0.1	7.9	91.4	0.5		0.4	1.7	82	15.9		0	72.9	2.2	24.9		0	25	15	60		
PHF	.250	.750	.960	.313	.945	.313	.679	.932	.809	.952	.000	.623	.500	.662	.718	.000	.625	.375	.500	.714	.925
Vehicle	1	75	810	5	891	5	18	878	178	1079	0	132	4	45	181	0	5	3	12	20	2171
% Vehicle	100	100	93.8	100	94.3	100	94.7	95.3	100	96.1	0	100	100	100	100	0	100	100	100	100	95.7
Trucks	0	0	54	0	54	0	1	43	0	44	0	0	0	0	0	0	0	0	0	0	98
% Trucks	0	0	6.3	0	5.7	0	5.3	4.7	0	3.9	0	0	0	0	0	0	0	0	0	0	4.3

NW 87th Avenue at NW 41st Street

File Name : TMC-2 NW 87th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



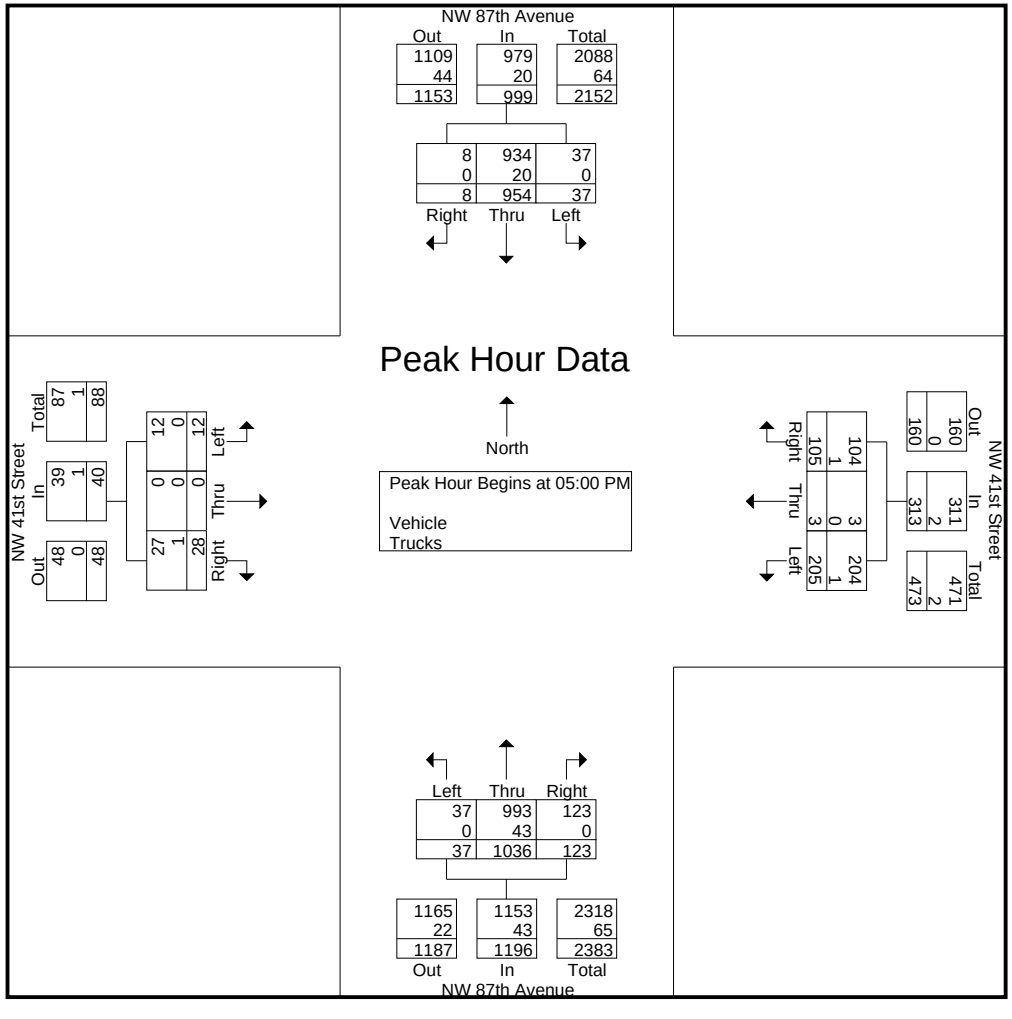
NW 87th Avenue at NW 41st Street

File Name : TMC-2 NW 87th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 41st Street Westbound					NW 41st Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	**15**	229	1	245	2	3	255	24	284	0	**65**	0	**36**	**101**	0	**4**	0	4	8	638
05:15 PM	0	3	212	**3**	218	**3**	7	247	26	283	0	53	**1**	23	77	0	3	0	5	8	586
05:30 PM	0	5	226	1	232	2	**10**	253	29	294	0	58	1	25	84	0	4	0	**12**	**16**	626
05:45 PM	**1**	13	**287**	3	**304**	1	9	**281**	**44**	**335**	0	29	1	21	51	0	1	0	7	8	**698**
Total Volume	1	36	954	8	999	8	29	1036	123	1196	0	205	3	105	313	0	12	0	28	40	2548
% App. Total	0.1	3.6	95.5	0.8		0.7	2.4	86.6	10.3		0	65.5	1	33.5		0	30	0	70		
PHF	.250	.600	.831	.667	.822	.667	.725	.922	.699	.893	.000	.788	.750	.729	.775	.000	.750	.000	.583	.625	.913
Vehicle	1	36	934	8	979	8	29	993	123	1153	0	204	3	104	311	0	12	0	27	39	2482
% Vehicle	100	100	97.9	100	98.0	100	100	95.8	100	96.4	0	99.5	100	99.0	99.4	0	100	0	96.4	97.5	97.4
Trucks	0	0	20	0	20	0	0	43	0	43	0	1	0	1	2	0	0	0	1	1	66
% Trucks	0	0	2.1	0	2.0	0	0	4.2	0	3.6	0	0.5	0	1.0	0.6	0	0	0	3.6	2.5	2.6

NW 87th Avenue at NW 41st Street

File Name : TMC-2 NW 87th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 87th Avenue at NW 53rd Street

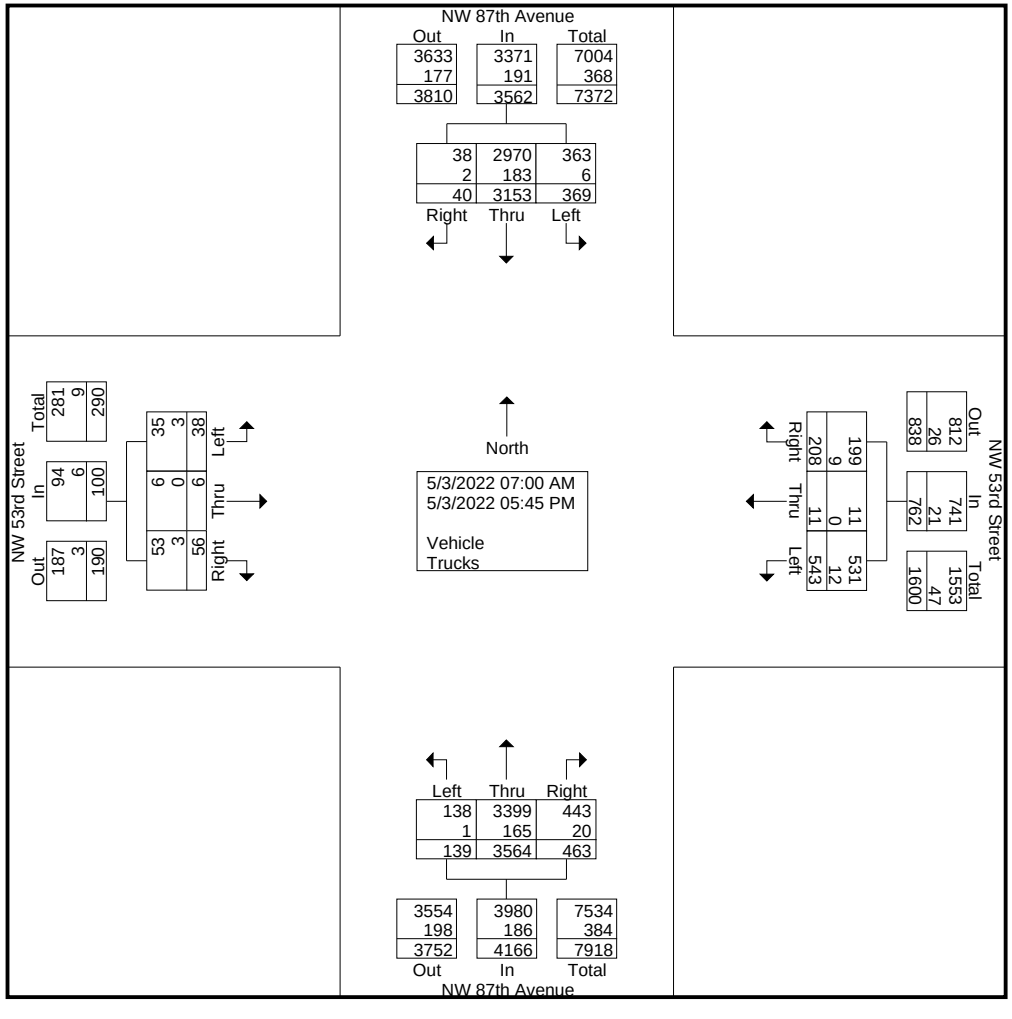
File Name : TMC-3 NW 87th Ave & NW 53rd St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 53rd Street Westbound					NW 53rd Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	26	187	1	214	1	2	159	20	182	0	21	0	7	28	0	0	0	3	3	427
07:15 AM	0	14	169	2	185	2	1	193	30	226	0	30	0	6	36	0	0	0	3	3	450
07:30 AM	0	15	189	1	205	2	0	200	24	226	0	23	0	3	26	0	1	0	1	2	459
07:45 AM	0	24	220	2	246	8	1	238	24	271	0	22	1	11	34	0	1	1	2	4	555
Total	0	79	765	6	850	13	4	790	98	905	0	96	1	27	124	0	2	1	9	12	1891
08:00 AM	0	33	241	2	276	11	2	230	41	284	0	19	0	6	25	0	1	0	3	4	589
08:15 AM	0	37	195	3	235	14	5	216	35	270	0	35	1	15	51	0	3	0	2	5	561
08:30 AM	0	14	192	4	210	17	6	211	28	262	0	39	0	10	49	0	2	1	8	11	532
08:45 AM	0	30	212	2	244	9	5	185	34	233	0	19	0	12	31	0	2	0	4	6	514
Total	0	114	840	11	965	51	18	842	138	1049	0	112	1	43	156	0	8	1	17	26	2196
*** BREAK ***																					
04:00 PM	0	14	183	3	200	6	1	215	33	255	0	46	2	10	58	0	2	2	3	7	520
04:15 PM	1	24	203	4	232	5	7	181	22	215	0	42	1	12	55	0	8	0	1	9	511
04:30 PM	2	28	177	4	211	3	1	280	35	319	0	36	0	13	49	0	2	1	3	6	585
04:45 PM	0	17	182	2	201	2	5	228	21	256	0	32	2	20	54	0	1	0	4	5	516
Total	3	83	745	13	844	16	14	904	111	1045	0	156	5	55	216	0	13	3	11	27	2132
05:00 PM	2	20	186	1	209	2	4	255	28	289	0	57	0	16	73	0	6	0	10	16	587
05:15 PM	0	21	186	4	211	3	3	259	24	289	0	54	1	19	74	0	5	0	3	8	582
05:30 PM	1	19	191	4	215	2	3	264	26	295	0	43	1	20	64	0	1	0	2	3	577
05:45 PM	0	27	240	1	268	2	4	250	38	294	0	25	2	28	55	0	3	1	4	8	625
Total	3	87	803	10	903	9	14	1028	116	1167	0	179	4	83	266	0	15	1	19	35	2371
Grand Total	6	363	3153	40	3562	89	50	3564	463	4166	0	543	11	208	762	0	38	6	56	100	8590
Apprch %	0.2	10.2	88.5	1.1		2.1	1.2	85.5	11.1		0	71.3	1.4	27.3		0	38	6	56		
Total %	0.1	4.2	36.7	0.5	41.5	1	0.6	41.5	5.4	48.5	0	6.3	0.1	2.4	8.9	0	0.4	0.1	0.7	1.2	
Vehicle	6	357	2970	38	3371	89	49	3399	443	3980	0	531	11	199	741	0	35	6	53	94	8186
% Vehicle	100	98.3	94.2	95	94.6	100	98	95.4	95.7	95.5	0	97.8	100	95.7	97.2	0	92.1	100	94.6	94	95.3
Trucks	0	6	183	2	191	0	1	165	20	186	0	12	0	9	21	0	3	0	3	6	404
% Trucks	0	1.7	5.8	5	5.4	0	2	4.6	4.3	4.5	0	2.2	0	4.3	2.8	0	7.9	0	5.4	6	4.7

NW 87th Avenue at NW 53rd Street

File Name : TMC-3 NW 87th Ave & NW 53rd St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



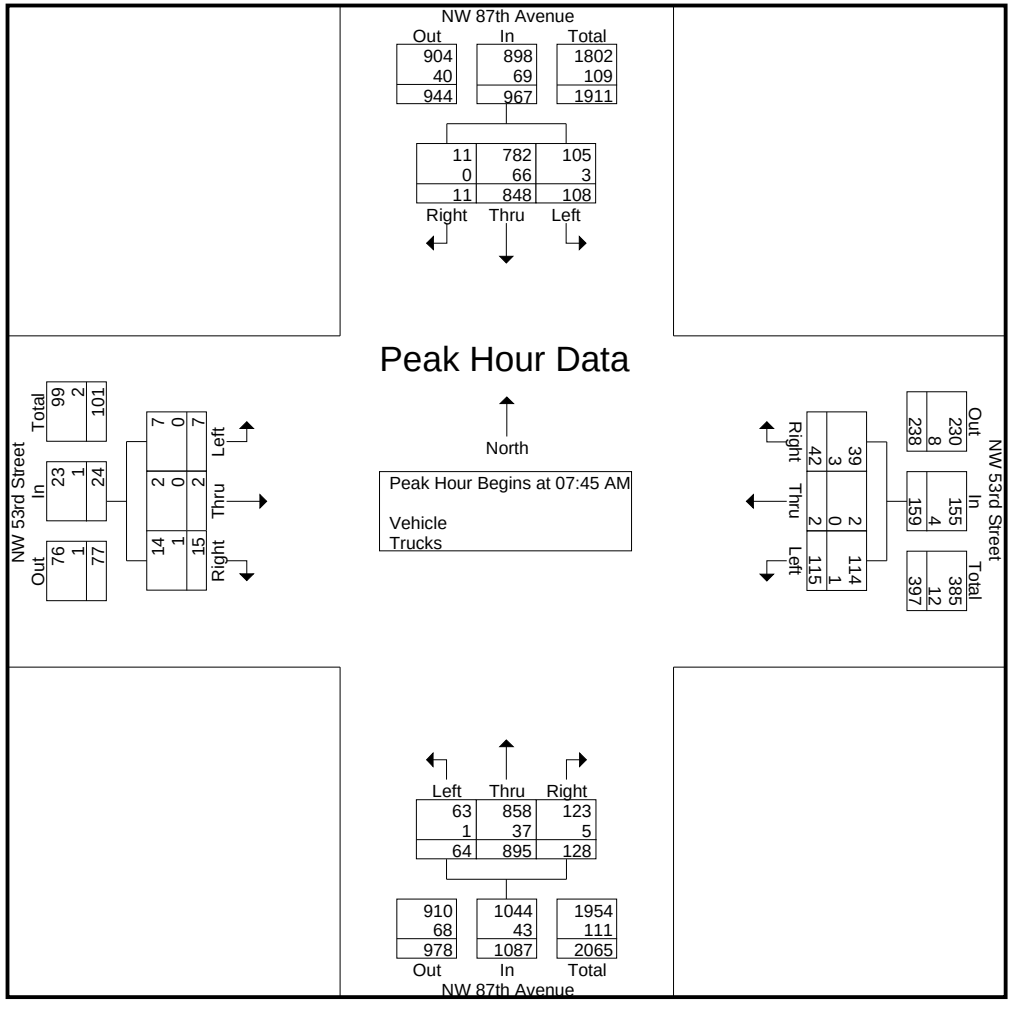
NW 87th Avenue at NW 53rd Street

File Name : TMC-3 NW 87th Ave & NW 53rd St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 53rd Street Westbound					NW 53rd Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	24	220	2	246	8	1	**238**	24	271	0	22	**1**	11	34	0	1	**1**	2	4	555
08:00 AM	0	33	**241**	2	**276**	11	2	230	**41**	**284**	0	19	0	6	25	0	1	0	3	4	**589**
08:15 AM	0	**37**	195	3	235	14	5	216	35	270	0	35	1	**15**	**51**	0	**3**	0	2	5	561
08:30 AM	0	14	192	**4**	210	**17**	**6**	211	28	262	0	**39**	0	10	49	0	2	1	**8**	**11**	532
Total Volume	0	108	848	11	967	50	14	895	128	1087	0	115	2	42	159	0	7	2	15	24	2237
% App. Total	0	11.2	87.7	1.1		4.6	1.3	82.3	11.8		0	72.3	1.3	26.4		0	29.2	8.3	62.5		
PHF	.000	.730	.880	.688	.876	.735	.583	.940	.780	.957	.000	.737	.500	.700	.779	.000	.583	.500	.469	.545	.949
Vehicle	0	105	782	11	898	50	13	858	123	1044	0	114	2	39	155	0	7	2	14	23	2120
% Vehicle	0	97.2	92.2	100	92.9	100	92.9	95.9	96.1	96.0	0	99.1	100	92.9	97.5	0	100	100	93.3	95.8	94.8
Trucks	0	3	66	0	69	0	1	37	5	43	0	1	0	3	4	0	0	0	1	1	117
% Trucks	0	2.8	7.8	0	7.1	0	7.1	4.1	3.9	4.0	0	0.9	0	7.1	2.5	0	0	0	6.7	4.2	5.2

NW 87th Avenue at NW 53rd Street

File Name : TMC-3 NW 87th Ave & NW 53rd St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



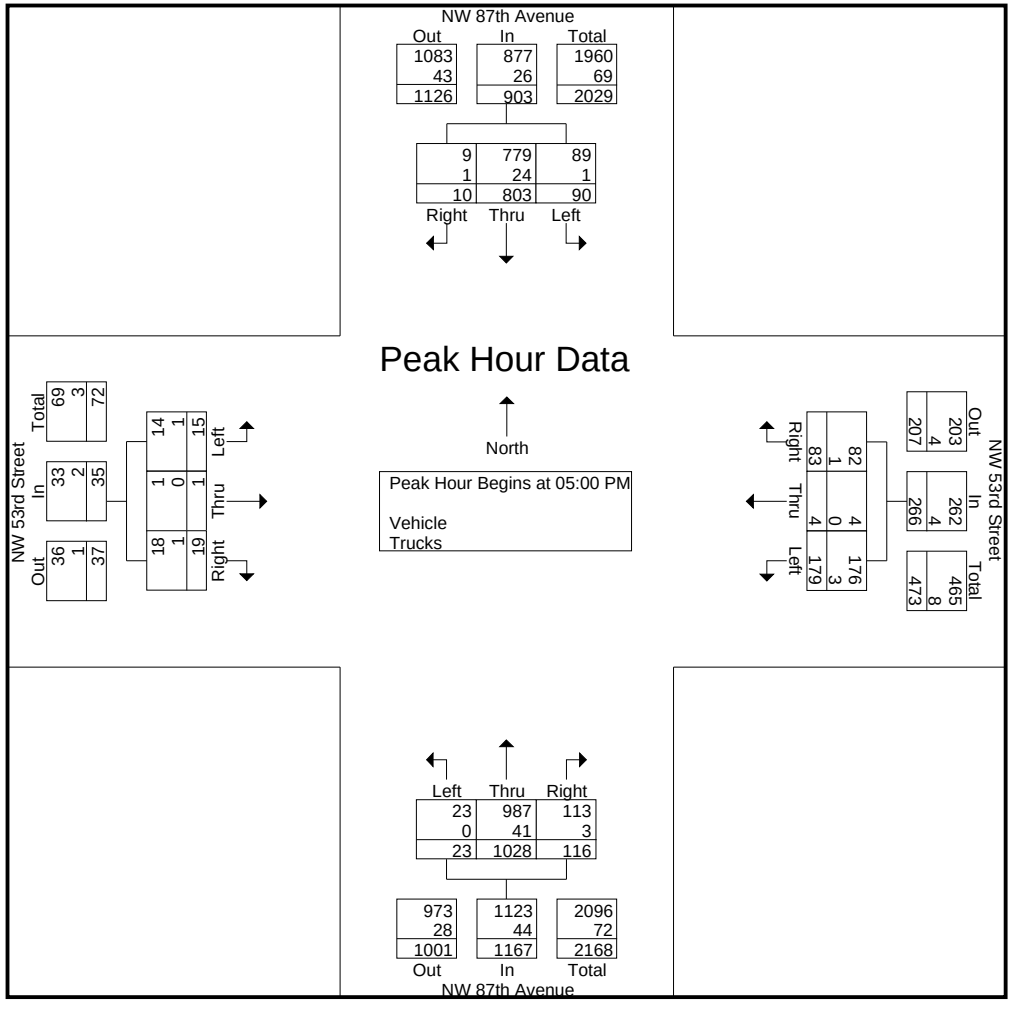
NW 87th Avenue at NW 53rd Street

File Name : TMC-3 NW 87th Ave & NW 53rd St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 53rd Street Westbound					NW 53rd Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**2**	20	186	1	209	2	**4**	255	28	289	0	**57**	0	16	73	0	**6**	0	**10**	**16**	587
05:15 PM	0	21	186	**4**	211	**3**	3	259	24	289	0	54	1	19	**74**	0	5	0	3	8	582
05:30 PM	1	19	191	4	215	2	3	**264**	26	**295**	0	43	1	20	64	0	1	0	2	3	577
05:45 PM	0	**27**	**240**	1	**268**	2	4	250	**38**	294	0	25	**2**	**28**	55	0	3	**1**	4	8	**625**
Total Volume	3	87	803	10	903	9	14	1028	116	1167	0	179	4	83	266	0	15	1	19	35	2371
% App. Total	0.3	9.6	88.9	1.1		0.8	1.2	88.1	9.9		0	67.3	1.5	31.2		0	42.9	2.9	54.3		
PHF	.375	.806	.836	.625	.842	.750	.875	.973	.763	.989	.000	.785	.500	.741	.899	.000	.625	.250	.475	.547	.948
Vehicle	3	86	779	9	877	9	14	987	113	1123	0	176	4	82	262	0	14	1	18	33	2295
% Vehicle	100	98.9	97.0	90.0	97.1	100	100	96.0	97.4	96.2	0	98.3	100	98.8	98.5	0	93.3	100	94.7	94.3	96.8
Trucks	0	1	24	1	26	0	0	41	3	44	0	3	0	1	4	0	1	0	1	2	76
% Trucks	0	1.1	3.0	10.0	2.9	0	0	4.0	2.6	3.8	0	1.7	0	1.2	1.5	0	6.7	0	5.3	5.7	3.2

NW 87th Avenue at NW 53rd Street

File Name : TMC-3 NW 87th Ave & NW 53rd St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 87th Avenue at NW 58th Street

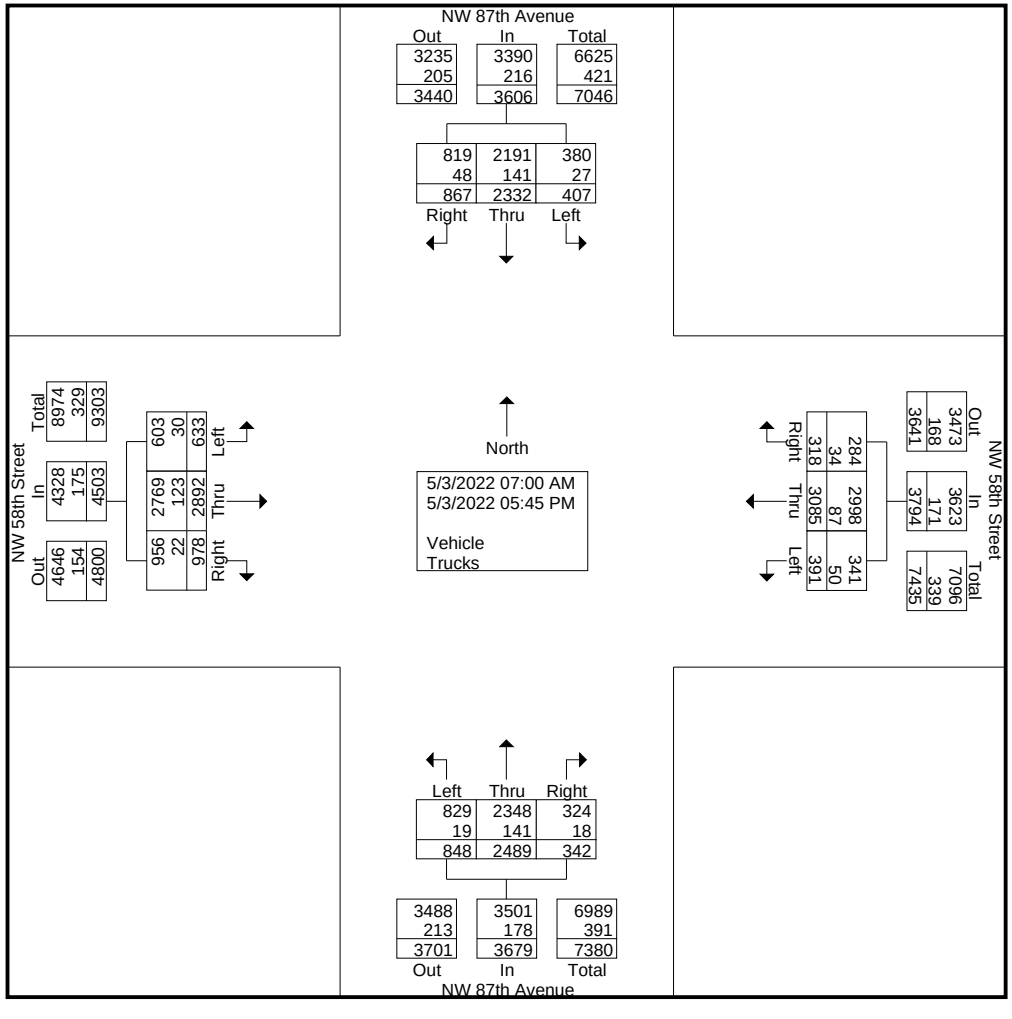
File Name : TMC-4 NW 87th Ave & NW 58th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	28	157	36	221	0	43	106	26	175	0	30	155	16	201	0	40	198	42	280	877
07:15 AM	0	31	142	23	196	0	39	118	25	182	0	18	134	18	170	0	34	189	42	265	813
07:30 AM	0	31	148	17	196	0	30	142	23	195	0	21	131	18	170	0	43	189	56	288	849
07:45 AM	0	33	180	26	239	0	47	161	30	238	0	18	156	10	184	0	47	248	70	365	1026
Total	0	123	627	102	852	0	159	527	104	790	0	87	576	62	725	0	164	824	210	1198	3565
08:00 AM	0	24	154	33	211	0	43	156	22	221	0	21	145	21	187	0	46	254	102	402	1021
08:15 AM	0	17	142	34	193	0	41	149	28	218	0	25	153	22	200	0	49	223	90	362	973
08:30 AM	0	24	137	21	182	0	43	147	27	217	0	19	133	22	174	0	53	223	71	347	920
08:45 AM	0	44	148	36	228	0	35	136	18	189	0	24	139	30	193	0	70	211	86	367	977
Total	0	109	581	124	814	0	162	588	95	845	0	89	570	95	754	0	218	911	349	1478	3891
*** BREAK ***																					
04:00 PM	0	17	133	56	206	0	58	141	13	212	0	32	238	32	302	0	33	145	45	223	943
04:15 PM	0	32	149	49	230	0	75	129	17	221	1	35	211	18	265	0	45	134	60	239	955
04:30 PM	0	20	114	87	221	0	77	189	17	283	0	24	248	22	294	0	31	170	63	264	1062
04:45 PM	0	17	130	62	209	0	60	185	20	265	0	28	255	24	307	0	23	149	52	224	1005
Total	0	86	526	254	866	0	270	644	67	981	1	119	952	96	1168	0	132	598	220	950	3965
05:00 PM	0	15	134	118	267	1	63	188	19	271	0	35	234	22	291	0	24	148	56	228	1057
05:15 PM	0	24	119	98	241	0	69	175	17	261	0	23	271	23	317	0	35	130	50	215	1034
05:30 PM	0	29	162	95	286	0	52	189	25	266	0	19	271	9	299	0	37	146	43	226	1077
05:45 PM	0	21	183	76	280	0	72	178	15	265	0	18	211	11	240	0	23	135	50	208	993
Total	0	89	598	387	1074	1	256	730	76	1063	0	95	987	65	1147	0	119	559	199	877	4161
Grand Total	0	407	2332	867	3606	1	847	2489	342	3679	1	390	3085	318	3794	0	633	2892	978	4503	15582
Apprch %	0	11.3	64.7	24		0	23	67.7	9.3		0	10.3	81.3	8.4		0	14.1	64.2	21.7		
Total %	0	2.6	15	5.6	23.1	0	5.4	16	2.2	23.6	0	2.5	19.8	2	24.3	0	4.1	18.6	6.3	28.9	
Vehicle	0	380	2191	819	3390	1	828	2348	324	3501	1	340	2998	284	3623	0	603	2769	956	4328	14842
% Vehicle	0	93.4	94	94.5	94	100	97.8	94.3	94.7	95.2	100	87.2	97.2	89.3	95.5	0	95.3	95.7	97.8	96.1	95.3
Trucks	0	27	141	48	216	0	19	141	18	178	0	50	87	34	171	0	30	123	22	175	740
% Trucks	0	6.6	6	5.5	6	0	2.2	5.7	5.3	4.8	0	12.8	2.8	10.7	4.5	0	4.7	4.3	2.2	3.9	4.7

NW 87th Avenue at NW 58th Street

File Name : TMC-4 NW 87th Ave & NW 58th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



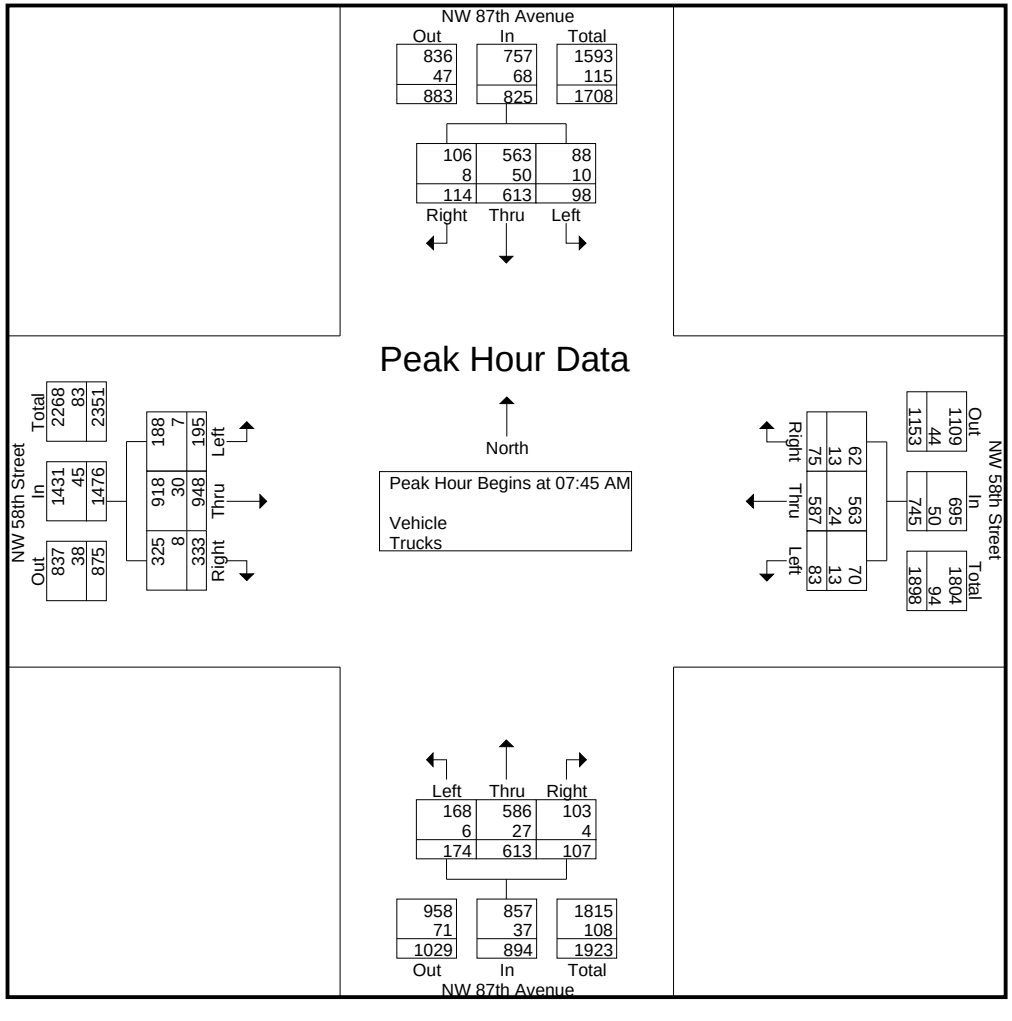
NW 87th Avenue at NW 58th Street

File Name : TMC-4 NW 87th Ave & NW 58th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	**33**	**180**	26	**239**	0	**47**	**161**	**30**	**238**	0	18	**156**	10	184	0	47	248	70	365	**1026**
08:00 AM	0	24	154	33	211	0	43	156	22	221	0	21	145	21	187	0	46	**254**	**102**	**402**	1021
08:15 AM	0	17	142	**34**	193	0	41	149	28	218	0	**25**	153	**22**	**200**	0	49	223	90	362	973
08:30 AM	0	24	137	21	182	0	43	147	27	217	0	19	133	22	174	0	**53**	223	71	347	920
Total Volume	0	98	613	114	825	0	174	613	107	894	0	83	587	75	745	0	195	948	333	1476	3940
% App. Total	0	11.9	74.3	13.8		0	19.5	68.6	12		0	11.1	78.8	10.1		0	13.2	64.2	22.6		
PHF	.000	.742	.851	.838	.863	.000	.926	.952	.892	.939	.000	.830	.941	.852	.931	.000	.920	.933	.816	.918	.960
Vehicle	0	88	563	106	757	0	168	586	103	857	0	70	563	62	695	0	188	918	325	1431	3740
% Vehicle	0	89.8	91.8	93.0	91.8	0	96.6	95.6	96.3	95.9	0	84.3	95.9	82.7	93.3	0	96.4	96.8	97.6	97.0	94.9
Trucks	0	10	50	8	68	0	6	27	4	37	0	13	24	13	50	0	7	30	8	45	200
% Trucks	0	10.2	8.2	7.0	8.2	0	3.4	4.4	3.7	4.1	0	15.7	4.1	17.3	6.7	0	3.6	3.2	2.4	3.0	5.1

NW 87th Avenue at NW 58th Street

File Name : TMC-4 NW 87th Ave & NW 58th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



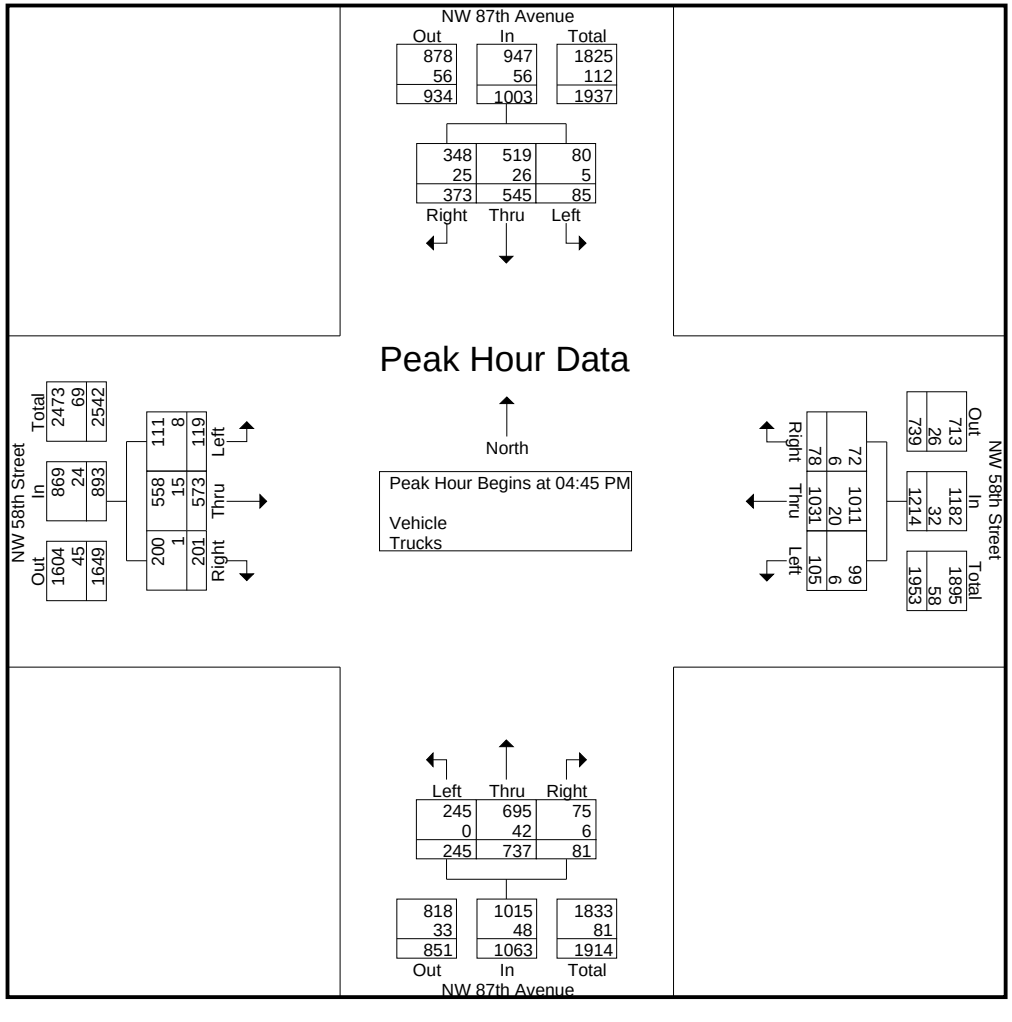
NW 87th Avenue at NW 58th Street

File Name : TMC-4 NW 87th Ave & NW 58th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	17	130	62	209	0	60	185	20	265	0	28	255	**24**	307	0	23	**149**	52	224	1005
05:00 PM	0	15	134	**118**	267	**1**	63	188	19	**271**	0	**35**	234	22	291	0	24	148	**56**	**228**	1057
05:15 PM	0	24	119	98	241	0	**69**	175	17	261	0	23	**271**	23	**317**	0	35	130	50	215	1034
05:30 PM	0	**29**	**162**	95	**286**	0	52	**189**	**25**	266	0	19	271	9	299	0	**37**	146	43	226	**1077**
Total Volume	0	85	545	373	1003	1	244	737	81	1063	0	105	1031	78	1214	0	119	573	201	893	4173
% App. Total	0	8.5	54.3	37.2		0.1	23	69.3	7.6		0	8.6	84.9	6.4		0	13.3	64.2	22.5		
PHF	.000	.733	.841	.790	.877	.250	.884	.975	.810	.981	.000	.750	.951	.813	.957	.000	.804	.961	.897	.979	.969
Vehicle	0	80	519	348	947	1	244	695	75	1015	0	99	1011	72	1182	0	111	558	200	869	4013
% Vehicle	0	94.1	95.2	93.3	94.4	100	100	94.3	92.6	95.5	0	94.3	98.1	92.3	97.4	0	93.3	97.4	99.5	97.3	96.2
Trucks	0	5	26	25	56	0	0	42	6	48	0	6	20	6	32	0	8	15	1	24	160
% Trucks	0	5.9	4.8	6.7	5.6	0	0	5.7	7.4	4.5	0	5.7	1.9	7.7	2.6	0	6.7	2.6	0.5	2.7	3.8

NW 87th Avenue at NW 58th Street

File Name : TMC-4 NW 87th Ave & NW 58th St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 36th Street at NW 8800th Blk

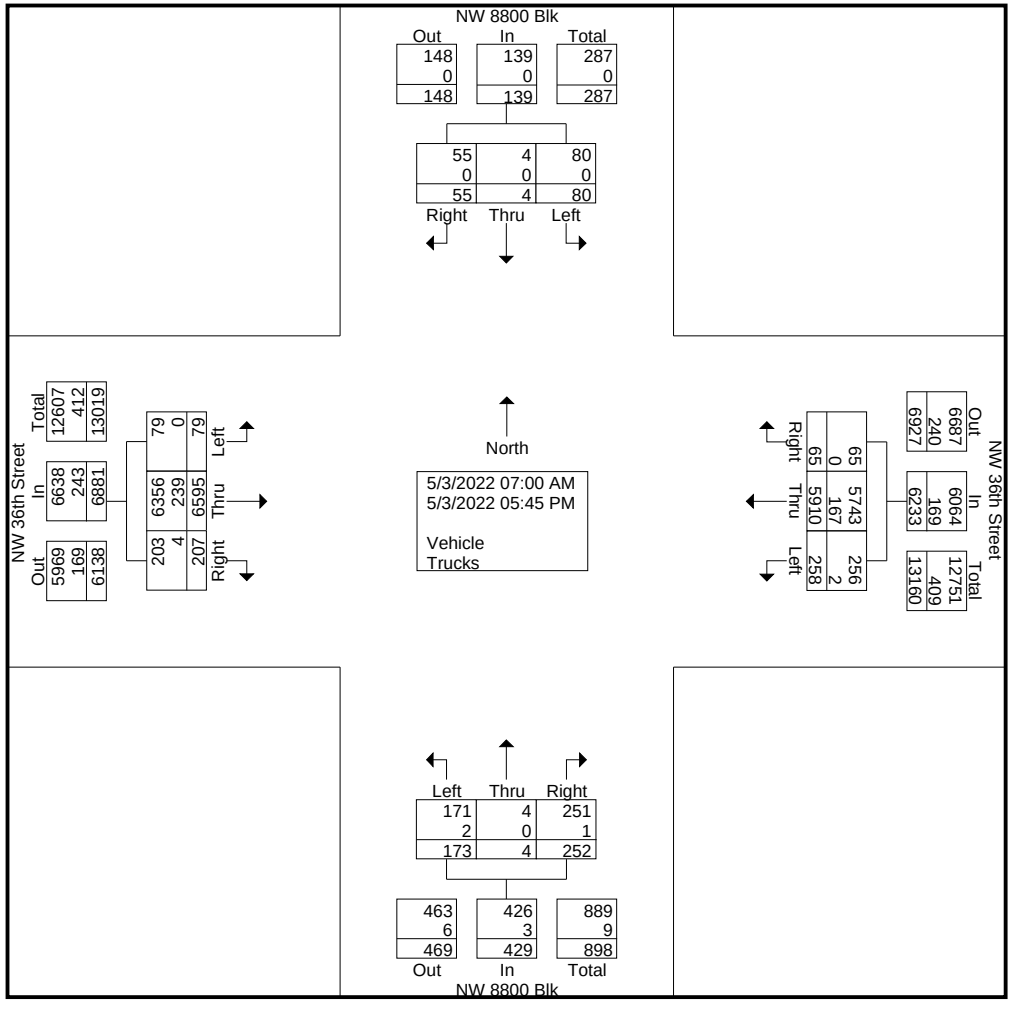
File Name : TMC-5 NW 36th Street at NW 8800th Blk
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 8800 Blk Southbound					NW 8800 Blk Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	2	0	11	0	18	29	1	7	267	6	281	0	5	434	1	440	752
07:15 AM	0	1	0	0	1	0	7	0	11	18	2	5	263	3	273	1	5	497	10	513	805
07:30 AM	0	4	0	3	7	0	10	0	25	35	2	5	289	2	298	0	5	470	7	482	822
07:45 AM	0	3	0	0	3	0	13	0	21	34	1	6	349	3	359	0	5	505	9	519	915
Total	0	9	0	4	13	0	41	0	75	116	6	23	1168	14	1211	1	20	1906	27	1954	3294
08:00 AM	0	4	0	3	7	0	19	0	20	39	4	5	384	6	399	0	6	515	18	539	984
08:15 AM	0	1	0	2	3	0	13	1	18	32	1	5	374	9	389	1	6	523	18	548	972
08:30 AM	0	1	0	1	2	0	7	0	15	22	4	6	348	5	363	0	3	535	13	551	938
08:45 AM	0	2	0	1	3	0	14	0	16	30	0	9	316	1	326	0	2	516	22	540	899
Total	0	8	0	7	15	0	53	1	69	123	9	25	1422	21	1477	1	17	2089	71	2178	3793
*** BREAK ***																					
04:00 PM	0	7	0	7	14	0	7	0	7	14	2	13	396	6	417	1	2	392	13	408	853
04:15 PM	0	7	1	2	10	0	12	0	9	21	11	12	395	2	420	2	4	346	19	371	822
04:30 PM	0	9	0	7	16	0	11	0	12	23	16	17	366	8	407	0	2	302	13	317	763
04:45 PM	0	10	0	10	20	0	10	0	13	23	8	20	398	3	429	2	5	292	15	314	786
Total	0	33	1	26	60	0	40	0	41	81	37	62	1555	19	1673	5	13	1332	60	1410	3224
05:00 PM	0	7	2	4	13	0	13	3	15	31	4	20	471	3	498	3	1	317	12	333	875
05:15 PM	0	9	1	5	15	0	11	0	25	36	12	9	502	3	526	1	6	327	9	343	920
05:30 PM	0	7	0	4	11	0	7	0	15	22	8	18	407	3	436	1	5	321	13	340	809
05:45 PM	0	7	0	5	12	0	8	0	12	20	3	22	385	2	412	0	5	303	15	323	767
Total	0	30	3	18	51	0	39	3	67	109	27	69	1765	11	1872	5	17	1268	49	1339	3371
Grand Total	0	80	4	55	139	0	173	4	252	429	79	179	5910	65	6233	12	67	6595	207	6881	13682
Apprch %	0	57.6	2.9	39.6		0	40.3	0.9	58.7		1.3	2.9	94.8	1		0.2	1	95.8	3		
Total %	0	0.6	0	0.4	1	0	1.3	0	1.8	3.1	0.6	1.3	43.2	0.5	45.6	0.1	0.5	48.2	1.5	50.3	
Vehicle	0	80	4	55	139	0	171	4	251	426	79	177	5743	65	6064	12	67	6356	203	6638	13267
% Vehicle	0	100	100	100	100	0	98.8	100	99.6	99.3	100	98.9	97.2	100	97.3	100	100	96.4	98.1	96.5	97
Trucks	0	0	0	0	0	0	2	0	1	3	0	2	167	0	169	0	0	239	4	243	415
% Trucks	0	0	0	0	0	0	1.2	0	0.4	0.7	0	1.1	2.8	0	2.7	0	0	3.6	1.9	3.5	3

NW 36th Street at NW 8800th Blk

File Name : TMC-5 NW 36th Street at NW 8800th Blk
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



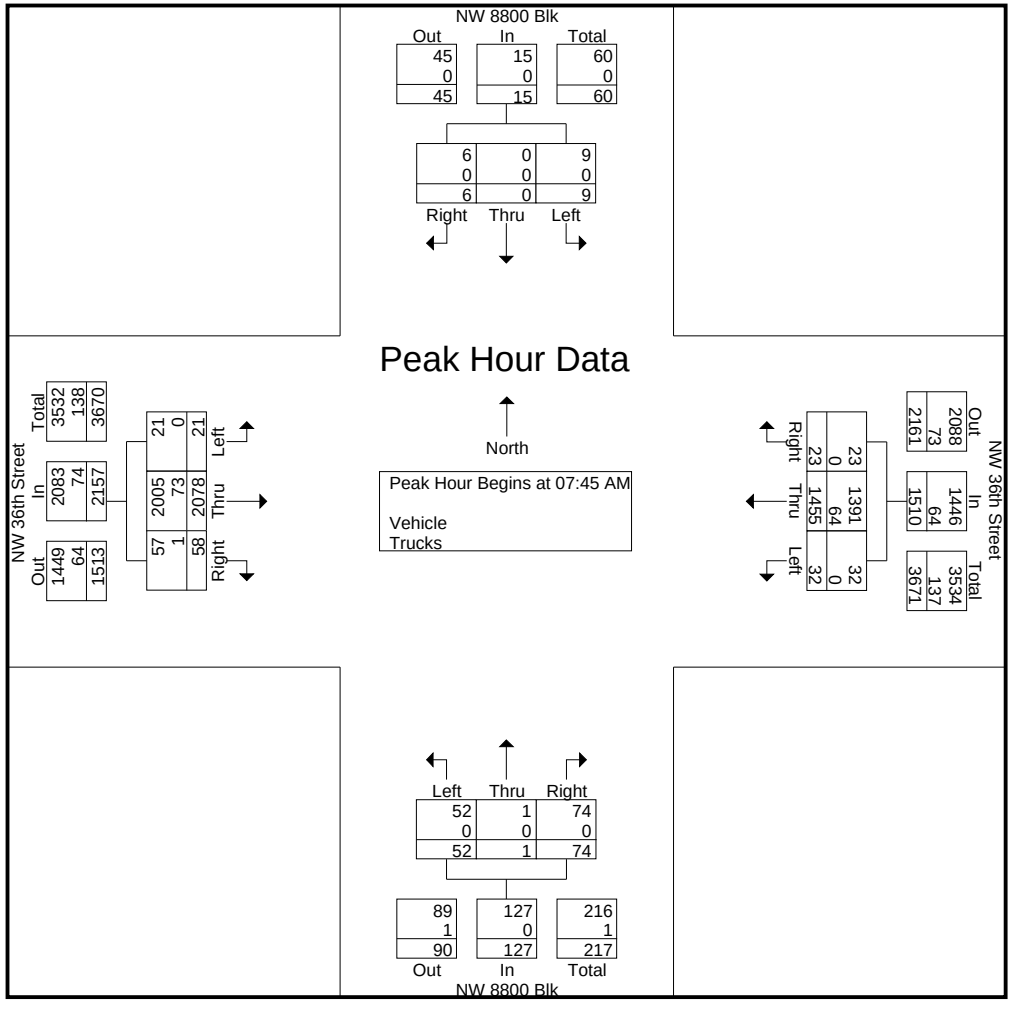
NW 36th Street at NW 8800th Blk

File Name : TMC-5 NW 36th Street at NW 8800th Blk
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 8800 Blk Southbound					NW 8800 Blk Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	3	0	0	3	0	13	0	**21**	34	1	**6**	349	3	359	0	5	505	9	519	915
08:00 AM	0	**4**	0	**3**	**7**	0	**19**	0	20	**39**	**4**	5	**384**	6	**399**	0	**6**	515	**18**	539	**984**
08:15 AM	0	1	0	2	3	0	13	**1**	18	32	1	5	374	**9**	389	**1**	6	523	18	548	972
08:30 AM	0	1	0	1	2	0	7	0	15	22	4	6	348	5	363	0	3	**535**	13	**551**	938
Total Volume	0	9	0	6	15	0	52	1	74	127	10	22	1455	23	1510	1	20	2078	58	2157	3809
% App. Total	0	60	0	40		0	40.9	0.8	58.3		0.7	1.5	96.4	1.5		0	0.9	96.3	2.7		
PHF	.000	.563	.000	.500	.536	.000	.684	.250	.881	.814	.625	.917	.947	.639	.946	.250	.833	.971	.806	.979	.968
Vehicle	0	9	0	6	15	0	52	1	74	127	10	22	1391	23	1446	1	20	2005	57	2083	3671
% Vehicle	0	100	0	100	100	0	100	100	100	100	100	100	95.6	100	95.8	100	100	96.5	98.3	96.6	96.4
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	64	0	64	0	0	73	1	74	138
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	4.4	0	4.2	0	0	3.5	1.7	3.4	3.6

NW 36th Street at NW 8800th Blk

File Name : TMC-5 NW 36th Street at NW 8800th Blk
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



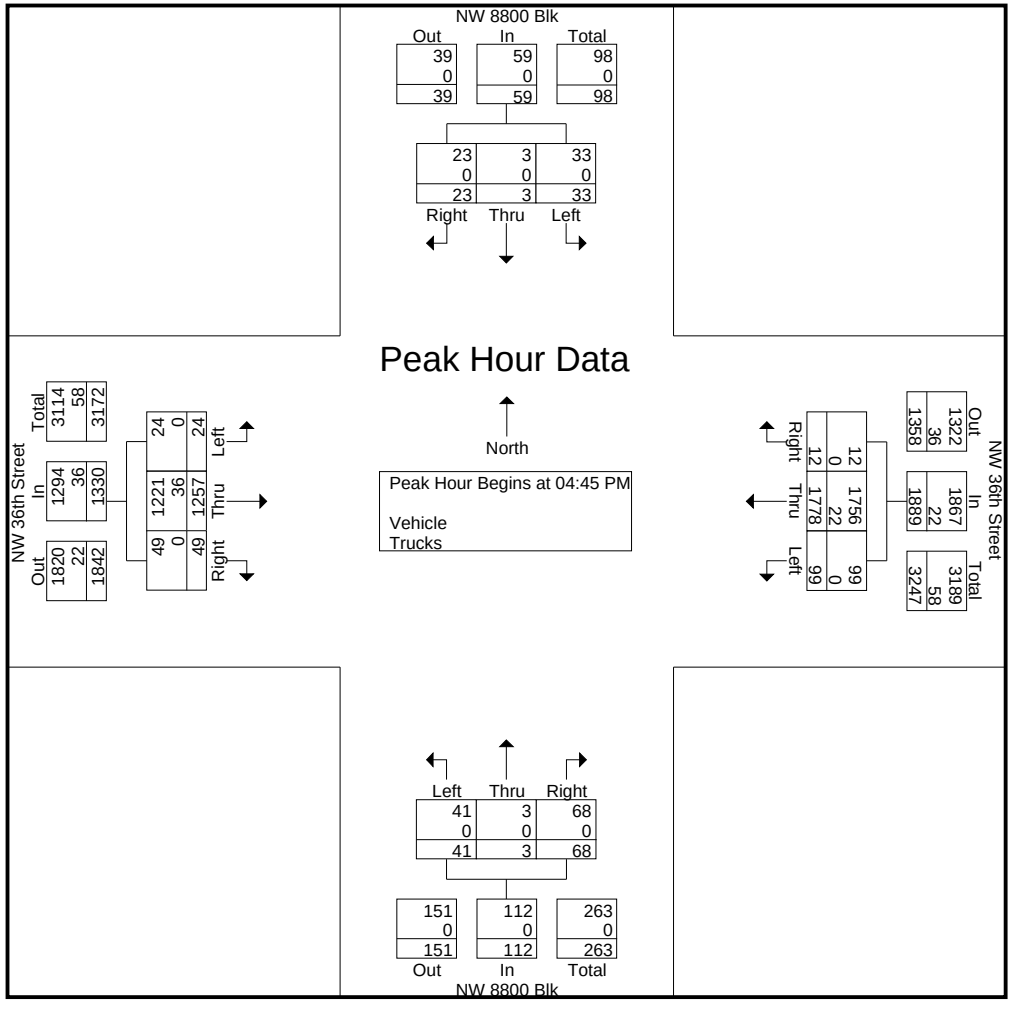
NW 36th Street at NW 8800th Blk

File Name : TMC-5 NW 36th Street at NW 8800th Blk
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 8800 Blk Southbound					NW 8800 Blk Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	**10**	0	**10**	**20**	0	10	0	13	23	8	**20**	398	**3**	429	2	5	292	**15**	314	786
05:00 PM	0	7	**2**	4	13	0	**13**	**3**	15	31	4	20	471	3	498	**3**	1	317	12	333	875
05:15 PM	0	9	1	5	15	0	11	0	**25**	**36**	**12**	9	**502**	3	**526**	1	**6**	**327**	9	**343**	**920**
05:30 PM	0	7	0	4	11	0	7	0	15	22	8	18	407	3	436	1	5	321	13	340	809
Total Volume	0	33	3	23	59	0	41	3	68	112	32	67	1778	12	1889	7	17	1257	49	1330	3390
% App. Total	0	55.9	5.1	39		0	36.6	2.7	60.7		1.7	3.5	94.1	0.6		0.5	1.3	94.5	3.7		
PHF	.000	.825	.375	.575	.738	.000	.788	.250	.680	.778	.667	.838	.885	1.00	.898	.583	.708	.961	.817	.969	.921
Vehicle	0	33	3	23	59	0	41	3	68	112	32	67	1756	12	1867	7	17	1221	49	1294	3332
% Vehicle	0	100	100	100	100	0	100	100	100	100	100	100	98.8	100	98.8	100	100	97.1	100	97.3	98.3
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	36	0	36	58
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1.2	0	1.2	0	0	2.9	0	2.7	1.7

NW 36th Street at NW 8800th Blk

File Name : TMC-5 NW 36th Street at NW 8800th Blk
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 36th Street at NW 93rd Ct

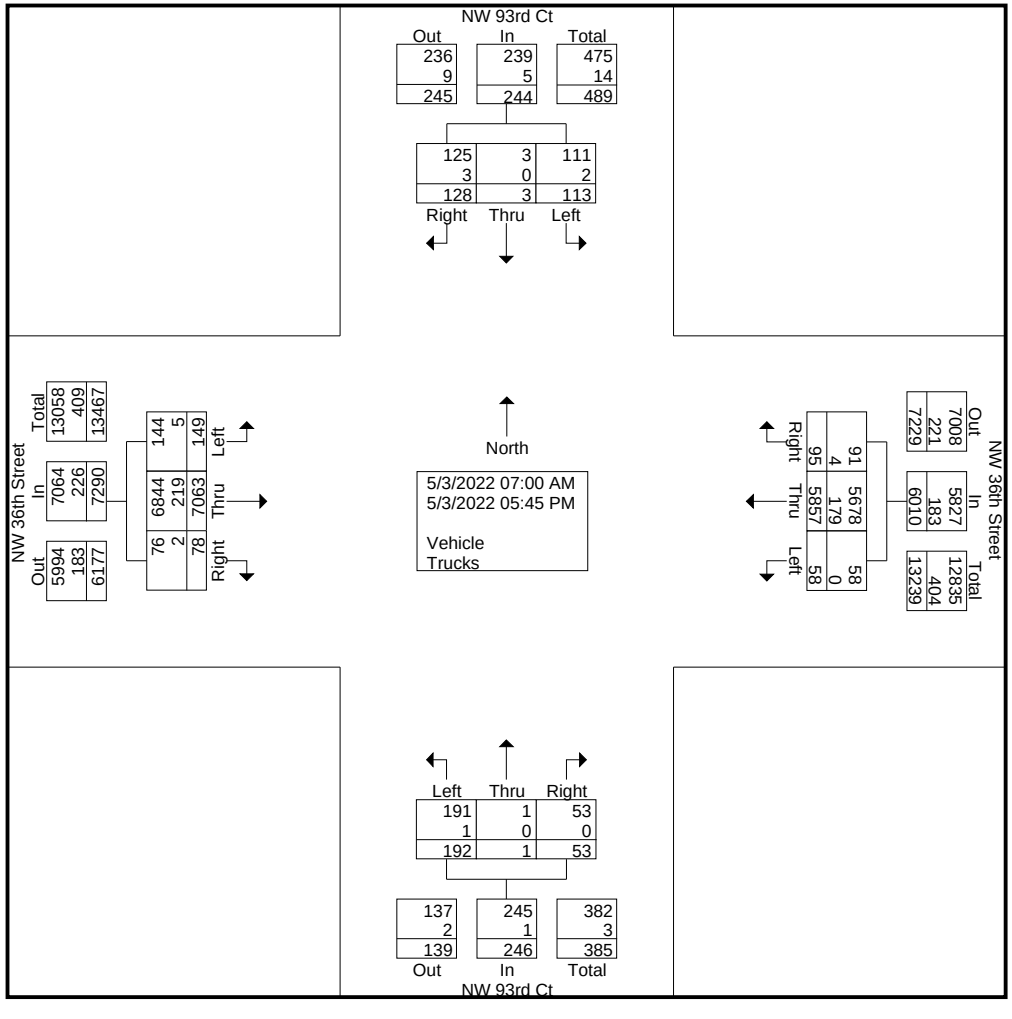
File Name : TMC-6 NW 36th St & NW 93rd Ct
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 93rd Ct Southbound					NW 93rd Ct Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	10	1	6	17	0	0	0	2	2	2	0	259	0	261	0	4	428	5	437	717
07:15 AM	0	4	0	2	6	0	0	0	0	0	1	2	246	3	252	1	2	506	11	520	778
07:30 AM	0	3	0	3	6	0	0	0	1	1	1	2	280	0	283	1	5	512	9	527	817
07:45 AM	0	10	0	13	23	0	2	0	2	4	0	3	328	3	334	1	4	536	14	555	916
Total	0	27	1	24	52	0	2	0	5	7	4	7	1113	6	1130	3	15	1982	39	2039	3228
08:00 AM	0	5	1	19	25	0	10	0	4	14	0	4	380	3	387	0	4	559	7	570	996
08:15 AM	0	6	0	7	13	0	3	0	9	12	0	6	342	7	355	0	10	564	9	583	963
08:30 AM	0	3	0	7	10	0	5	0	5	10	0	3	329	7	339	2	14	569	8	593	952
08:45 AM	0	13	0	6	19	0	9	0	6	15	0	5	327	11	343	0	13	551	5	569	946
Total	0	27	1	39	67	0	27	0	24	51	0	18	1378	28	1424	2	41	2243	29	2315	3857
*** BREAK ***																					
04:00 PM	0	19	0	10	29	0	24	0	5	29	0	4	391	9	404	2	9	402	3	416	878
04:15 PM	0	4	0	9	13	0	32	0	9	41	0	2	431	13	446	1	10	381	0	392	892
04:30 PM	0	6	0	14	20	0	15	0	0	15	0	5	373	4	382	1	8	325	2	336	753
04:45 PM	0	7	1	10	18	0	20	0	3	23	2	5	431	9	447	3	13	329	2	347	835
Total	0	36	1	43	80	0	91	0	17	108	2	16	1626	35	1679	7	40	1437	7	1491	3358
05:00 PM	0	5	0	9	14	0	39	1	3	43	1	4	440	6	451	3	8	343	1	355	863
05:15 PM	0	6	0	4	10	0	14	0	2	16	0	2	465	6	473	3	9	361	2	375	874
05:30 PM	0	5	0	5	10	0	11	0	2	13	0	1	432	5	438	1	6	358	0	365	826
05:45 PM	0	7	0	4	11	0	8	0	0	8	1	2	403	9	415	1	10	339	0	350	784
Total	0	23	0	22	45	0	72	1	7	80	2	9	1740	26	1777	8	33	1401	3	1445	3347
Grand Total	0	113	3	128	244	0	192	1	53	246	8	50	5857	95	6010	20	129	7063	78	7290	13790
Apprch %	0	46.3	1.2	52.5		0	78	0.4	21.5		0.1	0.8	97.5	1.6		0.3	1.8	96.9	1.1		
Total %	0	0.8	0	0.9	1.8	0	1.4	0	0.4	1.8	0.1	0.4	42.5	0.7	43.6	0.1	0.9	51.2	0.6	52.9	
Vehicle	0	111	3	125	239	0	191	1	53	245	8	50	5678	91	5827	20	124	6844	76	7064	13375
% Vehicle	0	98.2	100	97.7	98	0	99.5	100	100	99.6	100	100	96.9	95.8	97	100	96.1	96.9	97.4	96.9	97
Trucks	0	2	0	3	5	0	1	0	0	1	0	0	179	4	183	0	5	219	2	226	415
% Trucks	0	1.8	0	2.3	2	0	0.5	0	0	0.4	0	0	3.1	4.2	3	0	3.9	3.1	2.6	3.1	3

NW 36th Street at NW 93rd Ct

File Name : TMC-6 NW 36th St & NW 93rd Ct
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



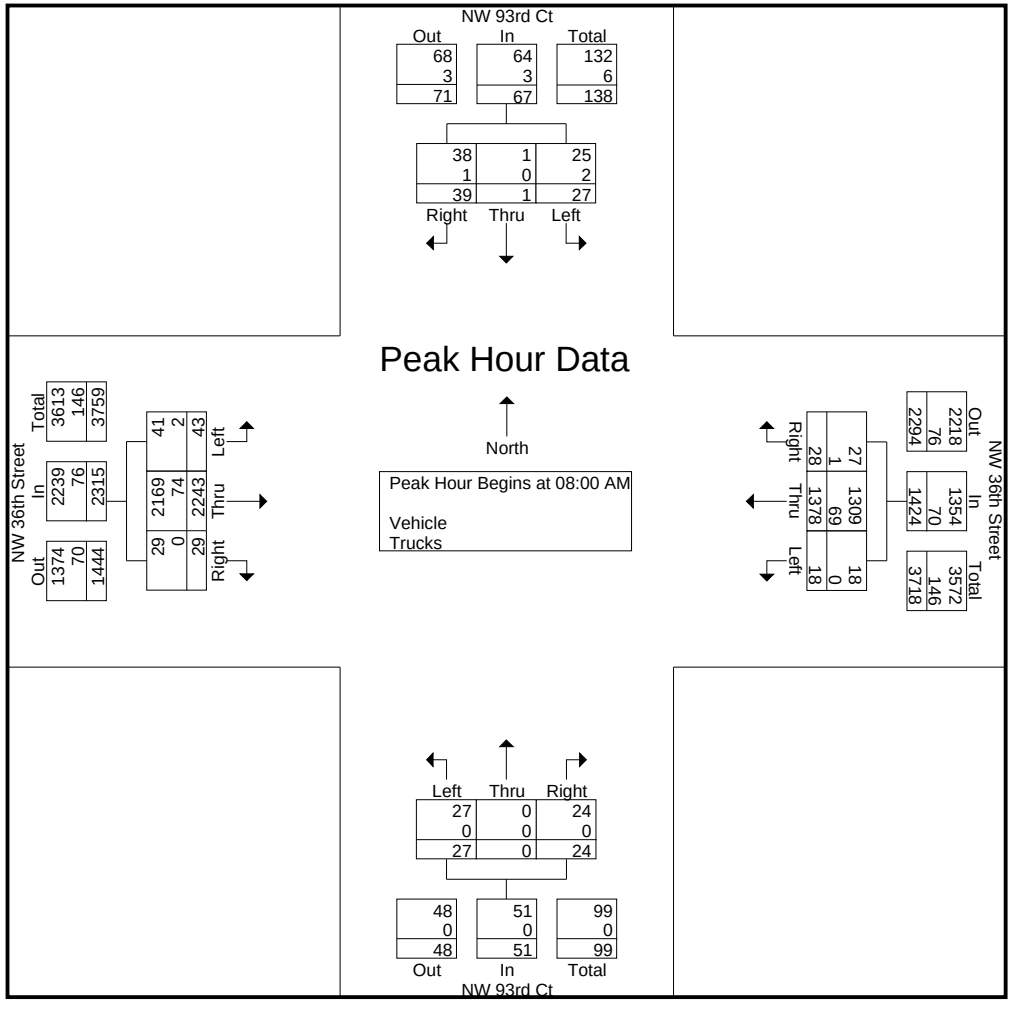
NW 36th Street at NW 93rd Ct

File Name : TMC-6 NW 36th St & NW 93rd Ct
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 93rd Ct Southbound					NW 93rd Ct Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	5	**1**	**19**	**25**	0	**10**	0	4	14	0	4	**380**	3	**387**	0	4	559	7	570	**996**
08:15 AM	0	6	0	7	13	0	3	0	**9**	12	0	**6**	342	7	355	0	10	564	**9**	583	963
08:30 AM	0	3	0	7	10	0	5	0	5	10	0	3	329	7	339	**2**	**14**	**569**	8	**593**	952
08:45 AM	0	**13**	0	6	19	0	9	0	6	**15**	0	5	327	**11**	343	0	13	551	5	569	946
Total Volume	0	27	1	39	67	0	27	0	24	51	0	18	1378	28	1424	2	41	2243	29	2315	3857
% App. Total	0	40.3	1.5	58.2		0	52.9	0	47.1		0	1.3	96.8	2		0.1	1.8	96.9	1.3		
PHF	.000	.519	.250	.513	.670	.000	.675	.000	.667	.850	.000	.750	.907	.636	.920	.250	.732	.986	.806	.976	.968
Vehicle	0	25	1	38	64	0	27	0	24	51	0	18	1309	27	1354	2	39	2169	29	2239	3708
% Vehicle	0	92.6	100	97.4	95.5	0	100	0	100	100	0	100	95.0	96.4	95.1	100	95.1	96.7	100	96.7	96.1
Trucks	0	2	0	1	3	0	0	0	0	0	0	0	69	1	70	0	2	74	0	76	149
% Trucks	0	7.4	0	2.6	4.5	0	0	0	0	0	0	0	5.0	3.6	4.9	0	4.9	3.3	0	3.3	3.9

NW 36th Street at NW 93rd Ct

File Name : TMC-6 NW 36th St & NW 93rd Ct
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



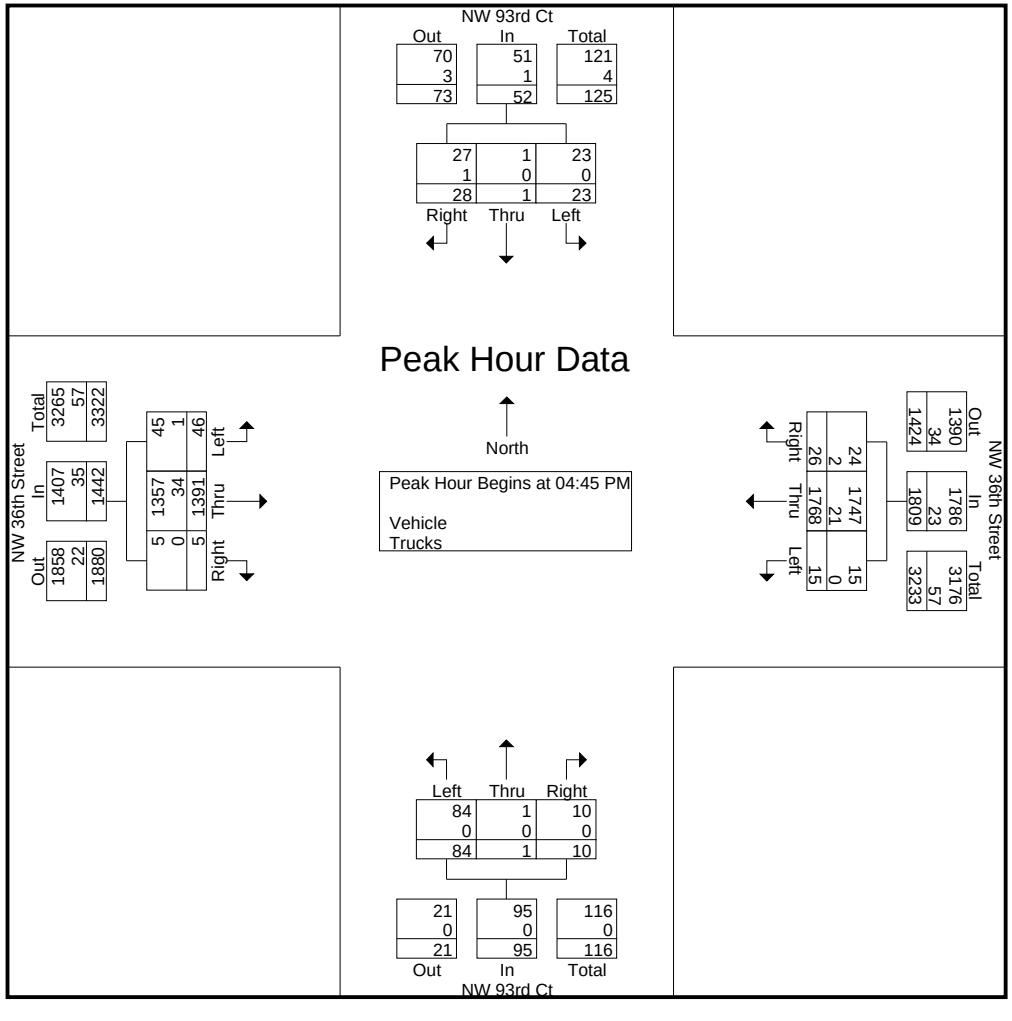
NW 36th Street at NW 93rd Ct

File Name : TMC-6 NW 36th St & NW 93rd Ct
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 93rd Ct Southbound					NW 93rd Ct Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	**7**	**1**	**10**	**18**	0	20	0	**3**	23	**2**	**5**	431	**9**	447	**3**	**13**	329	**2**	347	835
05:00 PM	0	5	0	9	14	0	**39**	**1**	3	**43**	1	4	440	6	451	3	8	343	1	355	863
05:15 PM	0	6	0	4	10	0	14	0	2	16	0	2	**465**	6	**473**	3	9	**361**	2	**375**	**874**
05:30 PM	0	5	0	5	10	0	11	0	2	13	0	1	432	5	438	1	6	358	0	365	826
Total Volume	0	23	1	28	52	0	84	1	10	95	3	12	1768	26	1809	10	36	1391	5	1442	3398
% App. Total	0	44.2	1.9	53.8		0	88.4	1.1	10.5		0.2	0.7	97.7	1.4		0.7	2.5	96.5	0.3		
PHF	.000	.821	.250	.700	.722	.000	.538	.250	.833	.552	.375	.600	.951	.722	.956	.833	.692	.963	.625	.961	.972
Vehicle	0	23	1	27	51	0	84	1	10	95	3	12	1747	24	1786	10	35	1357	5	1407	3339
% Vehicle	0	100	100	96.4	98.1	0	100	100	100	100	100	100	98.8	92.3	98.7	100	97.2	97.6	100	97.6	98.3
Trucks	0	0	0	1	1	0	0	0	0	0	0	0	21	2	23	0	1	34	0	35	59
% Trucks	0	0	0	3.6	1.9	0	0	0	0	0	0	0	1.2	7.7	1.3	0	2.8	2.4	0	2.4	1.7

NW 36th Street at NW 93rd Ct

File Name : TMC-6 NW 36th St & NW 93rd Ct
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 97th Avenue at NW 41st Street

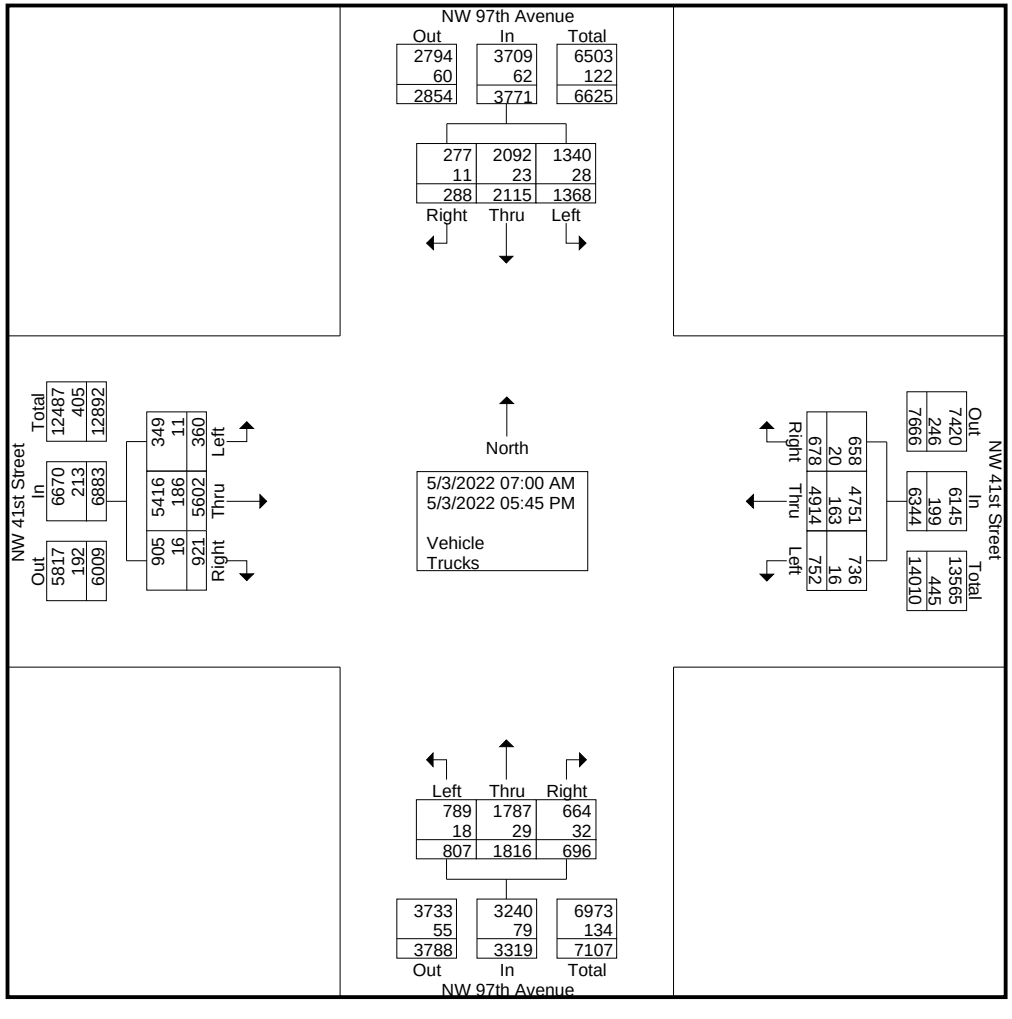
File Name : TMC-7 NW 97th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 97th Avenue Southbound					NW 97th Avenue Northbound					NW 41st Street Westbound					NW 41st Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	53	73	15	141	0	32	67	41	140	0	43	175	31	249	0	13	348	53	414	944
07:15 AM	0	83	85	13	181	0	22	58	35	115	0	32	176	23	231	0	8	434	77	519	1046
07:30 AM	0	76	111	7	194	0	32	95	45	172	0	32	204	24	260	0	17	411	88	516	1142
07:45 AM	0	98	124	4	226	1	39	99	42	181	0	50	238	52	340	0	18	449	84	551	1298
Total	0	310	393	39	742	1	125	319	163	608	0	157	793	130	1080	0	56	1642	302	2000	4430
08:00 AM	0	101	159	3	263	0	31	95	49	175	0	55	300	67	422	0	16	456	86	558	1418
08:15 AM	0	103	143	8	254	0	34	92	32	158	0	54	287	45	386	0	23	463	53	539	1337
08:30 AM	0	108	131	15	254	0	40	88	42	170	1	46	253	35	335	2	19	456	55	532	1291
08:45 AM	0	116	134	7	257	0	30	90	44	164	1	56	281	32	370	0	27	458	55	540	1331
Total	0	428	567	33	1028	0	135	365	167	667	2	211	1121	179	1513	2	85	1833	249	2169	5377
*** BREAK ***																					
04:00 PM	0	89	128	18	235	0	72	105	63	240	0	58	366	35	459	0	26	301	44	371	1305
04:15 PM	0	83	126	24	233	0	73	146	45	264	2	36	411	50	499	0	32	285	49	366	1362
04:30 PM	1	71	124	30	226	0	62	137	43	242	2	57	317	56	432	0	28	254	55	337	1237
04:45 PM	0	71	151	20	242	0	72	118	40	230	0	50	383	52	485	1	17	260	39	317	1274
Total	1	314	529	92	936	0	279	506	191	976	4	201	1477	193	1875	1	103	1100	187	1391	5178
05:00 PM	0	68	154	24	246	0	57	142	48	247	0	37	390	46	473	0	27	265	47	339	1305
05:15 PM	2	72	150	38	262	0	64	178	37	279	0	36	409	37	482	1	28	251	36	316	1339
05:30 PM	0	78	157	32	267	0	72	161	48	281	1	52	375	46	474	0	32	271	58	361	1383
05:45 PM	0	95	165	30	290	0	74	145	42	261	2	49	349	47	447	0	25	240	42	307	1305
Total	2	313	626	124	1065	0	267	626	175	1068	3	174	1523	176	1876	1	112	1027	183	1323	5332
Grand Total	3	1365	2115	288	3771	1	806	1816	696	3319	9	743	4914	678	6344	4	356	5602	921	6883	20317
Apprch %	0.1	36.2	56.1	7.6		0	24.3	54.7	21		0.1	11.7	77.5	10.7		0.1	5.2	81.4	13.4		
Total %	0	6.7	10.4	1.4	18.6	0	4	8.9	3.4	16.3	0	3.7	24.2	3.3	31.2	0	1.8	27.6	4.5	33.9	
Vehicle	3	1337	2092	277	3709	1	788	1787	664	3240	9	727	4751	658	6145	4	345	5416	905	6670	19764
% Vehicle	100	97.9	98.9	96.2	98.4	100	97.8	98.4	95.4	97.6	100	97.8	96.7	97.1	96.9	100	96.9	96.7	98.3	96.9	97.3
Trucks	0	28	23	11	62	0	18	29	32	79	0	16	163	20	199	0	11	186	16	213	553
% Trucks	0	2.1	1.1	3.8	1.6	0	2.2	1.6	4.6	2.4	0	2.2	3.3	2.9	3.1	0	3.1	3.3	1.7	3.1	2.7

NW 97th Avenue at NW 41st Street

File Name : TMC-7 NW 97th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



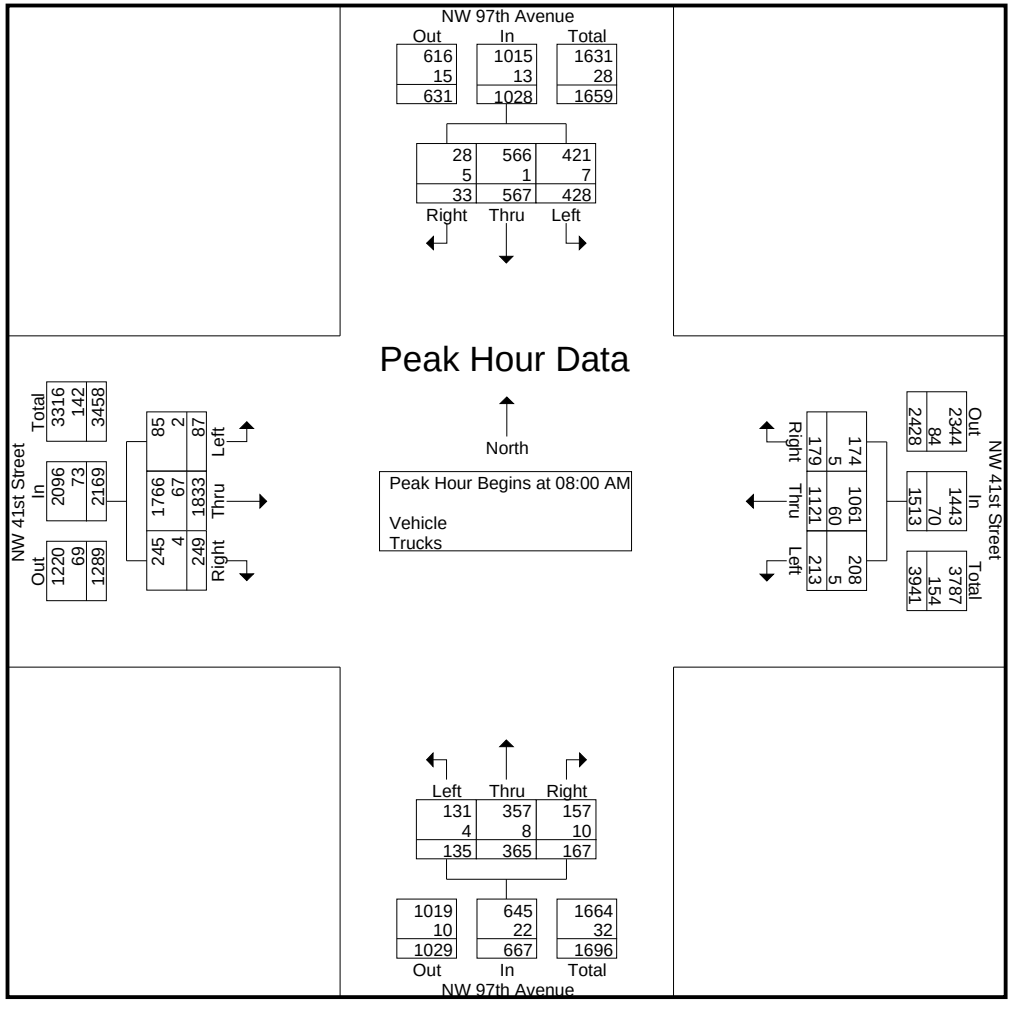
NW 97th Avenue at NW 41st Street

File Name : TMC-7 NW 97th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 97th Avenue Southbound					NW 97th Avenue Northbound					NW 41st Street Westbound					NW 41st Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	101	**159**	3	**263**	0	31	**95**	**49**	**175**	0	55	**300**	**67**	**422**	0	16	456	**86**	**558**	**1418**
08:15 AM	0	103	143	8	254	0	34	92	32	158	0	54	287	45	386	0	23	**463**	53	539	1337
08:30 AM	0	108	131	**15**	254	0	**40**	88	42	170	**1**	46	253	35	335	**2**	19	456	55	532	1291
08:45 AM	0	**116**	134	7	257	0	30	90	44	164	1	**56**	281	32	370	0	**27**	458	55	540	1331
Total Volume	0	428	567	33	1028	0	135	365	167	667	2	211	1121	179	1513	2	85	1833	249	2169	5377
% App. Total	0	41.6	55.2	3.2		0	20.2	54.7	25		0.1	13.9	74.1	11.8		0.1	3.9	84.5	11.5		
PHF	.000	.922	.892	.550	.977	.000	.844	.961	.852	.953	.500	.942	.934	.668	.896	.250	.787	.990	.724	.972	.948
Vehicle	0	421	566	28	1015	0	131	357	157	645	2	206	1061	174	1443	2	83	1766	245	2096	5199
% Vehicle	0	98.4	99.8	84.8	98.7	0	97.0	97.8	94.0	96.7	100	97.6	94.6	97.2	95.4	100	97.6	96.3	98.4	96.6	96.7
Trucks	0	7	1	5	13	0	4	8	10	22	0	5	60	5	70	0	2	67	4	73	178
% Trucks	0	1.6	0.2	15.2	1.3	0	3.0	2.2	6.0	3.3	0	2.4	5.4	2.8	4.6	0	2.4	3.7	1.6	3.4	3.3

NW 97th Avenue at NW 41st Street

File Name : TMC-7 NW 97th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



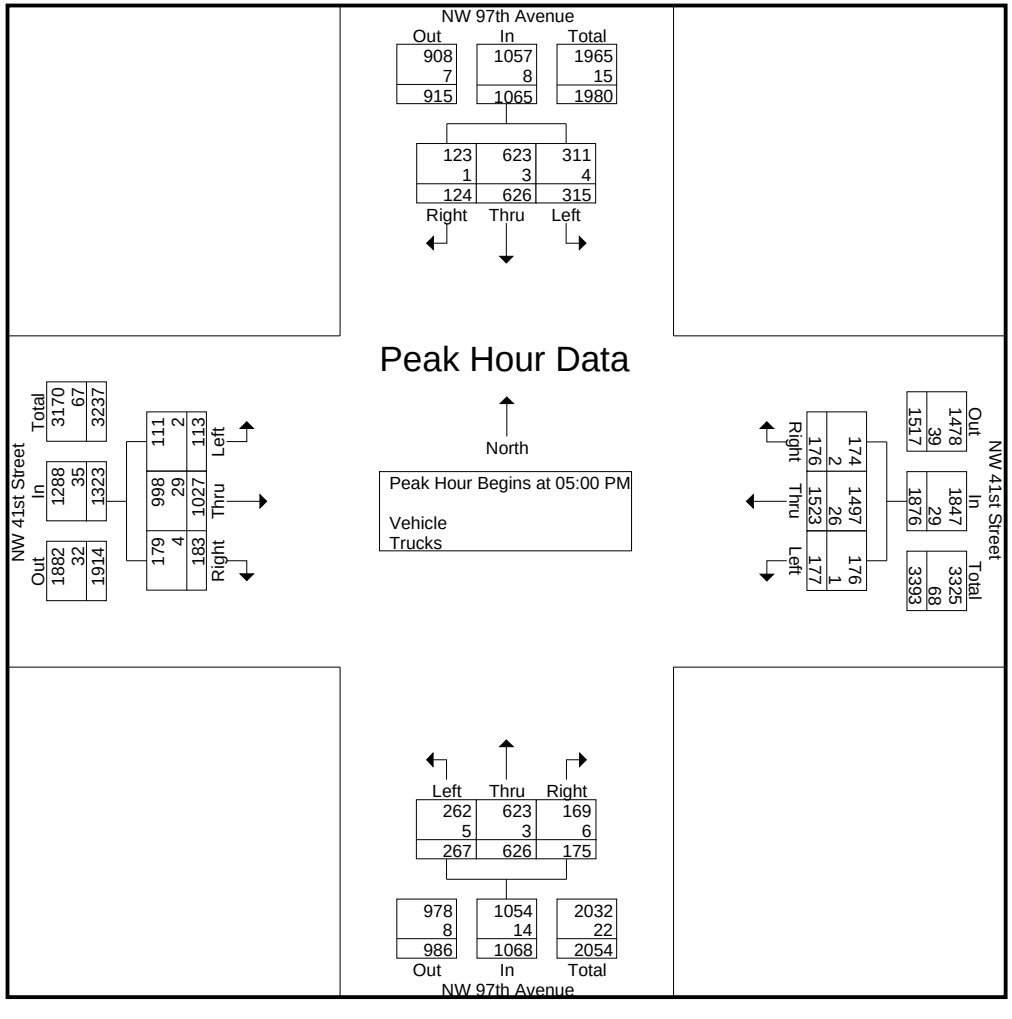
NW 97th Avenue at NW 41st Street

File Name : TMC-7 NW 97th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 97th Avenue Southbound					NW 97th Avenue Northbound					NW 41st Street Westbound					NW 41st Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	68	154	24	246	0	57	142	**48**	247	0	37	390	46	473	0	27	265	47	339	1305
05:15 PM	**2**	72	150	**38**	262	0	64	**178**	37	279	0	36	**409**	37	**482**	**1**	28	251	36	316	1339
05:30 PM	0	78	157	32	267	0	72	161	48	**281**	1	**52**	375	46	474	0	**32**	**271**	**58**	**361**	**1383**
05:45 PM	0	**95**	**165**	30	**290**	0	**74**	145	42	261	**2**	49	349	**47**	447	0	25	240	42	307	1305
Total Volume	2	313	626	124	1065	0	267	626	175	1068	3	174	1523	176	1876	1	112	1027	183	1323	5332
% App. Total	0.2	29.4	58.8	11.6		0	25	58.6	16.4		0.2	9.3	81.2	9.4		0.1	8.5	77.6	13.8		
PHF	.250	.824	.948	.816	.918	.000	.902	.879	.911	.950	.375	.837	.931	.936	.973	.250	.875	.947	.789	.916	.964
Vehicle	2	309	623	123	1057	0	262	623	169	1054	3	173	1497	174	1847	1	110	998	179	1288	5246
% Vehicle	100	98.7	99.5	99.2	99.2	0	98.1	99.5	96.6	98.7	100	99.4	98.3	98.9	98.5	100	98.2	97.2	97.8	97.4	98.4
Trucks	0	4	3	1	8	0	5	3	6	14	0	1	26	2	29	0	2	29	4	35	86
% Trucks	0	1.3	0.5	0.8	0.8	0	1.9	0.5	3.4	1.3	0	0.6	1.7	1.1	1.5	0	1.8	2.8	2.2	2.6	1.6

NW 97th Avenue at NW 41st Street

File Name : TMC-7 NW 97th Ave & NW 41st St
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 58th Street at NW 97th Avenue

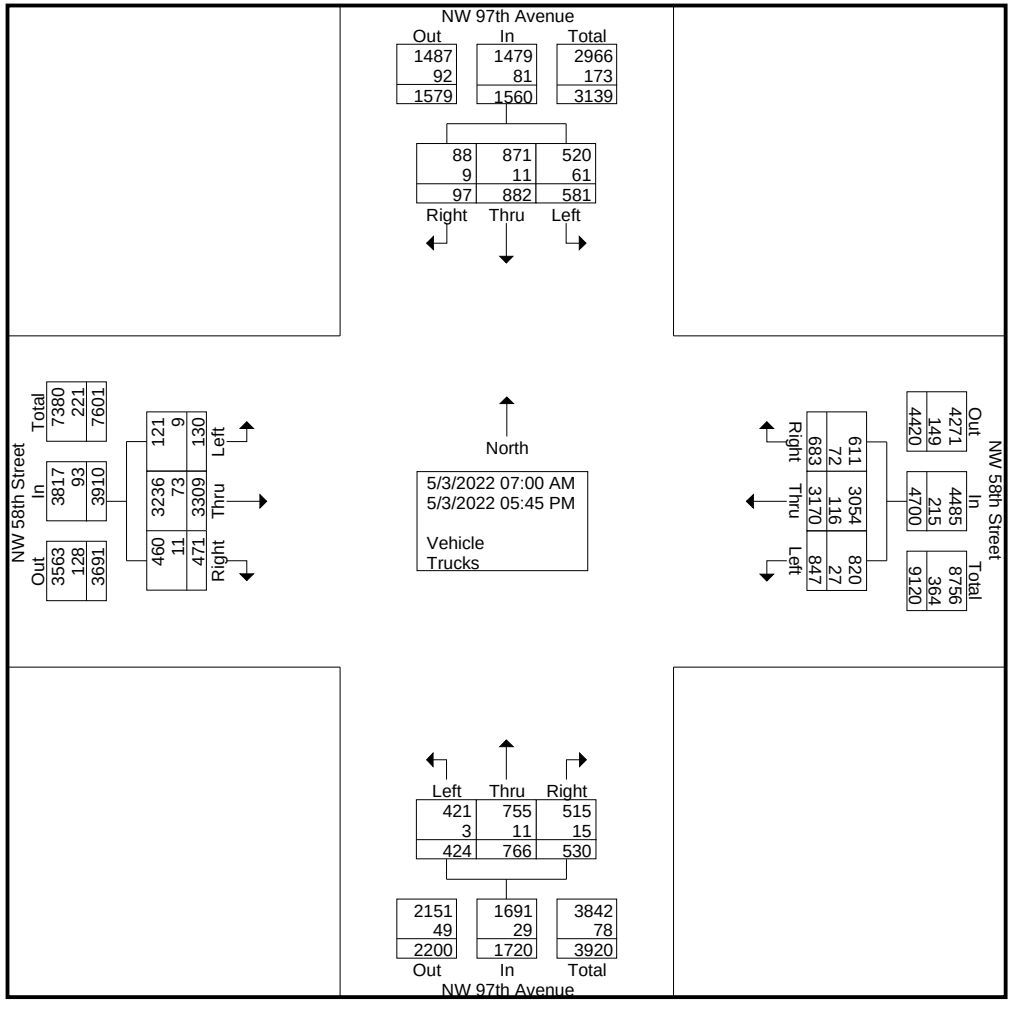
File Name : TMC-8 NW 58th St & NW 97st Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 97th Avenue Southbound					NW 97th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	42	37	2	81	0	10	35	32	77	0	25	146	42	213	0	0	217	15	232	603
07:15 AM	0	37	52	2	91	0	19	40	44	103	0	22	126	33	181	0	1	185	10	196	571
07:30 AM	0	45	45	3	93	0	21	25	44	90	0	33	102	33	168	0	1	214	14	229	580
07:45 AM	0	63	59	7	129	0	30	28	48	106	0	33	144	36	213	0	2	286	25	313	761
Total	0	187	193	14	394	0	80	128	168	376	0	113	518	144	775	0	4	902	64	970	2515
08:00 AM	0	68	66	2	136	0	34	36	38	108	0	33	134	34	201	0	6	318	48	372	817
08:15 AM	0	53	63	1	117	0	22	39	47	108	0	41	134	35	210	0	9	281	33	323	758
08:30 AM	0	43	44	6	93	0	25	30	38	93	0	34	109	44	187	0	5	254	39	298	671
08:45 AM	0	33	41	5	79	0	23	40	43	106	0	29	121	45	195	0	8	292	26	326	706
Total	0	197	214	14	425	0	104	145	166	415	0	137	498	158	793	0	28	1145	146	1319	2952
*** BREAK ***																					
04:00 PM	0	32	63	13	108	0	18	50	39	107	0	51	235	44	330	0	11	138	30	179	724
04:15 PM	0	29	53	11	93	0	39	56	29	124	0	70	222	48	340	0	14	172	26	212	769
04:30 PM	0	24	56	13	93	0	33	65	15	113	0	83	307	49	439	0	16	219	24	259	904
04:45 PM	0	25	52	8	85	0	29	47	27	103	0	62	280	53	395	0	11	156	39	206	789
Total	0	110	224	45	379	0	119	218	110	447	0	266	1044	194	1504	0	52	685	119	856	3186
05:00 PM	0	33	57	4	94	0	32	69	26	127	0	90	300	41	431	0	15	162	37	214	866
05:15 PM	0	13	50	7	70	0	34	67	18	119	0	96	276	56	428	0	13	131	28	172	789
05:30 PM	0	16	67	10	93	0	28	72	19	119	0	74	312	43	429	0	9	173	49	231	872
05:45 PM	0	25	77	3	105	0	27	67	23	117	0	71	222	47	340	1	8	111	28	148	710
Total	0	87	251	24	362	0	121	275	86	482	0	331	1110	187	1628	1	45	577	142	765	3237
Grand Total	0	581	882	97	1560	0	424	766	530	1720	0	847	3170	683	4700	1	129	3309	471	3910	11890
Apprch %	0	37.2	56.5	6.2		0	24.7	44.5	30.8		0	18	67.4	14.5		0	3.3	84.6	12		
Total %	0	4.9	7.4	0.8	13.1	0	3.6	6.4	4.5	14.5	0	7.1	26.7	5.7	39.5	0	1.1	27.8	4	32.9	
Vehicle	0	520	871	88	1479	0	421	755	515	1691	0	820	3054	611	4485	1	120	3236	460	3817	11472
% Vehicle	0	89.5	98.8	90.7	94.8	0	99.3	98.6	97.2	98.3	0	96.8	96.3	89.5	95.4	100	93	97.8	97.7	97.6	96.5
Trucks	0	61	11	9	81	0	3	11	15	29	0	27	116	72	215	0	9	73	11	93	418
% Trucks	0	10.5	1.2	9.3	5.2	0	0.7	1.4	2.8	1.7	0	3.2	3.7	10.5	4.6	0	7	2.2	2.3	2.4	3.5

NW 58th Street at NW 97th Avenue

File Name : TMC-8 NW 58th St & NW 97st Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



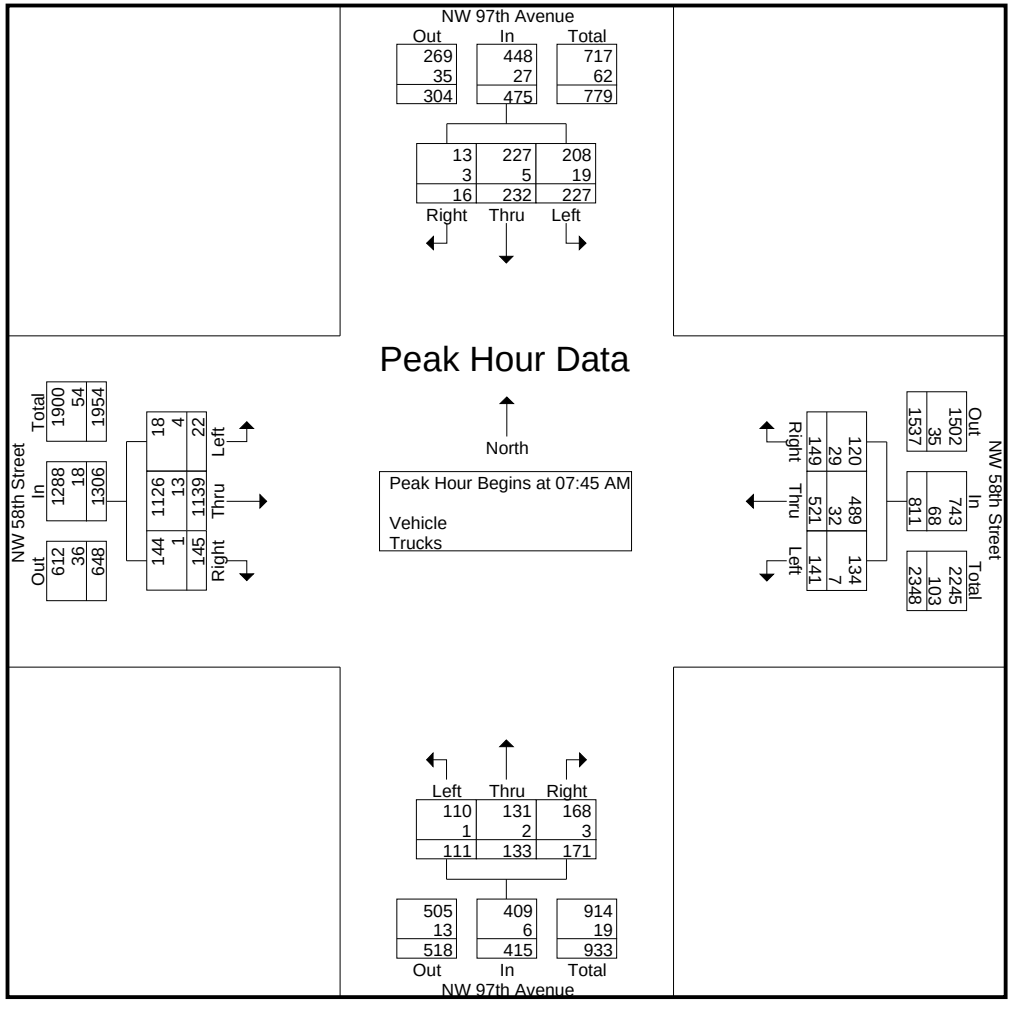
NW 58th Street at NW 97th Avenue

File Name : TMC-8 NW 58th St & NW 97st Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 97th Avenue Southbound					NW 97th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	63	59	**7**	129	0	30	28	**48**	106	0	33	**144**	36	**213**	0	2	286	25	313	761
08:00 AM	0	**68**	**66**	2	**136**	0	**34**	36	38	**108**	0	33	134	34	201	0	6	**318**	**48**	**372**	**817**
08:15 AM	0	53	63	1	117	0	22	**39**	47	108	0	**41**	134	35	210	0	**9**	281	33	323	758
08:30 AM	0	43	44	6	93	0	25	30	38	93	0	34	109	**44**	187	0	5	254	39	298	671
Total Volume	0	227	232	16	475	0	111	133	171	415	0	141	521	149	811	0	22	1139	145	1306	3007
% App. Total	0	47.8	48.8	3.4		0	26.7	32	41.2		0	17.4	64.2	18.4		0	1.7	87.2	11.1		
PHF	.000	.835	.879	.571	.873	.000	.816	.853	.891	.961	.000	.860	.905	.847	.952	.000	.611	.895	.755	.878	.920
Vehicle	0	208	227	13	448	0	110	131	168	409	0	134	489	120	743	0	18	1126	144	1288	2888
% Vehicle	0	91.6	97.8	81.3	94.3	0	99.1	98.5	98.2	98.6	0	95.0	93.9	80.5	91.6	0	81.8	98.9	99.3	98.6	96.0
Trucks	0	19	5	3	27	0	1	2	3	6	0	7	32	29	68	0	4	13	1	18	119
% Trucks	0	8.4	2.2	18.8	5.7	0	0.9	1.5	1.8	1.4	0	5.0	6.1	19.5	8.4	0	18.2	1.1	0.7	1.4	4.0

NW 58th Street at NW 97th Avenue

File Name : TMC-8 NW 58th St & NW 97st Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



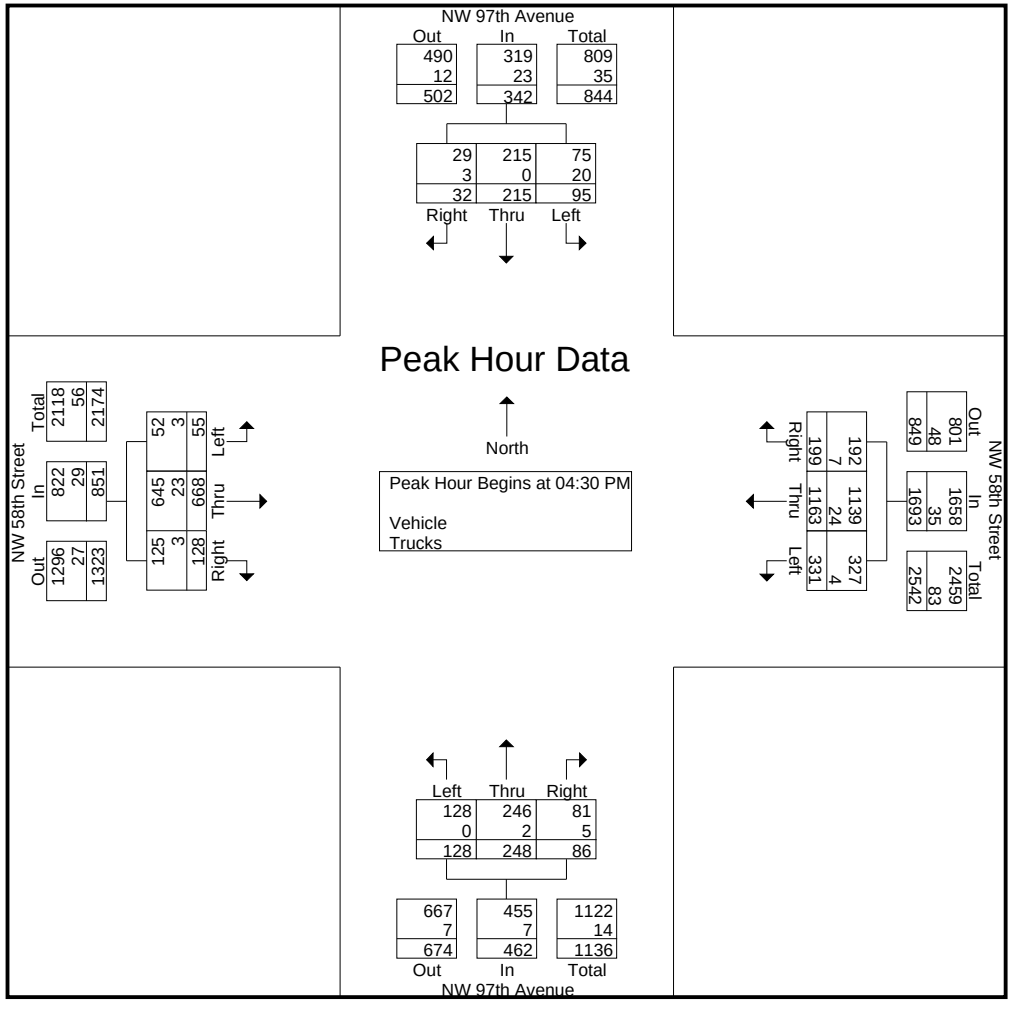
NW 58th Street at NW 97th Avenue

File Name : TMC-8 NW 58th St & NW 97st Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 97th Avenue Southbound					NW 97th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	24	56	**13**	93	0	33	65	15	113	0	83	**307**	49	**439**	0	**16**	**219**	24	**259**	**904**
04:45 PM	0	25	52	8	85	0	29	47	**27**	103	0	62	280	53	395	0	11	156	**39**	206	789
05:00 PM	0	**33**	**57**	4	**94**	0	32	**69**	26	**127**	0	90	300	41	431	0	15	162	37	214	866
05:15 PM	0	13	50	7	70	0	**34**	67	18	119	0	**96**	276	**56**	428	0	13	131	28	172	789
Total Volume	0	95	215	32	342	0	128	248	86	462	0	331	1163	199	1693	0	55	668	128	851	3348
% App. Total	0	27.8	62.9	9.4		0	27.7	53.7	18.6		0	19.6	68.7	11.8		0	6.5	78.5	15		
PHF	.000	.720	.943	.615	.910	.000	.941	.899	.796	.909	.000	.862	.947	.888	.964	.000	.859	.763	.821	.821	.926
Vehicle	0	75	215	29	319	0	128	246	81	455	0	327	1139	192	1658	0	52	645	125	822	3254
% Vehicle	0	78.9	100	90.6	93.3	0	100	99.2	94.2	98.5	0	98.8	97.9	96.5	97.9	0	94.5	96.6	97.7	96.6	97.2
Trucks	0	20	0	3	23	0	0	2	5	7	0	4	24	7	35	0	3	23	3	29	94
% Trucks	0	21.1	0	9.4	6.7	0	0	0.8	5.8	1.5	0	1.2	2.1	3.5	2.1	0	5.5	3.4	2.3	3.4	2.8

NW 58th Street at NW 97th Avenue

File Name : TMC-8 NW 58th St & NW 97st Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 58th Street at NW 79th Avenue

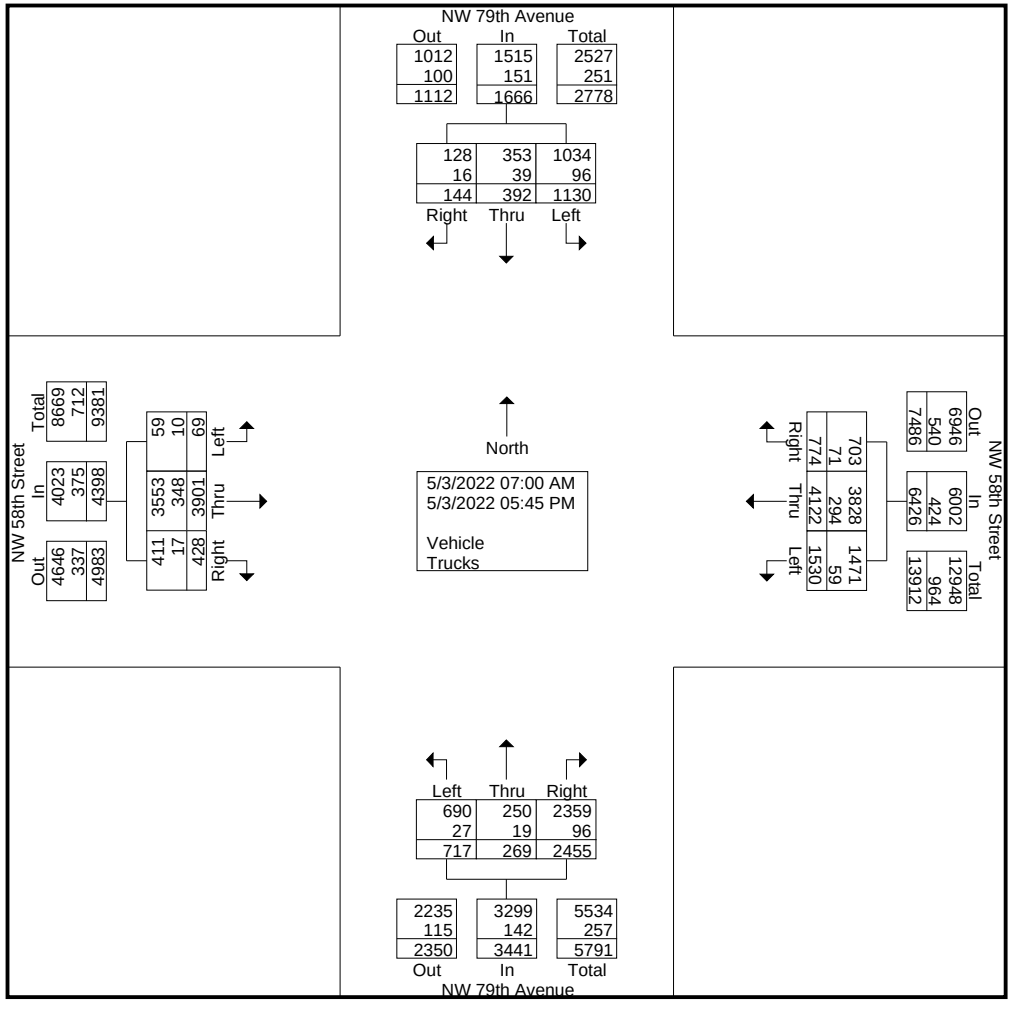
File Name : TMC-9 NW 58th St & NW 79th Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 79th Avenue Southbound					NW 79th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	28	22	4	54	0	39	22	126	187	3	124	306	82	515	0	6	186	64	256	1012
07:15 AM	0	44	15	3	62	0	46	25	121	192	0	106	255	65	426	0	3	190	46	239	919
07:30 AM	0	26	22	7	55	0	30	20	126	176	1	136	252	64	453	0	7	242	19	268	952
07:45 AM	0	30	17	7	54	0	36	24	128	188	1	120	350	81	552	0	12	257	25	294	1088
Total	0	128	76	21	225	0	151	91	501	743	5	486	1163	292	1946	0	28	875	154	1057	3971
08:00 AM	0	39	19	6	64	0	57	11	86	154	1	109	302	109	521	0	8	242	31	281	1020
08:15 AM	0	35	27	6	68	0	41	22	97	160	4	118	255	63	440	0	3	264	27	294	962
08:30 AM	0	32	20	8	60	0	39	15	93	147	3	116	266	58	443	0	6	243	12	261	911
08:45 AM	0	40	20	4	64	0	36	15	103	154	0	135	241	59	435	0	5	237	25	267	920
Total	0	146	86	24	256	0	173	63	379	615	8	478	1064	289	1839	0	22	986	95	1103	3813
*** BREAK ***																					
04:00 PM	0	111	31	12	154	0	50	13	183	246	1	69	248	33	351	0	1	258	19	278	1029
04:15 PM	0	82	22	6	110	0	45	14	183	242	2	73	230	28	333	0	3	272	13	288	973
04:30 PM	0	139	22	10	171	0	52	14	205	271	2	72	236	26	336	0	2	249	14	265	1043
04:45 PM	0	119	31	8	158	0	41	12	191	244	0	55	252	20	327	0	2	281	22	305	1034
Total	0	451	106	36	593	0	188	53	762	1003	5	269	966	107	1347	0	8	1060	68	1136	4079
05:00 PM	0	123	25	18	166	0	45	10	232	287	1	71	248	28	348	0	0	268	28	296	1097
05:15 PM	0	138	34	19	191	0	62	10	205	277	1	67	228	14	310	0	1	241	24	266	1044
05:30 PM	0	81	34	14	129	0	46	19	170	235	1	70	237	27	335	0	3	281	20	304	1003
05:45 PM	0	63	31	12	106	0	52	23	206	281	2	66	216	17	301	0	7	190	39	236	924
Total	0	405	124	63	592	0	205	62	813	1080	5	274	929	86	1294	0	11	980	111	1102	4068
Grand Total	0	1130	392	144	1666	0	717	269	2455	3441	23	1507	4122	774	6426	0	69	3901	428	4398	15931
Apprch %	0	67.8	23.5	8.6		0	20.8	7.8	71.3		0.4	23.5	64.1	12		0	1.6	88.7	9.7		
Total %	0	7.1	2.5	0.9	10.5	0	4.5	1.7	15.4	21.6	0.1	9.5	25.9	4.9	40.3	0	0.4	24.5	2.7	27.6	
Vehicle	0	1034	353	128	1515	0	690	250	2359	3299	23	1448	3828	703	6002	0	59	3553	411	4023	14839
% Vehicle	0	91.5	90.1	88.9	90.9	0	96.2	92.9	96.1	95.9	100	96.1	92.9	90.8	93.4	0	85.5	91.1	96	91.5	93.1
Trucks	0	96	39	16	151	0	27	19	96	142	0	59	294	71	424	0	10	348	17	375	1092
% Trucks	0	8.5	9.9	11.1	9.1	0	3.8	7.1	3.9	4.1	0	3.9	7.1	9.2	6.6	0	14.5	8.9	4	8.5	6.9

NW 58th Street at NW 79th Avenue

File Name : TMC-9 NW 58th St & NW 79th Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



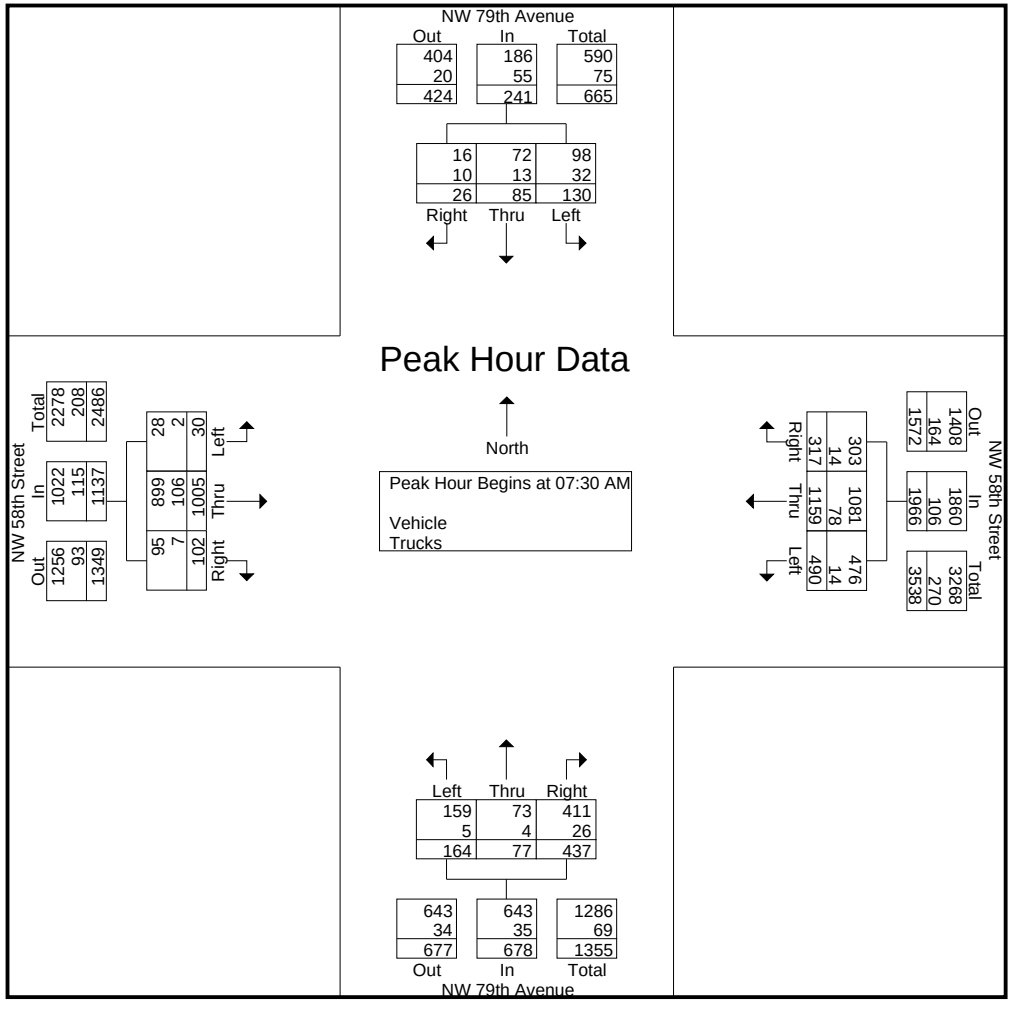
NW 58th Street at NW 79th Avenue

File Name : TMC-9 NW 58th St & NW 79th Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 79th Avenue Southbound					NW 79th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	26	22	**7**	55	0	30	20	126	176	1	**136**	252	64	453	0	7	242	19	268	952
07:45 AM	0	30	17	7	54	0	36	**24**	**128**	**188**	1	120	**350**	81	**552**	0	**12**	257	25	**294**	**1088**
08:00 AM	0	**39**	19	6	64	0	**57**	11	86	154	1	109	302	**109**	521	0	8	242	**31**	281	1020
08:15 AM	0	35	**27**	6	**68**	0	41	22	97	160	**4**	118	255	63	440	0	3	**264**	27	294	962
Total Volume	0	130	85	26	241	0	164	77	437	678	7	483	1159	317	1966	0	30	1005	102	1137	4022
% App. Total	0	53.9	35.3	10.8		0	24.2	11.4	64.5		0.4	24.6	59	16.1		0	2.6	88.4	9		
PHF	.000	.833	.787	.929	.886	.000	.719	.802	.854	.902	.438	.888	.828	.727	.890	.000	.625	.952	.823	.967	.924
Vehicle	0	98	72	16	186	0	159	73	411	643	7	469	1081	303	1860	0	28	899	95	1022	3711
% Vehicle	0	75.4	84.7	61.5	77.2	0	97.0	94.8	94.1	94.8	100	97.1	93.3	95.6	94.6	0	93.3	89.5	93.1	89.9	92.3
Trucks	0	32	13	10	55	0	5	4	26	35	0	14	78	14	106	0	2	106	7	115	311
% Trucks	0	24.6	15.3	38.5	22.8	0	3.0	5.2	5.9	5.2	0	2.9	6.7	4.4	5.4	0	6.7	10.5	6.9	10.1	7.7

NW 58th Street at NW 79th Avenue

File Name : TMC-9 NW 58th St & NW 79th Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



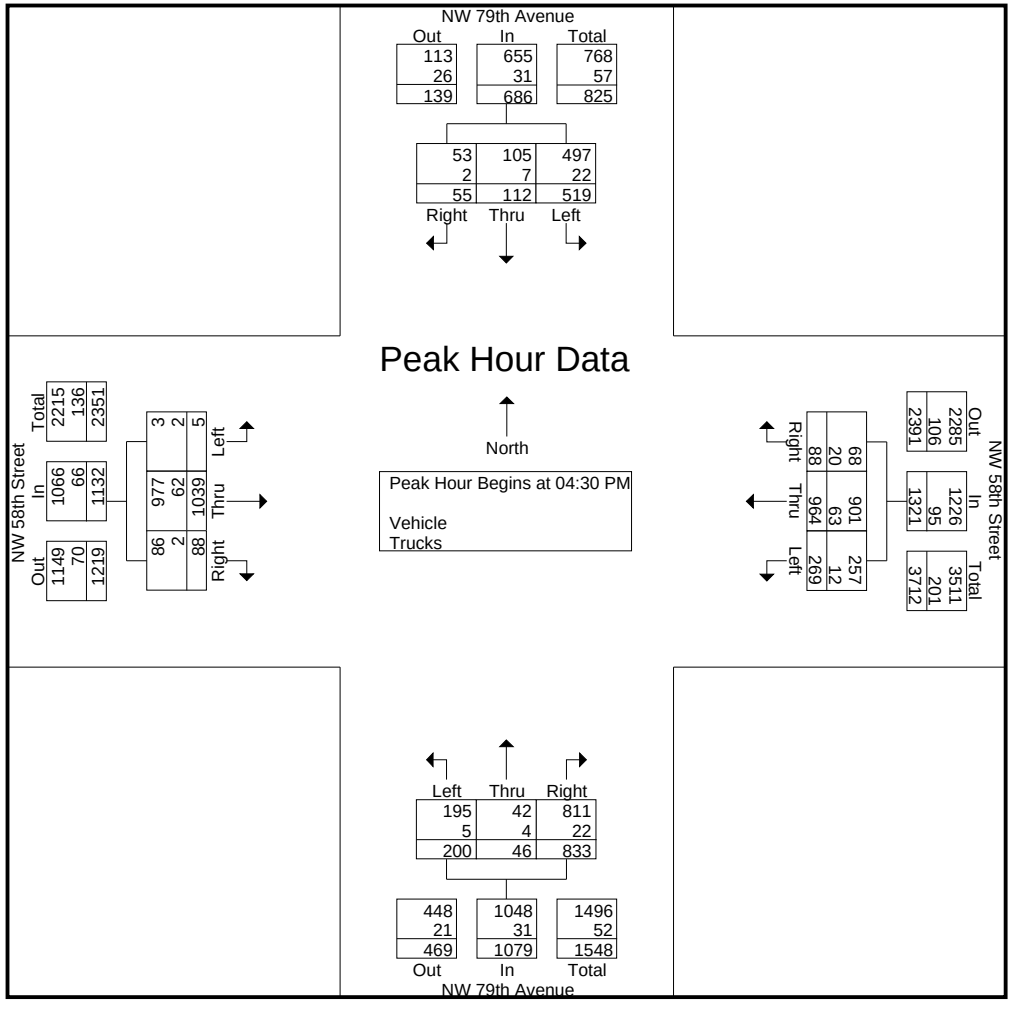
NW 58th Street at NW 79th Avenue

File Name : TMC-9 NW 58th St & NW 79th Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 79th Avenue Southbound					NW 79th Avenue Northbound					NW 58th Street Westbound					NW 58th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	**139**	22	10	171	0	52	**14**	205	271	**2**	**72**	236	26	336	0	**2**	249	14	265	1043
04:45 PM	0	119	31	8	158	0	41	12	191	244	0	55	**252**	20	327	0	2	**281**	22	**305**	1034
05:00 PM	0	123	25	18	166	0	45	10	**232**	**287**	1	71	248	**28**	**348**	0	0	268	**28**	296	**1097**
05:15 PM	0	138	**34**	**19**	**191**	0	**62**	10	205	277	1	67	228	14	310	0	1	241	24	266	1044
Total Volume	0	519	112	55	686	0	200	46	833	1079	4	265	964	88	1321	0	5	1039	88	1132	4218
% App. Total	0	75.7	16.3	8		0	18.5	4.3	77.2		0.3	20.1	73	6.7		0	0.4	91.8	7.8		
PHF	.000	.933	.824	.724	.898	.000	.806	.821	.898	.940	.500	.920	.956	.786	.949	.000	.625	.924	.786	.928	.961
Vehicle	0	497	105	53	655	0	195	42	811	1048	4	253	901	68	1226	0	3	977	86	1066	3995
% Vehicle	0	95.8	93.8	96.4	95.5	0	97.5	91.3	97.4	97.1	100	95.5	93.5	77.3	92.8	0	60.0	94.0	97.7	94.2	94.7
Trucks	0	22	7	2	31	0	5	4	22	31	0	12	63	20	95	0	2	62	2	66	223
% Trucks	0	4.2	6.3	3.6	4.5	0	2.5	8.7	2.6	2.9	0	4.5	6.5	22.7	7.2	0	40.0	6.0	2.3	5.8	5.3

NW 58th Street at NW 79th Avenue

File Name : TMC-9 NW 58th St & NW 79th Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 36th Street at NW 79th Avenue

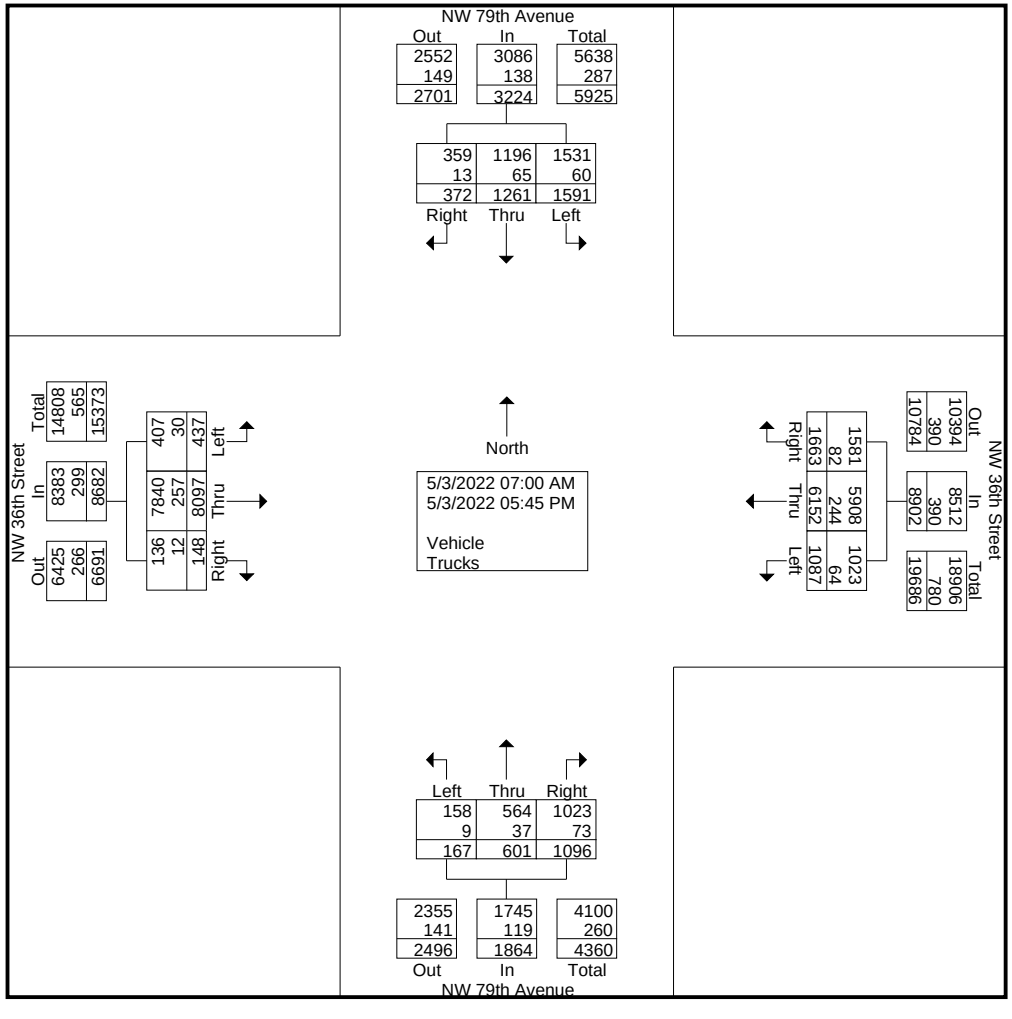
File Name : TMC-10 NW 36th St & NW 79tn Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 79th Avenue Southbound					NW 79th Avenue Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	95	49	23	167	0	3	17	35	55	1	64	310	102	477	2	27	378	6	413	1112
07:15 AM	0	108	53	24	185	0	4	22	37	63	0	71	315	96	482	0	25	425	16	466	1196
07:30 AM	0	82	51	17	150	0	3	21	62	86	2	75	345	107	529	0	18	438	6	462	1227
07:45 AM	0	92	83	18	193	0	8	31	51	90	0	84	458	94	636	0	24	423	10	457	1376
Total	0	377	236	82	695	0	18	91	185	294	3	294	1428	399	2124	2	94	1664	38	1798	4911
08:00 AM	0	81	71	24	176	0	6	30	36	72	1	76	462	120	659	0	23	441	6	470	1377
08:15 AM	0	101	89	17	207	0	7	33	44	84	0	87	384	116	587	0	20	452	7	479	1357
08:30 AM	0	99	83	23	205	0	11	36	42	89	2	92	395	123	612	0	24	457	13	494	1400
08:45 AM	0	97	104	16	217	0	9	34	45	88	0	93	364	131	588	0	33	430	11	474	1367
Total	0	378	347	80	805	0	33	133	167	333	3	348	1605	490	2446	0	100	1780	37	1917	5501
*** BREAK ***																					
04:00 PM	0	104	90	31	225	0	10	42	88	140	2	60	381	88	531	0	24	487	7	518	1414
04:15 PM	0	100	83	22	205	0	13	57	87	157	5	53	373	107	538	1	35	599	12	647	1547
04:30 PM	0	103	75	26	204	0	10	28	106	144	4	45	371	122	542	1	20	613	12	646	1536
04:45 PM	0	93	85	28	206	0	21	40	100	161	4	42	360	103	509	0	32	590	3	625	1501
Total	0	400	333	107	840	0	54	167	381	602	15	200	1485	420	2120	2	111	2289	34	2436	5998
05:00 PM	0	112	76	29	217	0	18	41	114	173	2	39	421	78	540	1	26	601	6	634	1564
05:15 PM	0	94	64	17	175	0	8	49	98	155	5	56	438	84	583	0	27	630	13	670	1583
05:30 PM	0	115	104	28	247	0	19	55	73	147	5	49	384	98	536	1	35	660	10	706	1636
05:45 PM	0	115	101	29	245	0	17	65	78	160	6	62	391	94	553	0	38	473	10	521	1479
Total	0	436	345	103	884	0	62	210	363	635	18	206	1634	354	2212	2	126	2364	39	2531	6262
Grand Total	0	1591	1261	372	3224	0	167	601	1096	1864	39	1048	6152	1663	8902	6	431	8097	148	8682	22672
Apprch %	0	49.3	39.1	11.5		0	9	32.2	58.8		0.4	11.8	69.1	18.7		0.1	5	93.3	1.7		
Total %	0	7	5.6	1.6	14.2	0	0.7	2.7	4.8	8.2	0.2	4.6	27.1	7.3	39.3	0	1.9	35.7	0.7	38.3	
Vehicle	0	1531	1196	359	3086	0	158	564	1023	1745	39	984	5908	1581	8512	6	401	7840	136	8383	21726
% Vehicle	0	96.2	94.8	96.5	95.7	0	94.6	93.8	93.3	93.6	100	93.9	96	95.1	95.6	100	93	96.8	91.9	96.6	95.8
Trucks	0	60	65	13	138	0	9	37	73	119	0	64	244	82	390	0	30	257	12	299	946
% Trucks	0	3.8	5.2	3.5	4.3	0	5.4	6.2	6.7	6.4	0	6.1	4	4.9	4.4	0	7	3.2	8.1	3.4	4.2

NW 36th Street at NW 79th Avenue

File Name : TMC-10 NW 36th St & NW 79tn Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 2



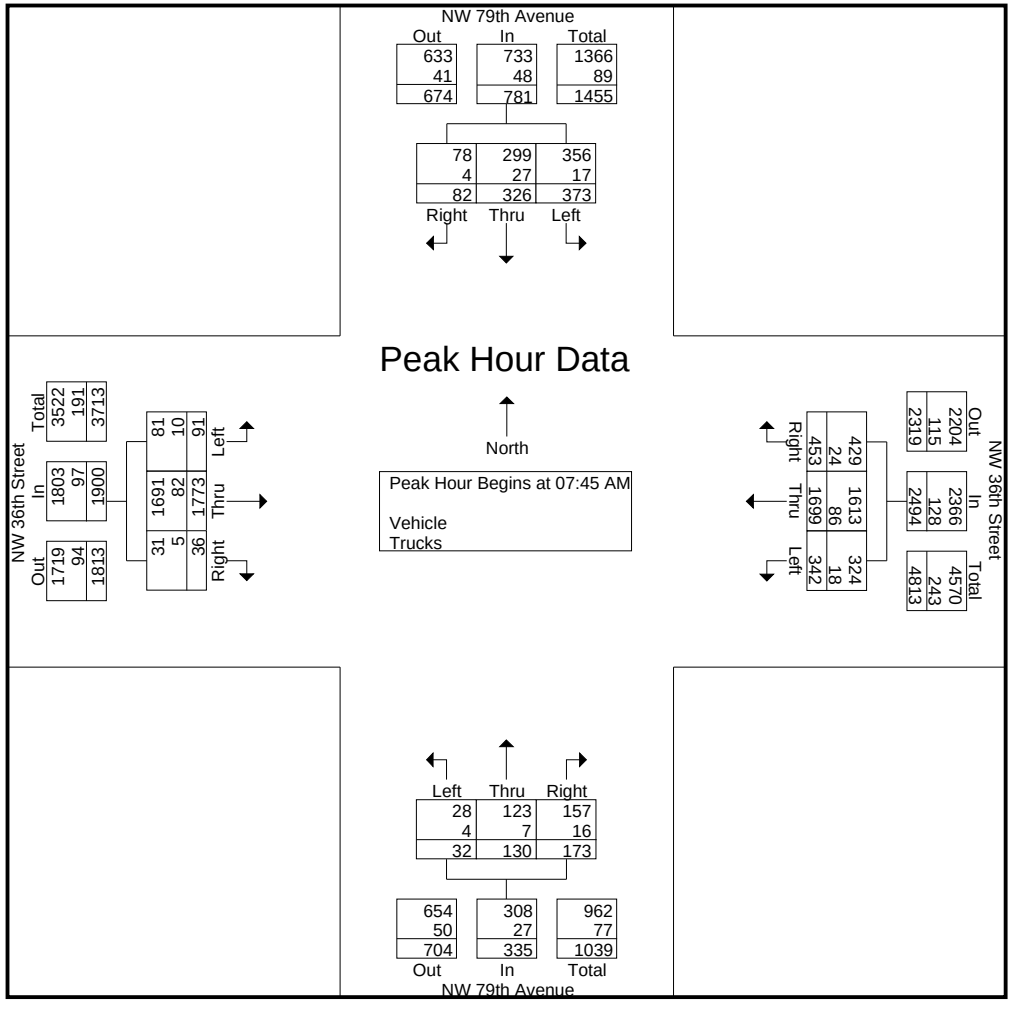
NW 36th Street at NW 79th Avenue

File Name : TMC-10 NW 36th St & NW 79tn Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 3

	NW 79th Avenue Southbound					NW 79th Avenue Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	92	83	18	193	0	8	31	**51**	**90**	0	84	458	94	636	0	**24**	423	10	457	1376
08:00 AM	0	81	71	**24**	176	0	6	30	36	72	1	76	**462**	120	**659**	0	23	441	6	470	1377
08:15 AM	0	**101**	**89**	17	**207**	0	7	33	44	84	0	87	384	116	587	0	20	452	7	479	1357
08:30 AM	0	99	83	23	205	0	**11**	**36**	42	89	**2**	**92**	395	**123**	612	0	24	**457**	**13**	**494**	**1400**
Total Volume	0	373	326	82	781	0	32	130	173	335	3	339	1699	453	2494	0	91	1773	36	1900	5510
% App. Total	0	47.8	41.7	10.5		0	9.6	38.8	51.6		0.1	13.6	68.1	18.2		0	4.8	93.3	1.9		
PHF	.000	.923	.916	.854	.943	.000	.727	.903	.848	.931	.375	.921	.919	.921	.946	.000	.948	.970	.692	.962	.984
Vehicle	0	356	299	78	733	0	28	123	157	308	3	321	1613	429	2366	0	81	1691	31	1803	5210
% Vehicle	0	95.4	91.7	95.1	93.9	0	87.5	94.6	90.8	91.9	100	94.7	94.9	94.7	94.9	0	89.0	95.4	86.1	94.9	94.6
Trucks	0	17	27	4	48	0	4	7	16	27	0	18	86	24	128	0	10	82	5	97	300
% Trucks	0	4.6	8.3	4.9	6.1	0	12.5	5.4	9.2	8.1	0	5.3	5.1	5.3	5.1	0	11.0	4.6	13.9	5.1	5.4

NW 36th Street at NW 79th Avenue

File Name : TMC-10 NW 36th St & NW 79tn Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 4



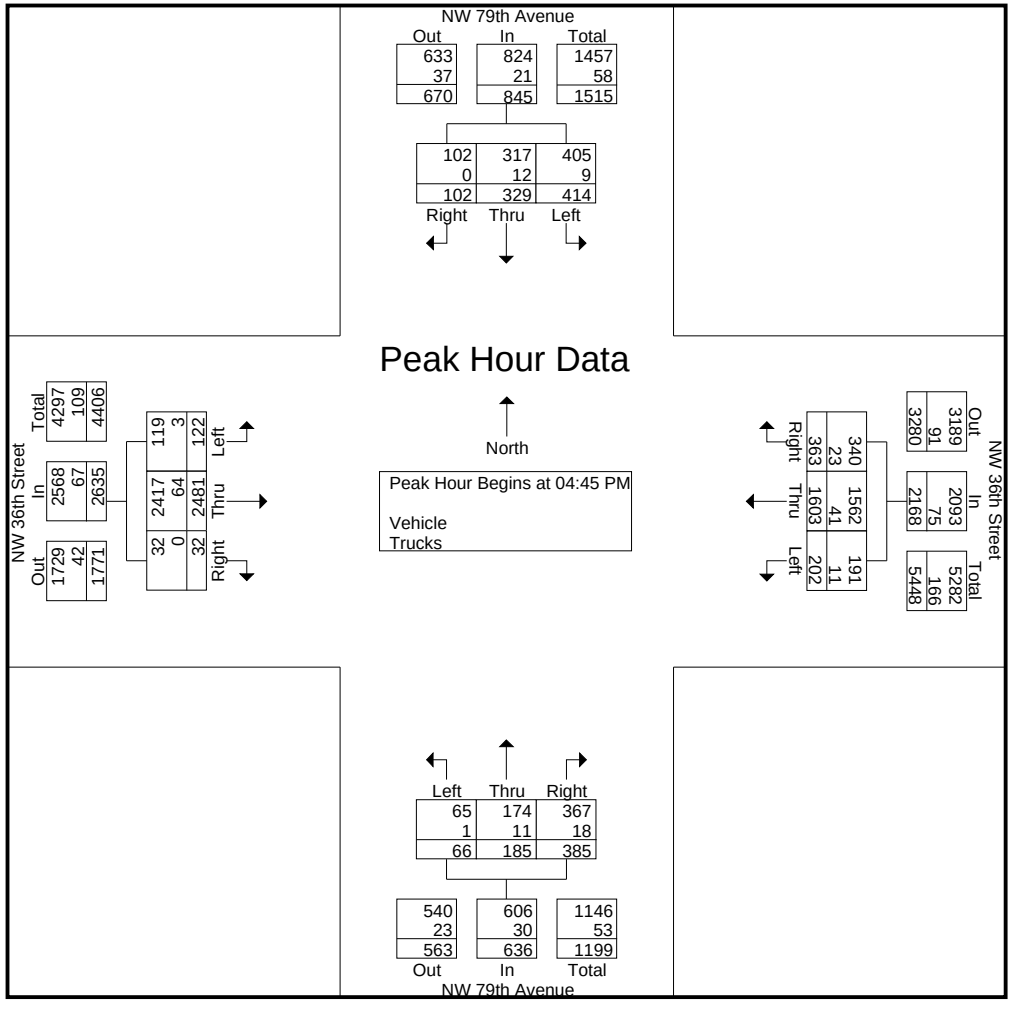
NW 36th Street at NW 79th Avenue

File Name : TMC-10 NW 36th St & NW 79tn Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 5

	NW 79th Avenue Southbound					NW 79th Avenue Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	93	85	28	206	0	**21**	40	100	161	4	42	360	**103**	509	0	32	590	3	625	1501
05:00 PM	0	112	76	**29**	217	0	18	41	**114**	**173**	2	39	421	78	540	**1**	26	601	6	634	1564
05:15 PM	0	94	64	17	175	0	8	49	98	155	**5**	**56**	**438**	84	**583**	0	27	630	**13**	670	1583
05:30 PM	0	**115**	**104**	28	**247**	0	19	**55**	73	147	5	49	384	98	536	1	**35**	**660**	10	**706**	**1636**
Total Volume	0	414	329	102	845	0	66	185	385	636	16	186	1603	363	2168	2	120	2481	32	2635	6284
% App. Total	0	49	38.9	12.1		0	10.4	29.1	60.5		0.7	8.6	73.9	16.7		0.1	4.6	94.2	1.2		
PHF	.000	.900	.791	.879	.855	.000	.786	.841	.844	.919	.800	.830	.915	.881	.930	.500	.857	.940	.615	.933	.960
Vehicle	0	405	317	102	824	0	65	174	367	606	16	175	1562	340	2093	2	117	2417	32	2568	6091
% Vehicle	0	97.8	96.4	100	97.5	0	98.5	94.1	95.3	95.3	100	94.1	97.4	93.7	96.5	100	97.5	97.4	100	97.5	96.9
Trucks	0	9	12	0	21	0	1	11	18	30	0	11	41	23	75	0	3	64	0	67	193
% Trucks	0	2.2	3.6	0	2.5	0	1.5	5.9	4.7	4.7	0	5.9	2.6	6.3	3.5	0	2.5	2.6	0	2.5	3.1

NW 36th Street at NW 79th Avenue

File Name : TMC-10 NW 36th St & NW 79tn Ave
Site Code : 00000000
Start Date : 5/3/2022
Page No : 6



NW 87th Avenue at Windsor at Doral

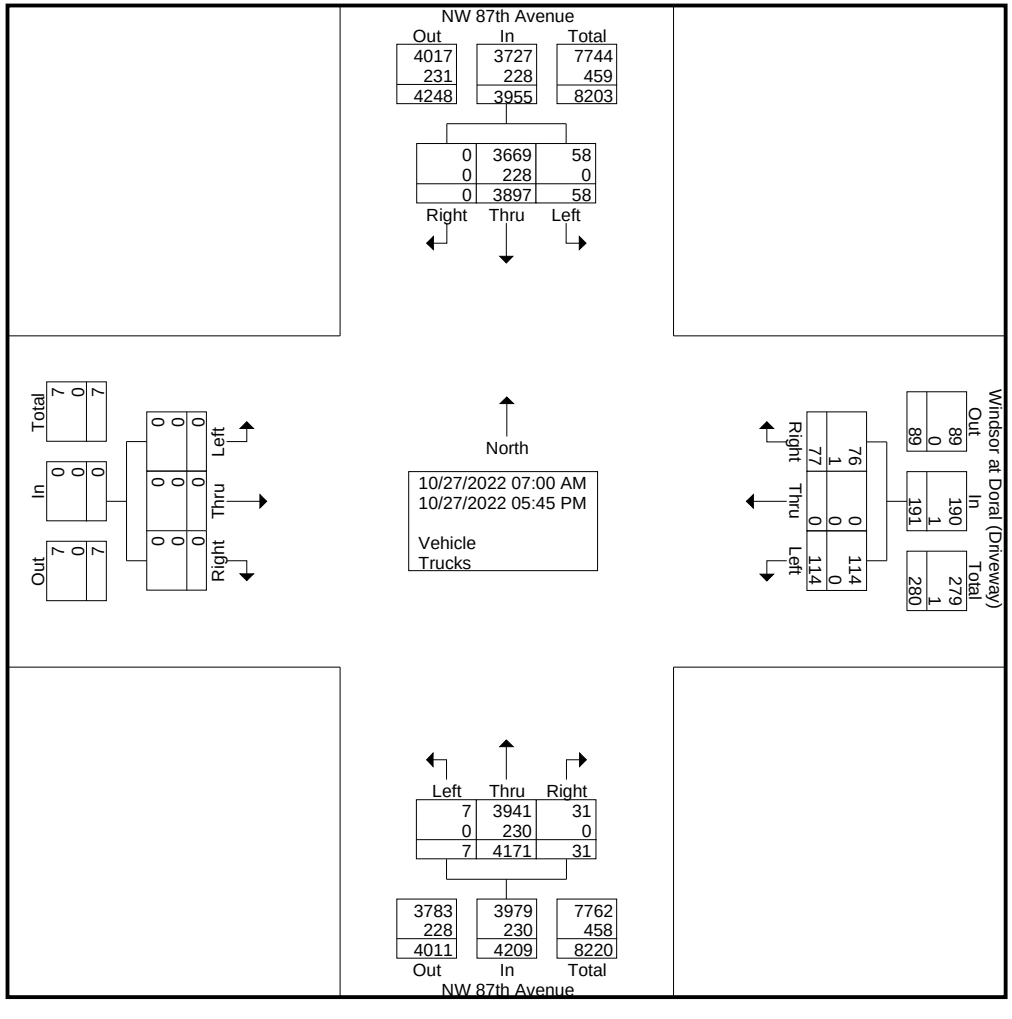
File Name : TMC-1 NW 87th Avenue at Windsor at Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					Windsor at Doral (Driveway) Westbound					Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	180	0	180	0	0	235	0	235	0	1	0	6	7	0	0	0	0	0	422
07:15 AM	0	2	206	0	208	0	0	214	0	214	0	6	0	6	12	0	0	0	0	0	434
07:30 AM	0	1	231	0	232	2	0	212	0	214	0	9	0	6	15	0	0	0	0	0	461
07:45 AM	0	0	246	0	246	0	0	249	4	253	0	7	0	6	13	0	0	0	0	0	512
Total	0	3	863	0	866	2	0	910	4	916	0	23	0	24	47	0	0	0	0	0	1829
08:00 AM	0	3	222	0	225	0	0	278	2	280	0	18	0	6	24	0	0	0	0	0	529
08:15 AM	0	4	211	0	215	0	0	251	0	251	0	8	0	6	14	0	0	0	0	0	480
08:30 AM	1	1	240	0	242	0	0	231	2	233	0	9	0	4	13	0	0	0	0	0	488
08:45 AM	0	3	210	0	213	0	0	215	0	215	0	8	0	6	14	0	0	0	0	0	442
Total	1	11	883	0	895	0	0	975	4	979	0	43	0	22	65	0	0	0	0	0	1939
*** BREAK ***																					
04:00 PM	1	8	275	0	284	1	0	290	3	294	0	4	0	4	8	0	0	0	0	0	586
04:15 PM	1	5	292	0	298	0	0	282	4	286	0	9	0	5	14	0	0	0	0	0	598
04:30 PM	0	5	293	0	298	2	0	265	3	270	0	8	0	6	14	0	0	0	0	0	582
04:45 PM	1	3	263	0	267	0	0	269	2	271	0	4	0	1	5	0	0	0	0	0	543
Total	3	21	1123	0	1147	3	0	1106	12	1121	0	25	0	16	41	0	0	0	0	0	2309
05:00 PM	1	3	275	0	279	2	0	286	3	291	0	6	0	5	11	0	0	0	0	0	581
05:15 PM	0	3	250	0	253	0	0	293	1	294	0	3	0	0	3	0	0	0	0	0	550
05:30 PM	0	6	260	0	266	0	0	300	2	302	0	8	0	7	15	0	0	0	0	0	583
05:45 PM	2	4	243	0	249	0	0	301	5	306	0	6	0	3	9	0	0	0	0	0	564
Total	3	16	1028	0	1047	2	0	1180	11	1193	0	23	0	15	38	0	0	0	0	0	2278
Grand Total	7	51	3897	0	3955	7	0	4171	31	4209	0	114	0	77	191	0	0	0	0	0	8355
Apprch %	0.2	1.3	98.5	0		0.2	0	99.1	0.7		0	59.7	0	40.3		0	0	0	0		
Total %	0.1	0.6	46.6	0	47.3	0.1	0	49.9	0.4	50.4	0	1.4	0	0.9	2.3	0	0	0	0	0	
Vehicle	7	51	3669	0	3727	7	0	3941	31	3979	0	114	0	76	190	0	0	0	0	0	7896
% Vehicle	100	100	94.1	0	94.2	100	0	94.5	100	94.5	0	100	0	98.7	99.5	0	0	0	0	0	94.5
Trucks	0	0	228	0	228	0	0	230	0	230	0	0	0	1	1	0	0	0	0	0	459
% Trucks	0	0	5.9	0	5.8	0	0	5.5	0	5.5	0	0	0	1.3	0.5	0	0	0	0	0	5.5

NW 87th Avenue at Windsor at Doral

File Name : TMC-1 NW 87th Avenue at Windsor at Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 2



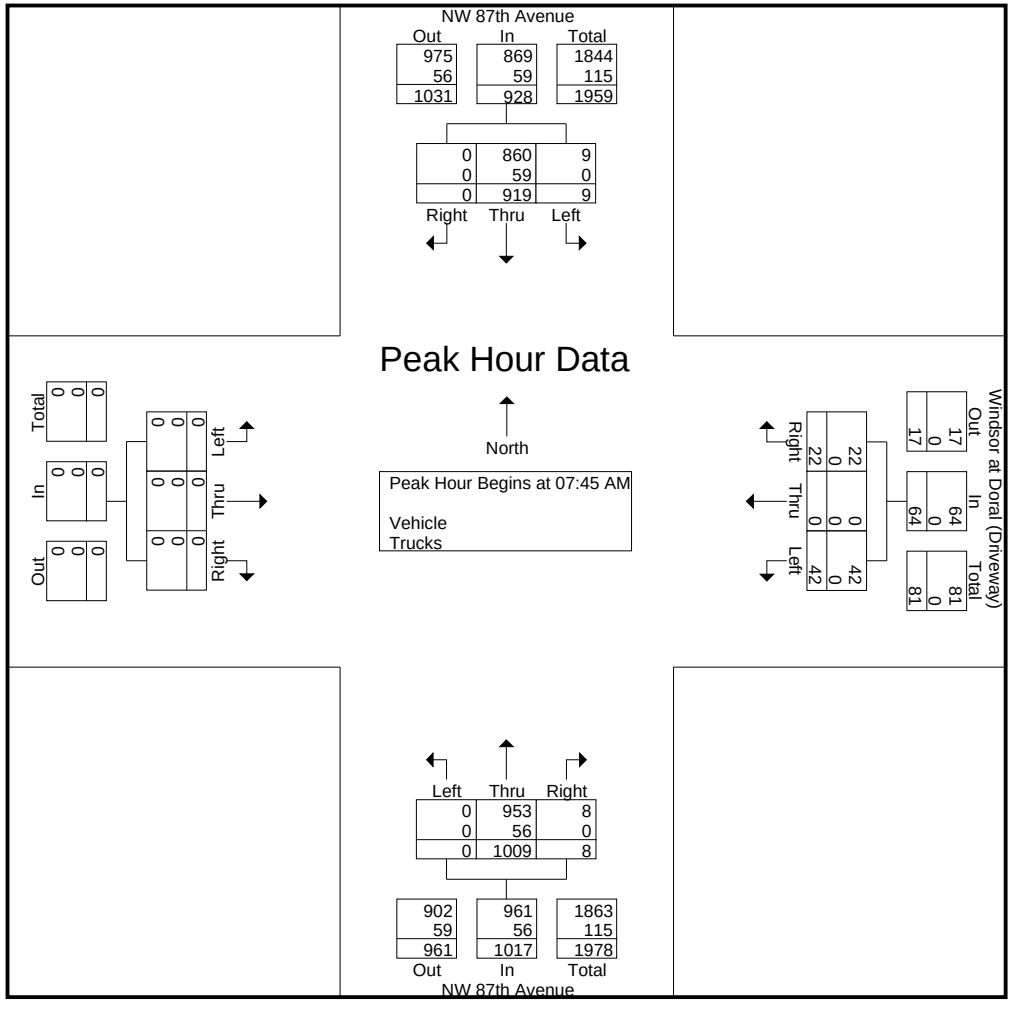
NW 87th Avenue at Windsor at Doral

File Name : TMC-1 NW 87th Avenue at Windsor at Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 3

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					Windsor at Doral (Driveway) Westbound					Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	**246**	0	**246**	0	0	249	**4**	253	0	7	0	**6**	13	0	0	0	0	0	512
08:00 AM	0	3	222	0	225	0	0	**278**	2	**280**	0	**18**	0	6	**24**	0	0	0	0	0	**529**
08:15 AM	0	**4**	211	0	215	0	0	251	0	251	0	8	0	6	14	0	0	0	0	0	480
08:30 AM	**1**	1	240	0	242	0	0	231	2	233	0	9	0	4	13	0	0	0	0	0	488
Total Volume	1	8	919	0	928	0	0	1009	8	1017	0	42	0	22	64	0	0	0	0	0	2009
% App. Total	0.1	0.9	99	0		0	0	99.2	0.8		0	65.6	0	34.4		0	0	0	0		
PHF	.250	.500	.934	.000	.943	.000	.000	.907	.500	.908	.000	.583	.000	.917	.667	.000	.000	.000	.000	.000	.949
Vehicle	1	8	860	0	869	0	0	953	8	961	0	42	0	22	64	0	0	0	0	0	1894
% Vehicle	100	100	93.6	0	93.6	0	0	94.4	100	94.5	0	100	0	100	100	0	0	0	0	0	94.3
Trucks	0	0	59	0	59	0	0	56	0	56	0	0	0	0	0	0	0	0	0	0	115
% Trucks	0	0	6.4	0	6.4	0	0	5.6	0	5.5	0	0	0	0	0	0	0	0	0	0	5.7

NW 87th Avenue at Windsor at Doral

File Name : TMC-1 NW 87th Avenue at Windsor at Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 4



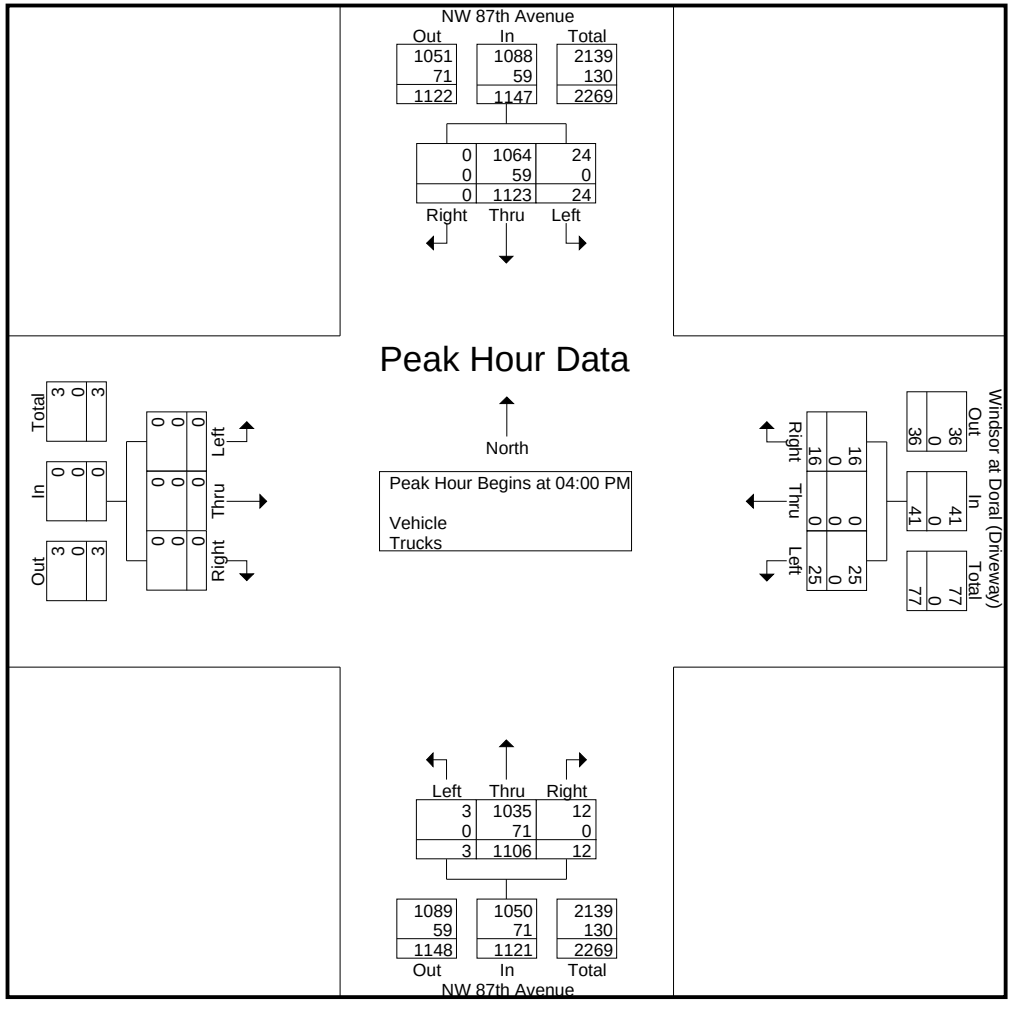
NW 87th Avenue at Windsor at Doral

File Name : TMC-1 NW 87th Avenue at Windsor at Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 5

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					Windsor at Doral (Driveway) Westbound					Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**1**	**8**	275	0	284	1	0	**290**	3	**294**	0	4	0	4	8	0	0	0	0	0	586
04:15 PM	1	5	292	0	**298**	0	0	282	**4**	286	0	**9**	0	5	**14**	0	0	0	0	0	**598**
04:30 PM	0	5	**293**	0	298	**2**	0	265	3	270	0	8	0	**6**	14	0	0	0	0	0	582
04:45 PM	1	3	263	0	267	0	0	269	2	271	0	4	0	1	5	0	0	0	0	0	543
Total Volume	3	21	1123	0	1147	3	0	1106	12	1121	0	25	0	16	41	0	0	0	0	0	2309
% App. Total	0.3	1.8	97.9	0		0.3	0	98.7	1.1		0	61	0	39		0	0	0	0		
PHF	.750	.656	.958	.000	.962	.375	.000	.953	.750	.953	.000	.694	.000	.667	.732	.000	.000	.000	.000	.000	.965
Vehicle	3	21	1064	0	1088	3	0	1035	12	1050	0	25	0	16	41	0	0	0	0	0	2179
% Vehicle	100	100	94.7	0	94.9	100	0	93.6	100	93.7	0	100	0	100	100	0	0	0	0	0	94.4
Trucks	0	0	59	0	59	0	0	71	0	71	0	0	0	0	0	0	0	0	0	0	130
% Trucks	0	0	5.3	0	5.1	0	0	6.4	0	6.3	0	0	0	0	0	0	0	0	0	0	5.6

NW 87th Avenue at Windsor at Doral

File Name : TMC-1 NW 87th Avenue at Windsor at Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 6



NW 87th Avenue at 8669 AWS (Driveway)

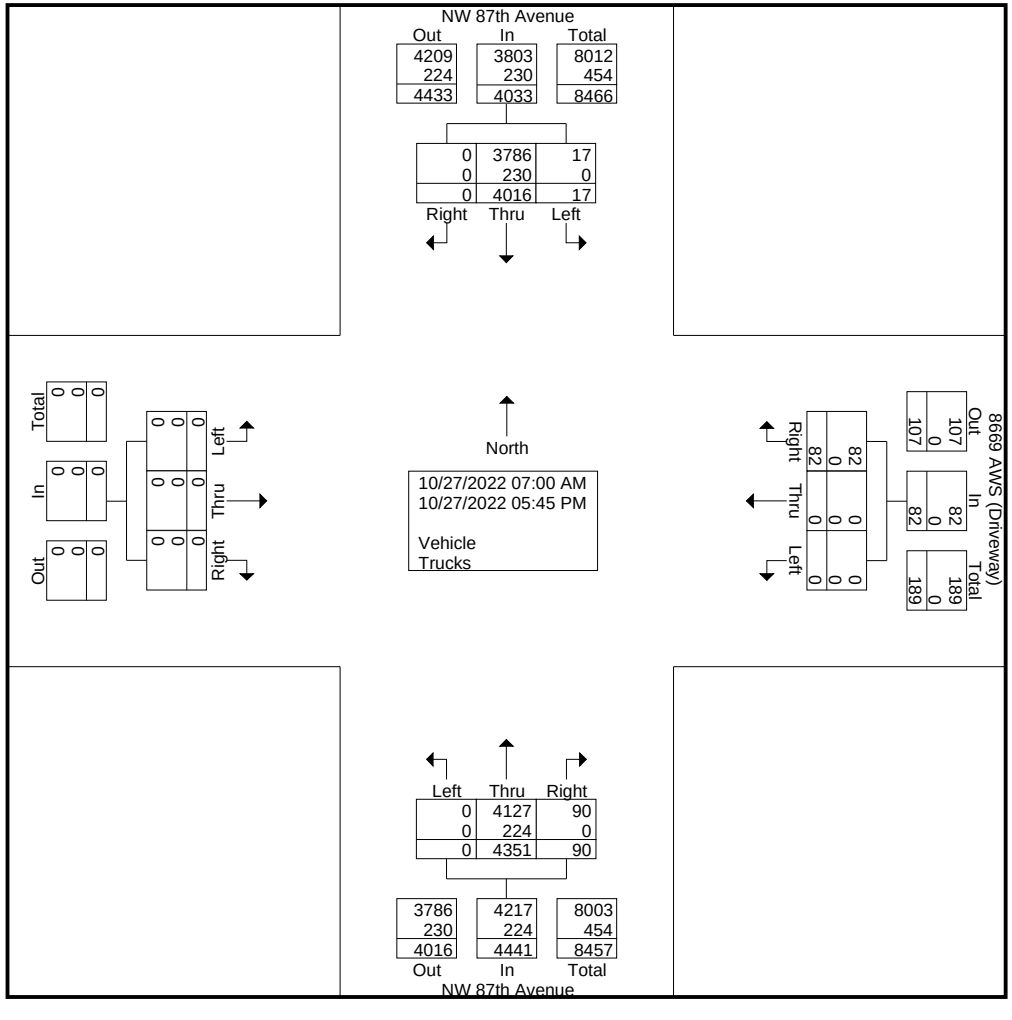
File Name : TMC-2 NW 87th Avenue at 8669 AWS (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					8669 AWS (Driveway) Westbound					Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	181	0	181	0	0	233	3	236	0	0	0	4	4	0	0	0	0	0	421
07:15 AM	1	1	212	0	214	0	0	229	1	230	0	0	0	2	2	0	0	0	0	0	446
07:30 AM	0	0	240	0	240	0	0	231	2	233	0	0	0	1	1	0	0	0	0	0	474
07:45 AM	0	0	252	0	252	0	0	257	4	261	0	0	0	4	4	0	0	0	0	0	517
Total	1	1	885	0	887	0	0	950	10	960	0	0	0	11	11	0	0	0	0	0	1858
08:00 AM	0	0	240	0	240	0	0	292	7	299	0	0	0	3	3	0	0	0	0	0	542
08:15 AM	0	0	222	0	222	0	0	268	5	273	0	0	0	4	4	0	0	0	0	0	499
08:30 AM	0	0	248	0	248	0	0	249	8	257	0	0	0	3	3	0	0	0	0	0	508
08:45 AM	0	3	218	0	221	0	0	226	12	238	0	0	0	3	3	0	0	0	0	0	462
Total	0	3	928	0	931	0	0	1035	32	1067	0	0	0	13	13	0	0	0	0	0	2011
*** BREAK ***																					
04:00 PM	1	2	279	0	282	0	0	310	6	316	0	0	0	9	9	0	0	0	0	0	607
04:15 PM	0	1	302	0	303	0	0	272	8	280	0	0	0	7	7	0	0	0	0	0	590
04:30 PM	1	2	303	0	306	0	0	268	6	274	0	0	0	8	8	0	0	0	0	0	588
04:45 PM	0	1	267	0	268	0	0	272	5	277	0	0	0	10	10	0	0	0	0	0	555
Total	2	6	1151	0	1159	0	0	1122	25	1147	0	0	0	34	34	0	0	0	0	0	2340
05:00 PM	0	1	279	0	280	0	0	308	7	315	0	0	0	7	7	0	0	0	0	0	602
05:15 PM	0	1	254	0	255	0	0	300	5	305	0	0	0	5	5	0	0	0	0	0	565
05:30 PM	0	1	270	0	271	0	0	312	5	317	0	0	0	7	7	0	0	0	0	0	595
05:45 PM	0	1	249	0	250	0	0	324	6	330	0	0	0	5	5	0	0	0	0	0	585
Total	0	4	1052	0	1056	0	0	1244	23	1267	0	0	0	24	24	0	0	0	0	0	2347
Grand Total	3	14	4016	0	4033	0	0	4351	90	4441	0	0	0	82	82	0	0	0	0	0	8556
Apprch %	0.1	0.3	99.6	0		0	0	98	2		0	0	0	100		0	0	0	0		
Total %	0	0.2	46.9	0	47.1	0	0	50.9	1.1	51.9	0	0	0	1	1	0	0	0	0	0	
Vehicle	3	14	3786	0	3803	0	0	4127	90	4217	0	0	0	82	82	0	0	0	0	0	8102
% Vehicle	100	100	94.3	0	94.3	0	0	94.9	100	95	0	0	0	100	100	0	0	0	0	0	94.7
Trucks	0	0	230	0	230	0	0	224	0	224	0	0	0	0	0	0	0	0	0	0	454
% Trucks	0	0	5.7	0	5.7	0	0	5.1	0	5	0	0	0	0	0	0	0	0	0	0	5.3

NW 87th Avenue at 8669 AWS (Driveway)

File Name : TMC-2 NW 87th Avenue at 8669 AWS (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 2



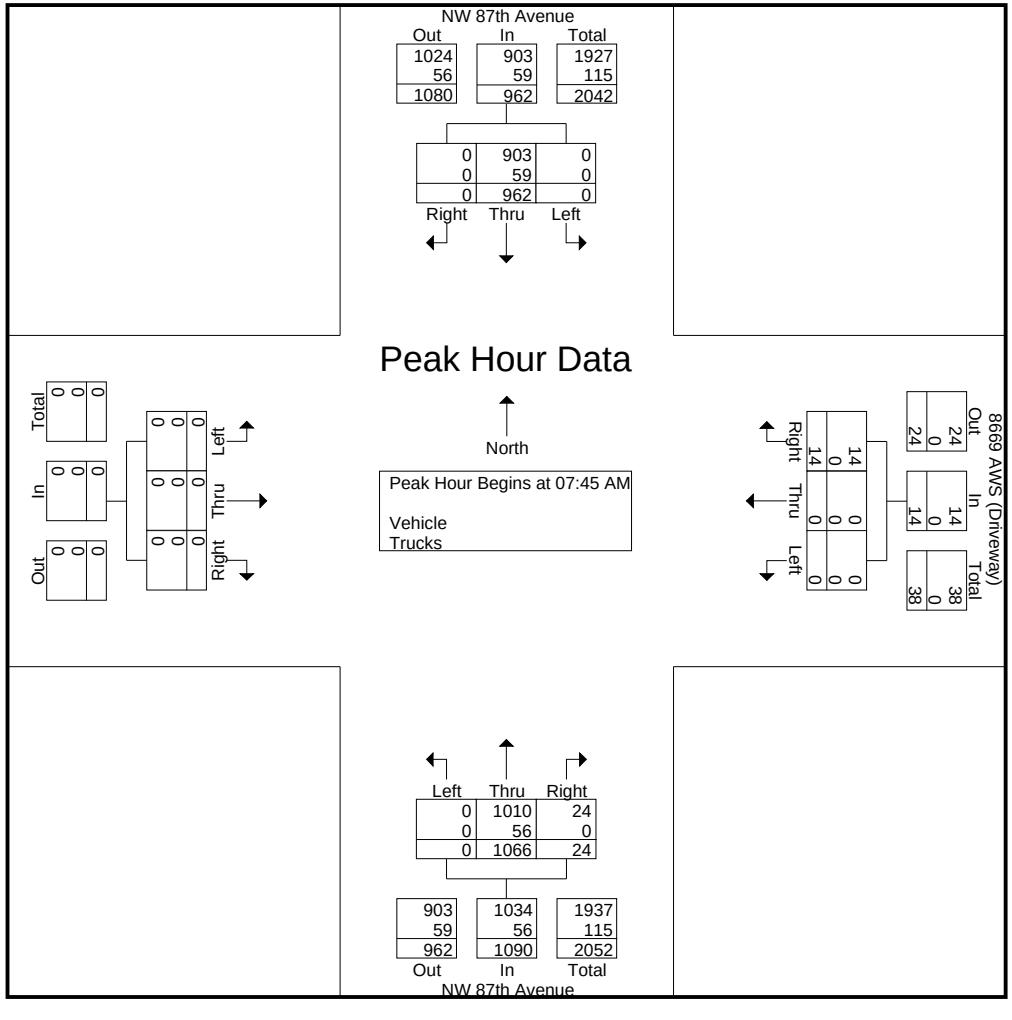
NW 87th Avenue at 8669 AWS (Driveway)

File Name : TMC-2 NW 87th Avenue at 8669 AWS (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 3

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					8669 AWS (Driveway) Westbound					Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	**252**	0	**252**	0	0	257	4	261	0	0	0	**4**	**4**	0	0	0	0	0	517
08:00 AM	0	0	240	0	240	0	0	**292**	7	**299**	0	0	0	3	3	0	0	0	0	0	**542**
08:15 AM	0	0	222	0	222	0	0	268	5	273	0	0	0	4	4	0	0	0	0	0	499
08:30 AM	0	0	248	0	248	0	0	249	**8**	257	0	0	0	3	3	0	0	0	0	0	508
Total Volume	0	0	962	0	962	0	0	1066	24	1090	0	0	0	14	14	0	0	0	0	0	2066
% App. Total	0	0	100	0		0	0	97.8	2.2		0	0	0	100		0	0	0	0		
PHF	.000	.000	.954	.000	.954	.000	.000	.913	.750	.911	.000	.000	.000	.875	.875	.000	.000	.000	.000	.000	.953
Vehicle	0	0	903	0	903	0	0	1010	24	1034	0	0	0	14	14	0	0	0	0	0	1951
% Vehicle	0	0	93.9	0	93.9	0	0	94.7	100	94.9	0	0	0	100	100	0	0	0	0	0	94.4
Trucks	0	0	59	0	59	0	0	56	0	56	0	0	0	0	0	0	0	0	0	0	115
% Trucks	0	0	6.1	0	6.1	0	0	5.3	0	5.1	0	0	0	0	0	0	0	0	0	0	5.6

NW 87th Avenue at 8669 AWS (Driveway)

File Name : TMC-2 NW 87th Avenue at 8669 AWS (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 4



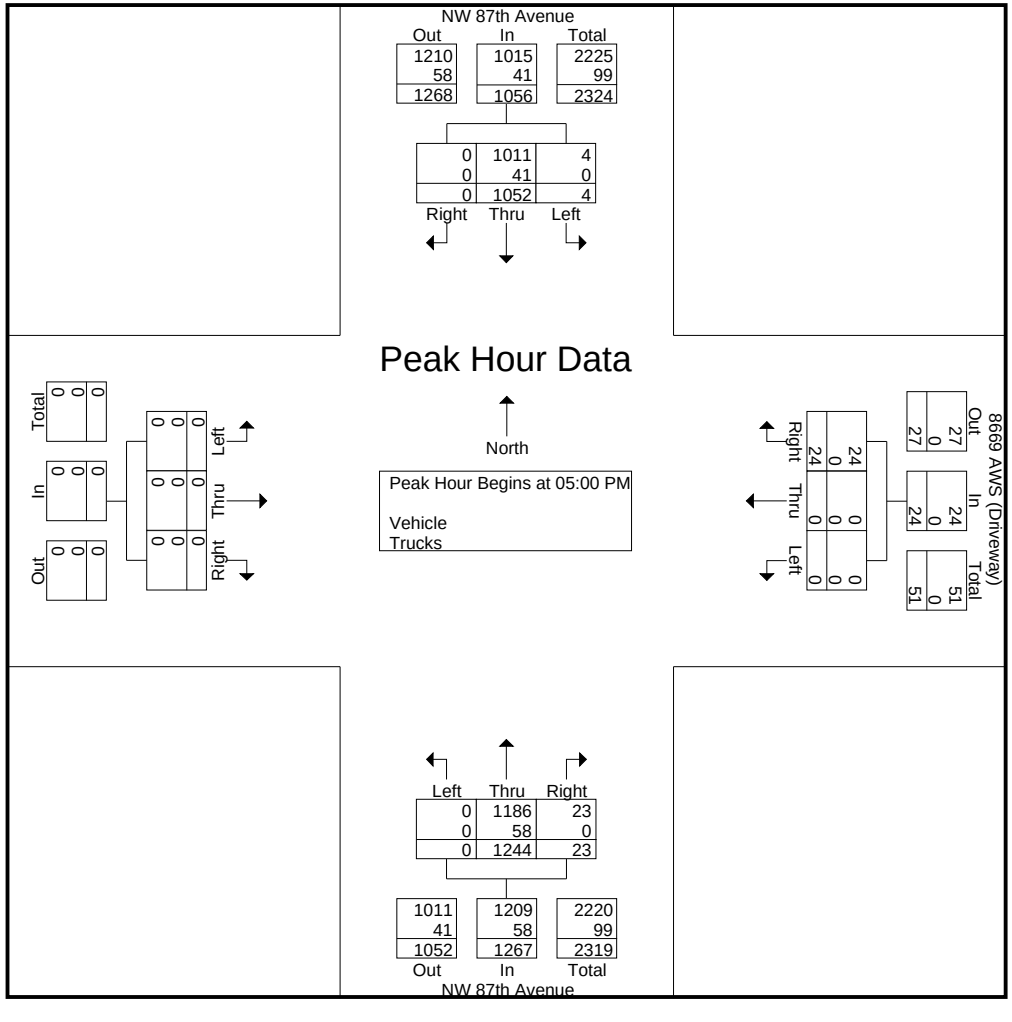
NW 87th Avenue at 8669 AWS (Driveway)

File Name : TMC-2 NW 87th Avenue at 8669 AWS (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 5

	NW 87th Avenue Southbound					NW 87th Avenue Northbound					8669 AWS (Driveway) Westbound					Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	**1**	**279**	0	**280**	0	0	308	**7**	315	0	0	0	**7**	**7**	0	0	0	0	0	**602**
05:15 PM	0	1	254	0	255	0	0	300	5	305	0	0	0	5	5	0	0	0	0	0	565
05:30 PM	0	1	270	0	271	0	0	312	5	317	0	0	0	7	7	0	0	0	0	0	595
05:45 PM	0	1	249	0	250	0	0	**324**	6	**330**	0	0	0	5	5	0	0	0	0	0	585
Total Volume	0	4	1052	0	1056	0	0	1244	23	1267	0	0	0	24	24	0	0	0	0	0	2347
% App. Total	0	0.4	99.6	0		0	0	98.2	1.8		0	0	0	100		0	0	0	0		
PHF	.000	1.00	.943	.000	.943	.000	.000	.960	.821	.960	.000	.000	.000	.857	.857	.000	.000	.000	.000	.000	.975
Vehicle	0	4	1011	0	1015	0	0	1186	23	1209	0	0	0	24	24	0	0	0	0	0	2248
% Vehicle	0	100	96.1	0	96.1	0	0	95.3	100	95.4	0	0	0	100	100	0	0	0	0	0	95.8
Trucks	0	0	41	0	41	0	0	58	0	58	0	0	0	0	0	0	0	0	0	0	99
% Trucks	0	0	3.9	0	3.9	0	0	4.7	0	4.6	0	0	0	0	0	0	0	0	0	0	4.2

NW 87th Avenue at 8669 AWS (Driveway)

File Name : TMC-2 NW 87th Avenue at 8669 AWS (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 6



NW 36th Street at Centrum Doral (Driveway)

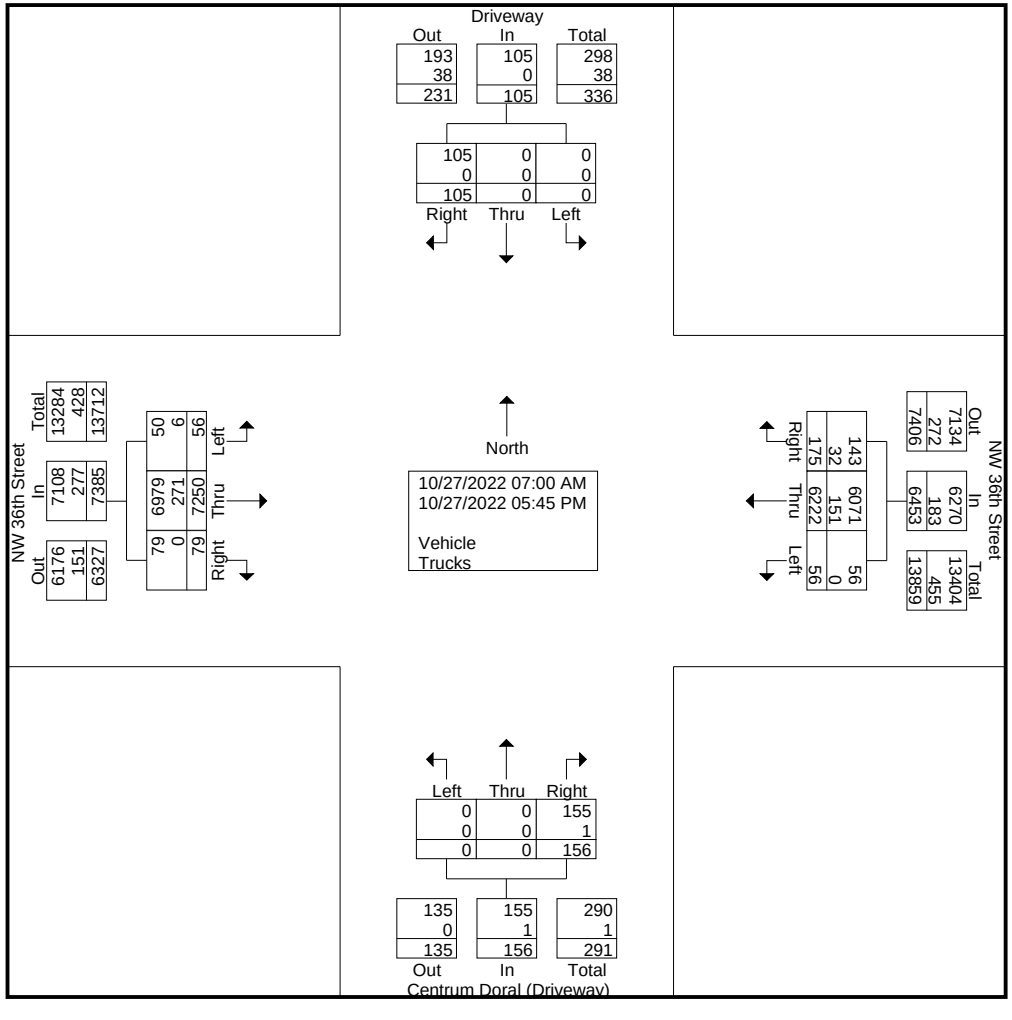
File Name : TMC-3 NW 36th Street at Centrum Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	Driveway Southbound					Centrum Doral (Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	3	3	0	0	0	5	5	1	1	302	11	315	0	1	468	1	470	793
07:15 AM	0	0	0	2	2	0	0	0	4	4	0	0	276	25	301	0	5	488	5	498	805
07:30 AM	0	0	0	4	4	0	0	0	7	7	0	1	321	34	356	0	11	552	3	566	933
07:45 AM	0	0	0	6	6	0	0	0	2	2	3	4	376	22	405	0	9	595	3	607	1020
Total	0	0	0	15	15	0	0	0	18	18	4	6	1275	92	1377	0	26	2103	12	2141	3551
08:00 AM	0	0	0	5	5	0	0	0	2	2	0	4	407	12	423	0	8	561	6	575	1005
08:15 AM	0	0	0	8	8	0	0	0	4	4	2	3	379	10	394	0	6	533	9	548	954
08:30 AM	0	0	0	7	7	0	0	0	8	8	0	4	360	11	375	0	4	556	7	567	957
08:45 AM	0	0	0	9	9	0	0	0	6	6	4	9	325	7	345	0	4	519	6	529	889
Total	0	0	0	29	29	0	0	0	20	20	6	20	1471	40	1537	0	22	2169	28	2219	3805
*** BREAK ***																					
04:00 PM	0	0	0	8	8	0	0	0	14	14	1	1	398	11	411	0	3	414	5	422	855
04:15 PM	0	0	0	11	11	0	0	0	16	16	0	2	446	7	455	0	2	398	8	408	890
04:30 PM	0	0	0	7	7	0	0	0	13	13	1	1	463	6	471	0	1	388	4	393	884
04:45 PM	0	0	0	9	9	0	0	0	13	13	2	3	431	5	441	0	0	333	2	335	798
Total	0	0	0	35	35	0	0	0	56	56	4	7	1738	29	1778	0	6	1533	19	1558	3427
05:00 PM	0	0	0	5	5	0	0	0	14	14	0	3	441	2	446	0	1	423	8	432	897
05:15 PM	0	0	0	7	7	0	0	0	19	19	1	2	450	5	458	0	0	402	3	405	889
05:30 PM	0	0	0	6	6	0	0	0	18	18	1	0	435	4	440	0	0	325	4	329	793
05:45 PM	0	0	0	8	8	0	0	0	11	11	2	0	412	3	417	0	1	295	5	301	737
Total	0	0	0	26	26	0	0	0	62	62	4	5	1738	14	1761	0	2	1445	20	1467	3316
Grand Total	0	0	0	105	105	0	0	0	156	156	18	38	6222	175	6453	0	56	7250	79	7385	14099
Apprch %	0	0	0	100		0	0	0	100		0.3	0.6	96.4	2.7		0	0.8	98.2	1.1		
Total %	0	0	0	0.7	0.7	0	0	0	1.1	1.1	0.1	0.3	44.1	1.2	45.8	0	0.4	51.4	0.6	52.4	
Vehicle	0	0	0	105	105	0	0	0	155	155	18	38	6071	143	6270	0	50	6979	79	7108	13638
% Vehicle	0	0	0	100	100	0	0	0	99.4	99.4	100	100	97.6	81.7	97.2	0	89.3	96.3	100	96.2	96.7
Trucks	0	0	0	0	0	0	0	0	1	1	0	0	151	32	183	0	6	271	0	277	461
% Trucks	0	0	0	0	0	0	0	0	0.6	0.6	0	0	2.4	18.3	2.8	0	10.7	3.7	0	3.8	3.3

NW 36th Street at Centrum Doral (Driveway)

File Name : TMC-3 NW 36th Street at Centrum Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 2



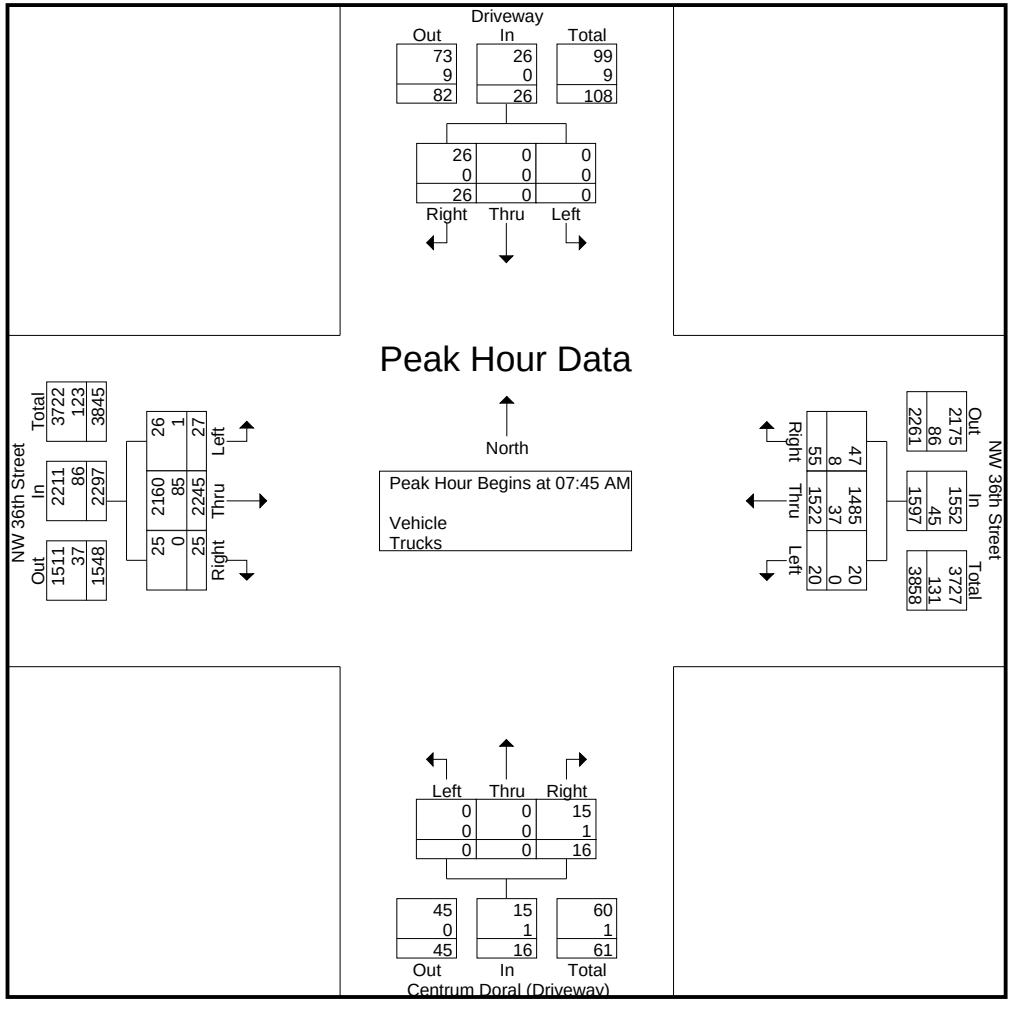
NW 36th Street at Centrum Doral (Driveway)

File Name : TMC-3 NW 36th Street at Centrum Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 3

	Driveway Southbound					Centrum Doral (Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	6	6	0	0	0	2	2	**3**	**4**	376	**22**	405	0	**9**	**595**	3	**607**	**1020**
08:00 AM	0	0	0	5	5	0	0	0	2	2	0	4	**407**	12	**423**	0	8	561	6	575	1005
08:15 AM	0	0	0	**8**	**8**	0	0	0	4	4	2	3	379	10	394	0	6	533	**9**	548	954
08:30 AM	0	0	0	7	7	0	0	0	**8**	**8**	0	4	360	11	375	0	4	556	7	567	957
Total Volume	0	0	0	26	26	0	0	0	16	16	5	15	1522	55	1597	0	27	2245	25	2297	3936
% App. Total	0	0	0	100		0	0	0	100		0.3	0.9	95.3	3.4		0	1.2	97.7	1.1		
PHF	.000	.000	.000	.813	.813	.000	.000	.000	.500	.500	.417	.938	.935	.625	.944	.000	.750	.943	.694	.946	.965
Vehicle	0	0	0	26	26	0	0	0	15	15	5	15	1485	47	1552	0	26	2160	25	2211	3804
% Vehicle	0	0	0	100	100	0	0	0	93.8	93.8	100	100	97.6	85.5	97.2	0	96.3	96.2	100	96.3	96.6
Trucks	0	0	0	0	0	0	0	0	1	1	0	0	37	8	45	0	1	85	0	86	132
% Trucks	0	0	0	0	0	0	0	0	6.3	6.3	0	0	2.4	14.5	2.8	0	3.7	3.8	0	3.7	3.4

NW 36th Street at Centrum Doral (Driveway)

File Name : TMC-3 NW 36th Street at Centrum Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 4



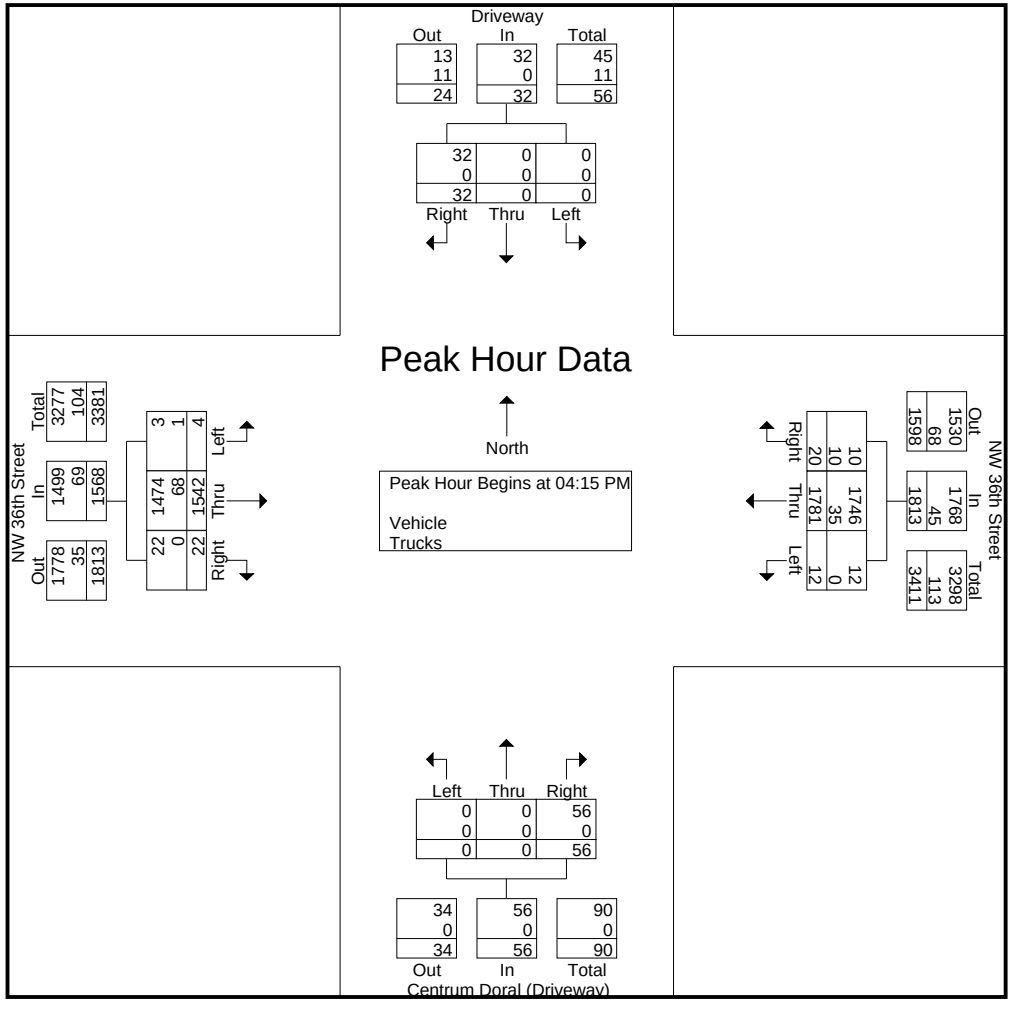
NW 36th Street at Centrum Doral (Driveway)

File Name : TMC-3 NW 36th Street at Centrum Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 5

	Driveway Southbound					Centrum Doral (Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	**11**	**11**	0	0	0	**16**	**16**	0	2	446	**7**	455	0	**2**	398	**8**	408	890
04:30 PM	0	0	0	7	7	0	0	0	13	13	1	1	**463**	6	**471**	0	1	388	4	393	884
04:45 PM	0	0	0	9	9	0	0	0	13	13	**2**	**3**	431	5	441	0	0	333	2	335	798
05:00 PM	0	0	0	5	5	0	0	0	14	14	0	3	441	2	446	0	1	**423**	8	**432**	**897**
Total Volume	0	0	0	32	32	0	0	0	56	56	3	9	1781	20	1813	0	4	1542	22	1568	3469
% App. Total	0	0	0	100		0	0	0	100		0.2	0.5	98.2	1.1		0	0.3	98.3	1.4		
PHF	.000	.000	.000	.727	.727	.000	.000	.000	.875	.875	.375	.750	.962	.714	.962	.000	.500	.911	.688	.907	.967
Vehicle	0	0	0	32	32	0	0	0	56	56	3	9	1746	10	1768	0	3	1474	22	1499	3355
% Vehicle	0	0	0	100	100	0	0	0	100	100	100	100	98.0	50.0	97.5	0	75.0	95.6	100	95.6	96.7
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	35	10	45	0	1	68	0	69	114
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	2.0	50.0	2.5	0	25.0	4.4	0	4.4	3.3

NW 36th Street at Centrum Doral (Driveway)

File Name : TMC-3 NW 36th Street at Centrum Doral (Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 6



NW 36th Street at AT&T (East Driveway)

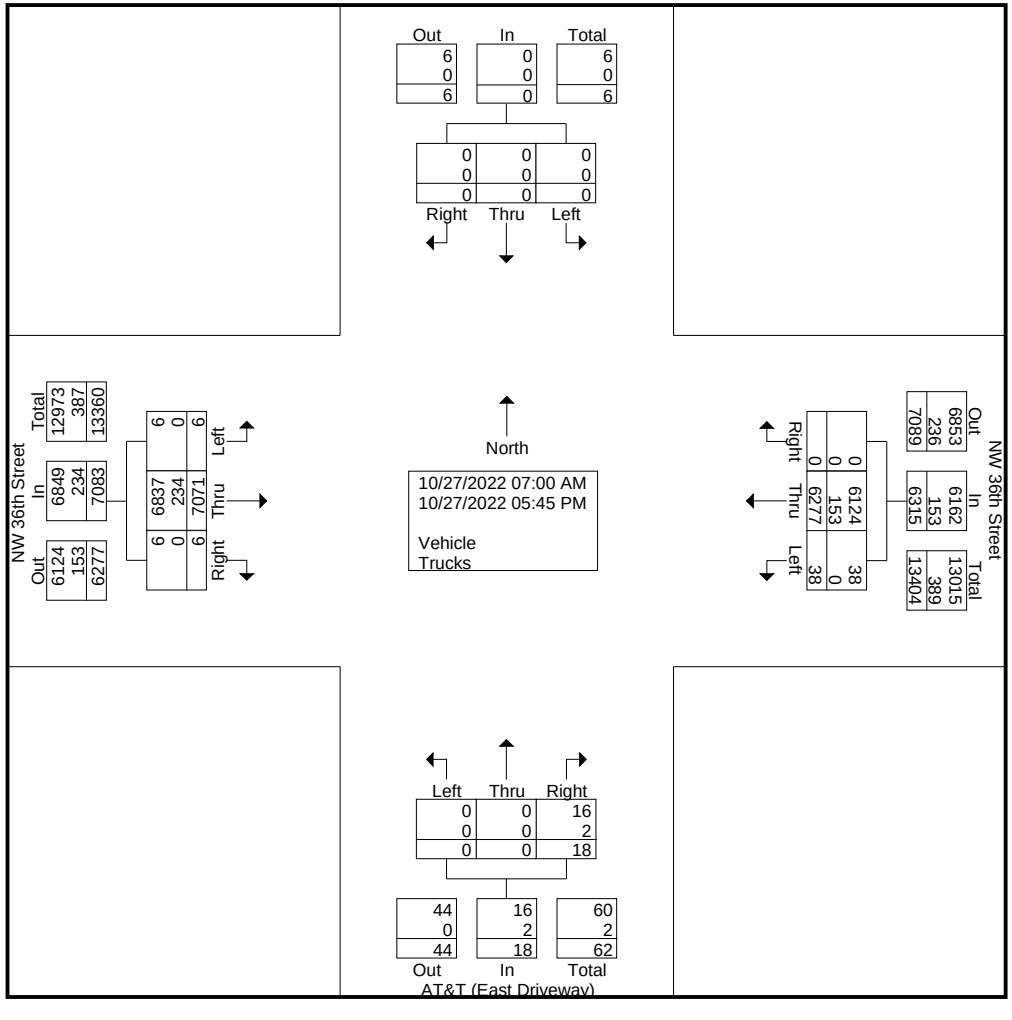
File Name : TMC-4 NW 36th Street at AT&T (East Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	Southbound					AT&T (East Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	305	0	309	0	0	457	2	459	768
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	1	261	0	264	1	0	464	0	465	729
07:30 AM	0	0	0	0	0	0	0	0	2	2	2	3	328	0	333	0	0	552	1	553	888
07:45 AM	0	0	0	0	0	0	0	0	1	1	1	2	353	0	356	0	0	556	1	557	914
Total	0	0	0	0	0	0	0	0	3	3	7	8	1247	0	1262	1	0	2029	4	2034	3299
08:00 AM	0	0	0	0	0	0	0	0	2	2	1	1	396	0	398	0	0	570	1	571	971
08:15 AM	0	0	0	0	0	0	0	0	4	4	1	0	408	0	409	0	0	567	0	567	980
08:30 AM	0	0	0	0	0	0	0	0	6	6	0	0	348	0	348	1	0	539	1	541	895
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	345	0	345	2	0	542	0	544	889
Total	0	0	0	0	0	0	0	0	12	12	2	1	1497	0	1500	3	0	2218	2	2223	3735
*** BREAK ***																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	415	0	418	0	0	375	0	375	793
04:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	438	0	440	0	0	375	0	375	815
04:30 PM	0	0	0	0	0	0	0	0	1	1	3	1	476	0	480	0	0	347	0	347	828
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	457	0	459	1	0	379	0	380	839
Total	0	0	0	0	0	0	0	0	1	1	6	5	1786	0	1797	1	0	1476	0	1477	3275
05:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	414	0	416	0	0	348	0	348	764
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	446	0	448	1	0	365	0	366	814
05:30 PM	0	0	0	0	0	0	0	0	1	1	1	0	464	0	465	0	0	309	0	309	775
05:45 PM	0	0	0	0	0	0	0	0	1	1	3	1	423	0	427	0	0	326	0	326	754
Total	0	0	0	0	0	0	0	0	2	2	7	2	1747	0	1756	1	0	1348	0	1349	3107
Grand Total	0	0	0	0	0	0	0	0	18	18	22	16	6277	0	6315	6	0	7071	6	7083	13416
Apprch %	0	0	0	0		0	0	0	100		0.3	0.3	99.4	0		0.1	0	99.8	0.1		
Total %	0	0	0	0	0	0	0	0	0.1	0.1	0.2	0.1	46.8	0	47.1	0	0	52.7	0	52.8	
Vehicle	0	0	0	0	0	0	0	0	16	16	22	16	6124	0	6162	6	0	6837	6	6849	13027
% Vehicle	0	0	0	0	0	0	0	0	88.9	88.9	100	100	97.6	0	97.6	100	0	96.7	100	96.7	97.1
Trucks	0	0	0	0	0	0	0	0	2	2	0	0	153	0	153	0	0	234	0	234	389
% Trucks	0	0	0	0	0	0	0	0	11.1	11.1	0	0	2.4	0	2.4	0	0	3.3	0	3.3	2.9

NW 36th Street at AT&T (East Driveway)

File Name : TMC-4 NW 36th Street at AT&T (East Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 2



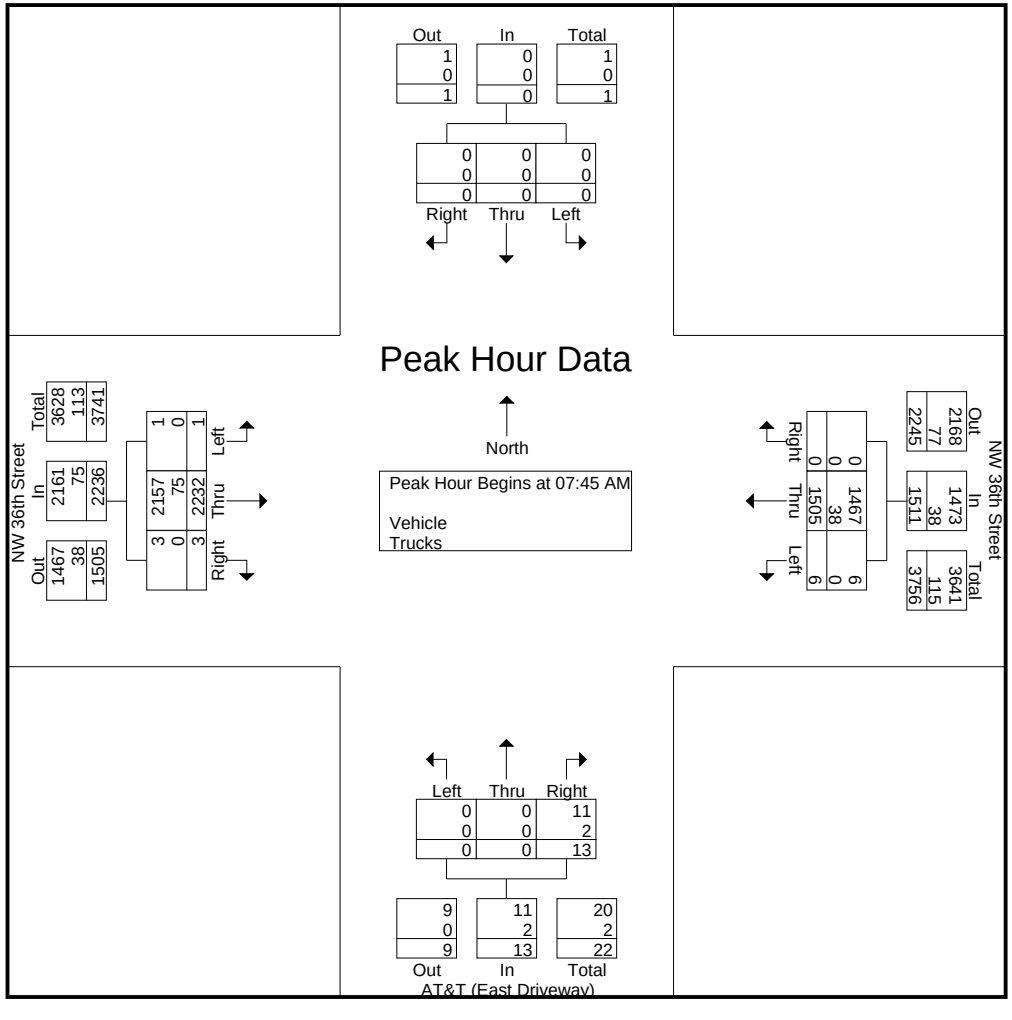
NW 36th Street at AT&T (East Driveway)

File Name : TMC-4 NW 36th Street at AT&T (East Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 3

	Southbound					AT&T (East Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	0	0	0	1	1	**1**	**2**	353	0	356	0	0	556	**1**	557	914
08:00 AM	0	0	0	0	0	0	0	0	2	2	1	1	396	0	398	0	0	**570**	1	**571**	971
08:15 AM	0	0	0	0	0	0	0	0	4	4	1	0	**408**	0	**409**	0	0	567	0	567	**980**
08:30 AM	0	0	0	0	0	0	0	0	**6**	**6**	0	0	348	0	348	**1**	0	539	1	541	895
Total Volume	0	0	0	0	0	0	0	0	13	13	3	3	1505	0	1511	1	0	2232	3	2236	3760
% App. Total	0	0	0	0		0	0	0	100		0.2	0.2	99.6	0		0	0	99.8	0.1		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.542	.542	.750	.375	.922	.000	.924	.250	.000	.979	.750	.979	.959
Vehicle	0	0	0	0	0	0	0	0	11	11	3	3	1467	0	1473	1	0	2157	3	2161	3645
% Vehicle	0	0	0	0	0	0	0	0	84.6	84.6	100	100	97.5	0	97.5	100	0	96.6	100	96.6	96.9
Trucks	0	0	0	0	0	0	0	0	2	2	0	0	38	0	38	0	0	75	0	75	115
% Trucks	0	0	0	0	0	0	0	0	15.4	15.4	0	0	2.5	0	2.5	0	0	3.4	0	3.4	3.1

NW 36th Street at AT&T (East Driveway)

File Name : TMC-4 NW 36th Street at AT&T (East Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 4



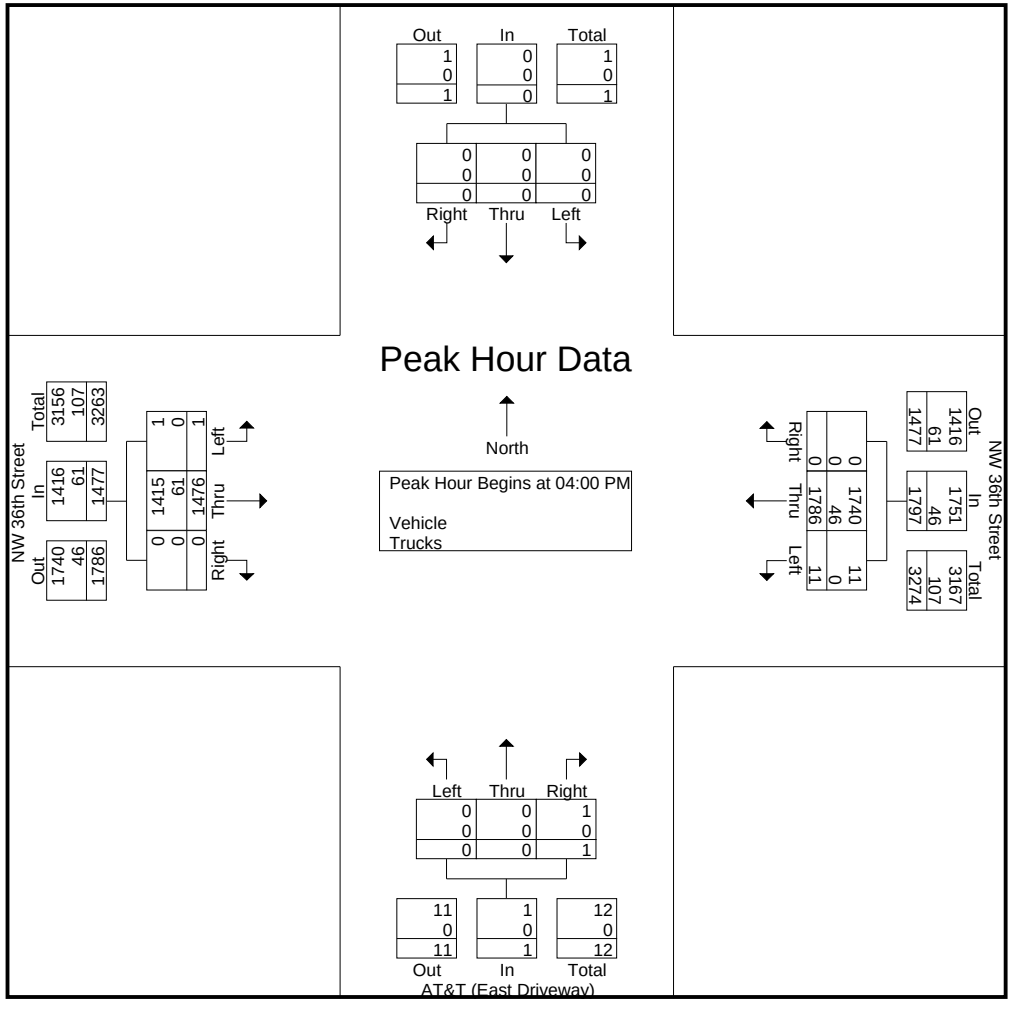
NW 36th Street at AT&T (East Driveway)

File Name : TMC-4 NW 36th Street at AT&T (East Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 5

	Southbound					AT&T (East Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	**3**	415	0	418	0	0	375	0	375	793
04:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	438	0	440	0	0	375	0	375	815
04:30 PM	0	0	0	0	0	0	0	0	**1**	**1**	**3**	1	**476**	0	**480**	0	0	347	0	347	828
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	457	0	459	**1**	0	**379**	0	**380**	**839**
Total Volume	0	0	0	0	0	0	0	0	1	1	6	5	1786	0	1797	1	0	1476	0	1477	3275
% App. Total	0	0	0	0		0	0	0	100		0.3	0.3	99.4	0		0.1	0	99.9	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.500	.417	.938	.000	.936	.250	.000	.974	.000	.972	.976
Vehicle	0	0	0	0	0	0	0	0	1	1	6	5	1740	0	1751	1	0	1415	0	1416	3168
% Vehicle	0	0	0	0	0	0	0	0	100	100	100	100	97.4	0	97.4	100	0	95.9	0	95.9	96.7
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	46	0	46	0	0	61	0	61	107
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	2.6	0	2.6	0	0	4.1	0	4.1	3.3

NW 36th Street at AT&T (East Driveway)

File Name : TMC-4 NW 36th Street at AT&T (East Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 6



NW 36th Street at AT&T (West Driveway)

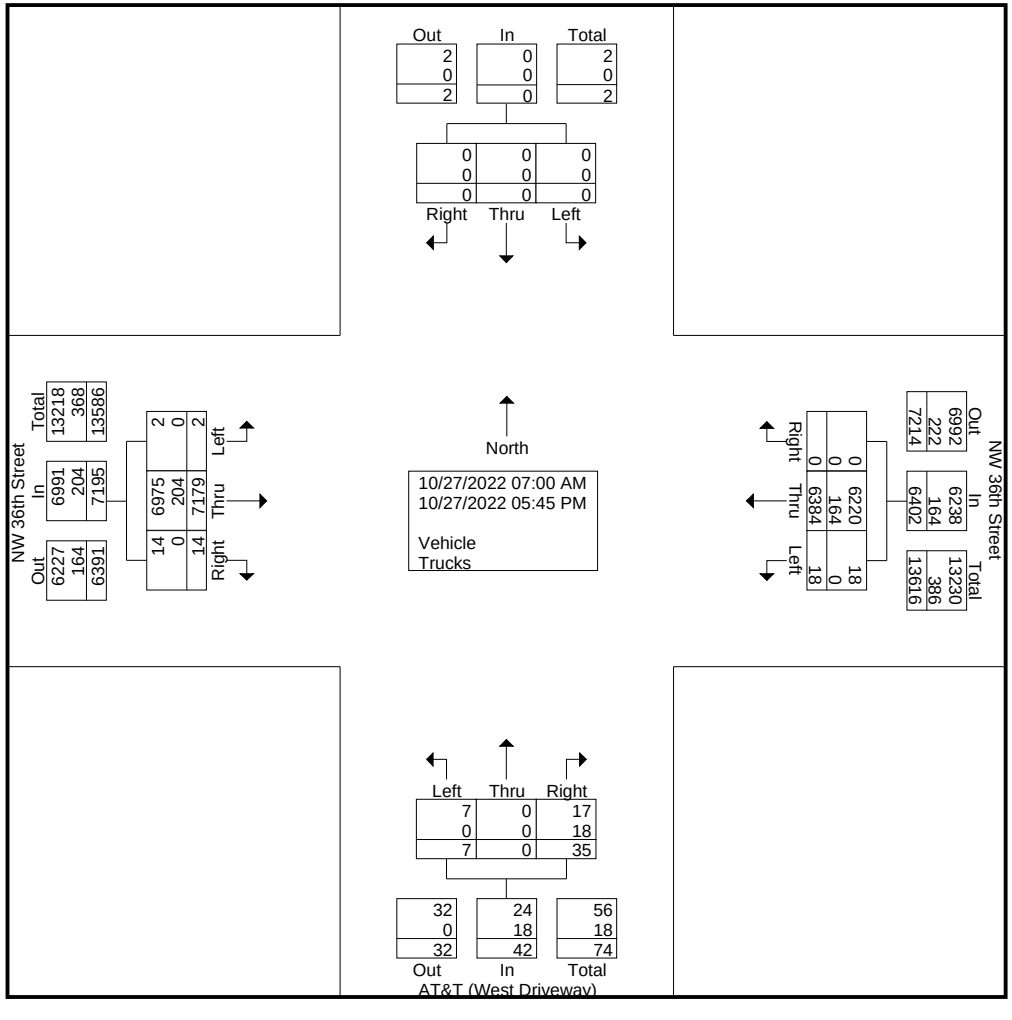
File Name : TMC-5 NW 36th Street at AT&T (West Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 1

Groups Printed- Vehicle - Trucks

	Southbound					AT&T (West Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	0	1	0	1	322	0	323	0	0	473	6	479	803
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	4	274	0	278	0	0	481	1	482	760
07:30 AM	0	0	0	0	0	0	0	0	5	5	0	3	305	0	308	0	0	544	1	545	858
07:45 AM	0	0	0	0	0	0	0	0	5	5	0	3	368	0	371	0	0	565	1	566	942
Total	0	0	0	0	0	0	1	0	10	11	0	11	1269	0	1280	0	0	2063	9	2072	3363
08:00 AM	0	0	0	0	0	0	0	0	5	5	0	1	415	0	416	1	0	576	1	578	999
08:15 AM	0	0	0	0	0	0	0	0	8	8	0	2	411	0	413	0	0	581	0	581	1002
08:30 AM	0	0	0	0	0	0	0	0	6	6	0	0	378	0	378	0	0	560	0	560	944
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	354	0	354	0	0	550	1	551	905
Total	0	0	0	0	0	0	0	0	19	19	0	3	1558	0	1561	1	0	2267	2	2270	3850
*** BREAK ***																					
04:00 PM	0	0	0	0	0	0	0	0	2	2	0	0	430	0	430	0	0	371	0	371	803
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	455	0	455	0	0	390	0	390	846
04:30 PM	0	0	0	0	0	0	1	0	1	2	1	0	459	0	460	0	0	340	0	340	802
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	439	0	439	1	0	382	0	383	823
Total	0	0	0	0	0	0	3	0	3	6	1	0	1783	0	1784	1	0	1483	0	1484	3274
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	436	0	437	0	0	372	0	372	809
05:15 PM	0	0	0	0	0	0	1	0	1	2	1	1	463	0	465	0	0	365	2	367	834
05:30 PM	0	0	0	0	0	0	1	0	2	3	0	0	440	0	440	0	0	305	0	305	748
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	435	0	435	0	0	324	1	325	761
Total	0	0	0	0	0	0	3	0	3	6	1	2	1774	0	1777	0	0	1366	3	1369	3152
Grand Total	0	0	0	0	0	0	7	0	35	42	2	16	6384	0	6402	2	0	7179	14	7195	13639
Apprch %	0	0	0	0		0	16.7	0	83.3		0	0.2	99.7	0		0	0	99.8	0.2		
Total %	0	0	0	0	0	0	0.1	0	0.3	0.3	0	0.1	46.8	0	46.9	0	0	52.6	0.1	52.8	
Vehicle	0	0	0	0	0	0	7	0	17	24	2	16	6220	0	6238	2	0	6975	14	6991	13253
% Vehicle	0	0	0	0	0	0	100	0	48.6	57.1	100	100	97.4	0	97.4	100	0	97.2	100	97.2	97.2
Trucks	0	0	0	0	0	0	0	0	18	18	0	0	164	0	164	0	0	204	0	204	386
% Trucks	0	0	0	0	0	0	0	0	51.4	42.9	0	0	2.6	0	2.6	0	0	2.8	0	2.8	2.8

NW 36th Street at AT&T (West Driveway)

File Name : TMC-5 NW 36th Street at AT&T (West Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 2



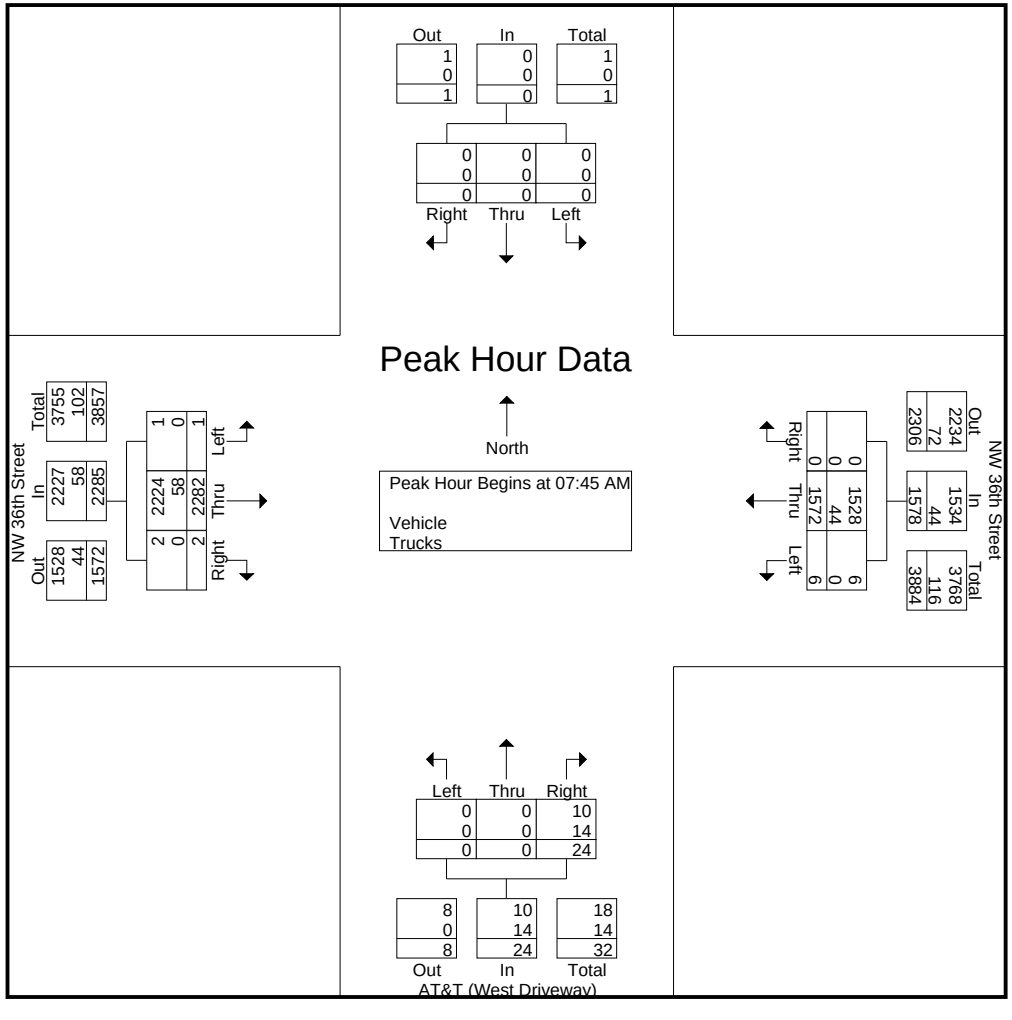
NW 36th Street at AT&T (West Driveway)

File Name : TMC-5 NW 36th Street at AT&T (West Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 3

	Southbound					AT&T (West Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	0	0	0	5	5	0	**3**	368	0	371	0	0	565	**1**	566	942
08:00 AM	0	0	0	0	0	0	0	0	5	5	0	1	**415**	0	**416**	**1**	0	576	1	578	999
08:15 AM	0	0	0	0	0	0	0	0	**8**	**8**	0	2	411	0	413	0	0	**581**	0	**581**	**1002**
08:30 AM	0	0	0	0	0	0	0	0	6	6	0	0	378	0	378	0	0	560	0	560	944
Total Volume	0	0	0	0	0	0	0	0	24	24	0	6	1572	0	1578	1	0	2282	2	2285	3887
% App. Total	0	0	0	0		0	0	0	100		0	0.4	99.6	0		0	0	99.9	0.1		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.750	.750	.000	.500	.947	.000	.948	.250	.000	.982	.500	.983	.970
Vehicle	0	0	0	0	0	0	0	0	10	10	0	6	1528	0	1534	1	0	2224	2	2227	3771
% Vehicle	0	0	0	0	0	0	0	0	41.7	41.7	0	100	97.2	0	97.2	100	0	97.5	100	97.5	97.0
Trucks	0	0	0	0	0	0	0	0	14	14	0	0	44	0	44	0	0	58	0	58	116
% Trucks	0	0	0	0	0	0	0	0	58.3	58.3	0	0	2.8	0	2.8	0	0	2.5	0	2.5	3.0

NW 36th Street at AT&T (West Driveway)

File Name : TMC-5 NW 36th Street at AT&T (West Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 4



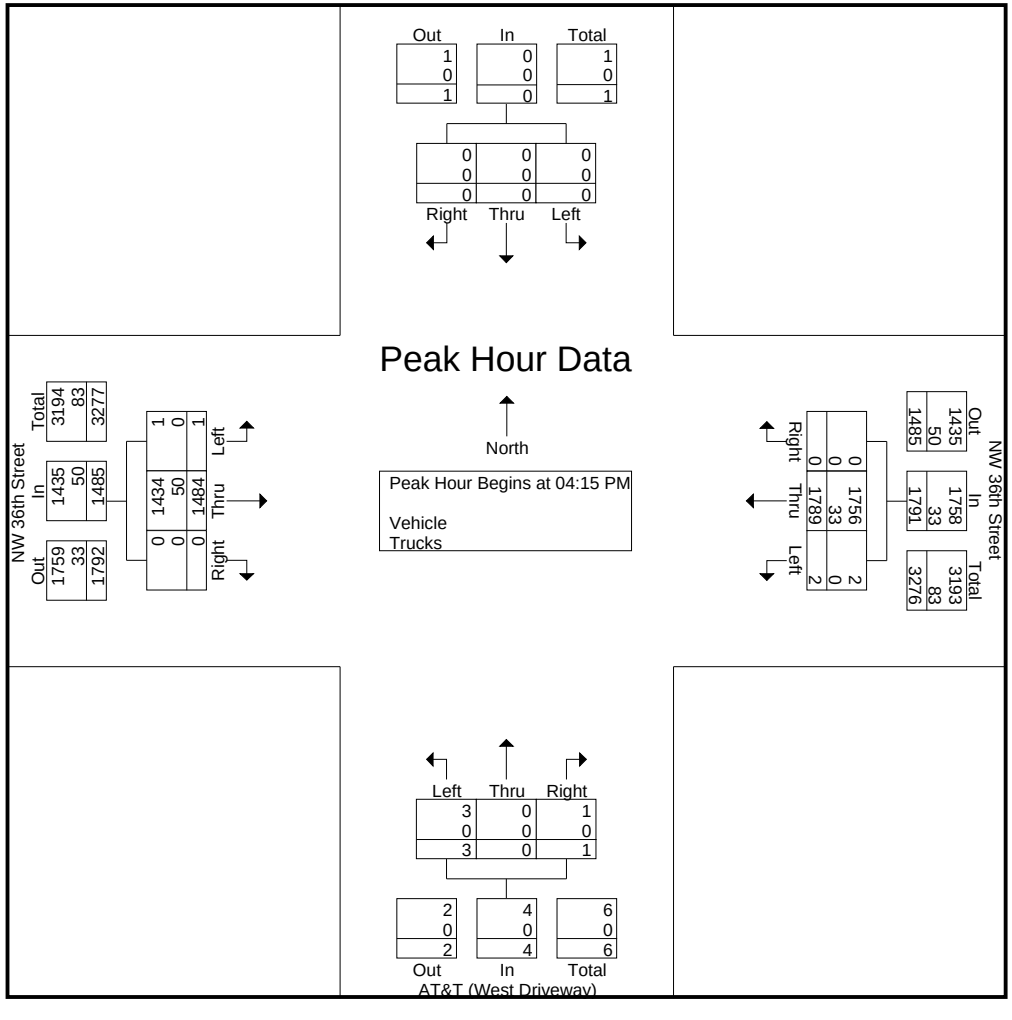
NW 36th Street at AT&T (West Driveway)

File Name : TMC-5 NW 36th Street at AT&T (West Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 5

	Southbound					AT&T (West Driveway) Northbound					NW 36th Street Westbound					NW 36th Street Eastbound					
Start Time	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	U-Turns	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0	0	0	**1**	0	0	1	0	0	455	0	455	0	0	**390**	0	**390**	**846**
04:30 PM	0	0	0	0	0	0	1	0	**1**	**2**	**1**	0	**459**	0	**460**	0	0	340	0	340	802
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	439	0	439	**1**	0	382	0	383	823
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	**1**	436	0	437	0	0	372	0	372	809
Total Volume	0	0	0	0	0	0	3	0	1	4	1	1	1789	0	1791	1	0	1484	0	1485	3280
% App. Total	0	0	0	0		0	75	0	25		0.1	0.1	99.9	0		0.1	0	99.9	0		
PHF	.000	.000	.000	.000	.000	.000	.750	.000	.250	.500	.250	.250	.974	.000	.973	.250	.000	.951	.000	.952	.969
Vehicle	0	0	0	0	0	0	3	0	1	4	1	1	1756	0	1758	1	0	1434	0	1435	3197
% Vehicle	0	0	0	0	0	0	100	0	100	100	100	100	98.2	0	98.2	100	0	96.6	0	96.6	97.5
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	33	0	33	0	0	50	0	50	83
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1.8	0	1.8	0	0	3.4	0	3.4	2.5

NW 36th Street at AT&T (West Driveway)

File Name : TMC-5 NW 36th Street at AT&T (West Driveway)
Site Code : 00000000
Start Date : 10/27/2022
Page No : 6



2019 Peak Season Factor
Category Report
Miami-Dade County

2019 Peak Season Factor Category Report - Report Type: ALL

Category: 8700 MIAMI-DADE NORTH

MOCF: 0.97

Week	Dates	SF	PSCF
1	01/01/2019 - 01/05/2019	1.03	1.06
2	01/06/2019 - 01/12/2019	1.02	1.05
3	01/13/2019 - 01/19/2019	1.01	1.04
4	01/20/2019 - 01/26/2019	1.00	1.03
* 5	01/27/2019 - 02/02/2019	0.98	1.01
* 6	02/03/2019 - 02/09/2019	0.97	1.00
* 7	02/10/2019 - 02/16/2019	0.96	0.99
* 8	02/17/2019 - 02/23/2019	0.96	0.99
* 9	02/24/2019 - 03/02/2019	0.96	0.99
*10	03/03/2019 - 03/09/2019	0.96	0.99
*11	03/10/2019 - 03/16/2019	0.97	1.00
*12	03/17/2019 - 03/23/2019	0.97	1.00
*13	03/24/2019 - 03/30/2019	0.97	1.00
*14	03/31/2019 - 04/06/2019	0.97	1.00
*15	04/07/2019 - 04/13/2019	0.98	1.01
*16	04/14/2019 - 04/20/2019	0.98	1.01
*17	04/21/2019 - 04/27/2019	0.98	1.01
18	04/28/2019 - 05/04/2019	0.99	1.02
19	05/05/2019 - 05/11/2019	0.99	1.02
20	05/12/2019 - 05/18/2019	1.00	1.03
21	05/19/2019 - 05/25/2019	1.00	1.03
22	05/26/2019 - 06/01/2019	1.01	1.04
23	06/02/2019 - 06/08/2019	1.01	1.04
24	06/09/2019 - 06/15/2019	1.02	1.05
25	06/16/2019 - 06/22/2019	1.02	1.05
26	06/23/2019 - 06/29/2019	1.02	1.05
27	06/30/2019 - 07/06/2019	1.02	1.05
28	07/07/2019 - 07/13/2019	1.03	1.06
29	07/14/2019 - 07/20/2019	1.03	1.06
30	07/21/2019 - 07/27/2019	1.03	1.06
31	07/28/2019 - 08/03/2019	1.02	1.05
32	08/04/2019 - 08/10/2019	1.02	1.05
33	08/11/2019 - 08/17/2019	1.02	1.05
34	08/18/2019 - 08/24/2019	1.02	1.05
35	08/25/2019 - 08/31/2019	1.02	1.05
36	09/01/2019 - 09/07/2019	1.03	1.06
37	09/08/2019 - 09/14/2019	1.03	1.06
38	09/15/2019 - 09/21/2019	1.03	1.06
39	09/22/2019 - 09/28/2019	1.02	1.05
40	09/29/2019 - 10/05/2019	1.01	1.04
41	10/06/2019 - 10/12/2019	1.00	1.03
42	10/13/2019 - 10/19/2019	0.99	1.02
43	10/20/2019 - 10/26/2019	1.00	1.03
44	10/27/2019 - 11/02/2019	1.00	1.03
45	11/03/2019 - 11/09/2019	1.01	1.04

46	11/10/2019 - 11/16/2019	1.01	1.04
47	11/17/2019 - 11/23/2019	1.02	1.05
48	11/24/2019 - 11/30/2019	1.02	1.05
49	12/01/2019 - 12/07/2019	1.02	1.05
50	12/08/2019 - 12/14/2019	1.03	1.06
51	12/15/2019 - 12/21/2019	1.03	1.06
52	12/22/2019 - 12/28/2019	1.02	1.05
53	12/29/2019 - 12/31/2019	1.01	1.04

* Peak Season

APPENDIX C: Historical Data and Growth Calculations

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8183 - NW 79TH AVE, 200' SOUTH OF NW 36 STREET

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	17200 C	N 8400	S 8800	9.00	54.20	10.40
2019	23500 T	N 12000	S 11500	9.00	54.60	11.00
2018	23500 S	N 12000	S 11500	9.00	54.30	12.10
2017	23500 F	N 12000	S 11500	9.00	55.00	12.60
2016	22500 C	N 11500	S 11000	9.00	54.50	13.50
2015	22300 T	N 9800	S 12500	9.00	54.70	13.70
2014	21500 S	N 9500	S 12000	9.00	54.50	17.40
2013	21400 F	N 9400	S 12000	9.00	52.40	16.20
2012	21600 C	N 9600	S 12000	9.00	55.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8161 - NW 79TH AVENUE, 200' NORTH OF NW 36TH STREET

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	16500 T	N 9100	S 7400	9.00	54.20	10.40
2019	17200 S	N 9500	S 7700	9.00	54.60	11.00
2018	17200 F	N 9500	S 7700	9.00	54.30	12.10
2017	17000 C	N 9400	S 7600	9.00	55.00	12.60
2016	24500 F	N 11500	S 13000	9.00	54.50	13.50
2015	23500 C	N 11000	S 12500	9.00	54.70	13.70
2014	9400 S	N 5000	S 4400	9.00	54.50	17.40
2013	9400 F	N 5000	S 4400	9.00	52.40	16.20
2012	9600 C	N 5100	S 4500	9.00	55.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8705 - NW 87TH AVE/NW 58TH ST 200 FT. EAST OF NW 84TH AVE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	30000 F	E 15500	W 14500	9.00	56.00	8.90
2019	33500 C	E 17500	W 16000	9.00	56.00	8.70
2018	25500 T	E 12000	W 13500	9.00	54.30	8.80
2017	28500 S	E 13500	W 15000	9.00	55.70	8.50
2016	28500 F	E 13500	W 15000	9.00	56.10	8.00
2015	29000 C	E 13500	W 15500	9.00	57.40	10.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8670 - NW 54 STREET 380' WEST OF NW 82 AVE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	2600 X	0	0	9.00	56.00	8.90
2019	2900 E			9.00	56.00	8.70
2018	2600 V	E 1300	W 1300	9.00	54.30	8.80
2017	2900 R	E 1500	W 1400	9.00	56.10	8.50
2016	2900 T	E 1500	W 1400	9.00	56.10	8.00
2015	2900 S	E 1500	W 1400	9.00	57.40	10.20
2014	2900 F	E 1500	W 1400	9.00	59.30	12.00
2013	2900 C	E 1500	W 1400	9.00	58.90	3.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8236 - NW 58TH ST, 200' WEST OF NW 87TH AVENUE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	28000 S	E 14000	W 14000	9.00	54.20	10.40
2019	29000 F	E 14500	W 14500	9.00	54.60	11.00
2018	29000 C	E 14500	W 14500	9.00	54.30	12.10
2017	30500 S	E 15000	W 15500	9.00	55.00	12.60
2016	29500 F	E 14500	W 15000	9.00	54.50	13.50
2015	28500 C	E 14000	W 14500	9.00	54.70	13.70
2014	22500 S	E 11500	W 11000	9.00	54.50	17.40
2013	22500 F	E 11500	W 11000	9.00	52.40	16.20
2012	22500 C	E 11500	W 11000	9.00	55.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8704 - NW 87TH AVE/NW 58TH ST 100 FT NORTH OF NW 52ND ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	20300 F	N 9800	S 10500	9.00	56.00	8.90
2019	23000 C	N 11000	S 12000	9.00	56.00	8.70
2018	19200 T	N 9400	S 9800	9.00	54.30	8.80
2017	21500 S	N 10500	S 11000	9.00	55.70	8.50
2016	21500 F	N 10500	S 11000	9.00	56.10	8.00
2015	21500 C	N 10500	S 11000	9.00	57.40	10.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8359 - NW 36TH ST, 200' WEST OF NW 87TH AVENUE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	42000 C	E 21500	W 20500	9.00	54.20	10.40
2019	44500 T	E 21500	W 23000	9.00	54.60	11.00
2018	44500 S	E 21500	W 23000	9.00	54.30	12.10
2017	43500 F	E 21000	W 22500	9.00	55.00	12.60
2016	42500 C	E 20500	W 22000	9.00	54.50	13.50
2015	44000 T	E 24000	W 20000	9.00	54.70	13.70
2014	42500 S	E 23000	W 19500	9.00	54.50	17.40
2013	42500 F	E 23000	W 19500	9.00	52.40	16.20
2012	43500 C	E 23500	W 20000	9.00	55.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 7022 - NW 41ST STREET 500 FT WEST OF NW 97TH AVE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	36500 F	E 18000	W 18500	9.00	56.00	5.50
2019	40500 C	E 20000	W 20500	9.00	56.00	5.50
2018	38000 F	E 19000	W 19000	9.00	54.30	6.70
2017	43000 C	E 21500	W 21500	9.00	54.00	6.70
2016	47500 F	E 24500	W 23000	9.00	56.10	5.20
2015	48500 C	E 25000	W 23500	9.00	57.40	5.20
2014	46000 F	E 23500	W 22500	9.00	59.30	9.80
2013	46000 C	E 23500	W 22500	9.00	58.90	9.80
2012	43500 F	E 22000	W 21500	9.00	59.70	2.40
2011	43500 C	E 22000	W 21500	9.00	58.20	3.30
2010	49500 F	E 24500	W 25000	7.87	58.27	3.00
2009	49500 C	E 24500	W 25000	7.98	59.96	2.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8235 - NW 58TH ST, 200' WEST OF NW 97TH AVENUE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	18400 S	E 9100	W 9300	9.00	54.20	10.40
2019	19200 F	E 9500	W 9700	9.00	54.60	11.00
2018	19200 C	E 9500	W 9700	9.00	54.30	12.10
2017	19800 S	E 9300	W 10500	9.00	55.00	12.60
2016	19000 F	E 9000	W 10000	9.00	54.50	13.50
2015	18200 C	E 8600	W 9600	9.00	54.70	13.70
2014	20900 S	E 9900	W 11000	9.00	54.50	17.40
2013	20800 F	E 9800	W 11000	9.00	52.40	16.20
2012	21000 C	E 10000	W 11000	9.00	55.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8626 - NW 87 AVE, 200' SOUTH OFNW 66 ST (2011 OFF SYSTEM CYCLE)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	21000 C	N 10500	S 10500	9.00	56.00	8.90
2019	13900 T	N 6000	S 7900	9.00	56.00	8.70
2018	14100 S	N 6100	S 8000	9.00	54.30	8.80
2017	15800 F	N 6800	S 9000	9.00	55.70	8.50
2016	16000 C	N 6900	S 9100	9.00	56.10	8.00
2015	14100 T	N 7400	S 6700	9.00	57.40	10.20
2014	14300 S	N 7500	S 6800	9.00	59.30	12.00
2013	14400 F	N 7600	S 6800	9.00	58.90	16.20
2012	14400 C	N 7600	S 6800	9.00	59.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 7051 - SR & CR 973 200 FEET SOUTH OF NW 33RD ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	35500 F	N 18500	S 17000	9.00	56.00	5.10
2019	39500 C	N 20500	S 19000	9.00	56.00	5.10
2018	36000 S	N 19500	S 16500	9.00	54.30	6.10
2017	40500 F	N 22000	S 18500	9.00	54.00	6.10
2016	41500 C	N 22500	S 19000	9.00	56.10	6.10
2015	37500 F	N 18000	S 19500	9.00	57.40	13.50
2014	37500 C	N 18000	S 19500	9.00	59.30	13.50
2013	38500 F	N 20000	S 18500	9.00	58.90	6.50
2012	38500 C	N 20000	S 18500	9.00	59.70	6.50
2011	37000 F	N 19000	S 18000	9.00	58.20	6.00
2010	37000 C	N 19000	S 18000	7.87	58.27	5.10
2009	37500 C	N 19000	S 18500	7.98	59.96	4.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Doral International Towers Areawide Count Stations

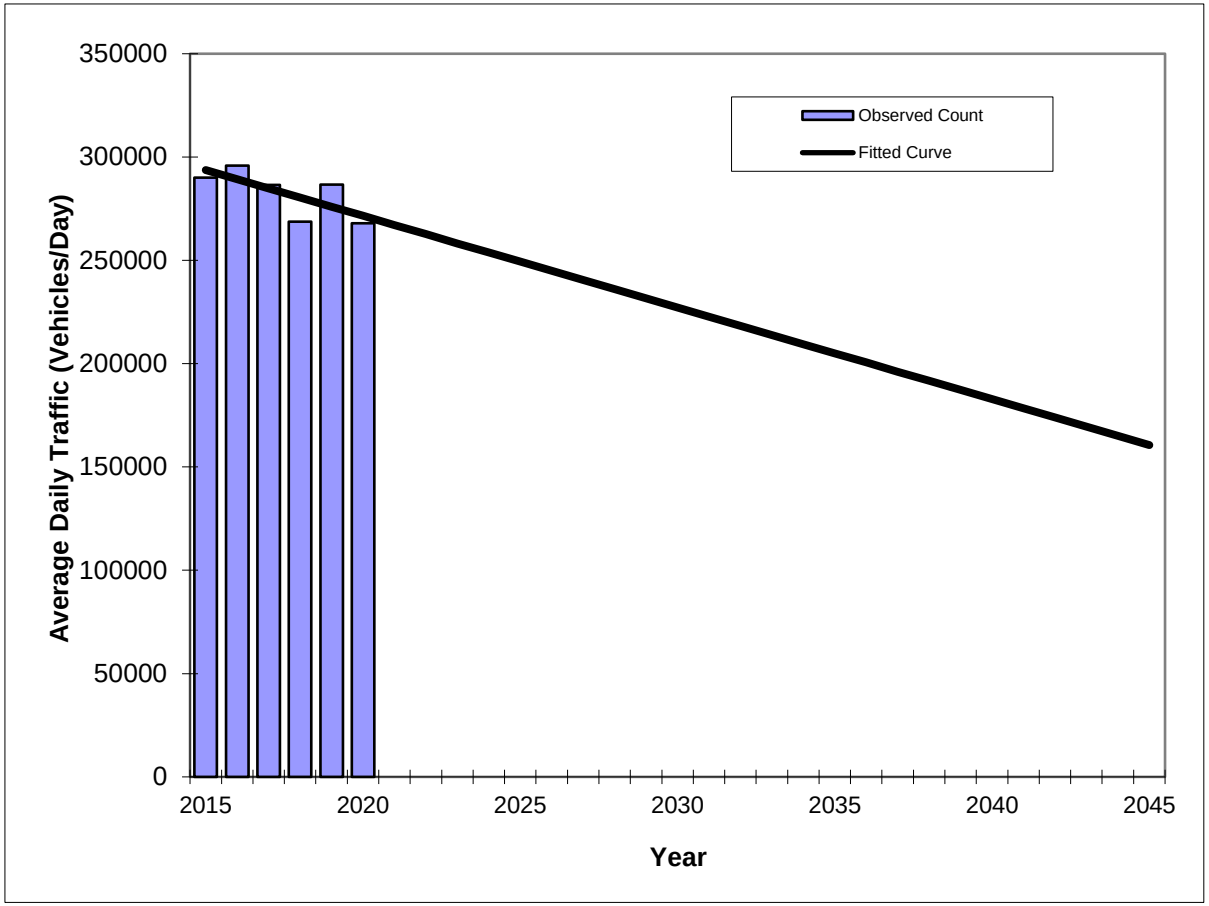
Station	Count Station Location	Year					
		2015	2016	2017	2018	2019	2020
878183	NW 79TH AVE, 200' SOUTH OF NW 36 STREET	22300	22500	23500	23500	23500	17200
878161	NW 79TH AVENUE, 200' NORTH OF NW 36TH STREET	23500	24500	17000	17200	17200	16500
878705	NW 87TH AVE/NW 58TH ST 200 FT. EAST OF NW 84TH AVE	29000	28500	28500	25500	33500	30000
878670	NW 54 STREET 380' WEST OF NW 82 AVE	2900	2900	2900	2600	2900	2600
878236	NW 58TH ST, 200' WEST OF NW 87TH AVENUE	28500	29500	30500	29000	29000	28000
878704	NW 87TH AVE/NW 58TH ST 100 FT NORTH OF NW 52ND ST	21500	21500	21500	19200	23000	20300
878359	NW 36TH ST, 200' WEST OF NW 87TH AVENUE	44000	42500	43500	44500	44500	42000
877022	NW 41ST STREET 500 FT WEST OF NW 97TH AVE	48500	47500	43000	38000	40500	36500
878235	NW 58TH ST, 200' WEST OF NW 97TH AVENUE	18200	19000	19800	19200	19200	18400
878626	NW 87 AVE, 200' SOUTH OF NW 66 ST *	14100	16000	15800	14100	13900	21000
877051	SR & CR 973 200 FEET SOUTH OF NW 33RD ST*	37500	41500	40500	36000	39500	35500
	Aggregate Totals	290000	295900	286500	268800	286700	268000

Traffic Trends - V03.a

-- Doral International Towers

FIN#	0
Location	**Areawide**

County:	Miami-Dade (87)
Station #:	0
Highway:	0



Year	Traffic (ADT/AADT) Count*	Trend**
2015	290000	293700
2016	295900	289300
2017	286500	284900
2018	268800	280400
2019	286700	276000
2020	268000	271600
2027 Opening Year Trend		
2027	N/A	240500
2033 Mid-Year Trend		
2033	N/A	213900
2045 Design Year Trend		
2045	N/A	160600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

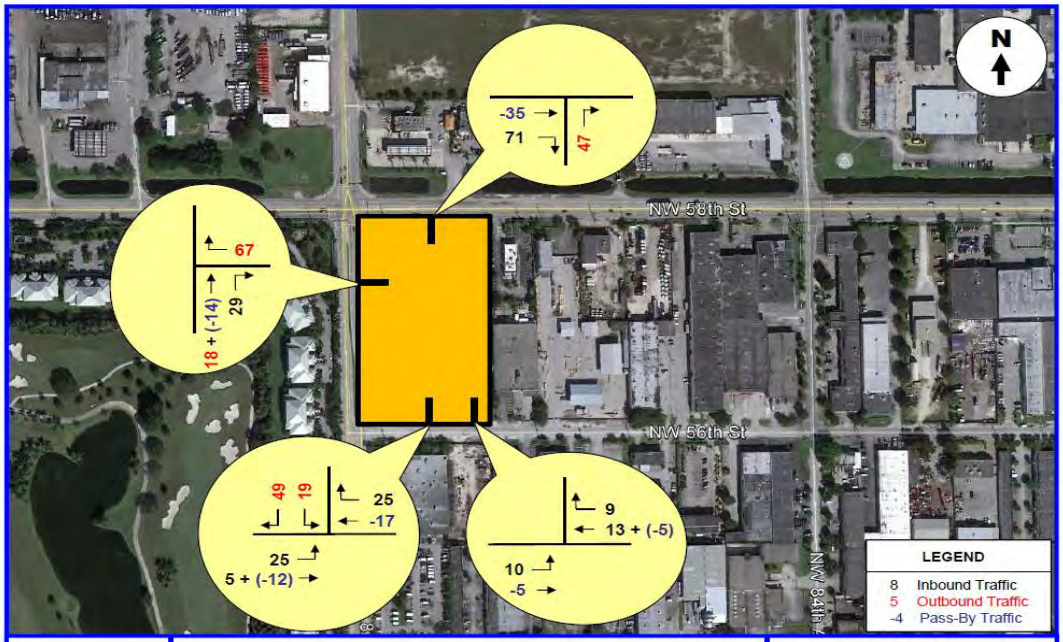
** Annual Trend Increase:	-4,437
Trend R-squared:	51.64%
Trend Annual Historic Growth Rate:	-1.50%
Trend Growth Rate (2020 to Design Year):	-1.63%
Printed:	8-Jun-22

Straight Line Growth Option

APPENDIX D: Committed Developments

87th Avenue Shoppes

	PM
87th Avenue between 41st and 58th Street	163
58th Street east of 87th Ave	83



KBP CONSULTING, INC.

Project Trip Assignment – Driveways
PM Peak Hour

FIGURE 4
NW 87th Avenue Doral
Doral, Florida

Table 1
Trip Generation Summary
NW 87th Avenue Doral Retail Development - Doral, Florida

Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Existing								
General Light Industrial	72,035 SF	502	58	8	66	8	62	70
Sub Total	**72,035 SF**	**502**	**58**	**8**	**66**	**8**	**62**	**70**
Proposed								
Shopping Center	48,677 SF	4,253	62	38	100	178	192	370
Pass-by (34%/13% / 47%)		*(1,446)*	*(8)*	*(5)*	*(13)*	*(84)*	*(90)*	*(174)*
Other Modes (5%)		*(213)*	*(3)*	*(2)*	*(5)*	*(9)*	*(10)*	*(19)*
Sub Total	**48,677 SF**	**2,594**	**51**	**31**	**82**	**85**	**92**	**177**
Difference (Proposed - Existing)		**2,092**	**(7)**	**23**	**16**	**77**	**30**	**107**
Driveway Volumes		**4,040**	**59**	**36**	**95**	**169**	**182**	**351**

Compiled by: KBP Consulting, Inc. (August 2017).
Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition).

As indicated in Table 1 above, the proposed project is estimated to result in an additional 2,594 daily vehicle trips, 82 AM peak hour vehicle trips (51 inbound and 31 outbound), and 177 PM peak hour vehicle trips (85 inbound and 92 outbound). When considering the existing light industrial development on the subject site, this project is estimated to result in 2,092 net new daily vehicle trips, 16 net new AM peak hour vehicle trips, and 107 net new PM peak hour vehicle trips.

Of specific interest to this analysis, the driveway volumes will consist of 95 AM peak hour vehicle trips (59 inbound and 36 outbound) and 351 PM peak hour vehicle trips (169 inbound and 182 outbound).

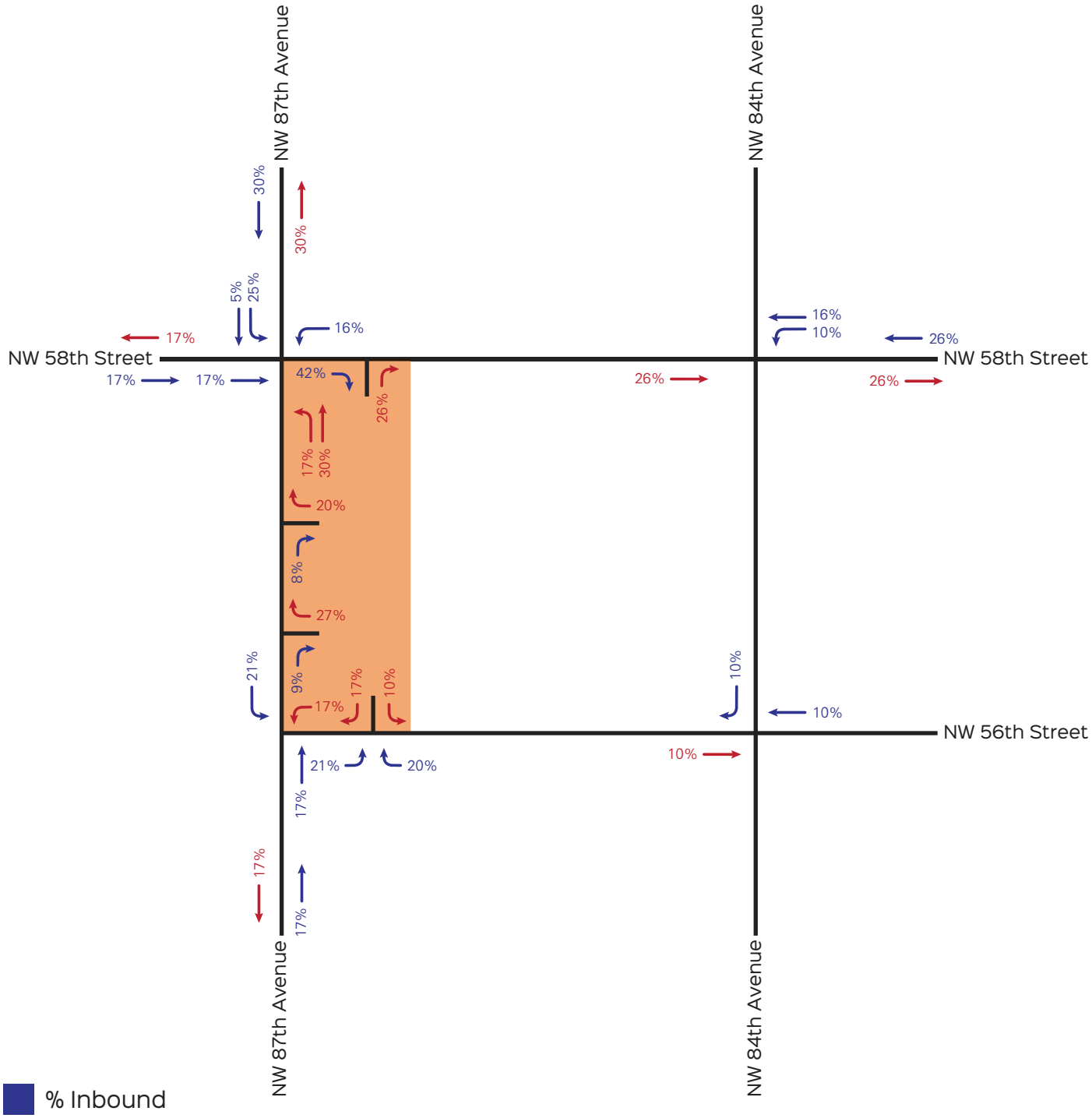


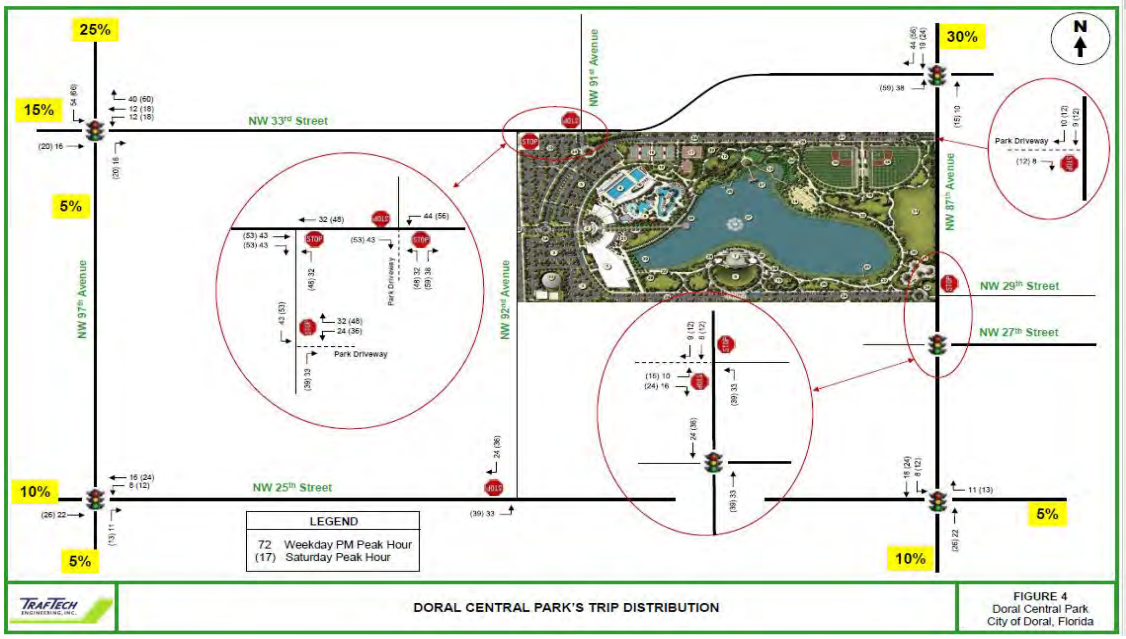
Exhibit 12

Project Trip Distribution Inbound/Outbound

Doral Central Park

PM Peak

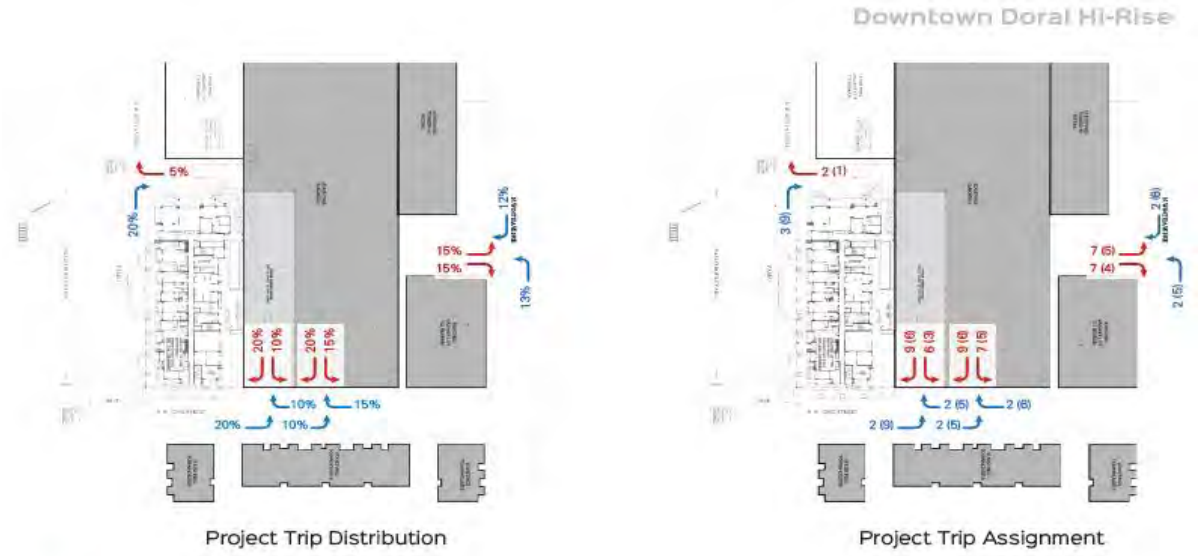
87th Avenue South of 41st Street 111



Downtown Doral Hi-Rise

PM Peak

87th Avenue Between 41st Street and 58th Street 36



Project Trip Distribution

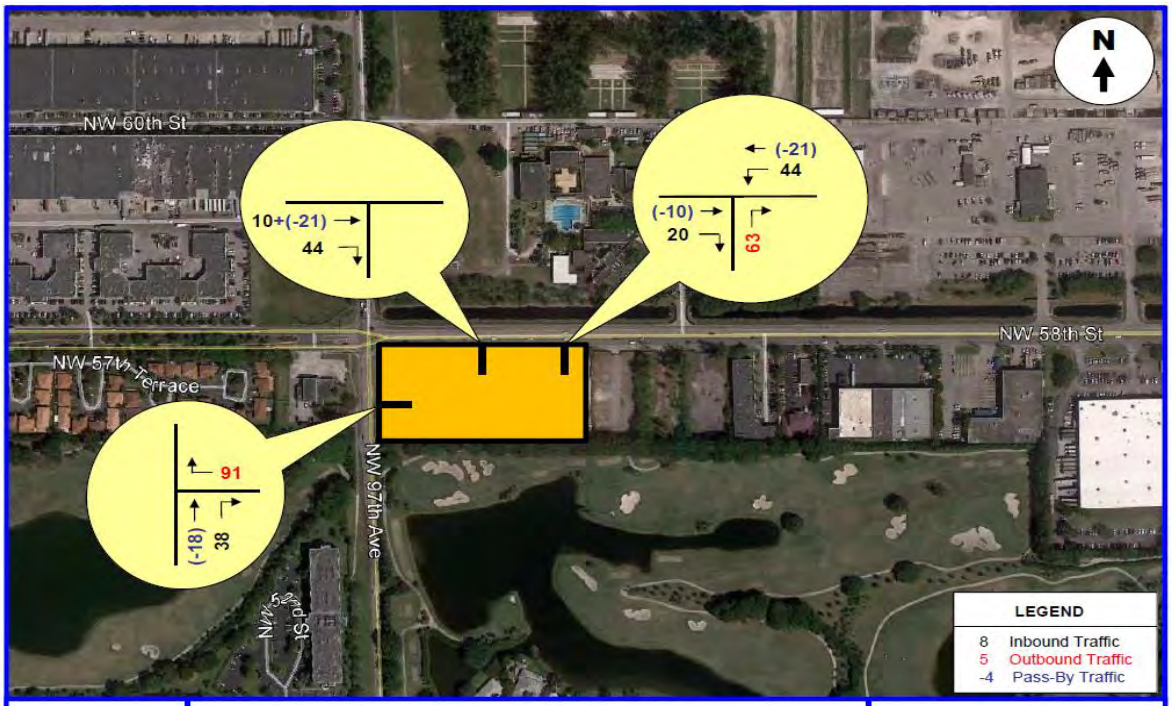
Project Trip Assignment

00 AM
(00) PM
Inbound
Outbound

Exhibit 2

NORTH

	Shoppes at 97th Avenue
	PM
97th Avenue between 41st and 58th Street	111
58th Street between 97th ave and 87th Ave	119



KBP CONSULTING, INC.

Project Trip Assignment – Driveways
PM Peak Hour

FIGURE 4
The Shoppes @ 97th Ave
Doral, Florida

Table 1
Trip Generation Summary
The Shoppes @ 97th Ave - Doral, Florida

Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Proposed								
Shopping Center	37,845 SF	3,105	22	14	36	127	138	265
Pass-by (34% / 13% / 48%)		*(1,056)*	*(3)*	*(2)*	*(5)*	*(61)*	*(66)*	*(127)*
Other Modes (5%)		*(155)*	*(1)*	*(1)*	*(2)*	*(6)*	*(7)*	*(13)*
Drive-In Bank	2,500 SF	250	14	10	24	26	25	51
Pass-by (32% / 29% / 35%)		*(80)*	*(4)*	*(3)*	*(7)*	*(9)*	*(9)*	*(18)*
Other Modes (5%)		*(13)*	*(1)*	*0*	*(1)*	*(1)*	*(2)*	*(3)*
Sub Total	**40,345 SF**	**2,051**	**27**	**18**	**45**	**76**	**79**	**155**
Driveway Volumes		**3,187**	**34**	**23**	**57**	**146**	**154**	**300**

Compiled by: KBP Consulting, Inc. (December 2017).
Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition).

As indicated in Table 1 above, the proposed project is estimated to result in an additional 2,051 daily vehicle trips, 45 AM peak hour vehicle trips (27 inbound and 18 outbound), and 155 PM peak hour vehicle trips (76 inbound and 79 outbound). Of specific interest to this analysis, the driveway volumes will consist of 57 AM peak hour vehicle trips (34 inbound and 23 outbound) and 300 PM peak hour vehicle trips (146 inbound and 154 outbound).

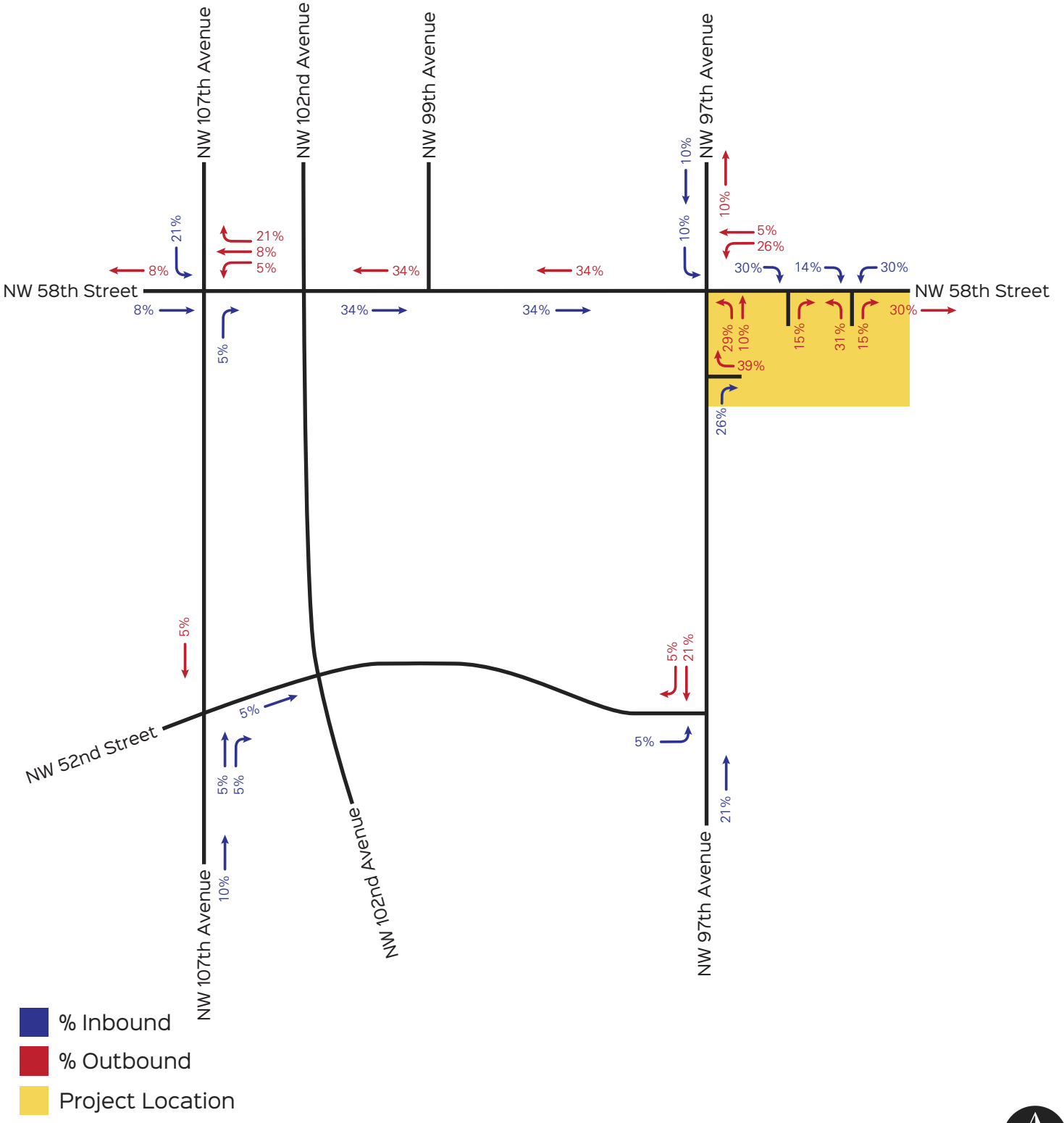


Exhibit 12

Project Trip Distribution Inbound/Outbound

NORTH
MAP NOT TO SCALE

Downtown Doral Assisted Living Facility

	PM Peak
87th Avenue Between 41st Street and 58th Street	29



Project Location In Out

Exhibit 3

Project Trip Assignment

NORTH

APPENDIX E: Signal Timing

Miami-Dade, FL

TOD Schedule Report

3954 - NW 36th Street & NW 79th Ave

2070 1C-Econolite Type-Cobalt

2/9/2021, 1:45 PM

Phase Data

Phase	Direction	Split	Timing Plan	Walk	Ped Clear	Min Green	Max Green	Vehicle Ext	MAX 2	MAX 3	Yellow	Red Clear
1	E - L	21	1	0	0	5	10	5	11	255	4.4	2
			2	0	0	5	35	5	40	0	3	1
			3	0	0	5	35	5	40	0	3	1
			4	0	0	5	35	5	40	0	3	1
2	W - T	92	1	7	13	7	40	5	0	255	4.4	2
			2	10	16	5	35	5	40	0	3	1
			3	10	16	5	35	5	40	0	3	1
			4	10	16	5	35	5	40	0	3	1
3	S - L	34	1	5	22	7	30	5	35	23	4.4	2.6
			2	0	0	5	35	5	40	0	3	1
			3	0	0	5	35	5	40	0	3	1
			4	0	0	5	35	5	40	0	3	1
4	N - L	23	1	0	0	7	15	5	35	255	4.4	2.6
			2	10	16	5	35	5	40	0	3	1
			3	10	16	5	35	5	40	0	3	1
			4	10	16	5	35	5	40	0	3	1
5	W - L	29	1	0	0	5	30	5	39	255	4.4	2
			2	0	0	5	35	5	40	0	3	1
			3	0	0	5	35	5	40	0	3	1
			4	0	0	5	35	5	40	0	3	1
6	E - T	84	1	7	13	7	40	5	0	255	4.4	2
			2	10	16	5	35	5	40	0	3	1
			3	10	16	5	35	5	40	0	3	1
			4	10	16	5	35	5	40	0	3	1

Schedule - 1

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
-	X	X	X	X	X	-

Day Plan - 1 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6
00:00:00	Free	-	-	-	-	-	-	-	-
05:30:00	2	120	21	18	44	34	24	19	43
06:15:00	3	180	38	12	114	34	20	37	89
10:00:00	7	170	157	21	92	34	23	29	84
14:30:00	9	190	49	22	106	39	23	24	104
19:00:00	15	150	2	18	74	35	23	25	67
21:00:00	Free	-	-	-	-	-	-	-	-

Schedule - 2

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
X	-	-	-	-	-	X

Day Plan - 2 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6
00:00:00	Free	-	-	-	-	-	-	-	-
06:00:00	18	100	30	11	52	19	18	11	52
09:00:00	20	120	30	12	64	23	21	26	50
19:00:00	Free	-	-	-	-	-	-	-	-

Action Plan

Name	Pattern	Enabled Logic Processor Statements
Free	Free	N/A
2	2	N/A
3	3	N/A
7	7	N/A
9	9	N/A
15	15	N/A
Free	Free	N/A

TOD Schedule Report

for 4176: NW 79 Av&NW 58 St

Print Date: 10/4/2021

Print Time: 6:00 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4176	NW 79 Av&NW 58 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBT	NBT	WBL	EBT	-	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 0 - 10	15 - 12 - 10	4.4	2
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 21 - 25	0 - 0 - 25	4.4	2
3 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 5	15 - 9 - 70	36 - 30 - 25	4	2.5
4 NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	11 - 9 - 15	23 - 23 - 15	4.4	2
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	5 - 3 - 5	20 - 20 - 10	60 - 60 - 70	4.4	2
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 21 - 25	0 - 0 - 25	4.4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	123456--
External Permit 0	--------
External Permit 1	-23456--
External Permit 2	123456--

TOD Schedule Report

for 4176: NW 79 Av&NW 58 St

Print Date: 10/4/2021

Print Time: 6:00 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBT	4 NBT	5 WBL	6 EBT	7 -	8 -	Ring Offset	Offset
	2	100	12	30	18	15	17	25	0	0	0	1
	3	160	15	91	12	17	44	62	0	0	0	74
	6	140	11	73	14	17	27	57	0	0	0	105
	7	150	11	79	15	20	27	63	0	0	0	105
	11	160	8	71	36	20	20	59	0	0	0	107
	14	120	15	53	16	11	22	46	0	0	0	119
	16	90	12	29	15	9	17	24	0	0	0	69
	19	90	0	42	15	14	0	42	0	0	0	42
	21	90	0	42	15	14	0	42	0	0	0	42
	25	130	8	24	62	11	8	24	0	0	0	106
	26	130	8	74	12	11	58	24	0	0	0	106

Local TOD Schedule

Time	Plan	DOW
0000	Flash	M T W Th F
0000	Flash	Su S
0200	Flash	Su S
0530	2	M T W Th F
0600	19	Su S
0645	3	M T W Th F
0900	Free	Su S
1000	6	M T W Th F
1130	7	M T W Th F
1530	11	M T W Th F
1700	21	Su S
1830	14	M T W Th F
2100	16	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	M T W ThF
1600	VEH MAX RECALL	-----3--	M T W ThF
1830	VEH MAX RECALL	--------	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	Su S
0000	TOD OUTPUTS	--------	M T W ThF
0900	TOD OUTPUTS	-------1	Su S
1600	VEH MAX RECALL	-----3--	M T W ThF
1700	TOD OUTPUTS	--------	Su S
1830	VEH MAX RECALL	--------	M T W ThF

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

Miami-Dade, FL

TOD Schedule Report

4477 NW 36th St. & Galloway Rd./NW 87th ave.

2070-1C 10.57.132.96-Econolite Type-Cobalt

2/9/2021, 12:10 PM

Phase Data

Phase	Direction	Split	Timing Plan	Walk	Ped Clear	Min Green	Max Green	Vehicle Ext	MAX 2	MAX 3	Yellow	Red Clear
1	E - L	25	1	0	0	5	15	4	52	0	4.4	2.6
			2	0	0	5	18	4	15	0	4.4	2.6
			3	0	0	5	12	4	31	0	4.4	2.6
			4	0	0	5	15	4	52	0	4.4	2.6
2	W - T	73	1	7	25	10	34	3	34	0	4.4	2.6
			2	7	25	10	34	3	30	0	4.4	2.6
			3	7	25	16	34	3	60	0	4.4	2.6
			4	7	25	10	34	3	34	0	4.4	2.6
3	S - L	19	1	0	0	5	15	4	22	0	4.4	2.7
			2	0	0	5	15	4	15	0	4.4	2.7
			3	0	0	5	10	4	27	0	4.4	2.7
			4	0	0	5	15	4	22	0	4.4	2.7
4	N - T	53	1	7	27	10	35	3	57	0	4.4	2.7
			2	7	27	10	20	3	25	0	4.4	2.7
			3	7	27	14	37	3	53	0	4.4	2.7
			4	7	27	10	35	3	57	0	4.4	2.7
5	W - L	31	1	0	0	5	15	4	40	0	4.4	2.6
			2	0	0	5	10	4	15	0	4.4	2.6
			3	0	0	5	12	4	31	0	4.4	2.6
			4	0	0	5	15	4	40	0	4.4	2.6
6	E - T	67	1	7	25	10	34	3	34	0	4.4	2.6
			2	7	25	10	34	3	30	0	4.4	2.6
			3	7	25	16	34	3	60	0	4.4	2.6
			4	7	25	10	34	3	34	0	4.4	2.6
7	N - L	25	1	0	0	5	15	4	35	0	4.4	2.7
			2	0	0	5	15	4	15	0	4.4	2.7
			3	0	0	5	10	4	27	0	4.4	2.7
			4	0	0	5	15	4	35	0	4.4	2.7
8	S - T	47	1	7	27	10	37	3	51	0	4.4	2.7
			2	7	29	10	37	3	25	0	4.4	2.7
			3	7	29	14	37	3	53	0	4.4	2.7
			4	7	27	10	37	3	51	0	4.4	2.7

Schedule - 1

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
-	X	X	X	X	X	-

Day Plan - 1 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 7	Phs Spl 8
00:00:00	Free	-	-	-	-	-	-	-	-	-	-
05:30:00	2	120	28	18	46	19	37	18	46	17	39
06:15:00	3	180	65	47	73	19	41	38	82	19	41
10:00:00	7	170	147	25	73	19	53	31	67	25	47
14:30:00	9	190	171	27	80	26	57	43	64	33	50
19:00:00	15	150	11	22	64	17	47	28	58	22	42
21:00:00	Free	-	-	-	-	-	-	-	-	-	-

Schedule - 2

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
X	-	-	-	-	-	X

Day Plan - 2 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 7	Phs Spl 8
00:00:00	Free	-	-	-	-	-	-	-	-	-	-
09:00:00	20	120	40	20	40	21	39	20	40	21	39
19:00:00	Free	-	-	-	-	-	-	-	-	-	-

Action Plan

Name	Pattern	Enabled Logic Processor Statements
Free	Free	N/A
2	2	N/A
3	3	N/A
7	7	N/A
9	9	N/A
15	15	N/A
Free	Free	N/A

Miami-Dade, FL

TOD Schedule Report

4332 - Galloway Rd & NW 41st St

2070 1C-Econolite Type-Cobalt

2/9/2021, 12:26 PM

Phase Data

Phase	Direction	Split	Timing Plan	Walk	Ped Clear	Min Green	Max Green	Vehicle Ext	MAX 2	MAX 3	Yellow	Red Clear
1	N - L	17	1	0	0	5	6	2	15	0	4.4	2
			2	0	0	5	6	2	15	0	4.4	2
			3	0	0	5	6	2	15	0	4.4	2
			4	0	0	5	35	5	40	0	3	1
2	S - T	96	1	0	0	16	30	1	30	0	4.4	2
			2	0	0	16	25	1	40	0	4.4	2
			3	0	0	16	25	1	40	0	4.4	2
			4	10	16	5	35	5	40	0	3	1
3	E - T	32	1	0	0	7	10	2.5	35	0	4	2.3
			2	0	0	7	12	2.5	35	0	4	2.3
			3	0	0	7	12	2.5	35	0	4	2.3
			4	0	0	5	35	5	40	0	3	1
4	W - T	25	1	7	12	7	15	2.5	35	0	4	2.3
			2	7	12	7	12	2.5	35	0	4	2.3
			3	7	12	7	12	2.5	35	0	4	2.3
			4	10	16	5	35	5	40	0	3	1
5	S - L	17	1	0	0	5	6	2	15	0	4.4	2
			2	0	0	5	6	2	15	0	4.4	2
			3	0	0	5	6	2	15	0	4.4	2
			4	0	0	5	35	5	40	0	3	1
6	N - T	96	1	0	0	16	30	1	30	0	4.4	2
			2	0	0	16	25	1	40	0	4.4	2
			3	0	0	16	25	1	40	0	4.4	2
			4	10	16	5	35	5	40	0	3	1

Schedule - 1

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
-	X	X	X	X	X	-

Day Plan - 1 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6
00:00:00	Free	-	-	-	-	-	-	-	-
06:15:00	3	180	107	18	108	29	25	18	108
10:00:00	7	170	149	17	96	32	25	17	96
14:30:00	9	190	168	17	106	40	27	17	106
19:00:00	15	150	149	17	76	32	25	17	76
21:00:00	Free	-	-	-	-	-	-	-	-

Schedule - 2

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
X	-	-	-	-	-	X

Day Plan - 2 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6
00:00:00	Free	-	-	-	-	-	-	-	-
09:00:00	20	120	50	13	61	20	26	13	61
19:00:00	Free	-	-	-	-	-	-	-	-

Action Plan

Name	Pattern	Enabled Logic Processor Statements
Free	Free	N/A
3	3	N/A
7	7	N/A
9	9	N/A
15	15	N/A
Free	Free	N/A

TOD Schedule Report

for 4667: Galloway Rd&NW 53 St

Print Date: 10/4/2021

Print Time: 6:56 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4667	Galloway Rd&NW 53 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBT	WBT	SBL	NBT	-	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	7 - 7 - 7	7 - 7 - 7	4.4	2
2 SBT	7 - 7 - 7	10 - 15 - 15	7 - 7 - 7	1 - 1 - 1	40 - 30 - 40	0 - 50 - 40	4.4	2
3 EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2 - 2 - 2	10 - 10 - 10	18 - 10 - 10	4	2.3
4 WBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	2 - 2 - 2	10 - 15 - 20	18 - 10 - 20	4	2.3
5 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	7 - 12 - 7	7 - 7 - 7	4.4	2
6 NBT	7 - 7 - 7	10 - 15 - 15	7 - 7 - 7	1 - 1 - 1	40 - 30 - 40	0 - 50 - 40	4.4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	123456--
External Permit 0	-234-6--
External Permit 1	-234-6--
External Permit 2	-234-6--

TOD Schedule Report

for 4667: Galloway Rd&NW 53 St

Print Date: 10/4/2021

Print Time: 6:56 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBT	4 WBT	5 SBL	6 NBT	7 -	8 -	Ring Offset	Offset
	1	90	7	31	14	14	7	31	0	0	0	0
	2	80	7	25	12	12	7	25	0	0	0	46
	3	160	7	101	17	11	7	101	0	0	0	86
	4	80	7	26	12	11	7	26	0	0	0	38
	5	140	6	80	18	12	6	80	0	0	0	4
	8	110	6	52	16	12	6	52	0	0	0	40
	10	120	6	57	18	15	6	57	0	0	0	38
	12	130	7	63	18	18	7	63	0	0	0	36
	14	160	6	96	17	17	6	96	0	0	0	108
	16	110	6	52	16	12	6	52	0	0	0	36
	17	80	7	25	12	12	7	25	0	0	0	1
	21	70	6	21	8	11	6	21	0	0	0	13

Local TOD Schedule

Time	Plan	DOW
0000	Flash	M T W Th F
0000	Flash	Su S
0530	Free	Su S
0530	Free	M T W Th F
0700	4	M T W Th F
0900	Free	M T W Th F
1545	2	M T W Th F
1800	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 4596: Galloway Rd&NW 58 St

Print Date: 10/4/2021

Print Time: 6:47 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4596	Galloway Rd&NW 58 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1	Walk Phase Bank 2	Walk Phase Bank 3	Don't Walk Phase Bank 1	Don't Walk Phase Bank 2	Don't Walk Phase Bank 3	Min Initial Phase Bank 1	Min Initial Phase Bank 2	Min Initial Phase Bank 3	Veh Ext Phase Bank 1	Veh Ext Phase Bank 2	Veh Ext Phase Bank 3	Max Limit Phase Bank 1	Max Limit Phase Bank 2	Max Limit Phase Bank 3	Max 2 Phase Bank 1	Max 2 Phase Bank 2	Max 2 Phase Bank 3	Yellow	Red
1 EBL	0	0	0	0	0	0	5	5	5	3	3	3	12	7	12	25	12	25	4.4	2
2 WBT	5	5	5	14	14	14	7	7	7	1	1	1	45	35	45	0	40	60	4.4	2
3 SBL	0	0	0	0	0	0	5	5	5	3	3	3	7	7	7	15	10	15	4.4	2
4 NBT	5	5	5	17	17	17	7	7	7	3	3	3	10	10	10	45	25	48	4.4	2
5 WBL	0	0	0	0	0	0	5	5	5	3	3	3	12	7	12	25	12	25	4.4	2
6 EBT	5	5	5	14	14	14	7	7	7	1	1	1	45	35	45	0	40	60	4.4	2
7 NBL	0	0	0	0	0	0	5	5	5	3	3	3	7	7	7	27	10	27	4.4	2
8 SBT	5	5	5	17	17	17	7	7	7	3	3	3	10	10	10	45	25	45	4.4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	12-456-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 4596: Galloway Rd&NW 58 St

Print Date: 10/4/2021

Print Time: 6:47 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 WBL	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	2	100	11	35	9	21	11	35	9	21	0	4
	3	160	11	75	14	36	11	75	14	36	0	25
	6	140	12	61	12	31	18	55	12	31	0	53
	7	150	12	66	15	33	20	58	16	32	0	53
	10	100	7	43	9	17	16	34	9	17	0	2
	12	160	11	63	14	48	11	63	21	41	0	46
	14	120	7	50	8	31	14	43	15	24	0	56
	15	90	7	42	6	11	11	38	6	11	0	4
	20	80	9	23	6	18	9	23	6	18	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	M T W Th F
0000	Free	Su S
0530	Free	Su S
0530	2	M T W Th F
0645	3	M T W Th F
0800	20	Su S
1000	6	M T W Th F
1130	7	M T W Th F
1530	12	M T W Th F
1800	Free	Su S
1830	14	M T W Th F
2100	15	M T W Th F
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	M T W ThF
0500	TOD OUTPUTS	--------	M T W ThF
0630	TOD OUTPUTS	--------	M T W ThF
1530	TOD OUTPUTS	----4---	M T W ThF
1830	TOD OUTPUTS	--------	M T W ThF
2000	TOD OUTPUTS	------2-	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	M T W ThF
0000	TOD OUTPUTS	--------	Su S
0500	TOD OUTPUTS	--------	Su S
0500	TOD OUTPUTS	--------	M T W ThF
0630	TOD OUTPUTS	--------	M T W ThF
0800	TOD OUTPUTS	------2-	Su S
1530	TOD OUTPUTS	----4---	M T W ThF
1800	TOD OUTPUTS	--------	Su S
1830	TOD OUTPUTS	--------	M T W ThF
2000	TOD OUTPUTS	------2-	M T W ThF

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

Miami-Dade, FL

TOD Schedule Report

5382 - NW 41st St. & NW 93rd Ct.

2070 1C-Econolite Type-Cobalt

2/9/2021, 12:18 PM

Phase Data

Phase	Direction	Split	Timing Plan	Walk	Ped Clear	Min Green	Max Green	Vehicle Ext	MAX 2	MAX 3	Yellow	Red Clear
1	E - L	10	1	0	0	5	13	2	10	0	4.4	2
			2	0	0	5	8	2	14	0	4.4	2
			3	0	0	5	8	2	10	0	4.4	2
			4	0	0	5	35	5	40	0	3	1
2	W - T	57	1	0	0	16	80	1	40	0	4.4	2
			2	0	0	16	21	1	60	0	4.4	2
			3	0	0	16	21	1	18	0	4.4	2
			4	10	16	5	35	5	40	0	3	1
4	N - T	18	1	2	20	7	22	3	25	0	4	2.8
			2	2	20	7	22	3	12	0	4	2.8
			3	2	20	7	15	3	7	0	4	2.8
			4	10	16	5	35	5	40	0	3	1
5	W - L	10	1	0	0	5	13	2	30	0	4.4	2
			2	0	0	5	8	2	10	0	4.4	2
			3	0	0	5	8	2	10	0	4.4	2
			4	0	0	5	35	5	40	0	3	1
6	E - T	57	1	0	0	16	80	1	10	0	4.4	2
			2	0	0	16	21	1	60	0	4.4	2
			3	0	0	16	21	1	18	0	4.4	2
			4	10	16	5	35	5	40	0	3	1
8	S - T	18	1	2	20	7	22	3	25	0	4	2.8
			2	2	20	7	8	3	12	0	4	2.8
			3	2	20	7	8	3	7	0	4	2.8
			4	10	16	5	35	5	40	0	3	1

Schedule - 1

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
-	X	X	X	X	X	-

Day Plan - 1 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 8
00:00:00	Free	-	-	-	-	-	-	-	-
06:00:00	2	120	98	0	100	20	0	100	20
06:45:00	4	180	105	24	126	30	24	126	30
09:45:00	6	80	58	9	55	16	9	55	16
11:15:00	7	85	70	10	57	18	10	57	18
15:30:00	11	90	6	10	61	19	10	61	19
19:00:00	13	75	40	10	50	15	10	50	15
20:00:00	14	60	35	0	45	15	0	45	15
22:00:00	Free	-	-	-	-	-	-	-	-

Schedule - 2

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
X	-	-	-	-	-	X

Day Plan - 2 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 8
00:00:00	Free	-	-	-	-	-	-	-	-
07:00:00	19	100	70	0	82	18	0	82	18
15:00:00	20	110	8	0	88	22	0	88	22
19:00:00	21	90	64	0	72	18	0	72	18
21:00:00	Free	-	-	-	-	-	-	-	-

Action Plan

Name	Pattern	Enabled Logic Processor Statements
Free	Free	N/A
2	2	N/A
4	4	N/A
6	6	N/A
7	7	N/A
11	11	N/A
13	13	N/A
14	14	N/A
Free	Free	N/A

Miami-Dade, FL

TOD Schedule Report

4885 - NW 41st St. & NW 97th Ave.

2070 1C-Econolite Type-Cobalt

2/15/2021, 11:16 AM

Phase Data

Phase	Direction	Split	Timing Plan	Walk	Ped Clear	Min Green	Max Green	Vehicle Ext	MAX 2	MAX 3	Yellow	Red Clear
1	E - L	21	1	0	0	5	15	2	15	0	4.4	2.2
			2	0	0	5	8	2	7	0	4.4	2.2
			3	0	0	5	8	2	7	0	4.4	2.2
			4	0	0	5	35	5	40	0	3	1
2	W - T	77	1	5	31	16	30	1	40	0	4.4	2.2
			2	5	31	16	21	1	18	0	4.4	2.2
			3	5	31	16	21	1	18	0	4.4	2.2
			4	10	16	5	35	5	40	0	3	1
3	S - L	22	1	0	0	5	15	4	15	0	4.4	2.4
			2	0	0	5	9	2	7	0	4.4	2.4
			3	0	0	5	9	2	7	0	4.4	2.4
			4	0	0	5	35	5	40	0	3	1
4	N - T	50	1	7	22	7	20	3	25	0	4.4	2.4
			2	7	22	7	10	2.5	9	0	4.4	2.4
			3	7	22	7	10	2.5	9	0	4.4	2.4
			4	10	16	5	35	5	40	0	3	1
5	W - L	21	1	0	0	5	15	2	15	0	4.4	2.2
			2	0	0	5	8	2	7	0	4.4	2.2
			3	0	0	5	8	2	7	0	4.4	2.2
			4	0	0	5	35	5	40	0	3	1
6	E - T	77	1	5	31	16	30	1	40	0	4.4	2.2
			2	5	31	16	30	1	18	0	4.4	2.2
			3	5	31	16	30	1	18	0	4.4	2.2
			4	10	16	5	35	5	40	0	3	1
7	N - L	22	1	0	0	5	15	4	15	0	4.4	2.4
			2	0	0	5	9	2	7	0	4.4	2.4
			3	0	0	5	9	2	7	0	4.4	2.4
			4	0	0	5	35	5	40	0	3	1
8	S - T	50	1	7	22	7	20	3	25	0	4.4	2.4
			2	7	22	7	10	2.5	9	0	4.4	2.4
			3	7	22	7	10	2.5	9	0	4.4	2.4
			4	10	16	5	35	5	40	0	3	1

Schedule - 1

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
-	X	X	X	X	X	-

Day Plan - 1 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 7	Phs Spl 8
00:00:00	Free	-	-	-	-	-	-	-	-	-	-
06:00:00	2	120	37	19	47	26	28	19	47	26	18
06:45:00	4	180	150	22	86	33	39	22	86	33	39
09:45:00	6	160	77	19	69	24	48	19	69	24	48
11:15:00	7	170	85	21	77	22	50	21	77	22	50
15:30:00	11	180	31	24	61	30	65	24	61	30	65
19:00:00	13	150	32	22	58	27	43	22	58	27	43
20:00:00	14	120	8	19	54	24	23	19	54	24	23
22:00:00	Free	-	-	-	-	-	-	-	-	-	-

Schedule - 2

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
X	-	-	-	-	-	X

Day Plan - 2 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 3	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 7	Phs Spl 8
00:00:00	Free	-	-	-	-	-	-	-	-	-	-
07:00:00	19	100	15	15	43	18	24	15	43	18	24
15:00:00	20	110	59	15	53	18	24	15	53	18	24
19:00:00	21	90	68	17	34	21	18	17	34	21	18
21:00:00	Free	-	-	-	-	-	-	-	-	-	-

Action Plan

Name	Pattern	Enabled Logic Processor Statements
Free	Free	N/A
2	2	N/A
4	4	N/A
6	6	N/A
7	7	N/A
11	11	N/A
13	13	N/A
14	14	N/A
Free	Free	N/A

TOD Schedule Report

for 5669: NW 97 Av&NW 58 St

Print Date: 10/4/2021

Print Time: 8:34 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5669	NW 97 Av&NW 58 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBT	NBT	WBL	EBT	EV-N	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2	10 - 10 - 6	13 - 16 - 0	4	2
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 40 - 25	0 - 0 - 0	4	2
3 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 2	20 - 12 - 8	35 - 32 - 0	4	2
4 NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	15 - 30 - 18	40 - 32 - 0	4	2
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	10 - 10 - 6	17 - 16 - 0	4	2
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 40 - 25	0 - 0 - 0	4	2
7 EV-N	0 - 0 - 0	0 - 0 - 0	30 - 30 - 30	1 - 1 - 1	0 - 0 - 0	0 - 0 - 0	4	2
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	123456--
External Permit 0	--------
External Permit 1	-234-6--
External Permit 2	------7-

TOD Schedule Report

for 5669: NW 97 Av&NW 58 St

Print Date: 10/4/2021

Print Time: 8:34 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBT	4 NBT	5 WBL	6 EBT	7 EV-N	8 -	Ring Offset	Offset
	2	100	7	41	10	18	7	41	0	0	0	76
	3	180	13	83	30	30	17	79	0	0	0	63
	4	120	13	37	28	18	13	37	0	0	0	48
	5	120	11	42	24	19	11	42	0	0	0	77
	8	160	12	60	32	32	12	60	0	0	0	83
	11	180	7	74	35	40	10	71	0	0	0	9
	14	120	9	33	28	26	9	33	0	0	0	82
	15	110	9	46	11	20	8	47	0	0	0	7
	20	100	11	27	24	14	11	27	0	0	0	85
	22	90	6	36	8	16	6	36	0	0	0	89

Local TOD Schedule

Time	Plan	DOW
0000	Free	M T W Th F
0000	Free	Su S
0100	Free	Su S
0530	2	M T W Th F
0700	3	M T W Th F
0800	20	Su S
0900	4	M T W Th F
1345	8	M T W Th F
1545	11	M T W Th F
1830	14	M T W Th F
2100	15	M T W Th F
2100	22	Su S
2200	Free	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----3--	M T W ThF
0600	TOD OUTPUTS	--------	M T W ThF
1345	TOD OUTPUTS	------2-	M T W ThF
1545	TOD OUTPUTS	--------	M T W ThF
2200	TOD OUTPUTS	-----3--	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----3--	M T W ThF
0000	TOD OUTPUTS	-----3--	Su S
0600	TOD OUTPUTS	--------	M T W ThF
0900	TOD OUTPUTS	--------	Su S
1345	TOD OUTPUTS	------2-	M T W ThF
1545	TOD OUTPUTS	--------	M T W ThF
2200	TOD OUTPUTS	-----3--	M T W ThF
2200	TOD OUTPUTS	-----3--	Su S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

Miami-Dade, FL

TOD Schedule Report

6957 - NW 36th St & 8800th Blk.

2070-1C-Econolite Type-Cobalt

2/9/2021, 12:08 PM

Phase Data

Phase	Direction	Split	Timing Plan	Walk	Ped Clear	Min Green	Max Green	Vehicle Ext	MAX 2	MAX 3	Yellow	Red Clear
1	E - L	13	1	0	0	5	8	2	30	0	4.4	2
			2	0	0	5	8	2	14	0	4.4	2
			3	0	0	5	8	2	10	0	4.4	2
			4	0	0	0	0	0	0	0	0	0
2	W - T	53	1	5	25	16	30	1	0	0	4.4	2
			2	5	25	16	45	1	25	0	4.4	2
			3	5	25	16	21	1	18	0	4.4	2
			4	0	0	0	0	0	0	0	0	0
4	N - T	19	1	5	30	7	22	3	40	0	4	3
			2	5	30	7	12	2.5	11	0	4	3
			3	5	30	7	15	2.5	7	0	4	3
			4	0	0	0	0	0	0	0	0	0
5	W - L	13	1	0	0	5	8	2	30	0	4.4	2
			2	0	0	5	8	2	10	0	4.4	2
			3	0	0	5	8	2	10	0	4.4	2
			4	0	0	0	0	0	0	0	0	0
6	E - T	53	1	5	25	16	30	1	0	0	4.4	2
			2	5	25	16	45	1	25	0	4.4	2
			3	5	25	16	21	1	18	0	4.4	2
			4	0	0	0	0	0	0	0	0	0
8	S - T	19	1	0	0	7	22	2.5	40	0	4	3
			2	0	0	7	12	2.5	16	0	4	3
			3	0	0	7	8	2.5	7	0	4	3
			4	0	0	0	0	0	0	0	0	0

Schedule - 1

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
-	X	X	X	X	X	-

Day Plan - 1 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 8
00:00:00	64	-	-	-	-	-	-	-	-
05:30:00	62	-	-	-	-	-	-	-	-
06:15:00	3	180	163	26	118	36	26	118	36
10:00:00	7	85	62	13	53	19	13	53	19
14:30:00	9	190	158	13	147	30	13	147	30
19:00:00	15	75	62	13	42	20	13	42	20
21:00:00	62	-	-	-	-	-	-	-	-

Schedule - 2

Day of Week

SUN	MON	TUE	WED	THU	FRI	SAT
X	-	-	-	-	-	X

Day Plan - 2 -

Time of Day	Action Plan	Cycle Length	Offset	Phs Spl 1	Phs Spl 2	Phs Spl 4	Phs Spl 5	Phs Spl 6	Phs Spl 8
00:00:00	62	-	-	-	-	-	-	-	-
09:00:00	50	120	109	0	98	22	0	98	22
19:00:00	62	-	-	-	-	-	-	-	-

Action Plan

Name	Pattern	Enabled Logic Processor Statements
64	Free	N/A
62	Free	N/A
3	3	N/A
7	7	N/A
9	9	N/A
15	15	N/A
62	Free	N/A

APPENDIX F: Intersection Analysis Tables

Intersection Volume Development Sheet
Doral International Towers

Doral Boulevard and NW 87th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound		
	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	212	631	290	98	724	228	2	421	1446	445	498	1174	123
Average Season Volume	210	625	287	97	717	226	2	417	1,432	441	493	1,162	122
Total Background growth	**215**	**640**	**294**	**99**	**735**	**231**	**2**	**427**	**1468**	**452**	**505**	**1192**	**125**
Project Traffic:													
% Project Traffic	15%	9%	0%	11%	13%	12%	1%	11%	10%	11%	0%	14%	7%
Direction (in / out)	in	in	in	out	out	out	in	In	out	out	in	in	in
Total Project Traffic	**31**	**18**	**0**	**40**	**48**	**44**	**2**	**22**	**37**	**40**	**0**	**29**	**14**
Total	**246**	**658**	**294**	**139**	**783**	**275**	**4**	**449**	**1,505**	**492**	**505**	**1,221**	**139**
Intersection Lane Geometry By Movement													
No. of Lanes	**2**	**2**	**1**	**2**	**3**	**<**	**>**	**2**	**3**	**1**	**2**	**3**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound		
	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	391	853	407	93	882	236	2	246	897	287	388	1292	162
Average Seasonal Volume	387	844	403	92	873	234	2	244	888	284	384	1,279	160
Total Background growth	**397**	**866**	**413**	**94**	**895**	**240**	**2**	**250**	**910**	**291**	**394**	**1311**	**164**
Project Traffic:													
% Project Traffic	15%	9%	0%	11%	13%	12%	1%	11%	10%	11%	0%	14%	7%
Direction (in / out)	in	in	in	out	out	out	in	In	out	out	in	in	in
Total Project Traffic	**52**	**31**	**0**	**25**	**29**	**27**	**3**	**38**	**22**	**25**	**0**	**48**	**24**
Total	**449**	**897**	**413**	**119**	**924**	**267**	**5**	**288**	**932**	**316**	**394**	**1,359**	**188**
Intersection Lane Geometry By Movement													
No. of Lanes	**2**	**2**	**1**	**2**	**3**	**<**	**>**	**2**	**3**	**1**	**2**	**3**	**<**

Intersection Volume Development Sheet
Doral International Towers

NW 41st Street and NW 87th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound			Eastbound			Westbound		
	UT	LT[1]	Thru	RT	LT	Thru	RT[1]	LT[1]	Thru	RT[1]	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	5	19	921	178	76	864	5	5	3	12	132	4	45
Average Season Volume	5	19	912	176	75	855	5	5	3	12	131	4	45
Total Background growth	**5**	**19**	**935**	**181**	**77**	**877**	**5**	**5**	**3**	**12**	**134**	**4**	**46**
Project Traffic:													
% Project Traffic	0%	18%	9%	0%	5%	10%	11%	12%	0%	19%	0%	0%	0%
Direction (in / out)	in	in	in	in	out	out	in	out	out	out	in	in	in
Total Project Traffic	**0**	**37**	**18**	**0**	**18**	**37**	**22**	**44**	**0**	**69**	**0**	**0**	**0**
Total	**5**	**56**	**953**	**181**	**95**	**914**	**27**	**49**	**3**	**81**	**134**	**4**	**46**
Intersection Lane Geometry By Movement													
No. of Lanes	**>**	**1**	**2**	**<**	**1**	**2**	**<**	**>**	**1**	**<**	**>**	**1**	**1**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound			Eastbound			Westbound		
	UT	LT[1]	Thru	RT	LT[2]	Thru	RT[1]	LT[1]	Thru	RT[1]	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	8	29	1036	123	37	954	8	12	0	28	205	3	105
Average Seasonal Volume	8	29	1,026	122	37	944	8	12	0	28	203	3	104
Total Background growth	**8**	**29**	**1052**	**125**	**38**	**968**	**8**	**12**	**0**	**28**	**208**	**3**	**107**
Project Traffic:													
% Project Traffic	0%	18%	9%	0%	5%	10%	11%	12%	0%	19%	0%	0%	0%
Direction (in / out)	in	in	in	in	out	out	in	out	out	out	in	in	in
Total Project Traffic	**0**	**62**	**31**	**0**	**11**	**22**	**38**	**27**	**0**	**43**	**0**	**0**	**0**
Total	**8**	**91**	**1,083**	**125**	**49**	**990**	**46**	**39**	**0**	**71**	**208**	**3**	**107**
Intersection Lane Geometry By Movement													
No. of Lanes	**>**	**1**	**2**	**<**	**1**	**2**	**<**	**>**	**1**	**<**	**>**	**1**	**1**

1 Total of trips is adjusted to match driveway in and out AM and PM totals
2 Total of trips is adjusted to add volume from median closure south of intersection

Intersection Volume Development Sheet
Doral International Towers

Doral Boulevard and NW 8800 Block

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound			
	LT	Thru	RT	LT[1]	Thru	RT[1,2]	UT	LT[1,2]	Thru	RT	UT[2]	LT[2]	Thru	RT[1,2]
Background Traffic:														
Existing Volume (5/3/2022)	52	1	74	9	0	6	1	20	2078	58	10	22	1455	23
Average Season Volume	51	1	73	9	0	6	1	20	2,057	57	10	22	1,440	23
Total Background growth	**53**	**1**	**75**	**9**	**0**	**6**	**1**	**20**	**2109**	**59**	**10**	**22**	**1477**	**23**
Project Traffic:														
% Project Traffic	0%	0%	0%	10%	0%	5%	6%	5%	12%	0%	0%	0%	11%	12%
Direction (in / out)	in	in	in	out	out	out	in	in	in	in	in	out	In	in
% Project Traffic									11%				12%	
Direction (in / out)									Out				Out	
Total Project Traffic	**0**	**0**	**0**	**37**	**0**	**18**	**12**	**10**	**65**	**0**	**0**	**0**	**66**	**25**
Total	**53**	**1**	**75**	**46**	**0**	**24**	**13**	**30**	**2,174**	**59**	**10**	**22**	**1,543**	**48**
Intersection Lane Geometry By Movement														
No. of Lanes	**1**	**1**	**<**	**>**	**1**	**<**	**>**	**1**	**3**	**1**	**>**	**1**	**3**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound			
	LT	Thru	RT	LT[1]	Thru	RT[1,2]	UT	LT[1,2]	Thru	RT	UT[2]	LT[2]	Thru	RT[1,2]
Background Traffic:														
Existing Volume (5/3/2022)	41	3	68	33	3	23	7	17	1257	49	32	67	1778	12
Average Seasonal Volume	41	3	67	33	3	23	7	17	1,244	49	32	66	1,760	12
Total Background growth	**42**	**3**	**69**	**33**	**3**	**23**	**7**	**17**	**1276**	**50**	**32**	**68**	**1805**	**12**
Project Traffic:														
% Project Traffic	0%	0%	0%	10%	0%	5%	6%	5%	12%	0%	0%	0%	11%	12%
Direction (in / out)	in	in	in	out	out	out	in	in	in	in	in	out	In	in
% Project Traffic									11%				12%	
Direction (in / out)									Out				Out	
Total Project Traffic	**0**	**0**	**0**	**22**	**0**	**11**	**21**	**17**	**66**	**0**	**0**	**0**	**65**	**41**
Total	**42**	**3**	**69**	**55**	**3**	**34**	**28**	**34**	**1,342**	**50**	**32**	**68**	**1,870**	**53**
Intersection Lane Geometry By Movement														
No. of Lanes	**1**	**1**	**<**	**>**	**1**	**<**	**>**	**1**	**3**	**1**	**>**	**1**	**3**	**<**

1 Total of trips is adjusted to match driveway in and out AM and PM totals and to accommodate rideshare driveway in redevelopment current use being moved to use this driveway

2 Total of trips is adjusted to accommodate rideshare driveway in redevelopment current use being moved to use this driveway and proposed median closure to the east

Intersection Volume Development Sheet
Doral International Towers

Doral Boulevard and NW 93rd Court

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound		
	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	27	0	24	27	1	39	2	41	2243	29	18	1378	28
Average Season Volume	27	0	24	27	1	39	2	41	2,221	29	18	1,364	28
Total Background growth	**27**	**0**	**24**	**27**	**1**	**40**	**2**	**42**	**2277**	**29**	**18**	**1399**	**28**
Project Traffic:													
% Project Traffic	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%	23%	0%
Direction (in / out)	in	in	in	in	in	in	in	in	in	in	out	out	out
Total Project Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**0**	**0**	**84**	**0**
Total	**27**	**0**	**24**	**27**	**1**	**40**	**2**	**42**	**2,324**	**29**	**18**	**1,483**	**28**
Intersection Lane Geometry By Movement													
No. of Lanes	**>**	**1**	**<**	**1**	**<**	**1**	**>**	**1**	**3**	**<**	**1**	**3**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound		
	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	84	1	10	23	1	28	10	36	1391	5	15	1768	26
Average Seasonal Volume	83	1	10	23	1	28	10	36	1,377	5	15	1,750	26
Total Background growth	**85**	**1**	**10**	**23**	**1**	**28**	**10**	**37**	**1412**	**5**	**15**	**1795**	**26**
Project Traffic:													
% Project Traffic	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%	23%	0%
Direction (in / out)	in	in	in	in	in	in	in	in	in	in	out	out	out
Total Project Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**79**	**0**	**0**	**52**	**0**
Total	**85**	**1**	**10**	**23**	**1**	**28**	**10**	**37**	**1,491**	**5**	**15**	**1,847**	**26**
Intersection Lane Geometry By Movement													
No. of Lanes	**>**	**1**	**<**	**1**	**<**	**1**	**>**	**1**	**3**	**<**	**1**	**3**	**<**

Intersection Volume Development Sheet
Doral International Towers

Doral Boulevard and NW 97th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound			
	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT
Background Traffic:														
Existing Volume (5/3/2022)	135	365	167	428	567	33	2	85	1833	249	2	211	1121	179
Average Season Volume	134	361	165	424	561	33	2	84	1,815	247	2	209	1,110	177
Total Background growth	**137**	**370**	**170**	**434**	**576**	**33**	**2**	**86**	**1860**	**253**	**2**	**214**	**1138**	**182**
Project Traffic:														
% Project Traffic	0%	0%	10%	3%	0%	0%	0%	0%	10%	0%	0%	10%	10%	3%
Direction (in / out)	in	in	in	in	in	in	in	in	in	in	out	out	out	out
Total Project Traffic	**0**	**0**	**20**	**6**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**37**	**37**	**11**
Total	**137**	**370**	**190**	**440**	**576**	**33**	**2**	**86**	**1,880**	**253**	**2**	**251**	**1,175**	**193**
Intersection Lane Geometry By Movement														
No. of Lanes	**2**	**2**	**<**	**2**	**2**	**<**	**>**	**2**	**3**	**<**	**>**	**2**	**3**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound				Westbound			
	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT
Background Traffic:														
Existing Volume (5/3/2022)	267	626	175	315	626	124	1	112	1027	183	3	174	1523	176
Average Seasonal Volume	264	620	173	312	620	123	1	111	1,017	181	3	172	1,508	174
Total Background growth	**271**	**635**	**178**	**320**	**635**	**126**	**1**	**114**	**1042**	**186**	**3**	**177**	**1546**	**179**
Project Traffic:														
% Project Traffic	0%	0%	10%	3%	0%	0%	0%	0%	10%	0%	0%	10%	10%	3%
Direction (in / out)	in	in	in	in	in	in	in	in	in	in	out	out	out	out
Total Project Traffic	**0**	**0**	**34**	**10**	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**22**	**22**	**7**
Total	**271**	**635**	**212**	**330**	**635**	**126**	**1**	**114**	**1,076**	**186**	**3**	**199**	**1,568**	**186**
Intersection Lane Geometry By Movement														
No. of Lanes	**2**	**2**	**<**	**2**	**2**	**<**	**>**	**2**	**3**	**<**	**>**	**2**	**3**	**<**

Intersection Volume Development Sheet
Doral International Towers

NW 36th Street and NW 79th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	32	130	173	373	326	82	91	1773	36	3	339	1699	453
Average Season Volume	32	129	171	369	323	81	90	1,755	36	3	336	1,682	448
Total Background growth	**32**	**132**	**176**	**379**	**331**	**83**	**92**	**1800**	**37**	**3**	**344**	**1724**	**460**
Project Traffic:													
% Project Traffic	4%	0%	0%	0%	0%	0%	0%	17%	4%	0%	0%	17%	0%
Direction (in / out)	in	in	in	out	out	in	out	out	out	in	in	in	in
Total Project Traffic	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**62**	**15**	**0**	**0**	**35**	**0**
Total	**40**	**132**	**176**	**379**	**331**	**83**	**92**	**1,862**	**52**	**3**	**344**	**1,759**	**460**
Intersection Lane Geometry By Movement													
No. of Lanes	**1**	**>**	**2**	**2**	**2**	**<**	**1**	**4**	**<**	**>**	**2**	**3**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	66	185	385	414	329	102	122	2481	32	16	186	1603	363
Average Seasonal Volume	65	183	381	410	326	101	121	2,456	32	16	184	1,587	359
Total Background growth	**67**	**188**	**391**	**420**	**334**	**104**	**124**	**2518**	**32**	**16**	**189**	**1627**	**368**
Project Traffic:													
% Project Traffic	4%	0%	0%	0%	0%	0%	0%	17%	4%	0%	0%	17%	0%
Direction (in / out)	in	in	in	out	out	in	out	out	out	in	in	in	in
Total Project Traffic	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**38**	**9**	**0**	**0**	**58**	**0**
Total	**81**	**188**	**391**	**420**	**334**	**104**	**124**	**2,556**	**41**	**16**	**189**	**1,685**	**368**
Intersection Lane Geometry By Movement													
No. of Lanes	**1**	**>**	**2**	**2**	**2**	**<**	**1**	**4**	**<**	**<0**	**2**	**3**	**<**

Intersection Volume Development Sheet
Doral International Towers

NW 58th Street and NW 97th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Background Traffic:												
Existing Volume (5/3/2022)	111	133	171	227	232	16	22	1139	145	141	521	149
Average Season Volume	110	132	169	225	230	16	22	1,128	144	140	516	148
Total Background growth	**113**	**135**	**174**	**230**	**235**	**16**	**22**	**1156**	**147**	**143**	**529**	**151**
Committed Projects:												
97th Avenue Doral Retail	5	2	0	3	0	0	0	9	0	5	1	0
Total Committed Traffic	**5**	**2**	**0**	**3**	**0**	**0**	**0**	**9**	**0**	**5**	**1**	**0**
Project Traffic:												
% Project Traffic	1%	2%	0%	3%	2%	0%	0%	2%	1%	0%	2%	3%
Direction (in / out)	out	out	out	in	in	in	in	in	in	out	out	out
Total Project Traffic	**4**	**7**	**0**	**6**	**4**	**0**	**0**	**4**	**2**	**0**	**7**	**11**
Total	**122**	**144**	**174**	**239**	**239**	**16**	**22**	**1,169**	**149**	**148**	**537**	**162**
Intersection Lane Geometry By Movement												
No. of Lanes	**1**	**1**	**<**	**2**	**<1**	**<**	**1**	**2**	**<**	**1**	**2**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Background Traffic:												
Existing Volume (5/3/2022)	128	248	86	95	215	32	55	668	128	331	1163	199
Average Seasonal Volume	127	246	85	94	213	32	54	661	127	328	1,151	197
Total Background growth	**130**	**252**	**87**	**96**	**218**	**32**	**56**	**678**	**130**	**336**	**1180**	**202**
Committed Projects:												
97th Avenue Doral Retail	23	8	0	8	0	0	0	26	0	21	4	0
Total Committed Traffic	**23**	**8**	**0**	**8**	**0**	**0**	**0**	**26**	**0**	**21**	**4**	**0**
Project Traffic:												
% Project Traffic	1%	2%	0%	3%	2%	0%	0%	2%	1%	0%	2%	3%
Direction (in / out)	out	out	out	in	in	in	in	in	in	out	out	out
Total Project Traffic	**2**	**4**	**0**	**10**	**7**	**0**	**0**	**7**	**3**	**0**	**4**	**7**
Total	**155**	**264**	**87**	**114**	**225**	**32**	**56**	**711**	**133**	**357**	**1,188**	**209**
Intersection Lane Geometry By Movement												
No. of Lanes	**1**	**1**	**<**	**2**	**<1**	**<**	**1**	**2**	**<**	**1**	**2**	**<**

Intersection Volume Development Sheet
Doral International Towers

NW 58th Street and NW 79th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	164	77	437	130	85	26	30	1005	102	7	483	1159	317
Average Season Volume	162	76	433	129	84	26	30	995	101	7	478	1,147	314
Total Background growth	**166**	**78**	**444**	**132**	**86**	**26**	**30**	**1020**	**104**	**7**	**490**	**1176**	**322**
Project Traffic:													
% Project Traffic	0%	1%	5%	0%	1%	1%	1%	5%	0%	0%	5%	5%	0%
Direction (in / out)	out	out	out	in	in	in	out	out	out	in	in	in	in
Total Project Traffic	**0**	**4**	**18**	**0**	**2**	**2**	**4**	**18**	**0**	**0**	**10**	**10**	**0**
Total	**166**	**82**	**462**	**132**	**88**	**28**	**34**	**1,038**	**104**	**7**	**500**	**1,186**	**322**
Intersection Lane Geometry By Movement													
No. of Lanes	**1**	**>**	**2**	**>**	**2**	**<**	**1**	**2**	**1**	**>**	**1**	**2**	**1**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	UT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	200	46	833	519	112	55	5	1039	88	4	265	964	88
Average Seasonal Volume	198	46	825	514	111	54	5	1,029	87	4	262	954	87
Total Background growth	**203**	**47**	**845**	**527**	**114**	**56**	**5**	**1055**	**89**	**4**	**269**	**978**	**89**
Project Traffic:													
% Project Traffic	0%	1%	5%	0%	1%	1%	1%	5%	0%	0%	5%	5%	0%
Direction (in / out)	out	out	out	in	in	in	out	out	out	in	in	in	in
Total Project Traffic	**0**	**2**	**11**	**0**	**3**	**3**	**2**	**11**	**0**	**0**	**17**	**17**	**0**
Total	**203**	**49**	**856**	**527**	**117**	**59**	**7**	**1,066**	**89**	**4**	**286**	**995**	**89**
Intersection Lane Geometry By Movement													
No. of Lanes	**1**	**>**	**2**	**>**	**2**	**<**	**1**	**2**	**1**	**>**	**1**	**2**	**1**

Intersection Volume Development Sheet
Doral International Towers

NW 58th Street and NW 87th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Background Traffic:												
Existing Volume (5/3/2022)	174	613	107	98	613	114	195	948	333	83	587	75
Average Season Volume	172	607	106	97	607	113	193	939	330	82	581	74
Total Background growth	**177**	**622**	**109**	**99**	**622**	**116**	**198**	**962**	**338**	**84**	**596**	**76**
Committed Projects:												
NW 87th Avenue Doral Retail	5	9	0	13	3	0	0	9	0	8	0	0
Total Committed Traffic	**5**	**9**	**0**	**13**	**3**	**0**	**0**	**9**	**0**	**8**	**0**	**0**
Project Traffic:												
% Project Traffic	5%	15%	6%	0%	15%	0%	0%	0%	5%	6%	0%	0%
Direction (in / out)	out	out	out	in	in	in	in	in	in	in	in	in
Total Project Traffic	**18**	**55**	**22**	**0**	**31**	**0**	**0**	**0**	**10**	**12**	**0**	**0**
Total	**200**	**686**	**131**	**112**	**656**	**116**	**198**	**971**	**348**	**104**	**596**	**76**
Intersection Lane Geometry By Movement												
No. of Lanes	**1**	**2**	**<**	**1**	**2**	**1**	**1**	**2**	**<**	**1**	**2**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Background Traffic:												
Existing Volume (5/3/2022)	245	737	81	85	545	373	119	573	201	105	1031	78
Average Seasonal Volume	243	730	80	84	540	369	118	567	199	104	1,021	77
Total Background growth	**249**	**748**	**82**	**86**	**553**	**379**	**121**	**582**	**204**	**107**	**1046**	**79**
Committed Projects:												
NW 87th Avenue Doral Retail	16	28	0	21	4	0	0	14	0	14	0	0
Total Committed Traffic	**16**	**28**	**0**	**21**	**4**	**0**	**0**	**14**	**0**	**14**	**0**	**0**
Project Traffic:												
% Project Traffic	5%	15%	6%	0%	15%	0%	0%	0%	5%	6%	0%	0%
Direction (in / out)	out	out	out	in	in	in	in	in	in	in	in	in
Total Project Traffic	**11**	**34**	**13**	**0**	**52**	**0**	**0**	**0**	**17**	**21**	**0**	**0**
Total	**276**	**810**	**95**	**107**	**609**	**379**	**121**	**596**	**221**	**142**	**1,046**	**79**
Intersection Lane Geometry By Movement												
No. of Lanes	**1**	**2**	**<**	**1**	**2**	**1**	**1**	**2**	**<**	**1**	**2**	**<**

Intersection Volume Development Sheet
Doral International Towers

NW 53rd Street and NW 87th Avenue

Growth Rate = 0.50%
Seasonal Adjustment Factor= 0.99
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound			Eastbound			Westbound		
	UT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	50	14	895	128	108	848	11	7	2	15	115	2	42
Average Season Volume	50	14	886	127	107	840	11	7	2	15	114	2	42
Total Background growth	**51**	**14**	**908**	**130**	**110**	**861**	**11**	**7**	**2**	**15**	**117**	**2**	**43**
Project Traffic:													
% Project Traffic	0%	0%	32%	6%	0%	26%	0%	0%	0%	0%	6%	0%	0%
Direction (in / out)	in	out	out	out	out	in	out	in	in	in	in	in	in
Total Project Traffic	**0**	**0**	**117**	**22**	**0**	**53**	**0**	**0**	**0**	**0**	**12**	**0**	**0**
Total	**51**	**14**	**1,025**	**152**	**110**	**914**	**11**	**7**	**2**	**15**	**129**	**2**	**43**
Intersection Lane Geometry By Movement													
No. of Lanes	**>**	**1**	**2**	**1**	**1**	**2**	**<**	**1**	**1**	**<**	**2**	**<1**	**1**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound			Eastbound			Westbound		
	UT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Background Traffic:													
Existing Volume (5/3/2022)	9	14	1028	116	90	803	10	15	1	19	179	4	83
Average Seasonal Volume	9	14	1,018	115	89	795	10	15	1	19	177	4	82
Total Background growth	**9**	**14**	**1043**	**118**	**91**	**815**	**10**	**15**	**1**	**19**	**182**	**4**	**84**
Project Traffic:													
% Project Traffic	0%	0%	32%	6%	0%	26%	0%	0%	0%	0%	6%	0%	0%
Direction (in / out)	in	out	out	out	out	in	out	in	in	in	in	in	in
Total Project Traffic	**0**	**0**	**72**	**13**	**0**	**89**	**0**	**0**	**0**	**0**	**21**	**0**	**0**
Total	**9**	**14**	**1,115**	**131**	**91**	**904**	**10**	**15**	**1**	**19**	**203**	**4**	**84**
Intersection Lane Geometry By Movement													
No. of Lanes	**>**	**1**	**2**	**1**	**1**	**2**	**<**	**1**	**1**	**<**	**2**	**<1**	**1**

Intersection Volume Development Sheet
Doral International Towers

NW 36th Street and Centrum Doral

Growth Rate = 0.50%
Seasonal Adjustment Factor= 1.00
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT[1]	LT[1,2]	Thru	RT	UT[2]	LT[2]	Thru	RT[1]
Background Traffic:													
Existing Volume (10/27/2022)	0	0	16	0	0	26	27	2245	25	5	15	1522	55
Average Season Volume	0	0	16	0	0	26	27	2,245	25	5	15	1,522	55
Total Background growth	**0**	**0**	**16**	**0**	**0**	**27**	**28**	**2302**	**26**	**5**	**15**	**1560**	**56**
Project Traffic:													
% Project Traffic	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%	21%	7%
Direction (in / out)	in	in	in	out	out	in	out	in	out	in	in	in	in
% Project Traffic								21%				12%	
Direction (in / out)								out				out	
Total Project Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**102**	**0**	**0**	**0**	**87**	**14**
Total	**0**	**0**	**16**	**0**	**0**	**27**	**28**	**2,404**	**26**	**5**	**15**	**1,647**	**70**
Intersection Lane Geometry By Movement													
No. of Lanes	-	-	1	-	-	1	1	3	<	>	1	3	<

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT[1]	LT[1,2]	Thru	RT	UT[2]	LT[2]	Thru	RT[1]
Background Traffic:													
Existing Volume (10/27/2022)	0	0	56	0	0	32	4	1542	22	3	9	1781	20
Average Seasonal Volume	0	0	56	0	0	32	4	1,542	22	3	9	1,781	20
Total Background growth	**0**	**0**	**57**	**0**	**0**	**33**	**4**	**1581**	**23**	**3**	**9**	**1826**	**21**
Project Traffic:													
% Project Traffic	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%	21%	7%
Direction (in / out)	in	in	in	out	out	in	out	in	out	in	in	in	in
% Project Traffic								21%				12%	
Direction (in / out)								out				out	
Total Project Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**88**	**0**	**0**	**0**	**99**	**24**
Total	**0**	**0**	**57**	**0**	**0**	**33**	**4**	**1,669**	**23**	**3**	**9**	**1,925**	**45**
Intersection Lane Geometry By Movement													
No. of Lanes	-	-	1	-	-	1	1	3	<	>	1	3	<

[1] *Use of driveway is changing in the re-development to be a valet, volumes associated with current use will be redistributed to another drieway total volumes adjusted to match future use*

[2] *Median opening facilitating this movement is proposed to be closed*

Intersection Volume Development Sheet
Doral International Towers

NW 87th Avenue at Windsor at 8669 AWS

Growth Rate = 0.50%
Seasonal Adjustment Factor= 1.00
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound				Westbound		
	UT	LT	Thru	RT	UT	LT[1]	Thru	RT	LT	Thru	RT
Background Traffic:											
Existing Volume (10/27/2022)	0	0	1066	24	0	0	962	0	0	0	14
Average Season Volume	0	0	1,066	24	0	0	962	0	0	0	14
Total Background growth	**0**	**0**	**1093**	**25**	**0**	**0**	**986**	**0**	**0**	**0**	**14**
Project Traffic:											
% Project Traffic	0%	0%	27%	0%	0%	0%	36%	0%	0%	0%	0%
Direction (in / out)	in	out	in	in	out	out	out	in	out	out	out
Total Project Traffic	**0**	**0**	**55**	**0**	**0**	**0**	**132**	**0**	**0**	**0**	**0**
Total	**0**	**0**	**1,148**	**25**	**0**	**0**	**1,118**	**0**	**0**	**0**	**14**
Intersection Lane Geometry By Movement											
No. of Lanes	**>**	**>**	**2**	**<**	**>**	**1**	**2**	**<**	**-**	**-**	**1**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound				Westbound		
	UT	LT	Thru	RT	UT	LT[1]	Thru	RT	LT	Thru	RT
Background Traffic:											
Existing Volume (10/27/2022)	0	0	1244	23	0	4	1052	0	0	0	24
Average Seasonal Volume	0	0	1,244	23	0	4	1,052	0	0	0	24
Total Background growth	**0**	**0**	**1275**	**24**	**0**	**4**	**1079**	**0**	**0**	**0**	**25**
Project Traffic:											
% Project Traffic	0%	0%	27%	0%	0%	0%	36%	0%	0%	0%	0%
Direction (in / out)	in	out	in	in	out	out	out	in	out	out	out
Total Project Traffic	**0**	**0**	**93**	**0**	**0**	**0**	**81**	**0**	**0**	**0**	**0**
Total	**0**	**0**	**1,368**	**24**	**0**	**4**	**1,160**	**0**	**0**	**0**	**25**
Intersection Lane Geometry By Movement											
No. of Lanes	**>**	**>**	**2**	**<**	**>**	**1**	**2**	**<**	**-**	**-**	**1**

[1] *Median opening facilitating this movement is proposed to be closed - movement to be accomodated by left turn signal at NW 41st Street*

Intersection Volume Development Sheet
Doral International Towers

NW 36th Street at AT&T (East Driveway)

Growth Rate = 0.50%
Seasonal Adjustment Factor= 1.00
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Eastbound				Westbound				Southbound[1,2]	Northbound		
	UT	LT	Thru	RT	UT	LT	Thru	RT[1]	RT	LT	Thru	RT
Background Traffic:												
Existing Volume (10/27/2022)	1	0	2232	3	3	3	1505	0	0	0	0	13
Average Season Volume	1	0	2,232	3	3	3	1,505	0	0	0	0	13
Total Background growth	**1**	**0**	**2288**	**3**	**3**	**3**	**1543**	**0**	**0**	**0**	**0**	**13**
Project Traffic:												
% Project Traffic	0%	0%	23%	0%	0%	0%	32%	2%	2%	0%	0%	0%
Direction (in / out)	in	out	in	in	out	out	out	in	out	out	out	out
% Project Traffic			11%									
Direction (in / out)			out									
Total Project Traffic	**0**	**0**	**87**	**0**	**0**	**0**	**117**	**4**	**7**	**0**	**0**	**0**
Total	**1**	**0**	**2,375**	**3**	**3**	**3**	**1,660**	**4**	**7**	**0**	**0**	**13**
Intersection Lane Geometry By Movement												
No. of Lanes	**>**	**>**	**3**	**<**	**>**	**1**	**3**	**<**	**1**	**>**	**1**	**<**

PM Peak Hour

Intersection Volume Development

Volume Component	Eastbound				Westbound				Southbound[1,2]	Northbound		
	UT	LT	Thru	RT	UT	LT	Thru	RT[1]	RT	LT	Thru	RT
Background Traffic:												
Existing Volume (10/27/2022)	1	0	1476	0	6	5	1786	0	0	0	0	1
Average Seasonal Volume	1	0	1,476	0	6	5	1,786	0	0	0	0	1
Total Background growth	**1**	**0**	**1513**	**0**	**6**	**5**	**1831**	**0**	**0**	**0**	**0**	**1**
Project Traffic:												
% Project Traffic	0%	0%	23%	0%	0%	0%	32%	2%	2%	0%	0%	0%
Direction (in / out)	in	out	in	in	out	out	out	in	out	out	out	out
% Project Traffic			11%									
Direction (in / out)			out									
Total Project Traffic	**0**	**0**	**104**	**0**	**0**	**0**	**72**	**7**	**4**	**0**	**0**	**0**
Total	**1**	**0**	**1,617**	**0**	**6**	**5**	**1,903**	**7**	**4**	**0**	**0**	**1**
Intersection Lane Geometry By Movement												
No. of Lanes	**>**	**>**	**3**	**<**	**>**	**1**	**3**	**<**	**1**	**>**	**1**	**<**

[1] *Total of trips is adjusted to match driveway in and out AM and PM totals*

[2] *Driveway does not currently exist*

Intersection Volume Development Sheet
Doral International Towers

NW 36th Street at AT&T (West Driveway)

Growth Rate = 0.50%
Seasonal Adjustment Factor= 1.00
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Eastbound				Westbound				Northbound		
	UT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:											
Existing Volume (10/27/2022)	1	0	2282	2	0	6	1572	0	0	0	24
Average Season Volume	1	0	2,282	2	0	6	1,572	0	0	0	24
Total Background growth	**1**	**0**	**2340**	**2**	**0**	**6**	**1612**	**0**	**0**	**0**	**25**
Project Traffic:											
% Project Traffic	0%	0%	23%	0%	11%	0%	23%	0%	0%	0%	0%
Direction (in / out)	in	out	in	in	out	out	out	in	out	out	out
Total Project Traffic	**0**	**0**	**47**	**0**	**40**	**0**	**84**	**0**	**0**	**0**	**0**
Total	**1**	**0**	**2,387**	**2**	**40**	**6**	**1,696**	**0**	**0**	**0**	**25**
Intersection Lane Geometry By Movement											
No. of Lanes	**>**	**>**	**3**	**<**	**>**	**1**	**3**	**-**	**1**	**-**	**1**

PM Peak Hour

Intersection Volume Development

Volume Component	Eastbound				Westbound				Northbound		
	UT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:											
Existing Volume (10/27/2022)	1	0	1484	0	1	1	1789	0	3	0	1
Average Seasonal Volume	1	0	1,484	0	1	1	1,789	0	3	0	1
Total Background growth	**1**	**0**	**1521**	**0**	**1**	**1**	**1834**	**0**	**3**	**0**	**1**
Project Traffic:											
% Project Traffic	0%	0%	23%	0%	11%	0%	23%	0%	0%	0%	0%
Direction (in / out)	in	out	in	in	out	out	out	in	out	out	out
Total Project Traffic	**0**	**0**	**79**	**0**	**25**	**0**	**52**	**0**	**0**	**0**	**0**
Total	**1**	**0**	**1,600**	**0**	**26**	**1**	**1,886**	**0**	**3**	**0**	**1**
Intersection Lane Geometry By Movement											
No. of Lanes	**>**	**>**	**3**	**<**	**>**	**1**	**3**	**-**	**>**	**1**	**<**

Intersection Volume Development Sheet
Doral International Towers

NW 87th Avenue at Windsor at Doral Driveway

Growth Rate = 0.50%
Seasonal Adjustment Factor= 1.00
Buildout Year = 2027
Years = 5

AM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound				Westbound		
	UT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:											
Existing Volume (10/27/2022)	0	0	1009	8	1	8	919	0	42	0	22
Average Season Volume	0	0	1,009	8	1	8	919	0	42	0	22
Total Background growth	**0**	**0**	**1034**	**8**	**1**	**8**	**942**	**0**	**43**	**0**	**23**
Project Traffic:											
% Project Traffic	9%	0%	17%	0%	15%	0%	17%	0%	0%	0%	0%
Direction (in / out)	in	out	out	in	out	out	in	in	out	out	out
Total Project Traffic	**18**	**0**	**62**	**0**	**55**	**0**	**35**	**0**	**0**	**0**	**0**
Total	**18**	**0**	**1,096**	**8**	**56**	**8**	**977**	**0**	**43**	**0**	**23**
Intersection Lane Geometry By Movement											
No. of Lanes	**>**	**>**	**2**	**<**	**>**	**1**	**2**	**-**	**1**	**-**	**1**

PM Peak Hour

Intersection Volume Development

Volume Component	Northbound				Southbound				Westbound		
	UT	LT	Thru	RT	UT	LT	Thru	RT	LT	Thru	RT
Background Traffic:											
Existing Volume (10/27/2022)	3	0	1106	12	3	21	1123	0	25	0	16
Average Seasonal Volume	3	0	1,106	12	3	21	1,123	0	25	0	16
Total Background growth	**3**	**0**	**1134**	**12**	**3**	**22**	**1151**	**0**	**26**	**0**	**16**
Project Traffic:											
% Project Traffic	9%	0%	17%	0%	15%	0%	17%	0%	0%	0%	0%
Direction (in / out)	in	out	out	in	out	out	in	in	out	out	out
Total Project Traffic	**31**	**0**	**38**	**0**	**34**	**0**	**58**	**0**	**0**	**0**	**0**
Total	**34**	**0**	**1,172**	**12**	**37**	**22**	**1,209**	**0**	**26**	**0**	**16**
Intersection Lane Geometry By Movement											
No. of Lanes	**>**	**>**	**2**	**<**	**>**	**1**	**2**	**-**	**1**	**-**	**1**

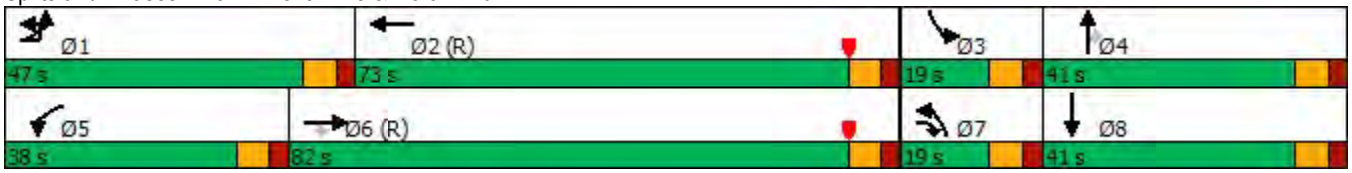
APPENDIX G: Synchro Sheets

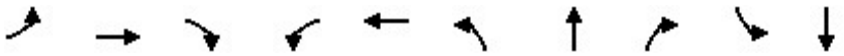
2022 Existing AM Traffic
Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	417	1432	441	493	1162	210	625	287	97	717
Future Volume (vph)	417	1432	441	493	1162	210	625	287	97	717
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	1	6	7	5	2	7	4		3	8
Permitted Phases			6					4		
Detector Phase	1	6	7	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1
Total Split (s)	47.0	82.0	19.0	38.0	73.0	19.0	41.0	41.0	19.0	41.0
Total Split (%)	26.1%	45.6%	10.6%	21.1%	40.6%	10.6%	22.8%	22.8%	10.6%	22.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max
Act Effct Green (s)	31.0	75.2	94.1	30.8	75.0	11.9	34.8	34.8	11.0	33.9
Actuated g/C Ratio	0.17	0.42	0.52	0.17	0.42	0.07	0.19	0.19	0.06	0.19
v/c Ratio	0.83	0.73	0.61	0.95	0.68	0.99	0.99	0.69	0.61	1.12
Control Delay	68.4	75.4	43.1	99.3	40.3	138.1	103.6	23.3	90.8	130.7
Queue Delay	56.8	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	125.2	75.4	43.4	99.3	40.7	138.1	103.6	23.3	90.8	130.7
LOS	F	E	D	F	D	F	F	C	F	F
Approach Delay		78.4			57.2		86.3			126.4
Approach LOS		E			E		F			F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 65 (36%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 82.1	Intersection LOS: F
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	482	1523	513	548	1399	219	665	363	126	1051
v/c Ratio	0.83	0.73	0.61	0.95	0.68	0.99	0.99	0.69	0.61	1.12
Control Delay	68.4	75.4	43.1	99.3	40.3	138.1	103.6	23.3	90.8	130.7
Queue Delay	56.8	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	125.2	75.4	43.4	99.3	40.7	138.1	103.6	23.3	90.8	130.7
Queue Length 50th (ft)	305	621	381	346	300	136	~435	89	76	~513
Queue Length 95th (ft)	357	683	478	#458	416	#231	#570	136	m97	#613
Internal Link Dist (ft)		378			2485		2143			310
Turn Bay Length (ft)	170		170	330		400			190	
Base Capacity (vph)	748	2085	844	579	2053	222	670	526	222	937
Starvation Cap Reductn	0	0	52	0	0	0	0	0	0	0
Spillback Cap Reductn	397	0	0	0	246	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.37	0.73	0.65	0.95	0.77	0.99	0.99	0.69	0.57	1.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	417	1432	441	493	1162	122	210	625	287	97	717
Future Volume (vph)	2	417	1432	441	493	1162	122	210	625	287	97	717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.96
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3367	4988	1553	3367	4915		3367	3471	1553	3367	4794
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3367	4988	1553	3367	4915		3367	3471	1553	3367	4794
Peak-hour factor, PHF	0.25	0.88	0.94	0.86	0.90	0.92	0.90	0.96	0.94	0.79	0.77	0.92
Adj. Flow (vph)	8	474	1523	513	548	1263	136	219	665	363	126	779
RTOR Reduction (vph)	0	0	0	35	0	6	0	0	0	227	0	35
Lane Group Flow (vph)	0	482	1523	478	548	1393	0	219	665	136	126	1016
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		31.0	75.2	87.1	30.8	75.0		11.9	34.8	34.8	11.0	33.9
Effective Green, g (s)		31.0	75.2	87.1	30.8	75.0		11.9	34.8	34.8	11.0	33.9
Actuated g/C Ratio		0.17	0.42	0.48	0.17	0.42		0.07	0.19	0.19	0.06	0.19
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		579	2083	751	576	2047		222	671	300	205	902
v/s Ratio Prot		0.14	c0.31	0.04	c0.16	0.28		c0.07	0.19		0.04	c0.21
v/s Ratio Perm				0.27						0.09		
v/c Ratio		0.83	0.73	0.64	0.95	0.68		0.99	0.99	0.45	0.61	1.13
Uniform Delay, d1		72.0	43.9	34.7	73.9	42.7		84.0	72.4	64.2	82.4	73.0
Progression Factor		0.79	1.66	1.54	1.09	0.90		1.00	1.00	1.00	0.95	1.03
Incremental Delay, d2		8.8	2.0	1.6	18.8	1.2		56.1	32.6	4.9	5.1	70.4
Delay (s)		65.9	75.0	55.0	99.3	39.8		140.0	105.1	69.1	83.7	145.8
Level of Service		E	E	D	F	D		F	F	E	F	F
Approach Delay (s)			69.2			56.5			100.7			139.2
Approach LOS			E			E			F			F

Intersection Summary			
HCM 2000 Control Delay	83.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



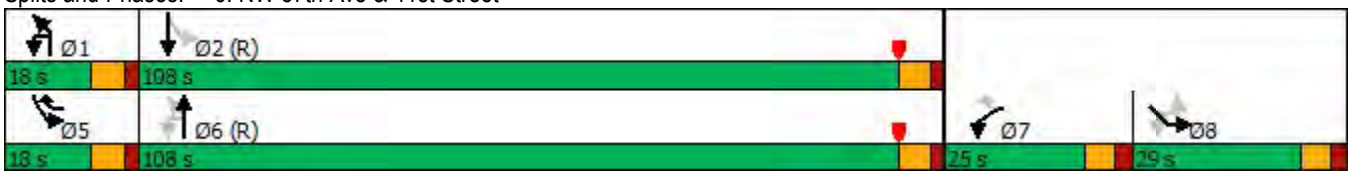
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	226
Future Volume (vph)	226
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.83
Adj. Flow (vph)	272
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SEL	SER
Lane Configurations									
Traffic Volume (vph)	131	45	5	19	912	75	855	3	12
Future Volume (vph)	131	45	5	19	912	75	855	3	12
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Prot	Perm
Protected Phases	7	5	1	1	6	5	2	8	
Permitted Phases		7	6	6		2			8
Detector Phase	7	5	1	1	6	5	2	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.3	24.3
Total Split (s)	25.0	18.0	18.0	18.0	108.0	18.0	108.0	29.0	29.0
Total Split (%)	13.9%	10.0%	10.0%	10.0%	60.0%	10.0%	60.0%	16.1%	16.1%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	None	None
Act Effct Green (s)	16.9	26.1		133.1	126.5	137.1	130.4	5.5	5.5
Actuated g/C Ratio	0.09	0.14		0.74	0.70	0.76	0.72	0.03	0.03
v/c Ratio	0.90	0.23		0.10	0.50	0.31	0.36	0.14	0.14
Control Delay	80.5	12.8		14.8	43.1	7.7	10.9	2.1	2.0
Queue Delay	0.0	0.0		0.0	20.7	0.0	0.0	0.0	0.0
Total Delay	80.5	12.8		14.8	63.8	7.7	10.9	2.1	2.0
LOS	F	B		B	E	A	B	A	A
Approach Delay	66.1				62.1		10.6	2.1	
Approach LOS	E				E		B	A	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 107 (59%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 41.4	Intersection LOS: D
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SEL	SER
Lane Group Flow (vph)	226	61	44	1198	100	907	21	19
v/c Ratio	0.90	0.23	0.10	0.50	0.31	0.36	0.14	0.14
Control Delay	80.5	12.8	14.8	43.1	7.7	10.9	2.1	2.0
Queue Delay	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0
Total Delay	80.5	12.8	14.8	63.8	7.7	10.9	2.1	2.0
Queue Length 50th (ft)	154	0	27	718	27	225	0	0
Queue Length 95th (ft)	132	15	m33	m754	37	268	0	0
Internal Link Dist (ft)	2087			188		622	377	
Turn Bay Length (ft)	200		120		200			
Base Capacity (vph)	267	294	482	2381	355	2507	299	271
Starvation Cap Reductn	0	0	0	1211	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.21	0.09	1.02	0.28	0.36	0.07	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	131	4	45	5	19	912	176	75	855	5	5	3
Future Volume (vph)	131	4	45	5	19	912	176	75	855	5	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95			1.00
Frt	0.99		0.85		1.00	0.97		1.00	1.00			0.96
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00			0.96
Satd. Flow (prot)	1728		1475		1736	3377		1736	3462			1697
Flt Permitted	0.96		1.00		0.29	1.00		0.19	1.00			0.96
Satd. Flow (perm)	1728		1475		529	3377		344	3462			1697
Peak-hour factor, PHF	0.62	0.50	0.66	0.31	0.68	0.93	0.81	0.75	0.96	0.31	0.62	0.38
Adj. Flow (vph)	211	8	68	16	28	981	217	100	891	16	8	8
RTOR Reduction (vph)	89	0	53	0	0	7	0	0	1	0	0	20
Lane Group Flow (vph)	137	0	8	0	44	1191	0	100	906	0	0	1
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA		Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2			8	
Actuated Green, G (s)	16.9		24.9		130.8	125.3		135.8	127.8			4.4
Effective Green, g (s)	16.9		24.9		130.8	125.3		135.8	127.8			4.4
Actuated g/C Ratio	0.09		0.14		0.73	0.70		0.75	0.71			0.02
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)	162		204		421	2350		321	2458			41
v/s Ratio Prot	c0.08		0.00		0.00	c0.35		c0.01	0.26			
v/s Ratio Perm			0.00		0.07			0.22				0.00
v/c Ratio	0.85		0.04		0.10	0.51		0.31	0.37			0.01
Uniform Delay, d1	80.3		67.2		7.2	12.8		8.1	10.3			85.7
Progression Factor	1.00		1.00		2.67	3.31		1.00	1.00			1.00
Incremental Delay, d2	31.4		0.1		0.1	0.5		0.6	0.4			0.1
Delay (s)	111.7		67.3		19.3	43.0		8.7	10.7			85.8
Level of Service	F		E		B	D		A	B			F
Approach Delay (s)	102.3					42.1			10.5			85.8
Approach LOS	F					D			B			F

Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



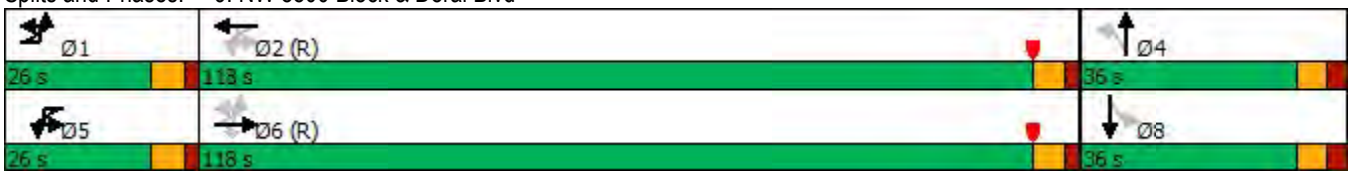
Movement	SER
Lane Configurations	
Traffic Volume (vph)	12
Future Volume (vph)	12
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1475
Flt Permitted	1.00
Satd. Flow (perm)	1475
Peak-hour factor, PHF	0.50
Adj. Flow (vph)	24
RTOR Reduction (vph)	19
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	4.4
Effective Green, g (s)	4.4
Actuated g/C Ratio	0.02
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	36
v/s Ratio Prot	
v/s Ratio Perm	c0.00
v/c Ratio	0.01
Uniform Delay, d1	85.7
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	85.8
Level of Service	F
Approach Delay (s)	
Approach LOS	

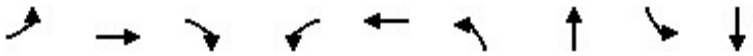
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	1	20	2057	57	10	22	1440	51	1	9	0
Future Volume (vph)	1	20	2057	57	10	22	1440	51	1	9	0
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2		4		8
Permitted Phases	6	6		6	2	2		4		8	
Detector Phase	1	1	6	6	5	5	2	4	4	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	26.0	26.0	118.0	118.0	26.0	26.0	118.0	36.0	36.0	36.0	36.0
Total Split (%)	14.4%	14.4%	65.6%	65.6%	14.4%	14.4%	65.6%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	None	None	Max	Max
Act Effct Green (s)		132.2	127.1	127.1		132.8	127.4	29.0	29.0	29.0	29.0
Actuated g/C Ratio		0.73	0.71	0.71		0.74	0.71	0.16	0.16	0.16	0.16
v/c Ratio		0.12	0.60	0.06		0.28	0.44	0.34	0.27	0.08	0.03
Control Delay		3.9	19.4	1.2		8.8	11.0	72.0	15.1	65.6	0.2
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		3.9	19.4	1.2		8.8	11.0	72.0	15.1	65.6	0.2
LOS		A	B	A		A	B	E	B	E	A
Approach Delay			18.6				10.9		41.5		37.5
Approach LOS			B				B		D		D

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 163 (91%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 60.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

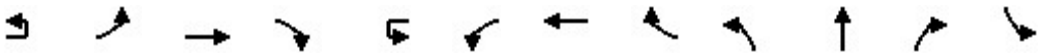




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	28	2121	70	40	1552	75	87	16	12
v/c Ratio	0.12	0.60	0.06	0.28	0.44	0.34	0.27	0.08	0.03
Control Delay	3.9	19.4	1.2	8.8	11.0	72.0	15.1	65.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.9	19.4	1.2	8.8	11.0	72.0	15.1	65.6	0.2
Queue Length 50th (ft)	3	890	7	7	391	80	4	16	0
Queue Length 95th (ft)	m4	791	7	m5	m442	103	0	26	0
Internal Link Dist (ft)		1116			323		94		231
Turn Bay Length (ft)	200		190	190					
Base Capacity (vph)	348	3523	1115	264	3522	220	321	201	412
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.60	0.06	0.15	0.44	0.34	0.27	0.08	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	20	2057	57	10	22	1440	23	51	1	73	9
Future Volume (vph)	1	20	2057	57	10	22	1440	23	51	1	73	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91		1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00		1.00	0.86		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		1745	4988	1553		1763	4970		1736	1565		1736
Flt Permitted		0.13	1.00	1.00		0.06	1.00		0.75	1.00		0.68
Satd. Flow (perm)		241	4988	1553		111	4970		1370	1565		1250
Peak-hour factor, PHF	0.25	0.83	0.97	0.81	0.62	0.92	0.95	0.64	0.68	0.25	0.88	0.56
Adj. Flow (vph)	4	24	2121	70	16	24	1516	36	75	4	83	16
RTOR Reduction (vph)	0	0	0	19	0	0	1	0	0	70	0	0
Lane Group Flow (vph)	0	28	2121	51	0	40	1551	0	75	17	0	16
Heavy Vehicles (%)	0%	4%	4%	4%	0%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2			4			8
Actuated Green, G (s)		130.9	125.9	125.9		131.5	126.2		29.0	29.0		29.0
Effective Green, g (s)		130.9	125.9	125.9		131.5	126.2		29.0	29.0		29.0
Actuated g/C Ratio		0.73	0.70	0.70		0.73	0.70		0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		217	3488	1086		129	3484		220	252		201
v/s Ratio Prot		0.00	c0.43			c0.01	0.31			0.01		
v/s Ratio Perm		0.09		0.03		0.22			c0.05			0.01
v/c Ratio		0.13	0.61	0.05		0.31	0.45		0.34	0.07		0.08
Uniform Delay, d1		7.8	14.1	8.4		11.3	11.7		67.0	64.0		64.2
Progression Factor		0.55	1.33	0.50		1.06	0.93		1.00	1.00		1.00
Incremental Delay, d2		0.2	0.7	0.1		0.8	0.3		0.9	0.1		0.8
Delay (s)		4.6	19.5	4.2		12.9	11.2		67.9	64.2		64.9
Level of Service		A	B	A		B	B		E	E		E
Approach Delay (s)			18.9				11.2			65.9		
Approach LOS			B				B			E		

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



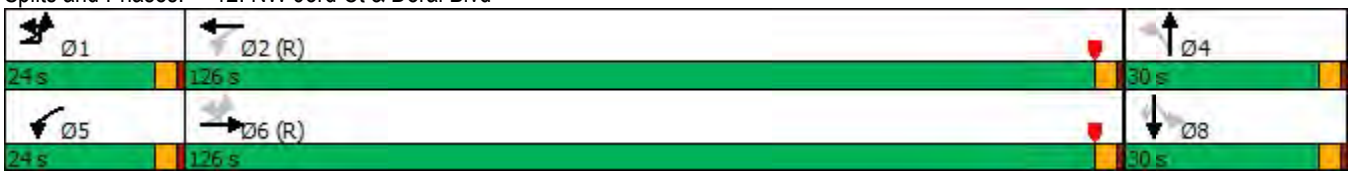
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	6
Future Volume (vph)	0	6
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	1553	
Flt Permitted	1.00	
Satd. Flow (perm)	1553	
Peak-hour factor, PHF	0.25	0.50
Adj. Flow (vph)	0	12
RTOR Reduction (vph)	10	0
Lane Group Flow (vph)	2	0
Heavy Vehicles (%)	4%	4%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	29.0	
Effective Green, g (s)	29.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	250	
v/s Ratio Prot	0.00	
v/s Ratio Perm		
v/c Ratio	0.01	
Uniform Delay, d1	63.4	
Progression Factor	1.00	
Incremental Delay, d2	0.1	
Delay (s)	63.5	
Level of Service	E	
Approach Delay (s)	64.3	
Approach LOS	E	

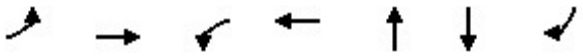
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	2	41	2221	18	1364	27	0	27	1	39
Future Volume (vph)	2	41	2221	18	1364	27	0	27	1	39
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	1	1	6	5	2		4		8	
Permitted Phases	6	6		2		4		8		8
Detector Phase	1	1	6	5	2	4	4	8	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	11.4	24.4	24.8	24.8	24.8	24.8	24.8
Total Split (s)	24.0	24.0	126.0	24.0	126.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	13.3%	13.3%	70.0%	13.3%	70.0%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)		156.6	152.6	154.1	148.2		13.4		13.4	13.4
Actuated g/C Ratio		0.87	0.85	0.86	0.82		0.07		0.07	0.07
v/c Ratio		0.23	0.54	0.16	0.38		0.64		0.68	0.41
Control Delay		3.7	14.9	7.8	19.0		71.9		117.1	20.3
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		3.7	14.9	7.8	19.0		71.9		117.1	20.3
LOS		A	B	A	B		E		F	C
Approach Delay			14.6		18.8		71.9		61.4	
Approach LOS			B		B		E		E	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 105 (58%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 18.8	Intersection LOS: B
Intersection Capacity Utilization 59.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	64	2279	24	1543	76	56	76
v/c Ratio	0.23	0.54	0.16	0.38	0.64	0.68	0.41
Control Delay	3.7	14.9	7.8	19.0	71.9	117.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.7	14.9	7.8	19.0	71.9	117.1	20.3
Queue Length 50th (ft)	12	728	8	510	53	66	0
Queue Length 95th (ft)	m18	912	18	597	5	31	0
Internal Link Dist (ft)		1411		1114	188	156	
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	391	4220	278	4091	204	160	289
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.54	0.09	0.38	0.37	0.35	0.26

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	41	2221	29	18	1364	28	27	0	24	27	1
Future Volume (vph)	2	41	2221	29	18	1364	28	27	0	24	27	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0			4.0
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00			1.00
Frt		1.00	1.00		1.00	1.00			0.94			1.00
Flt Protected		0.95	1.00		0.95	1.00			0.97			0.96
Satd. Flow (prot)		1736	4976		1736	4966			1666			1746
Flt Permitted		0.14	1.00		0.06	1.00			0.72			0.61
Satd. Flow (perm)		258	4976		112	4966			1238			1114
Peak-hour factor, PHF	0.25	0.73	0.99	0.81	0.75	0.91	0.64	0.68	0.25	0.67	0.52	0.25
Adj. Flow (vph)	8	56	2243	36	24	1499	44	40	0	36	52	4
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	28	0	0	0
Lane Group Flow (vph)	0	64	2279	0	24	1542	0	0	48	0	0	56
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA
Protected Phases	1	1	6		5	2			4			8
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		157.4	151.0		151.8	148.2			13.4			13.4
Effective Green, g (s)		157.4	151.0		151.8	148.2			13.4			13.4
Actuated g/C Ratio		0.87	0.84		0.84	0.82			0.07			0.07
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0			4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0			3.0
Lane Grp Cap (vph)		278	4174		126	4088			92			82
v/s Ratio Prot		c0.01	c0.46		0.00	0.31						
v/s Ratio Perm		0.19			0.16				0.04			c0.05
v/c Ratio		0.23	0.55		0.19	0.38			0.52			0.68
Uniform Delay, d1		2.1	4.3		3.4	4.1			80.2			81.2
Progression Factor		1.73	3.17		3.09	4.31			1.00			1.00
Incremental Delay, d2		0.2	0.2		0.7	0.2			5.3			20.9
Delay (s)		3.8	13.9		11.1	17.8			85.5			102.2
Level of Service		A	B		B	B			F			F
Approach Delay (s)			13.6			17.7			85.5			88.0
Approach LOS			B			B			F			F

Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



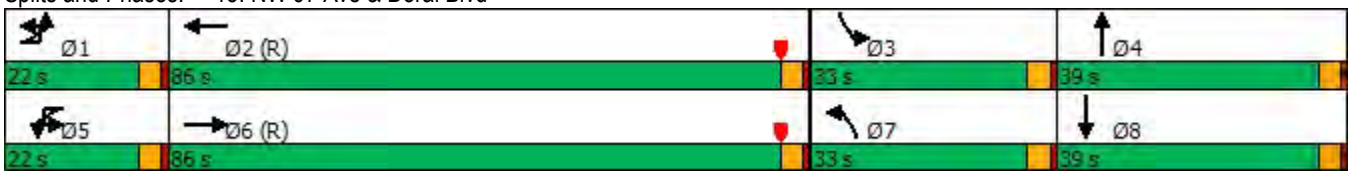
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.51
Adj. Flow (vph)	76
RTOR Reduction (vph)	70
Lane Group Flow (vph)	6
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.4
Effective Green, g (s)	13.4
Actuated g/C Ratio	0.07
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	115
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.05
Uniform Delay, d1	77.4
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	77.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

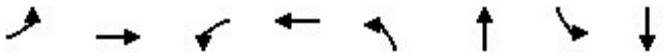
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	84	1815	209	1110	134	361	424	561
Future Volume (vph)	84	1815	209	1110	134	361	424	561
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	22.0	86.0	22.0	86.0	33.0	39.0	33.0	39.0
Total Split (%)	12.2%	47.8%	12.2%	47.8%	18.3%	21.7%	18.3%	21.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	11.4	86.6	16.3	91.5	13.8	33.5	27.6	47.3
Actuated g/C Ratio	0.06	0.48	0.09	0.51	0.08	0.19	0.15	0.26
v/c Ratio	0.53	0.91	0.74	0.58	0.62	0.87	0.88	0.76
Control Delay	90.4	50.1	63.8	51.8	90.5	80.0	93.6	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	50.1	63.8	51.8	90.5	80.0	93.6	66.7
LOS	F	D	E	D	F	F	F	E
Approach Delay		52.1		53.4		82.3		77.5
Approach LOS		D		D		F		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 61.2	Intersection LOS: E
Intersection Capacity Utilization 87.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	114	2176	226	1458	160	570	461	690
v/c Ratio	0.53	0.91	0.74	0.58	0.62	0.87	0.88	0.76
Control Delay	90.4	50.1	63.8	51.8	90.5	80.0	93.6	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	50.1	63.8	51.8	90.5	80.0	93.6	66.7
Queue Length 50th (ft)	68	893	138	590	96	321	276	387
Queue Length 95th (ft)	90	#983	189	647	127	397	#356	471
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	340	2379	340	2508	547	682	547	912
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.91	0.66	0.58	0.29	0.84	0.84	0.76

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	84	1815	247	2	209	1110	177	134	361	165	424
Future Volume (vph)	2	84	1815	247	2	209	1110	177	134	361	165	424
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.98			1.00	0.97		1.00	0.95		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3400	4917			3400	4899		3400	3326		3400
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3400	4917			3400	4899		3400	3326		3400
Peak-hour factor, PHF	0.25	0.79	0.99	0.72	0.50	0.94	0.93	0.67	0.84	0.96	0.85	0.92
Adj. Flow (vph)	8	106	1833	343	4	222	1194	264	160	376	194	461
RTOR Reduction (vph)	0	0	15	0	0	0	18	0	0	37	0	0
Lane Group Flow (vph)	0	114	2161	0	0	226	1440	0	160	533	0	461
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		11.4	86.6			16.3	91.5		13.8	33.5		27.6
Effective Green, g (s)		11.4	86.6			16.3	91.5		13.8	33.5		27.6
Actuated g/C Ratio		0.06	0.48			0.09	0.51		0.08	0.19		0.15
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		215	2365			307	2490		260	619		521
v/s Ratio Prot		0.03	c0.44			c0.07	0.29		0.05	c0.16		c0.14
v/s Ratio Perm												
v/c Ratio		0.53	0.91			0.74	0.58		0.62	0.86		0.88
Uniform Delay, d1		81.7	43.2			79.8	30.8		80.5	71.0		74.6
Progression Factor		1.00	1.00			0.63	1.65		1.00	1.00		1.00
Incremental Delay, d2		2.5	6.9			8.5	0.9		4.3	11.8		16.3
Delay (s)		84.2	50.1			58.4	51.7		84.8	82.8		91.0
Level of Service		F	D			E	D		F	F		F
Approach Delay (s)			51.8				52.6			83.3		
Approach LOS			D				D			F		

Intersection Summary			
HCM 2000 Control Delay	60.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	561	33
Future Volume (vph)	561	33
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.99	
Flt Protected	1.00	
Satd. Flow (prot)	3459	
Flt Permitted	1.00	
Satd. Flow (perm)	3459	
Peak-hour factor, PHF	0.89	0.55
Adj. Flow (vph)	630	60
RTOR Reduction (vph)	4	0
Lane Group Flow (vph)	686	0
Heavy Vehicles (%)	3%	3%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	47.3	
Effective Green, g (s)	47.3	
Actuated g/C Ratio	0.26	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	908	
v/s Ratio Prot	0.20	
v/s Ratio Perm		
v/c Ratio	0.76	
Uniform Delay, d1	61.0	
Progression Factor	1.00	
Incremental Delay, d2	3.6	
Delay (s)	64.7	
Level of Service	E	
Approach Delay (s)	75.2	
Approach LOS	E	

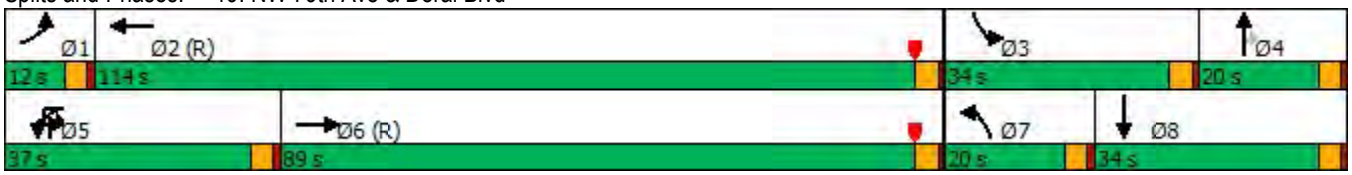
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	90	1755	336	1682	32	129	171	369	323
Future Volume (vph)	90	1755	336	1682	32	129	171	369	323
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6	5	2	7	4	5!	3	8
Permitted Phases							4		
Detector Phase	1	6	5	2	7	4	5	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	11.4	12.0	25.0
Total Split (s)	12.0	89.0	37.0	114.0	20.0	20.0	37.0	34.0	34.0
Total Split (%)	6.7%	49.4%	20.6%	63.3%	11.1%	11.1%	20.6%	18.9%	18.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	8.0	92.5	25.5	110.0	10.0	19.8	49.3	26.2	38.0
Actuated g/C Ratio	0.04	0.51	0.14	0.61	0.06	0.11	0.27	0.15	0.21
v/c Ratio	1.25	0.58	0.79	0.79	0.46	0.98	0.37	0.83	0.62
Control Delay	231.7	37.3	86.8	27.7	97.1	132.7	36.5	89.3	67.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	231.7	37.3	86.8	27.7	97.1	132.7	36.5	89.3	67.6
LOS	F	D	F	C	F	F	D	F	E
Approach Delay		46.7		35.9		88.8			77.9
Approach LOS		D		D		F			E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 38 (21%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 49.0	Intersection LOS: D
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	95	1861	373	2315	44	183	161	401	446
v/c Ratio	1.25	0.58	0.79	0.79	0.46	0.98	0.37	0.83	0.62
Control Delay	231.7	37.3	86.8	27.7	97.1	132.7	36.5	89.3	67.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	231.7	37.3	86.8	27.7	97.1	132.7	36.5	89.3	67.6
Queue Length 50th (ft)	~135	622	223	706	51	~225	106	240	250
Queue Length 95th (ft)	m#227	643	274	761	79	#454	165	298	324
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	76	3187	611	2949	152	187	498	555	715
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.58	0.61	0.79	0.29	0.98	0.32	0.72	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	90	1755	36	3	336	1682	448	32	129	171	369	323
Future Volume (vph)	90	1755	36	3	336	1682	448	32	129	171	369	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.97	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	6199			3335	4784		1719	1663	1461	3335	3328
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	6199			3335	4784		1719	1663	1461	3335	3328
Peak-hour factor, PHF	0.95	0.97	0.69	0.38	0.92	0.92	0.92	0.73	0.90	0.85	0.92	0.92
Adj. Flow (vph)	95	1809	52	8	365	1828	487	44	143	201	401	351
RTOR Reduction (vph)	0	2	0	0	0	27	0	0	5	41	0	13
Lane Group Flow (vph)	95	1859	0	0	373	2288	0	44	178	120	401	433
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6		5!	5	2		7	4	5!	3	8
Permitted Phases										4		
Actuated Green, G (s)	8.0	91.7			25.5	109.2		8.8	20.6	46.1	26.2	38.0
Effective Green, g (s)	8.0	91.7			25.5	109.2		8.8	20.6	46.1	26.2	38.0
Actuated g/C Ratio	0.04	0.51			0.14	0.61		0.05	0.11	0.26	0.15	0.21
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	76	3158			472	2902		84	190	406	485	702
v/s Ratio Prot	c0.06	0.30			c0.11	c0.48		0.03	c0.11	0.04	c0.12	0.13
v/s Ratio Perm										0.04		
v/c Ratio	1.25	0.59			0.79	0.79		0.52	0.94	0.30	0.83	0.62
Uniform Delay, d1	86.0	30.9			74.7	26.7		83.6	79.0	53.9	74.7	64.4
Progression Factor	1.04	1.19			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	167.2	0.6			8.8	2.3		5.8	46.7	0.4	11.0	1.6
Delay (s)	256.3	37.3			83.4	28.9		89.3	125.7	54.3	85.7	66.0
Level of Service	F	D			F	C		F	F	D	F	E
Approach Delay (s)		47.9				36.5			92.0			75.4
Approach LOS		D				D			F			E

Intersection Summary			
HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



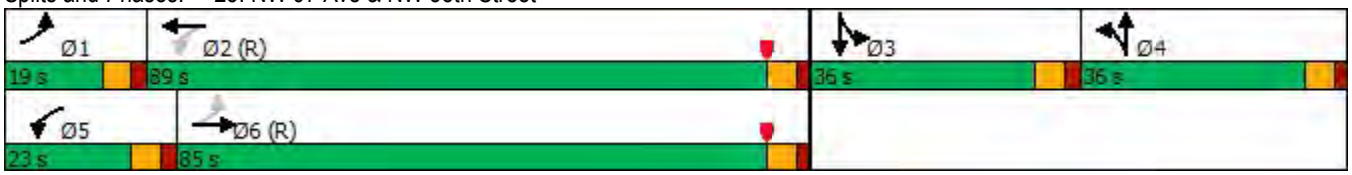
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	81
Future Volume (vph)	81
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.85
Adj. Flow (vph)	95
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

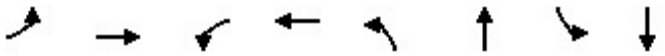
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	22	1128	140	516	110	132	225	230
Future Volume (vph)	22	1128	140	516	110	132	225	230
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	19.0	85.0	23.0	89.0	36.0	36.0	36.0	36.0
Total Split (%)	10.6%	47.2%	12.8%	49.4%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	87.7	80.6	102.0	91.2	30.0	30.0	30.0	30.0
Actuated g/C Ratio	0.49	0.45	0.57	0.51	0.17	0.17	0.17	0.17
v/c Ratio	0.11	0.94	0.87	0.43	0.46	1.14	0.89	1.10
Control Delay	18.7	60.0	86.0	28.3	73.7	152.4	104.7	149.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	60.0	86.0	28.3	73.7	152.4	104.7	149.2
LOS	B	E	F	C	E	F	F	F
Approach Delay		59.0		38.7		130.4		129.8
Approach LOS		E		D		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 63 (35%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 75.2	Intersection LOS: E
Intersection Capacity Utilization 93.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1442	163	741	134	345	244	316
v/c Ratio	0.11	0.94	0.87	0.43	0.46	1.14	0.89	1.10
Control Delay	18.7	60.0	86.0	28.3	73.7	152.4	104.7	149.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	60.0	86.0	28.3	73.7	152.4	104.7	149.2
Queue Length 50th (ft)	18	861	141	283	145	~444	301	~444
Queue Length 95th (ft)	25	#1024	#242	345	201	#604	#413	#644
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		470		170	
Base Capacity (vph)	392	1529	203	1711	289	303	274	286
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.94	0.80	0.43	0.46	1.14	0.89	1.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

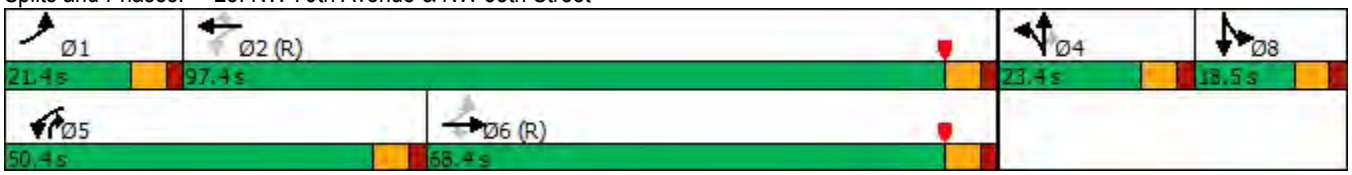
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1128	144	140	516	148	110	132	169	225	230	16
Future Volume (vph)	22	1128	144	140	516	148	110	132	169	225	230	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		0.95	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.92		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3403		1736	3349		1736	1676		1649	1705	
Flt Permitted	0.33	1.00		0.05	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	597	3403		84	3349		1736	1676		1649	1705	
Peak-hour factor, PHF	0.61	0.90	0.76	0.86	0.91	0.85	0.82	0.85	0.89	0.83	0.88	0.57
Adj. Flow (vph)	36	1253	189	163	567	174	134	155	190	271	261	28
RTOR Reduction (vph)	0	7	0	0	15	0	0	24	0	0	2	0
Lane Group Flow (vph)	36	1435	0	163	726	0	134	321	0	244	314	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	86.6	80.6		102.0	90.0		30.0	30.0		30.0	30.0	
Effective Green, g (s)	86.6	80.6		102.0	90.0		30.0	30.0		30.0	30.0	
Actuated g/C Ratio	0.48	0.45		0.57	0.50		0.17	0.17		0.17	0.17	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	325	1523		188	1674		289	279		274	284	
v/s Ratio Prot	0.00	c0.42		c0.07	0.22		0.08	c0.19		0.15	c0.18	
v/s Ratio Perm	0.05			0.41								
v/c Ratio	0.11	0.94		0.87	0.43		0.46	1.15		0.89	1.11	
Uniform Delay, d1	25.0	47.5		58.2	28.7		67.7	75.0		73.4	75.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	12.9		31.7	0.8		1.2	100.6		28.1	85.1	
Delay (s)	25.2	60.4		89.9	29.6		68.9	175.6		101.4	160.1	
Level of Service	C	E		F	C		E	F		F	F	
Approach Delay (s)		59.5			40.4			145.8			134.6	
Approach LOS		E			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	78.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	30	995	101	485	1147	314	162	76	433	129	84
Future Volume (vph)	30	995	101	485	1147	314	162	76	433	129	84
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6		5	2		4	4	5	8	8
Permitted Phases	6		6	2		2			4		
Detector Phase	1	6	6	5	2	2	4	4	5	8	8
Switch Phase											
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0	16.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4	11.4	24.4	24.4	13.4	13.4	11.4	13.5	13.5
Total Split (s)	21.4	68.4	68.4	50.4	97.4	97.4	23.4	23.4	50.4	18.5	18.5
Total Split (%)	13.3%	42.6%	42.6%	31.4%	60.6%	60.6%	14.6%	14.6%	31.4%	11.5%	11.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	68.9	62.0	62.0	112.6	101.7	101.7	17.0	17.0	61.2	11.8	11.8
Actuated g/C Ratio	0.43	0.39	0.39	0.70	0.63	0.63	0.11	0.11	0.38	0.07	0.07
v/c Ratio	0.24	0.81	0.18	1.02	0.65	0.40	1.28	1.49	0.51	0.86	0.82
Control Delay	17.4	50.3	2.4	87.2	21.0	4.4	215.3	279.3	22.8	126.1	96.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	50.3	2.4	87.2	21.0	4.4	215.3	279.3	22.8	126.1	96.1
LOS	B	D	A	F	C	A	F	F	C	F	F
Approach Delay		44.1			33.3			170.7			106.1
Approach LOS		D			C			F			F

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 74 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.49	
Intersection Signal Delay: 64.8	Intersection LOS: E
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	48	1047	123	545	1382	430	225	309	295	96	193
v/c Ratio	0.24	0.81	0.18	1.02	0.65	0.40	1.28	1.49	0.51	0.86	0.82
Control Delay	17.4	50.3	2.4	87.2	21.0	4.4	215.3	279.3	22.8	126.1	96.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	50.3	2.4	87.2	21.0	4.4	215.3	279.3	22.8	126.1	96.1
Queue Length 50th (ft)	15	516	0	~526	478	39	~297	~413	141	112	106
Queue Length 95th (ft)	19	608	11	#750	493	40	#343	#525	197	#206	135
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	288	1289	671	533	2115	1069	176	208	582	113	238
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.81	0.18	1.02	0.65	0.40	1.28	1.49	0.51	0.85	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

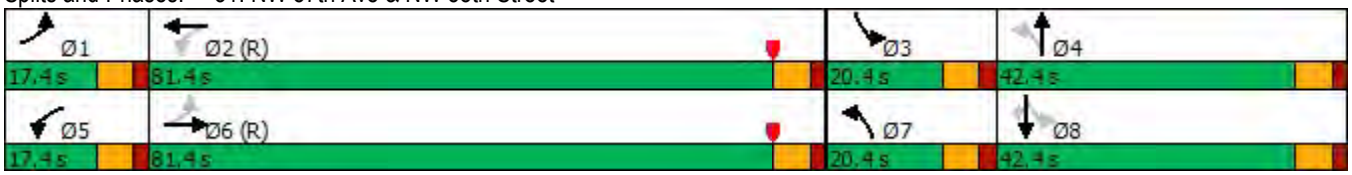
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	995	101	485	1147	314	162	76	433	129	84	26
Future Volume (vph)	30	995	101	485	1147	314	162	76	433	129	84	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	1671	3343	1495	1671	3343	1495	1671	1498	1421	1521	3085	
Flt Permitted	0.20	1.00	1.00	0.10	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (perm)	344	3343	1495	175	3343	1495	1671	1498	1421	1521	3085	
Peak-hour factor, PHF	0.62	0.95	0.82	0.89	0.83	0.73	0.72	0.80	0.85	0.83	0.79	0.93
Adj. Flow (vph)	48	1047	123	545	1382	430	225	95	509	155	106	28
RTOR Reduction (vph)	0	0	76	0	0	126	0	50	41	0	8	0
Lane Group Flow (vph)	48	1047	47	545	1382	304	225	259	254	96	185	0
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6		6	2		2			4			
Actuated Green, G (s)	67.8	62.0	62.0	112.6	100.4	100.4	17.0	17.0	61.2	11.8	11.8	
Effective Green, g (s)	67.8	62.0	62.0	112.6	100.4	100.4	17.0	17.0	61.2	11.8	11.8	
Actuated g/C Ratio	0.42	0.39	0.39	0.70	0.62	0.62	0.11	0.11	0.38	0.07	0.07	
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	193	1289	576	534	2088	934	176	158	541	111	226	
v/s Ratio Prot	0.01	0.31		c0.28	0.41		0.13	c0.17	0.13	c0.06	0.06	
v/s Ratio Perm	0.10		0.03	c0.43		0.20			0.05			
v/c Ratio	0.25	0.81	0.08	1.02	0.66	0.33	1.28	1.64	0.47	0.86	0.82	
Uniform Delay, d1	27.6	44.1	31.3	46.7	19.3	14.2	71.8	71.8	37.5	73.7	73.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	5.7	0.3	44.3	1.7	0.9	161.7	314.2	0.6	45.9	19.9	
Delay (s)	28.3	49.8	31.6	91.0	21.0	15.1	233.5	386.0	38.1	119.6	93.3	
Level of Service	C	D	C	F	C	B	F	F	D	F	F	
Approach Delay (s)		47.1			36.1			220.8			102.0	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	160.7	Sum of lost time (s)	25.7
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	193	939	82	581	172	607	97	607	113
Future Volume (vph)	193	939	82	581	172	607	97	607	113
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	17.4	81.4	17.4	81.4	20.4	42.4	20.4	42.4	42.4
Total Split (%)	10.8%	50.4%	10.8%	50.4%	12.6%	26.2%	12.6%	26.2%	26.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	87.3	76.4	84.7	75.1	51.2	37.2	48.8	36.0	36.0
Actuated g/C Ratio	0.54	0.47	0.52	0.46	0.32	0.23	0.30	0.22	0.22
v/c Ratio	0.57	0.89	0.66	0.45	0.96	0.97	0.73	0.93	0.30
Control Delay	24.3	46.1	48.4	29.8	98.1	85.5	62.0	81.1	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.3	46.1	48.4	29.8	98.1	85.5	62.0	81.1	9.2
LOS	C	D	D	C	F	F	E	F	A
Approach Delay		43.3		32.1		87.9		68.6	
Approach LOS		D		C		F		E	

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 25 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 56.6	Intersection LOS: E
Intersection Capacity Utilization 88.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	210	1412	99	705	185	758	131	714	135
v/c Ratio	0.57	0.89	0.66	0.45	0.96	0.97	0.73	0.93	0.30
Control Delay	24.3	46.1	48.4	29.8	98.1	85.5	62.0	81.1	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.3	46.1	48.4	29.8	98.1	85.5	62.0	81.1	9.2
Queue Length 50th (ft)	105	696	48	257	149	~422	98	393	0
Queue Length 95th (ft)	154	817	100	313	#316	#568	124	#461	47
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	370	1581	165	1573	193	782	193	765	447
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.89	0.60	0.45	0.96	0.97	0.68	0.93	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

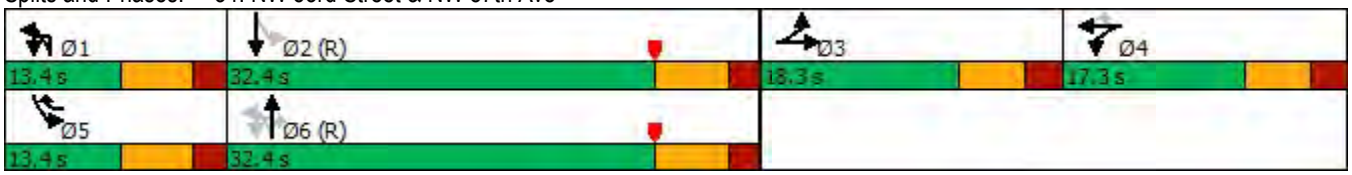
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	193	939	330	82	581	74	172	607	106	97	607	113
Future Volume (vph)	193	939	330	82	581	74	172	607	106	97	607	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3291		1719	3374		1719	3357		1719	3438	1538
Flt Permitted	0.30	1.00		0.06	1.00		0.11	1.00		0.11	1.00	1.00
Satd. Flow (perm)	536	3291		105	3374		195	3357		201	3438	1538
Peak-hour factor, PHF	0.92	0.93	0.82	0.83	0.94	0.85	0.93	0.95	0.89	0.74	0.85	0.84
Adj. Flow (vph)	210	1010	402	99	618	87	185	639	119	131	714	135
RTOR Reduction (vph)	0	26	0	0	7	0	0	9	0	0	0	105
Lane Group Flow (vph)	210	1386	0	99	698	0	185	749	0	131	714	30
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	87.3	76.4		84.7	75.1		51.2	37.2		48.8	36.0	36.0
Effective Green, g (s)	87.3	76.4		84.7	75.1		51.2	37.2		48.8	36.0	36.0
Actuated g/C Ratio	0.54	0.47		0.52	0.46		0.32	0.23		0.30	0.22	0.22
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	369	1555		150	1567		193	772		180	765	342
v/s Ratio Prot	0.04	c0.42		c0.04	0.21		c0.08	c0.22		0.06	0.21	
v/s Ratio Perm	0.27			0.31			0.22			0.16		0.02
v/c Ratio	0.57	0.89		0.66	0.45		0.96	0.97		0.73	0.93	0.09
Uniform Delay, d1	20.8	38.8		31.3	29.2		45.4	61.6		45.4	61.6	49.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.0	8.1		10.4	0.9		52.2	24.8		13.7	18.2	0.1
Delay (s)	22.8	47.0		41.7	30.1		97.6	86.5		59.1	79.8	49.9
Level of Service	C	D		D	C		F	F		E	E	D
Approach Delay (s)		43.8			31.5			88.7			72.9	
Approach LOS		D			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	161.6	Sum of lost time (s)	25.6
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	2	114	2	42	50	14	886	127	107	840
Future Volume (vph)	7	2	114	2	42	50	14	886	127	107	840
Turn Type	Split	NA	Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3	4	4	5	1	1	6		5	2
Permitted Phases					4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	18.3	18.3	17.3	17.3	13.4	13.4	13.4	32.4	32.4	13.4	32.4
Total Split (%)	22.5%	22.5%	21.3%	21.3%	16.5%	16.5%	16.5%	39.8%	39.8%	16.5%	39.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.3	7.3	9.5	9.5	21.3		46.3	39.1	39.1	49.3	43.6
Actuated g/C Ratio	0.09	0.09	0.12	0.12	0.26		0.57	0.48	0.48	0.61	0.54
v/c Ratio	0.08	0.21	0.42	0.41	0.12		0.26	0.57	0.19	0.42	0.53
Control Delay	35.0	17.6	39.3	39.2	0.5		10.8	21.2	1.9	12.5	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	17.6	39.3	39.2	0.5		10.8	21.2	1.9	12.5	20.0
LOS	C	B	D	D	A		B	C	A	B	B
Approach Delay		21.9		28.6				17.8			19.0
Approach LOS		C		C				B			B

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 38 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 53rd Street & NW 87th Ave





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	36	79	79	60	92	943	163	147	971
v/c Ratio	0.08	0.21	0.42	0.41	0.12	0.26	0.57	0.19	0.42	0.53
Control Delay	35.0	17.6	39.3	39.2	0.5	10.8	21.2	1.9	12.5	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	17.6	39.3	39.2	0.5	10.8	21.2	1.9	12.5	20.0
Queue Length 50th (ft)	6	2	40	40	0	20	211	0	33	212
Queue Length 95th (ft)	14	9	64	42	0	29	#341	8	55	#343
Internal Link Dist (ft)		93		992			2118			2105
Turn Bay Length (ft)			175		175	180		190	125	
Base Capacity (vph)	253	258	228	229	502	365	1651	849	355	1840
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.14	0.35	0.34	0.12	0.25	0.57	0.19	0.41	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	2	15	114	2	42	50	14	886	127	107	840
Future Volume (vph)	7	2	15	114	2	42	50	14	886	127	107	840
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.87		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1568		1633	1641	1538		1782	3438	1538	1719	3430
Flt Permitted	0.95	1.00		0.95	0.95	1.00		0.22	1.00	1.00	0.20	1.00
Satd. Flow (perm)	1719	1568		1633	1641	1538		411	3438	1538	355	3430
Peak-hour factor, PHF	0.58	0.50	0.47	0.74	0.50	0.70	0.73	0.58	0.94	0.78	0.73	0.88
Adj. Flow (vph)	12	4	32	154	4	60	68	24	943	163	147	955
RTOR Reduction (vph)	0	30	0	0	0	48	0	0	0	92	0	1
Lane Group Flow (vph)	12	6	0	79	79	12	0	92	943	71	147	970
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	0%	5%	5%	5%	5%	5%
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	4	5	1	1	6		5	2
Permitted Phases						4	6	6		6	2	
Actuated Green, G (s)	4.5	4.5		8.1	8.1	16.2		41.4	35.3	35.3	45.4	37.3
Effective Green, g (s)	4.5	4.5		8.1	8.1	16.2		41.4	35.3	35.3	45.4	37.3
Actuated g/C Ratio	0.06	0.06		0.10	0.10	0.20		0.51	0.43	0.43	0.56	0.46
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	95	86		162	163	306		311	1490	666	333	1571
v/s Ratio Prot	c0.01	0.00		c0.05	0.05	0.00		0.02	0.27		c0.04	c0.28
v/s Ratio Perm						0.00		0.13		0.05	0.20	
v/c Ratio	0.13	0.07		0.49	0.48	0.04		0.30	0.63	0.11	0.44	0.62
Uniform Delay, d1	36.6	36.5		34.7	34.7	26.3		11.0	18.0	13.7	10.2	16.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.3		2.3	2.3	0.1		0.5	2.1	0.3	0.9	1.8
Delay (s)	37.2	36.8		37.0	36.9	26.4		11.5	20.0	14.0	11.1	18.5
Level of Service	D	D		D	D	C		B	C	B	B	B
Approach Delay (s)		36.9			34.0				18.6			17.5
Approach LOS		D			C				B			B

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	11
Future Volume (vph)	11
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.69
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	27	2245	25	5	15	1522	55	0	0	16	0	0
Future Volume (Veh/h)	27	2245	25	5	15	1522	55	0	0	16	0	0
Sign Control		Free				Free			Stop			Stop
Grade		0%				0%			0%			0%
Peak Hour Factor	0.75	0.94	0.69	0.42	0.94	0.94	0.62	0.25	0.25	0.50	0.25	0.25
Hourly flow rate (vph)	36	2388	36	0	16	1619	89	0	0	32	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)		403				458						
pX, platoon unblocked	0.78			0.00	0.77			0.89	0.89	0.77	0.89	0.89
vC, conflicting volume	1708			0	2424			3082	4218	814	2596	4192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	917			0	1820			1213	2497	0	664	2467
tC, single (s)	4.2			0.0	4.1			7.5	6.5	7.0	7.6	6.6
tC, 2 stage (s)												
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	94			0	94			100	100	96	100	100
cM capacity (veh/h)	572			0	264			108	23	837	266	23

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	36	955	955	514	16	648	648	413	32	32
Volume Left	36	0	0	0	16	0	0	0	0	0
Volume Right	0	0	0	36	0	0	0	89	32	32
cSH	572	1700	1700	1700	264	1700	1700	1700	837	842
Volume to Capacity	0.06	0.56	0.56	0.30	0.06	0.38	0.38	0.24	0.04	0.04
Queue Length 95th (ft)	5	0	0	0	5	0	0	0	3	3
Control Delay (s)	11.7	0.0	0.0	0.0	19.5	0.0	0.0	0.0	9.5	9.4
Lane LOS	B				C				A	A
Approach Delay (s)	0.2				0.2				9.5	9.4
Approach LOS									A	A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	53.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	26
Future Volume (Veh/h)	26
Sign Control	
Grade	
Peak Hour Factor	0.81
Hourly flow rate (vph)	32
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	0.78
vC, conflicting volume	584
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	0
tC, single (s)	7.0
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	96
cM capacity (veh/h)	842
Direction, Lane #	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	14	1066	24	0	962
Future Volume (Veh/h)	0	14	1066	24	0	962
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.88	0.91	0.75	0.25	0.95
Hourly flow rate (vph)	0	16	1171	32	0	1013
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.84	0.82			0.82	
vC, conflicting volume	1525	602			1203	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	925	58			796	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	227	817			681	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	16	781	422	0	338	338	338
Volume Left	0	0	0	0	0	0	0
Volume Right	16	0	32	0	0	0	0
cSH	817	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.46	0.25	0.00	0.20	0.20	0.20
Queue Length 95th (ft)	1	0	0	0	0	0	0
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.5	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	2232	3	3	3	1505	0	13
Future Volume (Veh/h)	1	2232	3	3	3	1505	0	13
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.98	0.75	0.75	0.38	0.92	0.25	0.54
Hourly flow rate (vph)	0	2278	4	0	8	1636	0	24
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)						1196		
pX, platoon unblocked	0.00			0.00			0.87	
vC, conflicting volume	0			0	2282		2841	761
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	2282		2603	761
tC, single (s)	0.0			0.0	4.1		6.8	7.2
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.4
p0 queue free %	0			0	96		100	93
cM capacity (veh/h)	0			0	226		17	321

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	911	911	460	8	545	545	545	24
Volume Left	0	0	0	8	0	0	0	0
Volume Right	0	0	4	0	0	0	0	24
cSH	1700	1700	1700	226	1700	1700	1700	321
Volume to Capacity	0.54	0.54	0.27	0.04	0.32	0.32	0.32	0.07
Queue Length 95th (ft)	0	0	0	3	0	0	0	6
Control Delay (s)	0.0	0.0	0.0	21.5	0.0	0.0	0.0	17.1
Lane LOS				C				C
Approach Delay (s)	0.0			0.1				17.1
Approach LOS								C

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	53.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	1	2282	2	6	1572	0	24
Future Volume (Veh/h)	1	2282	2	6	1572	0	24
Sign Control		Free			Free	Stop	
Grade		0%			0%	0%	
Peak Hour Factor	0.25	0.98	0.50	0.50	0.95	0.25	0.75
Hourly flow rate (vph)	0	2329	4	12	1655	0	32
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		None			None		
Median storage veh)							
Upstream signal (ft)		1194					
pX, platoon unblocked	0.00			0.85		0.85	0.85
vC, conflicting volume	0			2333		2907	778
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	0			1963		2635	143
tC, single (s)	0.0			4.1		6.8	8.1
tC, 2 stage (s)							
tF (s)	0.0			2.2		3.5	3.9
p0 queue free %	0			95		100	95
cM capacity (veh/h)	0			257		16	621

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	932	932	470	12	552	552	552	32
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	4	0	0	0	0	32
cSH	1700	1700	1700	257	1700	1700	1700	621
Volume to Capacity	0.55	0.55	0.28	0.05	0.32	0.32	0.32	0.05
Queue Length 95th (ft)	0	0	0	4	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	19.7	0.0	0.0	0.0	11.1
Lane LOS				C				B
Approach Delay (s)	0.0			0.1				11.1
Approach LOS								B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	42	22	1009	8	1	8	919
Future Volume (Veh/h)	42	22	1009	8	1	8	919
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.58	0.92	0.91	0.50	0.25	0.50	0.93
Hourly flow rate (vph)	72	24	1109	16	0	16	988
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				None
Median storage veh)							
Upstream signal (ft)			702				
pX, platoon unblocked	0.85	0.85			0.00	0.85	
vC, conflicting volume	1643	562			0	1125	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1407	138			0	798	
tC, single (s)	6.9	7.0			0.0	4.2	
tC, 2 stage (s)							
tF (s)	3.6	3.4			0.0	2.3	
p0 queue free %	31	97			0	98	
cM capacity (veh/h)	104	743			0	677	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	72	24	739	386	16	494	494
Volume Left	72	0	0	0	16	0	0
Volume Right	0	24	0	16	0	0	0
cSH	104	743	1700	1700	677	1700	1700
Volume to Capacity	0.69	0.03	0.43	0.23	0.02	0.29	0.29
Queue Length 95th (ft)	89	2	0	0	2	0	0
Control Delay (s)	94.7	10.0	0.0	0.0	10.4	0.0	0.0
Lane LOS	F	B			B		
Approach Delay (s)	73.6		0.0		0.2		
Approach LOS	F						

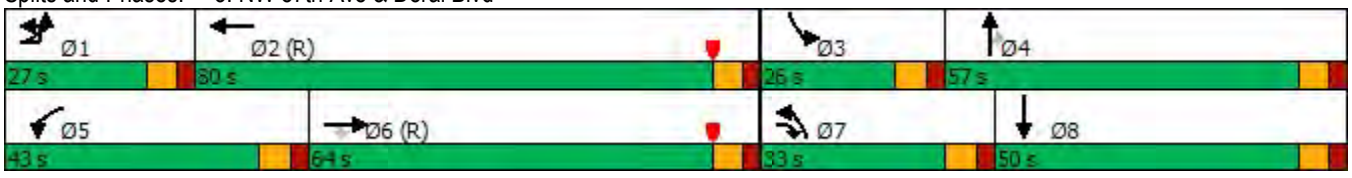
Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		

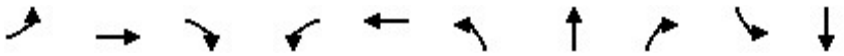
2022 Existing PM Traffic
Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	244	888	284	384	1279	387	844	403	92	873
Future Volume (vph)	244	888	284	384	1279	387	844	403	92	873
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	1	6	7	5	2	7	4		3	8
Permitted Phases			6					4		
Detector Phase	1	6	7	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1
Total Split (s)	27.0	64.0	33.0	43.0	80.0	33.0	57.0	57.0	26.0	50.0
Total Split (%)	14.2%	33.7%	17.4%	22.6%	42.1%	17.4%	30.0%	30.0%	13.7%	26.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max
Act Effct Green (s)	19.1	62.7	95.6	30.3	73.9	25.9	57.7	57.7	11.1	42.9
Actuated g/C Ratio	0.10	0.33	0.50	0.16	0.39	0.14	0.30	0.30	0.06	0.23
v/c Ratio	0.83	0.57	0.39	0.84	0.80	0.96	0.90	0.71	0.52	1.08
Control Delay	97.6	51.0	27.7	62.8	49.6	113.0	75.4	31.6	97.6	122.4
Queue Delay	4.7	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0
Total Delay	102.3	51.0	27.7	62.8	49.6	113.0	79.9	31.6	97.6	122.4
LOS	F	D	C	E	D	F	E	C	F	F
Approach Delay		55.4			52.6		75.8			120.5
Approach LOS		E			D		E			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 171 (90%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 72.9	Intersection LOS: E
Intersection Capacity Utilization 91.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	284	955	330	452	1549	445	959	463	103	1212
v/c Ratio	0.83	0.57	0.39	0.84	0.80	0.96	0.90	0.71	0.52	1.08
Control Delay	97.6	51.0	27.7	62.8	49.6	113.0	75.4	31.6	97.6	122.4
Queue Delay	4.7	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0
Total Delay	102.3	51.0	27.7	62.8	49.6	113.0	79.9	31.6	97.6	122.4
Queue Length 50th (ft)	182	365	219	258	721	289	609	239	67	~587
Queue Length 95th (ft)	231	435	300	287	776	#382	#729	364	m96	m#672
Internal Link Dist (ft)		378			2485		2143			310
Turn Bay Length (ft)	170		170	330		400			190	
Base Capacity (vph)	357	1662	840	644	1934	463	1063	656	338	1125
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	34	0	0	0	0	0	64	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.57	0.39	0.70	0.80	0.96	0.96	0.71	0.30	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	244	888	284	384	1279	160	387	844	403	92	873
Future Volume (vph)	2	244	888	284	384	1279	160	387	844	403	92	873
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3400	5036	1568	3400	4951		3400	3505	1568	3400	4872
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3400	5036	1568	3400	4951		3400	3505	1568	3400	4872
Peak-hour factor, PHF	0.50	0.87	0.93	0.86	0.85	0.93	0.92	0.87	0.88	0.87	0.89	0.92
Adj. Flow (vph)	4	280	955	330	452	1375	174	445	959	463	103	949
RTOR Reduction (vph)	0	0	0	56	0	9	0	0	0	180	0	26
Lane Group Flow (vph)	0	284	955	274	452	1540	0	445	959	283	103	1186
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		19.1	62.7	88.6	30.3	73.9		25.9	57.7	57.7	11.1	42.9
Effective Green, g (s)		19.1	62.7	88.6	30.3	73.9		25.9	57.7	57.7	11.1	42.9
Actuated g/C Ratio		0.10	0.33	0.47	0.16	0.39		0.14	0.30	0.30	0.06	0.23
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		341	1661	731	542	1925		463	1064	476	198	1100
v/s Ratio Prot		0.08	0.19	0.05	c0.13	c0.31		c0.13	c0.27		0.03	c0.24
v/s Ratio Perm				0.12						0.18		
v/c Ratio		0.83	0.57	0.38	0.83	0.80		0.96	0.90	0.59	0.52	1.08
Uniform Delay, d1		83.9	52.6	32.8	77.4	51.5		81.5	63.4	56.2	86.9	73.5
Progression Factor		0.92	0.93	1.32	0.69	0.92		1.00	1.00	1.00	1.03	1.14
Incremental Delay, d2		15.5	1.4	0.3	7.1	2.3		31.9	12.1	5.4	2.2	49.5
Delay (s)		93.0	50.3	43.6	60.6	49.6		113.4	75.6	61.6	91.9	133.5
Level of Service		F	D	D	E	D		F	E	E	F	F
Approach Delay (s)			56.6			52.1			81.1			130.2
Approach LOS			E			D			F			F

Intersection Summary			
HCM 2000 Control Delay	76.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	234
Future Volume (vph)	234
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	263
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SEL	SER
Lane Configurations									
Traffic Volume (vph)	203	104	8	29	1026	37	944	0	28
Future Volume (vph)	203	104	8	29	1026	37	944	0	28
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Prot	Perm
Protected Phases	7	5	1	1	6	5	2	8	
Permitted Phases		7	6	6		2			8
Detector Phase	7	5	1	1	6	5	2	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.3	24.3
Total Split (s)	27.0	17.0	17.0	17.0	106.0	17.0	106.0	40.0	40.0
Total Split (%)	14.2%	8.9%	8.9%	8.9%	55.8%	8.9%	55.8%	21.1%	21.1%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	None	None
Act Effct Green (s)	20.7	29.1		138.7	131.8	140.5	134.5	7.3	7.3
Actuated g/C Ratio	0.11	0.15		0.73	0.69	0.74	0.71	0.04	0.04
v/c Ratio	1.01	0.39		0.16	0.54	0.22	0.46	0.24	0.32
Control Delay	110.9	12.5		1.9	12.0	8.1	13.8	96.4	5.7
Queue Delay	0.0	0.0		0.0	4.9	0.0	0.0	0.0	0.0
Total Delay	110.9	12.5		1.9	16.9	8.1	13.8	96.4	5.7
LOS	F	B		A	B	A	B	F	A
Approach Delay	79.7				16.3		13.5	28.4	
Approach LOS	E				B		B	C	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 168 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SEL	SER
Lane Group Flow (vph)	275	128	52	1289	62	1136	16	48
v/c Ratio	1.01	0.39	0.16	0.54	0.22	0.46	0.24	0.32
Control Delay	110.9	12.5	1.9	12.0	8.1	13.8	96.4	5.7
Queue Delay	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0
Total Delay	110.9	12.5	1.9	16.9	8.1	13.8	96.4	5.7
Queue Length 50th (ft)	~247	6	1	607	18	333	20	0
Queue Length 95th (ft)	#345	30	m2	808	22	365	13	0
Internal Link Dist (ft)	2087			188		702	377	
Turn Bay Length (ft)	200		120		185			
Base Capacity (vph)	271	355	368	2386	308	2475	310	353
Starvation Cap Reductn	0	0	0	1015	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.36	0.14	0.94	0.20	0.46	0.05	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	203	3	104	8	29	1026	122	37	944	8	12	0
Future Volume (vph)	203	3	104	8	29	1026	122	37	944	8	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95			1.00
Frt	0.99		0.85		1.00	0.98		1.00	1.00			1.00
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00			0.95
Satd. Flow (prot)	1745		1490		1764	3434		1752	3499			1752
Flt Permitted	0.96		1.00		0.21	1.00		0.16	1.00			0.95
Satd. Flow (perm)	1745		1490		390	3434		303	3499			1752
Peak-hour factor, PHF	0.79	0.75	0.73	0.67	0.72	0.92	0.70	0.60	0.84	0.67	0.75	0.25
Adj. Flow (vph)	257	4	142	12	40	1115	174	62	1124	12	16	0
RTOR Reduction (vph)	82	0	104	0	0	4	0	0	0	0	0	0
Lane Group Flow (vph)	193	0	24	0	52	1285	0	62	1136	0	0	16
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA		Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2			8	
Actuated Green, G (s)	20.7		27.9		136.3	130.5		139.1	131.9			6.2
Effective Green, g (s)	20.7		27.9		136.3	130.5		139.1	131.9			6.2
Actuated g/C Ratio	0.11		0.15		0.72	0.69		0.73	0.69			0.03
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)	190		218		321	2358		276	2429			57
v/s Ratio Prot	c0.11		0.00		0.00	c0.37		c0.01	0.32			
v/s Ratio Perm			0.01		0.11			0.16				0.01
v/c Ratio	1.02		0.11		0.16	0.54		0.22	0.47			0.28
Uniform Delay, d1	84.7		70.3		9.1	14.9		10.1	13.2			89.7
Progression Factor	1.00		1.00		0.22	0.77		1.00	1.00			1.00
Incremental Delay, d2	69.5		0.2		0.1	0.5		0.4	0.6			2.7
Delay (s)	154.1		70.5		2.1	12.0		10.5	13.8			92.4
Level of Service	F		E		A	B		B	B			F
Approach Delay (s)	127.6					11.6			13.6			90.0
Approach LOS	F					B			B			F

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



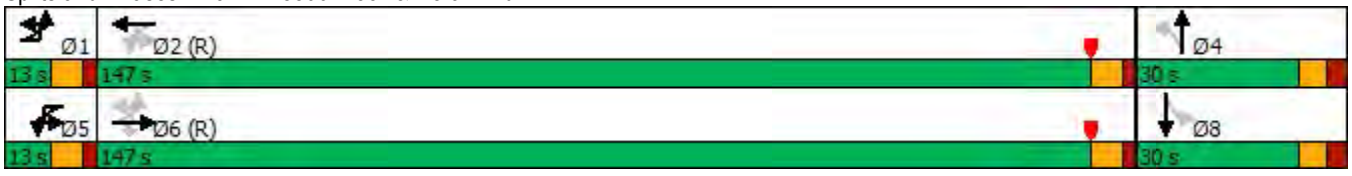
Movement	SER
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	48
RTOR Reduction (vph)	46
Lane Group Flow (vph)	2
Heavy Vehicles (%)	3%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	6.2
Effective Green, g (s)	6.2
Actuated g/C Ratio	0.03
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	51
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	89.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	89.2
Level of Service	F
Approach Delay (s)	
Approach LOS	

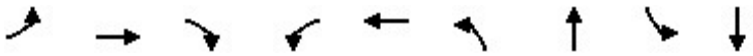
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	17	1244	49	32	66	1760	41	3	33	3
Future Volume (vph)	7	17	1244	49	32	66	1760	41	3	33	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2		4		8
Permitted Phases	6	6		6	2	2		4		8	
Detector Phase	1	1	6	6	5	5	2	4	4	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	13.0	13.0	147.0	147.0	13.0	13.0	147.0	30.0	30.0	30.0	30.0
Total Split (%)	6.8%	6.8%	77.4%	77.4%	6.8%	6.8%	77.4%	15.8%	15.8%	15.8%	15.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	None	None	Max	Max
Act Effct Green (s)		146.7	140.6	140.6		148.7	143.4	23.0	23.0	23.0	23.0
Actuated g/C Ratio		0.77	0.74	0.74		0.78	0.75	0.12	0.12	0.12	0.12
v/c Ratio		0.22	0.34	0.05		0.40	0.52	0.32	0.39	0.31	0.21
Control Delay		6.7	8.9	1.4		8.3	13.1	82.2	20.4	83.8	26.7
Queue Delay		0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.0	0.0
Total Delay		6.7	8.9	1.4		8.3	13.5	82.2	20.4	83.8	26.7
LOS		A	A	A		A	B	F	C	F	C
Approach Delay			8.5				13.2		40.1		52.7
Approach LOS			A				B		D		D

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 158 (83%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

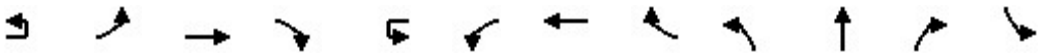




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1296	60	127	1990	52	111	40	48
v/c Ratio	0.22	0.34	0.05	0.40	0.52	0.32	0.39	0.31	0.21
Control Delay	6.7	8.9	1.4	8.3	13.1	82.2	20.4	83.8	26.7
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	6.7	8.9	1.4	8.3	13.5	82.2	20.4	83.8	26.7
Queue Length 50th (ft)	8	191	0	34	409	61	14	47	9
Queue Length 95th (ft)	12	213	10	m51	m486	98	0	84	0
Internal Link Dist (ft)		1116			323		94		231
Turn Bay Length (ft)	200		190	190					
Base Capacity (vph)	171	3762	1187	318	3835	163	282	127	232
Starvation Cap Reductn	0	0	0	0	1119	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.34	0.05	0.40	0.73	0.32	0.39	0.31	0.21

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	7	17	1244	49	32	66	1760	12	41	3	67	33
Future Volume (vph)	7	17	1244	49	32	66	1760	12	41	3	67	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91		1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00		1.00	0.87		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		1781	5085	1583		1783	5081		1770	1614		1770
Flt Permitted		0.08	1.00	1.00		0.18	1.00		0.73	1.00		0.57
Satd. Flow (perm)		148	5085	1583		343	5081		1352	1614		1056
Peak-hour factor, PHF	0.58	0.71	0.96	0.82	0.67	0.84	0.89	1.00	0.79	0.25	0.68	0.82
Adj. Flow (vph)	12	24	1296	60	48	79	1978	12	52	12	99	40
RTOR Reduction (vph)	0	0	0	16	0	0	0	0	0	87	0	0
Lane Group Flow (vph)	0	36	1296	44	0	127	1990	0	52	24	0	40
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2			4			8
Actuated Green, G (s)		145.6	140.6	140.6		148.8	142.2		23.0	23.0		23.0
Effective Green, g (s)		145.6	140.6	140.6		148.8	142.2		23.0	23.0		23.0
Actuated g/C Ratio		0.77	0.74	0.74		0.78	0.75		0.12	0.12		0.12
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		156	3762	1171		318	3802		163	195		127
v/s Ratio Prot		0.01	0.25			c0.01	c0.39			0.01		
v/s Ratio Perm		0.17		0.03		0.30			c0.04			0.04
v/c Ratio		0.23	0.34	0.04		0.40	0.52		0.32	0.12		0.31
Uniform Delay, d1		7.3	8.6	6.6		5.5	9.9		76.3	74.5		76.3
Progression Factor		1.00	1.00	1.00		1.50	1.31		1.00	1.00		1.00
Incremental Delay, d2		0.8	0.3	0.1		0.5	0.3		1.1	0.3		6.4
Delay (s)		8.0	8.9	6.7		8.7	13.3		77.5	74.8		82.7
Level of Service		A	A	A		A	B		E	E		F
Approach Delay (s)			8.8				13.0			75.6		
Approach LOS			A				B			E		

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



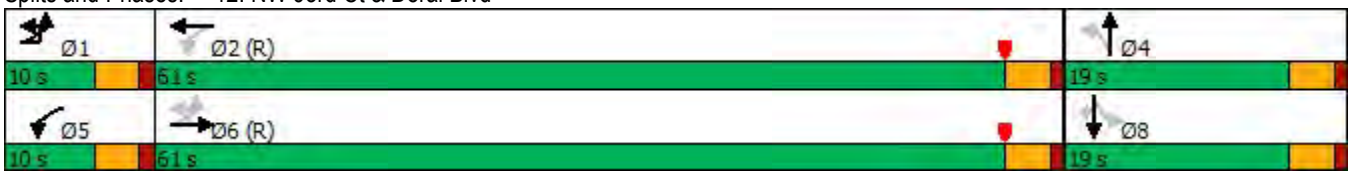
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	23
Future Volume (vph)	3	23
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.88	
Flt Protected	1.00	
Satd. Flow (prot)	1630	
Flt Permitted	1.00	
Satd. Flow (perm)	1630	
Peak-hour factor, PHF	0.38	0.57
Adj. Flow (vph)	8	40
RTOR Reduction (vph)	35	0
Lane Group Flow (vph)	13	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	23.0	
Effective Green, g (s)	23.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	197	
v/s Ratio Prot	0.01	
v/s Ratio Perm		
v/c Ratio	0.07	
Uniform Delay, d1	74.0	
Progression Factor	1.00	
Incremental Delay, d2	0.6	
Delay (s)	74.6	
Level of Service	E	
Approach Delay (s)	78.3	
Approach LOS	E	

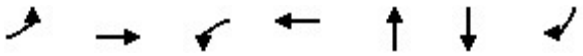
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	10	36	1377	15	1750	83	1	23	1	28
Future Volume (vph)	10	36	1377	15	1750	83	1	23	1	28
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	1	1	6	5	2		4		8	
Permitted Phases	6	6		2		4		8		8
Detector Phase	1	1	6	5	2	4	4	8	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	24.4	9.0	24.4	9.0	9.0	9.0	9.0	9.0
Total Split (s)	10.0	10.0	61.0	10.0	61.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	11.1%	11.1%	67.8%	11.1%	67.8%	21.1%	21.1%	21.1%	21.1%	21.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)		66.5	64.1	64.8	60.1		13.9		13.9	13.9
Actuated g/C Ratio		0.74	0.71	0.72	0.67		0.15		0.15	0.15
v/c Ratio		0.30	0.40	0.08	0.55		0.81		0.13	0.14
Control Delay		12.6	7.1	3.7	9.3		65.0		33.7	5.5
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		12.6	7.1	3.7	9.3		65.0		33.7	5.5
LOS		B	A	A	A		E		C	A
Approach Delay			7.3		9.3		65.0		18.0	
Approach LOS			A		A		E		B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 6 (7%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 57.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	64	1442	25	1878	170	32	40
v/c Ratio	0.30	0.40	0.08	0.55	0.81	0.13	0.14
Control Delay	12.6	7.1	3.7	9.3	65.0	33.7	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	7.1	3.7	9.3	65.0	33.7	5.5
Queue Length 50th (ft)	15	154	3	204	91	16	0
Queue Length 95th (ft)	m26	179	6	244	37	11	6
Internal Link Dist (ft)		1411		1114	188	156	
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	216	3616	308	3386	225	256	314
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.40	0.08	0.55	0.76	0.13	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	36	1377	5	15	1750	26	83	1	10	23	1
Future Volume (vph)	10	36	1377	5	15	1750	26	83	1	10	23	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0			4.0
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00			1.00
Frt		1.00	1.00		1.00	1.00			0.99			1.00
Flt Protected		0.95	1.00		0.95	1.00			0.96			0.96
Satd. Flow (prot)		1776	5081		1770	5071			1765			1785
Flt Permitted		0.08	1.00		0.16	1.00			0.72			0.83
Satd. Flow (perm)		145	5081		292	5071			1334			1539
Peak-hour factor, PHF	0.83	0.69	0.96	0.62	0.60	0.95	0.72	0.54	0.25	0.83	0.82	0.25
Adj. Flow (vph)	12	52	1434	8	25	1842	36	154	4	12	28	4
RTOR Reduction (vph)	0	0	1	0	0	2	0	0	3	0	0	0
Lane Group Flow (vph)	0	64	1441	0	25	1876	0	0	167	0	0	32
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA
Protected Phases	1	1	6		5	2			4			8
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		66.5	61.7		61.7	59.3			13.9			13.9
Effective Green, g (s)		66.5	61.7		61.7	59.3			13.9			13.9
Actuated g/C Ratio		0.74	0.69		0.69	0.66			0.15			0.15
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0			4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0			3.0
Lane Grp Cap (vph)		194	3483		239	3341			206			237
v/s Ratio Prot		c0.02	0.28		0.00	c0.37						
v/s Ratio Perm		0.23			0.07				c0.12			0.02
v/c Ratio		0.33	0.41		0.10	0.56			0.81			0.14
Uniform Delay, d1		5.6	6.2		4.7	8.3			36.8			32.9
Progression Factor		3.19	1.17		1.00	1.00			1.00			1.00
Incremental Delay, d2		0.7	0.3		0.2	0.7			20.3			0.3
Delay (s)		18.7	7.5		4.9	9.0			57.1			33.1
Level of Service		B	A		A	A			E			C
Approach Delay (s)			8.0			8.9			57.1			32.7
Approach LOS			A			A			E			C

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.70
Adj. Flow (vph)	40
RTOR Reduction (vph)	34
Lane Group Flow (vph)	6
Heavy Vehicles (%)	2%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.9
Effective Green, g (s)	13.9
Actuated g/C Ratio	0.15
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	244
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	32.3
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	32.3
Level of Service	C
Approach Delay (s)	
Approach LOS	

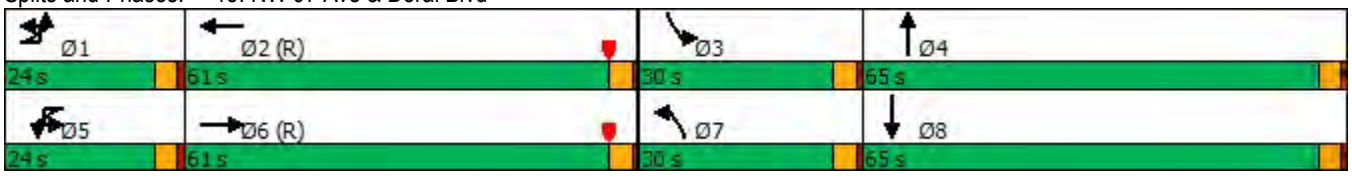
Intersection Summary

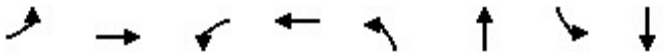
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	111	1017	172	1508	264	620	312	620
Future Volume (vph)	111	1017	172	1508	264	620	312	620
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	24.0	61.0	24.0	61.0	30.0	65.0	30.0	65.0
Total Split (%)	13.3%	33.9%	13.3%	33.9%	16.7%	36.1%	16.7%	36.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	12.2	70.1	16.3	74.2	20.6	53.8	23.8	57.1
Actuated g/C Ratio	0.07	0.39	0.09	0.41	0.11	0.30	0.13	0.32
v/c Ratio	0.56	0.67	0.69	0.87	0.75	0.86	0.84	0.73
Control Delay	90.4	48.1	97.2	59.4	89.1	67.2	92.8	57.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	48.1	97.2	59.4	89.1	67.2	92.8	57.3
LOS	F	D	F	E	F	E	F	E
Approach Delay		52.0		63.4		72.6		68.7
Approach LOS		D		E		E		E

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 63.6 — Intersection LOS: E
Intersection Capacity Utilization 82.1% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 15: NW 97 Ave & Doral Blvd

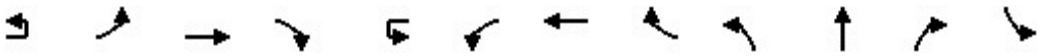




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	1300	213	1807	293	895	380	803
v/c Ratio	0.56	0.67	0.69	0.87	0.75	0.86	0.84	0.73
Control Delay	90.4	48.1	97.2	59.4	89.1	67.2	92.8	57.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	48.1	97.2	59.4	89.1	67.2	92.8	57.3
Queue Length 50th (ft)	78	465	126	793	175	515	227	430
Queue Length 95th (ft)	112	574	145	#950	225	555	259	499
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	381	1944	381	2070	495	1174	495	1179
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.67	0.56	0.87	0.59	0.76	0.77	0.68

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	111	1017	181	3	172	1508	174	264	620	173	312
Future Volume (vph)	1	111	1017	181	3	172	1508	174	264	620	173	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.97			1.00	0.98		1.00	0.97		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3435	4951			3436	5007		3433	3427		3433
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3435	4951			3436	5007		3433	3427		3433
Peak-hour factor, PHF	0.25	0.88	0.95	0.79	0.38	0.84	0.93	0.94	0.90	0.88	0.91	0.82
Adj. Flow (vph)	4	126	1071	229	8	205	1622	185	293	705	190	380
RTOR Reduction (vph)	0	0	17	0	0	0	6	0	0	14	0	0
Lane Group Flow (vph)	0	130	1284	0	0	213	1801	0	293	881	0	380
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		12.2	70.0			16.3	74.1		20.6	53.9		23.8
Effective Green, g (s)		12.2	70.0			16.3	74.1		20.6	53.9		23.8
Actuated g/C Ratio		0.07	0.39			0.09	0.41		0.11	0.30		0.13
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		232	1925			311	2061		392	1026		453
v/s Ratio Prot		0.04	0.26			c0.06	c0.36		0.09	c0.26		c0.11
v/s Ratio Perm												
v/c Ratio		0.56	0.67			0.68	0.87		0.75	0.86		0.84
Uniform Delay, d1		81.3	45.4			79.4	48.6		77.2	59.5		76.2
Progression Factor		1.00	1.00			1.10	1.13		1.00	1.00		1.00
Incremental Delay, d2		3.1	1.8			5.2	4.7		7.6	7.3		12.8
Delay (s)		84.4	47.2			92.8	59.7		84.8	66.7		89.0
Level of Service		F	D			F	E		F	E		F
Approach Delay (s)			50.6				63.2			71.2		
Approach LOS			D				E			E		

Intersection Summary			
HCM 2000 Control Delay	62.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	620	123
Future Volume (vph)	620	123
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.97	
Flt Protected	1.00	
Satd. Flow (prot)	3440	
Flt Permitted	1.00	
Satd. Flow (perm)	3440	
Peak-hour factor, PHF	0.95	0.82
Adj. Flow (vph)	653	150
RTOR Reduction (vph)	12	0
Lane Group Flow (vph)	791	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	57.1	
Effective Green, g (s)	57.1	
Actuated g/C Ratio	0.32	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	1091	
v/s Ratio Prot	c0.23	
v/s Ratio Perm		
v/c Ratio	0.73	
Uniform Delay, d1	54.5	
Progression Factor	1.00	
Incremental Delay, d2	2.4	
Delay (s)	56.9	
Level of Service	E	
Approach Delay (s)	67.2	
Approach LOS	E	

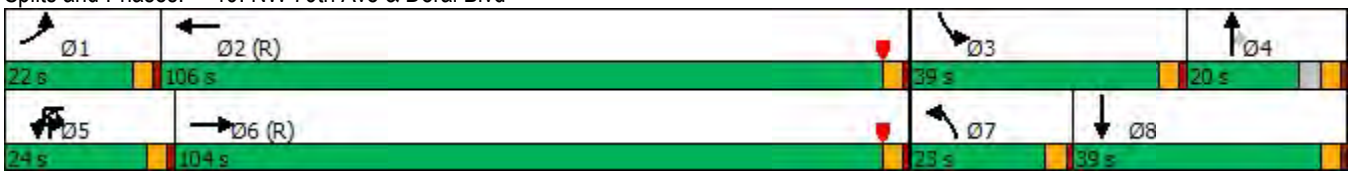
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	121	2456	184	1587	65	183	381	410	326
Future Volume (vph)	121	2456	184	1587	65	183	381	410	326
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6	5	2	7	4	5!	3	8
Permitted Phases							4		
Detector Phase	1	6	5	2	7	4	5	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	11.4	12.0	25.0
Total Split (s)	22.0	104.0	24.0	106.0	23.0	20.0	24.0	39.0	39.0
Total Split (%)	11.6%	54.7%	12.6%	55.8%	12.1%	10.5%	12.6%	20.5%	20.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	17.4	102.1	17.9	102.6	14.1	23.8	45.7	30.2	39.9
Actuated g/C Ratio	0.09	0.54	0.09	0.54	0.07	0.13	0.24	0.16	0.21
v/c Ratio	0.88	0.78	0.76	0.80	0.63	1.63	0.80	0.84	0.73
Control Delay	126.1	28.2	99.0	37.7	105.9	346.1	72.2	92.1	75.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	126.1	28.2	99.0	37.7	105.9	346.1	72.2	92.1	75.0
LOS	F	C	F	D	F	F	E	F	E
Approach Delay		33.1		43.9		204.5			82.9
Approach LOS		C		D		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 49 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.63	
Intersection Signal Delay: 62.6	Intersection LOS: E
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	141	2665	242	2133	82	354	318	456	528
v/c Ratio	0.88	0.78	0.76	0.80	0.63	1.63	0.80	0.84	0.73
Control Delay	126.1	28.2	99.0	37.7	105.9	346.1	72.2	92.1	75.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	126.1	28.2	99.0	37.7	105.9	346.1	72.2	92.1	75.0
Queue Length 50th (ft)	181	509	154	771	101	~660	338	289	318
Queue Length 95th (ft)	#288	550	188	828	142	#868	442	348	344
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	165	3402	358	2661	175	217	413	626	724
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.78	0.68	0.80	0.47	1.63	0.77	0.73	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	121	2456	32	16	184	1587	359	65	183	381	410	326
Future Volume (vph)	121	2456	32	16	184	1587	359	65	183	381	410	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.94	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	6327			3408	4891		1752	1651	1490	3400	3390
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	6327			3408	4891		1752	1651	1490	3400	3390
Peak-hour factor, PHF	0.86	0.94	0.61	0.80	0.83	0.92	0.88	0.79	0.84	0.84	0.90	0.79
Adj. Flow (vph)	141	2613	52	20	222	1725	408	82	218	454	456	413
RTOR Reduction (vph)	0	1	0	0	0	21	0	0	11	41	0	13
Lane Group Flow (vph)	141	2664	0	0	242	2112	0	82	343	277	456	515
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6		5!	5	2		7	4	5!	3	8
Permitted Phases										4		
Actuated Green, G (s)	17.4	102.1			17.9	102.6		14.1	23.8	41.7	30.2	39.9
Effective Green, g (s)	17.4	102.1			17.9	102.6		14.1	23.8	41.7	30.2	39.9
Actuated g/C Ratio	0.09	0.54			0.09	0.54		0.07	0.13	0.22	0.16	0.21
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	160	3399			321	2641		130	206	358	540	711
v/s Ratio Prot	0.08	0.42			0.07	c0.43		0.05	c0.21	c0.07	c0.13	0.15
v/s Ratio Perm										0.11		
v/c Ratio	0.88	0.78			0.75	0.80		0.63	1.66	0.77	0.84	0.72
Uniform Delay, d1	85.3	35.1			83.9	35.4		85.4	83.1	69.7	77.6	69.9
Progression Factor	0.98	0.74			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	38.0	1.8			9.6	2.6		9.6	319.0	10.0	11.6	3.7
Delay (s)	121.6	27.9			93.5	38.0		95.0	402.1	79.8	89.2	73.6
Level of Service	F	C			F	D		F	F	E	F	E
Approach Delay (s)		32.6				43.7			232.7			80.8
Approach LOS		C				D			F			F

Intersection Summary			
HCM 2000 Control Delay	65.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



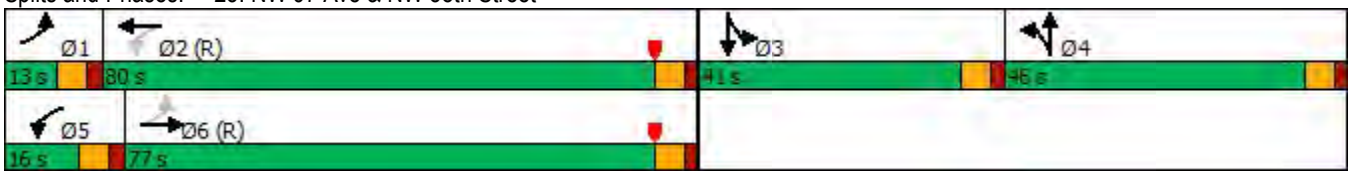
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	115
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

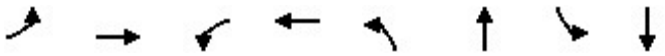
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	54	661	326	1151	127	246	94	213
Future Volume (vph)	54	661	326	1151	127	246	94	213
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	13.0	77.0	16.0	80.0	46.0	46.0	41.0	41.0
Total Split (%)	7.2%	42.8%	8.9%	44.4%	25.6%	25.6%	22.8%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	77.9	71.0	86.9	76.4	39.6	39.6	33.1	33.1
Actuated g/C Ratio	0.43	0.39	0.48	0.42	0.22	0.22	0.18	0.18
v/c Ratio	0.59	0.75	1.86	0.98	0.35	0.96	0.39	0.92
Control Delay	51.1	50.7	428.3	69.3	62.1	101.5	68.0	104.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.1	50.7	428.3	69.3	62.1	101.5	68.0	104.3
LOS	D	D	F	E	E	F	E	F
Approach Delay		50.7		144.3		91.2		93.9
Approach LOS		D		F		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 9 (5%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.86	
Intersection Signal Delay: 105.1	Intersection LOS: F
Intersection Capacity Utilization 91.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street



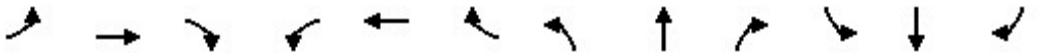


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	63	1025	379	1433	135	379	118	292
v/c Ratio	0.59	0.75	1.86	0.98	0.35	0.96	0.39	0.92
Control Delay	51.1	50.7	428.3	69.3	62.1	101.5	68.0	104.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.1	50.7	428.3	69.3	62.1	101.5	68.0	104.3
Queue Length 50th (ft)	40	543	~605	~927	136	437	129	351
Queue Length 95th (ft)	74	493	#778	#1067	208	#652	158	#532
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		470		170	
Base Capacity (vph)	108	1358	204	1461	392	404	323	334
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.75	1.86	0.98	0.34	0.94	0.37	0.87

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



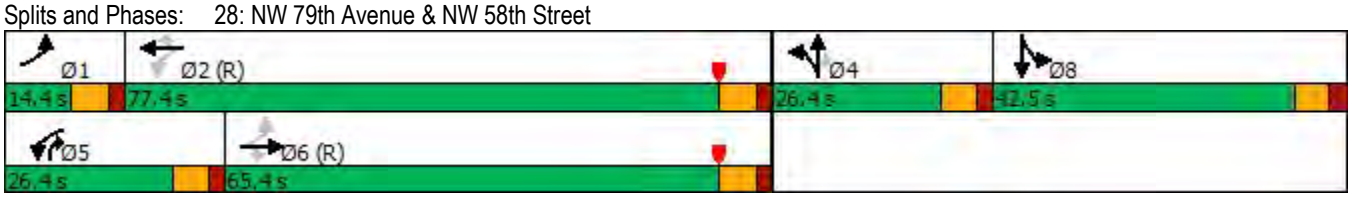
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	661	127	326	1151	197	127	246	85	94	213	32
Future Volume (vph)	54	661	127	326	1151	197	127	246	85	94	213	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		0.95	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3425		1752	3424		1752	1767		1665	1702	
Flt Permitted	0.06	1.00		0.11	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	104	3425		205	3424		1752	1767		1665	1702	
Peak-hour factor, PHF	0.86	0.76	0.82	0.86	0.95	0.89	0.94	0.90	0.80	0.72	0.94	0.61
Adj. Flow (vph)	63	870	155	379	1212	221	135	273	106	131	227	52
RTOR Reduction (vph)	0	8	0	0	8	0	0	8	0	0	4	0
Lane Group Flow (vph)	63	1017	0	379	1425	0	135	371	0	118	288	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	77.9	71.0		88.7	76.4		39.6	39.6		33.1	33.1	
Effective Green, g (s)	77.9	71.0		88.7	76.4		39.6	39.6		33.1	33.1	
Actuated g/C Ratio	0.43	0.39		0.49	0.42		0.22	0.22		0.18	0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	108	1350		206	1453		385	388		306	312	
v/s Ratio Prot	0.02	0.30		c0.13	0.42		0.08	c0.21		0.07	c0.17	
v/s Ratio Perm	0.23			c0.78								
v/c Ratio	0.58	0.75		1.84	0.98		0.35	0.96		0.39	0.92	
Uniform Delay, d1	42.0	47.0		36.3	51.1		59.3	69.4		64.5	72.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.8	3.9		396.2	19.4		0.6	34.2		0.8	31.5	
Delay (s)	49.7	50.9		432.5	70.5		59.9	103.6		65.3	103.7	
Level of Service	D	D		F	E		E	F		E	F	
Approach Delay (s)		50.8			146.2			92.1			92.7	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	106.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	5	1029	87	266	954	87	198	46	825	514	111
Future Volume (vph)	5	1029	87	266	954	87	198	46	825	514	111
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6		5	2		4	4	5	8	8
Permitted Phases	6		6	2		2			4		
Detector Phase	1	6	6	5	2	2	4	4	5	8	8
Switch Phase											
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0	16.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4	11.4	24.4	24.4	13.4	13.4	11.4	13.5	13.5
Total Split (s)	14.4	65.4	65.4	26.4	77.4	77.4	26.4	26.4	26.4	42.5	42.5
Total Split (%)	9.0%	40.7%	40.7%	16.4%	48.2%	48.2%	16.4%	16.4%	16.4%	26.4%	26.4%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	64.9	59.0	59.0	88.5	85.9	85.9	20.0	20.0	43.1	32.9	32.9
Actuated g/C Ratio	0.40	0.37	0.37	0.55	0.53	0.53	0.12	0.12	0.27	0.20	0.20
v/c Ratio	0.03	0.89	0.17	0.99	0.54	0.13	1.15	1.50	1.10	0.87	0.75
Control Delay	19.4	57.3	1.7	97.7	27.1	4.0	165.7	271.1	104.4	86.6	66.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	57.3	1.7	97.7	27.1	4.0	165.7	271.1	104.4	86.6	66.3
LOS	B	E	A	F	C	A	F	F	F	F	E
Approach Delay		52.1			39.9			183.4			73.6
Approach LOS		D			D			F			E

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 107 (67%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.50	
Intersection Signal Delay: 86.7	Intersection LOS: F
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street



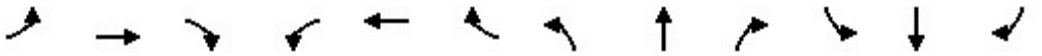


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	8	1118	110	289	994	110	244	487	486	276	487
v/c Ratio	0.03	0.89	0.17	0.99	0.54	0.13	1.15	1.50	1.10	0.87	0.75
Control Delay	19.4	57.3	1.7	97.7	27.1	4.0	165.7	271.1	104.4	86.6	66.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	57.3	1.7	97.7	27.1	4.0	165.7	271.1	104.4	86.6	66.3
Queue Length 50th (ft)	4	579	0	~293	353	0	~298	~585	~420	304	255
Queue Length 95th (ft)	9	678	0	#495	496	24	#412	#708	#624	#453	289
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	262	1262	662	293	1838	874	213	324	441	350	709
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.89	0.17	0.99	0.54	0.13	1.15	1.50	1.10	0.79	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1029	87	266	954	87	198	46	825	514	111	54
Future Volume (vph)	5	1029	87	266	954	87	198	46	825	514	111	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1719	3438	1538	1719	3438	1538	1719	1491	1461	1564	3128	
Flt Permitted	0.27	1.00	1.00	0.06	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	482	3438	1538	113	3438	1538	1719	1491	1461	1564	3128	
Peak-hour factor, PHF	0.62	0.92	0.79	0.92	0.96	0.79	0.81	0.82	0.90	0.93	0.82	0.72
Adj. Flow (vph)	8	1118	110	289	994	110	244	56	917	553	135	75
RTOR Reduction (vph)	0	0	70	0	0	55	0	139	49	0	9	0
Lane Group Flow (vph)	8	1118	40	289	994	55	244	348	437	276	478	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6		6	2		2			4			
Actuated Green, G (s)	60.3	59.0	59.0	88.5	80.8	80.8	20.0	20.0	43.1	32.9	32.9	
Effective Green, g (s)	60.3	59.0	59.0	88.5	80.8	80.8	20.0	20.0	43.1	32.9	32.9	
Actuated g/C Ratio	0.38	0.37	0.37	0.55	0.50	0.50	0.12	0.12	0.27	0.20	0.20	
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	190	1262	564	293	1728	773	213	185	391	320	640	
v/s Ratio Prot	0.00	0.33		0.14	0.29		0.14	c0.23	c0.16	c0.18	0.15	
v/s Ratio Perm	0.02		0.03	c0.40		0.04			0.14			
v/c Ratio	0.04	0.89	0.07	0.99	0.58	0.07	1.15	1.88	1.12	0.86	0.75	
Uniform Delay, d1	31.6	47.7	33.0	54.1	27.9	20.6	70.3	70.3	58.8	61.7	60.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	9.4	0.2	48.4	1.4	0.2	106.4	415.8	81.4	20.6	4.8	
Delay (s)	31.7	57.1	33.3	102.5	29.3	20.8	176.8	486.1	140.2	82.3	64.8	
Level of Service	C	E	C	F	C	C	F	F	F	F	E	
Approach Delay (s)		54.8			43.8			285.9			71.1	
Approach LOS		D			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	115.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	160.7	Sum of lost time (s)	25.7
Intersection Capacity Utilization	98.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	118	567	104	1021	243	730	84	540	369
Future Volume (vph)	118	567	104	1021	243	730	84	540	369
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	17.4	69.4	17.4	69.4	27.4	54.4	20.4	47.4	47.4
Total Split (%)	10.8%	42.9%	10.8%	42.9%	17.0%	33.7%	12.6%	29.3%	29.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	77.8	66.4	75.8	65.4	65.6	47.4	50.3	38.5	38.5
Actuated g/C Ratio	0.48	0.41	0.47	0.40	0.41	0.29	0.31	0.24	0.24
v/c Ratio	0.82	0.58	0.50	0.84	0.93	0.85	0.61	0.78	0.93
Control Delay	64.3	37.8	28.2	50.4	72.9	62.0	45.7	64.6	62.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.3	37.8	28.2	50.4	72.9	62.0	45.7	64.6	62.0
LOS	E	D	C	D	E	E	D	E	E
Approach Delay		41.9		48.1		64.7		61.8	
Approach LOS		D		D		E		E	

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 46 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 54.5	Intersection LOS: D
Intersection Capacity Utilization 86.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street

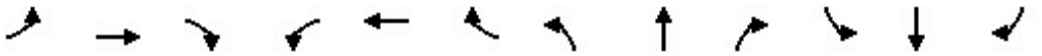




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	148	812	139	1170	276	852	115	643	467
v/c Ratio	0.82	0.58	0.50	0.84	0.93	0.85	0.61	0.78	0.93
Control Delay	64.3	37.8	28.2	50.4	72.9	62.0	45.7	64.6	62.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.3	37.8	28.2	50.4	72.9	62.0	45.7	64.6	62.0
Queue Length 50th (ft)	94	344	79	597	200	433	75	330	320
Queue Length 95th (ft)	#172	417	100	697	#357	528	96	371	371
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	182	1389	285	1391	300	1032	210	880	526
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.58	0.49	0.84	0.92	0.83	0.55	0.73	0.89

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



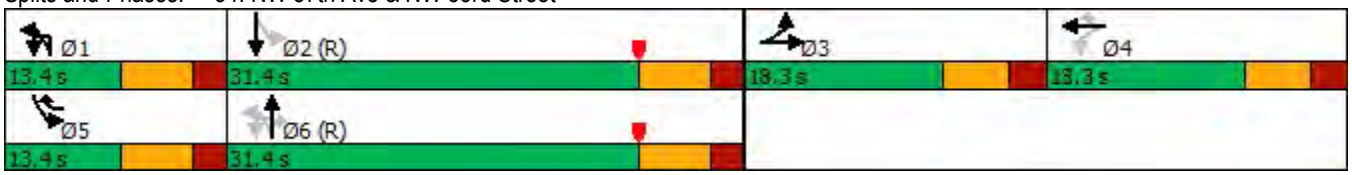
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	567	199	104	1021	77	243	730	80	84	540	369
Future Volume (vph)	118	567	199	104	1021	77	243	730	80	84	540	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3329		1736	3429		1736	3411		1736	3471	1553
Flt Permitted	0.08	1.00		0.23	1.00		0.15	1.00		0.14	1.00	1.00
Satd. Flow (perm)	144	3329		416	3429		272	3411		253	3471	1553
Peak-hour factor, PHF	0.80	0.96	0.90	0.75	0.95	0.81	0.88	0.97	0.81	0.73	0.84	0.79
Adj. Flow (vph)	148	591	221	139	1075	95	276	753	99	115	643	467
RTOR Reduction (vph)	0	23	0	0	4	0	0	6	0	0	0	135
Lane Group Flow (vph)	148	789	0	139	1166	0	276	846	0	115	643	332
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	77.7	66.3		75.7	65.3		65.7	47.5		50.3	38.5	38.5
Effective Green, g (s)	77.7	66.3		75.7	65.3		65.7	47.5		50.3	38.5	38.5
Actuated g/C Ratio	0.48	0.41		0.47	0.40		0.41	0.29		0.31	0.24	0.24
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	181	1365		279	1385		299	1002		187	826	369
v/s Ratio Prot	c0.06	0.24		0.03	c0.34		c0.12	c0.25		0.04	0.19	
v/s Ratio Perm	0.33			0.20			c0.26			0.15		0.21
v/c Ratio	0.82	0.58		0.50	0.84		0.92	0.84		0.61	0.78	0.90
Uniform Delay, d1	34.1	36.8		26.8	43.5		38.3	53.6		43.0	57.6	59.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	24.0	1.8		1.4	6.3		32.5	6.6		5.9	4.7	24.1
Delay (s)	58.1	38.6		28.2	49.8		70.8	60.2		48.9	62.2	83.7
Level of Service	E	D		C	D		E	E		D	E	F
Approach Delay (s)		41.6			47.5			62.8			69.2	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	55.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	161.6	Sum of lost time (s)	25.6
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	15	1	177	4	82	9	14	1018	115	89	795
Future Volume (vph)	15	1	177	4	82	9	14	1018	115	89	795
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	5	1	1	6		5	2
Permitted Phases			4		4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	18.3	18.3	18.3	18.3	13.4	13.4	13.4	31.4	31.4	13.4	31.4
Total Split (%)	22.5%	22.5%	22.5%	22.5%	16.5%	16.5%	16.5%	38.6%	38.6%	16.5%	38.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.4	7.4	12.5	12.5	25.9		40.5	34.4	34.4	45.6	42.6
Actuated g/C Ratio	0.09	0.09	0.15	0.15	0.32		0.50	0.42	0.42	0.56	0.52
v/c Ratio	0.15	0.24	0.59	0.61	0.19		0.09	0.71	0.19	0.42	0.53
Control Delay	36.2	16.6	44.2	45.5	3.5		11.6	26.5	1.7	16.7	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	16.6	44.2	45.5	3.5		11.6	26.5	1.7	16.7	19.0
LOS	D	B	D	D	A		B	C	A	B	B
Approach Delay		23.6		31.5				23.1			18.7
Approach LOS		C		C				C			B

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 46 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 22.5	Intersection LOS: C
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 87th Ave & NW 53rd Street





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	44	116	116	111	28	1049	151	110	962
v/c Ratio	0.15	0.24	0.59	0.61	0.19	0.09	0.71	0.19	0.42	0.53
Control Delay	36.2	16.6	44.2	45.5	3.5	11.6	26.5	1.7	16.7	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	16.6	44.2	45.5	3.5	11.6	26.5	1.7	16.7	19.0
Queue Length 50th (ft)	12	2	57	57	0	7	261	0	27	161
Queue Length 95th (ft)	23	0	94	56	12	20	#410	1	53	#300
Internal Link Dist (ft)		93		992			2038			2105
Turn Bay Length (ft)			175		175	150		245	120	
Base Capacity (vph)	258	269	213	208	593	336	1480	785	267	1831
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.16	0.54	0.56	0.19	0.08	0.71	0.19	0.41	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	1	19	177	4	82	9	14	1018	115	89	795
Future Volume (vph)	15	1	19	177	4	82	9	14	1018	115	89	795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.86		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1593		1665	1674	1568		1775	3505	1568	1752	3496
Flt Permitted	0.95	1.00		0.73	0.71	1.00		0.23	1.00	1.00	0.12	1.00
Satd. Flow (perm)	1752	1593		1276	1242	1568		436	3505	1568	226	3496
Peak-hour factor, PHF	0.62	0.25	0.48	0.79	0.50	0.74	0.75	0.88	0.97	0.76	0.81	0.84
Adj. Flow (vph)	24	4	40	224	8	111	12	16	1049	151	110	946
RTOR Reduction (vph)	0	38	0	0	0	84	0	0	0	92	0	1
Lane Group Flow (vph)	24	6	0	116	116	27	0	28	1049	59	110	961
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	0%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3			4	5	1	1	6		5	2
Permitted Phases				4		4	6	6		6	2	
Actuated Green, G (s)	4.6	4.6		12.5	12.5	19.6		34.5	31.8	31.8	43.3	36.2
Effective Green, g (s)	4.6	4.6		12.5	12.5	19.6		34.5	31.8	31.8	43.3	36.2
Actuated g/C Ratio	0.06	0.06		0.15	0.15	0.24		0.42	0.39	0.39	0.53	0.44
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	90		195	190	377		229	1369	612	253	1554
v/s Ratio Prot	c0.01	0.00				0.01		0.00	c0.30		c0.04	c0.27
v/s Ratio Perm				0.09	c0.09	0.01		0.05		0.04	0.19	
v/c Ratio	0.24	0.07		0.59	0.61	0.07		0.12	0.77	0.10	0.43	0.62
Uniform Delay, d1	36.7	36.4		32.1	32.2	23.9		14.0	21.6	15.7	12.6	17.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.3		4.8	5.7	0.1		0.2	4.1	0.3	1.2	1.9
Delay (s)	38.0	36.7		36.9	37.9	23.9		14.3	25.7	16.0	13.8	19.2
Level of Service	D	D		D	D	C		B	C	B	B	B
Approach Delay (s)		37.2			33.0				24.3			18.6
Approach LOS		D			C				C			B

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.62
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	4	1542	22	3	9	1781	20	0	0	56	0	0
Future Volume (Veh/h)	4	1542	22	3	9	1781	20	0	0	56	0	0
Sign Control		Free				Free			Stop			Stop
Grade		0%				0%			0%			0%
Peak Hour Factor	0.50	0.91	0.69	0.34	0.75	0.96	0.71	0.25	0.25	0.88	0.25	0.25
Hourly flow rate (vph)	8	1695	32	0	12	1855	28	0	0	64	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)		403				458						
pX, platoon unblocked	0.74			0.00	0.91			0.78	0.78	0.91	0.78	0.78
vC, conflicting volume	1883			0	1727			2413	3634	581	2538	3636
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	954			0	1462			1077	2638	206	1236	2641
tC, single (s)	4.2			0.0	4.2			7.6	6.6	7.0	7.6	6.6
tC, 2 stage (s)												
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	98			0	97			100	100	91	100	100
cM capacity (veh/h)	524			0	414			123	17	727	90	17

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	8	678	678	371	12	742	742	399	64	44
Volume Left	8	0	0	0	12	0	0	0	0	0
Volume Right	0	0	0	32	0	0	0	28	64	44
cSH	524	1700	1700	1700	414	1700	1700	1700	727	798
Volume to Capacity	0.02	0.40	0.40	0.22	0.03	0.44	0.44	0.23	0.09	0.06
Queue Length 95th (ft)	1	0	0	0	2	0	0	0	7	4
Control Delay (s)	12.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	10.4	9.8
Lane LOS	B				B				B	A
Approach Delay (s)	0.1				0.1				10.4	9.8
Approach LOS									B	A

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	45.0%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	32
Future Volume (Veh/h)	32
Sign Control	
Grade	
Peak Hour Factor	0.73
Hourly flow rate (vph)	44
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	0.74
vC, conflicting volume	632
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	0
tC, single (s)	7.0
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	94
cM capacity (veh/h)	798
Direction, Lane #	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	24	1244	23	4	1052
Future Volume (Veh/h)	0	24	1244	23	4	1052
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.86	0.96	0.82	1.00	0.94
Hourly flow rate (vph)	0	28	1296	28	4	1119
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.74	0.74			0.74	
vC, conflicting volume	1691	662			1324	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1231	0			736	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	100	96			99	
cM capacity (veh/h)	121	793			622	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	28	864	460	4	373	373	373
Volume Left	0	0	0	4	0	0	0
Volume Right	28	0	28	0	0	0	0
cSH	793	1700	1700	622	1700	1700	1700
Volume to Capacity	0.04	0.51	0.27	0.01	0.22	0.22	0.22
Queue Length 95th (ft)	3	0	0	0	0	0	0
Control Delay (s)	9.7	0.0	0.0	10.8	0.0	0.0	0.0
Lane LOS	A			B			
Approach Delay (s)	9.7	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1476	0	6	5	1786	0	1
Future Volume (Veh/h)	1	1476	0	6	5	1786	0	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.97	0.25	0.50	0.42	0.94	0.25	0.25
Hourly flow rate (vph)	0	1522	0	0	12	1900	0	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)						1196		
pX, platoon unblocked	0.00			0.00			0.85	
vC, conflicting volume	0			0	1522		2179	507
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1522		1760	507
tC, single (s)	0.0			0.0	4.1		6.8	7.0
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	97		100	99
cM capacity (veh/h)	0			0	444		64	508

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	609	609	304	12	633	633	633	4
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	444	1700	1700	1700	508
Volume to Capacity	0.36	0.36	0.18	0.03	0.37	0.37	0.37	0.01
Queue Length 95th (ft)	0	0	0	2	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	13.3	0.0	0.0	0.0	12.1
Lane LOS				B				B
Approach Delay (s)	0.0			0.1				12.1
Approach LOS								B

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	44.5%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1484	0	1	1	1789	3	1
Future Volume (Veh/h)	1	1484	0	1	1	1789	3	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.95	0.25	0.25	0.25	0.97	0.75	0.25
Hourly flow rate (vph)	0	1562	0	0	4	1844	4	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.91		0.91	0.91
vC, conflicting volume	0			0	1562		2185	521
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1279		1962	137
tC, single (s)	0.0			0.0	4.1		6.8	6.9
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	99		92	100
cM capacity (veh/h)	0			0	501		51	814

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	625	625	312	4	615	615	615	8
Volume Left	0	0	0	4	0	0	0	4
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	501	1700	1700	1700	96
Volume to Capacity	0.37	0.37	0.18	0.01	0.36	0.36	0.36	0.08
Queue Length 95th (ft)	0	0	0	1	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	12.2	0.0	0.0	0.0	45.7
Lane LOS				B				E
Approach Delay (s)	0.0			0.0				45.7
Approach LOS								E

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	25	16	3	1106	12	3	21	1123
Future Volume (Veh/h)	25	16	3	1106	12	3	21	1123
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.69	0.67	0.34	0.95	0.75	0.75	0.66	0.96
Hourly flow rate (vph)	36	24	0	1164	16	0	32	1170
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				782				
pX, platoon unblocked	0.83	0.83	0.00			0.00	0.83	
vC, conflicting volume	1821	590	0			0	1180	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1580	97	0			0	808	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	52	97	0			0	95	
cM capacity (veh/h)	76	770	0			0	654	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	36	24	776	404	32	585	585
Volume Left	36	0	0	0	32	0	0
Volume Right	0	24	0	16	0	0	0
cSH	76	770	1700	1700	654	1700	1700
Volume to Capacity	0.48	0.03	0.46	0.24	0.05	0.34	0.34
Queue Length 95th (ft)	49	2	0	0	4	0	0
Control Delay (s)	89.7	9.8	0.0	0.0	10.8	0.0	0.0
Lane LOS	F	A			B		
Approach Delay (s)	57.8		0.0		0.3		
Approach LOS	F						

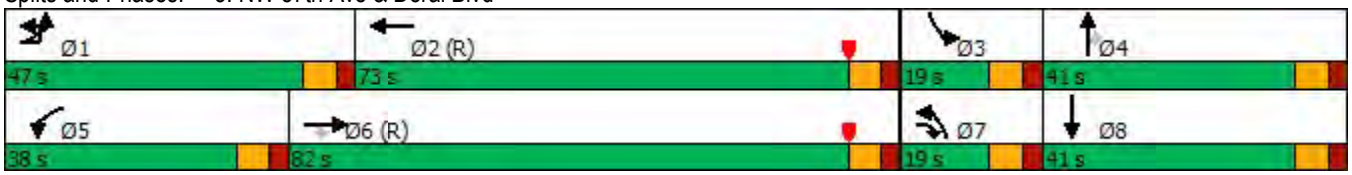
Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

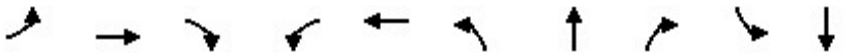
2027 Background AM Traffic
Without Project Trips
Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	427	1468	452	505	1192	215	640	294	99	735
Future Volume (vph)	427	1468	452	505	1192	215	640	294	99	735
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	1	6	7	5	2	7	4		3	8
Permitted Phases			6					4		
Detector Phase	1	6	7	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1
Total Split (s)	47.0	82.0	19.0	38.0	73.0	19.0	41.0	41.0	19.0	41.0
Total Split (%)	26.1%	45.6%	10.6%	21.1%	40.6%	10.6%	22.8%	22.8%	10.6%	22.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max
Act Effct Green (s)	31.6	75.0	93.9	31.0	74.4	11.9	34.7	34.7	11.1	33.9
Actuated g/C Ratio	0.18	0.42	0.52	0.17	0.41	0.07	0.19	0.19	0.06	0.19
v/c Ratio	0.84	0.75	0.62	0.97	0.70	1.01	1.02	0.71	0.63	1.15
Control Delay	67.0	76.8	44.7	100.8	42.4	142.9	108.7	24.7	91.1	140.0
Queue Delay	57.4	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Total Delay	124.4	76.8	45.0	100.8	42.9	142.9	108.7	24.7	91.1	140.0
LOS	F	E	D	F	D	F	F	C	F	F
Approach Delay		79.4			59.2		90.2			134.7
Approach LOS		E			E		F			F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 65 (36%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 85.1	Intersection LOS: F
Intersection Capacity Utilization 91.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	493	1562	526	561	1435	224	681	372	129	1077
v/c Ratio	0.84	0.75	0.62	0.97	0.70	1.01	1.02	0.71	0.63	1.15
Control Delay	67.0	76.8	44.7	100.8	42.4	142.9	108.7	24.7	91.1	140.0
Queue Delay	57.4	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Total Delay	124.4	76.8	45.0	100.8	42.9	142.9	108.7	24.7	91.1	140.0
Queue Length 50th (ft)	311	639	396	356	316	~140	~455	100	78	~538
Queue Length 95th (ft)	364	701	495	#475	460	#239	#591	147	m98	#637
Internal Link Dist (ft)		378			2485		2143			310
Turn Bay Length (ft)	170		170	330		400			190	
Base Capacity (vph)	748	2078	842	579	2037	222	669	527	222	937
Starvation Cap Reductn	0	0	52	0	0	0	0	0	0	0
Spillback Cap Reductn	417	0	0	0	242	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.49	0.75	0.67	0.97	0.80	1.01	1.02	0.71	0.58	1.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	427	1468	452	505	1192	125	215	640	294	99	735
Future Volume (vph)	2	427	1468	452	505	1192	125	215	640	294	99	735
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.96
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3367	4988	1553	3367	4915		3367	3471	1553	3367	4794
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3367	4988	1553	3367	4915		3367	3471	1553	3367	4794
Peak-hour factor, PHF	0.25	0.88	0.94	0.86	0.90	0.92	0.90	0.96	0.94	0.79	0.77	0.92
Adj. Flow (vph)	8	485	1562	526	561	1296	139	224	681	372	129	799
RTOR Reduction (vph)	0	0	0	35	0	6	0	0	0	228	0	35
Lane Group Flow (vph)	0	493	1562	491	561	1429	0	224	681	144	129	1042
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		31.6	75.0	86.9	31.0	74.4		11.9	34.7	34.7	11.1	33.9
Effective Green, g (s)		31.6	75.0	86.9	31.0	74.4		11.9	34.7	34.7	11.1	33.9
Actuated g/C Ratio		0.18	0.42	0.48	0.17	0.41		0.07	0.19	0.19	0.06	0.19
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		591	2078	749	579	2031		222	669	299	207	902
v/s Ratio Prot		0.15	c0.31	0.04	c0.17	0.29		c0.07	0.20		0.04	c0.22
v/s Ratio Perm				0.27						0.09		
v/c Ratio		0.83	0.75	0.66	0.97	0.70		1.01	1.02	0.48	0.62	1.16
Uniform Delay, d1		71.7	44.6	35.2	74.0	43.7		84.0	72.7	64.7	82.4	73.0
Progression Factor		0.78	1.66	1.56	1.09	0.93		1.00	1.00	1.00	0.95	1.03
Incremental Delay, d2		8.7	2.2	1.8	21.3	1.2		62.7	39.4	5.5	5.4	81.8
Delay (s)		64.4	76.3	56.9	101.7	41.9		146.8	112.0	70.2	83.8	157.2
Level of Service		E	E	E	F	D		F	F	E	F	F
Approach Delay (s)			70.1			58.7			105.9			149.3
Approach LOS			E			E			F			F

Intersection Summary			
HCM 2000 Control Delay	86.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	231
Future Volume (vph)	231
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.83
Adj. Flow (vph)	278
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SEL	SER
Lane Configurations									
Traffic Volume (vph)	134	46	5	19	935	77	877	3	12
Future Volume (vph)	134	46	5	19	935	77	877	3	12
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Prot	Perm
Protected Phases	7	5	1	1	6	5	2	8	
Permitted Phases		7	6	6		2			8
Detector Phase	7	5	1	1	6	5	2	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.3	24.3
Total Split (s)	25.0	18.0	18.0	18.0	108.0	18.0	108.0	29.0	29.0
Total Split (%)	13.9%	10.0%	10.0%	10.0%	60.0%	10.0%	60.0%	16.1%	16.1%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	None	None
Act Effct Green (s)	17.3	26.6		132.6	126.1	136.9	130.0	5.5	5.5
Actuated g/C Ratio	0.10	0.15		0.74	0.70	0.76	0.72	0.03	0.03
v/c Ratio	0.91	0.23		0.10	0.52	0.33	0.37	0.14	0.14
Control Delay	82.4	12.7		14.9	44.1	8.1	11.1	2.1	2.0
Queue Delay	0.0	0.0		0.0	31.8	0.0	0.0	0.0	0.0
Total Delay	82.4	12.7		14.9	75.9	8.1	11.1	2.1	2.0
LOS	F	B		B	E	A	B	A	A
Approach Delay	67.4				73.8		10.8	2.1	
Approach LOS	E				E		B	A	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 107 (59%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 47.3	Intersection LOS: D
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SEL	SER
Lane Group Flow (vph)	231	63	44	1228	103	930	21	19
v/c Ratio	0.91	0.23	0.10	0.52	0.33	0.37	0.14	0.14
Control Delay	82.4	12.7	14.9	44.1	8.1	11.1	2.1	2.0
Queue Delay	0.0	0.0	0.0	31.8	0.0	0.0	0.0	0.0
Total Delay	82.4	12.7	14.9	75.9	8.1	11.1	2.1	2.0
Queue Length 50th (ft)	161	0	27	740	28	233	0	0
Queue Length 95th (ft)	137	15	m33	m763	38	277	0	0
Internal Link Dist (ft)	2087			188		622	377	
Turn Bay Length (ft)			120		200			
Base Capacity (vph)	267	298	471	2372	345	2500	299	271
Starvation Cap Reductn	0	0	0	1209	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.21	0.09	1.06	0.30	0.37	0.07	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	134	4	46	5	19	935	181	77	877	5	5	3
Future Volume (vph)	134	4	46	5	19	935	181	77	877	5	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95			1.00
Frt	0.99		0.85		1.00	0.97		1.00	1.00			0.96
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00			0.96
Satd. Flow (prot)	1728		1475		1736	3377		1736	3462			1697
Flt Permitted	0.96		1.00		0.28	1.00		0.18	1.00			0.96
Satd. Flow (perm)	1728		1475		513	3377		328	3462			1697
Peak-hour factor, PHF	0.62	0.50	0.66	0.31	0.68	0.93	0.81	0.75	0.96	0.31	0.62	0.38
Adj. Flow (vph)	216	8	70	16	28	1005	223	103	914	16	8	8
RTOR Reduction (vph)	89	0	54	0	0	7	0	0	1	0	0	20
Lane Group Flow (vph)	142	0	9	0	44	1221	0	103	929	0	0	1
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA		Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2			8	
Actuated Green, G (s)	17.3		25.4		130.3	124.8		135.5	127.4			4.4
Effective Green, g (s)	17.3		25.4		130.3	124.8		135.5	127.4			4.4
Actuated g/C Ratio	0.10		0.14		0.72	0.69		0.75	0.71			0.02
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)	166		208		408	2341		310	2450			41
v/s Ratio Prot	c0.08		0.00		0.00	c0.36		c0.01	c0.27			
v/s Ratio Perm			0.00		0.07			0.23				0.00
v/c Ratio	0.86		0.04		0.11	0.52		0.33	0.38			0.01
Uniform Delay, d1	80.1		66.8		7.4	13.3		8.6	10.5			85.7
Progression Factor	1.00		1.00		2.67	3.29		1.00	1.00			1.00
Incremental Delay, d2	32.9		0.1		0.1	0.5		0.6	0.4			0.1
Delay (s)	113.0		66.9		19.8	44.1		9.2	11.0			85.8
Level of Service	F		E		B	D		A	B			F
Approach Delay (s)	103.1					43.3			10.8			85.8
Approach LOS	F					D			B			F

Intersection Summary			
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



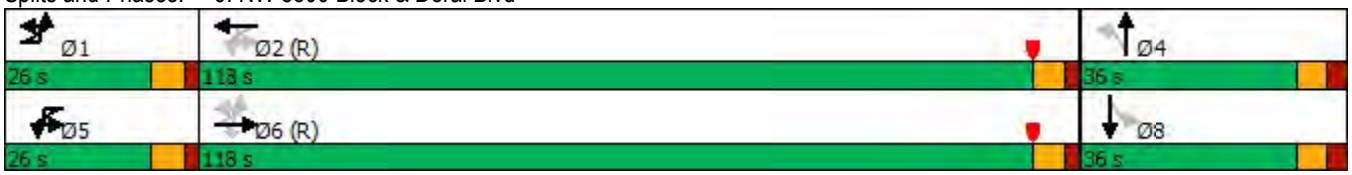
Movement	SER
Lane Configurations	
Traffic Volume (vph)	12
Future Volume (vph)	12
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1475
Flt Permitted	1.00
Satd. Flow (perm)	1475
Peak-hour factor, PHF	0.50
Adj. Flow (vph)	24
RTOR Reduction (vph)	19
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	4.4
Effective Green, g (s)	4.4
Actuated g/C Ratio	0.02
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	36
v/s Ratio Prot	
v/s Ratio Perm	c0.00
v/c Ratio	0.01
Uniform Delay, d1	85.7
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	85.8
Level of Service	F
Approach Delay (s)	
Approach LOS	

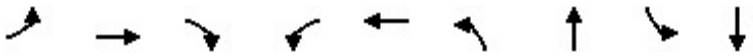
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	1	20	2109	59	10	22	1477	53	1	9	0
Future Volume (vph)	1	20	2109	59	10	22	1477	53	1	9	0
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2		4		8
Permitted Phases	6	6		6	2	2		4		8	
Detector Phase	1	1	6	6	5	5	2	4	4	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	26.0	26.0	118.0	118.0	26.0	26.0	118.0	36.0	36.0	36.0	36.0
Total Split (%)	14.4%	14.4%	65.6%	65.6%	14.4%	14.4%	65.6%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	None	None	Max	Max
Act Effct Green (s)		132.2	127.1	127.1		132.8	127.4	29.0	29.0	29.0	29.0
Actuated g/C Ratio		0.73	0.71	0.71		0.74	0.71	0.16	0.16	0.16	0.16
v/c Ratio		0.13	0.62	0.07		0.29	0.45	0.35	0.28	0.08	0.03
Control Delay		3.9	19.9	1.3		10.3	11.1	72.4	15.0	65.6	0.2
Queue Delay		0.0	0.0	0.0		0.0	0.6	0.0	0.0	0.0	0.0
Total Delay		3.9	19.9	1.3		10.3	11.7	72.4	15.0	65.6	0.2
LOS		A	B	A		B	B	E	B	E	A
Approach Delay			19.1				11.6		41.8		37.5
Approach LOS			B				B		D		D

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 163 (91%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 61.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	28	2174	73	40	1591	78	89	16	12
v/c Ratio	0.13	0.62	0.07	0.29	0.45	0.35	0.28	0.08	0.03
Control Delay	3.9	19.9	1.3	10.3	11.1	72.4	15.0	65.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Total Delay	3.9	19.9	1.3	10.3	11.7	72.4	15.0	65.6	0.2
Queue Length 50th (ft)	2	912	8	7	414	83	4	16	0
Queue Length 95th (ft)	m4	802	7	m6	m459	105	0	26	0
Internal Link Dist (ft)		1116			323		94		231
Turn Bay Length (ft)	200		190	190					
Base Capacity (vph)	340	3523	1115	260	3521	220	323	199	409
Starvation Cap Reductn	0	0	0	0	1373	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.62	0.07	0.15	0.74	0.35	0.28	0.08	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	20	2109	59	10	22	1477	23	53	1	75	9
Future Volume (vph)	1	20	2109	59	10	22	1477	23	53	1	75	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91		1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00		1.00	0.86		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		1745	4988	1553		1763	4971		1736	1565		1736
Flt Permitted		0.12	1.00	1.00		0.06	1.00		0.75	1.00		0.68
Satd. Flow (perm)		229	4988	1553		103	4971		1370	1565		1240
Peak-hour factor, PHF	0.25	0.83	0.97	0.81	0.62	0.92	0.95	0.64	0.68	0.25	0.88	0.56
Adj. Flow (vph)	4	24	2174	73	16	24	1555	36	78	4	85	16
RTOR Reduction (vph)	0	0	0	19	0	0	1	0	0	71	0	0
Lane Group Flow (vph)	0	28	2174	54	0	40	1590	0	78	18	0	16
Heavy Vehicles (%)	0%	4%	4%	4%	0%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2			4			8
Actuated Green, G (s)		130.9	125.9	125.9		131.5	126.2		29.0	29.0		29.0
Effective Green, g (s)		130.9	125.9	125.9		131.5	126.2		29.0	29.0		29.0
Actuated g/C Ratio		0.73	0.70	0.70		0.73	0.70		0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		208	3488	1086		124	3485		220	252		199
v/s Ratio Prot		0.00	c0.44			c0.01	0.32			0.01		
v/s Ratio Perm		0.09		0.03		0.23			c0.06			0.01
v/c Ratio		0.13	0.62	0.05		0.32	0.46		0.35	0.07		0.08
Uniform Delay, d1		7.9	14.4	8.4		11.9	11.8		67.2	64.1		64.2
Progression Factor		0.55	1.34	0.47		1.31	0.93		1.00	1.00		1.00
Incremental Delay, d2		0.3	0.7	0.1		0.9	0.3		1.0	0.1		0.8
Delay (s)		4.6	20.1	4.1		16.4	11.3		68.2	64.2		65.0
Level of Service		A	C	A		B	B		E	E		E
Approach Delay (s)			19.4				11.4			66.0		
Approach LOS			B				B			E		

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



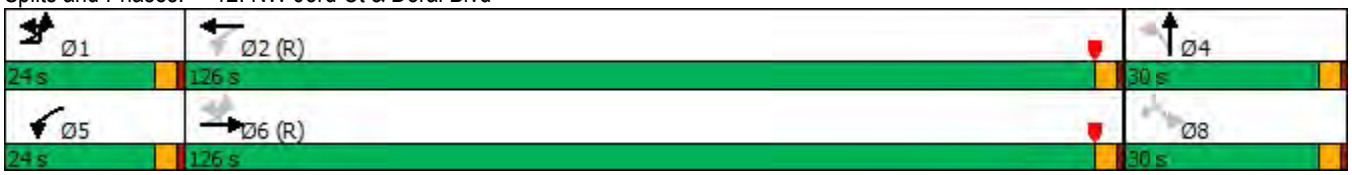
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	6
Future Volume (vph)	0	6
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	1553	
Flt Permitted	1.00	
Satd. Flow (perm)	1553	
Peak-hour factor, PHF	0.25	0.50
Adj. Flow (vph)	0	12
RTOR Reduction (vph)	10	0
Lane Group Flow (vph)	2	0
Heavy Vehicles (%)	4%	4%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	29.0	
Effective Green, g (s)	29.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	250	
v/s Ratio Prot	0.00	
v/s Ratio Perm		
v/c Ratio	0.01	
Uniform Delay, d1	63.4	
Progression Factor	1.00	
Incremental Delay, d2	0.1	
Delay (s)	63.5	
Level of Service	E	
Approach Delay (s)	64.3	
Approach LOS	E	

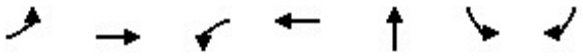
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	2	42	2277	18	1399	0	28	40
Future Volume (vph)	2	42	2277	18	1399	0	28	40
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	11.4	24.4	24.8	24.8	24.8
Total Split (s)	24.0	24.0	126.0	24.0	126.0	30.0	30.0	30.0
Total Split (%)	13.3%	13.3%	70.0%	13.3%	70.0%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		156.7	152.6	154.1	148.2	13.4	13.4	13.4
Actuated g/C Ratio		0.87	0.85	0.86	0.82	0.07	0.07	0.07
v/c Ratio		0.25	0.55	0.17	0.39	0.50	0.66	0.42
Control Delay		3.7	15.3	8.1	19.3	59.3	114.9	20.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		3.7	15.3	8.1	19.3	59.3	114.9	20.5
LOS		A	B	A	B	E	F	C
Approach Delay			15.0		19.2	59.3		
Approach LOS			B		B	E		

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 105 (58%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 18.8	Intersection LOS: B
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd

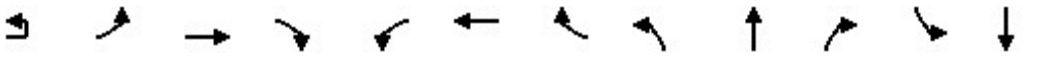




Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	2336	24	1581	76	54	78
v/c Ratio	0.25	0.55	0.17	0.39	0.50	0.66	0.42
Control Delay	3.7	15.3	8.1	19.3	59.3	114.9	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.7	15.3	8.1	19.3	59.3	114.9	20.5
Queue Length 50th (ft)	12	786	8	525	53	63	0
Queue Length 95th (ft)	m18	963	18	616	5	63	0
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	383	4220	272	4091	266	159	291
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.55	0.09	0.39	0.29	0.34	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	42	2277	29	18	1399	28	27	0	24	28	0
Future Volume (vph)	2	42	2277	29	18	1399	28	27	0	24	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.94		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.97		0.95	
Satd. Flow (prot)		1736	4976		1736	4967			1666		1736	
Flt Permitted		0.14	1.00		0.06	1.00			0.97		0.61	
Satd. Flow (perm)		247	4976		104	4967			1666		1106	
Peak-hour factor, PHF	0.25	0.73	0.99	0.81	0.75	0.91	0.64	0.68	0.25	0.67	0.52	0.25
Adj. Flow (vph)	8	58	2300	36	24	1537	44	40	0	36	54	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	28	0	0	0
Lane Group Flow (vph)	0	66	2336	0	24	1580	0	0	48	0	54	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		157.4	151.0		151.8	148.2			13.4		13.4	
Effective Green, g (s)		157.4	151.0		151.8	148.2			13.4		13.4	
Actuated g/C Ratio		0.87	0.84		0.84	0.82			0.07		0.07	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		268	4174		120	4089			124		82	
v/s Ratio Prot		c0.01	c0.47		0.00	0.32						
v/s Ratio Perm		0.21			0.16				0.03		c0.05	
v/c Ratio		0.25	0.56		0.20	0.39			0.39		0.66	
Uniform Delay, d1		2.2	4.4		3.6	4.1			79.4		81.1	
Progression Factor		1.72	3.20		3.10	4.34			1.00		1.00	
Incremental Delay, d2		0.2	0.2		0.8	0.3			2.0		17.5	
Delay (s)		3.9	14.3		11.8	18.1			81.4		98.6	
Level of Service		A	B		B	B			F		F	
Approach Delay (s)			14.0			18.0			81.4			86.2
Approach LOS			B			B			F			F

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



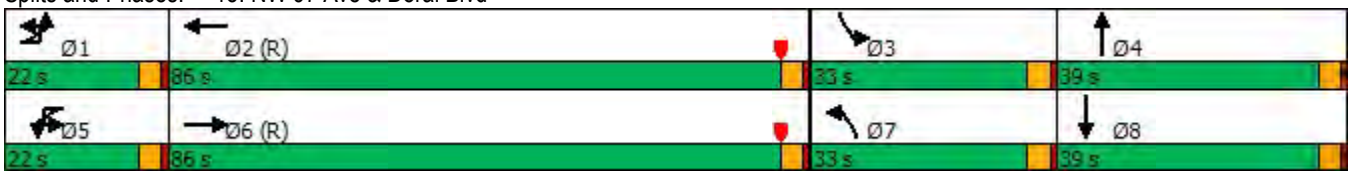
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.51
Adj. Flow (vph)	78
RTOR Reduction (vph)	72
Lane Group Flow (vph)	6
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.4
Effective Green, g (s)	13.4
Actuated g/C Ratio	0.07
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	115
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.05
Uniform Delay, d1	77.4
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	77.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

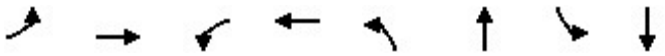
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	86	1860	214	1138	137	370	434	576
Future Volume (vph)	86	1860	214	1138	137	370	434	576
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	22.0	86.0	22.0	86.0	33.0	39.0	33.0	39.0
Total Split (%)	12.2%	47.8%	12.2%	47.8%	18.3%	21.7%	18.3%	21.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	11.6	85.3	16.4	90.2	14.0	34.4	27.9	48.3
Actuated g/C Ratio	0.06	0.47	0.09	0.50	0.08	0.19	0.16	0.27
v/c Ratio	0.54	0.95	0.75	0.61	0.62	0.87	0.90	0.76
Control Delay	90.4	55.0	64.2	52.8	90.4	79.3	94.9	66.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	55.0	64.2	52.8	90.4	79.3	94.9	66.4
LOS	F	D	E	D	F	E	F	E
Approach Delay		56.7		54.4		81.7		77.8
Approach LOS		E		D		F		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 63.3	Intersection LOS: E
Intersection Capacity Utilization 89.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

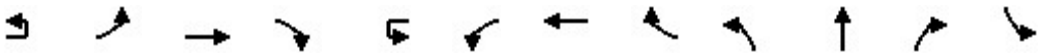




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	117	2230	232	1496	163	585	472	707
v/c Ratio	0.54	0.95	0.75	0.61	0.62	0.87	0.90	0.76
Control Delay	90.4	55.0	64.2	52.8	90.4	79.3	94.9	66.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	55.0	64.2	52.8	90.4	79.3	94.9	66.4
Queue Length 50th (ft)	70	937	142	608	97	331	284	400
Queue Length 95th (ft)	93	#1061	194	663	128	#412	#372	486
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	340	2343	340	2472	547	683	547	931
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.95	0.68	0.61	0.30	0.86	0.86	0.76

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	86	1860	253	2	214	1138	182	137	370	170	434
Future Volume (vph)	2	86	1860	253	2	214	1138	182	137	370	170	434
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.98			1.00	0.97		1.00	0.95		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3400	4917			3400	4899		3400	3325		3400
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3400	4917			3400	4899		3400	3325		3400
Peak-hour factor, PHF	0.25	0.79	0.99	0.72	0.50	0.94	0.93	0.67	0.84	0.96	0.85	0.92
Adj. Flow (vph)	8	109	1879	351	4	228	1224	272	163	385	200	472
RTOR Reduction (vph)	0	0	15	0	0	0	18	0	0	37	0	0
Lane Group Flow (vph)	0	117	2215	0	0	232	1478	0	163	548	0	472
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		11.6	85.3			16.4	90.1		14.0	34.4		27.9
Effective Green, g (s)		11.6	85.3			16.4	90.1		14.0	34.4		27.9
Actuated g/C Ratio		0.06	0.47			0.09	0.50		0.08	0.19		0.15
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		219	2330			309	2452		264	635		527
v/s Ratio Prot		0.03	c0.45			c0.07	0.30		0.05	c0.16		c0.14
v/s Ratio Perm												
v/c Ratio		0.53	0.95			0.75	0.60		0.62	0.86		0.90
Uniform Delay, d1		81.6	45.3			79.8	32.2		80.4	70.5		74.6
Progression Factor		1.00	1.00			0.62	1.62		1.00	1.00		1.00
Incremental Delay, d2		2.5	10.2			9.4	1.1		4.3	11.6		17.6
Delay (s)		84.1	55.6			59.1	53.2		84.7	82.1		92.2
Level of Service		F	E			E	D		F	F		F
Approach Delay (s)			57.0				54.0			82.7		
Approach LOS			E				D			F		

Intersection Summary			
HCM 2000 Control Delay	62.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	576	33
Future Volume (vph)	576	33
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.99	
Flt Protected	1.00	
Satd. Flow (prot)	3460	
Flt Permitted	1.00	
Satd. Flow (perm)	3460	
Peak-hour factor, PHF	0.89	0.55
Adj. Flow (vph)	647	60
RTOR Reduction (vph)	4	0
Lane Group Flow (vph)	703	0
Heavy Vehicles (%)	3%	3%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	48.3	
Effective Green, g (s)	48.3	
Actuated g/C Ratio	0.27	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	928	
v/s Ratio Prot	0.20	
v/s Ratio Perm		
v/c Ratio	0.76	
Uniform Delay, d1	60.5	
Progression Factor	1.00	
Incremental Delay, d2	3.6	
Delay (s)	64.1	
Level of Service	E	
Approach Delay (s)	75.3	
Approach LOS	E	

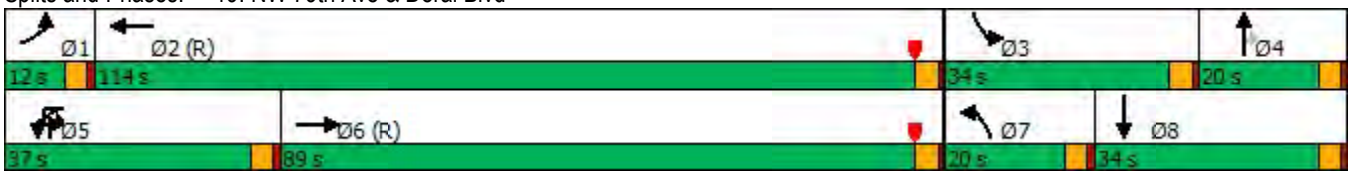
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	92	1800	344	1724	32	132	176	379	331
Future Volume (vph)	92	1800	344	1724	32	132	176	379	331
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6	5	2	7	4	5!	3	8
Permitted Phases							4		
Detector Phase	1	6	5	2	7	4	5	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	11.4	12.0	25.0
Total Split (s)	12.0	89.0	37.0	114.0	20.0	20.0	37.0	34.0	34.0
Total Split (%)	6.7%	49.4%	20.6%	63.3%	11.1%	11.1%	20.6%	18.9%	18.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	8.0	92.0	26.0	110.0	10.0	19.3	49.3	26.7	38.0
Actuated g/C Ratio	0.04	0.51	0.14	0.61	0.06	0.11	0.27	0.15	0.21
v/c Ratio	1.28	0.60	0.79	0.81	0.46	1.02	0.38	0.83	0.64
Control Delay	239.5	37.8	86.6	28.6	97.1	143.8	37.3	89.6	68.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	239.5	37.8	86.6	28.6	97.1	143.8	37.3	89.6	68.3
LOS	F	D	F	C	F	F	D	F	E
Approach Delay		47.5		36.7		94.2			78.4
Approach LOS		D		D		F			E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 38 (21%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 50.1	Intersection LOS: D
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	97	1910	382	2374	44	188	166	412	458
v/c Ratio	1.28	0.60	0.79	0.81	0.46	1.02	0.38	0.83	0.64
Control Delay	239.5	37.8	86.6	28.6	97.1	143.8	37.3	89.6	68.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	239.5	37.8	86.6	28.6	97.1	143.8	37.3	89.6	68.3
Queue Length 50th (ft)	~140	638	228	743	51	~249	111	246	258
Queue Length 95th (ft)	m#229	659	279	799	79	#468	171	306	334
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	76	3170	611	2949	152	184	494	555	715
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.60	0.63	0.81	0.29	1.02	0.34	0.74	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	92	1800	37	3	344	1724	460	32	132	176	379	331
Future Volume (vph)	92	1800	37	3	344	1724	460	32	132	176	379	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.97	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	6198			3335	4784		1719	1663	1461	3335	3328
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	6198			3335	4784		1719	1663	1461	3335	3328
Peak-hour factor, PHF	0.95	0.97	0.69	0.38	0.92	0.92	0.92	0.73	0.90	0.85	0.92	0.92
Adj. Flow (vph)	97	1856	54	8	374	1874	500	44	147	207	412	360
RTOR Reduction (vph)	0	2	0	0	0	27	0	0	5	41	0	13
Lane Group Flow (vph)	97	1908	0	0	382	2347	0	44	183	125	412	445
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6		5!	5	2		7	4	5!	3	8
Permitted Phases										4		
Actuated Green, G (s)	8.0	91.2			26.0	109.2		8.8	20.1	46.1	26.7	38.0
Effective Green, g (s)	8.0	91.2			26.0	109.2		8.8	20.1	46.1	26.7	38.0
Actuated g/C Ratio	0.04	0.51			0.14	0.61		0.05	0.11	0.26	0.15	0.21
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	76	3140			481	2902		84	185	406	494	702
v/s Ratio Prot	c0.06	0.31			c0.11	c0.49		0.03	c0.11	0.04	c0.12	0.13
v/s Ratio Perm										0.04		
v/c Ratio	1.28	0.61			0.79	0.81		0.52	0.99	0.31	0.83	0.63
Uniform Delay, d1	86.0	31.6			74.4	27.3		83.6	79.8	54.1	74.5	64.7
Progression Factor	1.05	1.18			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	175.7	0.6			8.8	2.5		5.8	61.9	0.4	11.5	1.9
Delay (s)	266.3	37.8			83.2	29.9		89.3	141.7	54.5	86.0	66.6
Level of Service	F	D			F	C		F	F	D	F	E
Approach Delay (s)		48.9				37.3			99.6			75.8
Approach LOS		D				D			F			E

Intersection Summary			
HCM 2000 Control Delay	50.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



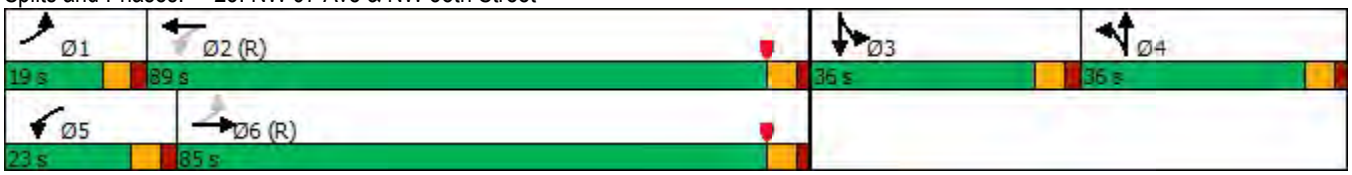
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	83
Future Volume (vph)	83
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.85
Adj. Flow (vph)	98
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

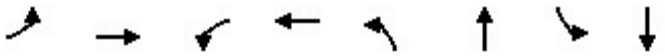
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	22	1165	148	530	118	137	233	235
Future Volume (vph)	22	1165	148	530	118	137	233	235
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	19.0	85.0	23.0	89.0	36.0	36.0	36.0	36.0
Total Split (%)	10.6%	47.2%	12.8%	49.4%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	94.6	87.6	111.1	100.4	20.9	20.9	30.0	30.0
Actuated g/C Ratio	0.53	0.49	0.62	0.56	0.12	0.12	0.17	0.17
v/c Ratio	0.10	0.89	0.82	0.40	0.72	0.72	0.97	0.51
Control Delay	16.5	50.3	77.5	23.8	95.4	52.2	118.9	70.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	50.3	77.5	23.8	95.4	52.2	118.9	70.8
LOS	B	D	E	C	F	D	F	E
Approach Delay		49.5		33.7		64.6		94.2
Approach LOS		D		C		E		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 63 (35%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 54.8	Intersection LOS: D
Intersection Capacity Utilization 87.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1487	172	760	144	357	281	295
v/c Ratio	0.10	0.89	0.82	0.40	0.72	0.72	0.97	0.51
Control Delay	16.5	50.3	77.5	23.8	95.4	52.2	118.9	70.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	50.3	77.5	23.8	95.4	52.2	118.9	70.8
Queue Length 50th (ft)	16	848	149	261	167	128	335	166
Queue Length 95th (ft)	25	#1082	#257	352	215	164	#465	215
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	428	1662	222	1882	289	653	289	574
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.89	0.77	0.40	0.50	0.55	0.97	0.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

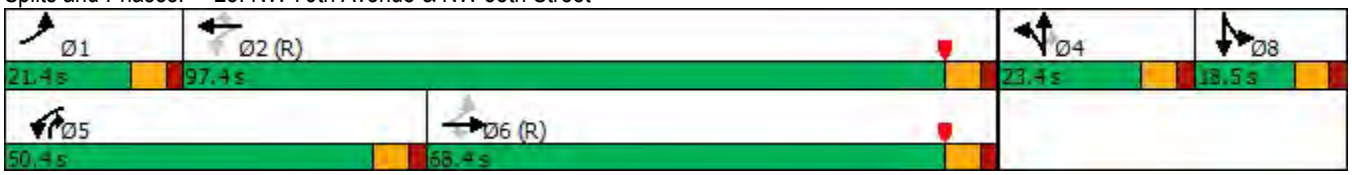
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1165	147	148	530	151	118	137	174	233	235	16
Future Volume (vph)	22	1165	147	148	530	151	118	137	174	233	235	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.92		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3404		1736	3349		1736	3185		1736	3422	
Flt Permitted	0.34	1.00		0.04	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	623	3404		78	3349		1736	3185		1736	3422	
Peak-hour factor, PHF	0.61	0.90	0.76	0.86	0.91	0.85	0.82	0.85	0.89	0.83	0.88	0.57
Adj. Flow (vph)	36	1294	193	172	582	178	144	161	196	281	267	28
RTOR Reduction (vph)	0	6	0	0	13	0	0	130	0	0	4	0
Lane Group Flow (vph)	36	1481	0	172	747	0	144	227	0	281	291	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	93.4	87.5		111.1	99.2		20.9	20.9		30.0	30.0	
Effective Green, g (s)	93.4	87.5		111.1	99.2		20.9	20.9		30.0	30.0	
Actuated g/C Ratio	0.52	0.49		0.62	0.55		0.12	0.12		0.17	0.17	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	359	1654		210	1845		201	369		289	570	
v/s Ratio Prot	0.00	c0.44		c0.08	0.22		c0.08	0.07		c0.16	0.08	
v/s Ratio Perm	0.05			0.42								
v/c Ratio	0.10	0.90		0.82	0.40		0.72	0.62		0.97	0.51	
Uniform Delay, d1	21.4	42.1		58.8	23.3		76.7	75.7		74.6	68.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	8.0		21.4	0.7		11.5	3.0		45.1	0.8	
Delay (s)	21.5	50.0		80.1	24.0		88.2	78.8		119.7	69.1	
Level of Service	C	D		F	C		F	E		F	E	
Approach Delay (s)		49.4			34.4			81.5			93.8	
Approach LOS		D			C			F			F	

Intersection Summary			
HCM 2000 Control Delay	57.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	30	1020	104	497	1176	322	166	78	444	132	86
Future Volume (vph)	30	1020	104	497	1176	322	166	78	444	132	86
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6		5	2		4	4	5	8	8
Permitted Phases	6		6	2		2			4		
Detector Phase	1	6	6	5	2	2	4	4	5	8	8
Switch Phase											
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0	16.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4	11.4	24.4	24.4	13.4	13.4	11.4	13.5	13.5
Total Split (s)	21.4	68.4	68.4	50.4	97.4	97.4	23.4	23.4	50.4	18.5	18.5
Total Split (%)	13.3%	42.6%	42.6%	31.4%	60.6%	60.6%	14.6%	14.6%	31.4%	11.5%	11.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	68.9	62.0	62.0	112.4	101.5	101.5	17.0	17.0	61.0	12.0	12.0
Actuated g/C Ratio	0.43	0.39	0.39	0.70	0.63	0.63	0.11	0.11	0.38	0.07	0.07
v/c Ratio	0.24	0.83	0.19	1.06	0.67	0.41	1.31	1.52	0.52	0.88	0.83
Control Delay	17.6	51.6	2.7	99.8	21.6	4.7	227.2	294.9	23.5	128.8	97.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.6	51.6	2.7	99.8	21.6	4.7	227.2	294.9	23.5	128.8	97.6
LOS	B	D	A	F	C	A	F	F	C	F	F
Approach Delay		45.3			36.6			179.9			108.0
Approach LOS		D			D			F			F

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 74 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.52	
Intersection Signal Delay: 68.6	Intersection LOS: E
Intersection Capacity Utilization 96.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street



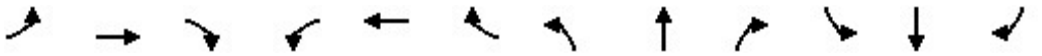


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	48	1074	127	558	1417	441	231	317	303	99	197
v/c Ratio	0.24	0.83	0.19	1.06	0.67	0.41	1.31	1.52	0.52	0.88	0.83
Control Delay	17.6	51.6	2.7	99.8	21.6	4.7	227.2	294.9	23.5	128.8	97.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.6	51.6	2.7	99.8	21.6	4.7	227.2	294.9	23.5	128.8	97.6
Queue Length 50th (ft)	15	536	0	~569	500	44	~311	~431	147	115	109
Queue Length 95th (ft)	19	631	14	#794	512	45	#354	#543	205	#213	#142
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	284	1289	671	524	2112	1068	176	208	580	113	237
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.83	0.19	1.06	0.67	0.41	1.31	1.52	0.52	0.88	0.83

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



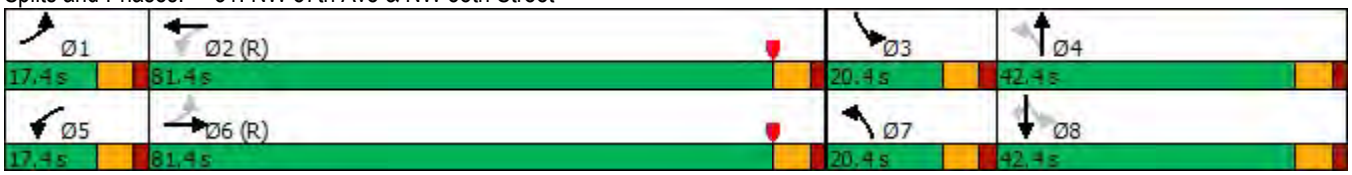
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1020	104	497	1176	322	166	78	444	132	86	26
Future Volume (vph)	30	1020	104	497	1176	322	166	78	444	132	86	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	1671	3343	1495	1671	3343	1495	1671	1498	1421	1521	3087	
Flt Permitted	0.19	1.00	1.00	0.09	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (perm)	332	3343	1495	159	3343	1495	1671	1498	1421	1521	3087	
Peak-hour factor, PHF	0.62	0.95	0.82	0.89	0.83	0.73	0.72	0.80	0.85	0.83	0.79	0.93
Adj. Flow (vph)	48	1074	127	558	1417	441	231	98	522	159	109	28
RTOR Reduction (vph)	0	0	78	0	0	126	0	50	42	0	7	0
Lane Group Flow (vph)	48	1074	49	558	1417	315	231	267	261	99	190	0
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6		6	2		2			4			
Actuated Green, G (s)	67.8	62.0	62.0	112.4	100.2	100.2	17.0	17.0	61.0	12.0	12.0	
Effective Green, g (s)	67.8	62.0	62.0	112.4	100.2	100.2	17.0	17.0	61.0	12.0	12.0	
Actuated g/C Ratio	0.42	0.39	0.39	0.70	0.62	0.62	0.11	0.11	0.38	0.07	0.07	
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	188	1289	576	525	2084	932	176	158	539	113	230	
v/s Ratio Prot	0.01	0.32		c0.29	0.42		0.14	c0.18	0.13	c0.07	0.06	
v/s Ratio Perm	0.10		0.03	c0.45		0.21			0.05			
v/c Ratio	0.26	0.83	0.09	1.06	0.68	0.34	1.31	1.69	0.49	0.88	0.82	
Uniform Delay, d1	27.6	44.7	31.3	47.8	19.8	14.4	71.8	71.8	37.9	73.6	73.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	6.4	0.3	57.0	1.8	1.0	175.1	336.0	0.7	48.0	20.7	
Delay (s)	28.4	51.1	31.6	104.8	21.6	15.4	247.0	407.9	38.6	121.6	94.0	
Level of Service	C	D	C	F	C	B	F	F	D	F	F	
Approach Delay (s)		48.2			39.7			232.7			103.2	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	79.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	160.7	Sum of lost time (s)	25.7
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	198	971	92	596	182	631	112	625	116
Future Volume (vph)	198	971	92	596	182	631	112	625	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	17.4	81.4	17.4	81.4	20.4	42.4	20.4	42.4	42.4
Total Split (%)	10.8%	50.4%	10.8%	50.4%	12.6%	26.2%	12.6%	26.2%	26.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	87.0	76.0	85.0	75.0	50.6	36.6	49.4	36.0	36.0
Actuated g/C Ratio	0.54	0.47	0.53	0.46	0.31	0.23	0.31	0.22	0.22
v/c Ratio	0.59	0.93	0.74	0.46	1.02	1.02	0.81	0.96	0.31
Control Delay	25.3	49.8	60.7	30.1	112.9	97.5	70.8	85.7	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	49.8	60.7	30.1	112.9	97.5	70.8	85.7	9.2
LOS	C	D	E	C	F	F	E	F	A
Approach Delay		46.7		34.2		100.6		73.2	
Approach LOS		D		C		F		E	

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 25 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 62.1	Intersection LOS: E
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street



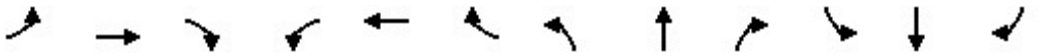


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	1456	111	723	196	786	151	735	138
v/c Ratio	0.59	0.93	0.74	0.46	1.02	1.02	0.81	0.96	0.31
Control Delay	25.3	49.8	60.7	30.1	112.9	97.5	70.8	85.7	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	49.8	60.7	30.1	112.9	97.5	70.8	85.7	9.2
Queue Length 50th (ft)	108	741	66	265	~169	~464	114	408	0
Queue Length 95th (ft)	157	#906	122	323	#344	#602	144	#484	47
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	362	1574	161	1573	193	769	193	765	449
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.93	0.69	0.46	1.02	1.02	0.78	0.96	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



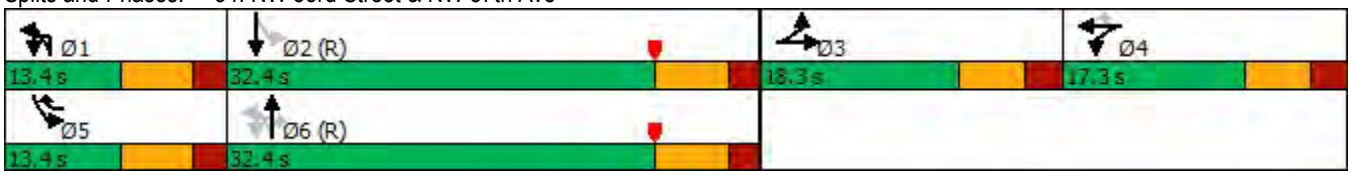
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	971	338	92	596	76	182	631	109	112	625	116
Future Volume (vph)	198	971	338	92	596	76	182	631	109	112	625	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3292		1719	3375		1719	3358		1719	3438	1538
Flt Permitted	0.29	1.00		0.05	1.00		0.11	1.00		0.11	1.00	1.00
Satd. Flow (perm)	522	3292		97	3375		198	3358		201	3438	1538
Peak-hour factor, PHF	0.92	0.93	0.82	0.83	0.94	0.85	0.93	0.95	0.89	0.74	0.85	0.84
Adj. Flow (vph)	215	1044	412	111	634	89	196	664	122	151	735	138
RTOR Reduction (vph)	0	25	0	0	7	0	0	9	0	0	0	107
Lane Group Flow (vph)	215	1431	0	111	716	0	196	777	0	151	735	31
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	87.0	76.0		85.0	75.0		50.6	36.6		49.4	36.0	36.0
Effective Green, g (s)	87.0	76.0		85.0	75.0		50.6	36.6		49.4	36.0	36.0
Actuated g/C Ratio	0.54	0.47		0.53	0.46		0.31	0.23		0.31	0.22	0.22
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	362	1548		151	1566		193	760		187	765	342
v/s Ratio Prot	0.04	c0.43		c0.05	0.21		c0.09	c0.23		0.07	0.21	
v/s Ratio Perm	0.28			0.34			0.23			0.18		0.02
v/c Ratio	0.59	0.92		0.74	0.46		1.02	1.02		0.81	0.96	0.09
Uniform Delay, d1	21.1	40.1		38.0	29.5		46.2	62.5		45.9	62.1	49.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	10.8		16.9	1.0		68.9	38.3		21.9	23.3	0.1
Delay (s)	23.7	50.9		54.8	30.4		115.1	100.8		67.8	85.4	49.9
Level of Service	C	D		D	C		F	F		E	F	D
Approach Delay (s)		47.4			33.7			103.7			78.0	
Approach LOS		D			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	64.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	161.6	Sum of lost time (s)	25.6
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	2	117	2	43	51	14	908	130	110	861
Future Volume (vph)	7	2	117	2	43	51	14	908	130	110	861
Turn Type	Split	NA	Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3	4	4	5	1	1	6		5	2
Permitted Phases					4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	18.3	18.3	17.3	17.3	13.4	13.4	13.4	32.4	32.4	13.4	32.4
Total Split (%)	22.5%	22.5%	21.3%	21.3%	16.5%	16.5%	16.5%	39.8%	39.8%	16.5%	39.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.3	7.3	9.6	9.6	21.4		46.1	38.9	38.9	49.3	43.6
Actuated g/C Ratio	0.09	0.09	0.12	0.12	0.26		0.57	0.48	0.48	0.61	0.54
v/c Ratio	0.08	0.21	0.42	0.42	0.12		0.27	0.59	0.20	0.44	0.54
Control Delay	35.0	17.6	39.4	39.3	0.5		11.0	21.7	2.0	13.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	17.6	39.4	39.3	0.5		11.0	21.7	2.0	13.1	20.3
LOS	C	B	D	D	A		B	C	A	B	C
Approach Delay		21.9		28.7				18.2			19.4
Approach LOS		C		C				B			B

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 38 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 19.7	Intersection LOS: B
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 53rd Street & NW 87th Ave





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	36	81	81	61	94	966	167	151	994
v/c Ratio	0.08	0.21	0.42	0.42	0.12	0.27	0.59	0.20	0.44	0.54
Control Delay	35.0	17.6	39.4	39.3	0.5	11.0	21.7	2.0	13.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	17.6	39.4	39.3	0.5	11.0	21.7	2.0	13.1	20.3
Queue Length 50th (ft)	6	2	41	41	0	20	220	0	34	220
Queue Length 95th (ft)	14	9	65	43	0	30	#354	9	56	#356
Internal Link Dist (ft)		93		992			2118			2105
Turn Bay Length (ft)			175		175	180		190	125	
Base Capacity (vph)	253	258	228	229	505	355	1643	847	346	1837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.14	0.36	0.35	0.12	0.26	0.59	0.20	0.44	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	2	15	117	2	43	51	14	908	130	110	861
Future Volume (vph)	7	2	15	117	2	43	51	14	908	130	110	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.87		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1568		1633	1641	1538		1782	3438	1538	1719	3430
Flt Permitted	0.95	1.00		0.95	0.95	1.00		0.21	1.00	1.00	0.19	1.00
Satd. Flow (perm)	1719	1568		1633	1641	1538		393	3438	1538	336	3430
Peak-hour factor, PHF	0.58	0.50	0.47	0.74	0.50	0.70	0.73	0.58	0.94	0.78	0.73	0.88
Adj. Flow (vph)	12	4	32	158	4	61	70	24	966	167	151	978
RTOR Reduction (vph)	0	30	0	0	0	49	0	0	0	95	0	1
Lane Group Flow (vph)	12	6	0	81	81	12	0	94	966	72	151	993
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	0%	5%	5%	5%	5%	5%
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	4	5	1	1	6		5	2
Permitted Phases						4	6	6		6	2	
Actuated Green, G (s)	4.5	4.5		8.2	8.2	16.4		41.2	35.1	35.1	45.4	37.2
Effective Green, g (s)	4.5	4.5		8.2	8.2	16.4		41.2	35.1	35.1	45.4	37.2
Actuated g/C Ratio	0.06	0.06		0.10	0.10	0.20		0.51	0.43	0.43	0.56	0.46
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	95	86		164	165	309		303	1482	663	326	1567
v/s Ratio Prot	c0.01	0.00		c0.05	0.05	0.00		0.02	0.28		c0.05	c0.29
v/s Ratio Perm						0.00		0.13		0.05	0.21	
v/c Ratio	0.13	0.07		0.49	0.49	0.04		0.31	0.65	0.11	0.46	0.63
Uniform Delay, d1	36.6	36.5		34.6	34.6	26.2		11.2	18.3	13.8	10.4	16.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.3		2.3	2.3	0.1		0.6	2.2	0.3	1.0	2.0
Delay (s)	37.2	36.8		37.0	36.9	26.2		11.8	20.6	14.1	11.4	18.9
Level of Service	D	D		D	D	C		B	C	B	B	B
Approach Delay (s)		36.9			34.0				19.0			17.9
Approach LOS		D			C				B			B

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	11
Future Volume (vph)	11
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.69
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	28	2302	26	5	15	1560	56	0	0	16	0	0
Future Volume (Veh/h)	28	2302	26	5	15	1560	56	0	0	16	0	0
Sign Control		Free				Free			Stop			Stop
Grade		0%				0%			0%			0%
Peak Hour Factor	0.75	0.94	0.69	0.42	0.94	0.94	0.62	0.25	0.25	0.50	0.25	0.25
Hourly flow rate (vph)	37	2449	38	0	16	1660	90	0	0	32	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)		403				458						
pX, platoon unblocked	0.77			0.00	0.76			0.88	0.88	0.76	0.88	0.88
vC, conflicting volume	1750			0	2487			3160	4324	835	2659	4298
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	925			0	1866			1206	2529	0	636	2499
tC, single (s)	4.2			0.0	4.1			7.5	6.5	7.0	7.5	6.5
tC, 2 stage (s)												
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	93			0	94			100	100	96	100	100
cM capacity (veh/h)	560			0	250			108	22	826	280	22

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	37	980	980	528	16	664	664	422	32	33
Volume Left	37	0	0	0	16	0	0	0	0	0
Volume Right	0	0	0	38	0	0	0	90	32	33
cSH	560	1700	1700	1700	250	1700	1700	1700	826	832
Volume to Capacity	0.07	0.58	0.58	0.31	0.06	0.39	0.39	0.25	0.04	0.04
Queue Length 95th (ft)	5	0	0	0	5	0	0	0	3	3
Control Delay (s)	11.9	0.0	0.0	0.0	20.4	0.0	0.0	0.0	9.5	9.5
Lane LOS	B				C				A	A
Approach Delay (s)	0.2				0.2				9.5	9.5
Approach LOS									A	A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	55.1%	ICU Level of Service		B
Analysis Period (min)	15			



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	27
Future Volume (Veh/h)	27
Sign Control	
Grade	
Peak Hour Factor	0.81
Hourly flow rate (vph)	33
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	0.77
vC, conflicting volume	598
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	0
tC, single (s)	7.0
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	96
cM capacity (veh/h)	832
Direction, Lane #	

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	28	2302	26	5	15	1560	56	0	0	16	0	0	27
Future Vol, veh/h	28	2302	26	5	15	1560	56	0	0	16	0	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	80	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	94	69	42	94	94	62	25	25	50	25	25	81
Heavy Vehicles, %	3	3	0	0	0	3	3	0	0	3	0	0	3
Mvmt Flow	37	2449	38	12	16	1660	90	0	0	32	0	0	33

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	1750	0	0	1815	2487	0	0	-	-	1244	-	-	875
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	5.6	5.3	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	2.3	3.1	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	165	-	-	157	72	-	-	0	0	141	0	0	250
Stage 1	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	165	-	-	91	91	-	-	-	-	141	-	-	250
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1	37.9	21.6
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	165	-	-	91	-	-	250
HCM Lane V/C Ratio	0.227	0.226	-	-	0.306	-	-	0.133
HCM Control Delay (s)	37.9	33.1	-	-	61.4	-	-	21.6
HCM Lane LOS	E	D	-	-	F	-	-	C
HCM 95th %tile Q(veh)	0.8	0.8	-	-	1.2	-	-	0.5



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	14	1093	25	0	986
Future Volume (Veh/h)	0	14	1093	25	0	986
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.88	0.91	0.75	0.25	0.95
Hourly flow rate (vph)	0	16	1201	33	0	1038
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.84	0.81			0.81	
vC, conflicting volume	1564	617			1234	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	933	70			829	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	225	801			660	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	16	801	433	0	346	346	346
Volume Left	0	0	0	0	0	0	0
Volume Right	16	0	33	0	0	0	0
cSH	801	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.47	0.25	0.00	0.20	0.20	0.20
Queue Length 95th (ft)	2	0	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.6	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	41.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	2288	3	3	3	1543	0	13
Future Volume (Veh/h)	1	2288	3	3	3	1543	0	13
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.98	0.75	0.75	0.38	0.92	0.25	0.54
Hourly flow rate (vph)	0	2335	4	0	8	1677	0	24
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)						1196		
pX, platoon unblocked	0.00			0.00			0.87	
vC, conflicting volume	0			0	2339		2912	780
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	2339		2671	780
tC, single (s)	0.0			0.0	4.1		6.8	7.2
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.4
p0 queue free %	0			0	96		100	92
cM capacity (veh/h)	0			0	214		16	311

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	934	934	471	8	559	559	559	24
Volume Left	0	0	0	8	0	0	0	0
Volume Right	0	0	4	0	0	0	0	24
cSH	1700	1700	1700	214	1700	1700	1700	311
Volume to Capacity	0.55	0.55	0.28	0.04	0.33	0.33	0.33	0.08
Queue Length 95th (ft)	0	0	0	3	0	0	0	6
Control Delay (s)	0.0	0.0	0.0	22.5	0.0	0.0	0.0	17.5
Lane LOS				C				C
Approach Delay (s)	0.0			0.1				17.5
Approach LOS								C

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	55.0%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	1	2340	2	6	1612	0	25
Future Volume (Veh/h)	1	2340	2	6	1612	0	25
Sign Control		Free			Free	Stop	
Grade		0%			0%	0%	
Peak Hour Factor	0.25	0.98	0.50	0.50	0.95	0.25	0.75
Hourly flow rate (vph)	0	2388	4	12	1697	0	33
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		None			None		
Median storage veh)							
Upstream signal (ft)		1194					
pX, platoon unblocked	0.00			0.84		0.84	0.84
vC, conflicting volume	0			2392		2980	798
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	0			2005		2701	119
tC, single (s)	0.0			4.1		6.8	8.1
tC, 2 stage (s)							
tF (s)	0.0			2.2		3.5	3.9
p0 queue free %	0			95		100	95
cM capacity (veh/h)	0			244		14	640

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	955	955	482	12	566	566	566	33
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	4	0	0	0	0	33
cSH	1700	1700	1700	244	1700	1700	1700	640
Volume to Capacity	0.56	0.56	0.28	0.05	0.33	0.33	0.33	0.05
Queue Length 95th (ft)	0	0	0	4	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	20.5	0.0	0.0	0.0	10.9
Lane LOS				C				B
Approach Delay (s)	0.0			0.1				10.9
Approach LOS								B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	43	23	1034	8	1	8	942
Future Volume (Veh/h)	43	23	1034	8	1	8	942
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.58	0.92	0.91	0.50	0.25	0.50	0.93
Hourly flow rate (vph)	74	25	1136	16	0	16	1013
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				None
Median storage veh)							
Upstream signal (ft)			702				
pX, platoon unblocked	0.84	0.84			0.00	0.84	
vC, conflicting volume	1682	576			0	1152	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1438	125			0	808	
tC, single (s)	6.9	7.0			0.0	4.2	
tC, 2 stage (s)							
tF (s)	3.6	3.4			0.0	2.3	
p0 queue free %	25	97			0	98	
cM capacity (veh/h)	98	750			0	664	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	74	25	757	395	16	506	506
Volume Left	74	0	0	0	16	0	0
Volume Right	0	25	0	16	0	0	0
cSH	98	750	1700	1700	664	1700	1700
Volume to Capacity	0.75	0.03	0.45	0.23	0.02	0.30	0.30
Queue Length 95th (ft)	99	3	0	0	2	0	0
Control Delay (s)	110.4	10.0	0.0	0.0	10.6	0.0	0.0
Lane LOS	F	A			B		
Approach Delay (s)	85.0		0.0		0.2		
Approach LOS	F						

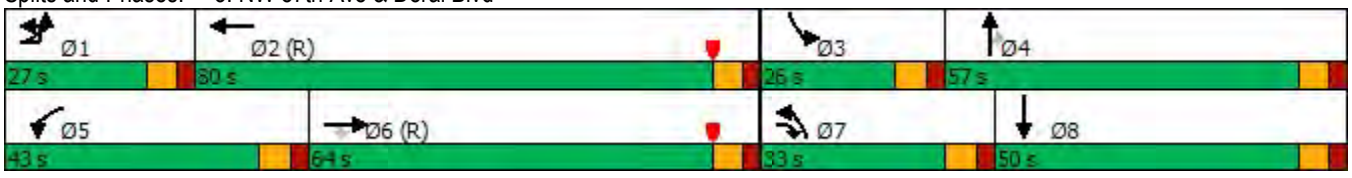
Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		

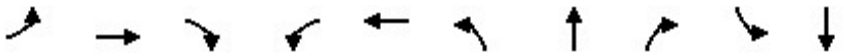
2027 Background PM Traffic
Without Project Trips
Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	250	910	291	394	1311	397	866	413	94	895
Future Volume (vph)	250	910	291	394	1311	397	866	413	94	895
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	1	6	7	5	2	7	4		3	8
Permitted Phases			6					4		
Detector Phase	1	6	7	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1
Total Split (s)	27.0	64.0	33.0	43.0	80.0	33.0	57.0	57.0	26.0	50.0
Total Split (%)	14.2%	33.7%	17.4%	22.6%	42.1%	17.4%	30.0%	30.0%	13.7%	26.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max
Act Effct Green (s)	19.3	62.3	95.2	30.7	73.7	25.9	57.5	57.5	11.3	42.9
Actuated g/C Ratio	0.10	0.33	0.50	0.16	0.39	0.14	0.30	0.30	0.06	0.23
v/c Ratio	0.85	0.59	0.40	0.84	0.82	0.98	0.93	0.73	0.53	1.10
Control Delay	98.4	51.7	28.3	63.8	50.2	118.0	78.6	33.3	97.7	130.6
Queue Delay	3.0	0.0	0.0	0.0	0.0	0.0	13.9	0.0	0.0	0.0
Total Delay	101.4	51.7	28.3	63.8	50.2	118.0	92.5	33.3	97.7	130.6
LOS	F	D	C	E	D	F	F	C	F	F
Approach Delay		55.8			53.3		83.9			128.0
Approach LOS		E			D		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 171 (90%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 76.9	Intersection LOS: E
Intersection Capacity Utilization 93.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	291	978	338	464	1588	456	984	475	106	1243
v/c Ratio	0.85	0.59	0.40	0.84	0.82	0.98	0.93	0.73	0.53	1.10
Control Delay	98.4	51.7	28.3	63.8	50.2	118.0	78.6	33.3	97.7	130.6
Queue Delay	3.0	0.0	0.0	0.0	0.0	0.0	13.9	0.0	0.0	0.0
Total Delay	101.4	51.7	28.3	63.8	50.2	118.0	92.5	33.3	97.7	130.6
Queue Length 50th (ft)	187	378	230	265	741	297	632	257	70	~617
Queue Length 95th (ft)	#238	448	311	300	797	#397	#764	385	m97	m#697
Internal Link Dist (ft)		378			2485		2143			310
Turn Bay Length (ft)	170		170	330		400			190	
Base Capacity (vph)	357	1650	837	644	1929	463	1060	655	338	1125
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	22	0	0	0	0	0	90	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.59	0.40	0.72	0.82	0.98	1.01	0.73	0.31	1.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	250	910	291	394	1311	164	397	866	413	94	895
Future Volume (vph)	2	250	910	291	394	1311	164	397	866	413	94	895
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3400	5036	1568	3400	4951		3400	3505	1568	3400	4872
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3400	5036	1568	3400	4951		3400	3505	1568	3400	4872
Peak-hour factor, PHF	0.50	0.87	0.93	0.86	0.85	0.93	0.92	0.87	0.88	0.87	0.89	0.92
Adj. Flow (vph)	4	287	978	338	464	1410	178	456	984	475	106	973
RTOR Reduction (vph)	0	0	0	56	0	9	0	0	0	181	0	26
Lane Group Flow (vph)	0	291	978	282	464	1579	0	456	984	294	106	1217
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		19.3	62.3	88.2	30.7	73.7		25.9	57.5	57.5	11.3	42.9
Effective Green, g (s)		19.3	62.3	88.2	30.7	73.7		25.9	57.5	57.5	11.3	42.9
Actuated g/C Ratio		0.10	0.33	0.46	0.16	0.39		0.14	0.30	0.30	0.06	0.23
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		345	1651	727	549	1920		463	1060	474	202	1100
v/s Ratio Prot		0.09	0.19	0.05	c0.14	c0.32		c0.13	c0.28		0.03	c0.25
v/s Ratio Perm				0.13						0.19		
v/c Ratio		0.84	0.59	0.39	0.85	0.82		0.98	0.93	0.62	0.52	1.11
Uniform Delay, d1		83.9	53.3	33.3	77.3	52.3		81.9	64.3	56.9	86.7	73.5
Progression Factor		0.92	0.93	1.31	0.71	0.91		1.00	1.00	1.00	1.03	1.14
Incremental Delay, d2		16.5	1.5	0.3	7.4	2.6		37.6	15.0	6.0	2.2	59.9
Delay (s)		94.0	51.0	44.0	61.9	50.2		119.4	79.3	62.9	91.7	144.0
Level of Service		F	D	D	E	D		F	E	E	F	F
Approach Delay (s)			57.3			52.9			84.8			139.9
Approach LOS			E			D			F			F

Intersection Summary			
HCM 2000 Control Delay	79.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	240
Future Volume (vph)	240
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	270
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SEL	SER
Lane Configurations									
Traffic Volume (vph)	208	107	8	29	1052	38	968	0	28
Future Volume (vph)	208	107	8	29	1052	38	968	0	28
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Prot	Perm
Protected Phases	7	5	1	1	6	5	2	8	
Permitted Phases		7	6	6		2			8
Detector Phase	7	5	1	1	6	5	2	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.3	24.3
Total Split (s)	27.0	17.0	17.0	17.0	106.0	17.0	106.0	40.0	40.0
Total Split (%)	14.2%	8.9%	8.9%	8.9%	55.8%	8.9%	55.8%	21.1%	21.1%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	None	None
Act Effct Green (s)	20.7	29.1		138.6	131.7	140.5	134.5	7.3	7.3
Actuated g/C Ratio	0.11	0.15		0.73	0.69	0.74	0.71	0.04	0.04
v/c Ratio	1.04	0.40		0.16	0.55	0.24	0.47	0.24	0.32
Control Delay	117.2	13.2		2.0	12.5	8.3	14.0	96.4	5.7
Queue Delay	0.0	0.0		0.0	7.1	0.0	0.0	0.0	0.0
Total Delay	117.2	13.2		2.0	19.6	8.3	14.0	96.4	5.7
LOS	F	B		A	B	A	B	F	A
Approach Delay	84.0				18.9		13.7	28.4	
Approach LOS	F				B		B	C	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 168 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 25.8	Intersection LOS: C
Intersection Capacity Utilization 66.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SEL	SER
Lane Group Flow (vph)	282	132	52	1322	63	1164	16	48
v/c Ratio	1.04	0.40	0.16	0.55	0.24	0.47	0.24	0.32
Control Delay	117.2	13.2	2.0	12.5	8.3	14.0	96.4	5.7
Queue Delay	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0
Total Delay	117.2	13.2	2.0	19.6	8.3	14.0	96.4	5.7
Queue Length 50th (ft)	~269	9	1	627	19	345	20	0
Queue Length 95th (ft)	#363	32	m3	882	23	377	13	0
Internal Link Dist (ft)	2087			188		702	377	
Turn Bay Length (ft)			120		185			
Base Capacity (vph)	271	356	358	2385	298	2475	310	353
Starvation Cap Reductn	0	0	0	1015	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.37	0.15	0.96	0.21	0.47	0.05	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	208	3	107	8	29	1052	125	38	968	8	12	0
Future Volume (vph)	208	3	107	8	29	1052	125	38	968	8	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95			1.00
Frt	0.99		0.85		1.00	0.98		1.00	1.00			1.00
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00			0.95
Satd. Flow (prot)	1745		1490		1764	3434		1752	3499			1752
Flt Permitted	0.96		1.00		0.20	1.00		0.16	1.00			0.95
Satd. Flow (perm)	1745		1490		375	3434		289	3499			1752
Peak-hour factor, PHF	0.79	0.75	0.73	0.67	0.72	0.92	0.70	0.60	0.84	0.67	0.75	0.25
Adj. Flow (vph)	263	4	147	12	40	1143	179	63	1152	12	16	0
RTOR Reduction (vph)	82	0	105	0	0	4	0	0	0	0	0	0
Lane Group Flow (vph)	200	0	27	0	52	1318	0	63	1164	0	0	16
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA		Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2			8	
Actuated Green, G (s)	20.7		27.9		136.3	130.5		139.1	131.9			6.2
Effective Green, g (s)	20.7		27.9		136.3	130.5		139.1	131.9			6.2
Actuated g/C Ratio	0.11		0.15		0.72	0.69		0.73	0.69			0.03
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)	190		218		311	2358		267	2429			57
v/s Ratio Prot	c0.11		0.00		0.01	c0.38		c0.01	0.33			
v/s Ratio Perm			0.01		0.11			0.16				0.01
v/c Ratio	1.05		0.12		0.17	0.56		0.24	0.48			0.28
Uniform Delay, d1	84.7		70.4		9.3	15.1		10.4	13.3			89.7
Progression Factor	1.00		1.00		0.23	0.79		1.00	1.00			1.00
Incremental Delay, d2	79.9		0.3		0.1	0.5		0.5	0.7			2.7
Delay (s)	164.6		70.7		2.3	12.5		10.9	14.0			92.4
Level of Service	F		E		A	B		B	B			F
Approach Delay (s)	134.6					12.1			13.8			90.0
Approach LOS	F					B			B			F

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



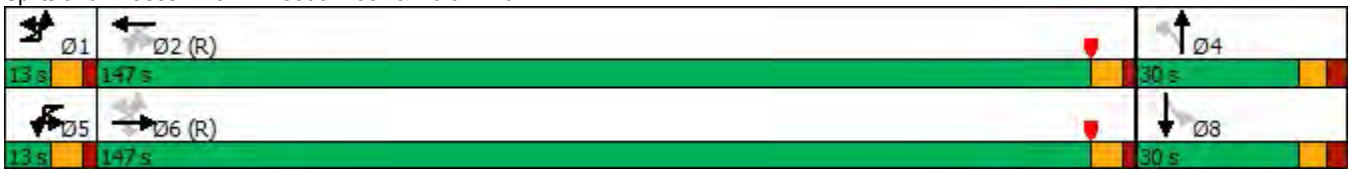
Movement	SER
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	48
RTOR Reduction (vph)	46
Lane Group Flow (vph)	2
Heavy Vehicles (%)	3%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	6.2
Effective Green, g (s)	6.2
Actuated g/C Ratio	0.03
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	51
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	89.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	89.2
Level of Service	F
Approach Delay (s)	
Approach LOS	

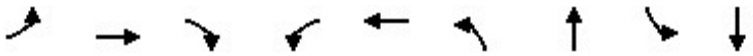
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	17	1276	50	32	68	1805	42	3	33	3
Future Volume (vph)	7	17	1276	50	32	68	1805	42	3	33	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2		4		8
Permitted Phases	6	6		6	2	2		4		8	
Detector Phase	1	1	6	6	5	5	2	4	4	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	13.0	13.0	147.0	147.0	13.0	13.0	147.0	30.0	30.0	30.0	30.0
Total Split (%)	6.8%	6.8%	77.4%	77.4%	6.8%	6.8%	77.4%	15.8%	15.8%	15.8%	15.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	None	None	Max	Max
Act Effct Green (s)		146.7	140.6	140.6		148.7	143.4	23.0	23.0	23.0	23.0
Actuated g/C Ratio		0.77	0.74	0.74		0.78	0.75	0.12	0.12	0.12	0.12
v/c Ratio		0.23	0.35	0.05		0.42	0.53	0.33	0.40	0.32	0.21
Control Delay		7.0	9.0	1.4		8.7	14.0	82.5	20.2	83.9	26.7
Queue Delay		0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.0	0.0
Total Delay		7.0	9.0	1.4		8.7	14.4	82.5	20.2	83.9	26.7
LOS		A	A	A		A	B	F	C	F	C
Approach Delay			8.6				14.0		40.1		52.7
Approach LOS			A				B		D		D

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 158 (83%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 14.0	Intersection LOS: B
Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

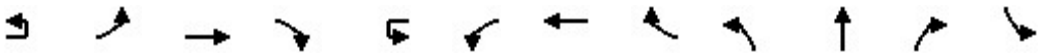




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1329	61	129	2040	53	113	40	48
v/c Ratio	0.23	0.35	0.05	0.42	0.53	0.33	0.40	0.32	0.21
Control Delay	7.0	9.0	1.4	8.7	14.0	82.5	20.2	83.9	26.7
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	7.0	9.0	1.4	8.7	14.4	82.5	20.2	83.9	26.7
Queue Length 50th (ft)	8	198	0	36	435	62	14	47	9
Queue Length 95th (ft)	12	220	11	m52	m508	99	0	84	0
Internal Link Dist (ft)		1116			323		94		231
Turn Bay Length (ft)	200		190	190					
Base Capacity (vph)	164	3762	1187	308	3835	163	284	126	232
Starvation Cap Reductn	0	0	0	0	1116	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.35	0.05	0.42	0.75	0.33	0.40	0.32	0.21

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	7	17	1276	50	32	68	1805	12	42	3	69	33
Future Volume (vph)	7	17	1276	50	32	68	1805	12	42	3	69	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91		1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00		1.00	0.87		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		1781	5085	1583		1783	5081		1770	1613		1770
Flt Permitted		0.07	1.00	1.00		0.18	1.00		0.73	1.00		0.56
Satd. Flow (perm)		139	5085	1583		330	5081		1352	1613		1043
Peak-hour factor, PHF	0.58	0.71	0.96	0.82	0.67	0.84	0.89	1.00	0.79	0.25	0.68	0.82
Adj. Flow (vph)	12	24	1329	61	48	81	2028	12	53	12	101	40
RTOR Reduction (vph)	0	0	0	16	0	0	0	0	0	89	0	0
Lane Group Flow (vph)	0	36	1329	45	0	129	2040	0	53	24	0	40
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2			4			8
Actuated Green, G (s)		145.6	140.6	140.6		148.8	142.2		23.0	23.0		23.0
Effective Green, g (s)		145.6	140.6	140.6		148.8	142.2		23.0	23.0		23.0
Actuated g/C Ratio		0.77	0.74	0.74		0.78	0.75		0.12	0.12		0.12
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		149	3762	1171		308	3802		163	195		126
v/s Ratio Prot		0.01	0.26			c0.01	c0.40			0.02		
v/s Ratio Perm		0.18		0.03		0.31			c0.04			0.04
v/c Ratio		0.24	0.35	0.04		0.42	0.54		0.33	0.12		0.32
Uniform Delay, d1		7.5	8.7	6.6		5.6	10.0		76.4	74.5		76.3
Progression Factor		1.00	1.00	1.00		1.56	1.38		1.00	1.00		1.00
Incremental Delay, d2		0.8	0.3	0.1		0.6	0.3		1.2	0.3		6.5
Delay (s)		8.4	9.0	6.7		9.2	14.2		77.6	74.8		82.8
Level of Service		A	A	A		A	B		E	E		F
Approach Delay (s)			8.8				13.9			75.7		
Approach LOS			A				B			E		

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



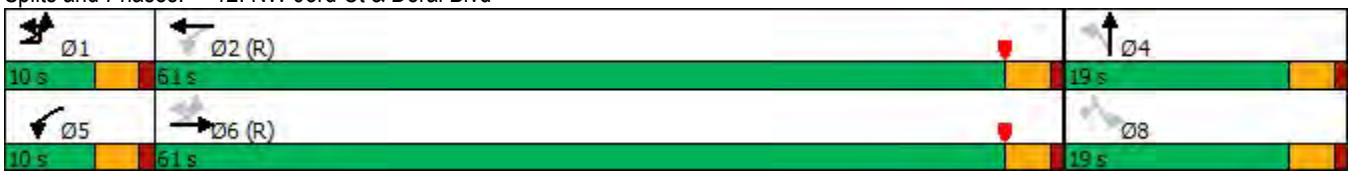
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	23
Future Volume (vph)	3	23
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.88	
Flt Protected	1.00	
Satd. Flow (prot)	1630	
Flt Permitted	1.00	
Satd. Flow (perm)	1630	
Peak-hour factor, PHF	0.38	0.57
Adj. Flow (vph)	8	40
RTOR Reduction (vph)	35	0
Lane Group Flow (vph)	13	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	23.0	
Effective Green, g (s)	23.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	197	
v/s Ratio Prot	0.01	
v/s Ratio Perm		
v/c Ratio	0.07	
Uniform Delay, d1	74.0	
Progression Factor	1.00	
Incremental Delay, d2	0.6	
Delay (s)	74.6	
Level of Service	E	
Approach Delay (s)	78.3	
Approach LOS	E	

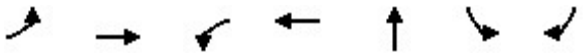
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	10	37	1412	15	1795	1	24	28
Future Volume (vph)	10	37	1412	15	1795	1	24	28
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	24.4	9.0	24.4	9.0	9.0	9.0
Total Split (s)	10.0	10.0	61.0	10.0	61.0	19.0	19.0	19.0
Total Split (%)	11.1%	11.1%	67.8%	11.1%	67.8%	21.1%	21.1%	21.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		67.6	65.2	65.8	61.2	12.8	12.8	12.8
Actuated g/C Ratio		0.75	0.72	0.73	0.68	0.14	0.14	0.14
v/c Ratio		0.31	0.40	0.08	0.56	0.68	0.13	0.14
Control Delay		13.7	6.0	3.6	9.0	49.4	34.0	5.6
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.7	6.0	3.6	9.0	49.4	34.0	5.6
LOS		B	A	A	A	D	C	A
Approach Delay			6.3		8.9	49.4		
Approach LOS			A		A	D		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 6 (7%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	1479	25	1925	173	29	40
v/c Ratio	0.31	0.40	0.08	0.56	0.68	0.13	0.14
Control Delay	13.7	6.0	3.6	9.0	49.4	34.0	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.7	6.0	3.6	9.0	49.4	34.0	5.6
Queue Length 50th (ft)	14	158	3	205	91	14	0
Queue Length 95th (ft)	m30	184	6	254	37	35	6
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	213	3682	304	3448	297	256	314
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.40	0.08	0.56	0.58	0.11	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	37	1412	5	15	1795	26	85	1	10	24	0
Future Volume (vph)	10	37	1412	5	15	1795	26	85	1	10	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.99		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.96		0.95	
Satd. Flow (prot)		1776	5081		1770	5071			1765		1770	
Flt Permitted		0.07	1.00		0.15	1.00			0.96		0.83	
Satd. Flow (perm)		139	5081		282	5071			1765		1540	
Peak-hour factor, PHF	0.83	0.69	0.96	0.62	0.60	0.95	0.72	0.54	0.25	0.83	0.82	0.25
Adj. Flow (vph)	12	54	1471	8	25	1889	36	157	4	12	29	0
RTOR Reduction (vph)	0	0	1	0	0	2	0	0	3	0	0	0
Lane Group Flow (vph)	0	66	1478	0	25	1923	0	0	170	0	29	0
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		67.6	62.8		62.8	60.4			12.8		12.8	
Effective Green, g (s)		67.6	62.8		62.8	60.4			12.8		12.8	
Actuated g/C Ratio		0.75	0.70		0.70	0.67			0.14		0.14	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		191	3545		236	3403			251		219	
v/s Ratio Prot		c0.02	0.29		0.00	c0.38						
v/s Ratio Perm		0.24			0.07				0.10		0.02	
v/c Ratio		0.35	0.42		0.11	0.57			0.68		0.13	
Uniform Delay, d1		5.5	5.8		4.3	7.8			36.6		33.7	
Progression Factor		3.66	1.04		1.00	1.00			1.00		1.00	
Incremental Delay, d2		0.7	0.2		0.2	0.7			7.0		0.3	
Delay (s)		20.8	6.3		4.5	8.5			43.6		34.0	
Level of Service		C	A		A	A			D		C	
Approach Delay (s)			6.9			8.5			43.6			33.6
Approach LOS			A			A			D			C

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



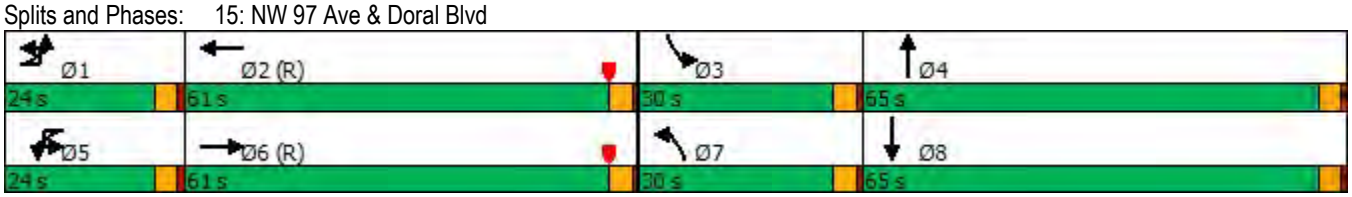
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.70
Adj. Flow (vph)	40
RTOR Reduction (vph)	34
Lane Group Flow (vph)	6
Heavy Vehicles (%)	2%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	12.8
Effective Green, g (s)	12.8
Actuated g/C Ratio	0.14
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	225
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	33.2
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	33.3
Level of Service	C
Approach Delay (s)	
Approach LOS	

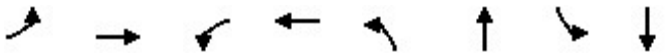
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	114	1042	177	1546	271	635	320	635
Future Volume (vph)	114	1042	177	1546	271	635	320	635
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	24.0	61.0	24.0	61.0	30.0	65.0	30.0	65.0
Total Split (%)	13.3%	33.9%	13.3%	33.9%	16.7%	36.1%	16.7%	36.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	12.4	68.6	16.6	72.8	21.0	54.7	24.2	57.9
Actuated g/C Ratio	0.07	0.38	0.09	0.40	0.12	0.30	0.13	0.32
v/c Ratio	0.57	0.70	0.70	0.91	0.75	0.87	0.85	0.74
Control Delay	90.3	50.0	94.8	62.6	89.0	67.4	93.2	57.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.3	50.0	94.8	62.6	89.0	67.4	93.2	57.2
LOS	F	D	F	E	F	E	F	E
Approach Delay		53.7		66.0		72.7		68.8
Approach LOS		D		E		E		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 64.9	Intersection LOS: E
Intersection Capacity Utilization 83.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

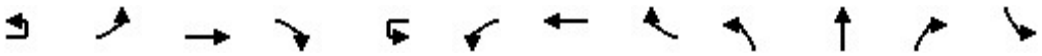




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	134	1332	219	1852	301	918	390	822
v/c Ratio	0.57	0.70	0.70	0.91	0.75	0.87	0.85	0.74
Control Delay	90.3	50.0	94.8	62.6	89.0	67.4	93.2	57.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.3	50.0	94.8	62.6	89.0	67.4	93.2	57.2
Queue Length 50th (ft)	80	491	125	831	180	528	233	438
Queue Length 95th (ft)	115	592	151	#996	230	573	266	516
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	381	1904	381	2031	495	1174	495	1180
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.70	0.57	0.91	0.61	0.78	0.79	0.70

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	114	1042	186	3	177	1546	179	271	635	178	320
Future Volume (vph)	1	114	1042	186	3	177	1546	179	271	635	178	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.97			1.00	0.98		1.00	0.97		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3435	4951			3435	5007		3433	3426		3433
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3435	4951			3435	5007		3433	3426		3433
Peak-hour factor, PHF	0.25	0.88	0.95	0.79	0.38	0.84	0.93	0.94	0.90	0.88	0.91	0.82
Adj. Flow (vph)	4	130	1097	235	8	211	1662	190	301	722	196	390
RTOR Reduction (vph)	0	0	17	0	0	0	7	0	0	15	0	0
Lane Group Flow (vph)	0	134	1315	0	0	219	1845	0	301	903	0	390
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		12.4	68.5			16.6	72.7		21.0	54.7		24.2
Effective Green, g (s)		12.4	68.5			16.6	72.7		21.0	54.7		24.2
Actuated g/C Ratio		0.07	0.38			0.09	0.40		0.12	0.30		0.13
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		236	1884			316	2022		400	1041		461
v/s Ratio Prot		0.04	0.27			c0.06	c0.37		0.09	c0.26		c0.11
v/s Ratio Perm												
v/c Ratio		0.57	0.70			0.69	0.91		0.75	0.87		0.85
Uniform Delay, d1		81.2	47.0			79.2	50.7		77.0	59.2		76.1
Progression Factor		1.00	1.00			1.07	1.12		1.00	1.00		1.00
Incremental Delay, d2		3.1	2.2			5.5	6.7		7.8	7.8		13.4
Delay (s)		84.3	49.2			90.4	63.6		84.8	67.0		89.5
Level of Service		F	D			F	E		F	E		F
Approach Delay (s)			52.4				66.5			71.4		
Approach LOS			D				E			E		

Intersection Summary			
HCM 2000 Control Delay	64.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	635	126
Future Volume (vph)	635	126
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.97	
Flt Protected	1.00	
Satd. Flow (prot)	3440	
Flt Permitted	1.00	
Satd. Flow (perm)	3440	
Peak-hour factor, PHF	0.95	0.82
Adj. Flow (vph)	668	154
RTOR Reduction (vph)	12	0
Lane Group Flow (vph)	810	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	57.9	
Effective Green, g (s)	57.9	
Actuated g/C Ratio	0.32	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	1106	
v/s Ratio Prot	c0.24	
v/s Ratio Perm		
v/c Ratio	0.73	
Uniform Delay, d1	54.2	
Progression Factor	1.00	
Incremental Delay, d2	2.5	
Delay (s)	56.7	
Level of Service	E	
Approach Delay (s)	67.3	
Approach LOS	E	

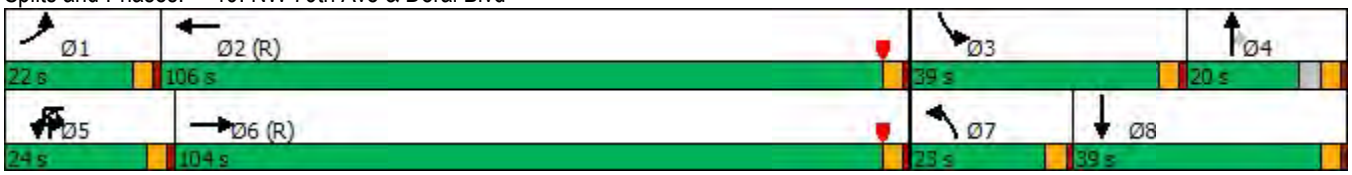
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	124	2518	189	1627	67	188	391	420	334
Future Volume (vph)	124	2518	189	1627	67	188	391	420	334
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6	5	2	7	4	5!	3	8
Permitted Phases							4		
Detector Phase	1	6	5	2	7	4	5	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	11.4	12.0	25.0
Total Split (s)	22.0	104.0	24.0	106.0	23.0	20.0	24.0	39.0	39.0
Total Split (%)	11.6%	54.7%	12.6%	55.8%	12.1%	10.5%	12.6%	20.5%	20.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	17.5	101.8	18.2	102.5	14.3	23.3	45.5	30.7	39.7
Actuated g/C Ratio	0.09	0.54	0.10	0.54	0.08	0.12	0.24	0.16	0.21
v/c Ratio	0.89	0.81	0.76	0.82	0.64	1.70	0.82	0.85	0.75
Control Delay	128.3	29.1	99.0	38.8	106.6	377.4	74.3	92.5	76.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.3	29.1	99.0	38.8	106.6	377.4	74.3	92.5	76.1
LOS	F	C	F	D	F	F	E	F	E
Approach Delay		34.1		45.0		220.4			83.7
Approach LOS		C		D		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 49 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.70	
Intersection Signal Delay: 65.2	Intersection LOS: E
Intersection Capacity Utilization 89.7%	ICU Level of Service E
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	144	2731	248	2186	85	364	325	467	541
v/c Ratio	0.89	0.81	0.76	0.82	0.64	1.70	0.82	0.85	0.75
Control Delay	128.3	29.1	99.0	38.8	106.6	377.4	74.3	92.5	76.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.3	29.1	99.0	38.8	106.6	377.4	74.3	92.5	76.1
Queue Length 50th (ft)	185	531	157	806	105	~693	347	296	329
Queue Length 95th (ft)	#299	577	193	864	146	#895	#458	357	353
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	165	3391	358	2658	175	214	410	626	720
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.81	0.69	0.82	0.49	1.70	0.79	0.75	0.75

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	124	2518	32	16	189	1627	368	67	188	391	420	334
Future Volume (vph)	124	2518	32	16	189	1627	368	67	188	391	420	334
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.94	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	6328			3408	4891		1752	1651	1490	3400	3390
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	6328			3408	4891		1752	1651	1490	3400	3390
Peak-hour factor, PHF	0.86	0.94	0.61	0.80	0.83	0.92	0.88	0.79	0.84	0.84	0.90	0.79
Adj. Flow (vph)	144	2679	52	20	228	1768	418	85	224	465	467	423
RTOR Reduction (vph)	0	1	0	0	0	21	0	0	11	41	0	13
Lane Group Flow (vph)	144	2730	0	0	248	2165	0	85	353	284	467	528
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6		5!	5	2		7	4	5!	3	8
Permitted Phases										4		
Actuated Green, G (s)	17.5	101.8			18.2	102.5		14.3	23.3	41.5	30.7	39.7
Effective Green, g (s)	17.5	101.8			18.2	102.5		14.3	23.3	41.5	30.7	39.7
Actuated g/C Ratio	0.09	0.54			0.10	0.54		0.08	0.12	0.22	0.16	0.21
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	161	3390			326	2638		131	202	356	549	708
v/s Ratio Prot	0.08	0.43			0.07	c0.44		0.05	c0.21	c0.08	c0.14	0.16
v/s Ratio Perm										0.11		
v/c Ratio	0.89	0.81			0.76	0.82		0.65	1.75	0.80	0.85	0.75
Uniform Delay, d1	85.3	36.0			83.8	36.2		85.4	83.3	70.3	77.4	70.4
Progression Factor	0.98	0.74			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	40.4	2.1			10.0	3.0		10.6	355.2	11.8	12.0	4.3
Delay (s)	124.1	28.8			93.8	39.2		96.0	438.5	82.1	89.5	74.7
Level of Service	F	C			F	D		F	F	F	F	E
Approach Delay (s)		33.5				44.7			251.3			81.5
Approach LOS		C				D			F			F

Intersection Summary			
HCM 2000 Control Delay	68.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.7%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



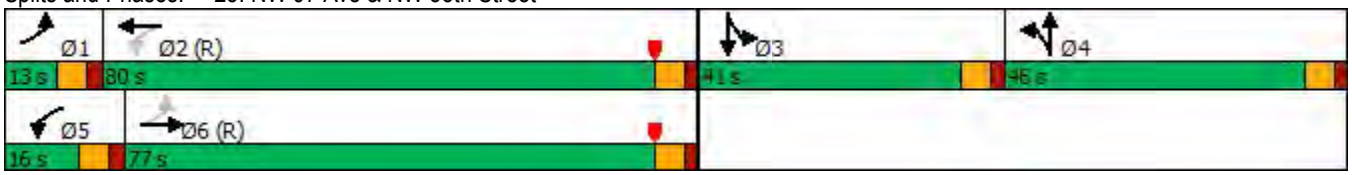
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	104
Future Volume (vph)	104
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	118
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

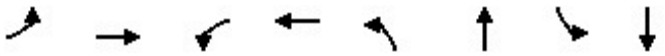
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	56	704	357	1184	153	260	104	218
Future Volume (vph)	56	704	357	1184	153	260	104	218
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	13.0	77.0	16.0	80.0	46.0	46.0	41.0	41.0
Total Split (%)	7.2%	42.8%	8.9%	44.4%	25.6%	25.6%	22.8%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	79.7	71.0	114.8	100.1	26.4	26.4	20.8	20.8
Actuated g/C Ratio	0.44	0.39	0.64	0.56	0.15	0.15	0.12	0.12
v/c Ratio	0.39	0.80	0.95	0.77	0.64	0.77	0.71	0.70
Control Delay	25.0	52.9	77.7	35.9	83.1	78.7	95.0	81.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	52.9	77.7	35.9	83.1	78.7	95.0	81.9
LOS	C	D	E	D	F	E	F	F
Approach Delay		51.4		45.1		80.0		86.3
Approach LOS		D		D		E		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 9 (5%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 56.1	Intersection LOS: E
Intersection Capacity Utilization 79.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street

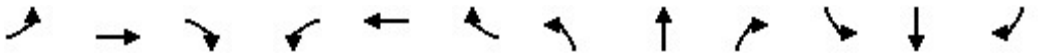




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	1085	415	1473	163	398	144	284
v/c Ratio	0.39	0.80	0.95	0.77	0.64	0.77	0.71	0.70
Control Delay	25.0	52.9	77.7	35.9	83.1	78.7	95.0	81.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	52.9	77.7	35.9	83.1	78.7	95.0	81.9
Queue Length 50th (ft)	27	590	394	676	184	226	168	165
Queue Length 95th (ft)	58	531	#733	#980	260	278	187	211
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	170	1360	438	1910	389	768	340	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.80	0.95	0.77	0.42	0.52	0.42	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



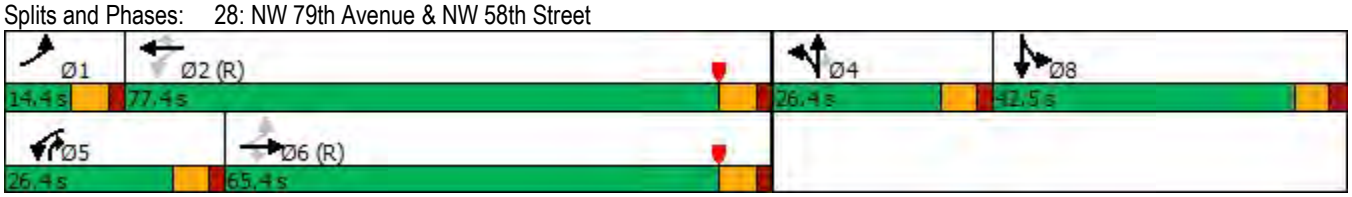
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	704	130	357	1184	202	153	260	87	104	218	32
Future Volume (vph)	56	704	130	357	1184	202	153	260	87	104	218	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3428		1752	3424		1752	3361		1752	3409	
Flt Permitted	0.11	1.00		0.09	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	211	3428		166	3424		1752	3361		1752	3409	
Peak-hour factor, PHF	0.86	0.76	0.82	0.86	0.95	0.89	0.94	0.90	0.80	0.72	0.94	0.61
Adj. Flow (vph)	65	926	159	415	1246	227	163	289	109	144	232	52
RTOR Reduction (vph)	0	8	0	0	6	0	0	24	0	0	11	0
Lane Group Flow (vph)	65	1077	0	415	1467	0	163	374	0	144	273	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	79.7	71.0		114.8	100.1		26.4	26.4		20.8	20.8	
Effective Green, g (s)	79.7	71.0		114.8	100.1		26.4	26.4		20.8	20.8	
Actuated g/C Ratio	0.44	0.39		0.64	0.56		0.15	0.15		0.12	0.12	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1352		438	1904		256	492		202	393	
v/s Ratio Prot	0.02	0.31		c0.20	0.43		0.09	c0.11		c0.08	0.08	
v/s Ratio Perm	0.15			c0.40								
v/c Ratio	0.39	0.80		0.95	0.77		0.64	0.76		0.71	0.69	
Uniform Delay, d1	31.2	48.1		53.4	31.0		72.3	73.8		76.7	76.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	4.9		29.7	3.1		5.1	6.8		11.3	5.2	
Delay (s)	32.7	53.1		83.1	34.1		77.4	80.6		88.0	81.8	
Level of Service	C	D		F	C		E	F		F	F	
Approach Delay (s)		51.9			44.9			79.7			83.9	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	55.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	5	1055	89	273	978	89	203	47	845	527	114
Future Volume (vph)	5	1055	89	273	978	89	203	47	845	527	114
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6		5	2		4	4	5	8	8
Permitted Phases	6		6	2		2			4		
Detector Phase	1	6	6	5	2	2	4	4	5	8	8
Switch Phase											
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0	16.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4	11.4	24.4	24.4	13.4	13.4	11.4	13.5	13.5
Total Split (s)	14.4	65.4	65.4	26.4	77.4	77.4	26.4	26.4	26.4	42.5	42.5
Total Split (%)	9.0%	40.7%	40.7%	16.4%	48.2%	48.2%	16.4%	16.4%	16.4%	26.4%	26.4%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	64.9	59.0	59.0	88.2	85.6	85.6	20.0	20.0	42.8	33.2	33.2
Actuated g/C Ratio	0.40	0.37	0.37	0.55	0.53	0.53	0.12	0.12	0.27	0.21	0.21
v/c Ratio	0.03	0.91	0.17	1.03	0.56	0.13	1.18	1.55	1.14	0.88	0.76
Control Delay	19.4	59.6	1.9	109.2	27.6	4.3	175.8	289.6	117.1	87.8	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	59.6	1.9	109.2	27.6	4.3	175.8	289.6	117.1	87.8	66.7
LOS	B	E	A	F	C	A	F	F	F	F	E
Approach Delay		54.2			42.7			197.8			74.3
Approach LOS		D			D			F			E

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 107 (67%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.55	
Intersection Signal Delay: 92.0	Intersection LOS: F
Intersection Capacity Utilization 100.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street



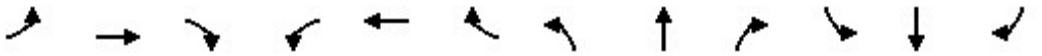


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	8	1147	113	297	1019	113	251	498	498	283	501
v/c Ratio	0.03	0.91	0.17	1.03	0.56	0.13	1.18	1.55	1.14	0.88	0.76
Control Delay	19.4	59.6	1.9	109.2	27.6	4.3	175.8	289.6	117.1	87.8	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	59.6	1.9	109.2	27.6	4.3	175.8	289.6	117.1	87.8	66.7
Queue Length 50th (ft)	4	602	0	~316	366	1	~314	~614	~396	313	264
Queue Length 95th (ft)	9	#711	1	#517	513	26	#427	#737	#666	#473	298
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	252	1262	662	288	1830	870	213	322	437	350	709
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.91	0.17	1.03	0.56	0.13	1.18	1.55	1.14	0.81	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1055	89	273	978	89	203	47	845	527	114	56
Future Volume (vph)	5	1055	89	273	978	89	203	47	845	527	114	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1719	3438	1538	1719	3438	1538	1719	1491	1461	1564	3128	
Flt Permitted	0.25	1.00	1.00	0.06	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	456	3438	1538	111	3438	1538	1719	1491	1461	1564	3128	
Peak-hour factor, PHF	0.62	0.92	0.79	0.92	0.96	0.79	0.81	0.82	0.90	0.93	0.82	0.72
Adj. Flow (vph)	8	1147	113	297	1019	113	251	57	939	567	139	78
RTOR Reduction (vph)	0	0	72	0	0	55	0	137	49	0	9	0
Lane Group Flow (vph)	8	1147	41	297	1019	58	251	361	449	283	492	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6		6	2		2			4			
Actuated Green, G (s)	60.3	59.0	59.0	88.2	80.5	80.5	20.0	20.0	42.8	33.2	33.2	
Effective Green, g (s)	60.3	59.0	59.0	88.2	80.5	80.5	20.0	20.0	42.8	33.2	33.2	
Actuated g/C Ratio	0.38	0.37	0.37	0.55	0.50	0.50	0.12	0.12	0.27	0.21	0.21	
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	181	1262	564	289	1722	770	213	185	389	323	646	
v/s Ratio Prot	0.00	0.33		0.15	0.30		0.15	c0.24	c0.16	c0.18	0.16	
v/s Ratio Perm	0.02		0.03	c0.42		0.04			0.14			
v/c Ratio	0.04	0.91	0.07	1.03	0.59	0.07	1.18	1.95	1.15	0.88	0.76	
Uniform Delay, d1	31.6	48.3	33.1	54.8	28.4	20.8	70.3	70.3	58.9	61.8	60.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	11.2	0.3	60.3	1.5	0.2	118.2	446.1	94.6	22.3	5.3	
Delay (s)	31.7	59.5	33.3	115.0	29.9	21.0	188.5	516.5	153.6	84.1	65.3	
Level of Service	C	E	C	F	C	C	F	F	F	F	E	
Approach Delay (s)		57.0			46.9			305.5			72.1	
Approach LOS		E			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	122.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	160.7	Sum of lost time (s)	25.7
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	121	596	121	1046	265	776	107	557	379
Future Volume (vph)	121	596	121	1046	265	776	107	557	379
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	17.4	69.4	17.4	69.4	27.4	54.4	20.4	47.4	47.4
Total Split (%)	10.8%	42.9%	10.8%	42.9%	17.0%	33.7%	12.6%	29.3%	29.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	76.3	65.1	75.1	64.5	66.7	47.2	52.4	39.3	39.3
Actuated g/C Ratio	0.47	0.40	0.46	0.40	0.41	0.29	0.32	0.24	0.24
v/c Ratio	0.89	0.62	0.61	0.87	1.01	0.90	0.79	0.79	0.95
Control Delay	83.5	39.5	33.3	53.1	93.0	66.7	67.6	64.5	67.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.5	39.5	33.3	53.1	93.0	66.7	67.6	64.5	67.2
LOS	F	D	C	D	F	E	E	E	E
Approach Delay		46.1		50.8		73.3		65.8	
Approach LOS		D		D		E		E	

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 46 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 59.4	Intersection LOS: E
Intersection Capacity Utilization 89.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street

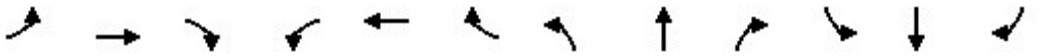




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	151	848	161	1199	301	901	147	663	480
v/c Ratio	0.89	0.62	0.61	0.87	1.01	0.90	0.79	0.79	0.95
Control Delay	83.5	39.5	33.3	53.1	93.0	66.7	67.6	64.5	67.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.5	39.5	33.3	53.1	93.0	66.7	67.6	64.5	67.2
Queue Length 50th (ft)	108	366	93	620	237	476	100	343	347
Queue Length 95th (ft)	#197	442	115	723	#428	#568	133	383	399
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	169	1364	267	1372	298	1025	195	880	520
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.62	0.60	0.87	1.01	0.88	0.75	0.75	0.92

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



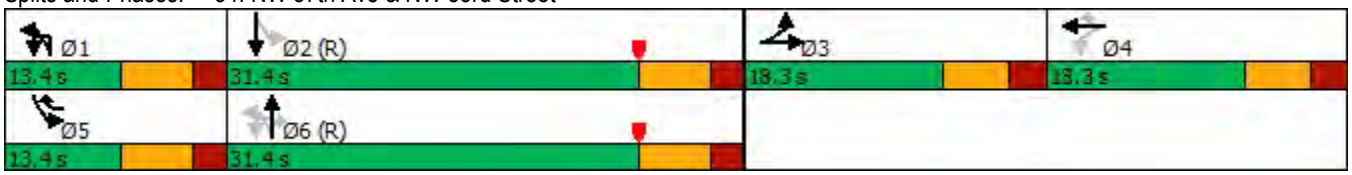
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	596	204	121	1046	79	265	776	82	107	557	379
Future Volume (vph)	121	596	204	121	1046	79	265	776	82	107	557	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3332		1736	3429		1736	3413		1736	3471	1553
Flt Permitted	0.07	1.00		0.20	1.00		0.14	1.00		0.10	1.00	1.00
Satd. Flow (perm)	122	3332		375	3429		260	3413		186	3471	1553
Peak-hour factor, PHF	0.80	0.96	0.90	0.75	0.95	0.81	0.88	0.97	0.81	0.73	0.84	0.79
Adj. Flow (vph)	151	621	227	161	1101	98	301	800	101	147	663	480
RTOR Reduction (vph)	0	23	0	0	4	0	0	6	0	0	0	129
Lane Group Flow (vph)	151	825	0	161	1195	0	301	895	0	147	663	351
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	76.3	65.1		75.1	64.5		66.7	47.2		52.4	39.3	39.3
Effective Green, g (s)	76.3	65.1		75.1	64.5		66.7	47.2		52.4	39.3	39.3
Actuated g/C Ratio	0.47	0.40		0.46	0.40		0.41	0.29		0.32	0.24	0.24
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	169	1342		263	1368		299	996		185	844	377
v/s Ratio Prot	c0.06	0.25		0.04	0.35		c0.13	c0.26		0.06	0.19	
v/s Ratio Perm	c0.36			0.24			c0.28			0.19		0.23
v/c Ratio	0.89	0.61		0.61	0.87		1.01	0.90		0.79	0.79	0.93
Uniform Delay, d1	42.1	38.3		28.1	44.8		42.3	54.9		43.3	57.2	59.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	40.1	2.1		4.2	8.0		53.7	10.7		20.5	4.8	29.5
Delay (s)	82.2	40.4		32.3	52.7		96.1	65.6		63.8	62.1	89.4
Level of Service	F	D		C	D		F	E		E	E	F
Approach Delay (s)		46.7			50.3			73.2			72.4	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	61.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	161.6	Sum of lost time (s)	25.6
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	15	1	182	4	84	9	14	1043	118	91	815
Future Volume (vph)	15	1	182	4	84	9	14	1043	118	91	815
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	5	1	1	6		5	2
Permitted Phases			4		4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	18.3	18.3	18.3	18.3	13.4	13.4	13.4	31.4	31.4	13.4	31.4
Total Split (%)	22.5%	22.5%	22.5%	22.5%	16.5%	16.5%	16.5%	38.6%	38.6%	16.5%	38.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.4	7.4	12.6	12.6	26.0		40.4	34.3	34.3	45.5	42.5
Actuated g/C Ratio	0.09	0.09	0.15	0.15	0.32		0.50	0.42	0.42	0.56	0.52
v/c Ratio	0.15	0.24	0.61	0.61	0.19		0.09	0.73	0.20	0.45	0.54
Control Delay	36.2	16.6	44.7	45.5	3.7		11.7	27.2	1.8	18.3	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	16.6	44.7	45.5	3.7		11.7	27.2	1.8	18.3	19.4
LOS	D	B	D	D	A		B	C	A	B	B
Approach Delay		23.6		31.7				23.8			19.3
Approach LOS		C		C				C			B

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 46 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 23.0	Intersection LOS: C
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 87th Ave & NW 53rd Street





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	44	120	118	114	28	1075	155	112	986
v/c Ratio	0.15	0.24	0.61	0.61	0.19	0.09	0.73	0.20	0.45	0.54
Control Delay	36.2	16.6	44.7	45.5	3.7	11.7	27.2	1.8	18.3	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	16.6	44.7	45.5	3.7	11.7	27.2	1.8	18.3	19.4
Queue Length 50th (ft)	12	2	60	58	0	7	271	0	28	167
Queue Length 95th (ft)	23	0	97	57	14	20	#426	2	57	#327
Internal Link Dist (ft)		93		992			2038			2105
Turn Bay Length (ft)			175		175	150		245	120	
Base Capacity (vph)	258	269	215	209	595	326	1476	784	256	1825
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.16	0.56	0.56	0.19	0.09	0.73	0.20	0.44	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	1	19	182	4	84	9	14	1043	118	91	815
Future Volume (vph)	15	1	19	182	4	84	9	14	1043	118	91	815
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.86		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1593		1665	1674	1568		1775	3505	1568	1752	3496
Flt Permitted	0.95	1.00		0.73	0.71	1.00		0.22	1.00	1.00	0.11	1.00
Satd. Flow (perm)	1752	1593		1276	1241	1568		414	3505	1568	208	3496
Peak-hour factor, PHF	0.62	0.25	0.48	0.79	0.50	0.74	0.75	0.88	0.97	0.76	0.81	0.84
Adj. Flow (vph)	24	4	40	230	8	114	12	16	1075	155	112	970
RTOR Reduction (vph)	0	38	0	0	0	86	0	0	0	95	0	1
Lane Group Flow (vph)	24	6	0	120	118	28	0	28	1075	60	112	985
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	0%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3			4	5	1	1	6		5	2
Permitted Phases				4		4	6	6		6	2	
Actuated Green, G (s)	4.6	4.6		12.6	12.6	19.7		34.4	31.7	31.7	43.2	36.1
Effective Green, g (s)	4.6	4.6		12.6	12.6	19.7		34.4	31.7	31.7	43.2	36.1
Actuated g/C Ratio	0.06	0.06		0.15	0.15	0.24		0.42	0.39	0.39	0.53	0.44
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	90		197	192	379		220	1364	610	245	1550
v/s Ratio Prot	c0.01	0.00				0.01		0.00	c0.31		c0.04	c0.28
v/s Ratio Perm				0.09	c0.10	0.01		0.05		0.04	0.20	
v/c Ratio	0.24	0.07		0.61	0.61	0.07		0.13	0.79	0.10	0.46	0.64
Uniform Delay, d1	36.7	36.4		32.1	32.1	23.8		14.2	21.9	15.8	13.0	17.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.3		5.3	5.7	0.1		0.3	4.7	0.3	1.4	2.0
Delay (s)	38.0	36.7		37.4	37.9	23.9		14.4	26.6	16.1	14.4	19.6
Level of Service	D	D		D	D	C		B	C	B	B	B
Approach Delay (s)		37.2			33.2				25.0			19.0
Approach LOS		D			C				C			B

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.62
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	4	1581	23	3	9	1826	21	0	0	57	0	0
Future Volume (Veh/h)	4	1581	23	3	9	1826	21	0	0	57	0	0
Sign Control		Free				Free			Stop			Stop
Grade		0%				0%			0%			0%
Peak Hour Factor	0.50	0.91	0.69	0.34	0.75	0.96	0.71	0.25	0.25	0.88	0.25	0.25
Hourly flow rate (vph)	8	1737	33	0	12	1902	30	0	0	65	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)		403				458						
pX, platoon unblocked	0.73			0.00	0.91			0.77	0.77	0.91	0.77	0.77
vC, conflicting volume	1932			0	1770			2472	3726	596	2601	3727
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	968			0	1498			1083	2706	207	1250	2708
tC, single (s)	4.2			0.0	4.2			7.6	6.6	7.0	7.6	6.6
tC, 2 stage (s)												
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	98			0	97			100	100	91	100	100
cM capacity (veh/h)	510			0	399			120	15	724	87	15

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	8	695	695	380	12	761	761	410	65	45
Volume Left	8	0	0	0	12	0	0	0	0	0
Volume Right	0	0	0	33	0	0	0	30	65	45
cSH	510	1700	1700	1700	399	1700	1700	1700	724	786
Volume to Capacity	0.02	0.41	0.41	0.22	0.03	0.45	0.45	0.24	0.09	0.06
Queue Length 95th (ft)	1	0	0	0	2	0	0	0	7	5
Control Delay (s)	12.2	0.0	0.0	0.0	14.3	0.0	0.0	0.0	10.5	9.9
Lane LOS	B				B				B	A
Approach Delay (s)	0.1				0.1				10.5	9.9
Approach LOS									B	A

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	45.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	33
Future Volume (Veh/h)	33
Sign Control	
Grade	
Peak Hour Factor	0.73
Hourly flow rate (vph)	45
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	0.73
vC, conflicting volume	649
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	0
tC, single (s)	7.0
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	94
cM capacity (veh/h)	786
Direction, Lane #	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	4	1581	23	3	9	1826	21	0	0	57	0	0	33
Future Vol, veh/h	4	1581	23	3	9	1826	21	0	0	57	0	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	80	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	91	69	34	75	96	71	25	25	88	25	25	73
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	1737	33	9	12	1902	30	0	0	65	0	0	45

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	1932	0	0	1293	1770	0	0	-	-	885	-	-	966
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	5.66	5.36	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	2.33	3.13	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	134	-	-	299	162	-	-	0	0	246	0	0	217
Stage 1	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	134	-	-	185	185	-	-	-	-	246	-	-	217
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	24.8	25.9
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	246	134	-	-	185	-	-	217
HCM Lane V/C Ratio	0.263	0.06	-	-	0.113	-	-	0.208
HCM Control Delay (s)	24.8	33.6	-	-	26.9	-	-	25.9
HCM Lane LOS	C	D	-	-	D	-	-	D
HCM 95th %tile Q(veh)	1	0.2	-	-	0.4	-	-	0.8



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	25	1275	24	4	1079
Future Volume (Veh/h)	0	25	1275	24	4	1079
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.86	0.96	0.82	1.00	0.94
Hourly flow rate (vph)	0	29	1328	29	4	1148
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.73	0.73			0.73	
vC, conflicting volume	1733	678			1357	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1265	0			750	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	100	96			99	
cM capacity (veh/h)	113	782			606	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	29	885	472	4	383	383	383
Volume Left	0	0	0	4	0	0	0
Volume Right	29	0	29	0	0	0	0
cSH	782	1700	1700	606	1700	1700	1700
Volume to Capacity	0.04	0.52	0.28	0.01	0.23	0.23	0.23
Queue Length 95th (ft)	3	0	0	0	0	0	0
Control Delay (s)	9.8	0.0	0.0	11.0	0.0	0.0	0.0
Lane LOS	A			B			
Approach Delay (s)	9.8	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1513	0	6	5	1831	0	1
Future Volume (Veh/h)	1	1513	0	6	5	1831	0	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.97	0.25	0.50	0.42	0.94	0.25	0.25
Hourly flow rate (vph)	0	1560	0	0	12	1948	0	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)						1196		
pX, platoon unblocked	0.00			0.00			0.84	
vC, conflicting volume	0			0	1560		2233	520
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1560		1798	520
tC, single (s)	0.0			0.0	4.1		6.8	6.9
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	97		100	99
cM capacity (veh/h)	0			0	430		59	506

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	624	624	312	12	649	649	649	4
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	430	1700	1700	1700	506
Volume to Capacity	0.37	0.37	0.18	0.03	0.38	0.38	0.38	0.01
Queue Length 95th (ft)	0	0	0	2	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	13.6	0.0	0.0	0.0	12.2
Lane LOS				B				B
Approach Delay (s)	0.0			0.1				12.2
Approach LOS								B

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	45.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1521	0	1	1	1834	3	1
Future Volume (Veh/h)	1	1521	0	1	1	1834	3	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.95	0.25	0.25	0.25	0.97	0.75	0.25
Hourly flow rate (vph)	0	1601	0	0	4	1891	4	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.91		0.91	0.91
vC, conflicting volume	0			0	1601		2239	534
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1322		2021	151
tC, single (s)	0.0			0.0	4.1		6.8	6.9
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	99		91	99
cM capacity (veh/h)	0			0	483		47	797

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	640	640	320	4	630	630	630	8
Volume Left	0	0	0	4	0	0	0	4
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	483	1700	1700	1700	88
Volume to Capacity	0.38	0.38	0.19	0.01	0.37	0.37	0.37	0.09
Queue Length 95th (ft)	0	0	0	1	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	12.5	0.0	0.0	0.0	49.8
Lane LOS				B				E
Approach Delay (s)	0.0			0.0				49.8
Approach LOS								E

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	45.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	26	16	3	1134	12	3	22	1151
Future Volume (Veh/h)	26	16	3	1134	12	3	22	1151
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.69	0.67	0.34	0.95	0.75	0.75	0.66	0.96
Hourly flow rate (vph)	38	24	0	1194	16	0	33	1199
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				782				
pX, platoon unblocked	0.82	0.82	0.00			0.00	0.82	
vC, conflicting volume	1868	605	0			0	1210	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1623	87	0			0	823	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	46	97	0			0	95	
cM capacity (veh/h)	70	774	0			0	639	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	38	24	796	414	33	600	600
Volume Left	38	0	0	0	33	0	0
Volume Right	0	24	0	16	0	0	0
cSH	70	774	1700	1700	639	1700	1700
Volume to Capacity	0.54	0.03	0.47	0.24	0.05	0.35	0.35
Queue Length 95th (ft)	57	2	0	0	4	0	0
Control Delay (s)	105.7	9.8	0.0	0.0	10.9	0.0	0.0
Lane LOS	F	A			B		
Approach Delay (s)	68.6		0.0		0.3		
Approach LOS	F						

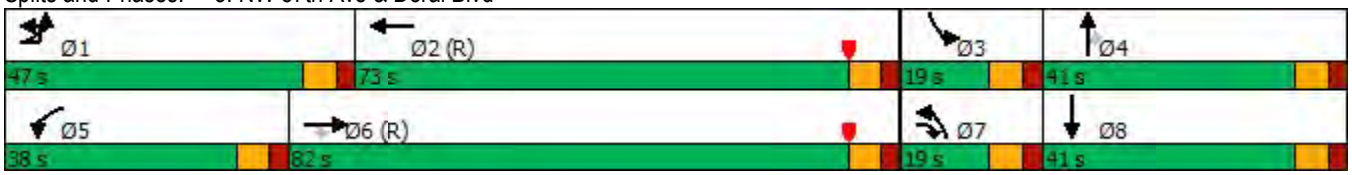
Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

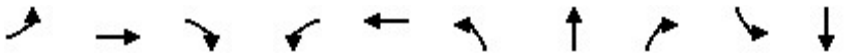
2027 AM Traffic With Project Trips Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	449	1505	492	505	1221	246	658	294	139	783
Future Volume (vph)	449	1505	492	505	1221	246	658	294	139	783
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	1	6	7	5	2	7	4		3	8
Permitted Phases			6					4		
Detector Phase	1	6	7	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1
Total Split (s)	47.0	82.0	19.0	38.0	73.0	19.0	41.0	41.0	19.0	41.0
Total Split (%)	26.1%	45.6%	10.6%	21.1%	40.6%	10.6%	22.8%	22.8%	10.6%	22.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max
Act Effct Green (s)	33.3	75.0	93.9	31.0	72.7	11.9	34.0	34.0	11.8	33.9
Actuated g/C Ratio	0.18	0.42	0.52	0.17	0.40	0.07	0.19	0.19	0.07	0.19
v/c Ratio	0.85	0.77	0.68	0.97	0.74	1.15	1.07	0.72	0.82	1.26
Control Delay	68.0	75.8	46.4	99.9	44.9	176.8	121.5	26.8	101.9	177.9
Queue Delay	56.4	0.3	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Total Delay	124.4	76.1	46.8	99.9	46.2	176.8	121.5	26.8	101.9	177.9
LOS	F	E	D	F	D	F	F	C	F	F
Approach Delay		79.3			60.9		105.6			167.8
Approach LOS		E			E		F			F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 65 (36%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.26	
Intersection Signal Delay: 95.2	Intersection LOS: F
Intersection Capacity Utilization 95.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





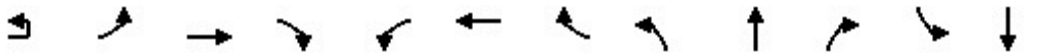
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	526	1601	572	561	1481	256	700	372	181	1182
v/c Ratio	0.85	0.77	0.68	0.97	0.74	1.15	1.07	0.72	0.82	1.26
Control Delay	68.0	75.8	46.4	99.9	44.9	176.8	121.5	26.8	101.9	177.9
Queue Delay	56.4	0.3	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Total Delay	124.4	76.1	46.8	99.9	46.2	176.8	121.5	26.8	101.9	177.9
Queue Length 50th (ft)	333	661	450	356	332	~182	~480	110	111	~630
Queue Length 95th (ft)	388	726	557	#477	523	#284	#616	159	m134	#730
Internal Link Dist (ft)		378			2485		2143			310
Turn Bay Length (ft)	170		170	330		400			190	
Base Capacity (vph)	748	2078	842	579	1989	222	655	515	222	938
Starvation Cap Reductn	0	100	48	0	0	0	0	0	0	0
Spillback Cap Reductn	398	0	0	0	290	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.50	0.81	0.72	0.97	0.87	1.15	1.07	0.72	0.82	1.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	449	1505	492	505	1221	139	246	658	294	139	783
Future Volume (vph)	4	449	1505	492	505	1221	139	246	658	294	139	783
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.96
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3367	4988	1553	3367	4910		3367	3471	1553	3367	4778
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3367	4988	1553	3367	4910		3367	3471	1553	3367	4778
Peak-hour factor, PHF	0.25	0.88	0.94	0.86	0.90	0.92	0.90	0.96	0.94	0.79	0.77	0.92
Adj. Flow (vph)	16	510	1601	572	561	1327	154	256	700	372	181	851
RTOR Reduction (vph)	0	0	0	35	0	8	0	0	0	222	0	39
Lane Group Flow (vph)	0	526	1601	537	561	1473	0	256	700	150	181	1143
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		33.3	75.0	86.9	31.0	72.7		11.9	34.0	34.0	11.8	33.9
Effective Green, g (s)		33.3	75.0	86.9	31.0	72.7		11.9	34.0	34.0	11.8	33.9
Actuated g/C Ratio		0.18	0.42	0.48	0.17	0.40		0.07	0.19	0.19	0.07	0.19
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		622	2078	749	579	1983		222	655	293	220	899
v/s Ratio Prot		0.16	c0.32	0.05	c0.17	0.30		c0.08	0.20		0.05	c0.24
v/s Ratio Perm				0.30						0.10		
v/c Ratio		0.85	0.77	0.72	0.97	0.74		1.15	1.07	0.51	0.82	1.27
Uniform Delay, d1		70.9	45.1	36.8	74.0	45.7		84.0	73.0	65.5	83.1	73.0
Progression Factor		0.80	1.62	1.51	1.08	0.94		1.00	1.00	1.00	0.92	0.99
Incremental Delay, d2		8.9	2.4	2.8	20.9	1.5		107.9	55.0	6.2	19.7	130.2
Delay (s)		65.7	75.3	58.4	100.8	44.4		192.0	128.0	71.8	96.3	202.4
Level of Service		E	E	E	F	D		F	F	E	F	F
Approach Delay (s)			69.9			59.9			124.6			188.3
Approach LOS			E			E			F			F

Intersection Summary			
HCM 2000 Control Delay	98.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



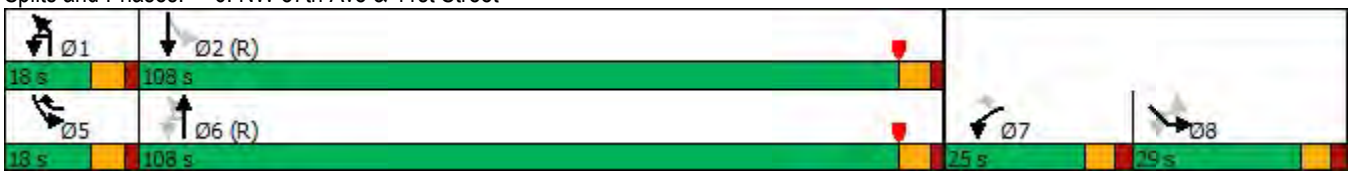
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	275
Future Volume (vph)	275
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.83
Adj. Flow (vph)	331
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SEL	SER
Lane Configurations									
Traffic Volume (vph)	134	46	5	56	953	95	914	3	81
Future Volume (vph)	134	46	5	56	953	95	914	3	81
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Prot	Perm
Protected Phases	7	5	1	1	6	5	2	8	
Permitted Phases		7	6	6		2			8
Detector Phase	7	5	1	1	6	5	2	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.3	24.3
Total Split (s)	25.0	18.0	18.0	18.0	108.0	18.0	108.0	29.0	29.0
Total Split (%)	13.9%	10.0%	10.0%	10.0%	60.0%	10.0%	60.0%	16.1%	16.1%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	None	None
Act Effct Green (s)	17.3	26.5		126.7	118.3	128.6	119.3	9.7	9.7
Actuated g/C Ratio	0.10	0.15		0.70	0.66	0.71	0.66	0.05	0.05
v/c Ratio	0.91	0.23		0.27	0.56	0.44	0.46	0.70	0.62
Control Delay	82.4	11.2		20.4	51.2	11.6	15.2	44.1	26.0
Queue Delay	0.0	0.0		0.0	46.8	0.0	0.0	0.0	0.0
Total Delay	82.4	11.2		20.4	98.1	11.6	15.2	44.1	26.0
LOS	F	B		C	F	B	B	D	C
Approach Delay	67.1				92.4		14.8	35.4	
Approach LOS	E				F		B	D	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 107 (59%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 55.7	Intersection LOS: E
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SEL	SER
Lane Group Flow (vph)	231	63	98	1248	127	1039	129	120
v/c Ratio	0.91	0.23	0.27	0.56	0.44	0.46	0.70	0.62
Control Delay	82.4	11.2	20.4	51.2	11.6	15.2	44.1	26.0
Queue Delay	0.0	0.0	0.0	46.8	0.0	0.0	0.0	0.0
Total Delay	82.4	11.2	20.4	98.1	11.6	15.2	44.1	26.0
Queue Length 50th (ft)	161	0	69	754	37	279	36	0
Queue Length 95th (ft)	137	14	m82	m773	55	380	0	0
Internal Link Dist (ft)	2087			188		622	377	
Turn Bay Length (ft)	200		120		200			
Base Capacity (vph)	267	289	389	2228	315	2273	297	290
Starvation Cap Reductn	0	0	0	1087	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.22	0.25	1.09	0.40	0.46	0.43	0.41

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	134	4	46	5	56	953	181	95	914	27	49	3
Future Volume (vph)	134	4	46	5	56	953	181	95	914	27	49	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95			1.00
Frt	0.99		0.85		1.00	0.97		1.00	0.99			0.95
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00			0.97
Satd. Flow (prot)	1728		1475		1736	3378		1736	3428			1681
Flt Permitted	0.96		1.00		0.23	1.00		0.17	1.00			0.97
Satd. Flow (perm)	1728		1475		422	3378		306	3428			1681
Peak-hour factor, PHF	0.62	0.50	0.66	0.31	0.68	0.93	0.81	0.75	0.96	0.31	0.62	0.38
Adj. Flow (vph)	216	8	70	16	82	1025	223	127	952	87	79	8
RTOR Reduction (vph)	89	0	54	0	0	8	0	0	3	0	0	93
Lane Group Flow (vph)	142	0	9	0	98	1240	0	127	1036	0	0	36
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA		Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2			8	
Actuated Green, G (s)	17.3		26.6		126.7	118.3		128.5	119.2			9.7
Effective Green, g (s)	17.3		26.6		126.7	118.3		128.5	119.2			9.7
Actuated g/C Ratio	0.10		0.15		0.70	0.66		0.71	0.66			0.05
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)	166		217		358	2220		292	2270			90
v/s Ratio Prot	c0.08		0.00		0.01	c0.37		c0.02	0.30			
v/s Ratio Perm			0.00		0.18			0.29				0.02
v/c Ratio	0.86		0.04		0.27	0.56		0.43	0.46			0.40
Uniform Delay, d1	80.1		65.8		9.6	16.7		11.6	14.7			82.4
Progression Factor	1.00		1.00		2.68	2.90		0.96	0.94			1.00
Incremental Delay, d2	32.9		0.1		0.2	0.5		1.0	0.7			2.9
Delay (s)	113.0		65.9		26.1	49.0		12.1	14.5			85.3
Level of Service	F		E		C	D		B	B			F
Approach Delay (s)	102.9					47.3			14.2			83.4
Approach LOS	F					D			B			F

Intersection Summary			
HCM 2000 Control Delay	43.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



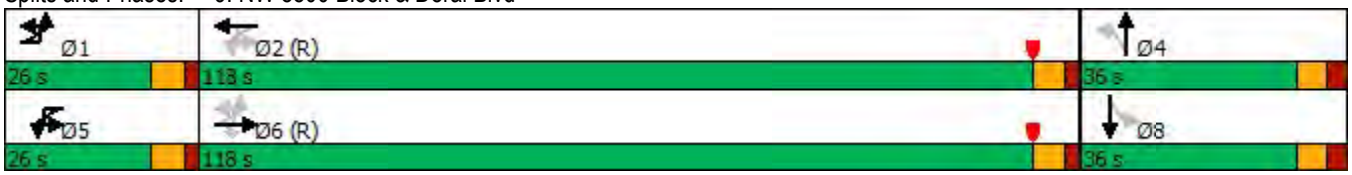
Movement	SER
Lane Configurations	
Traffic Volume (vph)	81
Future Volume (vph)	81
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1475
Flt Permitted	1.00
Satd. Flow (perm)	1475
Peak-hour factor, PHF	0.50
Adj. Flow (vph)	162
RTOR Reduction (vph)	114
Lane Group Flow (vph)	6
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	9.7
Effective Green, g (s)	9.7
Actuated g/C Ratio	0.05
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	79
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.08
Uniform Delay, d1	80.9
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	81.4
Level of Service	F
Approach Delay (s)	
Approach LOS	

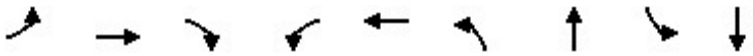
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	13	30	2174	59	10	22	1543	53	1	46	0
Future Volume (vph)	13	30	2174	59	10	22	1543	53	1	46	0
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2		4		8
Permitted Phases	6	6		6	2	2		4		8	
Detector Phase	1	1	6	6	5	5	2	4	4	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	26.0	26.0	118.0	118.0	26.0	26.0	118.0	36.0	36.0	36.0	36.0
Total Split (%)	14.4%	14.4%	65.6%	65.6%	14.4%	14.4%	65.6%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	None	None	Max	Max
Act Effct Green (s)		133.4	127.0	127.0		130.1	123.5	29.0	29.0	29.0	29.0
Actuated g/C Ratio		0.74	0.71	0.71		0.72	0.69	0.16	0.16	0.16	0.16
v/c Ratio		0.42	0.64	0.07		0.31	0.50	0.37	0.28	0.41	0.13
Control Delay		14.2	20.2	1.2		12.8	12.2	73.0	15.0	75.0	0.8
Queue Delay		0.0	0.0	0.0		0.0	0.9	0.0	0.0	0.0	0.0
Total Delay		14.2	20.2	1.2		12.8	13.1	73.0	15.0	75.0	0.8
LOS		B	C	A		B	B	E	B	E	A
Approach Delay			19.4				13.1		42.1		47.6
Approach LOS			B				B		D		D

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 163 (91%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 18.6	Intersection LOS: B
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

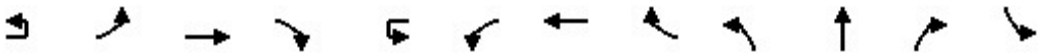




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	88	2241	73	40	1699	78	89	82	48
v/c Ratio	0.42	0.64	0.07	0.31	0.50	0.37	0.28	0.41	0.13
Control Delay	14.2	20.2	1.2	12.8	12.2	73.0	15.0	75.0	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
Total Delay	14.2	20.2	1.2	12.8	13.1	73.0	15.0	75.0	0.8
Queue Length 50th (ft)	8	927	7	5	454	83	4	88	0
Queue Length 95th (ft)	26	840	7	m1	m442	105	0	90	0
Internal Link Dist (ft)		1116			323		94		231
Turn Bay Length (ft)	200		190	190					
Base Capacity (vph)	320	3520	1114	254	3400	213	323	199	365
Starvation Cap Reductn	0	0	0	0	1290	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.64	0.07	0.16	0.81	0.37	0.28	0.41	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	30	2174	59	10	22	1543	48	53	1	75	46
Future Volume (vph)	13	30	2174	59	10	22	1543	48	53	1	75	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91		1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	0.99		1.00	0.86		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		1776	4988	1553		1763	4954		1736	1565		1736
Flt Permitted		0.10	1.00	1.00		0.05	1.00		0.73	1.00		0.68
Satd. Flow (perm)		195	4988	1553		95	4954		1326	1565		1240
Peak-hour factor, PHF	0.25	0.83	0.97	0.81	0.62	0.92	0.95	0.64	0.68	0.25	0.88	0.56
Adj. Flow (vph)	52	36	2241	73	16	24	1624	75	78	4	85	82
RTOR Reduction (vph)	0	0	0	19	0	0	2	0	0	71	0	0
Lane Group Flow (vph)	0	88	2241	54	0	40	1697	0	78	18	0	82
Heavy Vehicles (%)	0%	4%	4%	4%	0%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2			4			8
Actuated Green, G (s)		133.4	125.7	125.7		129.0	123.5		29.0	29.0		29.0
Effective Green, g (s)		133.4	125.7	125.7		129.0	123.5		29.0	29.0		29.0
Actuated g/C Ratio		0.74	0.70	0.70		0.72	0.69		0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		212	3483	1084		119	3398		213	252		199
v/s Ratio Prot		c0.02	c0.45			0.01	0.34			0.01		
v/s Ratio Perm		0.29		0.03		0.23			0.06			c0.07
v/c Ratio		0.42	0.64	0.05		0.34	0.50		0.37	0.07		0.41
Uniform Delay, d1		9.2	14.9	8.5		12.8	13.5		67.3	64.1		67.8
Progression Factor		1.65	1.32	0.45		1.74	0.88		1.00	1.00		1.00
Incremental Delay, d2		1.1	0.8	0.1		0.8	0.3		1.1	0.1		6.2
Delay (s)		16.3	20.4	3.9		23.0	12.1		68.4	64.2		74.0
Level of Service		B	C	A		C	B		E	E		E
Approach Delay (s)			19.8				12.3			66.1		
Approach LOS			B				B			E		

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



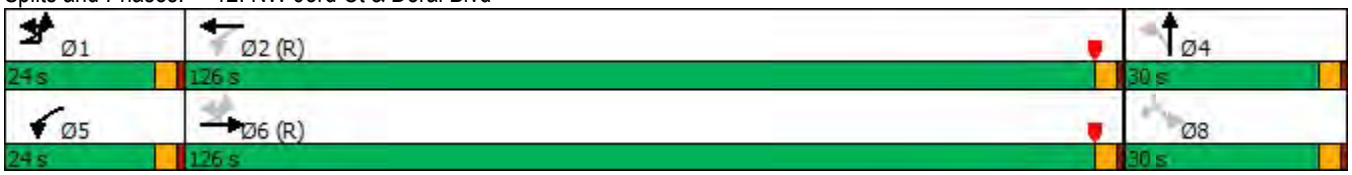
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	24
Future Volume (vph)	0	24
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	1553	
Flt Permitted	1.00	
Satd. Flow (perm)	1553	
Peak-hour factor, PHF	0.25	0.50
Adj. Flow (vph)	0	48
RTOR Reduction (vph)	40	0
Lane Group Flow (vph)	8	0
Heavy Vehicles (%)	4%	4%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	29.0	
Effective Green, g (s)	29.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	250	
v/s Ratio Prot	0.00	
v/s Ratio Perm		
v/c Ratio	0.03	
Uniform Delay, d1	63.7	
Progression Factor	1.00	
Incremental Delay, d2	0.2	
Delay (s)	63.9	
Level of Service	E	
Approach Delay (s)	70.3	
Approach LOS	E	

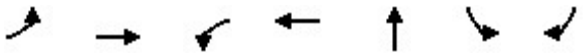
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	2	42	2324	18	1483	0	28	40
Future Volume (vph)	2	42	2324	18	1483	0	28	40
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	11.4	24.4	24.8	24.8	24.8
Total Split (s)	24.0	24.0	126.0	24.0	126.0	30.0	30.0	30.0
Total Split (%)	13.3%	13.3%	70.0%	13.3%	70.0%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		156.7	152.6	154.1	148.2	13.4	13.4	13.4
Actuated g/C Ratio		0.87	0.85	0.86	0.82	0.07	0.07	0.07
v/c Ratio		0.27	0.56	0.18	0.41	0.50	0.66	0.42
Control Delay		3.8	15.5	8.2	21.0	59.3	114.9	20.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		3.8	15.5	8.2	21.0	59.3	114.9	20.5
LOS		A	B	A	C	E	F	C
Approach Delay			15.2		20.9	59.3		
Approach LOS			B		C	E		

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 105 (58%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 19.5	Intersection LOS: B
Intersection Capacity Utilization 61.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd

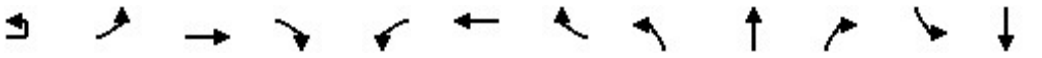




Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	2383	24	1674	76	54	78
v/c Ratio	0.27	0.56	0.18	0.41	0.50	0.66	0.42
Control Delay	3.8	15.5	8.2	21.0	59.3	114.9	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.8	15.5	8.2	21.0	59.3	114.9	20.5
Queue Length 50th (ft)	12	826	7	569	53	63	0
Queue Length 95th (ft)	m18	m974	16	681	5	63	0
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	363	4220	269	4091	266	159	291
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.56	0.09	0.41	0.29	0.34	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	42	2324	29	18	1483	28	27	0	24	28	0
Future Volume (vph)	2	42	2324	29	18	1483	28	27	0	24	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.94		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.97		0.95	
Satd. Flow (prot)		1736	4976		1736	4968			1666		1736	
Flt Permitted		0.12	1.00		0.05	1.00			0.97		0.61	
Satd. Flow (perm)		221	4976		98	4968			1666		1106	
Peak-hour factor, PHF	0.25	0.73	0.99	0.81	0.75	0.91	0.64	0.68	0.25	0.67	0.52	0.25
Adj. Flow (vph)	8	58	2347	36	24	1630	44	40	0	36	54	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	28	0	0	0
Lane Group Flow (vph)	0	66	2383	0	24	1673	0	0	48	0	54	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		157.4	151.0		151.8	148.2			13.4		13.4	
Effective Green, g (s)		157.4	151.0		151.8	148.2			13.4		13.4	
Actuated g/C Ratio		0.87	0.84		0.84	0.82			0.07		0.07	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		247	4174		115	4090			124		82	
v/s Ratio Prot		c0.01	c0.48		0.00	0.34						
v/s Ratio Perm		0.22			0.17				0.03		c0.05	
v/c Ratio		0.27	0.57		0.21	0.41			0.39		0.66	
Uniform Delay, d1		2.4	4.5		3.7	4.2			79.4		81.1	
Progression Factor		1.71	3.19		3.11	4.59			1.00		1.00	
Incremental Delay, d2		0.2	0.2		0.8	0.3			2.0		17.5	
Delay (s)		4.2	14.5		12.4	19.7			81.4		98.6	
Level of Service		A	B		B	B			F		F	
Approach Delay (s)			14.2			19.6			81.4			86.2
Approach LOS			B			B			F			F

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



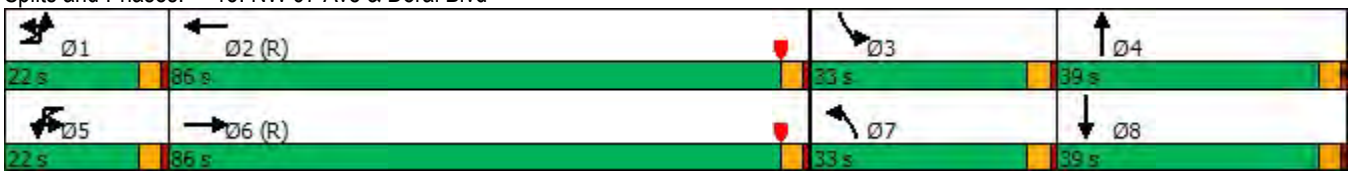
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.51
Adj. Flow (vph)	78
RTOR Reduction (vph)	72
Lane Group Flow (vph)	6
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.4
Effective Green, g (s)	13.4
Actuated g/C Ratio	0.07
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	115
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.05
Uniform Delay, d1	77.4
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	77.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

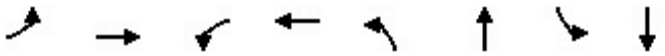
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	86	1880	251	1175	137	370	440	576
Future Volume (vph)	86	1880	251	1175	137	370	440	576
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	22.0	86.0	22.0	86.0	33.0	39.0	33.0	39.0
Total Split (%)	12.2%	47.8%	12.2%	47.8%	18.3%	21.7%	18.3%	21.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	11.6	84.0	17.4	89.8	14.0	34.6	28.0	48.6
Actuated g/C Ratio	0.06	0.47	0.10	0.50	0.08	0.19	0.16	0.27
v/c Ratio	0.54	0.97	0.83	0.63	0.62	0.89	0.91	0.75
Control Delay	90.4	59.5	66.6	56.6	90.4	80.3	95.7	65.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	59.5	66.6	56.6	90.4	80.3	95.7	65.9
LOS	F	E	E	E	F	F	F	E
Approach Delay		61.0		58.1		82.4		77.9
Approach LOS		E		E		F		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 66.1	Intersection LOS: E
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

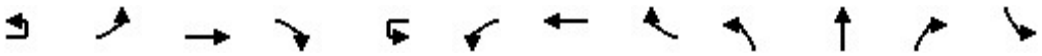




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	117	2250	271	1551	163	609	478	707
v/c Ratio	0.54	0.97	0.83	0.63	0.62	0.89	0.91	0.75
Control Delay	90.4	59.5	66.6	56.6	90.4	80.3	95.7	65.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	59.5	66.6	56.6	90.4	80.3	95.7	65.9
Queue Length 50th (ft)	70	957	167	640	97	342	288	400
Queue Length 95th (ft)	93	#1078	#232	699	128	#442	#379	486
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	340	2311	340	2462	547	689	547	937
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.97	0.80	0.63	0.30	0.88	0.87	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	86	1880	253	2	251	1175	193	137	370	190	440
Future Volume (vph)	2	86	1880	253	2	251	1175	193	137	370	190	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.98			1.00	0.97		1.00	0.94		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3400	4918			3400	4896		3400	3311		3400
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3400	4918			3400	4896		3400	3311		3400
Peak-hour factor, PHF	0.25	0.79	0.99	0.72	0.50	0.94	0.93	0.67	0.84	0.96	0.85	0.92
Adj. Flow (vph)	8	109	1899	351	4	267	1263	288	163	385	224	478
RTOR Reduction (vph)	0	0	14	0	0	0	19	0	0	46	0	0
Lane Group Flow (vph)	0	117	2236	0	0	271	1532	0	163	563	0	478
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		11.6	84.0			17.4	89.8		14.0	34.6		28.0
Effective Green, g (s)		11.6	84.0			17.4	89.8		14.0	34.6		28.0
Actuated g/C Ratio		0.06	0.47			0.10	0.50		0.08	0.19		0.16
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		219	2295			328	2442		264	636		528
v/s Ratio Prot		0.03	c0.45			c0.08	0.31		0.05	c0.17		c0.14
v/s Ratio Perm												
v/c Ratio		0.53	0.97			0.83	0.63		0.62	0.89		0.91
Uniform Delay, d1		81.6	46.9			79.8	32.9		80.4	70.8		74.7
Progression Factor		1.00	1.00			0.59	1.70		1.00	1.00		1.00
Incremental Delay, d2		2.5	13.6			14.7	1.2		4.3	13.9		18.9
Delay (s)		84.1	60.5			61.5	57.0		84.7	84.7		93.6
Level of Service		F	E			E	E		F	F		F
Approach Delay (s)			61.7				57.7			84.7		
Approach LOS			E				E			F		

Intersection Summary			
HCM 2000 Control Delay	66.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	576	33
Future Volume (vph)	576	33
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.99	
Flt Protected	1.00	
Satd. Flow (prot)	3460	
Flt Permitted	1.00	
Satd. Flow (perm)	3460	
Peak-hour factor, PHF	0.89	0.55
Adj. Flow (vph)	647	60
RTOR Reduction (vph)	4	0
Lane Group Flow (vph)	703	0
Heavy Vehicles (%)	3%	3%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	48.6	
Effective Green, g (s)	48.6	
Actuated g/C Ratio	0.27	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	934	
v/s Ratio Prot	0.20	
v/s Ratio Perm		
v/c Ratio	0.75	
Uniform Delay, d1	60.2	
Progression Factor	1.00	
Incremental Delay, d2	3.5	
Delay (s)	63.7	
Level of Service	E	
Approach Delay (s)	75.8	
Approach LOS	E	

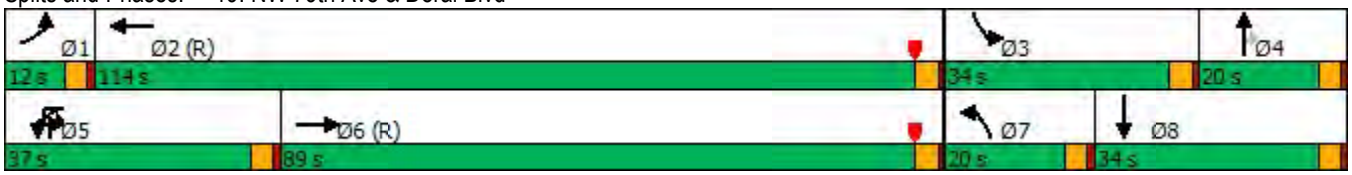
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	92	1862	344	1759	40	132	176	379	331
Future Volume (vph)	92	1862	344	1759	40	132	176	379	331
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6	5	2	7	4	5!	3	8
Permitted Phases							4		
Detector Phase	1	6	5	2	7	4	5	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	11.4	12.0	25.0
Total Split (s)	12.0	89.0	37.0	114.0	20.0	20.0	37.0	34.0	34.0
Total Split (%)	6.7%	49.4%	20.6%	63.3%	11.1%	11.1%	20.6%	18.9%	18.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	8.0	92.0	26.0	110.0	11.1	19.3	49.3	26.7	37.0
Actuated g/C Ratio	0.04	0.51	0.14	0.61	0.06	0.11	0.27	0.15	0.21
v/c Ratio	1.28	0.63	0.79	0.82	0.52	1.02	0.38	0.83	0.66
Control Delay	237.8	37.4	86.6	29.3	98.1	143.8	37.3	89.6	69.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	237.8	37.4	86.6	29.3	98.1	143.8	37.3	89.6	69.7
LOS	F	D	F	C	F	F	D	F	E
Approach Delay		46.7		37.1		94.4			79.1
Approach LOS		D		D		F			E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 38 (21%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 50.1	Intersection LOS: D
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	97	1995	382	2412	55	188	166	412	458
v/c Ratio	1.28	0.63	0.79	0.82	0.52	1.02	0.38	0.83	0.66
Control Delay	237.8	37.4	86.6	29.3	98.1	143.8	37.3	89.6	69.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	237.8	37.4	86.6	29.3	98.1	143.8	37.3	89.6	69.7
Queue Length 50th (ft)	~140	668	228	767	64	~249	111	246	260
Queue Length 95th (ft)	m#214	694	279	824	92	#468	171	306	337
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	76	3165	611	2951	152	184	494	555	697
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.63	0.63	0.82	0.36	1.02	0.34	0.74	0.66

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	92	1862	52	3	344	1759	460	40	132	176	379	331
Future Volume (vph)	92	1862	52	3	344	1759	460	40	132	176	379	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	0.99			1.00	0.97		1.00	0.97	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	6190			3335	4786		1719	1663	1461	3335	3328
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	6190			3335	4786		1719	1663	1461	3335	3328
Peak-hour factor, PHF	0.95	0.97	0.69	0.38	0.92	0.92	0.92	0.73	0.90	0.85	0.92	0.92
Adj. Flow (vph)	97	1920	75	8	374	1912	500	55	147	207	412	360
RTOR Reduction (vph)	0	3	0	0	0	26	0	0	5	41	0	13
Lane Group Flow (vph)	97	1992	0	0	382	2386	0	55	183	125	412	445
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6		5!	5	2		7	4	5!	3	8
Permitted Phases										4		
Actuated Green, G (s)	8.0	91.2			26.0	109.2		9.8	20.1	46.1	26.7	37.0
Effective Green, g (s)	8.0	91.2			26.0	109.2		9.8	20.1	46.1	26.7	37.0
Actuated g/C Ratio	0.04	0.51			0.14	0.61		0.05	0.11	0.26	0.15	0.21
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	76	3136			481	2903		93	185	406	494	684
v/s Ratio Prot	c0.06	0.32			c0.11	c0.50		0.03	c0.11	0.04	c0.12	0.13
v/s Ratio Perm										0.04		
v/c Ratio	1.28	0.64			0.79	0.82		0.59	0.99	0.31	0.83	0.65
Uniform Delay, d1	86.0	32.3			74.4	27.8		83.1	79.8	54.1	74.5	65.6
Progression Factor	1.07	1.14			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	173.1	0.6			8.8	2.8		9.7	61.9	0.4	11.5	2.2
Delay (s)	265.3	37.4			83.2	30.5		92.8	141.7	54.5	86.0	67.8
Level of Service	F	D			F	C		F	F	D	F	E
Approach Delay (s)		48.0				37.7			99.8			76.4
Approach LOS		D				D			F			E

Intersection Summary			
HCM 2000 Control Delay	50.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



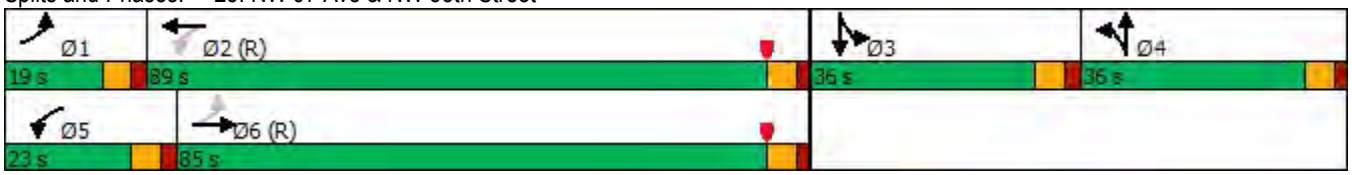
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	83
Future Volume (vph)	83
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.85
Adj. Flow (vph)	98
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

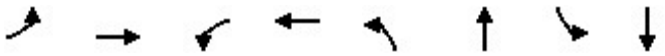
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	22	1169	148	537	122	144	239	239
Future Volume (vph)	22	1169	148	537	122	144	239	239
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	19.0	85.0	23.0	89.0	36.0	36.0	36.0	36.0
Total Split (%)	10.6%	47.2%	12.8%	49.4%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	94.2	87.2	110.6	99.9	21.4	21.4	30.0	30.0
Actuated g/C Ratio	0.52	0.48	0.61	0.56	0.12	0.12	0.17	0.17
v/c Ratio	0.10	0.90	0.83	0.42	0.72	0.72	1.00	0.52
Control Delay	16.8	51.4	78.5	24.3	95.2	53.9	124.6	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.8	51.4	78.5	24.3	95.2	53.9	124.6	71.0
LOS	B	D	E	C	F	D	F	E
Approach Delay		50.6		34.1		65.8		97.3
Approach LOS		D		C		E		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 63 (35%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 56.0	Intersection LOS: E
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street

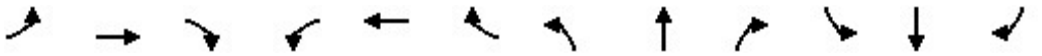




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1495	172	781	149	365	288	300
v/c Ratio	0.10	0.90	0.83	0.42	0.72	0.72	1.00	0.52
Control Delay	16.8	51.4	78.5	24.3	95.2	53.9	124.6	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.8	51.4	78.5	24.3	95.2	53.9	124.6	71.0
Queue Length 50th (ft)	16	863	149	272	172	136	345	170
Queue Length 95th (ft)	25	#1092	#265	366	222	171	#485	219
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	416	1654	220	1869	289	650	289	574
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.90	0.78	0.42	0.52	0.56	1.00	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1169	149	148	537	162	122	144	174	239	239	16
Future Volume (vph)	22	1169	149	148	537	162	122	144	174	239	239	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.92		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3403		1736	3344		1736	3192		1736	3423	
Flt Permitted	0.33	1.00		0.04	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	601	3403		78	3344		1736	3192		1736	3423	
Peak-hour factor, PHF	0.61	0.90	0.76	0.86	0.91	0.85	0.82	0.85	0.89	0.83	0.88	0.57
Adj. Flow (vph)	36	1299	196	172	590	191	149	169	196	288	272	28
RTOR Reduction (vph)	0	6	0	0	14	0	0	126	0	0	4	0
Lane Group Flow (vph)	36	1489	0	172	767	0	149	239	0	288	296	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	93.1	87.2		110.6	98.7		21.4	21.4		30.0	30.0	
Effective Green, g (s)	93.1	87.2		110.6	98.7		21.4	21.4		30.0	30.0	
Actuated g/C Ratio	0.52	0.48		0.61	0.55		0.12	0.12		0.17	0.17	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	1648		208	1833		206	379		289	570	
v/s Ratio Prot	0.00	c0.44		c0.08	0.23		c0.09	0.07		c0.17	0.09	
v/s Ratio Perm	0.05			0.43								
v/c Ratio	0.10	0.90		0.83	0.42		0.72	0.63		1.00	0.52	
Uniform Delay, d1	21.5	42.5		59.0	23.8		76.4	75.5		74.9	68.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	8.5		22.8	0.7		11.8	3.4		51.7	0.8	
Delay (s)	21.7	51.1		81.8	24.5		88.3	78.9		126.6	69.2	
Level of Service	C	D		F	C		F	E		F	E	
Approach Delay (s)		50.4			34.9			81.6			97.3	
Approach LOS		D			C			F			F	

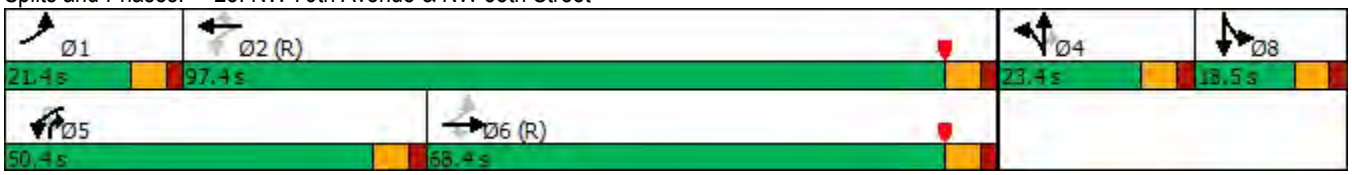
Intersection Summary			
HCM 2000 Control Delay	58.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Future Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6			5	2		4	4	5!	8	8
Permitted Phases	6		6	5!	2		2			4		
Detector Phase	1	6	6	5	5	2	2	4	4	5	8	8
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	5.0	16.0	16.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4	11.4	11.4	24.4	24.4	13.4	13.4	11.4	13.5	13.5
Total Split (s)	21.4	68.4	68.4	50.4	50.4	97.4	97.4	23.4	23.4	50.4	18.5	18.5
Total Split (%)	13.3%	42.6%	42.6%	31.4%	31.4%	60.6%	60.6%	14.6%	14.6%	31.4%	11.5%	11.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	69.1	62.0	62.0		112.4	101.3	101.3	17.0	17.0	61.0	12.0	12.0
Actuated g/C Ratio	0.43	0.39	0.39		0.70	0.63	0.63	0.11	0.11	0.38	0.07	0.07
v/c Ratio	0.28	0.85	0.19		1.11	0.68	0.41	1.31	1.60	0.55	0.88	0.84
Control Delay	18.3	52.6	2.7		115.6	21.9	4.8	227.2	324.4	24.6	129.7	98.0
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	52.6	2.7		115.6	21.9	4.8	227.2	324.4	24.6	129.7	98.0
LOS	B	D	A		F	C	A	F	F	C	F	F
Approach Delay		46.1				41.0			190.9			108.6
Approach LOS		D				D			F			F

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 74 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.60	
Intersection Signal Delay: 73.4	Intersection LOS: E
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	1093	127	578	1429	441	231	332	317	100	200
v/c Ratio	0.28	0.85	0.19	1.11	0.68	0.41	1.31	1.60	0.55	0.88	0.84
Control Delay	18.3	52.6	2.7	115.6	21.9	4.8	227.2	324.4	24.6	129.7	98.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	52.6	2.7	115.6	21.9	4.8	227.2	324.4	24.6	129.7	98.0
Queue Length 50th (ft)	17	550	0	~623	509	45	~311	~466	157	116	110
Queue Length 95th (ft)	22	646	14	#850	523	47	#354	#575	217	#218	#145
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	282	1289	671	520	2107	1065	176	208	580	113	238
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.85	0.19	1.11	0.68	0.41	1.31	1.60	0.55	0.88	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Future Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lane Util. Factor	1.00	0.95	1.00		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90	0.85	1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99
Satd. Flow (prot)	1671	3343	1495		1671	3343	1495	1671	1498	1421	1521	3084
Flt Permitted	0.19	1.00	1.00		0.08	1.00	1.00	0.95	1.00	1.00	0.95	0.99
Satd. Flow (perm)	328	3343	1495		148	3343	1495	1671	1498	1421	1521	3084
Peak-hour factor, PHF	0.62	0.95	0.82	0.44	0.89	0.83	0.73	0.72	0.80	0.85	0.83	0.79
Adj. Flow (vph)	55	1093	127	16	562	1429	441	231	102	546	159	111
RTOR Reduction (vph)	0	0	78	0	0	0	126	0	50	42	0	8
Lane Group Flow (vph)	55	1093	49	0	578	1429	315	231	282	275	100	192
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6			5	2		4	4	5!	8	8
Permitted Phases	6		6	5!	2		2			4		
Actuated Green, G (s)	68.0	62.0	62.0		112.4	100.0	100.0	17.0	17.0	61.0	12.0	12.0
Effective Green, g (s)	68.0	62.0	62.0		112.4	100.0	100.0	17.0	17.0	61.0	12.0	12.0
Actuated g/C Ratio	0.42	0.39	0.39		0.70	0.62	0.62	0.11	0.11	0.38	0.07	0.07
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	188	1289	576		520	2080	930	176	158	539	113	230
v/s Ratio Prot	0.01	0.33			c0.30	0.43		0.14	c0.19	0.14	c0.07	0.06
v/s Ratio Perm	0.11		0.03		c0.47		0.21			0.05		
v/c Ratio	0.29	0.85	0.09		1.11	0.69	0.34	1.31	1.78	0.51	0.88	0.83
Uniform Delay, d1	27.6	45.0	31.3		48.5	20.0	14.5	71.8	71.8	38.4	73.7	73.4
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	7.1	0.3		73.7	1.9	1.0	175.1	377.2	0.8	50.2	22.0
Delay (s)	28.5	52.1	31.6		122.2	21.9	15.5	247.0	449.0	39.2	123.9	95.4
Level of Service	C	D	C		F	C	B	F	F	D	F	F
Approach Delay (s)		49.0				44.4			248.4			104.9
Approach LOS		D				D			F			F

Intersection Summary			
HCM 2000 Control Delay	85.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	160.7	Sum of lost time (s)	25.7
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	30
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	8%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	198	971	104	596	200	686	112	656	116
Future Volume (vph)	198	971	104	596	200	686	112	656	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	17.4	81.4	17.4	81.4	20.4	42.4	20.4	42.4	42.4
Total Split (%)	10.8%	50.4%	10.8%	50.4%	12.6%	26.2%	12.6%	26.2%	26.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	86.5	75.5	85.5	75.0	50.6	36.6	49.4	36.0	36.0
Actuated g/C Ratio	0.54	0.47	0.53	0.46	0.31	0.23	0.31	0.22	0.22
v/c Ratio	0.60	0.94	0.80	0.46	1.11	1.13	0.81	1.01	0.31
Control Delay	25.3	51.8	70.3	30.1	140.0	129.8	70.8	96.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	51.8	70.3	30.1	140.0	129.8	70.8	96.0	9.2
LOS	C	D	E	C	F	F	E	F	A
Approach Delay		48.4		36.0		131.8		81.1	
Approach LOS		D		D		F		F	

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 25 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 73.0	Intersection LOS: E
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street



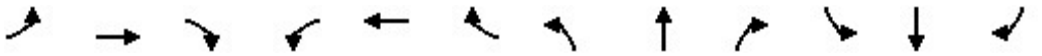


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	1468	125	723	215	871	151	772	138
v/c Ratio	0.60	0.94	0.80	0.46	1.11	1.13	0.81	1.01	0.31
Control Delay	25.3	51.8	70.3	30.1	140.0	129.8	70.8	96.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	51.8	70.3	30.1	140.0	129.8	70.8	96.0	9.2
Queue Length 50th (ft)	108	752	81	265	~211	~562	114	~440	0
Queue Length 95th (ft)	157	#920	#159	323	#391	#701	144	#526	47
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	362	1564	161	1573	193	768	193	765	449
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.94	0.78	0.46	1.11	1.13	0.78	1.01	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



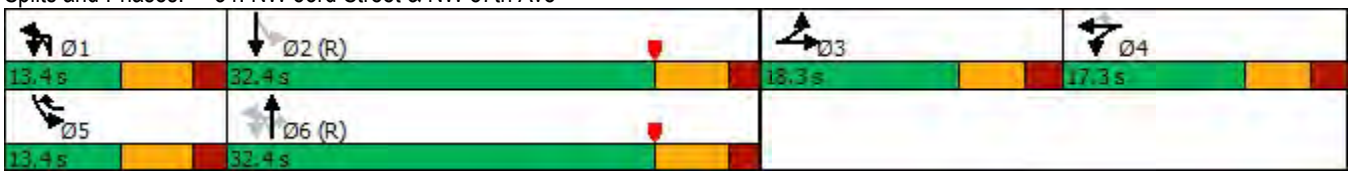
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	971	348	104	596	76	200	686	133	112	656	116
Future Volume (vph)	198	971	348	104	596	76	200	686	133	112	656	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3289		1719	3375		1719	3350		1719	3438	1538
Flt Permitted	0.29	1.00		0.05	1.00		0.11	1.00		0.11	1.00	1.00
Satd. Flow (perm)	526	3289		97	3375		198	3350		201	3438	1538
Peak-hour factor, PHF	0.92	0.93	0.82	0.83	0.94	0.85	0.93	0.95	0.89	0.74	0.85	0.84
Adj. Flow (vph)	215	1044	424	125	634	89	215	722	149	151	772	138
RTOR Reduction (vph)	0	27	0	0	7	0	0	11	0	0	0	107
Lane Group Flow (vph)	215	1441	0	125	716	0	215	860	0	151	772	31
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	86.5	75.5		85.5	75.0		50.6	36.6		49.4	36.0	36.0
Effective Green, g (s)	86.5	75.5		85.5	75.0		50.6	36.6		49.4	36.0	36.0
Actuated g/C Ratio	0.54	0.47		0.53	0.46		0.31	0.23		0.31	0.22	0.22
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	362	1536		156	1566		193	758		187	765	342
v/s Ratio Prot	0.04	c0.44		c0.05	0.21		c0.10	c0.26		0.07	0.22	
v/s Ratio Perm	0.28			0.37			0.25			0.18		0.02
v/c Ratio	0.59	0.94		0.80	0.46		1.11	1.13		0.81	1.01	0.09
Uniform Delay, d1	21.3	40.8		42.4	29.5		46.5	62.5		46.2	62.8	49.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	12.3		24.8	1.0		98.7	76.5		21.9	34.8	0.1
Delay (s)	23.9	53.1		67.2	30.4		145.2	139.0		68.1	97.6	49.9
Level of Service	C	D		E	C		F	F		E	F	D
Approach Delay (s)		49.4			35.8			140.2			87.2	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	76.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	161.6	Sum of lost time (s)	25.6
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	2	129	2	43	51	14	1025	152	110	914
Future Volume (vph)	7	2	129	2	43	51	14	1025	152	110	914
Turn Type	Split	NA	Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3	4	4	5	1	1	6		5	2
Permitted Phases					4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	18.3	18.3	17.3	17.3	13.4	13.4	13.4	32.4	32.4	13.4	32.4
Total Split (%)	22.5%	22.5%	21.3%	21.3%	16.5%	16.5%	16.5%	39.8%	39.8%	16.5%	39.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.3	7.3	9.9	9.9	21.7		45.8	38.7	38.7	49.0	43.3
Actuated g/C Ratio	0.09	0.09	0.12	0.12	0.27		0.56	0.48	0.48	0.60	0.53
v/c Ratio	0.08	0.21	0.45	0.45	0.12		0.29	0.67	0.23	0.51	0.58
Control Delay	35.0	17.6	39.8	39.7	0.5		12.6	24.3	4.2	17.3	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	17.6	39.8	39.7	0.5		12.6	24.3	4.2	17.3	21.3
LOS	C	B	D	D	A		B	C	A	B	C
Approach Delay		21.9		29.7				20.7			20.8
Approach LOS		C		C				C			C

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 38 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 21.5	Intersection LOS: C
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 53rd Street & NW 87th Ave





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	36	89	89	61	94	1090	195	151	1055
v/c Ratio	0.08	0.21	0.45	0.45	0.12	0.29	0.67	0.23	0.51	0.58
Control Delay	35.0	17.6	39.8	39.7	0.5	12.6	24.3	4.2	17.3	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	17.6	39.8	39.7	0.5	12.6	24.3	4.2	17.3	21.3
Queue Length 50th (ft)	6	2	45	45	0	21	245	1	34	242
Queue Length 95th (ft)	14	9	70	46	0	32	#426	22	59	#393
Internal Link Dist (ft)		93		992			2118			2105
Turn Bay Length (ft)			175		175	180		190	125	
Base Capacity (vph)	253	258	231	232	509	329	1633	843	302	1827
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.14	0.39	0.38	0.12	0.29	0.67	0.23	0.50	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	2	15	129	2	43	51	14	1025	152	110	914
Future Volume (vph)	7	2	15	129	2	43	51	14	1025	152	110	914
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.87		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1568		1633	1641	1538		1782	3438	1538	1719	3430
Flt Permitted	0.95	1.00		0.95	0.95	1.00		0.18	1.00	1.00	0.14	1.00
Satd. Flow (perm)	1719	1568		1633	1641	1538		344	3438	1538	250	3430
Peak-hour factor, PHF	0.58	0.50	0.47	0.74	0.50	0.70	0.73	0.58	0.94	0.78	0.73	0.88
Adj. Flow (vph)	12	4	32	174	4	61	70	24	1090	195	151	1039
RTOR Reduction (vph)	0	30	0	0	0	49	0	0	0	111	0	1
Lane Group Flow (vph)	12	6	0	89	89	12	0	94	1090	84	151	1054
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	0%	5%	5%	5%	5%	5%
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	4	5	1	1	6		5	2
Permitted Phases						4	6	6		6	2	
Actuated Green, G (s)	4.5	4.5		8.5	8.5	16.6		40.9	34.9	34.9	45.1	37.0
Effective Green, g (s)	4.5	4.5		8.5	8.5	16.6		40.9	34.9	34.9	45.1	37.0
Actuated g/C Ratio	0.06	0.06		0.10	0.10	0.20		0.50	0.43	0.43	0.55	0.45
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	95	86		170	171	313		278	1474	659	284	1559
v/s Ratio Prot	c0.01	0.00		c0.05	0.05	0.00		0.02	c0.32		c0.05	0.31
v/s Ratio Perm						0.00		0.14		0.05	0.24	
v/c Ratio	0.13	0.07		0.52	0.52	0.04		0.34	0.74	0.13	0.53	0.68
Uniform Delay, d1	36.6	36.5		34.5	34.5	26.0		11.6	19.4	14.0	11.6	17.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.10	1.02	1.33	1.00	1.00
Incremental Delay, d2	0.6	0.3		2.9	2.8	0.1		0.7	3.4	0.4	1.9	2.4
Delay (s)	37.2	36.8		37.4	37.4	26.1		13.5	23.1	19.0	13.5	19.9
Level of Service	D	D		D	D	C		B	C	B	B	B
Approach Delay (s)		36.9			34.5				21.9			19.1
Approach LOS		D			C				C			B

Intersection Summary			
HCM 2000 Control Delay	22.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	11
Future Volume (vph)	11
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.69
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	28	2404	26	5	15	1647	70	0	0	16	0	0
Future Volume (Veh/h)	28	2404	26	5	15	1647	70	0	0	16	0	0
Sign Control		Free				Free			Stop			Stop
Grade		0%				0%			0%			0%
Peak Hour Factor	0.75	0.94	0.69	0.42	0.94	0.94	0.62	0.25	0.25	0.50	0.25	0.25
Hourly flow rate (vph)	37	2557	38	0	16	1752	113	0	0	32	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)		403				458						
pX, platoon unblocked	0.75			0.00	0.75			0.87	0.87	0.75	0.87	0.87
vC, conflicting volume	1865			0	2595			3299	4547	871	2799	4510
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1007			0	1958			1221	2652	0	648	2609
tC, single (s)	4.2			0.0	4.1			7.5	6.5	7.0	7.5	6.5
tC, 2 stage (s)												
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	93			0	93			100	100	96	100	100
cM capacity (veh/h)	511			0	226			103	18	810	269	19

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	37	1023	1023	549	16	701	701	463	32	33
Volume Left	37	0	0	0	16	0	0	0	0	0
Volume Right	0	0	0	38	0	0	0	113	32	33
cSH	511	1700	1700	1700	226	1700	1700	1700	810	815
Volume to Capacity	0.07	0.60	0.60	0.32	0.07	0.41	0.41	0.27	0.04	0.04
Queue Length 95th (ft)	6	0	0	0	6	0	0	0	3	3
Control Delay (s)	12.6	0.0	0.0	0.0	22.1	0.0	0.0	0.0	9.6	9.6
Lane LOS	B				C				A	A
Approach Delay (s)	0.2				0.2				9.6	9.6
Approach LOS									A	A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	57.0%	ICU Level of Service		B
Analysis Period (min)	15			



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	27
Future Volume (Veh/h)	27
Sign Control	
Grade	
Peak Hour Factor	0.81
Hourly flow rate (vph)	33
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	0.75
vC, conflicting volume	640
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	0
tC, single (s)	7.0
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	96
cM capacity (veh/h)	815
Direction, Lane #	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	14	1148	25	0	1118
Future Volume (Veh/h)	0	14	1148	25	0	1118
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.88	0.91	0.75	0.25	0.95
Hourly flow rate (vph)	0	16	1262	33	0	1177
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.82	0.82			0.82	
vC, conflicting volume	1671	648			1295	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1371	117			910	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	114	751			617	

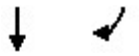
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	16	841	454	0	392	392	392
Volume Left	0	0	0	0	0	0	0
Volume Right	16	0	33	0	0	0	0
cSH	751	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.49	0.27	0.00	0.23	0.23	0.23
Queue Length 95th (ft)	2	0	0	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.9	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	2375	3	3	3	1660	4	0	0	13	0
Future Volume (Veh/h)	1	0	2375	3	3	3	1660	4	0	0	13	0
Sign Control			Free				Free			Stop		
Grade			0%				0%			0%		
Peak Hour Factor	0.25	0.92	0.98	0.75	0.75	0.38	0.92	0.92	0.25	0.92	0.54	0.92
Hourly flow rate (vph)	0	0	2423	4	0	8	1804	4	0	0	24	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type			None				None					
Median storage veh)												
Upstream signal (ft)							1196					
pX, platoon unblocked	0.00	0.85			0.00				0.85	0.85		0.85
vC, conflicting volume	0	1808			0	2427			3050	4249	810	2654
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1319			0	2427			2787	4203	810	2319
tC, single (s)	0.0	4.1			0.0	4.1			7.5	6.5	7.2	7.5
tC, 2 stage (s)												
tF (s)	0.0	2.2			0.0	2.2			3.5	4.0	3.4	3.5
p0 queue free %	0	100			0	96			100	100	92	100
cM capacity (veh/h)	0	440			0	198			7	2	297	15

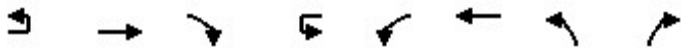
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1
Volume Total	969	969	489	8	722	722	365	8	16	8
Volume Left	0	0	0	8	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	4	8	16	8
cSH	1700	1700	1700	198	1700	1700	1700	297	297	918
Volume to Capacity	0.57	0.57	0.29	0.04	0.42	0.42	0.21	0.03	0.05	0.01
Queue Length 95th (ft)	0	0	0	3	0	0	0	2	4	1
Control Delay (s)	0.0	0.0	0.0	24.0	0.0	0.0	0.0	17.5	17.8	9.0
Lane LOS				C				C	C	A
Approach Delay (s)	0.0			0.1				17.7		9.0
Approach LOS								C		A

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	56.6%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	7
Future Volume (Veh/h)	0	7
Sign Control	Stop	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	0	8
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type		
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked	0.85	0.85
vC, conflicting volume	4249	603
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol	4203	0
tC, single (s)	6.5	6.9
tC, 2 stage (s)		
tF (s)	4.0	3.3
p0 queue free %	100	99
cM capacity (veh/h)	2	918

Direction, Lane #



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	2387	2	40	6	1696	0	25
Future Volume (Veh/h)	1	2387	2	40	6	1696	0	25
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.98	0.50	0.92	0.50	0.95	0.25	0.75
Hourly flow rate (vph)	0	2436	4	0	12	1785	0	33
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.84		0.84	0.84
vC, conflicting volume	0			0	2440		3057	814
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	2039		2776	96
tC, single (s)	0.0			0.0	4.1		6.8	8.1
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.9
p0 queue free %	0			0	95		100	95
cM capacity (veh/h)	0			0	235		12	659

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	974	974	491	12	595	595	595	33
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	4	0	0	0	0	33
cSH	1700	1700	1700	235	1700	1700	1700	659
Volume to Capacity	0.57	0.57	0.29	0.05	0.35	0.35	0.35	0.05
Queue Length 95th (ft)	0	0	0	4	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	21.1	0.0	0.0	0.0	10.7
Lane LOS				C				B
Approach Delay (s)	0.0			0.1				10.7
Approach LOS								B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	43	23	18	1096	8	56	8	977
Future Volume (Veh/h)	43	23	18	1096	8	56	8	977
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.58	0.92	0.25	0.91	0.50	0.25	0.50	0.93
Hourly flow rate (vph)	74	25	0	1204	16	0	16	1051
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				702				
pX, platoon unblocked	0.82	0.82	0.00			0.00	0.82	
vC, conflicting volume	1770	610	0			0	1220	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1494	74	0			0	821	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	15	97	0			0	97	
cM capacity (veh/h)	87	784	0			0	636	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	74	25	803	417	16	526	526
Volume Left	74	0	0	0	16	0	0
Volume Right	0	25	0	16	0	0	0
cSH	87	784	1700	1700	636	1700	1700
Volume to Capacity	0.85	0.03	0.47	0.25	0.03	0.31	0.31
Queue Length 95th (ft)	113	2	0	0	2	0	0
Control Delay (s)	142.0	9.7	0.0	0.0	10.8	0.0	0.0
Lane LOS	F	A			B		
Approach Delay (s)	108.6		0.0		0.2		
Approach LOS	F						

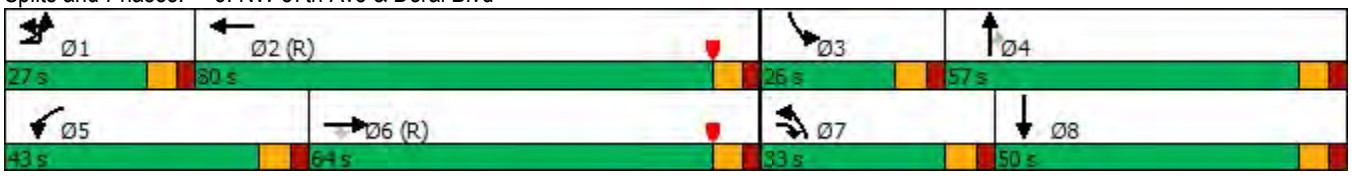
Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

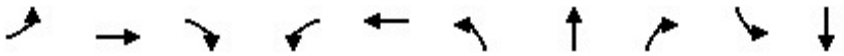
2027 PM Traffic With Project
Trips Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	288	932	316	394	1359	449	897	413	119	924
Future Volume (vph)	288	932	316	394	1359	449	897	413	119	924
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	1	6	7	5	2	7	4		3	8
Permitted Phases			6					4		
Detector Phase	1	6	7	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1
Total Split (s)	27.0	64.0	33.0	43.0	80.0	33.0	57.0	57.0	26.0	50.0
Total Split (%)	14.2%	33.7%	17.4%	22.6%	42.1%	17.4%	30.0%	30.0%	13.7%	26.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max
Act Effct Green (s)	20.0	62.3	95.2	30.7	73.0	25.9	56.0	56.0	12.8	42.9
Actuated g/C Ratio	0.11	0.33	0.50	0.16	0.38	0.14	0.29	0.29	0.07	0.23
v/c Ratio	0.96	0.61	0.44	0.84	0.87	1.11	0.99	0.74	0.59	1.16
Control Delay	113.6	52.4	29.0	65.6	52.2	147.6	90.1	36.1	93.7	155.3
Queue Delay	43.8	0.0	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0
Total Delay	157.5	52.4	29.0	65.6	52.2	147.6	108.6	36.1	93.7	155.3
LOS	F	D	C	E	D	F	F	D	F	F
Approach Delay		68.3			55.1		101.5			149.5
Approach LOS		E			E		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 171 (90%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 89.6	Intersection LOS: F
Intersection Capacity Utilization 98.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	341	1002	367	464	1665	516	1019	475	134	1304
v/c Ratio	0.96	0.61	0.44	0.84	0.87	1.11	0.99	0.74	0.59	1.16
Control Delay	113.6	52.4	29.0	65.6	52.2	147.6	90.1	36.1	93.7	155.3
Queue Delay	43.8	0.0	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0
Total Delay	157.5	52.4	29.0	65.6	52.2	147.6	108.6	36.1	93.7	155.3
Queue Length 50th (ft)	223	389	254	268	781	~378	672	272	88	~676
Queue Length 95th (ft)	#311	459	339	302	834	#478	#835	404	m120	m#778
Internal Link Dist (ft)		378			2485		2143			310
Turn Bay Length (ft)	170		170	330		400			190	
Base Capacity (vph)	357	1650	837	644	1909	463	1032	638	338	1125
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	87	0	0	0	0	0	62	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.61	0.44	0.72	0.87	1.11	1.05	0.74	0.40	1.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	288	932	316	394	1359	188	449	897	413	119	924
Future Volume (vph)	5	288	932	316	394	1359	188	449	897	413	119	924
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3400	5036	1568	3400	4943		3400	3505	1568	3400	4862
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3400	5036	1568	3400	4943		3400	3505	1568	3400	4862
Peak-hour factor, PHF	0.50	0.87	0.93	0.86	0.85	0.93	0.92	0.87	0.88	0.87	0.89	0.92
Adj. Flow (vph)	10	331	1002	367	464	1461	204	516	1019	475	134	1004
RTOR Reduction (vph)	0	0	0	56	0	9	0	0	0	176	0	29
Lane Group Flow (vph)	0	341	1002	311	464	1656	0	516	1019	299	134	1275
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		20.0	62.3	88.2	30.7	73.0		25.9	56.0	56.0	12.8	42.9
Effective Green, g (s)		20.0	62.3	88.2	30.7	73.0		25.9	56.0	56.0	12.8	42.9
Actuated g/C Ratio		0.11	0.33	0.46	0.16	0.38		0.14	0.29	0.29	0.07	0.23
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		357	1651	727	549	1899		463	1033	462	229	1097
v/s Ratio Prot		0.10	0.20	0.06	c0.14	c0.33		c0.15	c0.29		0.04	c0.26
v/s Ratio Perm				0.14						0.19		
v/c Ratio		0.96	0.61	0.43	0.85	0.87		1.11	0.99	0.65	0.59	1.16
Uniform Delay, d1		84.6	53.6	34.0	77.3	54.2		82.0	66.6	58.4	86.0	73.5
Progression Factor		0.93	0.93	1.26	0.73	0.90		1.00	1.00	1.00	0.99	1.28
Incremental Delay, d2		34.9	1.6	0.4	6.9	3.5		76.9	24.9	6.8	3.3	82.2
Delay (s)		113.4	51.6	43.3	63.8	52.3		158.9	91.6	65.2	88.4	176.4
Level of Service		F	D	D	E	D		F	F	E	F	F
Approach Delay (s)			62.2			54.8			102.6			168.2
Approach LOS			E			D			F			F

Intersection Summary			
HCM 2000 Control Delay	92.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	267
Future Volume (vph)	267
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	300
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SEL	SER
Lane Configurations									
Traffic Volume (vph)	208	107	8	91	1083	49	990	0	71
Future Volume (vph)	208	107	8	91	1083	49	990	0	71
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Prot	Perm
Protected Phases	7	5	1	1	6	5	2	8	
Permitted Phases		7	6	6		2			8
Detector Phase	7	5	1	1	6	5	2	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.3	24.3
Total Split (s)	27.0	17.0	17.0	17.0	106.0	17.0	106.0	40.0	40.0
Total Split (%)	14.2%	8.9%	8.9%	8.9%	55.8%	8.9%	55.8%	21.1%	21.1%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	None	None
Act Effct Green (s)	20.7	28.6		135.1	124.9	130.7	122.6	11.0	11.0
Actuated g/C Ratio	0.11	0.15		0.71	0.66	0.69	0.65	0.06	0.06
v/c Ratio	1.04	0.40		0.47	0.60	0.33	0.56	0.51	0.60
Control Delay	117.2	12.6		7.9	16.8	11.2	18.9	103.6	24.1
Queue Delay	0.0	0.0		0.0	37.8	0.0	0.0	0.0	0.0
Total Delay	117.2	12.6		7.9	54.6	11.2	18.9	103.6	24.1
LOS	F	B		A	D	B	B	F	C
Approach Delay	83.8				50.3		18.5	47.9	
Approach LOS	F				D		B	D	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 168 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 41.8	Intersection LOS: D
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SEL	SER
Lane Group Flow (vph)	282	132	138	1356	82	1248	52	122
v/c Ratio	1.04	0.40	0.47	0.60	0.33	0.56	0.51	0.60
Control Delay	117.2	12.6	7.9	16.8	11.2	18.9	103.6	24.1
Queue Delay	0.0	0.0	0.0	37.8	0.0	0.0	0.0	0.0
Total Delay	117.2	12.6	7.9	54.6	11.2	18.9	103.6	24.1
Queue Length 50th (ft)	~269	8	10	684	25	397	64	0
Queue Length 95th (ft)	#363	30	m11	m863	30	462	31	0
Internal Link Dist (ft)	2087			188		702	377	
Turn Bay Length (ft)			120		185			
Base Capacity (vph)	271	347	302	2262	270	2245	310	378
Starvation Cap Reductn	0	0	0	998	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.38	0.46	1.07	0.30	0.56	0.17	0.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	208	3	107	8	91	1083	125	49	990	46	39	0
Future Volume (vph)	208	3	107	8	91	1083	125	49	990	46	39	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95			1.00
Frt	0.99		0.85		1.00	0.98		1.00	0.99			1.00
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00			0.95
Satd. Flow (prot)	1745		1490		1757	3435		1752	3476			1752
Flt Permitted	0.96		1.00		0.16	1.00		0.14	1.00			0.95
Satd. Flow (perm)	1745		1490		299	3435		267	3476			1752
Peak-hour factor, PHF	0.79	0.75	0.73	0.67	0.72	0.92	0.70	0.60	0.84	0.67	0.75	0.25
Adj. Flow (vph)	263	4	147	12	126	1177	179	82	1179	69	52	0
RTOR Reduction (vph)	82	0	104	0	0	4	0	0	2	0	0	0
Lane Group Flow (vph)	200	0	28	0	138	1352	0	82	1246	0	0	52
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA		Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2			8	
Actuated Green, G (s)	20.7		28.7		135.2	124.9		130.6	122.6			11.0
Effective Green, g (s)	20.7		28.7		135.2	124.9		130.6	122.6			11.0
Actuated g/C Ratio	0.11		0.15		0.71	0.66		0.69	0.65			0.06
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4			6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)	190		225		291	2258		246	2242			101
v/s Ratio Prot	c0.11		0.01		c0.03	c0.39		0.01	0.36			
v/s Ratio Perm			0.01		0.31			0.21				0.03
v/c Ratio	1.05		0.12		0.47	0.60		0.33	0.56			0.51
Uniform Delay, d1	84.7		69.8		13.3	18.4		13.7	18.6			86.9
Progression Factor	1.00		1.00		0.75	0.87		0.96	0.93			1.00
Incremental Delay, d2	79.9		0.2		0.5	0.4		0.8	1.0			4.4
Delay (s)	164.6		70.0		10.4	16.4		13.9	18.3			91.3
Level of Service	F		E		B	B		B	B			F
Approach Delay (s)	134.4					15.9			18.0			86.9
Approach LOS	F					B			B			F

Intersection Summary			
HCM 2000 Control Delay	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



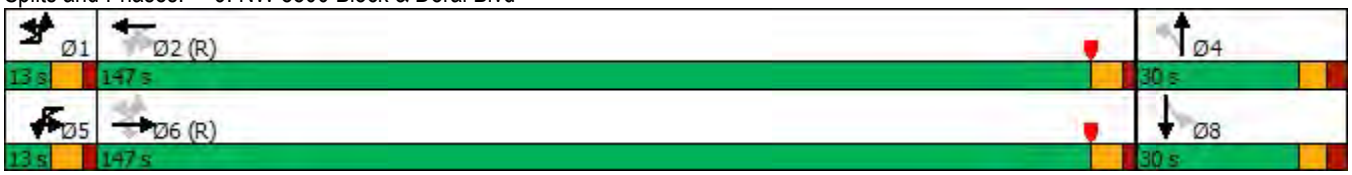
Movement	SER
Lane Configurations	
Traffic Volume (vph)	71
Future Volume (vph)	71
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	122
RTOR Reduction (vph)	115
Lane Group Flow (vph)	7
Heavy Vehicles (%)	3%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	11.0
Effective Green, g (s)	11.0
Actuated g/C Ratio	0.06
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	90
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.08
Uniform Delay, d1	84.7
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	85.1
Level of Service	F
Approach Delay (s)	
Approach LOS	

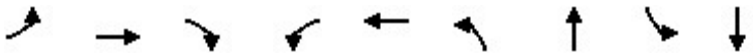
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	28	34	1342	50	32	68	1870	42	3	55	3
Future Volume (vph)	28	34	1342	50	32	68	1870	42	3	55	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2		4		8
Permitted Phases	6	6		6	2	2		4		8	
Detector Phase	1	1	6	6	5	5	2	4	4	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	13.0	13.0	147.0	147.0	13.0	13.0	147.0	30.0	30.0	30.0	30.0
Total Split (%)	6.8%	6.8%	77.4%	77.4%	6.8%	6.8%	77.4%	15.8%	15.8%	15.8%	15.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	None	None	Max	Max
Act Effct Green (s)		147.2	140.6	140.6		147.2	140.6	23.0	23.0	23.0	23.0
Actuated g/C Ratio		0.77	0.74	0.74		0.77	0.74	0.12	0.12	0.12	0.12
v/c Ratio		0.65	0.37	0.05		0.45	0.57	0.33	0.40	0.53	0.29
Control Delay		33.5	8.9	1.3		9.1	16.8	82.8	20.2	94.8	34.8
Queue Delay		0.0	0.0	0.0		0.0	0.7	0.0	0.0	0.0	0.0
Total Delay		33.5	8.9	1.3		9.1	17.5	82.8	20.2	94.8	34.8
LOS		C	A	A		A	B	F	C	F	C
Approach Delay			10.1				17.0		40.2		64.6
Approach LOS			B				B		D		E

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 158 (83%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 67.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

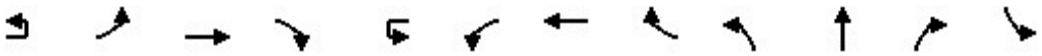




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	96	1398	61	129	2154	53	113	67	68
v/c Ratio	0.65	0.37	0.05	0.45	0.57	0.33	0.40	0.53	0.29
Control Delay	33.5	8.9	1.3	9.1	16.8	82.8	20.2	94.8	34.8
Queue Delay	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Total Delay	33.5	8.9	1.3	9.1	17.5	82.8	20.2	94.8	34.8
Queue Length 50th (ft)	20	211	0	38	505	62	14	80	27
Queue Length 95th (ft)	33	231	10	m51	m552	99	0	128	4
Internal Link Dist (ft)		1116			323		94		231
Turn Bay Length (ft)	200		190	190					
Base Capacity (vph)	148	3762	1187	289	3750	160	284	126	234
Starvation Cap Reductn	0	0	0	0	1111	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.37	0.05	0.45	0.82	0.33	0.40	0.53	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	28	34	1342	50	32	68	1870	53	42	3	69	55
Future Volume (vph)	28	34	1342	50	32	68	1870	53	42	3	69	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91		1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00		1.00	0.87		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		1787	5085	1583		1783	5067		1770	1613		1770
Flt Permitted		0.06	1.00	1.00		0.16	1.00		0.71	1.00		0.56
Satd. Flow (perm)		116	5085	1583		307	5067		1328	1613		1043
Peak-hour factor, PHF	0.58	0.71	0.96	0.82	0.67	0.84	0.89	1.00	0.79	0.25	0.68	0.82
Adj. Flow (vph)	48	48	1398	61	48	81	2101	53	53	12	101	67
RTOR Reduction (vph)	0	0	0	16	0	0	1	0	0	89	0	0
Lane Group Flow (vph)	0	96	1398	45	0	129	2153	0	53	24	0	67
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2			4			8
Actuated Green, G (s)		147.2	140.6	140.6		147.2	140.6		23.0	23.0		23.0
Effective Green, g (s)		147.2	140.6	140.6		147.2	140.6		23.0	23.0		23.0
Actuated g/C Ratio		0.77	0.74	0.74		0.77	0.74		0.12	0.12		0.12
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4		7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		147	3762	1171		289	3749		160	195		126
v/s Ratio Prot		c0.02	0.27			0.02	0.42			0.02		
v/s Ratio Perm		c0.48		0.03		0.33			0.04			c0.06
v/c Ratio		0.65	0.37	0.04		0.45	0.57		0.33	0.12		0.53
Uniform Delay, d1		12.6	8.9	6.6		5.9	11.2		76.5	74.5		78.4
Progression Factor		1.02	0.97	0.91		1.64	1.47		1.00	1.00		1.00
Incremental Delay, d2		10.0	0.3	0.1		0.6	0.3		1.2	0.3		15.1
Delay (s)		22.8	8.9	6.0		10.3	16.7		77.7	74.8		93.6
Level of Service		C	A	A		B	B		E	E		F
Approach Delay (s)			9.6				16.4			75.7		
Approach LOS			A				B			E		

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



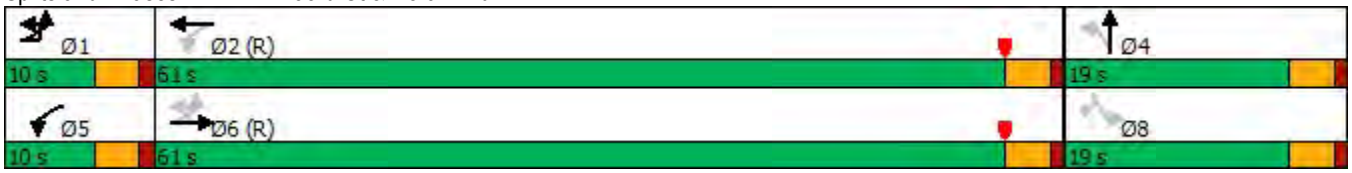
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	34
Future Volume (vph)	3	34
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1616	
Flt Permitted	1.00	
Satd. Flow (perm)	1616	
Peak-hour factor, PHF	0.38	0.57
Adj. Flow (vph)	8	60
RTOR Reduction (vph)	39	0
Lane Group Flow (vph)	29	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	23.0	
Effective Green, g (s)	23.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	195	
v/s Ratio Prot	0.02	
v/s Ratio Perm		
v/c Ratio	0.15	
Uniform Delay, d1	74.8	
Progression Factor	1.00	
Incremental Delay, d2	1.6	
Delay (s)	76.4	
Level of Service	E	
Approach Delay (s)	84.9	
Approach LOS	F	

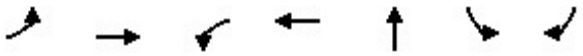
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	10	37	1491	15	1847	1	24	28
Future Volume (vph)	10	37	1491	15	1847	1	24	28
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	24.4	9.0	24.4	9.0	9.0	9.0
Total Split (s)	10.0	10.0	61.0	10.0	61.0	19.0	19.0	19.0
Total Split (%)	11.1%	11.1%	67.8%	11.1%	67.8%	21.1%	21.1%	21.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		67.6	65.2	65.8	61.2	12.8	12.8	12.8
Actuated g/C Ratio		0.75	0.72	0.73	0.68	0.14	0.14	0.14
v/c Ratio		0.32	0.42	0.09	0.57	0.68	0.13	0.14
Control Delay		14.2	5.4	3.7	9.2	49.4	34.0	5.6
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.2	5.4	3.7	9.2	49.4	34.0	5.6
LOS		B	A	A	A	D	C	A
Approach Delay			5.7		9.1	49.4		
Approach LOS			A		A	D		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 6 (7%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 9.7	Intersection LOS: A
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	1561	25	1980	173	29	40
v/c Ratio	0.32	0.42	0.09	0.57	0.68	0.13	0.14
Control Delay	14.2	5.4	3.7	9.2	49.4	34.0	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.2	5.4	3.7	9.2	49.4	34.0	5.6
Queue Length 50th (ft)	13	164	3	215	91	14	0
Queue Length 95th (ft)	m33	193	6	266	37	35	6
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	206	3682	286	3448	297	256	314
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.42	0.09	0.57	0.58	0.11	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	37	1491	5	15	1847	26	85	1	10	24	0
Future Volume (vph)	10	37	1491	5	15	1847	26	85	1	10	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.99		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.96		0.95	
Satd. Flow (prot)		1776	5081		1770	5071			1765		1770	
Flt Permitted		0.07	1.00		0.14	1.00			0.96		0.83	
Satd. Flow (perm)		128	5081		254	5071			1765		1540	
Peak-hour factor, PHF	0.83	0.69	0.96	0.62	0.60	0.95	0.72	0.54	0.25	0.83	0.82	0.25
Adj. Flow (vph)	12	54	1553	8	25	1944	36	157	4	12	29	0
RTOR Reduction (vph)	0	0	1	0	0	2	0	0	3	0	0	0
Lane Group Flow (vph)	0	66	1560	0	25	1978	0	0	170	0	29	0
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		67.6	62.8		62.8	60.4			12.8		12.8	
Effective Green, g (s)		67.6	62.8		62.8	60.4			12.8		12.8	
Actuated g/C Ratio		0.75	0.70		0.70	0.67			0.14		0.14	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		184	3545		217	3403			251		219	
v/s Ratio Prot		c0.02	0.31		0.00	c0.39						
v/s Ratio Perm		0.25			0.08				0.10		0.02	
v/c Ratio		0.36	0.44		0.12	0.58			0.68		0.13	
Uniform Delay, d1		5.8	5.9		4.4	8.0			36.6		33.7	
Progression Factor		3.68	0.91		1.00	1.00			1.00		1.00	
Incremental Delay, d2		0.7	0.2		0.2	0.7			7.0		0.3	
Delay (s)		22.3	5.6		4.6	8.7			43.6		34.0	
Level of Service		C	A		A	A			D		C	
Approach Delay (s)			6.3			8.7			43.6			33.6
Approach LOS			A			A			D			C

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



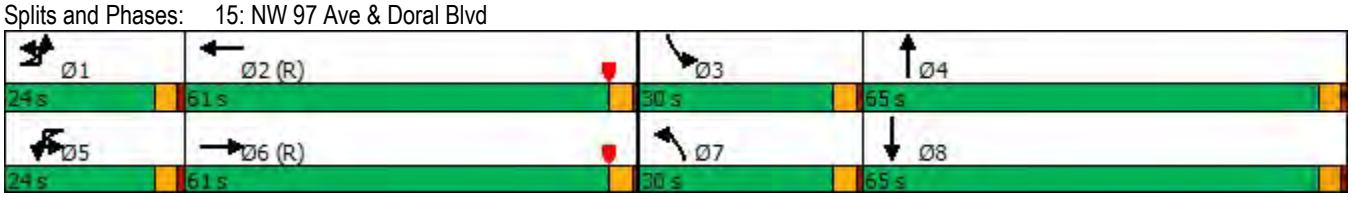
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.70
Adj. Flow (vph)	40
RTOR Reduction (vph)	34
Lane Group Flow (vph)	6
Heavy Vehicles (%)	2%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	12.8
Effective Green, g (s)	12.8
Actuated g/C Ratio	0.14
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	225
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	33.2
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	33.3
Level of Service	C
Approach Delay (s)	
Approach LOS	

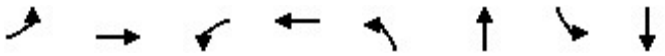
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	114	1076	199	1568	271	635	330	635
Future Volume (vph)	114	1076	199	1568	271	635	330	635
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	24.0	61.0	24.0	61.0	30.0	65.0	30.0	65.0
Total Split (%)	13.3%	33.9%	13.3%	33.9%	16.7%	36.1%	16.7%	36.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	12.4	65.6	17.6	70.8	21.0	56.3	24.5	59.8
Actuated g/C Ratio	0.07	0.36	0.10	0.39	0.12	0.31	0.14	0.33
v/c Ratio	0.57	0.75	0.73	0.95	0.75	0.88	0.86	0.71
Control Delay	90.3	53.6	92.4	68.1	89.0	67.3	94.1	55.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.3	53.6	92.4	68.1	89.0	67.3	94.1	55.1
LOS	F	D	F	E	F	E	F	E
Approach Delay		56.8		70.9		72.5		67.9
Approach LOS		E		E		E		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 67.2	Intersection LOS: E
Intersection Capacity Utilization 85.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	134	1368	245	1884	301	955	402	822
v/c Ratio	0.57	0.75	0.73	0.95	0.75	0.88	0.86	0.71
Control Delay	90.3	53.6	92.4	68.1	89.0	67.3	94.1	55.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.3	53.6	92.4	68.1	89.0	67.3	94.1	55.1
Queue Length 50th (ft)	80	526	134	857	180	548	241	430
Queue Length 95th (ft)	115	614	169	#1026	230	602	275	516
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	381	1822	381	1975	495	1172	495	1194
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.75	0.64	0.95	0.61	0.81	0.81	0.69

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	114	1076	186	3	199	1568	186	271	635	212	330
Future Volume (vph)	1	114	1076	186	3	199	1568	186	271	635	212	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.97			1.00	0.98		1.00	0.96		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3435	4954			3435	5005		3433	3410		3433
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3435	4954			3435	5005		3433	3410		3433
Peak-hour factor, PHF	0.25	0.88	0.95	0.79	0.38	0.84	0.93	0.94	0.90	0.88	0.91	0.82
Adj. Flow (vph)	4	130	1133	235	8	237	1686	198	301	722	233	402
RTOR Reduction (vph)	0	0	17	0	0	0	7	0	0	18	0	0
Lane Group Flow (vph)	0	134	1351	0	0	245	1877	0	301	937	0	402
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		12.4	65.6			17.6	70.8		21.0	56.3		24.5
Effective Green, g (s)		12.4	65.6			17.6	70.8		21.0	56.3		24.5
Actuated g/C Ratio		0.07	0.36			0.10	0.39		0.12	0.31		0.14
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		236	1805			335	1968		400	1066		467
v/s Ratio Prot		0.04	0.27			c0.07	c0.37		0.09	c0.27		c0.12
v/s Ratio Perm												
v/c Ratio		0.57	0.75			0.73	0.95		0.75	0.88		0.86
Uniform Delay, d1		81.2	50.0			78.9	53.0		77.0	58.6		76.1
Progression Factor		1.00	1.00			1.03	1.12		1.00	1.00		1.00
Incremental Delay, d2		3.1	2.9			6.7	10.4		7.8	8.4		14.9
Delay (s)		84.3	52.9			88.1	69.9		84.8	67.0		91.0
Level of Service		F	D			F	E		F	E		F
Approach Delay (s)			55.7				72.0			71.3		
Approach LOS			E				E			E		

Intersection Summary			
HCM 2000 Control Delay	66.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	635	126
Future Volume (vph)	635	126
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.97	
Flt Protected	1.00	
Satd. Flow (prot)	3440	
Flt Permitted	1.00	
Satd. Flow (perm)	3440	
Peak-hour factor, PHF	0.95	0.82
Adj. Flow (vph)	668	154
RTOR Reduction (vph)	11	0
Lane Group Flow (vph)	811	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	59.8	
Effective Green, g (s)	59.8	
Actuated g/C Ratio	0.33	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	1142	
v/s Ratio Prot	c0.24	
v/s Ratio Perm		
v/c Ratio	0.71	
Uniform Delay, d1	52.5	
Progression Factor	1.00	
Incremental Delay, d2	2.1	
Delay (s)	54.6	
Level of Service	D	
Approach Delay (s)	66.5	
Approach LOS	E	

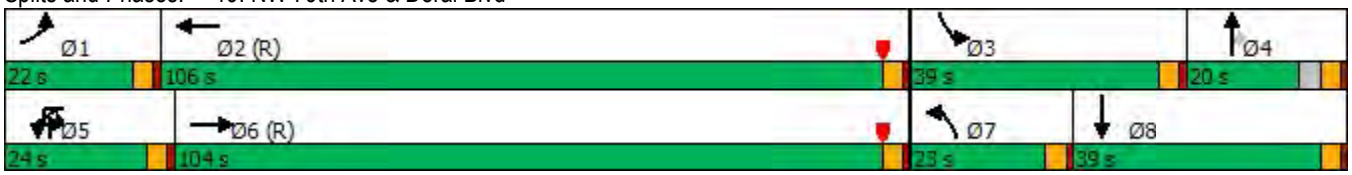
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	124	2556	189	1685	81	188	391	420	334
Future Volume (vph)	124	2556	189	1685	81	188	391	420	334
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6	5	2	7	4	5!	3	8
Permitted Phases							4		
Detector Phase	1	6	5	2	7	4	5	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	11.4	12.0	25.0
Total Split (s)	22.0	104.0	24.0	106.0	23.0	20.0	24.0	39.0	39.0
Total Split (%)	11.6%	54.7%	12.6%	55.8%	12.1%	10.5%	12.6%	20.5%	20.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	17.5	101.8	18.2	102.5	15.8	23.3	45.5	30.7	38.2
Actuated g/C Ratio	0.09	0.54	0.10	0.54	0.08	0.12	0.24	0.16	0.20
v/c Ratio	0.89	0.82	0.76	0.85	0.71	1.70	0.82	0.85	0.78
Control Delay	127.7	30.0	99.0	40.3	110.0	377.4	74.3	92.5	78.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	127.7	30.0	99.0	40.3	110.0	377.4	74.3	92.5	78.6
LOS	F	C	F	D	F	F	E	F	E
Approach Delay		34.8		46.1		218.2			85.1
Approach LOS		C		D		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 49 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.70	
Intersection Signal Delay: 65.8	Intersection LOS: E
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	144	2786	248	2250	103	364	325	467	541
v/c Ratio	0.89	0.82	0.76	0.85	0.71	1.70	0.82	0.85	0.78
Control Delay	127.7	30.0	99.0	40.3	110.0	377.4	74.3	92.5	78.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	127.7	30.0	99.0	40.3	110.0	377.4	74.3	92.5	78.6
Queue Length 50th (ft)	185	548	157	851	127	~693	347	296	334
Queue Length 95th (ft)	m#296	603	193	910	173	#895	#458	357	353
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	165	3388	358	2659	175	214	410	626	695
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.82	0.69	0.85	0.59	1.70	0.79	0.75	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	124	2556	41	16	189	1685	368	81	188	391	420	334
Future Volume (vph)	124	2556	41	16	189	1685	368	81	188	391	420	334
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.94	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	6323			3408	4896		1752	1651	1490	3400	3390
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	6323			3408	4896		1752	1651	1490	3400	3390
Peak-hour factor, PHF	0.86	0.94	0.61	0.80	0.83	0.92	0.88	0.79	0.84	0.84	0.90	0.79
Adj. Flow (vph)	144	2719	67	20	228	1832	418	103	224	465	467	423
RTOR Reduction (vph)	0	2	0	0	0	19	0	0	11	41	0	13
Lane Group Flow (vph)	144	2784	0	0	248	2231	0	103	353	284	467	528
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	1	6		5!	5	2		7	4	5!	3	8
Permitted Phases										4		
Actuated Green, G (s)	17.5	101.8			18.2	102.5		15.8	23.3	41.5	30.7	38.2
Effective Green, g (s)	17.5	101.8			18.2	102.5		15.8	23.3	41.5	30.7	38.2
Actuated g/C Ratio	0.09	0.54			0.10	0.54		0.08	0.12	0.22	0.16	0.20
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	161	3387			326	2641		145	202	356	549	681
v/s Ratio Prot	0.08	0.44			0.07	c0.46		0.06	c0.21	c0.08	c0.14	0.16
v/s Ratio Perm										0.11		
v/c Ratio	0.89	0.82			0.76	0.84		0.71	1.75	0.80	0.85	0.78
Uniform Delay, d1	85.3	36.6			83.8	37.0		84.9	83.3	70.3	77.4	71.8
Progression Factor	0.97	0.75			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	40.3	2.3			10.0	3.5		15.1	355.2	11.8	12.0	5.5
Delay (s)	123.5	29.7			93.8	40.5		100.0	438.5	82.1	89.5	77.4
Level of Service	F	C			F	D		F	F	F	F	E
Approach Delay (s)		34.3				45.8			248.3			83.0
Approach LOS		C				D			F			F

Intersection Summary			
HCM 2000 Control Delay	68.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



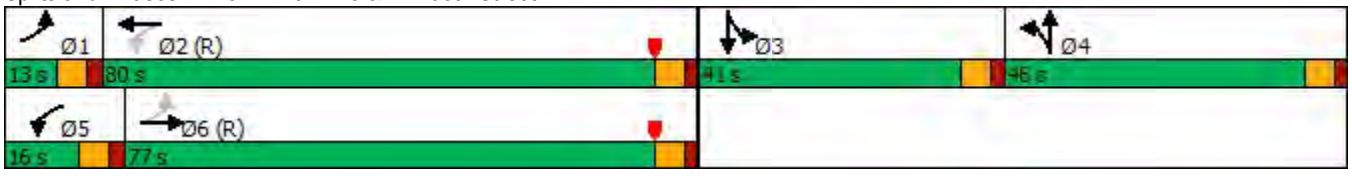
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	104
Future Volume (vph)	104
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	118
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

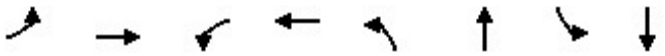
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	56	711	357	1188	155	264	114	225
Future Volume (vph)	56	711	357	1188	155	264	114	225
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	13.0	77.0	16.0	80.0	46.0	46.0	41.0	41.0
Total Split (%)	7.2%	42.8%	8.9%	44.4%	25.6%	25.6%	22.8%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	79.7	71.0	113.4	98.6	26.6	26.6	22.0	22.0
Actuated g/C Ratio	0.44	0.39	0.63	0.55	0.15	0.15	0.12	0.12
v/c Ratio	0.40	0.81	0.98	0.79	0.64	0.77	0.74	0.68
Control Delay	26.2	53.5	87.6	37.6	82.9	78.9	95.5	79.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	53.5	87.6	37.6	82.9	78.9	95.5	79.8
LOS	C	D	F	D	F	E	F	E
Approach Delay		52.0		48.5		80.1		85.3
Approach LOS		D		D		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 9 (5%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 57.9	Intersection LOS: E
Intersection Capacity Utilization 80.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	1098	415	1486	165	402	158	291
v/c Ratio	0.40	0.81	0.98	0.79	0.64	0.77	0.74	0.68
Control Delay	26.2	53.5	87.6	37.6	82.9	78.9	95.5	79.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	53.5	87.6	37.6	82.9	78.9	95.5	79.8
Queue Length 50th (ft)	28	600	406	703	187	228	184	168
Queue Length 95th (ft)	59	539	#765	#1056	262	281	201	213
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	163	1360	422	1881	389	767	340	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.81	0.98	0.79	0.42	0.52	0.46	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	711	133	357	1188	209	155	264	87	114	225	32
Future Volume (vph)	56	711	133	357	1188	209	155	264	87	114	225	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3427		1752	3422		1752	3362		1752	3411	
Flt Permitted	0.10	1.00		0.09	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	193	3427		159	3422		1752	3362		1752	3411	
Peak-hour factor, PHF	0.86	0.76	0.82	0.86	0.95	0.89	0.94	0.90	0.80	0.72	0.94	0.61
Adj. Flow (vph)	65	936	162	415	1251	235	165	293	109	158	239	52
RTOR Reduction (vph)	0	8	0	0	7	0	0	23	0	0	11	0
Lane Group Flow (vph)	65	1090	0	415	1479	0	165	379	0	158	280	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	79.7	71.0		113.4	98.7		26.6	26.6		22.0	22.0	
Effective Green, g (s)	79.7	71.0		113.4	98.7		26.6	26.6		22.0	22.0	
Actuated g/C Ratio	0.44	0.39		0.63	0.55		0.15	0.15		0.12	0.12	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	160	1351		422	1876		258	496		214	416	
v/s Ratio Prot	0.02	0.32		c0.20	0.43		0.09	c0.11		c0.09	0.08	
v/s Ratio Perm	0.16			c0.42								
v/c Ratio	0.41	0.81		0.98	0.79		0.64	0.76		0.74	0.67	
Uniform Delay, d1	31.9	48.4		55.6	32.3		72.2	73.7		76.2	75.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	5.3		39.2	3.5		5.1	6.9		12.5	4.2	
Delay (s)	33.6	53.7		94.7	35.8		77.3	80.6		88.7	79.8	
Level of Service	C	D		F	D		E	F		F	E	
Approach Delay (s)		52.5			48.7			79.6			82.9	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Future Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6			5	2		4	4	5!	8	8
Permitted Phases	6		6	5!	2		2			4		
Detector Phase	1	6	6	5	5	2	2	4	4	5	8	8
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	5.0	16.0	16.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4	11.4	11.4	24.4	24.4	13.4	13.4	11.4	13.5	13.5
Total Split (s)	14.4	65.4	65.4	26.4	26.4	77.4	77.4	26.4	26.4	26.4	42.5	42.5
Total Split (%)	9.0%	40.7%	40.7%	16.4%	16.4%	48.2%	48.2%	16.4%	16.4%	16.4%	26.4%	26.4%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	65.0	59.0	59.0		88.2	83.0	83.0	20.0	20.0	42.8	33.2	33.2
Actuated g/C Ratio	0.40	0.37	0.37		0.55	0.52	0.52	0.12	0.12	0.27	0.21	0.21
v/c Ratio	0.05	0.92	0.17		1.11	0.58	0.13	1.18	1.62	1.15	0.88	0.78
Control Delay	19.6	60.7	1.9		132.0	30.1	4.6	175.8	321.7	122.1	87.8	67.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	60.7	1.9		132.0	30.1	4.6	175.8	321.7	122.1	87.8	67.2
LOS	B	E	A		F	C	A	F	F	F	F	E
Approach Delay		55.2				50.3			212.9			74.6
Approach LOS		E				D			F			E

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 107 (67%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.62	
Intersection Signal Delay: 98.3	Intersection LOS: F
Intersection Capacity Utilization 116.9%	ICU Level of Service H
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	11	1159	113	320	1036	113	251	507	504	283	509
v/c Ratio	0.05	0.92	0.17	1.11	0.58	0.13	1.18	1.62	1.15	0.88	0.78
Control Delay	19.6	60.7	1.9	132.0	30.1	4.6	175.8	321.7	122.1	87.8	67.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	60.7	1.9	132.0	30.1	4.6	175.8	321.7	122.1	87.8	67.2
Queue Length 50th (ft)	5	612	0	~367	375	1	~314	~657	~410	313	268
Queue Length 95th (ft)	11	#745	1	#572	526	26	#427	#778	#686	#473	303
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	241	1262	662	287	1775	847	213	313	437	350	710
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.92	0.17	1.11	0.58	0.13	1.18	1.62	1.15	0.81	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Future Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lane Util. Factor	1.00	0.95	1.00		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.87	0.85	1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97
Satd. Flow (prot)	1719	3438	1538		1718	3438	1538	1719	1492	1461	1564	3127
Flt Permitted	0.24	1.00	1.00		0.06	1.00	1.00	0.95	1.00	1.00	0.95	0.97
Satd. Flow (perm)	426	3438	1538		111	3438	1538	1719	1492	1461	1564	3127
Peak-hour factor, PHF	0.62	0.92	0.79	0.44	0.92	0.96	0.79	0.81	0.82	0.90	0.93	0.82
Adj. Flow (vph)	11	1159	113	9	311	1036	113	251	60	951	567	143
RTOR Reduction (vph)	0	0	72	0	0	0	56	0	128	49	0	10
Lane Group Flow (vph)	11	1159	41	0	320	1036	57	251	379	455	283	499
Heavy Vehicles (%)	5%	5%	5%	8%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	pm+ov	Split	NA
Protected Phases	1	6			5	2		4	4	5!	8	8
Permitted Phases	6		6	5!	2		2			4		
Actuated Green, G (s)	61.6	59.0	59.0		88.2	79.2	79.2	20.0	20.0	42.8	33.2	33.2
Effective Green, g (s)	61.6	59.0	59.0		88.2	79.2	79.2	20.0	20.0	42.8	33.2	33.2
Actuated g/C Ratio	0.38	0.37	0.37		0.55	0.49	0.49	0.12	0.12	0.27	0.21	0.21
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	184	1262	564		288	1694	757	213	185	389	323	646
v/s Ratio Prot	0.00	0.34			0.16	0.30		0.15	c0.25	c0.17	c0.18	0.16
v/s Ratio Perm	0.02		0.03		c0.45		0.04			0.15		
v/c Ratio	0.06	0.92	0.07		1.11	0.61	0.07	1.18	2.05	1.17	0.88	0.77
Uniform Delay, d1	31.0	48.6	33.1		54.8	29.6	21.5	70.3	70.3	58.9	61.8	60.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	12.1	0.3		86.2	1.7	0.2	118.2	490.6	100.4	22.3	5.7
Delay (s)	31.1	60.6	33.3		141.0	31.2	21.7	188.5	560.9	159.4	84.1	65.9
Level of Service	C	E	C		F	C	C	F	F	F	F	E
Approach Delay (s)		58.0				54.4			326.5			72.4
Approach LOS		E				D			F			E

Intersection Summary			
HCM 2000 Control Delay	129.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	160.7	Sum of lost time (s)	25.7
Intersection Capacity Utilization	116.9%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	59
Future Volume (vph)	59
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.72
Adj. Flow (vph)	82
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	121	596	142	1046	276	810	107	609	379
Future Volume (vph)	121	596	142	1046	276	810	107	609	379
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	17.4	69.4	17.4	69.4	27.4	54.4	20.4	47.4	47.4
Total Split (%)	10.8%	42.9%	10.8%	42.9%	17.0%	33.7%	12.6%	29.3%	29.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	75.5	64.3	75.0	64.0	67.2	47.7	52.8	39.8	39.8
Actuated g/C Ratio	0.47	0.40	0.46	0.40	0.42	0.30	0.33	0.25	0.25
v/c Ratio	0.90	0.64	0.74	0.88	1.11	0.94	0.79	0.85	0.95
Control Delay	85.9	40.2	42.3	53.9	128.6	71.8	67.2	68.5	67.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.9	40.2	42.3	53.9	128.6	71.8	67.2	68.5	67.3
LOS	F	D	D	D	F	E	E	E	E
Approach Delay		47.0		52.3		85.9		67.9	
Approach LOS		D		D		F		E	

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 46 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 63.9	Intersection LOS: E
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street



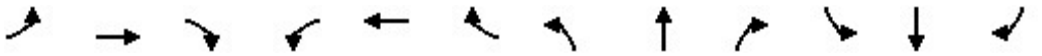


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	151	867	189	1199	314	952	147	725	480
v/c Ratio	0.90	0.64	0.74	0.88	1.11	0.94	0.79	0.85	0.95
Control Delay	85.9	40.2	42.3	53.9	128.6	71.8	67.2	68.5	67.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.9	40.2	42.3	53.9	128.6	71.8	67.2	68.5	67.3
Queue Length 50th (ft)	109	375	111	620	~312	513	100	383	351
Queue Length 95th (ft)	#200	452	133	723	#498	#645	133	425	403
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	168	1347	257	1362	282	1024	196	880	517
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.64	0.74	0.88	1.11	0.93	0.75	0.82	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



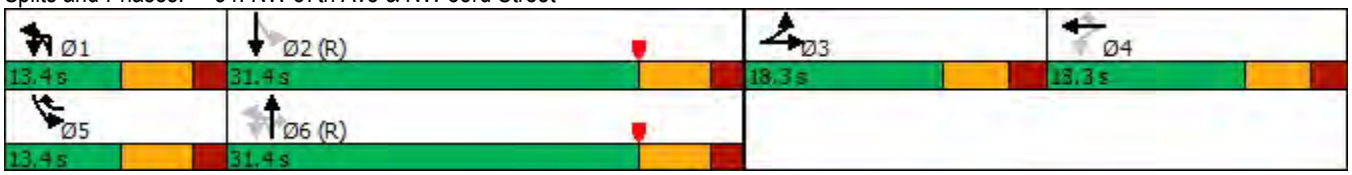
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	596	221	142	1046	79	276	810	95	107	609	379
Future Volume (vph)	121	596	221	142	1046	79	276	810	95	107	609	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3323		1736	3429		1736	3407		1736	3471	1553
Flt Permitted	0.06	1.00		0.19	1.00		0.11	1.00		0.10	1.00	1.00
Satd. Flow (perm)	118	3323		350	3429		200	3407		184	3471	1553
Peak-hour factor, PHF	0.80	0.96	0.90	0.75	0.95	0.81	0.88	0.97	0.81	0.73	0.84	0.79
Adj. Flow (vph)	151	621	246	189	1101	98	314	835	117	147	725	480
RTOR Reduction (vph)	0	26	0	0	4	0	0	7	0	0	0	125
Lane Group Flow (vph)	151	841	0	189	1195	0	314	945	0	147	725	355
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	75.4	64.2		75.0	64.0		67.2	47.7		52.9	39.8	39.8
Effective Green, g (s)	75.4	64.2		75.0	64.0		67.2	47.7		52.9	39.8	39.8
Actuated g/C Ratio	0.47	0.40		0.46	0.40		0.42	0.30		0.33	0.25	0.25
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	167	1320		256	1358		282	1005		186	854	382
v/s Ratio Prot	c0.06	0.25		0.05	0.35		c0.14	c0.28		0.06	0.21	
v/s Ratio Perm	c0.36			0.29			c0.32			0.20		0.23
v/c Ratio	0.90	0.64		0.74	0.88		1.11	0.94		0.79	0.85	0.93
Uniform Delay, d1	43.3	39.3		29.2	45.2		47.7	55.6		43.4	58.0	59.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	42.9	2.4		10.6	8.4		87.6	16.0		20.0	7.9	28.4
Delay (s)	86.2	41.7		39.8	53.6		135.2	71.5		63.4	65.9	88.0
Level of Service	F	D		D	D		F	E		E	E	F
Approach Delay (s)		48.3			51.7			87.3			73.5	
Approach LOS		D			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	65.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	161.6	Sum of lost time (s)	25.6
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	15	1	203	4	84	9	14	1115	131	91	904
Future Volume (vph)	15	1	203	4	84	9	14	1115	131	91	904
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	5	1	1	6		5	2
Permitted Phases			4		4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	18.3	18.3	18.3	18.3	13.4	13.4	13.4	31.4	31.4	13.4	31.4
Total Split (%)	22.5%	22.5%	22.5%	22.5%	16.5%	16.5%	16.5%	38.6%	38.6%	16.5%	38.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.4	7.4	13.6	13.6	26.8		39.6	33.5	33.5	44.3	41.5
Actuated g/C Ratio	0.09	0.09	0.17	0.17	0.33		0.49	0.41	0.41	0.54	0.51
v/c Ratio	0.15	0.24	0.62	0.65	0.19		0.11	0.80	0.22	0.46	0.61
Control Delay	36.2	16.6	44.0	46.3	3.7		12.4	30.2	2.6	18.9	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	16.6	44.0	46.3	3.7		12.4	30.2	2.6	18.9	21.7
LOS	D	B	D	D	A		B	C	A	B	C
Approach Delay		23.6		32.7				26.4			21.4
Approach LOS		C		C				C			C

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 46 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 25.1	Intersection LOS: C
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: NW 87th Ave & NW 53rd Street





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	44	131	134	114	28	1149	172	112	1092
v/c Ratio	0.15	0.24	0.62	0.65	0.19	0.11	0.80	0.22	0.46	0.61
Control Delay	36.2	16.6	44.0	46.3	3.7	12.4	30.2	2.6	18.9	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	16.6	44.0	46.3	3.7	12.4	30.2	2.6	18.9	21.7
Queue Length 50th (ft)	12	2	64	66	0	7	~333	0	29	201
Queue Length 95th (ft)	23	0	105	64	14	m20	#472	9	57	#388
Internal Link Dist (ft)		93		992			2038			2105
Turn Bay Length (ft)			175		175	150		245	120	
Base Capacity (vph)	258	269	223	217	608	280	1441	770	251	1784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.16	0.59	0.62	0.19	0.10	0.80	0.22	0.45	0.61

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	1	19	203	4	84	9	14	1115	131	91	904
Future Volume (vph)	15	1	19	203	4	84	9	14	1115	131	91	904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.86		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1593		1665	1674	1568		1775	3505	1568	1752	3497
Flt Permitted	0.95	1.00		0.73	0.71	1.00		0.17	1.00	1.00	0.11	1.00
Satd. Flow (perm)	1752	1593		1276	1238	1568		313	3505	1568	210	3497
Peak-hour factor, PHF	0.62	0.25	0.48	0.79	0.50	0.74	0.75	0.88	0.97	0.76	0.81	0.84
Adj. Flow (vph)	24	4	40	257	8	114	12	16	1149	172	112	1076
RTOR Reduction (vph)	0	38	0	0	0	85	0	0	0	107	0	1
Lane Group Flow (vph)	24	6	0	131	134	29	0	28	1149	65	112	1091
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	0%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3			4	5	1	1	6		5	2
Permitted Phases				4		4	6	6		6	2	
Actuated Green, G (s)	4.6	4.6		13.6	13.6	20.5		33.6	30.9	30.9	42.0	35.1
Effective Green, g (s)	4.6	4.6		13.6	13.6	20.5		33.6	30.9	30.9	42.0	35.1
Actuated g/C Ratio	0.06	0.06		0.17	0.17	0.25		0.41	0.38	0.38	0.52	0.43
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	90		213	206	394		177	1330	595	239	1507
v/s Ratio Prot	c0.01	0.00				0.01		0.01	c0.33		c0.04	c0.31
v/s Ratio Perm				0.10	c0.11	0.01		0.06		0.04	0.20	
v/c Ratio	0.24	0.07		0.62	0.65	0.07		0.16	0.86	0.11	0.47	0.72
Uniform Delay, d1	36.7	36.4		31.5	31.7	23.2		15.1	23.3	16.3	14.3	19.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.02	1.00	1.09	1.00	1.00
Incremental Delay, d2	1.3	0.3		5.2	7.2	0.1		0.4	7.6	0.4	1.5	3.1
Delay (s)	38.0	36.7		36.7	38.8	23.3		15.8	30.9	18.3	15.7	22.2
Level of Service	D	D		D	D	C		B	C	B	B	C
Approach Delay (s)		37.2			33.4				29.0			21.6
Approach LOS		D			C				C			C

Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.62
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	4	1669	23	3	9	1925	45	0	0	57	0	0
Future Volume (Veh/h)	4	1669	23	3	9	1925	45	0	0	57	0	0
Sign Control		Free				Free			Stop			Stop
Grade		0%				0%			0%			0%
Peak Hour Factor	0.50	0.91	0.69	0.34	0.75	0.96	0.71	0.25	0.25	0.88	0.25	0.25
Hourly flow rate (vph)	8	1834	33	0	12	2005	63	0	0	65	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)		403				458						
pX, platoon unblocked	0.70			0.00	0.90			0.75	0.75	0.90	0.75	0.75
vC, conflicting volume	2068			0	1867			2604	3958	628	2753	3944
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1047			0	1583			1108	2907	210	1306	2887
tC, single (s)	4.2			0.0	4.2			7.6	6.6	7.0	7.6	6.6
tC, 2 stage (s)												
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	98			0	97			100	100	91	100	100
cM capacity (veh/h)	461			0	367			111	11	716	77	11

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	8	734	734	400	12	802	802	464	65	45
Volume Left	8	0	0	0	12	0	0	0	0	0
Volume Right	0	0	0	33	0	0	0	63	65	45
cSH	461	1700	1700	1700	367	1700	1700	1700	716	761
Volume to Capacity	0.02	0.43	0.43	0.24	0.03	0.47	0.47	0.27	0.09	0.06
Queue Length 95th (ft)	1	0	0	0	3	0	0	0	7	5
Control Delay (s)	12.9	0.0	0.0	0.0	15.1	0.0	0.0	0.0	10.5	10.0
Lane LOS	B				C				B	B
Approach Delay (s)	0.1				0.1				10.5	10.0
Approach LOS									B	B

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	33
Future Volume (Veh/h)	33
Sign Control	
Grade	
Peak Hour Factor	0.73
Hourly flow rate (vph)	45
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	0.70
vC, conflicting volume	700
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	0
tC, single (s)	7.0
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	94
cM capacity (veh/h)	761
Direction, Lane #	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	25	1368	24	4	1160
Future Volume (Veh/h)	0	25	1368	24	4	1160
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.86	0.96	0.82	1.00	0.94
Hourly flow rate (vph)	0	29	1425	29	4	1234
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.72	0.72			0.72	
vC, conflicting volume	1859	727			1454	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1405	0			839	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	100	96			99	
cM capacity (veh/h)	89	767			548	

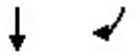
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	29	950	504	4	411	411	411
Volume Left	0	0	0	4	0	0	0
Volume Right	29	0	29	0	0	0	0
cSH	767	1700	1700	548	1700	1700	1700
Volume to Capacity	0.04	0.56	0.30	0.01	0.24	0.24	0.24
Queue Length 95th (ft)	3	0	0	1	0	0	0
Control Delay (s)	9.9	0.0	0.0	11.6	0.0	0.0	0.0
Lane LOS	A			B			
Approach Delay (s)	9.9	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	1617	0	6	5	1903	7	0	0	1	0
Future Volume (Veh/h)	1	0	1617	0	6	5	1903	7	0	0	1	0
Sign Control			Free				Free			Stop		
Grade			0%				0%			0%		
Peak Hour Factor	0.25	0.92	0.97	0.25	0.50	0.42	0.94	0.92	0.25	0.92	0.25	0.92
Hourly flow rate (vph)	0	0	1667	0	0	12	2024	8	0	0	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type			None				None					
Median storage veh)												
Upstream signal (ft)							1196					
pX, platoon unblocked	0.00	0.82			0.00				0.82	0.82		0.82
vC, conflicting volume	0	2032			0	1667			2370	3723	556	2612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1490			0	1667			1902	3552	556	2197
tC, single (s)	0.0	4.1			0.0	4.1			7.5	6.5	6.9	7.5
tC, 2 stage (s)												
tF (s)	0.0	2.2			0.0	2.2			3.5	4.0	3.3	3.5
p0 queue free %	0	100			0	97			100	100	99	100
cM capacity (veh/h)	0	366			0	391			34	5	480	20

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	667	667	333	12	810	810	413	4	4
Volume Left	0	0	0	12	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	4	4
cSH	1700	1700	1700	391	1700	1700	1700	480	889
Volume to Capacity	0.39	0.39	0.20	0.03	0.48	0.48	0.24	0.01	0.00
Queue Length 95th (ft)	0	0	0	2	0	0	0	1	0
Control Delay (s)	0.0	0.0	0.0	14.5	0.0	0.0	0.0	12.6	9.1
Lane LOS				B				B	A
Approach Delay (s)	0.0			0.1				12.6	9.1
Approach LOS								B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	46.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	4
Future Volume (Veh/h)	0	4
Sign Control	Stop	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	0	4
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type		
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked	0.82	0.82
vC, conflicting volume	3719	679
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol	3548	0
tC, single (s)	6.5	6.9
tC, 2 stage (s)		
tF (s)	4.0	3.3
p0 queue free %	100	100
cM capacity (veh/h)	5	889

Direction, Lane #



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1600	0	26	1	1886	3	1
Future Volume (Veh/h)	1	1600	0	26	1	1886	3	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.95	0.25	0.25	0.25	0.97	0.75	0.25
Hourly flow rate (vph)	0	1684	0	0	4	1944	4	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.90		0.90	0.90
vC, conflicting volume	0			0	1684		2340	561
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1357		2089	104
tC, single (s)	0.0			0.0	4.1		6.8	6.9
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	99		90	100
cM capacity (veh/h)	0			0	460		41	840

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	674	674	337	4	648	648	648	8
Volume Left	0	0	0	4	0	0	0	4
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	460	1700	1700	1700	79
Volume to Capacity	0.40	0.40	0.20	0.01	0.38	0.38	0.38	0.10
Queue Length 95th (ft)	0	0	0	1	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	12.9	0.0	0.0	0.0	55.9
Lane LOS				B				F
Approach Delay (s)	0.0			0.0				55.9
Approach LOS								F

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	26	16	34	1172	12	37	22	1209
Future Volume (Veh/h)	26	16	34	1172	12	37	22	1209
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.69	0.67	0.34	0.95	0.75	0.75	0.66	0.96
Hourly flow rate (vph)	38	24	0	1234	16	0	33	1259
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				782				
pX, platoon unblocked	0.79	0.79	0.00			0.00	0.79	
vC, conflicting volume	1938	625	0			0	1250	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1651	0	0			0	778	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	41	97	0			0	95	
cM capacity (veh/h)	64	844	0			0	637	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	38	24	823	427	33	630	630
Volume Left	38	0	0	0	33	0	0
Volume Right	0	24	0	16	0	0	0
cSH	64	844	1700	1700	637	1700	1700
Volume to Capacity	0.59	0.03	0.48	0.25	0.05	0.37	0.37
Queue Length 95th (ft)	62	2	0	0	4	0	0
Control Delay (s)	122.3	9.4	0.0	0.0	11.0	0.0	0.0
Lane LOS	F	A			B		
Approach Delay (s)	78.6		0.0		0.3		
Approach LOS	F						

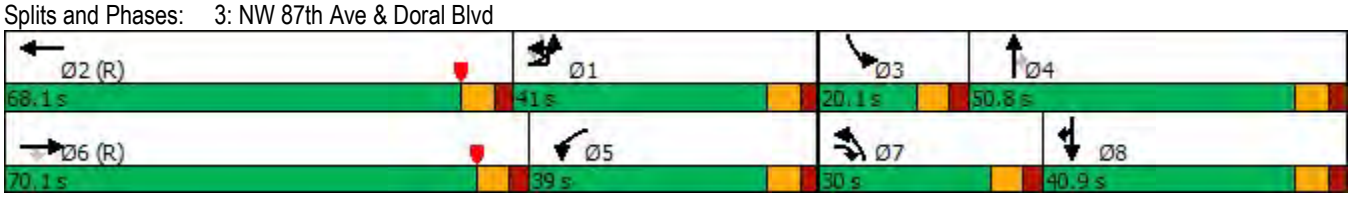
Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

2027 AM Traffic With Project Trips and Improvements with median closures Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	477	1505	492	505	1221	246	658	294	139	783	275
Future Volume (vph)	477	1505	492	505	1221	246	658	294	139	783	275
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	custom
Protected Phases	1	6	7	5	2	7	4		3	8	8
Permitted Phases			6					4			1
Detector Phase	1	6	7	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1	25.1
Total Split (s)	41.0	70.1	30.0	39.0	68.1	30.0	50.8	50.8	20.1	40.9	40.9
Total Split (%)	22.8%	38.9%	16.7%	21.7%	37.8%	16.7%	28.2%	28.2%	11.2%	22.7%	22.7%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	33.6	63.1	85.3	31.6	61.1	22.3	44.5	44.5	12.6	34.8	68.3
Actuated g/C Ratio	0.19	0.35	0.47	0.18	0.34	0.12	0.25	0.25	0.07	0.19	0.38
v/c Ratio	0.89	0.92	0.74	0.95	0.89	0.61	0.82	0.62	0.77	0.88	0.50
Control Delay	70.7	47.4	15.6	84.6	34.2	81.5	72.9	17.8	96.3	74.9	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.7	47.4	15.6	84.6	34.2	81.5	72.9	17.8	96.3	74.9	16.1
LOS	E	D	B	F	C	F	E	B	F	E	B
Approach Delay		45.5			48.0		59.2			63.5	
Approach LOS		D			D		E			E	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 118 (66%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 51.9	Intersection LOS: D
Intersection Capacity Utilization 89.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd

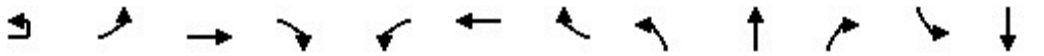




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	558	1601	572	561	1481	256	700	372	181	851	331
v/c Ratio	0.89	0.92	0.74	0.95	0.89	0.61	0.82	0.62	0.77	0.88	0.50
Control Delay	70.7	47.4	15.6	84.6	34.2	81.5	72.9	17.8	96.3	74.9	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.7	47.4	15.6	84.6	34.2	81.5	72.9	17.8	96.3	74.9	16.1
Queue Length 50th (ft)	348	617	166	352	520	150	417	77	110	368	71
Queue Length 95th (ft)	#415	704	192	m#438	589	202	500	121	123	#441	197
Internal Link Dist (ft)		378			2485		2143			310	
Turn Bay Length (ft)	400		170	330		400			190		300
Base Capacity (vph)	635	1748	776	598	1673	428	857	604	243	963	657
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.92	0.74	0.94	0.89	0.60	0.82	0.62	0.74	0.88	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	477	1505	492	505	1221	139	246	658	294	139	783
Future Volume (vph)	4	477	1505	492	505	1221	139	246	658	294	139	783
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3367	4988	1553	3367	4910		3367	3471	1553	3367	4988
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3367	4988	1553	3367	4910		3367	3471	1553	3367	4988
Peak-hour factor, PHF	0.25	0.88	0.94	0.86	0.90	0.92	0.90	0.96	0.94	0.79	0.77	0.92
Adj. Flow (vph)	16	542	1601	572	561	1327	154	256	700	372	181	851
RTOR Reduction (vph)	0	0	0	35	0	8	0	0	0	221	0	0
Lane Group Flow (vph)	0	558	1601	537	561	1473	0	256	700	151	181	851
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		33.6	63.1	85.4	31.6	61.1		22.3	44.5	44.5	12.6	34.8
Effective Green, g (s)		33.6	63.1	85.4	31.6	61.1		22.3	44.5	44.5	12.6	34.8
Actuated g/C Ratio		0.19	0.35	0.47	0.18	0.34		0.12	0.25	0.25	0.07	0.19
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		628	1748	736	591	1666		417	858	383	235	964
v/s Ratio Prot		0.17	c0.32	c0.09	c0.17	0.30		0.08	c0.20		0.05	c0.17
v/s Ratio Perm				0.26						0.10		
v/c Ratio		0.89	0.92	0.73	0.95	0.88		0.61	0.82	0.39	0.77	0.88
Uniform Delay, d1		71.4	55.9	38.0	73.4	56.1		74.8	63.9	56.5	82.3	70.6
Progression Factor		0.78	0.70	0.52	0.94	0.54		1.00	1.00	1.00	0.93	0.90
Incremental Delay, d2		12.5	7.9	3.1	15.3	3.8		2.7	8.4	3.0	13.7	11.0
Delay (s)		68.2	47.2	23.0	84.2	34.2		77.4	72.3	59.5	90.2	74.8
Level of Service		E	D	C	F	C		E	E	E	F	E
Approach Delay (s)			46.4			47.9			69.7			67.5
Approach LOS			D			D			E			E

Intersection Summary			
HCM 2000 Control Delay	54.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



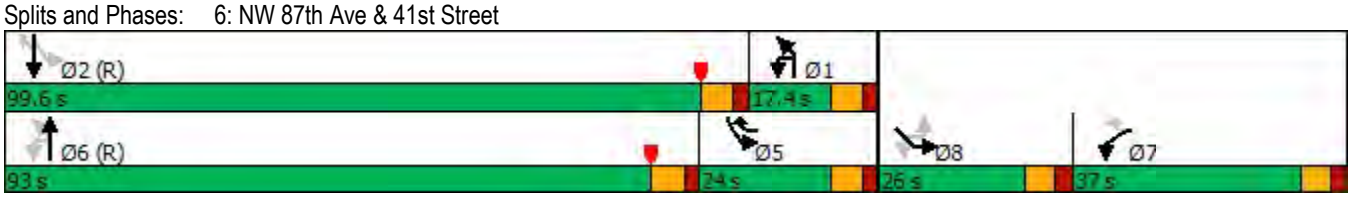
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	275
Future Volume (vph)	275
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.1
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.83
Adj. Flow (vph)	331
RTOR Reduction (vph)	68
Lane Group Flow (vph)	263
Heavy Vehicles (%)	4%
Turn Type	custom
Protected Phases	8
Permitted Phases	1
Actuated Green, G (s)	68.4
Effective Green, g (s)	68.4
Actuated g/C Ratio	0.38
Clearance Time (s)	7.1
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	590
v/s Ratio Prot	0.09
v/s Ratio Perm	0.08
v/c Ratio	0.45
Uniform Delay, d1	41.6
Progression Factor	0.86
Incremental Delay, d2	0.5
Delay (s)	36.4
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Configurations										
Traffic Volume (vph)	134	46	5	56	953	95	914	27	3	81
Future Volume (vph)	134	46	5	56	953	95	914	27	3	81
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Perm	Prot	Perm
Protected Phases	7	5	1	1	6	5	2		8	
Permitted Phases		7	6	6		2		2		8
Detector Phase	7	5	1	1	6	5	2	2	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.4	24.3	24.3
Total Split (s)	37.0	24.0	17.4	17.4	93.0	24.0	99.6	99.6	26.0	26.0
Total Split (%)	20.6%	13.3%	9.7%	9.7%	51.7%	13.3%	55.3%	55.3%	14.4%	14.4%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	C-Max	None	None
Act Effct Green (s)	16.1	29.0		124.7	118.3	137.7	124.9	124.9	7.3	7.3
Actuated g/C Ratio	0.09	0.16		0.69	0.66	0.76	0.69	0.69	0.04	0.04
v/c Ratio	0.83	0.22		0.26	0.56	0.37	0.40	0.08	0.65	0.63
Control Delay	56.1	10.3		3.9	5.5	15.2	13.3	1.9	25.4	22.8
Queue Delay	0.0	0.0		0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	10.3		3.9	6.0	15.2	13.3	1.9	25.4	22.8
LOS	E	B		A	A	B	B	A	C	C
Approach Delay	46.3				5.9		12.6		24.1	
Approach LOS	D				A		B		C	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 64 (36%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Group Flow (vph)	231	63	98	1248	127	952	87	129	120
v/c Ratio	0.83	0.22	0.26	0.56	0.37	0.40	0.08	0.65	0.63
Control Delay	56.1	10.3	3.9	5.5	15.2	13.3	1.9	25.4	22.8
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	10.3	3.9	6.0	15.2	13.3	1.9	25.4	22.8
Queue Length 50th (ft)	114	0	10	95	32	222	0	0	0
Queue Length 95th (ft)	84	13	m14	372	59	352	0	0	0
Internal Link Dist (ft)	2087			188		622		377	
Turn Bay Length (ft)	200		225		200		200		
Base Capacity (vph)	407	326	421	2225	385	2407	1106	304	282
Starvation Cap Reductn	0	0	0	499	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.19	0.23	0.72	0.33	0.40	0.08	0.42	0.43

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	134	4	46	5	56	953	181	95	914	27	49	3
Future Volume (vph)	134	4	46	5	56	953	181	95	914	27	49	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95	1.00		1.00
Frt	0.99		0.85		1.00	0.97		1.00	1.00	0.85		0.95
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00	1.00		0.97
Satd. Flow (prot)	1728		1475		1736	3378		1736	3471	1553		1681
Flt Permitted	0.96		1.00		0.26	1.00		0.17	1.00	1.00		0.97
Satd. Flow (perm)	1728		1475		480	3378		313	3471	1553		1681
Peak-hour factor, PHF	0.62	0.50	0.66	0.31	0.68	0.93	0.81	0.75	0.96	0.31	0.62	0.38
Adj. Flow (vph)	216	8	70	16	82	1025	223	127	952	87	79	8
RTOR Reduction (vph)	124	0	53	0	0	7	0	0	0	27	0	124
Lane Group Flow (vph)	107	0	10	0	98	1241	0	127	952	60	0	5
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA	Perm	Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2		2	8	
Actuated Green, G (s)	16.1		29.1		124.6	118.2		137.6	124.8	124.8		7.3
Effective Green, g (s)	16.1		29.1		124.6	118.2		137.6	124.8	124.8		7.3
Actuated g/C Ratio	0.09		0.16		0.69	0.66		0.76	0.69	0.69		0.04
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	154		238		376	2218		342	2406	1076		68
v/s Ratio Prot	c0.06		0.00		0.01	c0.37		c0.03	0.27			
v/s Ratio Perm			0.00		0.17			0.26		0.04		0.00
v/c Ratio	0.70		0.04		0.26	0.56		0.37	0.40	0.06		0.08
Uniform Delay, d1	79.6		63.7		16.7	16.8		20.6	11.7	8.8		83.1
Progression Factor	1.00		1.00		0.33	0.28		0.96	1.00	1.05		1.00
Incremental Delay, d2	12.8		0.1		0.2	0.6		0.7	0.5	0.1		0.5
Delay (s)	92.4		63.8		5.8	5.2		20.4	12.1	9.3		83.6
Level of Service	F		E		A	A		C	B	A		F
Approach Delay (s)	86.3					5.3			12.8			83.7
Approach LOS	F					A			B			F

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



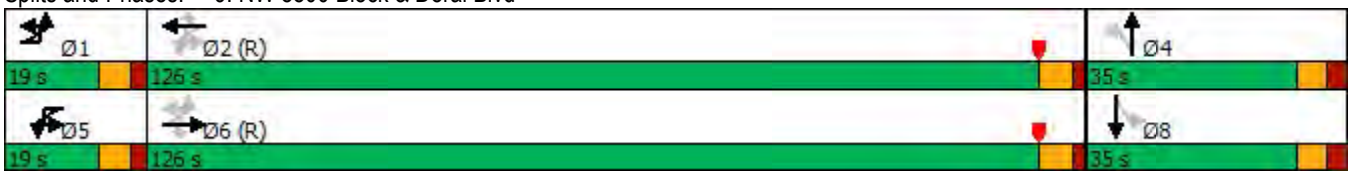
Movement	SER
Lane Configurations	
Traffic Volume (vph)	81
Future Volume (vph)	81
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1475
Flt Permitted	1.00
Satd. Flow (perm)	1475
Peak-hour factor, PHF	0.50
Adj. Flow (vph)	162
RTOR Reduction (vph)	115
Lane Group Flow (vph)	5
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	7.3
Effective Green, g (s)	7.3
Actuated g/C Ratio	0.04
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	59
v/s Ratio Prot	
v/s Ratio Perm	c0.00
v/c Ratio	0.08
Uniform Delay, d1	83.1
Progression Factor	1.00
Incremental Delay, d2	0.6
Delay (s)	83.7
Level of Service	F
Approach Delay (s)	
Approach LOS	

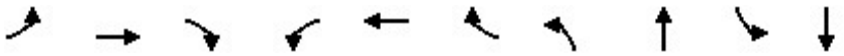
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	13	30	2174	59	15	37	1543	48	53	1	46	0
Future Volume (vph)	13	30	2174	59	15	37	1543	48	53	1	46	0
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2			4		8
Permitted Phases	6	6		6	2	2		2	4		8	
Detector Phase	1	1	6	6	5	5	2	2	4	4	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	19.0	19.0	126.0	126.0	19.0	19.0	126.0	126.0	35.0	35.0	35.0	35.0
Total Split (%)	10.6%	10.6%	70.0%	70.0%	10.6%	10.6%	70.0%	70.0%	19.4%	19.4%	19.4%	19.4%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	Max	Max
Act Effct Green (s)		132.3	124.6	124.6		132.1	124.6	124.6	28.0	28.0	28.0	28.0
Actuated g/C Ratio		0.74	0.69	0.69		0.73	0.69	0.69	0.16	0.16	0.16	0.16
v/c Ratio		0.39	0.65	0.07		0.47	0.47	0.07	0.38	0.28	0.43	0.15
Control Delay		6.6	8.6	0.9		32.1	5.6	1.0	74.3	15.3	76.5	1.0
Queue Delay		0.0	0.0	0.0		0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay		6.6	8.6	0.9		32.1	5.7	1.0	74.3	15.3	76.5	1.0
LOS		A	A	A		C	A	A	E	B	E	A
Approach Delay			8.3				6.5			42.9		48.6
Approach LOS			A				A			D		D

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 151 (84%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 64.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

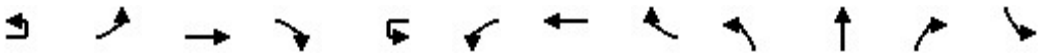




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	88	2241	73	64	1624	75	78	89	82	48
v/c Ratio	0.39	0.65	0.07	0.47	0.47	0.07	0.38	0.28	0.43	0.15
Control Delay	6.6	8.6	0.9	32.1	5.6	1.0	74.3	15.3	76.5	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	6.6	8.6	0.9	32.1	5.7	1.0	74.3	15.3	76.5	1.0
Queue Length 50th (ft)	10	283	2	19	152	4	84	4	89	0
Queue Length 95th (ft)	15	394	8	m36	143	m5	106	0	90	0
Internal Link Dist (ft)		1116			323			94		231
Turn Bay Length (ft)	200		190	190		75				
Base Capacity (vph)	277	3453	1094	186	3452	1094	206	315	192	327
Starvation Cap Reductn	0	0	0	0	619	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.65	0.07	0.34	0.57	0.07	0.38	0.28	0.43	0.15

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	30	2174	59	15	37	1543	48	53	1	75	46
Future Volume (vph)	13	30	2174	59	15	37	1543	48	53	1	75	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.86		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1776	4988	1553		1761	4988	1553	1736	1565		1736
Flt Permitted		0.12	1.00	1.00		0.05	1.00	1.00	0.73	1.00		0.68
Satd. Flow (perm)		221	4988	1553		92	4988	1553	1326	1565		1236
Peak-hour factor, PHF	0.25	0.83	0.97	0.81	0.62	0.92	0.95	0.64	0.68	0.25	0.88	0.56
Adj. Flow (vph)	52	36	2241	73	24	40	1624	75	78	4	85	82
RTOR Reduction (vph)	0	0	0	19	0	0	0	19	0	72	0	0
Lane Group Flow (vph)	0	88	2241	54	0	64	1624	56	78	17	0	82
Heavy Vehicles (%)	0%	4%	4%	4%	0%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2		2	4			8
Actuated Green, G (s)		132.2	124.6	124.6		132.2	124.6	124.6	28.0	28.0		28.0
Effective Green, g (s)		132.2	124.6	124.6		132.2	124.6	124.6	28.0	28.0		28.0
Actuated g/C Ratio		0.73	0.69	0.69		0.73	0.69	0.69	0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		227	3452	1075		138	3452	1075	206	243		192
v/s Ratio Prot		0.02	c0.45			c0.02	0.33			0.01		
v/s Ratio Perm		0.27		0.03		0.32		0.04	0.06			c0.07
v/c Ratio		0.39	0.65	0.05		0.46	0.47	0.05	0.38	0.07		0.43
Uniform Delay, d1		8.5	15.5	8.8		15.1	12.6	8.8	68.2	64.9		68.7
Progression Factor		0.45	0.50	0.33		2.20	0.42	0.36	1.00	1.00		1.00
Incremental Delay, d2		0.9	0.8	0.1		1.5	0.3	0.1	1.2	0.1		6.8
Delay (s)		4.8	8.5	3.0		34.6	5.5	3.2	69.4	65.0		75.6
Level of Service		A	A	A		C	A	A	E	E		E
Approach Delay (s)			8.2				6.5			67.0		
Approach LOS			A				A			E		

Intersection Summary			
HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	64.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



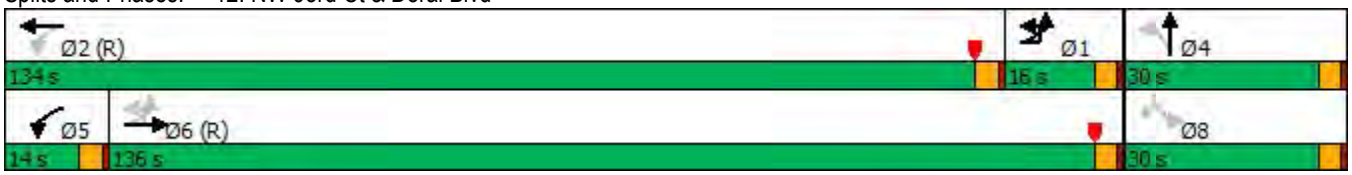
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	24
Future Volume (vph)	0	24
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	1553	
Flt Permitted	1.00	
Satd. Flow (perm)	1553	
Peak-hour factor, PHF	0.25	0.50
Adj. Flow (vph)	0	48
RTOR Reduction (vph)	41	0
Lane Group Flow (vph)	7	0
Heavy Vehicles (%)	4%	4%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	28.0	
Effective Green, g (s)	28.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	241	
v/s Ratio Prot	0.00	
v/s Ratio Perm		
v/c Ratio	0.03	
Uniform Delay, d1	64.5	
Progression Factor	1.00	
Incremental Delay, d2	0.2	
Delay (s)	64.7	
Level of Service	E	
Approach Delay (s)	71.6	
Approach LOS	E	

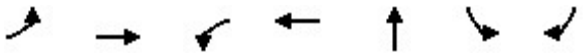
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	2	42	2324	18	1483	0	28	40
Future Volume (vph)	2	42	2324	18	1483	0	28	40
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	11.4	24.4	24.8	24.8	24.8
Total Split (s)	16.0	16.0	136.0	14.0	134.0	30.0	30.0	30.0
Total Split (%)	8.9%	8.9%	75.6%	7.8%	74.4%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		152.4	152.4	142.6	142.6	13.4	13.4	13.4
Actuated g/C Ratio		0.85	0.85	0.79	0.79	0.07	0.07	0.07
v/c Ratio		0.22	0.57	0.19	0.43	0.44	0.66	0.42
Control Delay		0.9	0.4	4.6	1.2	34.5	114.9	20.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		0.9	0.4	4.6	1.2	34.5	114.9	20.5
LOS		A	A	A	A	C	F	C
Approach Delay			0.4		1.3	34.5		
Approach LOS			A		A	C		

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 50 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 3.1	Intersection LOS: A
Intersection Capacity Utilization 61.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	2383	24	1674	76	54	78
v/c Ratio	0.22	0.57	0.19	0.43	0.44	0.66	0.42
Control Delay	0.9	0.4	4.6	1.2	34.5	114.9	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.9	0.4	4.6	1.2	34.5	114.9	20.5
Queue Length 50th (ft)	0	5	1	18	24	63	0
Queue Length 95th (ft)	m2	31	2	30	0	63	0
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	295	4215	163	3937	287	159	291
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.57	0.15	0.43	0.26	0.34	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	42	2324	29	18	1483	28	27	0	24	28	0
Future Volume (vph)	2	42	2324	29	18	1483	28	27	0	24	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.94		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.97		0.95	
Satd. Flow (prot)		1736	4976		1736	4968			1666		1736	
Flt Permitted		0.13	1.00		0.05	1.00			0.97		0.61	
Satd. Flow (perm)		231	4976		91	4968			1666		1106	
Peak-hour factor, PHF	0.25	0.73	0.99	0.81	0.75	0.91	0.64	0.68	0.25	0.67	0.52	0.25
Adj. Flow (vph)	8	58	2347	36	24	1630	44	40	0	36	54	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	51	0	0	0
Lane Group Flow (vph)	0	66	2383	0	24	1673	0	0	25	0	54	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		150.8	150.8		141.0	141.0			13.4		13.4	
Effective Green, g (s)		150.8	150.8		141.0	141.0			13.4		13.4	
Actuated g/C Ratio		0.84	0.84		0.78	0.78			0.07		0.07	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		307	4168		106	3891			124		82	
v/s Ratio Prot		0.02	c0.48		0.00	c0.34						
v/s Ratio Perm		0.16			0.17				0.02		c0.05	
v/c Ratio		0.21	0.57		0.23	0.43			0.20		0.66	
Uniform Delay, d1		5.4	4.5		6.9	6.4			78.3		81.1	
Progression Factor		0.04	0.03		0.34	0.15			1.00		1.00	
Incremental Delay, d2		0.1	0.2		1.0	0.3			0.8		17.5	
Delay (s)		0.4	0.4		3.3	1.3			79.1		98.6	
Level of Service		A	A		A	A			E		F	
Approach Delay (s)			0.4			1.3			79.1			86.2
Approach LOS			A			A			E			F

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



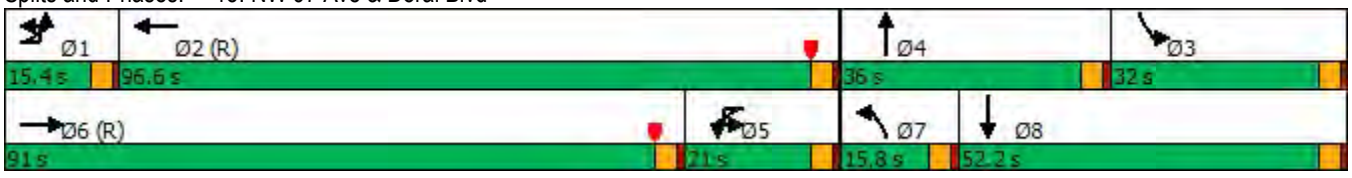
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.51
Adj. Flow (vph)	78
RTOR Reduction (vph)	72
Lane Group Flow (vph)	6
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.4
Effective Green, g (s)	13.4
Actuated g/C Ratio	0.07
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	115
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.05
Uniform Delay, d1	77.4
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	77.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

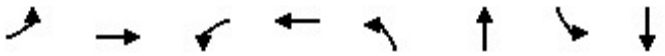
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	86	1880	251	1175	137	370	440	576
Future Volume (vph)	86	1880	251	1175	137	370	440	576
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	15.4	91.0	21.0	96.6	15.8	36.0	32.0	52.2
Total Split (%)	8.6%	50.6%	11.7%	53.7%	8.8%	20.0%	17.8%	29.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	10.5	87.7	17.0	94.2	11.5	31.9	27.4	47.8
Actuated g/C Ratio	0.06	0.49	0.09	0.52	0.06	0.18	0.15	0.27
v/c Ratio	0.59	0.93	0.84	0.60	0.75	0.96	0.92	0.77
Control Delay	94.8	51.2	77.3	13.1	103.9	93.5	99.0	66.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.8	51.2	77.3	13.1	103.9	93.5	99.0	66.9
LOS	F	D	E	B	F	F	F	E
Approach Delay		53.3		22.7		95.7		79.8
Approach LOS		D		C		F		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 32 (18%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 54.7	Intersection LOS: D
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

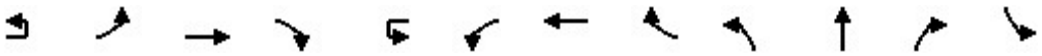




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	117	2250	271	1551	163	609	478	707
v/c Ratio	0.59	0.93	0.84	0.60	0.75	0.96	0.92	0.77
Control Delay	94.8	51.2	77.3	13.1	103.9	93.5	99.0	66.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.8	51.2	77.3	13.1	103.9	93.5	99.0	66.9
Queue Length 50th (ft)	70	905	165	254	99	350	290	405
Queue Length 95th (ft)	95	973	#238	293	134	#478	#391	478
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	215	2411	321	2580	222	634	528	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.93	0.84	0.60	0.73	0.96	0.91	0.76

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	86	1880	253	2	251	1175	193	137	370	190	440
Future Volume (vph)	2	86	1880	253	2	251	1175	193	137	370	190	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.98			1.00	0.97		1.00	0.94		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3400	4918			3400	4896		3400	3311		3400
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3400	4918			3400	4896		3400	3311		3400
Peak-hour factor, PHF	0.25	0.79	0.99	0.72	0.50	0.94	0.93	0.67	0.84	0.96	0.85	0.92
Adj. Flow (vph)	8	109	1899	351	4	267	1263	288	163	385	224	478
RTOR Reduction (vph)	0	0	15	0	0	0	20	0	0	46	0	0
Lane Group Flow (vph)	0	117	2235	0	0	271	1531	0	163	563	0	478
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		10.5	87.7			17.0	94.2		11.5	31.9		27.4
Effective Green, g (s)		10.5	87.7			17.0	94.2		11.5	31.9		27.4
Actuated g/C Ratio		0.06	0.49			0.09	0.52		0.06	0.18		0.15
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		198	2396			321	2562		217	586		517
v/s Ratio Prot		0.03	c0.45			c0.08	0.31		0.05	c0.17		c0.14
v/s Ratio Perm												
v/c Ratio		0.59	0.93			0.84	0.60		0.75	0.96		0.92
Uniform Delay, d1		82.7	43.4			80.2	29.8		82.8	73.4		75.3
Progression Factor		1.00	1.00			0.69	0.41		1.00	1.00		1.00
Incremental Delay, d2		4.7	8.2			17.0	1.0		13.6	27.5		22.4
Delay (s)		87.3	51.6			72.4	13.3		96.5	100.9		97.7
Level of Service		F	D			E	B		F	F		F
Approach Delay (s)			53.4				22.1			100.0		
Approach LOS			D				C			F		

Intersection Summary			
HCM 2000 Control Delay	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

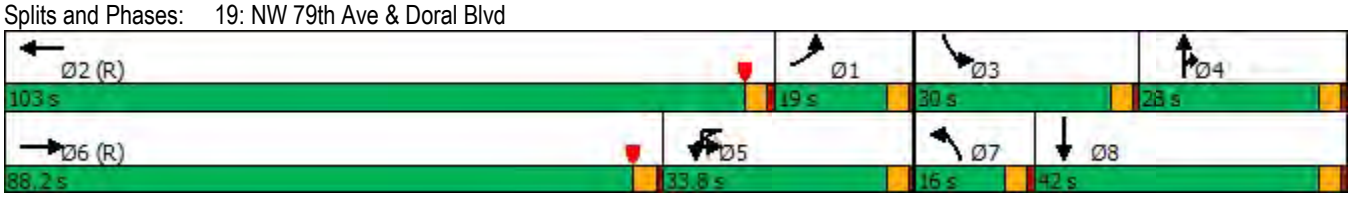
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	576	33
Future Volume (vph)	576	33
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.99	
Flt Protected	1.00	
Satd. Flow (prot)	3460	
Flt Permitted	1.00	
Satd. Flow (perm)	3460	
Peak-hour factor, PHF	0.89	0.55
Adj. Flow (vph)	647	60
RTOR Reduction (vph)	4	0
Lane Group Flow (vph)	703	0
Heavy Vehicles (%)	3%	3%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	47.8	
Effective Green, g (s)	47.8	
Actuated g/C Ratio	0.27	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	918	
v/s Ratio Prot	0.20	
v/s Ratio Perm		
v/c Ratio	0.77	
Uniform Delay, d1	60.9	
Progression Factor	1.00	
Incremental Delay, d2	3.9	
Delay (s)	64.8	
Level of Service	E	
Approach Delay (s)	78.1	
Approach LOS	E	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	92	1862	344	1759	40	132	176	379	331
Future Volume (vph)	92	1862	344	1759	40	132	176	379	331
Turn Type	Prot	NA	Prot	NA	Prot	NA	custom	Prot	NA
Protected Phases	1	6	5	2	7	4	4	3	8
Permitted Phases							5		
Detector Phase	1	6	5	2	7	4	4	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	9.0	12.0	25.0
Total Split (s)	19.0	88.2	33.8	103.0	16.0	28.0	28.0	30.0	42.0
Total Split (%)	10.6%	49.0%	18.8%	57.2%	8.9%	15.6%	15.6%	16.7%	23.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	13.6	88.0	28.4	102.8	10.2	22.5	51.0	25.0	39.5
Actuated g/C Ratio	0.08	0.49	0.16	0.57	0.06	0.12	0.28	0.14	0.22
v/c Ratio	0.75	0.66	0.72	0.87	0.57	0.89	0.37	0.89	0.62
Control Delay	89.8	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.8	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
LOS	F	A	F	D	F	F	C	F	E
Approach Delay		12.8		43.4		74.5			80.6
Approach LOS		B		D		E			F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 28 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 40.3	Intersection LOS: D
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	97	1995	382	2412	55	188	166	412	458
v/c Ratio	0.75	0.66	0.72	0.87	0.57	0.89	0.37	0.89	0.62
Control Delay	89.8	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.8	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
Queue Length 50th (ft)	120	140	222	903	64	225	75	248	252
Queue Length 95th (ft)	m144	157	284	969	94	#371	121	#332	319
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	143	3027	552	2758	114	226	464	481	742
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.66	0.69	0.87	0.48	0.83	0.36	0.86	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	92	1862	52	3	344	1759	460	40	132	176	379	331
Future Volume (vph)	92	1862	52	3	344	1759	460	40	132	176	379	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	0.99			1.00	0.97		1.00	0.97	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	6190			3335	4786		1719	1663	1461	3335	3328
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	6190			3335	4786		1719	1663	1461	3335	3328
Peak-hour factor, PHF	0.95	0.97	0.69	0.38	0.92	0.92	0.92	0.73	0.90	0.85	0.92	0.92
Adj. Flow (vph)	97	1920	75	8	374	1912	500	55	147	207	412	360
RTOR Reduction (vph)	0	3	0	0	0	25	0	0	5	39	0	13
Lane Group Flow (vph)	97	1992	0	0	382	2387	0	55	183	127	412	445
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	custom	Prot	NA
Protected Phases	1	6		5	5	2		7	4	4	3	8
Permitted Phases										5		
Actuated Green, G (s)	13.6	87.2			28.4	102.0		8.9	23.4	51.8	25.0	39.5
Effective Green, g (s)	13.6	87.2			28.4	102.0		8.9	23.4	51.8	25.0	39.5
Actuated g/C Ratio	0.08	0.48			0.16	0.57		0.05	0.13	0.29	0.14	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	129	2998			526	2712		84	216	420	463	730
v/s Ratio Prot	0.06	0.32			c0.11	c0.50		0.03	c0.11	0.04	c0.12	0.13
v/s Ratio Perm										0.05		
v/c Ratio	0.75	0.66			0.73	0.88		0.65	0.85	0.30	0.89	0.61
Uniform Delay, d1	81.5	35.3			72.1	33.7		84.0	76.5	50.0	76.1	63.3
Progression Factor	0.89	0.24			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.7	0.6			5.0	4.5		16.9	25.0	0.4	18.5	1.4
Delay (s)	84.2	9.0			77.1	38.2		100.9	101.6	50.4	94.6	64.7
Level of Service	F	A			E	D		F	F	D	F	E
Approach Delay (s)		12.5				43.5			80.7			78.9
Approach LOS		B				D			F			E

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



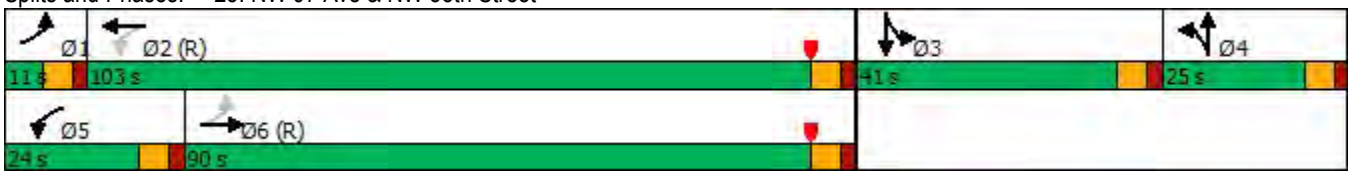
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	83
Future Volume (vph)	83
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.85
Adj. Flow (vph)	98
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

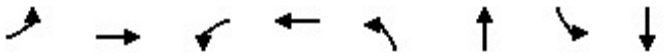
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	22	1169	148	537	122	144	239	239
Future Volume (vph)	22	1169	148	537	122	144	239	239
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	11.0	90.0	24.0	103.0	25.0	25.0	41.0	41.0
Total Split (%)	6.1%	50.0%	13.3%	57.2%	13.9%	13.9%	22.8%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	94.1	88.8	111.0	102.0	18.1	18.1	32.9	32.9
Actuated g/C Ratio	0.52	0.49	0.62	0.57	0.10	0.10	0.18	0.18
v/c Ratio	0.10	0.89	0.87	0.41	0.86	0.83	0.91	0.48
Control Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
LOS	B	D	F	C	F	E	F	E
Approach Delay		48.6		34.0		81.1		84.8
Approach LOS		D		C		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 55.3	Intersection LOS: E
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street

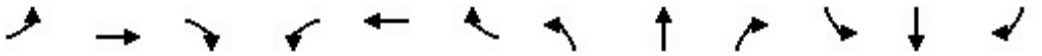




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1495	172	781	149	365	288	300
v/c Ratio	0.10	0.89	0.87	0.41	0.86	0.83	0.91	0.48
Control Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
Queue Length 50th (ft)	17	870	151	271	175	145	333	164
Queue Length 95th (ft)	23	#996	#252	324	#255	191	#426	211
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	352	1684	214	1910	183	455	337	669
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.89	0.80	0.41	0.81	0.80	0.85	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1169	149	148	537	162	122	144	174	239	239	16
Future Volume (vph)	22	1169	149	148	537	162	122	144	174	239	239	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.92		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3403		1736	3344		1736	3192		1736	3423	
Flt Permitted	0.33	1.00		0.04	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	610	3403		80	3344		1736	3192		1736	3423	
Peak-hour factor, PHF	0.61	0.90	0.76	0.86	0.91	0.85	0.82	0.85	0.89	0.83	0.88	0.57
Adj. Flow (vph)	36	1299	196	172	590	191	149	169	196	288	272	28
RTOR Reduction (vph)	0	6	0	0	17	0	0	120	0	0	4	0
Lane Group Flow (vph)	36	1489	0	172	764	0	149	245	0	288	296	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	93.0	88.7		111.0	100.7		18.1	18.1		32.9	32.9	
Effective Green, g (s)	93.0	88.7		111.0	100.7		18.1	18.1		32.9	32.9	
Actuated g/C Ratio	0.52	0.49		0.62	0.56		0.10	0.10		0.18	0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	342	1676		199	1870		174	320		317	625	
v/s Ratio Prot	0.00	c0.44		c0.08	0.23		c0.09	0.08		c0.17	0.09	
v/s Ratio Perm	0.05			0.45								
v/c Ratio	0.11	0.89		0.86	0.41		0.86	0.77		0.91	0.47	
Uniform Delay, d1	21.6	41.2		59.0	22.6		79.7	78.9		72.1	65.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	7.4		30.0	0.7		31.5	10.5		28.1	0.6	
Delay (s)	21.7	48.6		89.0	23.3		111.2	89.4		100.2	66.4	
Level of Service	C	D		F	C		F	F		F	E	
Approach Delay (s)		48.0			35.2			95.7			82.9	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	57.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Future Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Detector Phase	1	6	6	2 5	5	2	2	4	4	4	8	8
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0		5.0	16.0	16.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4		11.4	24.4	24.4	13.4	13.4	13.4	13.5	13.5
Total Split (s)	13.0	56.8	56.8		52.0	95.8	95.8	34.0	34.0	34.0	17.2	17.2
Total Split (%)	8.1%	35.5%	35.5%		32.5%	59.9%	59.9%	21.3%	21.3%	21.3%	10.8%	10.8%
Yellow Time (s)	4.4	4.4	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max		None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	50.4	50.4	50.4		92.0	92.0	92.0	27.6	27.6	73.2	10.7	10.7
Actuated g/C Ratio	0.32	0.32	0.32		0.58	0.58	0.58	0.17	0.17	0.46	0.07	0.07
v/c Ratio	0.35	1.04	0.23		1.11	0.74	0.44	0.80	1.08	0.45	0.99	0.93
Control Delay	28.9	58.3	2.1		115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	58.3	2.1		115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
LOS	C	E	A		F	C	A	F	F	B	F	F
Approach Delay		51.4				45.4			73.2			130.1
Approach LOS		D				D			E			F

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 102 (64%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 57.1	Intersection LOS: E
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	1093	127	578	1429	441	231	332	317	100	200
v/c Ratio	0.35	1.04	0.23	1.11	0.74	0.44	0.80	1.08	0.45	0.99	0.93
Control Delay	28.9	58.3	2.1	115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	58.3	2.1	115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
Queue Length 50th (ft)	25	~637	11	~644	590	54	235	~348	104	117	111
Queue Length 95th (ft)	m25	m#662	m12	#872	591	55	261	#456	152	#231	#159
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	158	1053	546	521	1921	999	288	308	710	101	214
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	1.04	0.23	1.11	0.74	0.44	0.80	1.08	0.45	0.99	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Future Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lane Util. Factor	1.00	0.95	1.00		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90	0.85	1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99
Satd. Flow (prot)	1671	3343	1495		1671	3343	1495	1671	1498	1421	1521	3084
Flt Permitted	0.19	1.00	1.00		0.09	1.00	1.00	0.95	1.00	1.00	0.95	0.99
Satd. Flow (perm)	328	3343	1495		156	3343	1495	1671	1498	1421	1521	3084
Peak-hour factor, PHF	0.62	0.95	0.82	0.44	0.89	0.83	0.73	0.72	0.80	0.85	0.83	0.79
Adj. Flow (vph)	55	1093	127	16	562	1429	441	231	102	546	159	111
RTOR Reduction (vph)	0	0	76	0	0	0	142	0	50	60	0	8
Lane Group Flow (vph)	55	1093	51	0	578	1429	299	231	282	257	100	192
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Actuated Green, G (s)	50.4	50.4	50.4		90.7	90.7	90.7	27.6	27.6	73.2	10.7	10.7
Effective Green, g (s)	50.4	50.4	50.4		90.7	90.7	90.7	27.6	27.6	73.2	10.7	10.7
Actuated g/C Ratio	0.31	0.31	0.31		0.57	0.57	0.57	0.17	0.17	0.46	0.07	0.07
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	147	1053	470		520	1895	847	288	258	650	101	206
v/s Ratio Prot	0.01	c0.33			c0.32	0.43		0.14	c0.19	0.07	c0.07	0.06
v/s Ratio Perm	0.10		0.03		c0.31		0.20			0.11		
v/c Ratio	0.37	1.04	0.11		1.11	0.75	0.35	0.80	1.09	0.40	0.99	0.93
Uniform Delay, d1	45.1	54.8	38.9		49.2	26.2	18.8	63.6	66.2	28.7	74.6	74.3
Progression Factor	0.56	0.59	0.20		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	25.4	0.1		73.7	2.8	1.2	14.8	83.6	0.4	86.2	43.4
Delay (s)	25.7	58.0	7.9		122.9	29.1	19.9	78.4	149.8	29.1	160.8	117.7
Level of Service	C	E	A		F	C	B	E	F	C	F	F
Approach Delay (s)		51.6				49.6			87.6			132.0
Approach LOS		D				D			F			F

Intersection Summary			
HCM 2000 Control Delay	62.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



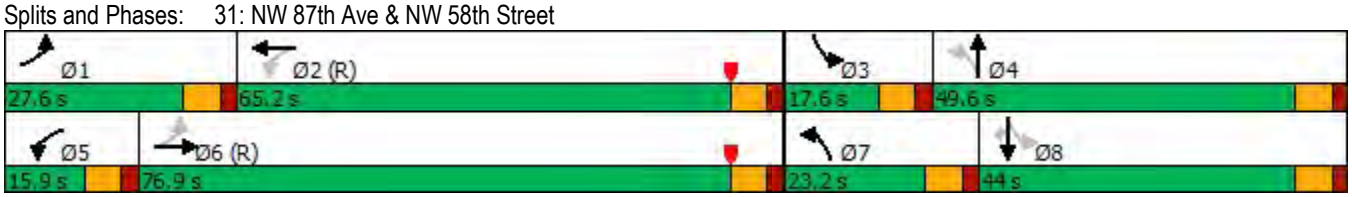
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	30
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	8%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	198	971	104	596	200	686	112	656	116
Future Volume (vph)	198	971	104	596	200	686	112	656	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	27.6	76.9	15.9	65.2	23.2	49.6	17.6	44.0	44.0
Total Split (%)	17.3%	48.1%	9.9%	40.8%	14.5%	31.0%	11.0%	27.5%	27.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	85.1	70.5	73.4	63.9	60.0	43.2	48.8	37.6	37.6
Actuated g/C Ratio	0.53	0.44	0.46	0.40	0.38	0.27	0.30	0.24	0.24
v/c Ratio	0.60	0.99	0.85	0.53	0.96	0.95	0.92	0.96	0.29
Control Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
LOS	C	E	F	C	F	E	F	F	A
Approach Delay		59.7		30.8		79.5		73.8	
Approach LOS		E		C		E		E	

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 28 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 62.3	Intersection LOS: E
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street

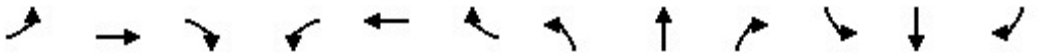




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	1468	125	723	215	871	151	772	138
v/c Ratio	0.60	0.99	0.85	0.53	0.96	0.95	0.92	0.96	0.29
Control Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
Queue Length 50th (ft)	115	780	72	275	177	467	109	423	0
Queue Length 95th (ft)	168	#956	m#152	m341	#348	#603	#167	#498	32
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	403	1477	147	1354	225	915	165	807	479
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.99	0.85	0.53	0.96	0.95	0.92	0.96	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



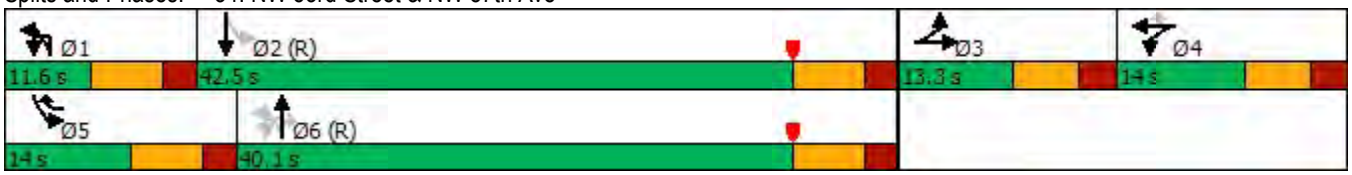
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	971	348	104	596	76	200	686	133	112	656	116
Future Volume (vph)	198	971	348	104	596	76	200	686	133	112	656	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3289		1719	3375		1719	3350		1719	3438	1538
Flt Permitted	0.24	1.00		0.06	1.00		0.09	1.00		0.11	1.00	1.00
Satd. Flow (perm)	432	3289		113	3375		168	3350		193	3438	1538
Peak-hour factor, PHF	0.92	0.93	0.82	0.83	0.94	0.85	0.93	0.95	0.89	0.74	0.85	0.84
Adj. Flow (vph)	215	1044	424	125	634	89	215	722	149	151	772	138
RTOR Reduction (vph)	0	27	0	0	7	0	0	11	0	0	0	106
Lane Group Flow (vph)	215	1441	0	125	716	0	215	860	0	151	772	32
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	86.4	70.5		73.4	63.9		60.0	43.2		48.8	37.6	37.6
Effective Green, g (s)	86.4	70.5		73.4	63.9		60.0	43.2		48.8	37.6	37.6
Actuated g/C Ratio	0.54	0.44		0.46	0.40		0.38	0.27		0.30	0.24	0.24
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	362	1449		147	1347		225	904		165	807	361
v/s Ratio Prot	0.06	c0.44		c0.05	0.21		c0.10	c0.26		0.06	0.22	
v/s Ratio Perm	0.26			0.34			c0.26			0.21		0.02
v/c Ratio	0.59	0.99		0.85	0.53		0.96	0.95		0.92	0.96	0.09
Uniform Delay, d1	22.4	44.5		39.8	36.6		47.5	57.4		45.4	60.4	47.8
Progression Factor	1.00	1.00		1.50	0.56		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	22.3		24.6	1.0		47.1	19.1		45.8	21.5	0.1
Delay (s)	25.0	66.9		84.2	21.7		94.7	76.5		91.2	81.9	47.9
Level of Service	C	E		F	C		F	E		F	F	D
Approach Delay (s)		61.5			30.9			80.1			78.8	
Approach LOS		E			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	64.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	2	129	2	43	51	14	1025	152	110	914
Future Volume (vph)	7	2	129	2	43	51	14	1025	152	110	914
Turn Type	Split	NA	Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3	4	4	5	1	1	6		5	2
Permitted Phases					4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	13.3	13.3	14.0	14.0	14.0	11.6	11.6	40.1	40.1	14.0	42.5
Total Split (%)	16.3%	16.3%	17.2%	17.2%	17.2%	14.3%	14.3%	49.3%	49.3%	17.2%	52.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.0	7.0	7.7	7.7	18.4		47.7	42.3	42.3	52.2	47.5
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.23		0.59	0.52	0.52	0.64	0.58
v/c Ratio	0.08	0.22	0.58	0.57	0.14		0.29	0.61	0.22	0.49	0.53
Control Delay	35.7	18.1	51.6	51.3	0.6		10.0	17.8	2.7	12.8	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	18.1	51.6	51.3	0.6		10.0	17.8	2.7	12.8	15.7
LOS	D	B	D	D	A		B	B	A	B	B
Approach Delay		22.5		38.5				15.2			15.4
Approach LOS		C		D				B			B

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 53rd Street & NW 87th Ave





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	36	89	89	61	94	1090	195	151	1055
v/c Ratio	0.08	0.22	0.58	0.57	0.14	0.29	0.61	0.22	0.49	0.53
Control Delay	35.7	18.1	51.6	51.3	0.6	10.0	17.8	2.7	12.8	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	18.1	51.6	51.3	0.6	10.0	17.8	2.7	12.8	15.7
Queue Length 50th (ft)	6	2	46	46	0	18	220	1	32	218
Queue Length 95th (ft)	14	9	76	50	0	24	298	16	46	278
Internal Link Dist (ft)		93		992			2118			2105
Turn Bay Length (ft)			175		175	180		190	125	
Base Capacity (vph)	147	164	156	157	457	322	1785	901	317	2002
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.22	0.57	0.57	0.13	0.29	0.61	0.22	0.48	0.53

Intersection Summary



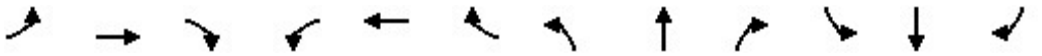
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	2	15	129	2	43	51	14	1025	152	110	914
Future Volume (vph)	7	2	15	129	2	43	51	14	1025	152	110	914
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.87		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1568		1633	1641	1538		1782	3438	1538	1719	3430
Flt Permitted	0.95	1.00		0.95	0.95	1.00		0.21	1.00	1.00	0.16	1.00
Satd. Flow (perm)	1719	1568		1633	1641	1538		390	3438	1538	286	3430
Peak-hour factor, PHF	0.58	0.50	0.47	0.74	0.50	0.70	0.73	0.58	0.94	0.78	0.73	0.88
Adj. Flow (vph)	12	4	32	174	4	61	70	24	1090	195	151	1039
RTOR Reduction (vph)	0	30	0	0	0	51	0	0	0	103	0	1
Lane Group Flow (vph)	12	6	0	89	89	10	0	94	1090	92	151	1054
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	0%	5%	5%	5%	5%	5%
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	4	5	1	1	6		5	2
Permitted Phases						4	6	6		6	2	
Actuated Green, G (s)	4.2	4.2		6.3	6.3	13.3		42.9	38.5	38.5	48.1	41.1
Effective Green, g (s)	4.2	4.2		6.3	6.3	13.3		42.9	38.5	38.5	48.1	41.1
Actuated g/C Ratio	0.05	0.05		0.08	0.08	0.16		0.53	0.47	0.47	0.59	0.50
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	88	80		126	127	251		280	1626	727	292	1731
v/s Ratio Prot	c0.01	0.00		c0.05	0.05	0.00		0.02	c0.32		c0.04	c0.31
v/s Ratio Perm						0.00		0.16		0.06	0.26	
v/c Ratio	0.14	0.07		0.71	0.70	0.04		0.34	0.67	0.13	0.52	0.61
Uniform Delay, d1	36.9	36.7		36.6	36.6	28.7		10.2	16.6	12.0	9.9	14.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.03	0.96	1.06	1.00	1.00
Incremental Delay, d2	0.7	0.4		16.5	16.0	0.1		0.7	2.2	0.4	1.5	1.6
Delay (s)	37.6	37.1		53.1	52.7	28.7		11.2	18.2	13.1	11.4	16.0
Level of Service	D	D		D	D	C		B	B	B	B	B
Approach Delay (s)		37.2			46.7				17.0			15.4
Approach LOS		D			D				B			B

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	11
Future Volume (vph)	11
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.69
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2404	26	0	1647	70	0	0	16	0	0	27
Future Volume (Veh/h)	0	2404	26	0	1647	70	0	0	16	0	0	27
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.94	0.69	0.94	0.94	0.62	0.25	0.25	0.50	0.25	0.25	0.81
Hourly flow rate (vph)	0	2557	38	0	1752	113	0	0	32	0	0	33
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		403			458							
pX, platoon unblocked	0.73			0.74			0.86	0.86	0.74	0.86	0.86	0.73
vC, conflicting volume	1865			2595			3193	4441	871	2636	4347	584
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	897			1936			963	2414	0	315	2305	0
tC, single (s)	4.2			4.1			7.5	6.5	7.0	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	96	100	100	96
cM capacity (veh/h)	546			229			176	28	803	511	33	791

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	1023	1023	549	584	584	584	113	32	33
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	38	0	0	0	113	32	33
cSH	1700	1700	1700	1700	1700	1700	1700	803	791
Volume to Capacity	0.60	0.60	0.32	0.34	0.34	0.34	0.07	0.04	0.04
Queue Length 95th (ft)	0	0	0	0	0	0	0	3	3
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	9.8
Lane LOS								A	A
Approach Delay (s)	0.0			0.0				9.7	9.8
Approach LOS								A	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	57.0%	ICU Level of Service		B
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	14	1148	25	0	1118
Future Volume (Veh/h)	0	14	1148	25	0	1118
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.88	0.91	0.75	0.25	0.95
Hourly flow rate (vph)	0	16	1262	33	0	1177
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.85	0.81			0.81	
vC, conflicting volume	1671	648			1295	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	968	113			908	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	216	753			618	

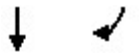
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	16	841	454	392	392	392
Volume Left	0	0	0	0	0	0
Volume Right	16	0	33	0	0	0
cSH	753	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.49	0.27	0.23	0.23	0.23
Queue Length 95th (ft)	2	0	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	42.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	2375	3	3	3	1660	4	0	0	13	0
Future Volume (Veh/h)	1	0	2375	3	3	3	1660	4	0	0	13	0
Sign Control			Free				Free			Stop		
Grade			0%				0%			0%		
Peak Hour Factor	0.25	0.92	0.98	0.75	0.75	0.38	0.92	0.92	0.25	0.92	0.54	0.92
Hourly flow rate (vph)	0	0	2423	4	0	8	1804	4	0	0	24	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type			None				None					
Median storage veh)												
Upstream signal (ft)							1196					
pX, platoon unblocked	0.00	0.86			0.00				0.86	0.86		0.86
vC, conflicting volume	0	1808			0	2427			3050	4249	810	2654
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1353			0	2427			2805	4207	810	2341
tC, single (s)	0.0	4.1			0.0	4.1			7.5	6.5	7.2	7.5
tC, 2 stage (s)												
tF (s)	0.0	2.2			0.0	2.2			3.5	4.0	3.4	3.5
p0 queue free %	0	100			0	96			100	100	92	100
cM capacity (veh/h)	0	432			0	198			7	2	297	15

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1
Volume Total	969	969	489	8	722	722	365	8	16	8
Volume Left	0	0	0	8	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	4	8	16	8
cSH	1700	1700	1700	198	1700	1700	1700	297	297	927
Volume to Capacity	0.57	0.57	0.29	0.04	0.42	0.42	0.21	0.03	0.05	0.01
Queue Length 95th (ft)	0	0	0	3	0	0	0	2	4	1
Control Delay (s)	0.0	0.0	0.0	24.0	0.0	0.0	0.0	17.5	17.8	8.9
Lane LOS				C				C	C	A
Approach Delay (s)	0.0			0.1				17.7		8.9
Approach LOS								C		A

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	56.6%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	7
Future Volume (Veh/h)	0	7
Sign Control	Stop	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	0	8
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type		
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked	0.86	0.86
vC, conflicting volume	4249	603
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol	4207	0
tC, single (s)	6.5	6.9
tC, 2 stage (s)		
tF (s)	4.0	3.3
p0 queue free %	100	99
cM capacity (veh/h)	2	927

Direction, Lane #



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	2387	2	40	6	1696	0	25
Future Volume (Veh/h)	1	2387	2	40	6	1696	0	25
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.98	0.50	0.92	0.50	0.95	0.25	0.75
Hourly flow rate (vph)	0	2436	4	0	12	1785	0	33
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.84		0.84	0.84
vC, conflicting volume	0			0	2440		3057	814
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	2036		2774	90
tC, single (s)	0.0			0.0	4.1		6.8	8.1
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.9
p0 queue free %	0			0	95		100	95
cM capacity (veh/h)	0			0	235		13	665

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	974	974	491	12	595	595	595	33
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	4	0	0	0	0	33
cSH	1700	1700	1700	235	1700	1700	1700	665
Volume to Capacity	0.57	0.57	0.29	0.05	0.35	0.35	0.35	0.05
Queue Length 95th (ft)	0	0	0	4	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	21.1	0.0	0.0	0.0	10.7
Lane LOS				C				B
Approach Delay (s)	0.0			0.1				10.7
Approach LOS								B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	43	23	18	1096	8	56	8	977
Future Volume (Veh/h)	43	23	18	1096	8	56	8	977
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.58	0.92	0.25	0.91	0.50	0.25	0.50	0.93
Hourly flow rate (vph)	74	25	0	1204	16	0	16	1051
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				702				
pX, platoon unblocked	0.82	0.82	0.00			0.00	0.82	
vC, conflicting volume	1770	610	0			0	1220	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1506	99	0			0	839	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	14	97	0			0	97	
cM capacity (veh/h)	86	762	0			0	631	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	74	25	803	417	0	16	526	526
Volume Left	74	0	0	0	0	16	0	0
Volume Right	0	25	0	16	0	0	0	0
cSH	86	762	1700	1700	1700	631	1700	1700
Volume to Capacity	0.86	0.03	0.47	0.25	0.00	0.03	0.31	0.31
Queue Length 95th (ft)	114	3	0	0	0	2	0	0
Control Delay (s)	145.5	9.9	0.0	0.0	0.0	10.9	0.0	0.0
Lane LOS	F	A				B		
Approach Delay (s)	111.2		0.0			0.2		
Approach LOS	F							

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

2027 PM Traffic With Project Trips and Improvements with median closures Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	292	932	316	394	1359	449	897	413	119	924	267
Future Volume (vph)	292	932	316	394	1359	449	897	413	119	924	267
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	custom
Protected Phases	1	6	7	5	2	7	4		3	8	8
Permitted Phases			6					4			1
Detector Phase	1	6	7	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	1.0	5.0	1.0	1.0	5.0	1.0	5.0	5.0	1.0	5.0	5.0
Minimum Split (s)	8.0	25.0	8.1	8.0	25.0	8.1	25.1	25.1	8.1	25.1	25.1
Total Split (s)	32.0	62.0	39.0	41.0	71.0	39.0	69.8	69.8	17.2	48.0	48.0
Total Split (%)	16.8%	32.6%	20.5%	21.6%	37.4%	20.5%	36.7%	36.7%	9.1%	25.3%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	23.1	55.1	93.9	32.1	64.1	31.8	64.6	64.6	10.0	42.8	72.9
Actuated g/C Ratio	0.12	0.29	0.49	0.17	0.34	0.17	0.34	0.34	0.05	0.23	0.38
v/c Ratio	0.84	0.69	0.44	0.81	0.99	0.91	0.86	0.66	0.75	0.89	0.43
Control Delay	92.2	55.1	17.5	69.2	46.3	97.9	66.8	26.4	104.3	71.8	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.2	55.1	17.5	69.2	46.3	97.9	66.8	26.4	104.3	71.8	17.5
LOS	F	E	B	E	D	F	E	C	F	E	B
Approach Delay		54.5			51.3		65.3			63.5	
Approach LOS		D			D		E			E	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 134 (71%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 58.3	Intersection LOS: E
Intersection Capacity Utilization 93.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd

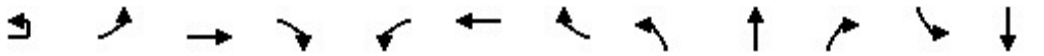




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	346	1002	367	464	1665	516	1019	475	134	1004	300
v/c Ratio	0.84	0.69	0.44	0.81	0.99	0.91	0.86	0.66	0.75	0.89	0.43
Control Delay	92.2	55.1	17.5	69.2	46.3	97.9	66.8	26.4	104.3	71.8	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.2	55.1	17.5	69.2	46.3	97.9	66.8	26.4	104.3	71.8	17.5
Queue Length 50th (ft)	220	416	111	307	786	330	634	223	87	460	82
Queue Length 95th (ft)	270	473	148	m328	m#876	#407	708	336	#139	#526	151
Internal Link Dist (ft)		378			2485		2143			310	
Turn Bay Length (ft)	400		170	330		400			190		300
Base Capacity (vph)	447	1460	817	608	1677	570	1191	715	180	1134	690
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.69	0.45	0.76	0.99	0.91	0.86	0.66	0.74	0.89	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	292	932	316	394	1359	188	449	897	413	119	924
Future Volume (vph)	5	292	932	316	394	1359	188	449	897	413	119	924
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3400	5036	1568	3400	4943		3400	3505	1568	3400	5036
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3400	5036	1568	3400	4943		3400	3505	1568	3400	5036
Peak-hour factor, PHF	0.50	0.87	0.93	0.86	0.85	0.93	0.92	0.87	0.88	0.87	0.89	0.92
Adj. Flow (vph)	10	336	1002	367	464	1461	204	516	1019	475	134	1004
RTOR Reduction (vph)	0	0	0	56	0	9	0	0	0	182	0	0
Lane Group Flow (vph)	0	346	1002	311	464	1656	0	516	1019	293	134	1004
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		23.1	55.1	86.9	32.1	64.1		31.8	64.6	64.6	10.0	42.8
Effective Green, g (s)		23.1	55.1	86.9	32.1	64.1		31.8	64.6	64.6	10.0	42.8
Actuated g/C Ratio		0.12	0.29	0.46	0.17	0.34		0.17	0.34	0.34	0.05	0.23
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		413	1460	775	574	1667		569	1191	533	178	1134
v/s Ratio Prot		0.10	0.20	0.07	c0.14	c0.33		c0.15	c0.29		0.04	0.20
v/s Ratio Perm				0.13						0.19		
v/c Ratio		0.84	0.69	0.40	0.81	0.99		0.91	0.86	0.55	0.75	0.89
Uniform Delay, d1		81.6	59.8	34.3	76.0	62.7		77.6	58.4	50.9	88.8	71.2
Progression Factor		0.92	0.88	0.73	0.84	0.53		1.00	1.00	1.00	0.92	0.88
Incremental Delay, d2		13.3	2.5	0.3	3.9	13.3		18.1	8.0	4.0	14.8	9.3
Delay (s)		88.1	54.9	25.3	67.5	46.3		95.7	66.3	54.9	96.8	71.7
Level of Service		F	D	C	E	D		F	E	D	F	E
Approach Delay (s)			55.3			50.9			71.2			66.3
Approach LOS			E			D			E			E

Intersection Summary			
HCM 2000 Control Delay	60.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



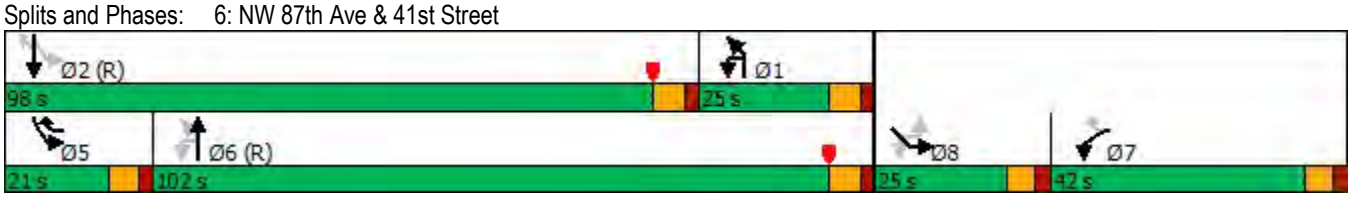
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	267
Future Volume (vph)	267
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.1
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	300
RTOR Reduction (vph)	98
Lane Group Flow (vph)	202
Heavy Vehicles (%)	3%
Turn Type	custom
Protected Phases	8
Permitted Phases	1
Actuated Green, G (s)	61.9
Effective Green, g (s)	61.9
Actuated g/C Ratio	0.33
Clearance Time (s)	7.1
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	510
v/s Ratio Prot	0.09
v/s Ratio Perm	0.04
v/c Ratio	0.40
Uniform Delay, d1	49.6
Progression Factor	0.43
Incremental Delay, d2	0.5
Delay (s)	21.9
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Configurations										
Traffic Volume (vph)	208	107	8	91	1083	53	990	46	0	71
Future Volume (vph)	208	107	8	91	1083	53	990	46	0	71
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Perm	Prot	Perm
Protected Phases	7	5	1	1	6	5	2		8	
Permitted Phases		7	6	6		2		2		8
Detector Phase	7	5	1	1	6	5	2	2	8	8
Switch Phase										
Minimum Initial (s)	1.7	1.6	1.6	1.6	5.0	1.6	5.0	5.0	5.0	5.0
Minimum Split (s)	8.0	8.0	8.0	8.0	24.4	8.0	24.4	24.4	24.3	24.3
Total Split (s)	42.0	21.0	25.0	25.0	102.0	21.0	98.0	98.0	25.0	25.0
Total Split (%)	22.1%	11.1%	13.2%	13.2%	53.7%	11.1%	51.6%	51.6%	13.2%	13.2%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	C-Max	None	None
Act Effct Green (s)	23.3	39.8		125.3	125.3	116.9	116.9	116.9	5.8	5.8
Actuated g/C Ratio	0.12	0.21		0.66	0.66	0.62	0.62	0.62	0.03	0.03
v/c Ratio	0.87	0.32		0.36	0.60	0.40	0.55	0.07	0.51	0.49
Control Delay	68.0	9.0		4.6	3.3	22.9	24.5	1.8	13.0	11.1
Queue Delay	0.0	0.0		0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	9.0		4.6	3.6	22.9	24.5	1.8	13.0	11.1
LOS	E	A		A	A	C	C	A	B	B
Approach Delay	49.2				3.7		23.2		12.1	
Approach LOS	D				A		C		B	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 46 (24%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Group Flow (vph)	282	132	138	1356	88	1179	69	90	84
v/c Ratio	0.87	0.32	0.36	0.60	0.40	0.55	0.07	0.51	0.49
Control Delay	68.0	9.0	4.6	3.3	22.9	24.5	1.8	13.0	11.1
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	9.0	4.6	3.6	22.9	24.5	1.8	13.0	11.1
Queue Length 50th (ft)	197	0	15	88	45	439	0	0	0
Queue Length 95th (ft)	234	23	m24	m135	55	524	0	0	0
Internal Link Dist (ft)	2087			188		702		377	
Turn Bay Length (ft)	200		225		200		200		
Base Capacity (vph)	432	448	385	2270	255	2156	1000	281	262
Starvation Cap Reductn	0	0	0	275	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.29	0.36	0.68	0.35	0.55	0.07	0.32	0.32

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	208	3	107	8	91	1083	125	53	990	46	39	0
Future Volume (vph)	208	3	107	8	91	1083	125	53	990	46	39	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95	1.00		1.00
Frt	0.99		0.85		1.00	0.98		1.00	1.00	0.85		0.94
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00	1.00		0.97
Satd. Flow (prot)	1745		1490		1757	3435		1752	3505	1568		1679
Flt Permitted	0.96		1.00		0.20	1.00		0.12	1.00	1.00		0.97
Satd. Flow (perm)	1745		1490		379	3435		223	3505	1568		1679
Peak-hour factor, PHF	0.79	0.75	0.73	0.67	0.72	0.92	0.70	0.60	0.84	0.67	0.75	0.25
Adj. Flow (vph)	263	4	147	12	126	1177	179	88	1179	69	52	0
RTOR Reduction (vph)	113	0	109	0	0	4	0	0	0	27	0	87
Lane Group Flow (vph)	169	0	23	0	138	1352	0	88	1179	42	0	3
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA	Perm	Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2		2	8	
Actuated Green, G (s)	23.3		33.5		125.3	125.3		116.9	116.9	116.9		5.8
Effective Green, g (s)	23.3		33.5		125.3	125.3		116.9	116.9	116.9		5.8
Actuated g/C Ratio	0.12		0.18		0.66	0.66		0.62	0.62	0.62		0.03
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	213		262		384	2265		219	2156	964		51
v/s Ratio Prot	c0.10		0.00		0.04	c0.39		0.02	c0.34			
v/s Ratio Perm			0.01		0.20			0.23		0.03		0.00
v/c Ratio	0.79		0.09		0.36	0.60		0.40	0.55	0.04		0.05
Uniform Delay, d1	81.0		65.5		24.6	18.2		21.0	21.2	14.5		89.4
Progression Factor	1.00		1.00		0.14	0.14		1.06	1.05	1.30		1.00
Incremental Delay, d2	18.0		0.1		0.3	0.6		1.2	1.0	0.1		0.4
Delay (s)	99.0		65.6		3.8	3.1		23.6	23.2	18.8		89.9
Level of Service	F		E		A	A		C	C	B		F
Approach Delay (s)	88.4					3.2			23.0			89.9
Approach LOS	F					A			C			F

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



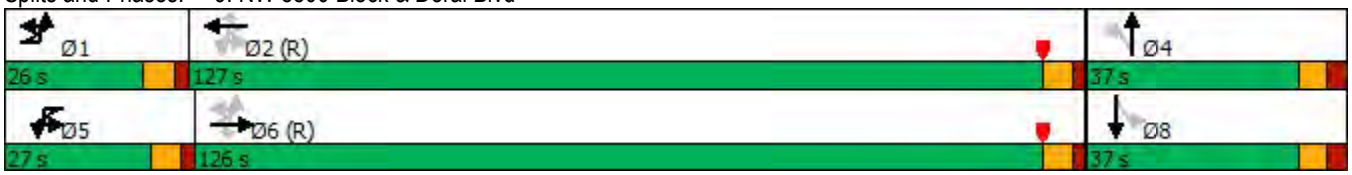
Movement	SER
Lane Configurations	
Traffic Volume (vph)	71
Future Volume (vph)	71
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1490
Flt Permitted	1.00
Satd. Flow (perm)	1490
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	122
RTOR Reduction (vph)	81
Lane Group Flow (vph)	3
Heavy Vehicles (%)	3%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	5.8
Effective Green, g (s)	5.8
Actuated g/C Ratio	0.03
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	45
v/s Ratio Prot	
v/s Ratio Perm	c0.00
v/c Ratio	0.06
Uniform Delay, d1	89.4
Progression Factor	1.00
Incremental Delay, d2	0.5
Delay (s)	90.0
Level of Service	F
Approach Delay (s)	
Approach LOS	

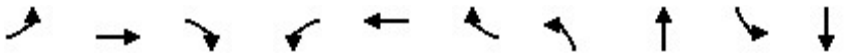
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	28	34	1342	50	35	77	1870	53	42	3	55	3
Future Volume (vph)	28	34	1342	50	35	77	1870	53	42	3	55	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2			4		8
Permitted Phases	6	6		6	2	2		2	4		8	
Detector Phase	1	1	6	6	5	5	2	2	4	4	8	8
Switch Phase												
Minimum Initial (s)	1.6	1.6	5.0	5.0	1.6	1.6	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.0	8.0	24.4	24.4	8.0	8.0	24.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	26.0	26.0	126.0	126.0	27.0	27.0	127.0	127.0	37.0	37.0	37.0	37.0
Total Split (%)	13.7%	13.7%	66.3%	66.3%	14.2%	14.2%	66.8%	66.8%	19.5%	19.5%	19.5%	19.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	Max	Max
Act Effct Green (s)		140.6	130.9	130.9		139.8	130.5	130.5	30.0	30.0	30.0	30.0
Actuated g/C Ratio		0.74	0.69	0.69		0.74	0.69	0.69	0.16	0.16	0.16	0.16
v/c Ratio		0.57	0.40	0.06		0.50	0.60	0.05	0.25	0.33	0.38	0.22
Control Delay		27.4	13.8	2.5		9.0	5.1	0.1	73.9	17.3	78.9	19.8
Queue Delay		0.0	0.0	0.0		0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay		27.4	13.8	2.5		9.0	5.2	0.1	73.9	17.3	78.9	19.8
LOS		C	B	A		A	A	A	E	B	E	B
Approach Delay			14.2				5.3			35.4		49.1
Approach LOS			B				A			D		D

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 167 (88%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 11.3	Intersection LOS: B
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

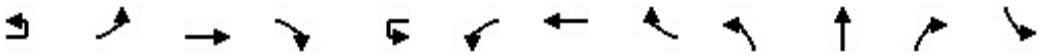




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	96	1398	61	144	2101	53	53	113	67	68
v/c Ratio	0.57	0.40	0.06	0.50	0.60	0.05	0.25	0.33	0.38	0.22
Control Delay	27.4	13.8	2.5	9.0	5.1	0.1	73.9	17.3	78.9	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	13.8	2.5	9.0	5.2	0.1	73.9	17.3	78.9	19.8
Queue Length 50th (ft)	27	272	1	17	120	0	59	13	76	9
Queue Length 95th (ft)	40	309	15	m19	141	m0	95	0	121	0
Internal Link Dist (ft)		1116			323			94		231
Turn Bay Length (ft)	200		190	190		75				
Base Capacity (vph)	259	3502	1109	389	3493	1106	209	339	176	305
Starvation Cap Reductn	0	0	0	0	420	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.40	0.06	0.37	0.68	0.05	0.25	0.33	0.38	0.22

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	28	34	1342	50	35	77	1870	53	42	3	69	55
Future Volume (vph)	28	34	1342	50	35	77	1870	53	42	3	69	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.87		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1787	5085	1583		1782	5085	1583	1770	1613		1770
Flt Permitted		0.06	1.00	1.00		0.16	1.00	1.00	0.71	1.00		0.60
Satd. Flow (perm)		113	5085	1583		296	5085	1583	1328	1613		1117
Peak-hour factor, PHF	0.58	0.71	0.96	0.82	0.67	0.84	0.89	1.00	0.79	0.25	0.68	0.82
Adj. Flow (vph)	48	48	1398	61	52	92	2101	53	53	12	101	67
RTOR Reduction (vph)	0	0	0	19	0	0	0	17	0	85	0	0
Lane Group Flow (vph)	0	96	1398	42	0	144	2101	36	53	28	0	67
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2		2	4			8
Actuated Green, G (s)		140.6	130.9	130.9		139.8	130.5	130.5	30.0	30.0		30.0
Effective Green, g (s)		140.6	130.9	130.9		139.8	130.5	130.5	30.0	30.0		30.0
Actuated g/C Ratio		0.74	0.69	0.69		0.74	0.69	0.69	0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		169	3503	1090		290	3492	1087	209	254		176
v/s Ratio Prot		c0.03	0.27			0.02	c0.41			0.02		
v/s Ratio Perm		0.39		0.03		0.34		0.02	0.04			c0.06
v/c Ratio		0.57	0.40	0.04		0.50	0.60	0.03	0.25	0.11		0.38
Uniform Delay, d1		16.5	12.7	9.4		8.5	15.9	9.5	70.2	68.6		71.7
Progression Factor		0.97	1.05	1.12		0.88	0.28	0.00	1.00	1.00		1.00
Incremental Delay, d2		4.3	0.3	0.1		0.9	0.5	0.0	0.6	0.2		6.2
Delay (s)		20.3	13.6	10.6		8.3	5.0	0.0	70.8	68.8		77.8
Level of Service		C	B	B		A	A	A	E	E		E
Approach Delay (s)			13.9				5.0			69.4		
Approach LOS			B				A			E		

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	34
Future Volume (vph)	3	34
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1616	
Flt Permitted	1.00	
Satd. Flow (perm)	1616	
Peak-hour factor, PHF	0.38	0.57
Adj. Flow (vph)	8	60
RTOR Reduction (vph)	51	0
Lane Group Flow (vph)	17	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	30.0	
Effective Green, g (s)	30.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	255	
v/s Ratio Prot	0.01	
v/s Ratio Perm		
v/c Ratio	0.07	
Uniform Delay, d1	68.1	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	68.6	
Level of Service	E	
Approach Delay (s)	73.2	
Approach LOS	E	

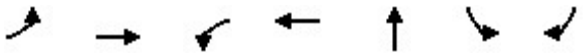
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	10	37	1491	15	1847	1	24	28
Future Volume (vph)	10	37	1491	15	1847	1	24	28
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	5.0	4.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.0	8.0	24.4	8.0	24.4	9.0	9.0	9.0
Total Split (s)	10.0	10.0	56.0	8.0	54.0	26.0	26.0	26.0
Total Split (%)	11.1%	11.1%	62.2%	8.9%	60.0%	28.9%	28.9%	28.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		63.9	63.9	60.1	60.1	13.9	13.9	13.9
Actuated g/C Ratio		0.71	0.71	0.67	0.67	0.15	0.15	0.15
v/c Ratio		0.32	0.43	0.10	0.58	0.63	0.12	0.12
Control Delay		10.4	3.3	7.8	10.1	44.4	32.0	0.7
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		10.4	3.3	7.8	10.1	44.4	32.0	0.7
LOS		B	A	A	B	D	C	A
Approach Delay			3.6		10.1	44.4		
Approach LOS			A		B	D		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 17 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd

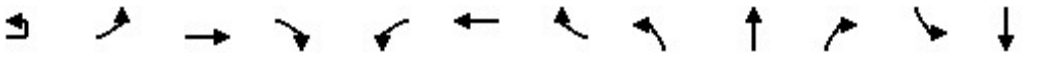




Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	1561	25	1980	173	29	40
v/c Ratio	0.32	0.43	0.10	0.58	0.63	0.12	0.12
Control Delay	10.4	3.3	7.8	10.1	44.4	32.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	3.3	7.8	10.1	44.4	32.0	0.7
Queue Length 50th (ft)	5	48	5	213	91	14	0
Queue Length 95th (ft)	m13	92	10	308	35	33	0
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	211	3607	247	3388	434	368	469
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.43	0.10	0.58	0.40	0.08	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	37	1491	5	15	1847	26	85	1	10	24	0
Future Volume (vph)	10	37	1491	5	15	1847	26	85	1	10	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.99		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.96		0.95	
Satd. Flow (prot)		1776	5081		1770	5071			1765		1770	
Flt Permitted		0.08	1.00		0.12	1.00			0.96		0.81	
Satd. Flow (perm)		144	5081		215	5071			1765		1507	
Peak-hour factor, PHF	0.83	0.69	0.96	0.62	0.60	0.95	0.72	0.54	0.25	0.83	0.82	0.25
Adj. Flow (vph)	12	54	1553	8	25	1944	36	157	4	12	29	0
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	3	0	0	0
Lane Group Flow (vph)	0	66	1561	0	25	1978	0	0	170	0	29	0
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		61.5	61.5		57.7	57.7			13.9		13.9	
Effective Green, g (s)		61.5	61.5		57.7	57.7			13.9		13.9	
Actuated g/C Ratio		0.68	0.68		0.64	0.64			0.15		0.15	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		214	3472		182	3251			272		232	
v/s Ratio Prot		0.02	c0.31		0.00	c0.39						
v/s Ratio Perm		0.19			0.08				0.10		0.02	
v/c Ratio		0.31	0.45		0.14	0.61			0.62		0.12	
Uniform Delay, d1		13.8	6.5		7.0	9.5			35.6		32.8	
Progression Factor		0.57	0.47		1.00	1.00			1.00		1.00	
Incremental Delay, d2		0.5	0.3		0.3	0.9			4.4		0.2	
Delay (s)		8.4	3.3		7.3	10.4			40.0		33.1	
Level of Service		A	A		A	B			D		C	
Approach Delay (s)			3.5			10.3			40.0			32.6
Approach LOS			A			B			D			C

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



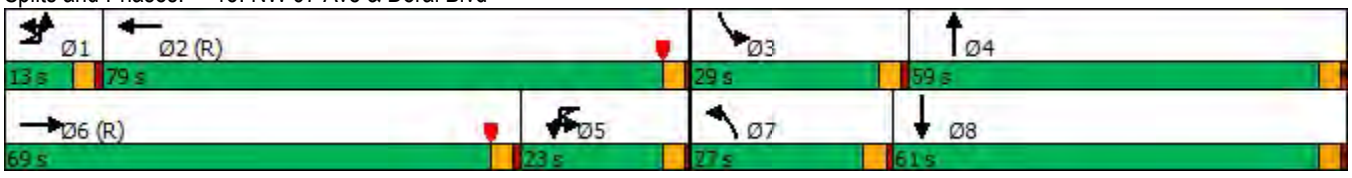
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.70
Adj. Flow (vph)	40
RTOR Reduction (vph)	34
Lane Group Flow (vph)	6
Heavy Vehicles (%)	2%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.9
Effective Green, g (s)	13.9
Actuated g/C Ratio	0.15
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	244
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	32.3
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	32.3
Level of Service	C
Approach Delay (s)	
Approach LOS	

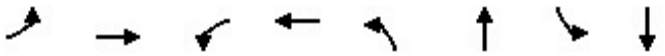
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	114	1076	199	1568	271	635	330	635
Future Volume (vph)	114	1076	199	1568	271	635	330	635
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Minimum Split (s)	8.0	24.6	8.0	24.6	8.0	24.8	8.0	24.8
Total Split (s)	13.0	69.0	23.0	79.0	27.0	59.0	29.0	61.0
Total Split (%)	7.2%	38.3%	12.8%	43.9%	15.0%	32.8%	16.1%	33.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	9.5	67.5	19.0	77.0	20.4	53.5	24.0	57.1
Actuated g/C Ratio	0.05	0.38	0.11	0.43	0.11	0.30	0.13	0.32
v/c Ratio	0.74	0.73	0.68	0.88	0.78	0.93	0.88	0.75
Control Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
LOS	F	D	E	D	F	E	F	E
Approach Delay		55.7		48.3		78.7		71.2
Approach LOS		E		D		E		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 12 (7%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 60.9	Intersection LOS: E
Intersection Capacity Utilization 84.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

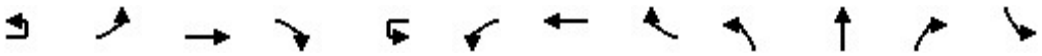




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	134	1368	245	1884	301	955	402	822
v/c Ratio	0.74	0.73	0.68	0.88	0.78	0.93	0.88	0.75
Control Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
Queue Length 50th (ft)	82	512	147	767	180	561	242	444
Queue Length 95th (ft)	#135	571	178	570	235	634	276	535
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	180	1874	362	2149	438	1058	476	1116
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.73	0.68	0.88	0.69	0.90	0.84	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	114	1076	186	3	199	1568	186	271	635	212	330
Future Volume (vph)	1	114	1076	186	3	199	1568	186	271	635	212	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.97			1.00	0.98		1.00	0.96		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3435	4954			3435	5005		3433	3410		3433
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3435	4954			3435	5005		3433	3410		3433
Peak-hour factor, PHF	0.25	0.88	0.95	0.79	0.38	0.84	0.93	0.94	0.90	0.88	0.91	0.82
Adj. Flow (vph)	4	130	1133	235	8	237	1686	198	301	722	233	402
RTOR Reduction (vph)	0	0	18	0	0	0	8	0	0	18	0	0
Lane Group Flow (vph)	0	134	1351	0	0	245	1876	0	301	937	0	402
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		9.5	67.5			19.0	77.0		20.4	53.5		24.0
Effective Green, g (s)		9.5	67.5			19.0	77.0		20.4	53.5		24.0
Actuated g/C Ratio		0.05	0.38			0.11	0.43		0.11	0.30		0.13
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		181	1857			362	2141		389	1013		457
v/s Ratio Prot		0.04	c0.27			0.07	c0.37		0.09	c0.27		c0.12
v/s Ratio Perm												
v/c Ratio		0.74	0.73			0.68	0.88		0.77	0.93		0.88
Uniform Delay, d1		84.0	48.3			77.5	47.1		77.6	61.3		76.6
Progression Factor		1.00	1.00			0.90	0.84		1.00	1.00		1.00
Incremental Delay, d2		15.0	2.5			4.2	4.6		9.3	13.7		17.3
Delay (s)		99.0	50.9			73.7	44.2		86.8	75.0		93.9
Level of Service		F	D			E	D		F	E		F
Approach Delay (s)			55.2				47.6			77.8		
Approach LOS			E				D			E		

Intersection Summary			
HCM 2000 Control Delay	60.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



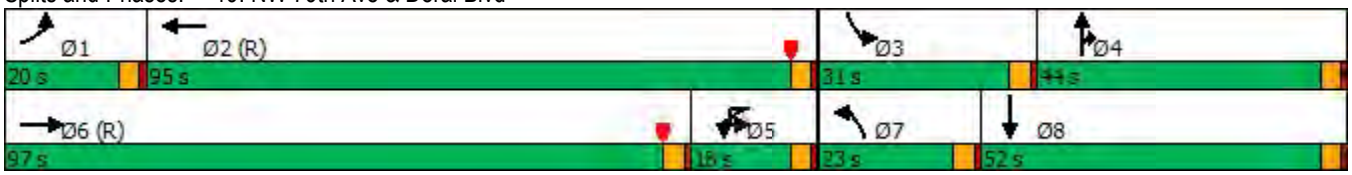
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	635	126
Future Volume (vph)	635	126
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.97	
Flt Protected	1.00	
Satd. Flow (prot)	3440	
Flt Permitted	1.00	
Satd. Flow (perm)	3440	
Peak-hour factor, PHF	0.95	0.82
Adj. Flow (vph)	668	154
RTOR Reduction (vph)	11	0
Lane Group Flow (vph)	811	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	57.1	
Effective Green, g (s)	57.1	
Actuated g/C Ratio	0.32	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	1091	
v/s Ratio Prot	c0.24	
v/s Ratio Perm		
v/c Ratio	0.74	
Uniform Delay, d1	54.9	
Progression Factor	1.00	
Incremental Delay, d2	2.8	
Delay (s)	57.7	
Level of Service	E	
Approach Delay (s)	69.6	
Approach LOS	E	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	124	2556	189	1685	81	188	391	420	334
Future Volume (vph)	124	2556	189	1685	81	188	391	420	334
Turn Type	Prot	NA	Prot	NA	Prot	NA	custom	Prot	NA
Protected Phases	1	6	5	2	7	4	4	3	8
Permitted Phases							5		
Detector Phase	1	6	5	2	7	4	4	3	8
Switch Phase									
Minimum Initial (s)	4.0	5.0	4.0	5.0	4.0	5.0	5.0	4.0	5.0
Minimum Split (s)	8.0	24.4	8.0	24.4	8.0	9.0	9.0	8.0	25.0
Total Split (s)	20.0	97.0	18.0	95.0	23.0	44.0	44.0	31.0	52.0
Total Split (%)	10.5%	51.1%	9.5%	50.0%	12.1%	23.2%	23.2%	16.3%	27.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	16.0	93.0	14.0	91.0	15.8	40.0	54.0	27.0	51.2
Actuated g/C Ratio	0.08	0.49	0.07	0.48	0.08	0.21	0.28	0.14	0.27
v/c Ratio	0.98	0.90	0.99	0.95	0.71	1.01	0.68	0.97	0.58
Control Delay	166.5	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	166.5	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
LOS	F	C	F	E	F	F	D	F	E
Approach Delay		36.0		64.9		86.9			85.3
Approach LOS		D		E		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 32 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 58.4	Intersection LOS: E
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	144	2786	248	2250	103	364	325	467	541
v/c Ratio	0.98	0.90	0.99	0.95	0.71	1.01	0.68	0.97	0.58
Control Delay	166.5	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	166.5	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
Queue Length 50th (ft)	187	526	162	968	127	~485	217	304	303
Queue Length 95th (ft)	m#324	550	#232	1035	173	#642	281	#424	321
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	147	3095	251	2363	175	359	477	483	927
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.90	0.99	0.95	0.59	1.01	0.68	0.97	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	124	2556	41	16	189	1685	368	81	188	391	420	334
Future Volume (vph)	124	2556	41	16	189	1685	368	81	188	391	420	334
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.94	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	6323			3408	4896		1752	1651	1490	3400	3390
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	6323			3408	4896		1752	1651	1490	3400	3390
Peak-hour factor, PHF	0.86	0.94	0.61	0.80	0.83	0.92	0.88	0.79	0.84	0.84	0.90	0.79
Adj. Flow (vph)	144	2719	67	20	228	1832	418	103	224	465	467	423
RTOR Reduction (vph)	0	2	0	0	0	19	0	0	12	54	0	13
Lane Group Flow (vph)	144	2784	0	0	248	2231	0	103	352	271	467	528
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	custom	Prot	NA
Protected Phases	1	6		5	5	2		7	4	4	3	8
Permitted Phases										5		
Actuated Green, G (s)	16.0	93.0			14.0	91.0		15.8	40.0	54.0	27.0	51.2
Effective Green, g (s)	16.0	93.0			14.0	91.0		15.8	40.0	54.0	27.0	51.2
Actuated g/C Ratio	0.08	0.49			0.07	0.48		0.08	0.21	0.28	0.14	0.27
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	147	3094			251	2344		145	347	423	483	913
v/s Ratio Prot	0.08	c0.44			0.07	c0.46		0.06	c0.21	0.13	c0.14	0.16
v/s Ratio Perm										0.05		
v/c Ratio	0.98	0.90			0.99	0.95		0.71	1.01	0.64	0.97	0.58
Uniform Delay, d1	86.8	44.3			87.9	47.4		84.9	75.0	59.5	81.1	60.1
Progression Factor	1.22	0.56			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	65.2	4.5			52.9	10.3		15.1	52.1	3.3	32.2	0.9
Delay (s)	171.2	29.1			140.8	57.7		100.0	127.1	62.8	113.3	60.9
Level of Service	F	C			F	E		F	F	E	F	E
Approach Delay (s)		36.1				65.9			97.2			85.2
Approach LOS		D				E			F			F

Intersection Summary			
HCM 2000 Control Delay	59.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	104
Future Volume (vph)	104
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	118
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

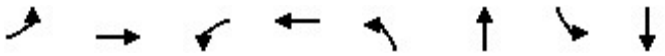
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	56	711	357	1188	155	264	114	225
Future Volume (vph)	56	711	357	1188	155	264	114	225
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	2.0	5.0	2.0	5.0	5.0	5.0	2.0	2.0
Minimum Split (s)	8.0	24.0	8.0	24.0	24.0	24.0	8.0	8.0
Total Split (s)	15.0	72.0	51.0	108.0	30.0	30.0	27.0	27.0
Total Split (%)	8.3%	40.0%	28.3%	60.0%	16.7%	16.7%	15.0%	15.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	80.7	73.0	119.4	105.7	23.2	23.2	19.4	19.4
Actuated g/C Ratio	0.45	0.41	0.66	0.59	0.13	0.13	0.11	0.11
v/c Ratio	0.38	0.79	0.89	0.74	0.73	0.89	0.84	0.77
Control Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
LOS	C	D	E	C	F	F	F	F
Approach Delay		50.9		38.1		93.8		96.9
Approach LOS		D		D		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 55.9	Intersection LOS: E
Intersection Capacity Utilization 80.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street

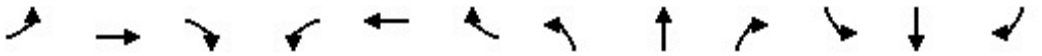




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	1098	415	1486	165	402	158	291
v/c Ratio	0.38	0.79	0.89	0.74	0.73	0.89	0.84	0.77
Control Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
Queue Length 50th (ft)	27	621	378	671	190	234	185	170
Queue Length 95th (ft)	45	566	484	774	280	#322	213	227
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	186	1397	508	2016	233	468	204	408
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.79	0.82	0.74	0.71	0.86	0.77	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	711	133	357	1188	209	155	264	87	114	225	32
Future Volume (vph)	56	711	133	357	1188	209	155	264	87	114	225	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3427		1752	3422		1752	3362		1752	3411	
Flt Permitted	0.13	1.00		0.09	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	243	3427		172	3422		1752	3362		1752	3411	
Peak-hour factor, PHF	0.86	0.76	0.82	0.86	0.95	0.89	0.94	0.90	0.80	0.72	0.94	0.61
Adj. Flow (vph)	65	936	162	415	1251	235	165	293	109	158	239	52
RTOR Reduction (vph)	0	7	0	0	8	0	0	21	0	0	11	0
Lane Group Flow (vph)	65	1091	0	415	1478	0	165	381	0	158	280	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	80.7	73.0		119.4	105.7		23.2	23.2		19.4	19.4	
Effective Green, g (s)	80.7	73.0		119.4	105.7		23.2	23.2		19.4	19.4	
Actuated g/C Ratio	0.45	0.41		0.66	0.59		0.13	0.13		0.11	0.11	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	173	1389		468	2009		225	433		188	367	
v/s Ratio Prot	0.02	0.32		c0.20	0.43		0.09	c0.11		c0.09	0.08	
v/s Ratio Perm	0.15			c0.39								
v/c Ratio	0.38	0.79		0.89	0.74		0.73	0.88		0.84	0.76	
Uniform Delay, d1	29.6	46.7		50.3	27.0		75.4	77.0		78.8	78.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	4.5		18.0	2.4		11.7	18.4		27.2	9.1	
Delay (s)	31.0	51.2		68.3	29.4		87.1	95.4		106.0	87.2	
Level of Service	C	D		E	C		F	F		F	F	
Approach Delay (s)		50.1			37.9			93.0			93.8	
Approach LOS		D			D			F			F	

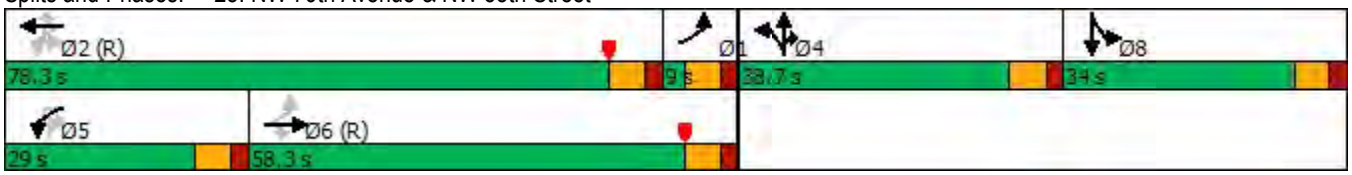
Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Future Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Detector Phase	1	6	6	2 5	5	2	2	4	4	4	8	8
Switch Phase												
Minimum Initial (s)	1.6	16.0	16.0		1.6	16.0	16.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.0	24.4	24.4		8.0	24.4	24.4	13.4	13.4	13.4	13.5	13.5
Total Split (s)	9.0	58.3	58.3		29.0	78.3	78.3	38.7	38.7	38.7	34.0	34.0
Total Split (%)	5.6%	36.4%	36.4%		18.1%	48.9%	48.9%	24.2%	24.2%	24.2%	21.3%	21.3%
Yellow Time (s)	4.4	4.4	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max		None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	51.9	51.9	51.9		77.3	77.3	77.3	32.3	32.3	54.9	27.5	27.5
Actuated g/C Ratio	0.32	0.32	0.32		0.48	0.48	0.48	0.20	0.20	0.34	0.17	0.17
v/c Ratio	0.06	1.04	0.20		1.10	0.62	0.14	0.72	1.08	0.88	1.06	0.98dl
Control Delay	27.1	77.2	2.7		126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	77.2	2.7		126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
LOS	C	E	A		F	C	A	E	F	D	F	F
Approach Delay		70.2				51.4			69.8			103.8
Approach LOS		E				D			E			F

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 143 (89%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 69.9	Intersection LOS: E
Intersection Capacity Utilization 116.9%	ICU Level of Service H
Analysis Period (min) 15	

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	11	1159	113	320	1036	113	251	507	504	283	509
v/c Ratio	0.06	1.04	0.20	1.10	0.62	0.14	0.72	1.08	0.88	1.06	0.98dl
Control Delay	27.1	77.2	2.7	126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	77.2	2.7	126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
Queue Length 50th (ft)	6	~686	16	~317	396	1	248	~427	250	~353	286
Queue Length 95th (ft)	m9	#821	m18	#541	524	26	312	#549	#413	#568	#338
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	175	1115	573	291	1660	800	347	468	574	268	546
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	1.04	0.20	1.10	0.62	0.14	0.72	1.08	0.88	1.06	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Future Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lane Util. Factor	1.00	0.95	1.00		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.87	0.85	1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97
Satd. Flow (prot)	1719	3438	1538		1718	3438	1538	1719	1492	1461	1564	3127
Flt Permitted	0.26	1.00	1.00		0.08	1.00	1.00	0.95	1.00	1.00	0.95	0.97
Satd. Flow (perm)	479	3438	1538		142	3438	1538	1719	1492	1461	1564	3127
Peak-hour factor, PHF	0.62	0.92	0.79	0.44	0.92	0.96	0.79	0.81	0.82	0.90	0.93	0.82
Adj. Flow (vph)	11	1159	113	9	311	1036	113	251	60	951	567	143
RTOR Reduction (vph)	0	0	75	0	0	0	60	0	168	73	0	9
Lane Group Flow (vph)	11	1159	38	0	320	1036	53	251	339	431	283	500
Heavy Vehicles (%)	5%	5%	5%	8%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Actuated Green, G (s)	51.9	51.9	51.9		73.5	73.5	73.5	32.3	32.3	54.9	27.5	27.5
Effective Green, g (s)	51.9	51.9	51.9		73.5	73.5	73.5	32.3	32.3	54.9	27.5	27.5
Actuated g/C Ratio	0.32	0.32	0.32		0.46	0.46	0.46	0.20	0.20	0.34	0.17	0.17
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	163	1115	498		287	1579	706	347	301	501	268	537
v/s Ratio Prot	0.00	c0.34			c0.16	0.30		0.15	c0.23	0.17	c0.18	0.16
v/s Ratio Perm	0.02		0.02		c0.35		0.03			0.12		
v/c Ratio	0.07	1.04	0.08		1.11	0.66	0.08	0.72	1.13	0.86	1.06	0.98dl
Uniform Delay, d1	38.9	54.0	37.4		52.9	33.5	24.2	59.7	63.9	49.0	66.2	65.3
Progression Factor	0.69	0.78	0.31		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	35.9	0.3		87.6	2.1	0.2	7.3	90.8	14.0	70.5	23.0
Delay (s)	27.0	78.1	12.0		140.6	35.6	24.4	67.0	154.7	63.0	136.7	88.3
Level of Service	C	E	B		F	D	C	E	F	E	F	F
Approach Delay (s)		71.8				57.6			100.6			105.6
Approach LOS		E				E			F			F

Intersection Summary			
HCM 2000 Control Delay	80.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	116.9%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



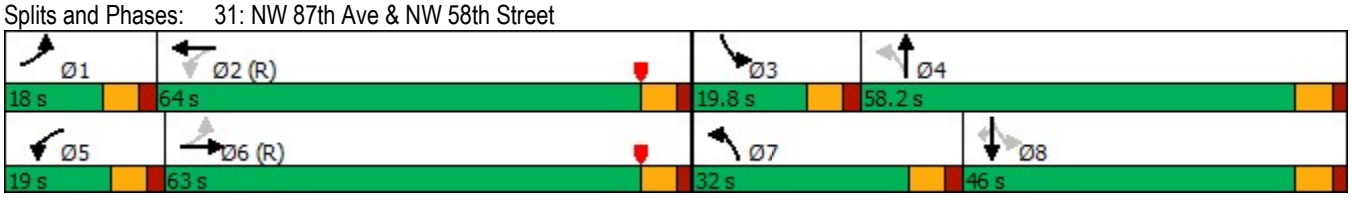
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	59
Future Volume (vph)	59
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.72
Adj. Flow (vph)	82
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	121	596	142	1046	276	810	107	609	379
Future Volume (vph)	121	596	142	1046	276	810	107	609	379
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	18.0	63.0	19.0	64.0	32.0	58.2	19.8	46.0	46.0
Total Split (%)	11.3%	39.4%	11.9%	40.0%	20.0%	36.4%	12.4%	28.8%	28.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	69.7	58.2	71.4	59.0	70.3	51.3	51.2	38.6	38.6
Actuated g/C Ratio	0.44	0.36	0.45	0.37	0.44	0.32	0.32	0.24	0.24
v/c Ratio	0.89	0.70	0.77	0.95	0.96	0.87	0.77	0.87	0.93
Control Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
LOS	F	D	D	D	F	E	E	E	E
Approach Delay		51.0		44.4		66.4		66.3	
Approach LOS		D		D		E		E	

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 48 (30%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 57.2	Intersection LOS: E
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street

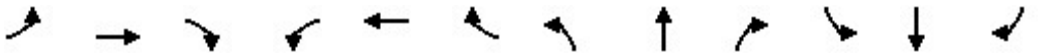




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	151	867	189	1199	314	952	147	725	480
v/c Ratio	0.89	0.70	0.77	0.95	0.96	0.87	0.77	0.87	0.93
Control Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
Queue Length 50th (ft)	109	396	98	664	268	487	92	383	330
Queue Length 95th (ft)	#196	477	m133	m#781	#445	580	123	424	382
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	171	1234	249	1268	329	1115	200	859	522
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.70	0.76	0.95	0.95	0.85	0.73	0.84	0.92

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



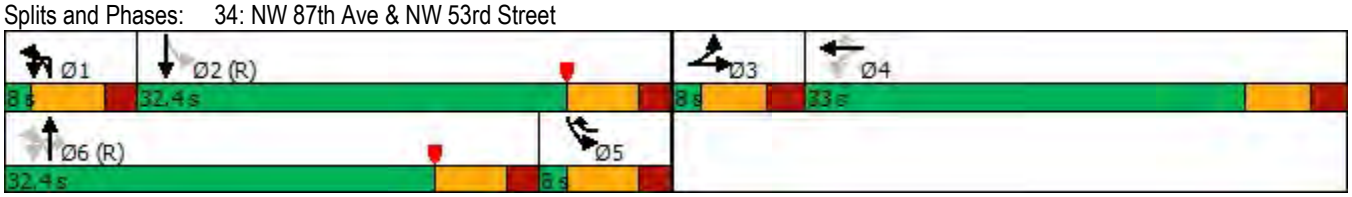
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	596	221	142	1046	79	276	810	95	107	609	379
Future Volume (vph)	121	596	221	142	1046	79	276	810	95	107	609	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3323		1736	3429		1736	3407		1736	3471	1553
Flt Permitted	0.07	1.00		0.17	1.00		0.10	1.00		0.12	1.00	1.00
Satd. Flow (perm)	125	3323		305	3429		188	3407		224	3471	1553
Peak-hour factor, PHF	0.80	0.96	0.90	0.75	0.95	0.81	0.88	0.97	0.81	0.73	0.84	0.79
Adj. Flow (vph)	151	621	246	189	1101	98	314	835	117	147	725	480
RTOR Reduction (vph)	0	26	0	0	4	0	0	7	0	0	0	139
Lane Group Flow (vph)	151	841	0	189	1195	0	314	945	0	147	725	341
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	69.8	58.3		71.4	59.1		70.2	51.3		51.1	38.6	38.6
Effective Green, g (s)	69.8	58.3		71.4	59.1		70.2	51.3		51.1	38.6	38.6
Actuated g/C Ratio	0.44	0.36		0.45	0.37		0.44	0.32		0.32	0.24	0.24
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	170	1210		246	1266		326	1092		189	837	374
v/s Ratio Prot	c0.06	0.25		0.06	c0.35		c0.15	0.28		0.06	0.21	
v/s Ratio Perm	0.32			0.28			c0.27			0.19		0.22
v/c Ratio	0.89	0.69		0.77	0.94		0.96	0.87		0.78	0.87	0.91
Uniform Delay, d1	42.9	43.3		31.4	48.9		48.6	51.1		42.7	58.2	59.1
Progression Factor	1.00	1.00		1.38	0.62		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	38.5	3.3		10.4	12.2		39.8	7.3		18.0	9.4	25.9
Delay (s)	81.5	46.6		53.6	42.4		88.4	58.5		60.7	67.6	84.9
Level of Service	F	D		D	D		F	E		E	E	F
Approach Delay (s)		51.8			43.9			65.9			73.0	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	58.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	15	1	203	4	84	9	14	1115	131	91	904
Future Volume (vph)	15	1	203	4	84	9	14	1115	131	91	904
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	5	1	1	6		5	2
Permitted Phases			4		4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	1.7	1.7	7.0	7.0	1.6	1.6	1.6	5.0	5.0	1.6	5.0
Minimum Split (s)	8.0	8.0	13.3	13.3	8.0	8.0	8.0	24.4	24.4	8.0	24.4
Total Split (s)	8.0	8.0	33.0	33.0	8.0	8.0	8.0	32.4	32.4	8.0	32.4
Total Split (%)	9.8%	9.8%	40.5%	40.5%	9.8%	9.8%	9.8%	39.8%	39.8%	9.8%	39.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	1.7	1.7	14.1	14.1	16.9		40.2	40.2	40.2	42.8	42.8
Actuated g/C Ratio	0.02	0.02	0.17	0.17	0.21		0.49	0.49	0.49	0.53	0.53
v/c Ratio	0.67	0.61	0.59	0.62	0.23		0.12	0.66	0.20	0.54	0.59
Control Delay	113.5	51.2	41.0	43.0	1.1		15.3	19.9	2.1	34.4	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	51.2	41.0	43.0	1.1		15.3	19.9	2.1	34.4	19.4
LOS	F	D	D	D	A		B	B	A	C	B
Approach Delay		73.2		29.7				17.5			20.8
Approach LOS		E		C				B			C

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 21.6	Intersection LOS: C
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: NW 87th Ave & NW 53rd Street





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	44	131	134	114	28	1149	172	112	1092
v/c Ratio	0.67	0.61	0.59	0.62	0.23	0.12	0.66	0.20	0.54	0.59
Control Delay	113.5	51.2	41.0	43.0	1.1	15.3	19.9	2.1	34.4	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	51.2	41.0	43.0	1.1	15.3	19.9	2.1	34.4	19.4
Queue Length 50th (ft)	12	2	65	67	0	7	224	0	24	166
Queue Length 95th (ft)	#32	0	95	58	0	m24	355	9	#97	#374
Internal Link Dist (ft)		93		992			2038			2105
Turn Bay Length (ft)			175		175	150		245	120	
Base Capacity (vph)	36	72	418	406	496	234	1730	882	209	1838
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.61	0.31	0.33	0.23	0.12	0.66	0.20	0.54	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



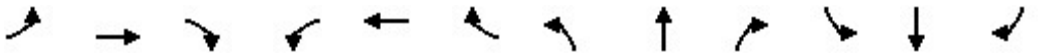
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	1	19	203	4	84	9	14	1115	131	91	904
Future Volume (vph)	15	1	19	203	4	84	9	14	1115	131	91	904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.86		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1593		1665	1674	1568		1775	3505	1568	1752	3497
Flt Permitted	0.95	1.00		0.73	0.71	1.00		0.12	1.00	1.00	0.19	1.00
Satd. Flow (perm)	1752	1593		1276	1238	1568		233	3505	1568	345	3497
Peak-hour factor, PHF	0.62	0.25	0.48	0.79	0.50	0.74	0.75	0.88	0.97	0.76	0.81	0.84
Adj. Flow (vph)	24	4	40	257	8	114	12	16	1149	172	112	1076
RTOR Reduction (vph)	0	39	0	0	0	87	0	0	0	98	0	1
Lane Group Flow (vph)	24	5	0	131	134	27	0	28	1149	74	112	1091
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	0%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3			4	5	1	1	6		5	2
Permitted Phases				4		4	6	6		6	2	
Actuated Green, G (s)	1.4	1.4		14.1	14.1	19.6		35.0	35.0	35.0	37.6	37.6
Effective Green, g (s)	1.4	1.4		14.1	14.1	19.6		35.0	35.0	35.0	37.6	37.6
Actuated g/C Ratio	0.02	0.02		0.17	0.17	0.24		0.43	0.43	0.43	0.46	0.46
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	30	27		221	214	377		155	1507	674	254	1615
v/s Ratio Prot	c0.01	0.00				0.00		0.01	c0.33		0.03	c0.31
v/s Ratio Perm				0.10	c0.11	0.01		0.07		0.05	0.17	
v/c Ratio	0.80	0.17		0.59	0.63	0.07		0.18	0.76	0.11	0.44	0.68
Uniform Delay, d1	39.9	39.4		31.0	31.2	23.9		16.1	19.7	13.9	21.7	17.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.04	1.01	1.21	1.00	1.00
Incremental Delay, d2	84.3	3.1		4.2	5.6	0.1		0.6	3.7	0.3	1.2	2.3
Delay (s)	124.1	42.5		35.2	36.8	24.0		17.3	23.5	17.1	22.9	19.4
Level of Service	F	D		D	D	C		B	C	B	C	B
Approach Delay (s)		71.3			32.4				22.6			19.7
Approach LOS		E			C				C			B

Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.62
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1669	23	0	1925	45	0	0	57	0	0	33
Future Volume (Veh/h)	4	1669	23	0	1925	45	0	0	57	0	0	33
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.91	0.69	0.75	0.96	0.71	0.25	0.25	0.88	0.25	0.25	0.73
Hourly flow rate (vph)	8	1834	33	0	2005	63	0	0	65	0	0	45
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		403			458							
pX, platoon unblocked	0.69			0.88			0.75	0.75	0.88	0.75	0.75	0.69
vC, conflicting volume	2068			1867			2580	3934	628	2697	3888	668
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	995			1518			898	2698	114	1054	2636	0
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	92	100	100	94
cM capacity (veh/h)	475			381			163	15	806	122	17	750

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	466	917	492	668	668	668	63	65	45
Volume Left	8	0	0	0	0	0	0	0	0
Volume Right	0	0	33	0	0	0	63	65	45
cSH	475	1700	1700	1700	1700	1700	1700	806	750
Volume to Capacity	0.02	0.54	0.29	0.39	0.39	0.39	0.04	0.08	0.06
Queue Length 95th (ft)	1	0	0	0	0	0	0	7	5
Control Delay (s)	0.5	0.0	0.0	0.0	0.0	0.0	0.0	9.9	10.1
Lane LOS	A							A	B
Approach Delay (s)	0.1			0.0				9.9	10.1
Approach LOS								A	B

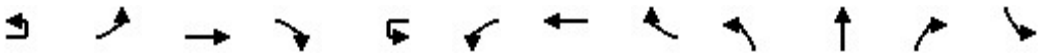
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	47.2%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	25	1368	24	0	1160
Future Volume (Veh/h)	0	25	1368	24	0	1160
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.86	0.96	0.82	1.00	0.94
Hourly flow rate (vph)	0	29	1425	29	0	1234
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.73	0.73			0.73	
vC, conflicting volume	1851	727			1454	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1421	0			876	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	100	96			100	
cM capacity (veh/h)	89	780			540	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	29	950	504	411	411	411
Volume Left	0	0	0	0	0	0
Volume Right	29	0	29	0	0	0
cSH	780	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.56	0.30	0.24	0.24	0.24
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.8	0.0		0.0		
Approach LOS	A					

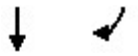
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	1617	0	6	5	1903	7	0	0	1	0
Future Volume (Veh/h)	1	0	1617	0	6	5	1903	7	0	0	1	0
Sign Control			Free				Free			Stop		
Grade			0%				0%			0%		
Peak Hour Factor	0.25	0.92	0.97	0.25	0.50	0.42	0.94	0.92	0.25	0.92	0.25	0.92
Hourly flow rate (vph)	0	0	1667	0	0	12	2024	8	0	0	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type			None				None					
Median storage veh)												
Upstream signal (ft)							1196					
pX, platoon unblocked	0.00	0.79			0.00				0.79	0.79		0.79
vC, conflicting volume	0	2032			0	1667			2370	3723	556	2612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1365			0	1667			1794	3513	556	2102
tC, single (s)	0.0	4.1			0.0	4.1			7.5	6.5	6.9	7.5
tC, 2 stage (s)												
tF (s)	0.0	2.2			0.0	2.2			3.5	4.0	3.3	3.5
p0 queue free %	0	100			0	97			100	100	99	100
cM capacity (veh/h)	0	393			0	391			40	5	475	23

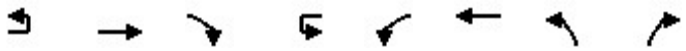
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	417	834	417	12	810	810	413	4	4
Volume Left	0	0	0	12	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	4	4
cSH	393	1700	1700	391	1700	1700	1700	475	854
Volume to Capacity	0.00	0.49	0.25	0.03	0.48	0.48	0.24	0.01	0.00
Queue Length 95th (ft)	0	0	0	2	0	0	0	1	0
Control Delay (s)	0.0	0.0	0.0	14.5	0.0	0.0	0.0	12.6	9.2
Lane LOS				B				B	A
Approach Delay (s)	0.0			0.1				12.6	9.2
Approach LOS								B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	46.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	4
Future Volume (Veh/h)	0	4
Sign Control	Stop	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	0	4
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type		
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked	0.79	0.79
vC, conflicting volume	3719	679
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol	3508	0
tC, single (s)	6.5	6.9
tC, 2 stage (s)		
tF (s)	4.0	3.3
p0 queue free %	100	100
cM capacity (veh/h)	5	854

Direction, Lane #



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1600	0	26	1	1886	3	1
Future Volume (Veh/h)	1	1600	0	26	1	1886	3	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.95	0.25	0.25	0.25	0.97	0.75	0.25
Hourly flow rate (vph)	0	1684	0	0	4	1944	4	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.89		0.89	0.89
vC, conflicting volume	0			0	1684		2340	561
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1325		2065	60
tC, single (s)	0.0			0.0	4.1		6.8	6.9
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	99		91	100
cM capacity (veh/h)	0			0	468		42	887

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	674	674	337	4	648	648	648	8
Volume Left	0	0	0	4	0	0	0	4
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	468	1700	1700	1700	81
Volume to Capacity	0.40	0.40	0.20	0.01	0.38	0.38	0.38	0.10
Queue Length 95th (ft)	0	0	0	1	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	12.8	0.0	0.0	0.0	54.2
Lane LOS				B				F
Approach Delay (s)	0.0			0.0				54.2
Approach LOS								F

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	46.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	26	16	34	1172	12	37	22	1209
Future Volume (Veh/h)	26	16	34	1172	12	37	22	1209
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.69	0.67	0.34	0.95	0.75	0.75	0.66	0.96
Hourly flow rate (vph)	38	24	0	1234	16	0	33	1259
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				782				
pX, platoon unblocked	0.80	0.80	0.00			0.00	0.80	
vC, conflicting volume	1938	625	0			0	1250	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1670	26	0			0	809	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	40	97	0			0	95	
cM capacity (veh/h)	63	823	0			0	629	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	38	24	823	427	0	33	630	630
Volume Left	38	0	0	0	0	33	0	0
Volume Right	0	24	0	16	0	0	0	0
cSH	63	823	1700	1700	1700	629	1700	1700
Volume to Capacity	0.60	0.03	0.48	0.25	0.00	0.05	0.37	0.37
Queue Length 95th (ft)	63	2	0	0	0	4	0	0
Control Delay (s)	125.7	9.5	0.0	0.0	0.0	11.0	0.0	0.0
Lane LOS	F	A				B		
Approach Delay (s)	80.7		0.0			0.3		
Approach LOS	F							

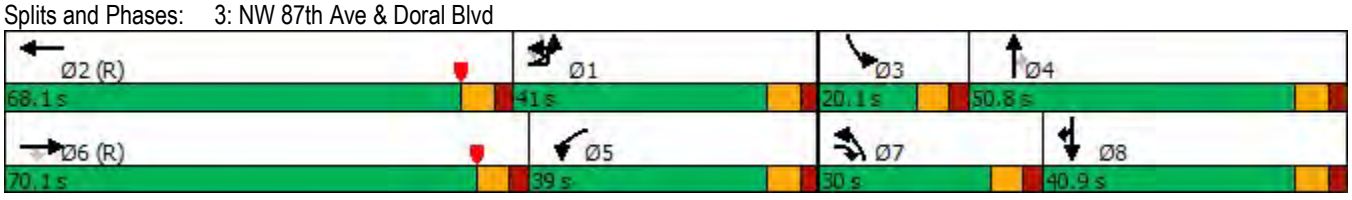
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	50.1%	ICU Level of Service		A
Analysis Period (min)	15			

2027 AM Traffic With Project
Trips and Improvements
without median closures
Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	449	1505	492	505	1221	246	658	294	139	783	275
Future Volume (vph)	449	1505	492	505	1221	246	658	294	139	783	275
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	custom
Protected Phases	1	6	7	5	2	7	4		3	8	8
Permitted Phases			6					4			1
Detector Phase	1	6	7	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.1	12.0	25.0	12.1	25.1	25.1	12.1	25.1	25.1
Total Split (s)	41.0	70.1	30.0	39.0	68.1	30.0	50.8	50.8	20.1	40.9	40.9
Total Split (%)	22.8%	38.9%	16.7%	21.7%	37.8%	16.7%	28.2%	28.2%	11.2%	22.7%	22.7%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	33.6	63.1	85.3	31.6	61.1	22.3	44.5	44.5	12.6	34.8	68.3
Actuated g/C Ratio	0.19	0.35	0.47	0.18	0.34	0.12	0.25	0.25	0.07	0.19	0.38
v/c Ratio	0.84	0.92	0.74	0.95	0.89	0.61	0.82	0.62	0.77	0.88	0.50
Control Delay	67.2	48.5	16.7	84.6	34.2	81.5	72.9	17.8	96.1	74.9	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	48.5	16.7	84.6	34.2	81.5	72.9	17.8	96.1	74.9	16.2
LOS	E	D	B	F	C	F	E	B	F	E	B
Approach Delay		45.4			48.0		59.2			63.5	
Approach LOS		D			D		E			E	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 118 (66%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 51.9	Intersection LOS: D
Intersection Capacity Utilization 89.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	526	1601	572	561	1481	256	700	372	181	851	331
v/c Ratio	0.84	0.92	0.74	0.95	0.89	0.61	0.82	0.62	0.77	0.88	0.50
Control Delay	67.2	48.5	16.7	84.6	34.2	81.5	72.9	17.8	96.1	74.9	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	48.5	16.7	84.6	34.2	81.5	72.9	17.8	96.1	74.9	16.2
Queue Length 50th (ft)	326	617	181	352	520	150	417	77	110	368	71
Queue Length 95th (ft)	387	703	198	m#438	589	202	500	121	124	#442	197
Internal Link Dist (ft)		378			2485		2143			310	
Turn Bay Length (ft)	170		170	330		400			190		300
Base Capacity (vph)	635	1748	776	598	1673	428	857	604	243	963	657
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.92	0.74	0.94	0.89	0.60	0.82	0.62	0.74	0.88	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	449	1505	492	505	1221	139	246	658	294	139	783
Future Volume (vph)	4	449	1505	492	505	1221	139	246	658	294	139	783
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3367	4988	1553	3367	4910		3367	3471	1553	3367	4988
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3367	4988	1553	3367	4910		3367	3471	1553	3367	4988
Peak-hour factor, PHF	0.25	0.88	0.94	0.86	0.90	0.92	0.90	0.96	0.94	0.79	0.77	0.92
Adj. Flow (vph)	16	510	1601	572	561	1327	154	256	700	372	181	851
RTOR Reduction (vph)	0	0	0	35	0	8	0	0	0	221	0	0
Lane Group Flow (vph)	0	526	1601	537	561	1473	0	256	700	151	181	851
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		33.6	63.1	85.4	31.6	61.1		22.3	44.5	44.5	12.6	34.8
Effective Green, g (s)		33.6	63.1	85.4	31.6	61.1		22.3	44.5	44.5	12.6	34.8
Actuated g/C Ratio		0.19	0.35	0.47	0.18	0.34		0.12	0.25	0.25	0.07	0.19
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		628	1748	736	591	1666		417	858	383	235	964
v/s Ratio Prot		0.16	c0.32	c0.09	c0.17	0.30		0.08	c0.20		0.05	c0.17
v/s Ratio Perm				0.26						0.10		
v/c Ratio		0.84	0.92	0.73	0.95	0.88		0.61	0.82	0.39	0.77	0.88
Uniform Delay, d1		70.6	55.9	38.0	73.4	56.1		74.8	63.9	56.5	82.3	70.6
Progression Factor		0.79	0.72	0.57	0.94	0.54		1.00	1.00	1.00	0.93	0.90
Incremental Delay, d2		8.3	8.0	3.1	15.3	3.8		2.7	8.4	3.0	13.7	11.0
Delay (s)		64.2	48.3	24.9	84.2	34.2		77.4	72.3	59.5	90.0	74.8
Level of Service		E	D	C	F	C		E	E	E	F	E
Approach Delay (s)			46.4			47.9			69.7			67.5
Approach LOS			D			D			E			E

Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



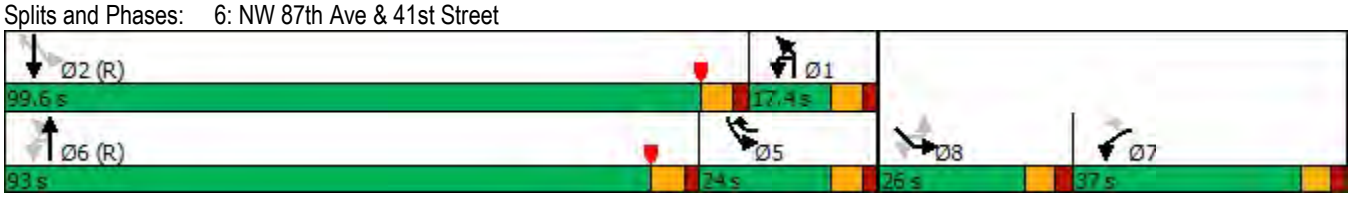
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	275
Future Volume (vph)	275
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.1
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.83
Adj. Flow (vph)	331
RTOR Reduction (vph)	68
Lane Group Flow (vph)	263
Heavy Vehicles (%)	4%
Turn Type	custom
Protected Phases	8
Permitted Phases	1
Actuated Green, G (s)	68.4
Effective Green, g (s)	68.4
Actuated g/C Ratio	0.38
Clearance Time (s)	7.1
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	590
v/s Ratio Prot	0.09
v/s Ratio Perm	0.08
v/c Ratio	0.45
Uniform Delay, d1	41.6
Progression Factor	0.86
Incremental Delay, d2	0.5
Delay (s)	36.5
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Configurations										
Traffic Volume (vph)	134	46	5	56	953	95	914	27	3	81
Future Volume (vph)	134	46	5	56	953	95	914	27	3	81
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Perm	Prot	Perm
Protected Phases	7	5	1	1	6	5	2		8	
Permitted Phases		7	6	6		2		2		8
Detector Phase	7	5	1	1	6	5	2	2	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.3	11.4	11.4	11.4	24.4	11.4	24.4	24.4	24.3	24.3
Total Split (s)	37.0	24.0	17.4	17.4	93.0	24.0	99.6	99.6	26.0	26.0
Total Split (%)	20.6%	13.3%	9.7%	9.7%	51.7%	13.3%	55.3%	55.3%	14.4%	14.4%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	C-Max	None	None
Act Effct Green (s)	16.1	29.0		124.7	118.3	137.7	124.9	124.9	7.3	7.3
Actuated g/C Ratio	0.09	0.16		0.69	0.66	0.76	0.69	0.69	0.04	0.04
v/c Ratio	0.83	0.22		0.26	0.56	0.37	0.40	0.08	0.65	0.63
Control Delay	56.1	10.3		4.0	5.6	15.3	13.3	1.9	25.4	22.8
Queue Delay	0.0	0.0		0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	10.3		4.0	6.1	15.3	13.3	1.9	25.4	22.8
LOS	E	B		A	A	B	B	A	C	C
Approach Delay	46.3				5.9		12.6		24.1	
Approach LOS	D				A		B		C	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 64 (36%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 13.9	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Group Flow (vph)	231	63	98	1248	127	952	87	129	120
v/c Ratio	0.83	0.22	0.26	0.56	0.37	0.40	0.08	0.65	0.63
Control Delay	56.1	10.3	4.0	5.6	15.3	13.3	1.9	25.4	22.8
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	10.3	4.0	6.1	15.3	13.3	1.9	25.4	22.8
Queue Length 50th (ft)	114	0	10	97	32	222	0	0	0
Queue Length 95th (ft)	84	13	m15	345	59	352	0	0	0
Internal Link Dist (ft)	2087			188		622		377	
Turn Bay Length (ft)	200		120		200		200		
Base Capacity (vph)	407	326	421	2225	385	2407	1106	304	282
Starvation Cap Reductn	0	0	0	483	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.19	0.23	0.72	0.33	0.40	0.08	0.42	0.43

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	134	4	46	5	56	953	181	95	914	27	49	3
Future Volume (vph)	134	4	46	5	56	953	181	95	914	27	49	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95	1.00		1.00
Frt	0.99		0.85		1.00	0.97		1.00	1.00	0.85		0.95
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00	1.00		0.97
Satd. Flow (prot)	1728		1475		1736	3378		1736	3471	1553		1681
Flt Permitted	0.96		1.00		0.26	1.00		0.17	1.00	1.00		0.97
Satd. Flow (perm)	1728		1475		480	3378		313	3471	1553		1681
Peak-hour factor, PHF	0.62	0.50	0.66	0.31	0.68	0.93	0.81	0.75	0.96	0.31	0.62	0.38
Adj. Flow (vph)	216	8	70	16	82	1025	223	127	952	87	79	8
RTOR Reduction (vph)	124	0	53	0	0	7	0	0	0	27	0	124
Lane Group Flow (vph)	107	0	10	0	98	1241	0	127	952	60	0	5
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA	Perm	Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2		2	8	
Actuated Green, G (s)	16.1		29.1		124.6	118.2		137.6	124.8	124.8		7.3
Effective Green, g (s)	16.1		29.1		124.6	118.2		137.6	124.8	124.8		7.3
Actuated g/C Ratio	0.09		0.16		0.69	0.66		0.76	0.69	0.69		0.04
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	154		238		376	2218		342	2406	1076		68
v/s Ratio Prot	c0.06		0.00		0.01	c0.37		c0.03	0.27			
v/s Ratio Perm			0.00		0.17			0.26		0.04		0.00
v/c Ratio	0.70		0.04		0.26	0.56		0.37	0.40	0.06		0.08
Uniform Delay, d1	79.6		63.7		16.7	16.8		20.6	11.7	8.8		83.1
Progression Factor	1.00		1.00		0.34	0.28		0.96	1.00	1.05		1.00
Incremental Delay, d2	12.8		0.1		0.2	0.6		0.7	0.5	0.1		0.5
Delay (s)	92.4		63.8		5.8	5.3		20.5	12.1	9.4		83.6
Level of Service	F		E		A	A		C	B	A		F
Approach Delay (s)	86.3					5.3			12.8			83.7
Approach LOS	F					A			B			F

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



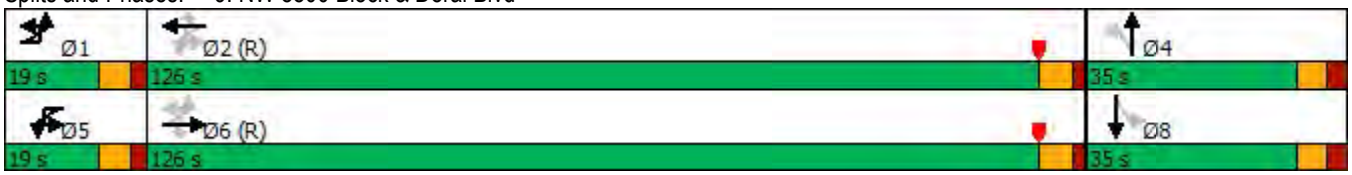
Movement	SER
Lane Configurations	
Traffic Volume (vph)	81
Future Volume (vph)	81
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1475
Flt Permitted	1.00
Satd. Flow (perm)	1475
Peak-hour factor, PHF	0.50
Adj. Flow (vph)	162
RTOR Reduction (vph)	115
Lane Group Flow (vph)	5
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	7.3
Effective Green, g (s)	7.3
Actuated g/C Ratio	0.04
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	59
v/s Ratio Prot	
v/s Ratio Perm	c0.00
v/c Ratio	0.08
Uniform Delay, d1	83.1
Progression Factor	1.00
Incremental Delay, d2	0.6
Delay (s)	83.7
Level of Service	F
Approach Delay (s)	
Approach LOS	

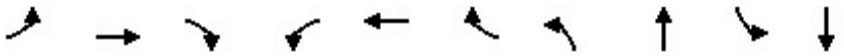
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	13	30	2174	59	10	22	1543	48	53	1	46	0
Future Volume (vph)	13	30	2174	59	10	22	1543	48	53	1	46	0
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2			4		8
Permitted Phases	6	6		6	2	2		2	4		8	
Detector Phase	1	1	6	6	5	5	2	2	4	4	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	24.4	11.4	11.4	24.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	19.0	19.0	126.0	126.0	19.0	19.0	126.0	126.0	35.0	35.0	35.0	35.0
Total Split (%)	10.6%	10.6%	70.0%	70.0%	10.6%	10.6%	70.0%	70.0%	19.4%	19.4%	19.4%	19.4%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	Max	Max
Act Effct Green (s)		134.5	128.2	128.2		131.0	124.6	124.6	28.0	28.0	28.0	28.0
Actuated g/C Ratio		0.75	0.71	0.71		0.73	0.69	0.69	0.16	0.16	0.16	0.16
v/c Ratio		0.39	0.63	0.06		0.31	0.47	0.07	0.38	0.28	0.43	0.15
Control Delay		6.4	7.3	0.8		14.6	5.6	1.0	74.3	15.3	76.5	1.0
Queue Delay		0.0	0.0	0.0		0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay		6.4	7.3	0.8		14.6	5.7	1.0	74.3	15.3	76.5	1.0
LOS		A	A	A		B	A	A	E	B	E	A
Approach Delay			7.1				5.7			42.9		48.6
Approach LOS			A				A			D		D

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 151 (84%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 9.1	Intersection LOS: A
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

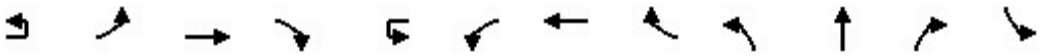




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	88	2241	73	40	1624	75	78	89	82	48
v/c Ratio	0.39	0.63	0.06	0.31	0.47	0.07	0.38	0.28	0.43	0.15
Control Delay	6.4	7.3	0.8	14.6	5.6	1.0	74.3	15.3	76.5	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	6.4	7.3	0.8	14.6	5.7	1.0	74.3	15.3	76.5	1.0
Queue Length 50th (ft)	10	282	2	4	152	4	84	4	89	0
Queue Length 95th (ft)	15	310	6	m6	143	m5	106	0	90	0
Internal Link Dist (ft)		1116			323			94		231
Turn Bay Length (ft)	200		190	190		75				
Base Capacity (vph)	275	3552	1124	189	3452	1094	206	315	192	327
Starvation Cap Reductn	0	0	0	0	619	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.63	0.06	0.21	0.57	0.07	0.38	0.28	0.43	0.15

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	30	2174	59	10	22	1543	48	53	1	75	46
Future Volume (vph)	13	30	2174	59	10	22	1543	48	53	1	75	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.86		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1776	4988	1553		1763	4988	1553	1736	1565		1736
Flt Permitted		0.12	1.00	1.00		0.05	1.00	1.00	0.73	1.00		0.68
Satd. Flow (perm)		217	4988	1553		96	4988	1553	1326	1565		1236
Peak-hour factor, PHF	0.25	0.83	0.97	0.81	0.62	0.92	0.95	0.64	0.68	0.25	0.88	0.56
Adj. Flow (vph)	52	36	2241	73	16	24	1624	75	78	4	85	82
RTOR Reduction (vph)	0	0	0	19	0	0	0	19	0	72	0	0
Lane Group Flow (vph)	0	88	2241	54	0	40	1624	56	78	17	0	82
Heavy Vehicles (%)	0%	4%	4%	4%	0%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2		2	4			8
Actuated Green, G (s)		134.5	126.9	126.9		129.9	124.6	124.6	28.0	28.0		28.0
Effective Green, g (s)		134.5	126.9	126.9		129.9	124.6	124.6	28.0	28.0		28.0
Actuated g/C Ratio		0.75	0.71	0.71		0.72	0.69	0.69	0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		227	3516	1094		118	3452	1075	206	243		192
v/s Ratio Prot		c0.02	c0.45			0.01	0.33			0.01		
v/s Ratio Perm		0.27		0.04		0.23		0.04	0.06			c0.07
v/c Ratio		0.39	0.64	0.05		0.34	0.47	0.05	0.38	0.07		0.43
Uniform Delay, d1		8.3	14.2	8.1		12.2	12.6	8.8	68.2	64.9		68.7
Progression Factor		0.43	0.47	0.31		1.97	0.42	0.36	1.00	1.00		1.00
Incremental Delay, d2		0.9	0.8	0.1		1.1	0.3	0.1	1.2	0.1		6.8
Delay (s)		4.5	7.4	2.6		25.1	5.5	3.2	69.4	65.0		75.6
Level of Service		A	A	A		C	A	A	E	E		E
Approach Delay (s)			7.1				5.9			67.0		
Approach LOS			A				A			E		

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



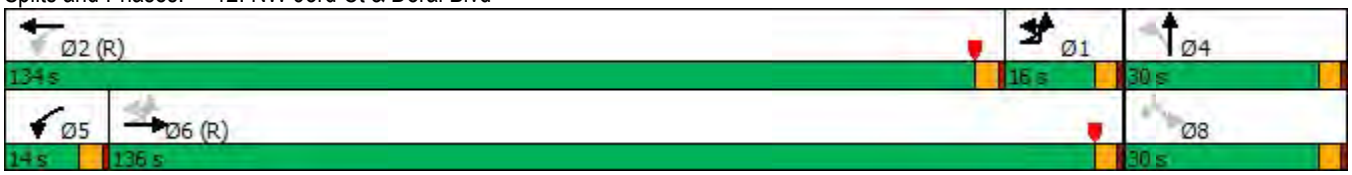
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	24
Future Volume (vph)	0	24
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	1553	
Flt Permitted	1.00	
Satd. Flow (perm)	1553	
Peak-hour factor, PHF	0.25	0.50
Adj. Flow (vph)	0	48
RTOR Reduction (vph)	41	0
Lane Group Flow (vph)	7	0
Heavy Vehicles (%)	4%	4%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	28.0	
Effective Green, g (s)	28.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	241	
v/s Ratio Prot	0.00	
v/s Ratio Perm		
v/c Ratio	0.03	
Uniform Delay, d1	64.5	
Progression Factor	1.00	
Incremental Delay, d2	0.2	
Delay (s)	64.7	
Level of Service	E	
Approach Delay (s)	71.6	
Approach LOS	E	

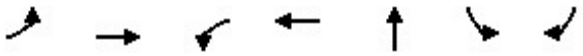
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	2	42	2324	18	1483	0	28	40
Future Volume (vph)	2	42	2324	18	1483	0	28	40
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	11.4	24.4	11.4	24.4	24.8	24.8	24.8
Total Split (s)	16.0	16.0	136.0	14.0	134.0	30.0	30.0	30.0
Total Split (%)	8.9%	8.9%	75.6%	7.8%	74.4%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		152.4	152.4	142.6	142.6	13.4	13.4	13.4
Actuated g/C Ratio		0.85	0.85	0.79	0.79	0.07	0.07	0.07
v/c Ratio		0.22	0.57	0.19	0.43	0.44	0.66	0.42
Control Delay		0.9	0.4	4.6	1.2	34.5	114.9	20.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		0.9	0.4	4.6	1.2	34.5	114.9	20.5
LOS		A	A	A	A	C	F	C
Approach Delay			0.4		1.3	34.5		
Approach LOS			A		A	C		

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 50 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 3.1	Intersection LOS: A
Intersection Capacity Utilization 61.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	2383	24	1674	76	54	78
v/c Ratio	0.22	0.57	0.19	0.43	0.44	0.66	0.42
Control Delay	0.9	0.4	4.6	1.2	34.5	114.9	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.9	0.4	4.6	1.2	34.5	114.9	20.5
Queue Length 50th (ft)	0	5	1	18	24	63	0
Queue Length 95th (ft)	m2	31	2	30	0	63	0
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	295	4215	163	3937	287	159	291
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.57	0.15	0.43	0.26	0.34	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	42	2324	29	18	1483	28	27	0	24	28	0
Future Volume (vph)	2	42	2324	29	18	1483	28	27	0	24	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.94		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.97		0.95	
Satd. Flow (prot)		1736	4976		1736	4968			1666		1736	
Flt Permitted		0.13	1.00		0.05	1.00			0.97		0.61	
Satd. Flow (perm)		231	4976		91	4968			1666		1106	
Peak-hour factor, PHF	0.25	0.73	0.99	0.81	0.75	0.91	0.64	0.68	0.25	0.67	0.52	0.25
Adj. Flow (vph)	8	58	2347	36	24	1630	44	40	0	36	54	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	51	0	0	0
Lane Group Flow (vph)	0	66	2383	0	24	1673	0	0	25	0	54	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		150.8	150.8		141.0	141.0			13.4		13.4	
Effective Green, g (s)		150.8	150.8		141.0	141.0			13.4		13.4	
Actuated g/C Ratio		0.84	0.84		0.78	0.78			0.07		0.07	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		307	4168		106	3891			124		82	
v/s Ratio Prot		0.02	c0.48		0.00	c0.34						
v/s Ratio Perm		0.16			0.17				0.02		c0.05	
v/c Ratio		0.21	0.57		0.23	0.43			0.20		0.66	
Uniform Delay, d1		5.4	4.5		6.9	6.4			78.3		81.1	
Progression Factor		0.04	0.03		0.34	0.15			1.00		1.00	
Incremental Delay, d2		0.1	0.2		1.0	0.3			0.8		17.5	
Delay (s)		0.4	0.4		3.3	1.3			79.1		98.6	
Level of Service		A	A		A	A			E		F	
Approach Delay (s)			0.4			1.3			79.1			86.2
Approach LOS			A			A			E			F

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



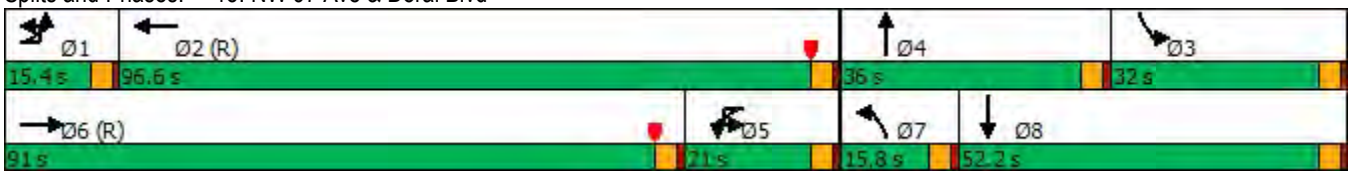
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1553
Flt Permitted	1.00
Satd. Flow (perm)	1553
Peak-hour factor, PHF	0.51
Adj. Flow (vph)	78
RTOR Reduction (vph)	72
Lane Group Flow (vph)	6
Heavy Vehicles (%)	4%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.4
Effective Green, g (s)	13.4
Actuated g/C Ratio	0.07
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	115
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.05
Uniform Delay, d1	77.4
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	77.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

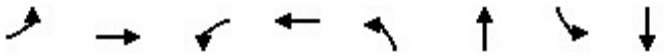
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	86	1880	251	1175	137	370	440	576
Future Volume (vph)	86	1880	251	1175	137	370	440	576
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.6	24.6	11.6	24.6	11.8	24.8	11.8	24.8
Total Split (s)	15.4	91.0	21.0	96.6	15.8	36.0	32.0	52.2
Total Split (%)	8.6%	50.6%	11.7%	53.7%	8.8%	20.0%	17.8%	29.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	10.5	87.7	17.0	94.2	11.5	31.9	27.4	47.8
Actuated g/C Ratio	0.06	0.49	0.09	0.52	0.06	0.18	0.15	0.27
v/c Ratio	0.59	0.93	0.84	0.60	0.75	0.96	0.92	0.77
Control Delay	94.8	51.2	77.2	13.1	103.9	93.5	99.0	66.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.8	51.2	77.2	13.1	103.9	93.5	99.0	66.9
LOS	F	D	E	B	F	F	F	E
Approach Delay		53.3		22.7		95.7		79.8
Approach LOS		D		C		F		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 32 (18%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 54.7	Intersection LOS: D
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

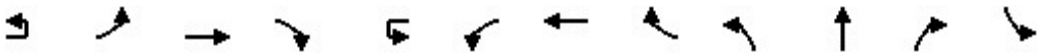




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	117	2250	271	1551	163	609	478	707
v/c Ratio	0.59	0.93	0.84	0.60	0.75	0.96	0.92	0.77
Control Delay	94.8	51.2	77.2	13.1	103.9	93.5	99.0	66.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.8	51.2	77.2	13.1	103.9	93.5	99.0	66.9
Queue Length 50th (ft)	70	905	165	254	99	350	290	405
Queue Length 95th (ft)	95	973	#238	293	134	#478	#391	478
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	215	2411	321	2580	222	634	528	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.93	0.84	0.60	0.73	0.96	0.91	0.76

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	86	1880	253	2	251	1175	193	137	370	190	440
Future Volume (vph)	2	86	1880	253	2	251	1175	193	137	370	190	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.98			1.00	0.97		1.00	0.94		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3400	4918			3400	4896		3400	3311		3400
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3400	4918			3400	4896		3400	3311		3400
Peak-hour factor, PHF	0.25	0.79	0.99	0.72	0.50	0.94	0.93	0.67	0.84	0.96	0.85	0.92
Adj. Flow (vph)	8	109	1899	351	4	267	1263	288	163	385	224	478
RTOR Reduction (vph)	0	0	15	0	0	0	20	0	0	46	0	0
Lane Group Flow (vph)	0	117	2235	0	0	271	1531	0	163	563	0	478
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		10.5	87.7			17.0	94.2		11.5	31.9		27.4
Effective Green, g (s)		10.5	87.7			17.0	94.2		11.5	31.9		27.4
Actuated g/C Ratio		0.06	0.49			0.09	0.52		0.06	0.18		0.15
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		198	2396			321	2562		217	586		517
v/s Ratio Prot		0.03	c0.45			c0.08	0.31		0.05	c0.17		c0.14
v/s Ratio Perm												
v/c Ratio		0.59	0.93			0.84	0.60		0.75	0.96		0.92
Uniform Delay, d1		82.7	43.4			80.2	29.8		82.8	73.4		75.3
Progression Factor		1.00	1.00			0.69	0.41		1.00	1.00		1.00
Incremental Delay, d2		4.7	8.2			17.0	1.0		13.6	27.5		22.4
Delay (s)		87.3	51.6			72.4	13.3		96.5	100.9		97.7
Level of Service		F	D			E	B		F	F		F
Approach Delay (s)			53.4				22.1			100.0		
Approach LOS			D				C			F		

Intersection Summary			
HCM 2000 Control Delay	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

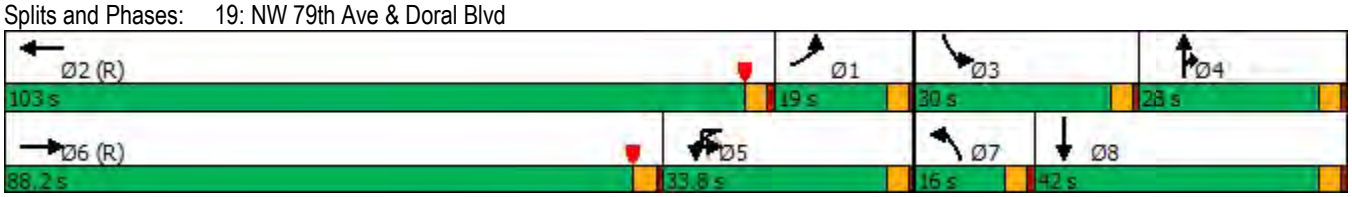
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	576	33
Future Volume (vph)	576	33
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.99	
Flt Protected	1.00	
Satd. Flow (prot)	3460	
Flt Permitted	1.00	
Satd. Flow (perm)	3460	
Peak-hour factor, PHF	0.89	0.55
Adj. Flow (vph)	647	60
RTOR Reduction (vph)	4	0
Lane Group Flow (vph)	703	0
Heavy Vehicles (%)	3%	3%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	47.8	
Effective Green, g (s)	47.8	
Actuated g/C Ratio	0.27	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	918	
v/s Ratio Prot	0.20	
v/s Ratio Perm		
v/c Ratio	0.77	
Uniform Delay, d1	60.9	
Progression Factor	1.00	
Incremental Delay, d2	3.9	
Delay (s)	64.8	
Level of Service	E	
Approach Delay (s)	78.1	
Approach LOS	E	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	92	1862	344	1759	40	132	176	379	331
Future Volume (vph)	92	1862	344	1759	40	132	176	379	331
Turn Type	Prot	NA	Prot	NA	Prot	NA	custom	Prot	NA
Protected Phases	1	6	5	2	7	4	4	3	8
Permitted Phases							5		
Detector Phase	1	6	5	2	7	4	4	3	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	12.0	9.0	9.0	12.0	25.0
Total Split (s)	19.0	88.2	33.8	103.0	16.0	28.0	28.0	30.0	42.0
Total Split (%)	10.6%	49.0%	18.8%	57.2%	8.9%	15.6%	15.6%	16.7%	23.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	13.6	88.0	28.4	102.8	10.2	22.5	51.0	25.0	39.5
Actuated g/C Ratio	0.08	0.49	0.16	0.57	0.06	0.12	0.28	0.14	0.22
v/c Ratio	0.75	0.66	0.72	0.87	0.57	0.89	0.37	0.89	0.62
Control Delay	89.9	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.9	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
LOS	F	A	F	D	F	F	C	F	E
Approach Delay		12.8		43.4		74.5			80.6
Approach LOS		B		D		E			F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 28 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 40.3	Intersection LOS: D
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	97	1995	382	2412	55	188	166	412	458
v/c Ratio	0.75	0.66	0.72	0.87	0.57	0.89	0.37	0.89	0.62
Control Delay	89.9	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.9	9.0	80.6	37.5	104.2	111.5	22.7	97.3	65.5
Queue Length 50th (ft)	120	140	222	903	64	225	75	248	252
Queue Length 95th (ft)	m144	157	284	969	94	#371	121	#332	319
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	143	3027	552	2758	114	226	464	481	742
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.66	0.69	0.87	0.48	0.83	0.36	0.86	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	92	1862	52	3	344	1759	460	40	132	176	379	331
Future Volume (vph)	92	1862	52	3	344	1759	460	40	132	176	379	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	0.99			1.00	0.97		1.00	0.97	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	6190			3335	4786		1719	1663	1461	3335	3328
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	6190			3335	4786		1719	1663	1461	3335	3328
Peak-hour factor, PHF	0.95	0.97	0.69	0.38	0.92	0.92	0.92	0.73	0.90	0.85	0.92	0.92
Adj. Flow (vph)	97	1920	75	8	374	1912	500	55	147	207	412	360
RTOR Reduction (vph)	0	3	0	0	0	25	0	0	5	39	0	13
Lane Group Flow (vph)	97	1992	0	0	382	2387	0	55	183	127	412	445
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	custom	Prot	NA
Protected Phases	1	6		5	5	2		7	4	4	3	8
Permitted Phases										5		
Actuated Green, G (s)	13.6	87.2			28.4	102.0		8.9	23.4	51.8	25.0	39.5
Effective Green, g (s)	13.6	87.2			28.4	102.0		8.9	23.4	51.8	25.0	39.5
Actuated g/C Ratio	0.08	0.48			0.16	0.57		0.05	0.13	0.29	0.14	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	129	2998			526	2712		84	216	420	463	730
v/s Ratio Prot	0.06	0.32			c0.11	c0.50		0.03	c0.11	0.04	c0.12	0.13
v/s Ratio Perm										0.05		
v/c Ratio	0.75	0.66			0.73	0.88		0.65	0.85	0.30	0.89	0.61
Uniform Delay, d1	81.5	35.3			72.1	33.7		84.0	76.5	50.0	76.1	63.3
Progression Factor	0.89	0.24			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.7	0.6			5.0	4.5		16.9	25.0	0.4	18.5	1.4
Delay (s)	84.4	9.0			77.1	38.2		100.9	101.6	50.4	94.6	64.7
Level of Service	F	A			E	D		F	F	D	F	E
Approach Delay (s)		12.5				43.5			80.7			78.9
Approach LOS		B				D			F			E

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



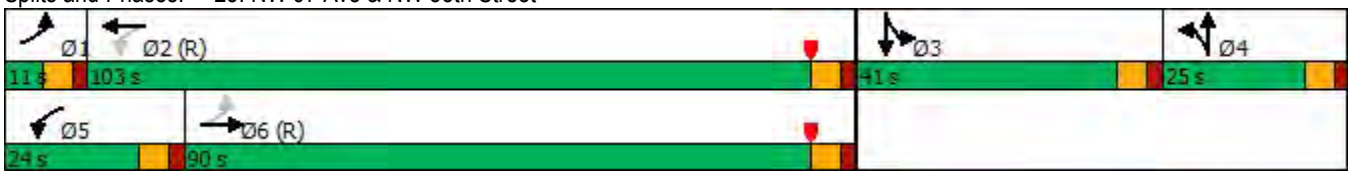
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	83
Future Volume (vph)	83
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.85
Adj. Flow (vph)	98
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

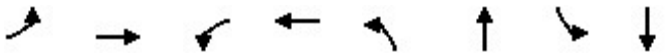
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	22	1169	148	537	122	144	239	239
Future Volume (vph)	22	1169	148	537	122	144	239	239
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	11.0	90.0	24.0	103.0	25.0	25.0	41.0	41.0
Total Split (%)	6.1%	50.0%	13.3%	57.2%	13.9%	13.9%	22.8%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	94.1	88.8	111.0	102.0	18.1	18.1	32.9	32.9
Actuated g/C Ratio	0.52	0.49	0.62	0.57	0.10	0.10	0.18	0.18
v/c Ratio	0.10	0.89	0.87	0.41	0.86	0.83	0.91	0.48
Control Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
LOS	B	D	F	C	F	E	F	E
Approach Delay		48.6		34.0		81.1		84.8
Approach LOS		D		C		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 55.3	Intersection LOS: E
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street

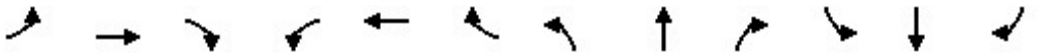




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1495	172	781	149	365	288	300
v/c Ratio	0.10	0.89	0.87	0.41	0.86	0.83	0.91	0.48
Control Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	49.4	86.2	22.5	117.1	66.5	103.2	67.0
Queue Length 50th (ft)	17	870	151	271	175	145	333	164
Queue Length 95th (ft)	23	#996	#252	324	#255	191	#426	211
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	352	1684	214	1910	183	455	337	669
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.89	0.80	0.41	0.81	0.80	0.85	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1169	149	148	537	162	122	144	174	239	239	16
Future Volume (vph)	22	1169	149	148	537	162	122	144	174	239	239	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.92		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3403		1736	3344		1736	3192		1736	3423	
Flt Permitted	0.33	1.00		0.04	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	610	3403		80	3344		1736	3192		1736	3423	
Peak-hour factor, PHF	0.61	0.90	0.76	0.86	0.91	0.85	0.82	0.85	0.89	0.83	0.88	0.57
Adj. Flow (vph)	36	1299	196	172	590	191	149	169	196	288	272	28
RTOR Reduction (vph)	0	6	0	0	17	0	0	120	0	0	4	0
Lane Group Flow (vph)	36	1489	0	172	764	0	149	245	0	288	296	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	93.0	88.7		111.0	100.7		18.1	18.1		32.9	32.9	
Effective Green, g (s)	93.0	88.7		111.0	100.7		18.1	18.1		32.9	32.9	
Actuated g/C Ratio	0.52	0.49		0.62	0.56		0.10	0.10		0.18	0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	342	1676		199	1870		174	320		317	625	
v/s Ratio Prot	0.00	c0.44		c0.08	0.23		c0.09	0.08		c0.17	0.09	
v/s Ratio Perm	0.05			0.45								
v/c Ratio	0.11	0.89		0.86	0.41		0.86	0.77		0.91	0.47	
Uniform Delay, d1	21.6	41.2		59.0	22.6		79.7	78.9		72.1	65.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	7.4		30.0	0.7		31.5	10.5		28.1	0.6	
Delay (s)	21.7	48.6		89.0	23.3		111.2	89.4		100.2	66.4	
Level of Service	C	D		F	C		F	F		F	E	
Approach Delay (s)		48.0			35.2			95.7			82.9	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	57.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Future Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Detector Phase	1	6	6	2 5	5	2	2	4	4	4	8	8
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0		5.0	16.0	16.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.4	24.4	24.4		11.4	24.4	24.4	13.4	13.4	13.4	13.5	13.5
Total Split (s)	13.0	56.8	56.8		52.0	95.8	95.8	34.0	34.0	34.0	17.2	17.2
Total Split (%)	8.1%	35.5%	35.5%		32.5%	59.9%	59.9%	21.3%	21.3%	21.3%	10.8%	10.8%
Yellow Time (s)	4.4	4.4	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max		None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	50.4	50.4	50.4		92.0	92.0	92.0	27.6	27.6	73.2	10.7	10.7
Actuated g/C Ratio	0.32	0.32	0.32		0.58	0.58	0.58	0.17	0.17	0.46	0.07	0.07
v/c Ratio	0.35	1.04	0.23		1.11	0.74	0.44	0.80	1.08	0.45	0.99	0.93
Control Delay	28.9	58.3	2.1		115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	58.3	2.1		115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
LOS	C	E	A		F	C	A	F	F	B	F	F
Approach Delay		51.4				45.4			73.2			130.1
Approach LOS		D				D			E			F

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 102 (64%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 57.1	Intersection LOS: E
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	1093	127	578	1429	441	231	332	317	100	200
v/c Ratio	0.35	1.04	0.23	1.11	0.74	0.44	0.80	1.08	0.45	0.99	0.93
Control Delay	28.9	58.3	2.1	115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	58.3	2.1	115.9	28.9	6.2	84.3	122.5	13.3	158.6	115.9
Queue Length 50th (ft)	25	~637	11	~644	590	54	235	~348	104	117	111
Queue Length 95th (ft)	m25	m#662	m12	#872	591	55	261	#456	152	#231	#159
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	158	1053	546	521	1921	999	288	308	710	101	214
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	1.04	0.23	1.11	0.74	0.44	0.80	1.08	0.45	0.99	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Future Volume (vph)	34	1038	104	7	500	1186	322	166	82	464	132	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lane Util. Factor	1.00	0.95	1.00		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90	0.85	1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99
Satd. Flow (prot)	1671	3343	1495		1671	3343	1495	1671	1498	1421	1521	3084
Flt Permitted	0.19	1.00	1.00		0.09	1.00	1.00	0.95	1.00	1.00	0.95	0.99
Satd. Flow (perm)	328	3343	1495		156	3343	1495	1671	1498	1421	1521	3084
Peak-hour factor, PHF	0.62	0.95	0.82	0.44	0.89	0.83	0.73	0.72	0.80	0.85	0.83	0.79
Adj. Flow (vph)	55	1093	127	16	562	1429	441	231	102	546	159	111
RTOR Reduction (vph)	0	0	76	0	0	0	142	0	50	60	0	8
Lane Group Flow (vph)	55	1093	51	0	578	1429	299	231	282	257	100	192
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Actuated Green, G (s)	50.4	50.4	50.4		90.7	90.7	90.7	27.6	27.6	73.2	10.7	10.7
Effective Green, g (s)	50.4	50.4	50.4		90.7	90.7	90.7	27.6	27.6	73.2	10.7	10.7
Actuated g/C Ratio	0.31	0.31	0.31		0.57	0.57	0.57	0.17	0.17	0.46	0.07	0.07
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	147	1053	470		520	1895	847	288	258	650	101	206
v/s Ratio Prot	0.01	c0.33			c0.32	0.43		0.14	c0.19	0.07	c0.07	0.06
v/s Ratio Perm	0.10		0.03		c0.31		0.20			0.11		
v/c Ratio	0.37	1.04	0.11		1.11	0.75	0.35	0.80	1.09	0.40	0.99	0.93
Uniform Delay, d1	45.1	54.8	38.9		49.2	26.2	18.8	63.6	66.2	28.7	74.6	74.3
Progression Factor	0.56	0.59	0.20		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	25.4	0.1		73.7	2.8	1.2	14.8	83.6	0.4	86.2	43.4
Delay (s)	25.7	58.0	7.9		122.9	29.1	19.9	78.4	149.8	29.1	160.8	117.7
Level of Service	C	E	A		F	C	B	E	F	C	F	F
Approach Delay (s)		51.6				49.6			87.6			132.0
Approach LOS		D				D			F			F

Intersection Summary			
HCM 2000 Control Delay	62.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



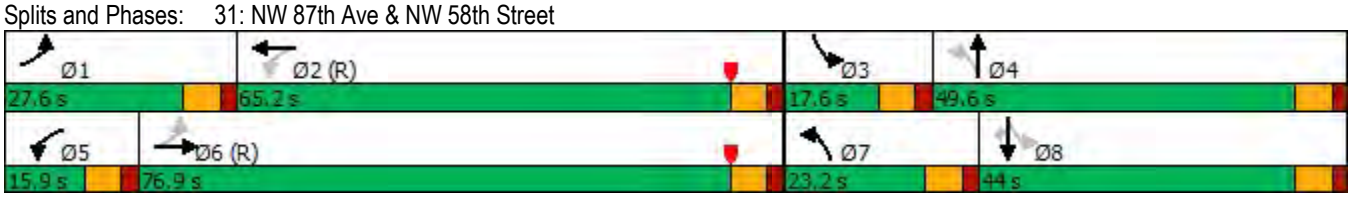
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	30
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	8%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	198	971	104	596	200	686	112	656	116
Future Volume (vph)	198	971	104	596	200	686	112	656	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	27.6	76.9	15.9	65.2	23.2	49.6	17.6	44.0	44.0
Total Split (%)	17.3%	48.1%	9.9%	40.8%	14.5%	31.0%	11.0%	27.5%	27.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	85.1	70.5	73.4	63.9	60.0	43.2	48.8	37.6	37.6
Actuated g/C Ratio	0.53	0.44	0.46	0.40	0.38	0.27	0.30	0.24	0.24
v/c Ratio	0.60	0.99	0.85	0.53	0.96	0.95	0.92	0.96	0.29
Control Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
LOS	C	E	F	C	F	E	F	F	A
Approach Delay		59.7		30.8		79.5		73.8	
Approach LOS		E		C		E		E	

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 28 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 62.3	Intersection LOS: E
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street

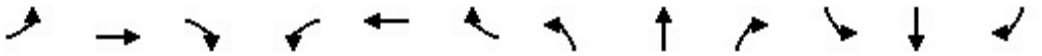




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	1468	125	723	215	871	151	772	138
v/c Ratio	0.60	0.99	0.85	0.53	0.96	0.95	0.92	0.96	0.29
Control Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	64.6	82.9	21.8	93.3	76.1	90.7	82.6	6.3
Queue Length 50th (ft)	115	780	72	275	177	467	109	423	0
Queue Length 95th (ft)	168	#956	m#152	m341	#348	#603	#167	#498	32
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	403	1477	147	1354	225	915	165	807	479
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.99	0.85	0.53	0.96	0.95	0.92	0.96	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



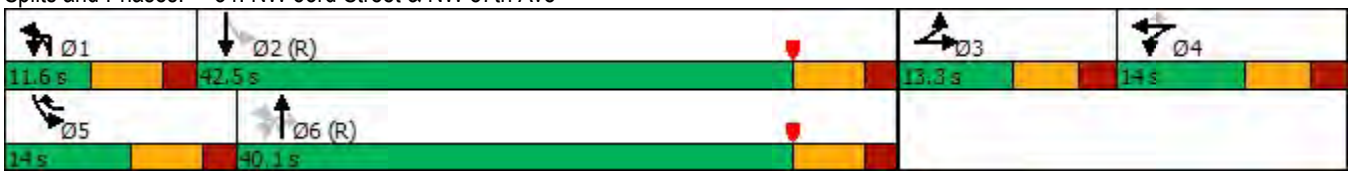
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	971	348	104	596	76	200	686	133	112	656	116
Future Volume (vph)	198	971	348	104	596	76	200	686	133	112	656	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3289		1719	3375		1719	3350		1719	3438	1538
Flt Permitted	0.24	1.00		0.06	1.00		0.09	1.00		0.11	1.00	1.00
Satd. Flow (perm)	432	3289		113	3375		168	3350		193	3438	1538
Peak-hour factor, PHF	0.92	0.93	0.82	0.83	0.94	0.85	0.93	0.95	0.89	0.74	0.85	0.84
Adj. Flow (vph)	215	1044	424	125	634	89	215	722	149	151	772	138
RTOR Reduction (vph)	0	27	0	0	7	0	0	11	0	0	0	106
Lane Group Flow (vph)	215	1441	0	125	716	0	215	860	0	151	772	32
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	86.4	70.5		73.4	63.9		60.0	43.2		48.8	37.6	37.6
Effective Green, g (s)	86.4	70.5		73.4	63.9		60.0	43.2		48.8	37.6	37.6
Actuated g/C Ratio	0.54	0.44		0.46	0.40		0.38	0.27		0.30	0.24	0.24
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	362	1449		147	1347		225	904		165	807	361
v/s Ratio Prot	0.06	c0.44		c0.05	0.21		c0.10	c0.26		0.06	0.22	
v/s Ratio Perm	0.26			0.34			c0.26			0.21		0.02
v/c Ratio	0.59	0.99		0.85	0.53		0.96	0.95		0.92	0.96	0.09
Uniform Delay, d1	22.4	44.5		39.8	36.6		47.5	57.4		45.4	60.4	47.8
Progression Factor	1.00	1.00		1.50	0.56		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	22.3		24.6	1.0		47.1	19.1		45.8	21.5	0.1
Delay (s)	25.0	66.9		84.2	21.7		94.7	76.5		91.2	81.9	47.9
Level of Service	C	E		F	C		F	E		F	F	D
Approach Delay (s)		61.5			30.9			80.1			78.8	
Approach LOS		E			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	64.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	2	129	2	43	51	14	1025	152	110	914
Future Volume (vph)	7	2	129	2	43	51	14	1025	152	110	914
Turn Type	Split	NA	Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3	4	4	5	1	1	6		5	2
Permitted Phases					4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.3	13.3	13.3	13.3	11.4	11.4	11.4	24.4	24.4	11.4	24.4
Total Split (s)	13.3	13.3	14.0	14.0	14.0	11.6	11.6	40.1	40.1	14.0	42.5
Total Split (%)	16.3%	16.3%	17.2%	17.2%	17.2%	14.3%	14.3%	49.3%	49.3%	17.2%	52.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	7.0	7.0	7.7	7.7	18.4		47.7	42.3	42.3	52.2	47.5
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.23		0.59	0.52	0.52	0.64	0.58
v/c Ratio	0.08	0.22	0.58	0.57	0.14		0.29	0.61	0.22	0.49	0.53
Control Delay	35.7	18.1	51.6	51.3	0.6		10.0	17.8	2.7	12.8	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	18.1	51.6	51.3	0.6		10.0	17.8	2.7	12.8	15.7
LOS	D	B	D	D	A		B	B	A	B	B
Approach Delay		22.5		38.5				15.2			15.4
Approach LOS		C		D				B			B

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 53rd Street & NW 87th Ave





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	36	89	89	61	94	1090	195	151	1055
v/c Ratio	0.08	0.22	0.58	0.57	0.14	0.29	0.61	0.22	0.49	0.53
Control Delay	35.7	18.1	51.6	51.3	0.6	10.0	17.8	2.7	12.8	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	18.1	51.6	51.3	0.6	10.0	17.8	2.7	12.8	15.7
Queue Length 50th (ft)	6	2	46	46	0	18	220	1	32	218
Queue Length 95th (ft)	14	9	76	50	0	24	298	16	46	278
Internal Link Dist (ft)		93		992			2118			2105
Turn Bay Length (ft)			175		175	180		190	125	
Base Capacity (vph)	147	164	156	157	457	322	1785	901	317	2002
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.22	0.57	0.57	0.13	0.29	0.61	0.22	0.48	0.53

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	2	15	129	2	43	51	14	1025	152	110	914
Future Volume (vph)	7	2	15	129	2	43	51	14	1025	152	110	914
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.87		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1568		1633	1641	1538		1782	3438	1538	1719	3430
Flt Permitted	0.95	1.00		0.95	0.95	1.00		0.21	1.00	1.00	0.16	1.00
Satd. Flow (perm)	1719	1568		1633	1641	1538		390	3438	1538	286	3430
Peak-hour factor, PHF	0.58	0.50	0.47	0.74	0.50	0.70	0.73	0.58	0.94	0.78	0.73	0.88
Adj. Flow (vph)	12	4	32	174	4	61	70	24	1090	195	151	1039
RTOR Reduction (vph)	0	30	0	0	0	51	0	0	0	103	0	1
Lane Group Flow (vph)	12	6	0	89	89	10	0	94	1090	92	151	1054
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	0%	5%	5%	5%	5%	5%
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	4	5	1	1	6		5	2
Permitted Phases						4	6	6		6	2	
Actuated Green, G (s)	4.2	4.2		6.3	6.3	13.3		42.9	38.5	38.5	48.1	41.1
Effective Green, g (s)	4.2	4.2		6.3	6.3	13.3		42.9	38.5	38.5	48.1	41.1
Actuated g/C Ratio	0.05	0.05		0.08	0.08	0.16		0.53	0.47	0.47	0.59	0.50
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	88	80		126	127	251		280	1626	727	292	1731
v/s Ratio Prot	c0.01	0.00		c0.05	0.05	0.00		0.02	c0.32		c0.04	c0.31
v/s Ratio Perm						0.00		0.16		0.06	0.26	
v/c Ratio	0.14	0.07		0.71	0.70	0.04		0.34	0.67	0.13	0.52	0.61
Uniform Delay, d1	36.9	36.7		36.6	36.6	28.7		10.2	16.6	12.0	9.9	14.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.03	0.96	1.06	1.00	1.00
Incremental Delay, d2	0.7	0.4		16.5	16.0	0.1		0.7	2.2	0.4	1.5	1.6
Delay (s)	37.6	37.1		53.1	52.7	28.7		11.2	18.2	13.1	11.4	16.0
Level of Service	D	D		D	D	C		B	B	B	B	B
Approach Delay (s)		37.2			46.7				17.0			15.4
Approach LOS		D			D				B			B

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	11
Future Volume (vph)	11
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.69
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	28	2404	26	5	15	1647	70	0	0	16	0	0	27
Future Vol, veh/h	28	2404	26	5	15	1647	70	0	0	16	0	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	80	-	80	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	94	69	42	94	94	62	25	25	50	25	25	81
Heavy Vehicles, %	3	3	0	0	0	3	3	0	0	3	0	0	3
Mvmt Flow	37	2557	38	12	16	1752	113	0	0	32	0	0	33

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	1865	0	0	1894	2595	0	0	-	-	1298	-	-	876
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	5.6	5.3	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	2.3	3.1	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	145	-	-	142	64	-	-	0	0	130	0	0	249
Stage 1	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	145	-	-	81	81	-	-	-	-	130	-	-	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1	41.5	21.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	145	-	-	81	-	-	249
HCM Lane V/C Ratio	0.246	0.257	-	-	0.344	-	-	0.134
HCM Control Delay (s)	41.5	38.2	-	-	71.3	-	-	21.7
HCM Lane LOS	E	E	-	-	F	-	-	C
HCM 95th %tile Q(veh)	0.9	1	-	-	1.3	-	-	0.5



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	14	1148	25	0	1118
Future Volume (Veh/h)	0	14	1148	25	0	1118
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.88	0.91	0.75	0.25	0.95
Hourly flow rate (vph)	0	16	1262	33	0	1177
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.85	0.81			0.81	
vC, conflicting volume	1671	648			1295	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	965	109			905	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	217	757			619	

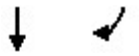
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	16	841	454	0	392	392	392
Volume Left	0	0	0	0	0	0	0
Volume Right	16	0	33	0	0	0	0
cSH	757	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.49	0.27	0.00	0.23	0.23	0.23
Queue Length 95th (ft)	2	0	0	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.9	0.0		0.0			
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	2375	3	3	3	1660	4	0	0	13	0
Future Volume (Veh/h)	1	0	2375	3	3	3	1660	4	0	0	13	0
Sign Control			Free				Free			Stop		
Grade			0%				0%			0%		
Peak Hour Factor	0.25	0.92	0.98	0.75	0.75	0.38	0.92	0.92	0.25	0.92	0.54	0.92
Hourly flow rate (vph)	0	0	2423	4	0	8	1804	4	0	0	24	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type			None				None					
Median storage veh)												
Upstream signal (ft)							1196					
pX, platoon unblocked	0.00	0.86			0.00				0.86	0.86		0.86
vC, conflicting volume	0	1808			0	2427			3050	4249	810	2654
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1353			0	2427			2805	4207	810	2341
tC, single (s)	0.0	4.1			0.0	4.1			7.5	6.5	7.2	7.5
tC, 2 stage (s)												
tF (s)	0.0	2.2			0.0	2.2			3.5	4.0	3.4	3.5
p0 queue free %	0	100			0	96			100	100	92	100
cM capacity (veh/h)	0	432			0	198			7	2	297	15

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1
Volume Total	969	969	489	8	722	722	365	8	16	8
Volume Left	0	0	0	8	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	4	8	16	8
cSH	1700	1700	1700	198	1700	1700	1700	297	297	927
Volume to Capacity	0.57	0.57	0.29	0.04	0.42	0.42	0.21	0.03	0.05	0.01
Queue Length 95th (ft)	0	0	0	3	0	0	0	2	4	1
Control Delay (s)	0.0	0.0	0.0	24.0	0.0	0.0	0.0	17.5	17.8	8.9
Lane LOS				C				C	C	A
Approach Delay (s)	0.0			0.1				17.7		8.9
Approach LOS								C		A

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	56.6%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	7
Future Volume (Veh/h)	0	7
Sign Control	Stop	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	0	8
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type		
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked	0.86	0.86
vC, conflicting volume	4249	603
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol	4207	0
tC, single (s)	6.5	6.9
tC, 2 stage (s)		
tF (s)	4.0	3.3
p0 queue free %	100	99
cM capacity (veh/h)	2	927

Direction, Lane #



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	2387	2	40	6	1696	0	25
Future Volume (Veh/h)	1	2387	2	40	6	1696	0	25
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.98	0.50	0.92	0.50	0.95	0.25	0.75
Hourly flow rate (vph)	0	2436	4	0	12	1785	0	33
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.84		0.84	0.84
vC, conflicting volume	0			0	2440		3057	814
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	2036		2774	90
tC, single (s)	0.0			0.0	4.1		6.8	8.1
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.9
p0 queue free %	0			0	95		100	95
cM capacity (veh/h)	0			0	235		13	665

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	974	974	491	12	595	595	595	33
Volume Left	0	0	0	12	0	0	0	0
Volume Right	0	0	4	0	0	0	0	33
cSH	1700	1700	1700	235	1700	1700	1700	665
Volume to Capacity	0.57	0.57	0.29	0.05	0.35	0.35	0.35	0.05
Queue Length 95th (ft)	0	0	0	4	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	21.1	0.0	0.0	0.0	10.7
Lane LOS				C				B
Approach Delay (s)	0.0			0.1				10.7
Approach LOS								B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	43	23	18	1096	8	56	8	977
Future Volume (Veh/h)	43	23	18	1096	8	56	8	977
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.58	0.92	0.25	0.91	0.50	0.25	0.50	0.93
Hourly flow rate (vph)	74	25	0	1204	16	0	16	1051
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				702				
pX, platoon unblocked	0.82	0.82	0.00			0.00	0.82	
vC, conflicting volume	1770	610	0			0	1220	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1506	99	0			0	839	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	14	97	0			0	97	
cM capacity (veh/h)	86	762	0			0	631	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	74	25	803	417	0	16	526	526
Volume Left	74	0	0	0	0	16	0	0
Volume Right	0	25	0	16	0	0	0	0
cSH	86	762	1700	1700	1700	631	1700	1700
Volume to Capacity	0.86	0.03	0.47	0.25	0.00	0.03	0.31	0.31
Queue Length 95th (ft)	114	3	0	0	0	2	0	0
Control Delay (s)	145.5	9.9	0.0	0.0	0.0	10.9	0.0	0.0
Lane LOS	F	A				B		
Approach Delay (s)	111.2		0.0			0.2		
Approach LOS	F							

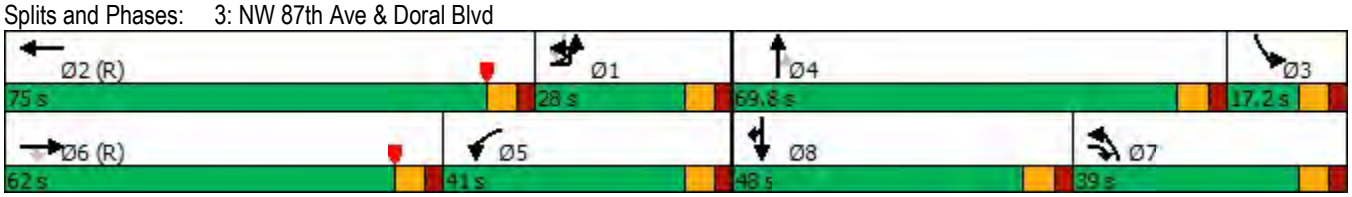
Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

2027 PM Traffic With Project
Trips and Improvements
without median closures
Synchro Output

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	288	932	316	394	1359	449	897	413	119	924	267
Future Volume (vph)	288	932	316	394	1359	449	897	413	119	924	267
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	custom
Protected Phases	1	6	7	5	2	7	4		3	8	8
Permitted Phases			6					4			1
Detector Phase	1	6	7	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	1.0	5.0	1.0	1.0	5.0	1.0	5.0	5.0	1.0	5.0	5.0
Minimum Split (s)	8.0	25.0	8.1	8.0	25.0	8.1	25.1	25.1	8.1	25.1	25.1
Total Split (s)	28.0	62.0	39.0	41.0	75.0	39.0	69.8	69.8	17.2	48.0	48.0
Total Split (%)	14.7%	32.6%	20.5%	21.6%	39.5%	20.5%	36.7%	36.7%	9.1%	25.3%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	20.8	55.1	93.9	33.8	68.1	31.8	62.9	62.9	10.0	41.1	68.9
Actuated g/C Ratio	0.11	0.29	0.49	0.18	0.36	0.17	0.33	0.33	0.05	0.22	0.36
v/c Ratio	0.92	0.69	0.44	0.77	0.93	0.91	0.88	0.68	0.75	0.92	0.45
Control Delay	105.3	55.3	17.5	67.3	35.0	97.9	69.7	27.0	107.4	72.6	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.3	55.3	17.5	67.3	35.0	97.9	69.7	27.0	107.4	72.6	12.0
LOS	F	E	B	E	D	F	E	C	F	E	B
Approach Delay		57.2			42.1		66.9			63.2	
Approach LOS		E			D		E			E	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 134 (71%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 56.6	Intersection LOS: E
Intersection Capacity Utilization 93.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd

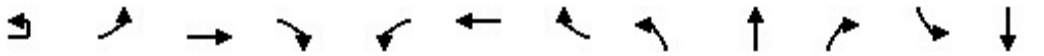




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	341	1002	367	464	1665	516	1019	475	134	1004	300
v/c Ratio	0.92	0.69	0.44	0.77	0.93	0.91	0.88	0.68	0.75	0.92	0.45
Control Delay	105.3	55.3	17.5	67.3	35.0	97.9	69.7	27.0	107.4	72.6	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.3	55.3	17.5	67.3	35.0	97.9	69.7	27.0	107.4	72.6	12.0
Queue Length 50th (ft)	221	415	111	307	764	330	636	224	90	460	124
Queue Length 95th (ft)	#298	473	150	m328	m827	#407	708	336	#142	#538	115
Internal Link Dist (ft)		378			2485		2143			310	
Turn Bay Length (ft)	170		170	330		400			190		300
Base Capacity (vph)	375	1460	817	608	1782	570	1160	703	180	1089	661
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.69	0.45	0.76	0.93	0.91	0.88	0.68	0.74	0.92	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	288	932	316	394	1359	188	449	897	413	119	924
Future Volume (vph)	5	288	932	316	394	1359	188	449	897	413	119	924
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.91
Frt		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3400	5036	1568	3400	4943		3400	3505	1568	3400	5036
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3400	5036	1568	3400	4943		3400	3505	1568	3400	5036
Peak-hour factor, PHF	0.50	0.87	0.93	0.86	0.85	0.93	0.92	0.87	0.88	0.87	0.89	0.92
Adj. Flow (vph)	10	331	1002	367	464	1461	204	516	1019	475	134	1004
RTOR Reduction (vph)	0	0	0	56	0	10	0	0	0	185	0	0
Lane Group Flow (vph)	0	341	1002	311	464	1655	0	516	1019	290	134	1004
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6	7	5	2		7	4		3	8
Permitted Phases				6						4		
Actuated Green, G (s)		20.8	55.1	86.9	33.8	68.1		31.8	62.9	62.9	10.0	41.1
Effective Green, g (s)		20.8	55.1	86.9	33.8	68.1		31.8	62.9	62.9	10.0	41.1
Actuated g/C Ratio		0.11	0.29	0.46	0.18	0.36		0.17	0.33	0.33	0.05	0.22
Clearance Time (s)		7.0	7.0	7.1	7.0	7.0		7.1	7.1	7.1	7.1	7.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		372	1460	775	604	1771		569	1160	519	178	1089
v/s Ratio Prot		c0.10	0.20	0.07	c0.14	c0.33		c0.15	c0.29		0.04	0.20
v/s Ratio Perm				0.13						0.19		
v/c Ratio		0.92	0.69	0.40	0.77	0.93		0.91	0.88	0.56	0.75	0.92
Uniform Delay, d1		83.7	59.8	34.3	74.4	58.8		77.6	59.9	52.2	88.8	72.9
Progression Factor		0.92	0.88	0.73	0.84	0.50		1.00	1.00	1.00	0.96	0.82
Incremental Delay, d2		25.9	2.5	0.3	2.7	5.5		18.1	9.5	4.3	14.9	12.9
Delay (s)		103.1	55.1	25.4	65.5	35.0		95.7	69.5	56.5	99.9	72.8
Level of Service		F	E	C	E	D		F	E	E	F	E
Approach Delay (s)			58.3			41.7			73.2			64.7
Approach LOS			E			D			E			E

Intersection Summary			
HCM 2000 Control Delay	58.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	28.2
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



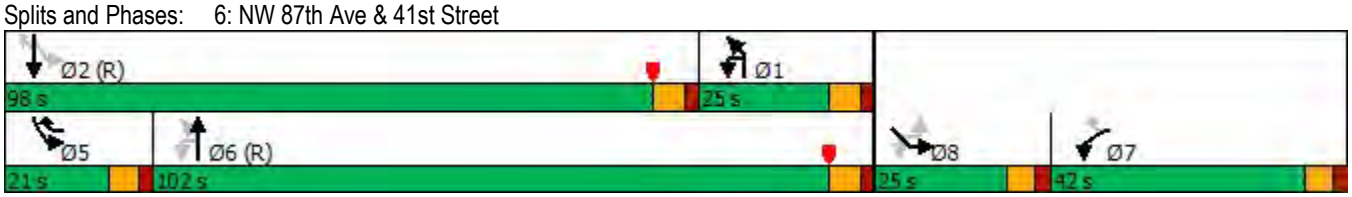
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	267
Future Volume (vph)	267
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.1
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	300
RTOR Reduction (vph)	98
Lane Group Flow (vph)	202
Heavy Vehicles (%)	3%
Turn Type	custom
Protected Phases	8
Permitted Phases	1
Actuated Green, G (s)	61.9
Effective Green, g (s)	61.9
Actuated g/C Ratio	0.33
Clearance Time (s)	7.1
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	510
v/s Ratio Prot	0.09
v/s Ratio Perm	0.04
v/c Ratio	0.40
Uniform Delay, d1	49.6
Progression Factor	0.43
Incremental Delay, d2	0.5
Delay (s)	21.9
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR2	NBU	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Configurations										
Traffic Volume (vph)	208	107	8	91	1083	49	990	46	0	71
Future Volume (vph)	208	107	8	91	1083	49	990	46	0	71
Turn Type	Prot	pm+ov	pm+pt	pm+pt	NA	pm+pt	NA	Perm	Prot	Perm
Protected Phases	7	5	1	1	6	5	2		8	
Permitted Phases		7	6	6		2		2		8
Detector Phase	7	5	1	1	6	5	2	2	8	8
Switch Phase										
Minimum Initial (s)	1.7	1.6	1.6	1.6	5.0	1.6	5.0	5.0	5.0	5.0
Minimum Split (s)	8.0	8.0	8.0	8.0	24.4	8.0	24.4	24.4	24.3	24.3
Total Split (s)	42.0	21.0	25.0	25.0	102.0	21.0	98.0	98.0	25.0	25.0
Total Split (%)	22.1%	11.1%	13.2%	13.2%	53.7%	11.1%	51.6%	51.6%	13.2%	13.2%
Yellow Time (s)	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.4		6.4	6.4	6.4	6.4	6.4	6.3	6.3
Lead/Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max	C-Max	None	None
Act Effct Green (s)	23.3	39.3		125.8	125.8	116.9	116.9	116.9	5.8	5.8
Actuated g/C Ratio	0.12	0.21		0.66	0.66	0.62	0.62	0.62	0.03	0.03
v/c Ratio	0.87	0.32		0.36	0.60	0.38	0.55	0.07	0.51	0.49
Control Delay	68.0	9.1		4.6	3.3	22.6	24.5	1.8	13.0	11.1
Queue Delay	0.0	0.0		0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	9.1		4.6	3.5	22.6	24.5	1.8	13.0	11.1
LOS	E	A		A	A	C	C	A	B	B
Approach Delay	49.2				3.6		23.2		12.1	
Approach LOS	D				A		C		B	

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 46 (24%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street





Lane Group	WBL	WBR2	NBL	NBT	SBL	SBT	SBR	SEL	SER
Lane Group Flow (vph)	282	132	138	1356	82	1179	69	90	84
v/c Ratio	0.87	0.32	0.36	0.60	0.38	0.55	0.07	0.51	0.49
Control Delay	68.0	9.1	4.6	3.3	22.6	24.5	1.8	13.0	11.1
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	9.1	4.6	3.5	22.6	24.5	1.8	13.0	11.1
Queue Length 50th (ft)	197	0	15	87	41	439	0	0	0
Queue Length 95th (ft)	234	23	m24	m133	52	524	0	0	0
Internal Link Dist (ft)	2087			188		702		377	
Turn Bay Length (ft)	200		120		200		200		
Base Capacity (vph)	432	447	384	2277	254	2156	1000	281	262
Starvation Cap Reductn	0	0	0	274	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.30	0.36	0.68	0.32	0.55	0.07	0.32	0.32

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	WBR2	NBU	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL
Lane Configurations												
Traffic Volume (vph)	208	3	107	8	91	1083	125	49	990	46	39	0
Future Volume (vph)	208	3	107	8	91	1083	125	49	990	46	39	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Lane Util. Factor	1.00		0.95		1.00	0.95		1.00	0.95	1.00		1.00
Frt	0.99		0.85		1.00	0.98		1.00	1.00	0.85		0.94
Flt Protected	0.96		1.00		0.95	1.00		0.95	1.00	1.00		0.97
Satd. Flow (prot)	1745		1490		1757	3435		1752	3505	1568		1679
Flt Permitted	0.96		1.00		0.20	1.00		0.12	1.00	1.00		0.97
Satd. Flow (perm)	1745		1490		377	3435		224	3505	1568		1679
Peak-hour factor, PHF	0.79	0.75	0.73	0.67	0.72	0.92	0.70	0.60	0.84	0.67	0.75	0.25
Adj. Flow (vph)	263	4	147	12	126	1177	179	82	1179	69	52	0
RTOR Reduction (vph)	113	0	109	0	0	4	0	0	0	27	0	87
Lane Group Flow (vph)	169	0	23	0	138	1352	0	82	1179	42	0	3
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot		pm+ov	pm+pt	pm+pt	NA		pm+pt	NA	Perm	Perm	Prot
Protected Phases	7		5	1	1	6		5	2			8
Permitted Phases			7	6	6			2		2	8	
Actuated Green, G (s)	23.3		33.1		125.7	125.7		116.8	116.8	116.8		5.8
Effective Green, g (s)	23.3		33.1		125.7	125.7		116.8	116.8	116.8		5.8
Actuated g/C Ratio	0.12		0.17		0.66	0.66		0.61	0.61	0.61		0.03
Clearance Time (s)	6.3		6.4		6.4	6.4		6.4	6.4	6.4		6.3
Vehicle Extension (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	213		259		385	2272		216	2154	963		51
v/s Ratio Prot	c0.10		0.00		0.04	c0.39		0.02	c0.34			
v/s Ratio Perm			0.01		0.20			0.21		0.03		0.00
v/c Ratio	0.79		0.09		0.36	0.59		0.38	0.55	0.04		0.05
Uniform Delay, d1	81.0		65.8		24.6	17.9		20.8	21.3	14.5		89.4
Progression Factor	1.00		1.00		0.14	0.14		1.06	1.05	1.30		1.00
Incremental Delay, d2	18.0		0.1		0.3	0.6		1.1	1.0	0.1		0.4
Delay (s)	99.0		65.9		3.8	3.1		23.3	23.3	18.9		89.9
Level of Service	F		E		A	A		C	C	B		F
Approach Delay (s)	88.5					3.1			23.1			89.9
Approach LOS	F					A			C			F

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



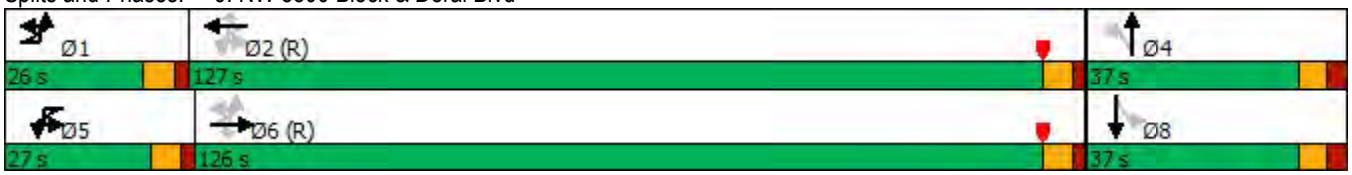
Movement	SER
Lane Configurations	
Traffic Volume (vph)	71
Future Volume (vph)	71
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.3
Lane Util. Factor	0.95
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1490
Flt Permitted	1.00
Satd. Flow (perm)	1490
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	122
RTOR Reduction (vph)	81
Lane Group Flow (vph)	3
Heavy Vehicles (%)	3%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	5.8
Effective Green, g (s)	5.8
Actuated g/C Ratio	0.03
Clearance Time (s)	6.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	45
v/s Ratio Prot	
v/s Ratio Perm	c0.00
v/c Ratio	0.06
Uniform Delay, d1	89.4
Progression Factor	1.00
Incremental Delay, d2	0.5
Delay (s)	90.0
Level of Service	F
Approach Delay (s)	
Approach LOS	

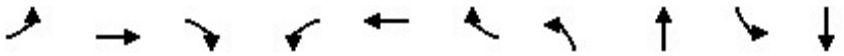
Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	28	34	1342	50	32	68	1870	53	42	3	55	3
Future Volume (vph)	28	34	1342	50	32	68	1870	53	42	3	55	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	1	6		5	5	2			4		8
Permitted Phases	6	6		6	2	2		2	4		8	
Detector Phase	1	1	6	6	5	5	2	2	4	4	8	8
Switch Phase												
Minimum Initial (s)	1.6	1.6	5.0	5.0	1.6	1.6	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.0	8.0	24.4	24.4	8.0	8.0	24.4	24.4	25.0	25.0	25.0	25.0
Total Split (s)	26.0	26.0	126.0	126.0	27.0	27.0	127.0	127.0	37.0	37.0	37.0	37.0
Total Split (%)	13.7%	13.7%	66.3%	66.3%	14.2%	14.2%	66.8%	66.8%	19.5%	19.5%	19.5%	19.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	Max	Max
Act Effct Green (s)		141.0	131.3	131.3		139.4	130.5	130.5	30.0	30.0	30.0	30.0
Actuated g/C Ratio		0.74	0.69	0.69		0.73	0.69	0.69	0.16	0.16	0.16	0.16
v/c Ratio		0.57	0.40	0.05		0.45	0.60	0.05	0.25	0.33	0.38	0.22
Control Delay		27.0	13.5	2.4		7.1	5.0	0.1	73.9	17.3	78.9	19.8
Queue Delay		0.0	0.0	0.0		0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay		27.0	13.5	2.4		7.1	5.1	0.1	73.9	17.3	78.9	19.8
LOS		C	B	A		A	A	A	E	B	E	B
Approach Delay			13.9				5.1			35.4		49.1
Approach LOS			B				A			D		D

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 167 (88%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd

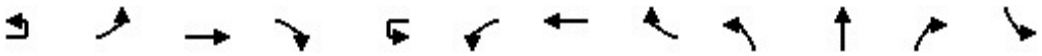




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	96	1398	61	129	2101	53	53	113	67	68
v/c Ratio	0.57	0.40	0.05	0.45	0.60	0.05	0.25	0.33	0.38	0.22
Control Delay	27.0	13.5	2.4	7.1	5.0	0.1	73.9	17.3	78.9	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	13.5	2.4	7.1	5.1	0.1	73.9	17.3	78.9	19.8
Queue Length 50th (ft)	27	269	1	15	118	0	59	13	76	9
Queue Length 95th (ft)	40	305	15	m17	139	m0	95	0	121	0
Internal Link Dist (ft)		1116			323			94		231
Turn Bay Length (ft)	200		190	190		75				
Base Capacity (vph)	259	3515	1112	389	3493	1106	209	339	176	305
Starvation Cap Reductn	0	0	0	0	417	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.40	0.05	0.33	0.68	0.05	0.25	0.33	0.38	0.22

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	28	34	1342	50	32	68	1870	53	42	3	69	55
Future Volume (vph)	28	34	1342	50	32	68	1870	53	42	3	69	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.87		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1787	5085	1583		1783	5085	1583	1770	1613		1770
Flt Permitted		0.06	1.00	1.00		0.16	1.00	1.00	0.71	1.00		0.60
Satd. Flow (perm)		112	5085	1583		297	5085	1583	1328	1613		1117
Peak-hour factor, PHF	0.58	0.71	0.96	0.82	0.67	0.84	0.89	1.00	0.79	0.25	0.68	0.82
Adj. Flow (vph)	48	48	1398	61	48	81	2101	53	53	12	101	67
RTOR Reduction (vph)	0	0	0	19	0	0	0	17	0	85	0	0
Lane Group Flow (vph)	0	96	1398	42	0	129	2101	36	53	28	0	67
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases	6	6		6	2	2		2	4			8
Actuated Green, G (s)		141.0	131.3	131.3		139.4	130.5	130.5	30.0	30.0		30.0
Effective Green, g (s)		141.0	131.3	131.3		139.4	130.5	130.5	30.0	30.0		30.0
Actuated g/C Ratio		0.74	0.69	0.69		0.73	0.69	0.69	0.16	0.16		0.16
Clearance Time (s)		6.4	6.4	6.4		6.4	6.4	6.4	7.0	7.0		7.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		168	3514	1093		287	3492	1087	209	254		176
v/s Ratio Prot		c0.03	0.27			0.02	c0.41			0.02		
v/s Ratio Perm		0.39		0.03		0.31		0.02	0.04			c0.06
v/c Ratio		0.57	0.40	0.04		0.45	0.60	0.03	0.25	0.11		0.38
Uniform Delay, d1		16.6	12.5	9.3		8.4	15.9	9.5	70.2	68.6		71.7
Progression Factor		0.97	1.05	1.12		0.67	0.28	0.00	1.00	1.00		1.00
Incremental Delay, d2		4.6	0.3	0.1		0.7	0.5	0.0	0.6	0.2		6.2
Delay (s)		20.7	13.4	10.5		6.3	4.9	0.0	70.8	68.8		77.8
Level of Service		C	B	B		A	A	A	E	E		E
Approach Delay (s)			13.8				4.9			69.4		
Approach LOS			B				A			E		

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	34
Future Volume (vph)	3	34
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	
Lane Util. Factor	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1616	
Flt Permitted	1.00	
Satd. Flow (perm)	1616	
Peak-hour factor, PHF	0.38	0.57
Adj. Flow (vph)	8	60
RTOR Reduction (vph)	51	0
Lane Group Flow (vph)	17	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	30.0	
Effective Green, g (s)	30.0	
Actuated g/C Ratio	0.16	
Clearance Time (s)	7.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	255	
v/s Ratio Prot	0.01	
v/s Ratio Perm		
v/c Ratio	0.07	
Uniform Delay, d1	68.1	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	68.6	
Level of Service	E	
Approach Delay (s)	73.2	
Approach LOS	E	

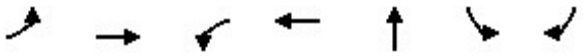
Intersection Summary

Lane Group	EBU	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	10	37	1491	15	1847	1	24	28
Future Volume (vph)	10	37	1491	15	1847	1	24	28
Turn Type	pm+pt	pm+pt	NA	pm+pt	NA	NA	Perm	Perm
Protected Phases	1	1	6	5	2	4		
Permitted Phases	6	6		2			8	8
Detector Phase	1	1	6	5	2	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	5.0	4.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.0	8.0	24.4	8.0	24.4	9.0	9.0	9.0
Total Split (s)	10.0	10.0	56.0	8.0	54.0	26.0	26.0	26.0
Total Split (%)	11.1%	11.1%	62.2%	8.9%	60.0%	28.9%	28.9%	28.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)		63.9	63.9	60.1	60.1	13.9	13.9	13.9
Actuated g/C Ratio		0.71	0.71	0.67	0.67	0.15	0.15	0.15
v/c Ratio		0.32	0.43	0.10	0.58	0.63	0.12	0.12
Control Delay		10.4	3.3	7.8	10.1	44.4	32.0	0.7
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		10.4	3.3	7.8	10.1	44.4	32.0	0.7
LOS		B	A	A	B	D	C	A
Approach Delay			3.6		10.1	44.4		
Approach LOS			A		B	D		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 17 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd

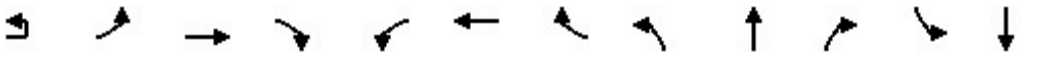




Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	66	1561	25	1980	173	29	40
v/c Ratio	0.32	0.43	0.10	0.58	0.63	0.12	0.12
Control Delay	10.4	3.3	7.8	10.1	44.4	32.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	3.3	7.8	10.1	44.4	32.0	0.7
Queue Length 50th (ft)	5	48	5	213	91	14	0
Queue Length 95th (ft)	m13	92	10	308	35	33	0
Internal Link Dist (ft)		1411		1114	188		
Turn Bay Length (ft)	200		200				
Base Capacity (vph)	211	3607	247	3388	434	368	469
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.43	0.10	0.58	0.40	0.08	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	37	1491	5	15	1847	26	85	1	10	24	0
Future Volume (vph)	10	37	1491	5	15	1847	26	85	1	10	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00		1.00	
Frt		1.00	1.00		1.00	1.00			0.99		1.00	
Flt Protected		0.95	1.00		0.95	1.00			0.96		0.95	
Satd. Flow (prot)		1776	5081		1770	5071			1765		1770	
Flt Permitted		0.08	1.00		0.12	1.00			0.96		0.81	
Satd. Flow (perm)		144	5081		215	5071			1765		1507	
Peak-hour factor, PHF	0.83	0.69	0.96	0.62	0.60	0.95	0.72	0.54	0.25	0.83	0.82	0.25
Adj. Flow (vph)	12	54	1553	8	25	1944	36	157	4	12	29	0
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	3	0	0	0
Lane Group Flow (vph)	0	66	1561	0	25	1978	0	0	170	0	29	0
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	
Protected Phases	1	1	6		5	2			4			
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		61.5	61.5		57.7	57.7			13.9		13.9	
Effective Green, g (s)		61.5	61.5		57.7	57.7			13.9		13.9	
Actuated g/C Ratio		0.68	0.68		0.64	0.64			0.15		0.15	
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0		3.0	
Lane Grp Cap (vph)		214	3472		182	3251			272		232	
v/s Ratio Prot		0.02	c0.31		0.00	c0.39						
v/s Ratio Perm		0.19			0.08				0.10		0.02	
v/c Ratio		0.31	0.45		0.14	0.61			0.62		0.12	
Uniform Delay, d1		13.8	6.5		7.0	9.5			35.6		32.8	
Progression Factor		0.57	0.47		1.00	1.00			1.00		1.00	
Incremental Delay, d2		0.5	0.3		0.3	0.9			4.4		0.2	
Delay (s)		8.4	3.3		7.3	10.4			40.0		33.1	
Level of Service		A	A		A	B			D		C	
Approach Delay (s)			3.5			10.3			40.0			32.6
Approach LOS			A			B			D			C

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



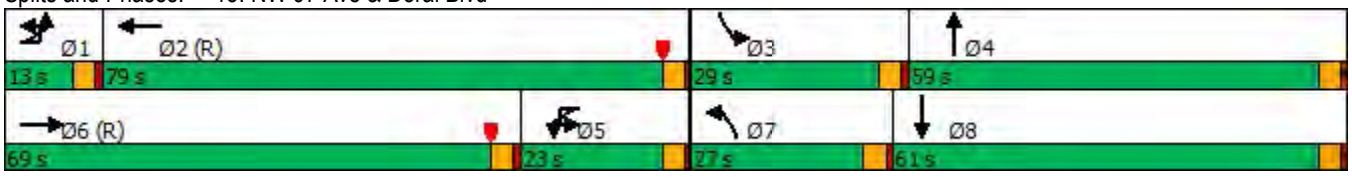
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.70
Adj. Flow (vph)	40
RTOR Reduction (vph)	34
Lane Group Flow (vph)	6
Heavy Vehicles (%)	2%
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	13.9
Effective Green, g (s)	13.9
Actuated g/C Ratio	0.15
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	244
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.03
Uniform Delay, d1	32.3
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	32.3
Level of Service	C
Approach Delay (s)	
Approach LOS	

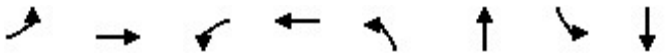
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	114	1076	199	1568	271	635	330	635
Future Volume (vph)	114	1076	199	1568	271	635	330	635
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Minimum Split (s)	8.0	24.6	8.0	24.6	8.0	24.8	8.0	24.8
Total Split (s)	13.0	69.0	23.0	79.0	27.0	59.0	29.0	61.0
Total Split (%)	7.2%	38.3%	12.8%	43.9%	15.0%	32.8%	16.1%	33.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	9.5	67.5	19.0	77.0	20.4	53.5	24.0	57.1
Actuated g/C Ratio	0.05	0.38	0.11	0.43	0.11	0.30	0.13	0.32
v/c Ratio	0.74	0.73	0.68	0.88	0.78	0.93	0.88	0.75
Control Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
LOS	F	D	E	D	F	E	F	E
Approach Delay		55.7		48.3		78.7		71.2
Approach LOS		E		D		E		E

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 12 (7%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 60.9	Intersection LOS: E
Intersection Capacity Utilization 84.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd

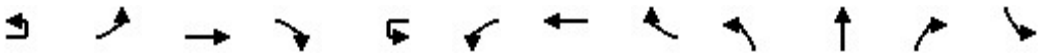




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	134	1368	245	1884	301	955	402	822
v/c Ratio	0.74	0.73	0.68	0.88	0.78	0.93	0.88	0.75
Control Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.4	50.6	78.1	44.4	91.5	74.7	96.8	58.7
Queue Length 50th (ft)	82	512	147	767	180	561	242	444
Queue Length 95th (ft)	#135	571	178	570	235	634	276	535
Internal Link Dist (ft)		546		1411		448		539
Turn Bay Length (ft)	180		150		120		175	
Base Capacity (vph)	180	1874	362	2149	438	1058	476	1116
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.73	0.68	0.88	0.69	0.90	0.84	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	114	1076	186	3	199	1568	186	271	635	212	330
Future Volume (vph)	1	114	1076	186	3	199	1568	186	271	635	212	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Lane Util. Factor		0.97	0.91			0.97	0.91		0.97	0.95		0.97
Frt		1.00	0.97			1.00	0.98		1.00	0.96		1.00
Flt Protected		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (prot)		3435	4954			3435	5005		3433	3410		3433
Flt Permitted		0.95	1.00			0.95	1.00		0.95	1.00		0.95
Satd. Flow (perm)		3435	4954			3435	5005		3433	3410		3433
Peak-hour factor, PHF	0.25	0.88	0.95	0.79	0.38	0.84	0.93	0.94	0.90	0.88	0.91	0.82
Adj. Flow (vph)	4	130	1133	235	8	237	1686	198	301	722	233	402
RTOR Reduction (vph)	0	0	18	0	0	0	8	0	0	18	0	0
Lane Group Flow (vph)	0	134	1351	0	0	245	1876	0	301	937	0	402
Heavy Vehicles (%)	0%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA		Prot
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases												
Actuated Green, G (s)		9.5	67.5			19.0	77.0		20.4	53.5		24.0
Effective Green, g (s)		9.5	67.5			19.0	77.0		20.4	53.5		24.0
Actuated g/C Ratio		0.05	0.38			0.11	0.43		0.11	0.30		0.13
Clearance Time (s)		4.0	4.0			4.0	4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0			3.0	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		181	1857			362	2141		389	1013		457
v/s Ratio Prot		0.04	c0.27			0.07	c0.37		0.09	c0.27		c0.12
v/s Ratio Perm												
v/c Ratio		0.74	0.73			0.68	0.88		0.77	0.93		0.88
Uniform Delay, d1		84.0	48.3			77.5	47.1		77.6	61.3		76.6
Progression Factor		1.00	1.00			0.90	0.84		1.00	1.00		1.00
Incremental Delay, d2		15.0	2.5			4.2	4.6		9.3	13.7		17.3
Delay (s)		99.0	50.9			73.7	44.2		86.8	75.0		93.9
Level of Service		F	D			E	D		F	E		F
Approach Delay (s)			55.2				47.6			77.8		
Approach LOS			E				D			E		

Intersection Summary			
HCM 2000 Control Delay	60.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



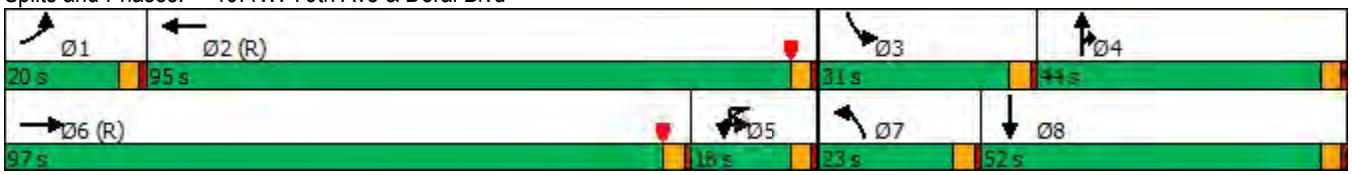
Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	635	126
Future Volume (vph)	635	126
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.95	
Frt	0.97	
Flt Protected	1.00	
Satd. Flow (prot)	3440	
Flt Permitted	1.00	
Satd. Flow (perm)	3440	
Peak-hour factor, PHF	0.95	0.82
Adj. Flow (vph)	668	154
RTOR Reduction (vph)	11	0
Lane Group Flow (vph)	811	0
Heavy Vehicles (%)	2%	2%
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Actuated Green, G (s)	57.1	
Effective Green, g (s)	57.1	
Actuated g/C Ratio	0.32	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	1091	
v/s Ratio Prot	c0.24	
v/s Ratio Perm		
v/c Ratio	0.74	
Uniform Delay, d1	54.9	
Progression Factor	1.00	
Incremental Delay, d2	2.8	
Delay (s)	57.7	
Level of Service	E	
Approach Delay (s)	69.6	
Approach LOS	E	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	124	2556	189	1685	81	188	391	420	334
Future Volume (vph)	124	2556	189	1685	81	188	391	420	334
Turn Type	Prot	NA	Prot	NA	Prot	NA	custom	Prot	NA
Protected Phases	1	6	5	2	7	4	4	3	8
Permitted Phases							5		
Detector Phase	1	6	5	2	7	4	4	3	8
Switch Phase									
Minimum Initial (s)	4.0	5.0	4.0	5.0	4.0	5.0	5.0	4.0	5.0
Minimum Split (s)	8.0	24.4	8.0	24.4	8.0	9.0	9.0	8.0	25.0
Total Split (s)	20.0	97.0	18.0	95.0	23.0	44.0	44.0	31.0	52.0
Total Split (%)	10.5%	51.1%	9.5%	50.0%	12.1%	23.2%	23.2%	16.3%	27.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	16.0	93.0	14.0	91.0	15.8	40.0	54.0	27.0	51.2
Actuated g/C Ratio	0.08	0.49	0.07	0.48	0.08	0.21	0.28	0.14	0.27
v/c Ratio	0.98	0.90	0.99	0.95	0.71	1.01	0.68	0.97	0.58
Control Delay	166.6	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	166.6	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
LOS	F	C	F	E	F	F	D	F	E
Approach Delay		36.0		64.9		86.9			85.3
Approach LOS		D		E		F			F

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 32 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 58.4	Intersection LOS: E
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 19: NW 79th Ave & Doral Blvd





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	144	2786	248	2250	103	364	325	467	541
v/c Ratio	0.98	0.90	0.99	0.95	0.71	1.01	0.68	0.97	0.58
Control Delay	166.6	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	166.6	29.2	138.6	56.8	110.0	119.5	43.1	112.7	61.6
Queue Length 50th (ft)	187	526	162	968	127	~485	217	304	303
Queue Length 95th (ft)	m#324	550	#232	1035	173	#642	281	#424	321
Internal Link Dist (ft)		453		807		442			414
Turn Bay Length (ft)	400		425		220			160	
Base Capacity (vph)	147	3095	251	2363	175	359	477	483	927
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.90	0.99	0.95	0.59	1.01	0.68	0.97	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	124	2556	41	16	189	1685	368	81	188	391	420	334
Future Volume (vph)	124	2556	41	16	189	1685	368	81	188	391	420	334
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86			0.97	0.91		1.00	0.95	0.95	0.97	0.95
Frt	1.00	1.00			1.00	0.97		1.00	0.94	0.85	1.00	0.97
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	6323			3408	4896		1752	1651	1490	3400	3390
Flt Permitted	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	6323			3408	4896		1752	1651	1490	3400	3390
Peak-hour factor, PHF	0.86	0.94	0.61	0.80	0.83	0.92	0.88	0.79	0.84	0.84	0.90	0.79
Adj. Flow (vph)	144	2719	67	20	228	1832	418	103	224	465	467	423
RTOR Reduction (vph)	0	2	0	0	0	19	0	0	12	54	0	13
Lane Group Flow (vph)	144	2784	0	0	248	2231	0	103	352	271	467	528
Heavy Vehicles (%)	3%	3%	3%	0%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA	custom	Prot	NA
Protected Phases	1	6		5	5	2		7	4	4	3	8
Permitted Phases										5		
Actuated Green, G (s)	16.0	93.0			14.0	91.0		15.8	40.0	54.0	27.0	51.2
Effective Green, g (s)	16.0	93.0			14.0	91.0		15.8	40.0	54.0	27.0	51.2
Actuated g/C Ratio	0.08	0.49			0.07	0.48		0.08	0.21	0.28	0.14	0.27
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	147	3094			251	2344		145	347	423	483	913
v/s Ratio Prot	0.08	c0.44			0.07	c0.46		0.06	c0.21	0.13	c0.14	0.16
v/s Ratio Perm										0.05		
v/c Ratio	0.98	0.90			0.99	0.95		0.71	1.01	0.64	0.97	0.58
Uniform Delay, d1	86.8	44.3			87.9	47.4		84.9	75.0	59.5	81.1	60.1
Progression Factor	1.22	0.56			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	65.2	4.5			52.9	10.3		15.1	52.1	3.3	32.2	0.9
Delay (s)	171.2	29.1			140.8	57.7		100.0	127.1	62.8	113.3	60.9
Level of Service	F	C			F	E		F	F	E	F	E
Approach Delay (s)		36.1				65.9			97.2			85.2
Approach LOS		D				E			F			F

Intersection Summary			
HCM 2000 Control Delay	59.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	104
Future Volume (vph)	104
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	118
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

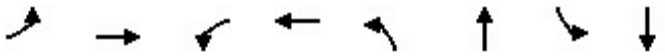
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	56	711	357	1188	155	264	114	225
Future Volume (vph)	56	711	357	1188	155	264	114	225
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Split	NA
Protected Phases	1	6	5	2	4	4	3	3
Permitted Phases	6		2					
Detector Phase	1	6	5	2	4	4	3	3
Switch Phase								
Minimum Initial (s)	2.0	5.0	2.0	5.0	5.0	5.0	2.0	2.0
Minimum Split (s)	8.0	24.0	8.0	24.0	24.0	24.0	8.0	8.0
Total Split (s)	15.0	72.0	51.0	108.0	30.0	30.0	27.0	27.0
Total Split (%)	8.3%	40.0%	28.3%	60.0%	16.7%	16.7%	15.0%	15.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	80.7	73.0	119.4	105.7	23.2	23.2	19.4	19.4
Actuated g/C Ratio	0.45	0.41	0.66	0.59	0.13	0.13	0.11	0.11
v/c Ratio	0.38	0.79	0.89	0.74	0.73	0.89	0.84	0.77
Control Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
LOS	C	D	E	C	F	F	F	F
Approach Delay		50.9		38.1		93.8		96.9
Approach LOS		D		D		F		F

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 55.9	Intersection LOS: E
Intersection Capacity Utilization 80.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street

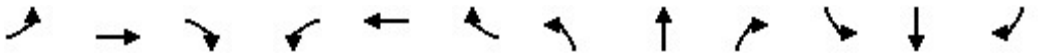




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	1098	415	1486	165	402	158	291
v/c Ratio	0.38	0.79	0.89	0.74	0.73	0.89	0.84	0.77
Control Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	52.5	66.7	30.1	94.5	93.5	111.7	88.8
Queue Length 50th (ft)	27	621	378	671	190	234	185	170
Queue Length 95th (ft)	45	566	484	774	280	#322	213	227
Internal Link Dist (ft)		651		5043		619		564
Turn Bay Length (ft)	100		200		220		200	
Base Capacity (vph)	186	1397	508	2016	233	468	204	408
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.79	0.82	0.74	0.71	0.86	0.77	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	711	133	357	1188	209	155	264	87	114	225	32
Future Volume (vph)	56	711	133	357	1188	209	155	264	87	114	225	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3427		1752	3422		1752	3362		1752	3411	
Flt Permitted	0.13	1.00		0.09	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	243	3427		172	3422		1752	3362		1752	3411	
Peak-hour factor, PHF	0.86	0.76	0.82	0.86	0.95	0.89	0.94	0.90	0.80	0.72	0.94	0.61
Adj. Flow (vph)	65	936	162	415	1251	235	165	293	109	158	239	52
RTOR Reduction (vph)	0	7	0	0	8	0	0	21	0	0	11	0
Lane Group Flow (vph)	65	1091	0	415	1478	0	165	381	0	158	280	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases	6			2								
Actuated Green, G (s)	80.7	73.0		119.4	105.7		23.2	23.2		19.4	19.4	
Effective Green, g (s)	80.7	73.0		119.4	105.7		23.2	23.2		19.4	19.4	
Actuated g/C Ratio	0.45	0.41		0.66	0.59		0.13	0.13		0.11	0.11	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	173	1389		468	2009		225	433		188	367	
v/s Ratio Prot	0.02	0.32		c0.20	0.43		0.09	c0.11		c0.09	0.08	
v/s Ratio Perm	0.15			c0.39								
v/c Ratio	0.38	0.79		0.89	0.74		0.73	0.88		0.84	0.76	
Uniform Delay, d1	29.6	46.7		50.3	27.0		75.4	77.0		78.8	78.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	4.5		18.0	2.4		11.7	18.4		27.2	9.1	
Delay (s)	31.0	51.2		68.3	29.4		87.1	95.4		106.0	87.2	
Level of Service	C	D		E	C		F	F		F	F	
Approach Delay (s)		50.1			37.9			93.0			93.8	
Approach LOS		D			D			F			F	

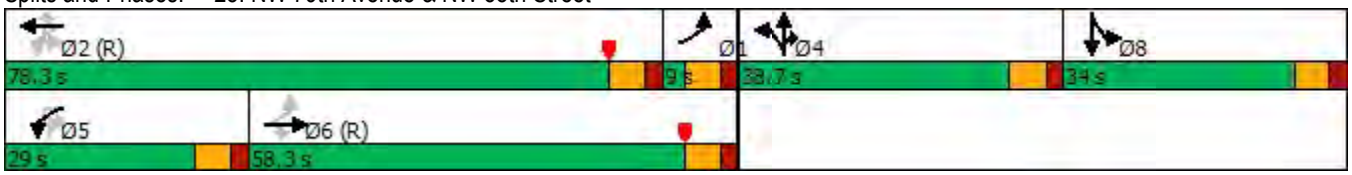
Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Future Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Detector Phase	1	6	6	2 5	5	2	2	4	4	4	8	8
Switch Phase												
Minimum Initial (s)	1.6	16.0	16.0		1.6	16.0	16.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.0	24.4	24.4		8.0	24.4	24.4	13.4	13.4	13.4	13.5	13.5
Total Split (s)	9.0	58.3	58.3		29.0	78.3	78.3	38.7	38.7	38.7	34.0	34.0
Total Split (%)	5.6%	36.4%	36.4%		18.1%	48.9%	48.9%	24.2%	24.2%	24.2%	21.3%	21.3%
Yellow Time (s)	4.4	4.4	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max		None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	51.9	51.9	51.9		77.3	77.3	77.3	32.3	32.3	54.9	27.5	27.5
Actuated g/C Ratio	0.32	0.32	0.32		0.48	0.48	0.48	0.20	0.20	0.34	0.17	0.17
v/c Ratio	0.06	1.04	0.20		1.10	0.62	0.14	0.72	1.08	0.88	1.06	0.98dl
Control Delay	27.1	77.2	2.7		126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	77.2	2.7		126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
LOS	C	E	A		F	C	A	E	F	D	F	F
Approach Delay		70.2				51.4			69.8			103.8
Approach LOS		E				D			E			F

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 143 (89%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 69.9	Intersection LOS: E
Intersection Capacity Utilization 116.9%	ICU Level of Service H
Analysis Period (min) 15	

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 28: NW 79th Avenue & NW 58th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	11	1159	113	320	1036	113	251	507	504	283	509
v/c Ratio	0.06	1.04	0.20	1.10	0.62	0.14	0.72	1.08	0.88	1.06	0.98dl
Control Delay	27.1	77.2	2.7	126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	77.2	2.7	126.3	33.3	4.7	72.8	99.6	38.4	131.6	88.3
Queue Length 50th (ft)	6	~686	16	~317	396	1	248	~427	250	~353	286
Queue Length 95th (ft)	m9	#821	m18	#541	524	26	312	#549	#413	#568	#338
Internal Link Dist (ft)		3764			817			715			357
Turn Bay Length (ft)	220		70	650			200			170	
Base Capacity (vph)	175	1115	573	291	1660	800	347	468	574	268	546
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	1.04	0.20	1.10	0.62	0.14	0.72	1.08	0.88	1.06	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Future Volume (vph)	7	1066	89	4	286	995	89	203	49	856	527	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Lane Util. Factor	1.00	0.95	1.00		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.87	0.85	1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97
Satd. Flow (prot)	1719	3438	1538		1718	3438	1538	1719	1492	1461	1564	3127
Flt Permitted	0.26	1.00	1.00		0.08	1.00	1.00	0.95	1.00	1.00	0.95	0.97
Satd. Flow (perm)	479	3438	1538		142	3438	1538	1719	1492	1461	1564	3127
Peak-hour factor, PHF	0.62	0.92	0.79	0.44	0.92	0.96	0.79	0.81	0.82	0.90	0.93	0.82
Adj. Flow (vph)	11	1159	113	9	311	1036	113	251	60	951	567	143
RTOR Reduction (vph)	0	0	75	0	0	0	60	0	168	73	0	9
Lane Group Flow (vph)	11	1159	38	0	320	1036	53	251	339	431	283	500
Heavy Vehicles (%)	5%	5%	5%	8%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Split	NA	custom	Split	NA
Protected Phases	1	6			5	2		4	4	4	8	8
Permitted Phases	6		6	2 5	2		2			5		
Actuated Green, G (s)	51.9	51.9	51.9		73.5	73.5	73.5	32.3	32.3	54.9	27.5	27.5
Effective Green, g (s)	51.9	51.9	51.9		73.5	73.5	73.5	32.3	32.3	54.9	27.5	27.5
Actuated g/C Ratio	0.32	0.32	0.32		0.46	0.46	0.46	0.20	0.20	0.34	0.17	0.17
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	163	1115	498		287	1579	706	347	301	501	268	537
v/s Ratio Prot	0.00	c0.34			c0.16	0.30		0.15	c0.23	0.17	c0.18	0.16
v/s Ratio Perm	0.02		0.02		c0.35		0.03			0.12		
v/c Ratio	0.07	1.04	0.08		1.11	0.66	0.08	0.72	1.13	0.86	1.06	0.98dl
Uniform Delay, d1	38.9	54.0	37.4		52.9	33.5	24.2	59.7	63.9	49.0	66.2	65.3
Progression Factor	0.69	0.78	0.31		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	35.9	0.3		87.6	2.1	0.2	7.3	90.8	14.0	70.5	23.0
Delay (s)	27.0	78.1	12.0		140.6	35.6	24.4	67.0	154.7	63.0	136.7	88.3
Level of Service	C	E	B		F	D	C	E	F	E	F	F
Approach Delay (s)		71.8				57.6			100.6			105.6
Approach LOS		E				E			F			F

Intersection Summary			
HCM 2000 Control Delay	80.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	116.9%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



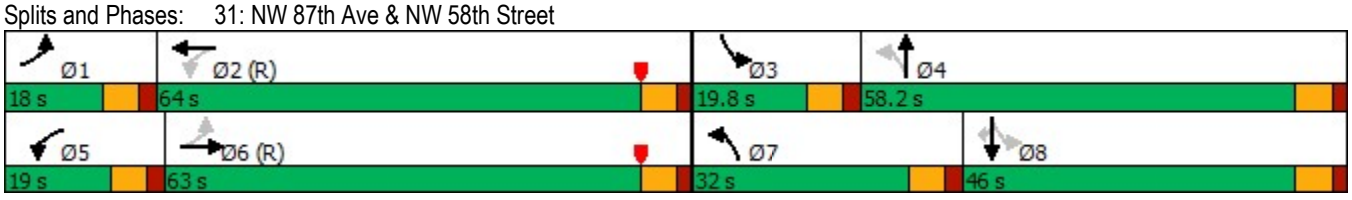
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	59
Future Volume (vph)	59
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.72
Adj. Flow (vph)	82
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	121	596	142	1046	276	810	107	609	379
Future Volume (vph)	121	596	142	1046	276	810	107	609	379
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4	3	8	
Permitted Phases	6		2		4		8		8
Detector Phase	1	6	5	2	7	4	3	8	8
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.4	24.4	11.4	24.4	11.4	24.4	11.4	24.4	24.4
Total Split (s)	18.0	63.0	19.0	64.0	32.0	58.2	19.8	46.0	46.0
Total Split (%)	11.3%	39.4%	11.9%	40.0%	20.0%	36.4%	12.4%	28.8%	28.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	69.7	58.2	71.4	59.0	70.3	51.3	51.2	38.6	38.6
Actuated g/C Ratio	0.44	0.36	0.45	0.37	0.44	0.32	0.32	0.24	0.24
v/c Ratio	0.89	0.70	0.77	0.95	0.96	0.87	0.77	0.87	0.93
Control Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
LOS	F	D	D	D	F	E	E	E	E
Approach Delay		51.0		44.4		66.4		66.3	
Approach LOS		D		D		E		E	

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 48 (30%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 57.2	Intersection LOS: E
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street

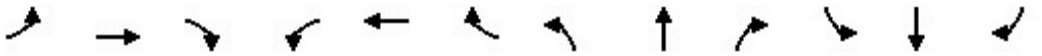




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	151	867	189	1199	314	952	147	725	480
v/c Ratio	0.89	0.70	0.77	0.95	0.96	0.87	0.77	0.87	0.93
Control Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.3	45.4	51.9	43.3	86.1	59.9	61.1	69.8	62.5
Queue Length 50th (ft)	109	396	98	664	268	487	92	383	330
Queue Length 95th (ft)	#196	477	m133	m#781	#445	580	123	424	382
Internal Link Dist (ft)		5043		3764		2105		917	
Turn Bay Length (ft)	200		210		260		215		600
Base Capacity (vph)	171	1234	249	1268	329	1115	200	859	522
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.70	0.76	0.95	0.95	0.85	0.73	0.84	0.92

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



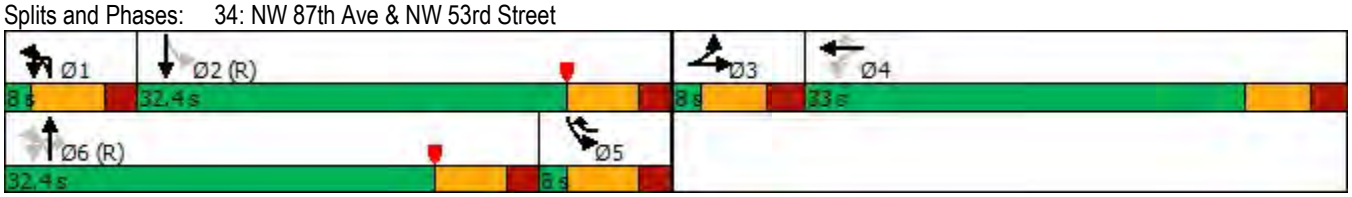
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	596	221	142	1046	79	276	810	95	107	609	379
Future Volume (vph)	121	596	221	142	1046	79	276	810	95	107	609	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3323		1736	3429		1736	3407		1736	3471	1553
Flt Permitted	0.07	1.00		0.17	1.00		0.10	1.00		0.12	1.00	1.00
Satd. Flow (perm)	125	3323		305	3429		188	3407		224	3471	1553
Peak-hour factor, PHF	0.80	0.96	0.90	0.75	0.95	0.81	0.88	0.97	0.81	0.73	0.84	0.79
Adj. Flow (vph)	151	621	246	189	1101	98	314	835	117	147	725	480
RTOR Reduction (vph)	0	26	0	0	4	0	0	7	0	0	0	139
Lane Group Flow (vph)	151	841	0	189	1195	0	314	945	0	147	725	341
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	69.8	58.3		71.4	59.1		70.2	51.3		51.1	38.6	38.6
Effective Green, g (s)	69.8	58.3		71.4	59.1		70.2	51.3		51.1	38.6	38.6
Actuated g/C Ratio	0.44	0.36		0.45	0.37		0.44	0.32		0.32	0.24	0.24
Clearance Time (s)	6.4	6.4		6.4	6.4		6.4	6.4		6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	170	1210		246	1266		326	1092		189	837	374
v/s Ratio Prot	c0.06	0.25		0.06	c0.35		c0.15	0.28		0.06	0.21	
v/s Ratio Perm	0.32			0.28			c0.27			0.19		0.22
v/c Ratio	0.89	0.69		0.77	0.94		0.96	0.87		0.78	0.87	0.91
Uniform Delay, d1	42.9	43.3		31.4	48.9		48.6	51.1		42.7	58.2	59.1
Progression Factor	1.00	1.00		1.38	0.62		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	38.5	3.3		10.4	12.2		39.8	7.3		18.0	9.4	25.9
Delay (s)	81.5	46.6		53.6	42.4		88.4	58.5		60.7	67.6	84.9
Level of Service	F	D		D	D		F	E		E	E	F
Approach Delay (s)		51.8			43.9			65.9			73.0	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	58.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	15	1	203	4	84	9	14	1115	131	91	904
Future Volume (vph)	15	1	203	4	84	9	14	1115	131	91	904
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3		4	5	1	1	6		5	2
Permitted Phases			4		4	6	6		6	2	
Detector Phase	3	3	4	4	5	1	1	6	6	5	2
Switch Phase											
Minimum Initial (s)	1.7	1.7	7.0	7.0	1.6	1.6	1.6	5.0	5.0	1.6	5.0
Minimum Split (s)	8.0	8.0	13.3	13.3	8.0	8.0	8.0	24.4	24.4	8.0	24.4
Total Split (s)	8.0	8.0	33.0	33.0	8.0	8.0	8.0	32.4	32.4	8.0	32.4
Total Split (%)	9.8%	9.8%	40.5%	40.5%	9.8%	9.8%	9.8%	39.8%	39.8%	9.8%	39.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	1.7	1.7	14.1	14.1	16.9		40.2	40.2	40.2	42.8	42.8
Actuated g/C Ratio	0.02	0.02	0.17	0.17	0.21		0.49	0.49	0.49	0.53	0.53
v/c Ratio	0.67	0.61	0.59	0.62	0.23		0.12	0.66	0.20	0.54	0.59
Control Delay	113.5	51.2	41.0	43.0	1.1		15.3	19.9	2.1	34.4	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	51.2	41.0	43.0	1.1		15.3	19.9	2.1	34.4	19.4
LOS	F	D	D	D	A		B	B	A	C	B
Approach Delay		73.2		29.7				17.5			20.8
Approach LOS		E		C				B			C

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 21.6	Intersection LOS: C
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: NW 87th Ave & NW 53rd Street





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	44	131	134	114	28	1149	172	112	1092
v/c Ratio	0.67	0.61	0.59	0.62	0.23	0.12	0.66	0.20	0.54	0.59
Control Delay	113.5	51.2	41.0	43.0	1.1	15.3	19.9	2.1	34.4	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	51.2	41.0	43.0	1.1	15.3	19.9	2.1	34.4	19.4
Queue Length 50th (ft)	12	2	65	67	0	7	224	0	24	166
Queue Length 95th (ft)	#32	0	95	58	0	m24	355	9	#97	#374
Internal Link Dist (ft)		93		992			2038			2105
Turn Bay Length (ft)			175		175	150		245	120	
Base Capacity (vph)	36	72	418	406	496	234	1730	882	209	1838
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.61	0.31	0.33	0.23	0.12	0.66	0.20	0.54	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	1	19	203	4	84	9	14	1115	131	91	904
Future Volume (vph)	15	1	19	203	4	84	9	14	1115	131	91	904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.86		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1593		1665	1674	1568		1775	3505	1568	1752	3497
Flt Permitted	0.95	1.00		0.73	0.71	1.00		0.12	1.00	1.00	0.19	1.00
Satd. Flow (perm)	1752	1593		1276	1238	1568		233	3505	1568	345	3497
Peak-hour factor, PHF	0.62	0.25	0.48	0.79	0.50	0.74	0.75	0.88	0.97	0.76	0.81	0.84
Adj. Flow (vph)	24	4	40	257	8	114	12	16	1149	172	112	1076
RTOR Reduction (vph)	0	39	0	0	0	87	0	0	0	98	0	1
Lane Group Flow (vph)	24	5	0	131	134	27	0	28	1149	74	112	1091
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	0%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	3			4	5	1	1	6		5	2
Permitted Phases				4		4	6	6		6	2	
Actuated Green, G (s)	1.4	1.4		14.1	14.1	19.6		35.0	35.0	35.0	37.6	37.6
Effective Green, g (s)	1.4	1.4		14.1	14.1	19.6		35.0	35.0	35.0	37.6	37.6
Actuated g/C Ratio	0.02	0.02		0.17	0.17	0.24		0.43	0.43	0.43	0.46	0.46
Clearance Time (s)	6.3	6.3		6.3	6.3	6.4		6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	30	27		221	214	377		155	1507	674	254	1615
v/s Ratio Prot	c0.01	0.00				0.00		0.01	c0.33		0.03	c0.31
v/s Ratio Perm				0.10	c0.11	0.01		0.07		0.05	0.17	
v/c Ratio	0.80	0.17		0.59	0.63	0.07		0.18	0.76	0.11	0.44	0.68
Uniform Delay, d1	39.9	39.4		31.0	31.2	23.9		16.1	19.7	13.9	21.7	17.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.04	1.01	1.21	1.00	1.00
Incremental Delay, d2	84.3	3.1		4.2	5.6	0.1		0.6	3.7	0.3	1.2	2.3
Delay (s)	124.1	42.5		35.2	36.8	24.0		17.3	23.5	17.1	22.9	19.4
Level of Service	F	D		D	D	C		B	C	B	C	B
Approach Delay (s)		71.3			32.4				22.6			19.7
Approach LOS		E			C				C			B

Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	25.4
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.62
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	3%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	4	1669	23	3	9	1925	45	0	0	57	0	0	33
Future Vol, veh/h	4	1669	23	3	9	1925	45	0	0	57	0	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	80	-	80	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	91	69	34	75	96	71	25	25	88	25	25	73
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	1834	33	9	12	2005	63	0	0	65	0	0	45

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	2068	0	0	1363	1867	0	0	-	-	934	-	-	1003
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	5.66	5.36	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	2.33	3.13	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	114	-	-	273	144	-	-	0	0	228	0	0	205
Stage 1	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	114	-	-	165	165	-	-	-	-	228	-	-	205
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	26.9	27.5
HCM LOS			D	D

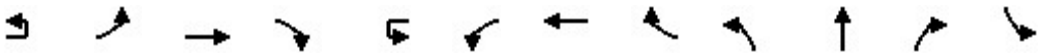
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	228	114	-	-	165	-	-	205
HCM Lane V/C Ratio	0.284	0.07	-	-	0.126	-	-	0.221
HCM Control Delay (s)	26.9	38.9	-	-	30	-	-	27.5
HCM Lane LOS	D	E	-	-	D	-	-	D
HCM 95th %tile Q(veh)	1.1	0.2	-	-	0.4	-	-	0.8



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	25	1368	24	4	1160
Future Volume (Veh/h)	0	25	1368	24	4	1160
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.86	0.96	0.82	1.00	0.94
Hourly flow rate (vph)	0	29	1425	29	4	1234
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			390			268
pX, platoon unblocked	0.73	0.73			0.73	
vC, conflicting volume	1859	727			1454	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1432	0			876	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	100	96			99	
cM capacity (veh/h)	87	780			540	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	SB 4
Volume Total	29	950	504	4	411	411	411
Volume Left	0	0	0	4	0	0	0
Volume Right	29	0	29	0	0	0	0
cSH	780	1700	1700	540	1700	1700	1700
Volume to Capacity	0.04	0.56	0.30	0.01	0.24	0.24	0.24
Queue Length 95th (ft)	3	0	0	1	0	0	0
Control Delay (s)	9.8	0.0	0.0	11.7	0.0	0.0	0.0
Lane LOS	A			B			
Approach Delay (s)	9.8	0.0		0.0			
Approach LOS	A						

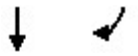
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	1617	0	6	5	1903	7	0	0	1	0
Future Volume (Veh/h)	1	0	1617	0	6	5	1903	7	0	0	1	0
Sign Control			Free				Free			Stop		
Grade			0%				0%			0%		
Peak Hour Factor	0.25	0.92	0.97	0.25	0.50	0.42	0.94	0.92	0.25	0.92	0.25	0.92
Hourly flow rate (vph)	0	0	1667	0	0	12	2024	8	0	0	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type			None				None					
Median storage veh)												
Upstream signal (ft)							1196					
pX, platoon unblocked	0.00	0.79			0.00				0.79	0.79		0.79
vC, conflicting volume	0	2032			0	1667			2370	3723	556	2612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1365			0	1667			1794	3513	556	2102
tC, single (s)	0.0	4.1			0.0	4.1			7.5	6.5	6.9	7.5
tC, 2 stage (s)												
tF (s)	0.0	2.2			0.0	2.2			3.5	4.0	3.3	3.5
p0 queue free %	0	100			0	97			100	100	99	100
cM capacity (veh/h)	0	393			0	391			40	5	475	23

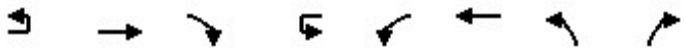
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1
Volume Total	417	834	417	12	810	810	413	4	4
Volume Left	0	0	0	12	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	4	4
cSH	393	1700	1700	391	1700	1700	1700	475	854
Volume to Capacity	0.00	0.49	0.25	0.03	0.48	0.48	0.24	0.01	0.00
Queue Length 95th (ft)	0	0	0	2	0	0	0	1	0
Control Delay (s)	0.0	0.0	0.0	14.5	0.0	0.0	0.0	12.6	9.2
Lane LOS				B				B	A
Approach Delay (s)	0.0			0.1				12.6	9.2
Approach LOS								B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	46.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	4
Future Volume (Veh/h)	0	4
Sign Control	Stop	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	0	4
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type		
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked	0.79	0.79
vC, conflicting volume	3719	679
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol	3508	0
tC, single (s)	6.5	6.9
tC, 2 stage (s)		
tF (s)	4.0	3.3
p0 queue free %	100	100
cM capacity (veh/h)	5	854

Direction, Lane #



Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (veh/h)	1	1600	0	26	1	1886	3	1
Future Volume (Veh/h)	1	1600	0	26	1	1886	3	1
Sign Control		Free				Free	Stop	
Grade		0%				0%	0%	
Peak Hour Factor	0.25	0.95	0.25	0.25	0.25	0.97	0.75	0.25
Hourly flow rate (vph)	0	1684	0	0	4	1944	4	4
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None				None		
Median storage veh)								
Upstream signal (ft)		1194						
pX, platoon unblocked	0.00			0.00	0.89		0.89	0.89
vC, conflicting volume	0			0	1684		2340	561
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	0			0	1325		2065	60
tC, single (s)	0.0			0.0	4.1		6.8	6.9
tC, 2 stage (s)								
tF (s)	0.0			0.0	2.2		3.5	3.3
p0 queue free %	0			0	99		91	100
cM capacity (veh/h)	0			0	468		42	887

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	674	674	337	4	648	648	648	8
Volume Left	0	0	0	4	0	0	0	4
Volume Right	0	0	0	0	0	0	0	4
cSH	1700	1700	1700	468	1700	1700	1700	81
Volume to Capacity	0.40	0.40	0.20	0.01	0.38	0.38	0.38	0.10
Queue Length 95th (ft)	0	0	0	1	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	12.8	0.0	0.0	0.0	54.2
Lane LOS				B				F
Approach Delay (s)	0.0			0.0				54.2
Approach LOS								F

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	46.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	26	16	34	1172	12	37	22	1209
Future Volume (Veh/h)	26	16	34	1172	12	37	22	1209
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.69	0.67	0.34	0.95	0.75	0.75	0.66	0.96
Hourly flow rate (vph)	38	24	0	1234	16	0	33	1259
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage veh)								
Upstream signal (ft)				782				
pX, platoon unblocked	0.80	0.80	0.00			0.00	0.80	
vC, conflicting volume	1938	625	0			0	1250	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1672	32	0			0	813	
tC, single (s)	6.9	7.0	0.0			0.0	4.2	
tC, 2 stage (s)								
tF (s)	3.6	3.4	0.0			0.0	2.3	
p0 queue free %	40	97	0			0	95	
cM capacity (veh/h)	63	818	0			0	628	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	38	24	823	427	0	33	630	630
Volume Left	38	0	0	0	0	33	0	0
Volume Right	0	24	0	16	0	0	0	0
cSH	63	818	1700	1700	1700	628	1700	1700
Volume to Capacity	0.60	0.03	0.48	0.25	0.00	0.05	0.37	0.37
Queue Length 95th (ft)	63	2	0	0	0	4	0	0
Control Delay (s)	126.1	9.5	0.0	0.0	0.0	11.1	0.0	0.0
Lane LOS	F	A				B		
Approach Delay (s)	81.0		0.0			0.3		
Approach LOS	F							

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	50.1%	ICU Level of Service		A
Analysis Period (min)	15			

AM Signal timing
comparison for the proposed
and existing scenarios

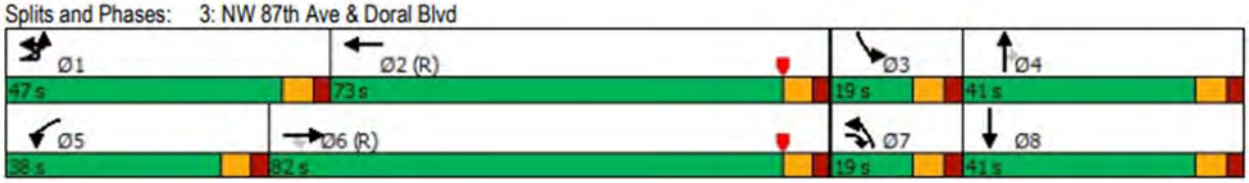
AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 87th Ave & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 65 (36%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 82.1	Intersection LOS: F
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 118 (66%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 51.9	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd



AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 87th Ave & 41st Street

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 107 (59%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 41.4	Intersection LOS: D
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

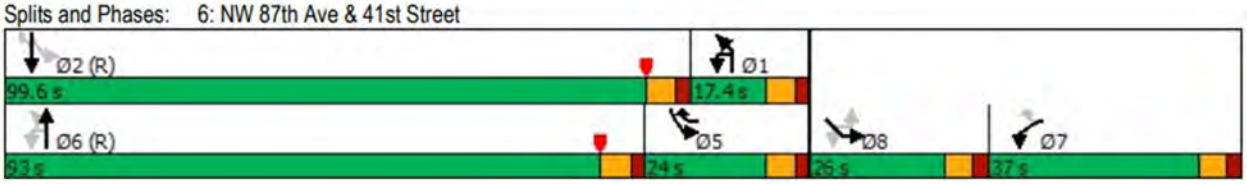
Splits and Phases: 6: NW 87th Ave & 41st Street



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 64 (36%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 14.4	Intersection LOS: B
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street



AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 8800 Block & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 163 (91%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 60.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 151 (84%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 64.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd



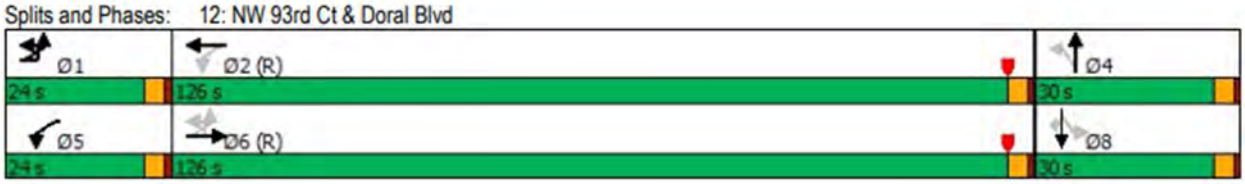
AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 93rd Ct & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 105 (58%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 18.8	Intersection LOS: B
Intersection Capacity Utilization 59.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 50 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 3.1	Intersection LOS: A
Intersection Capacity Utilization 61.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd



AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 97 Ave & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 61.2	Intersection LOS: E
Intersection Capacity Utilization 87.3%	ICU Level of Service E
Analysis Period (min) 15	

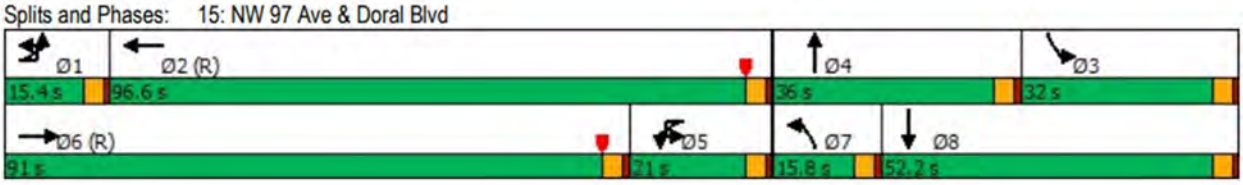
Splits and Phases: 15: NW 97 Ave & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 32 (18%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 54.6	Intersection LOS: D
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd



AM Synchro Summary [Existing vs Future Improvements with Median Closures]

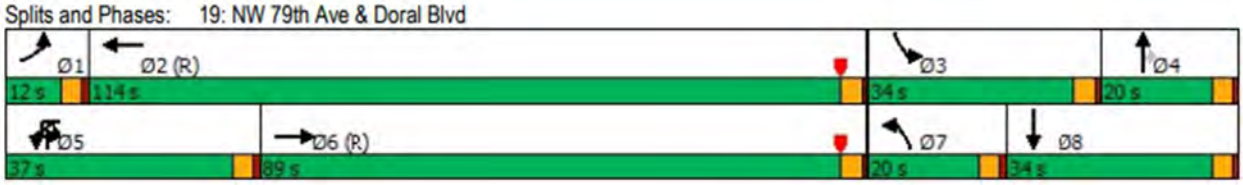
NW 79th Ave & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 38 (21%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 49.0	Intersection LOS: D
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

! Phase conflict between lane groups.

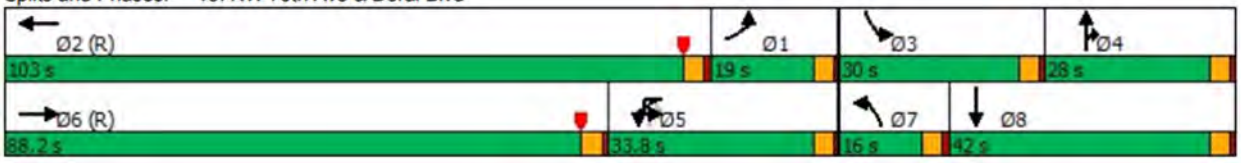
Splits and Phases: 19: NW 79th Ave & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 28 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 40.2	Intersection LOS: D
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 19: NW 79th Ave & Doral Blvd



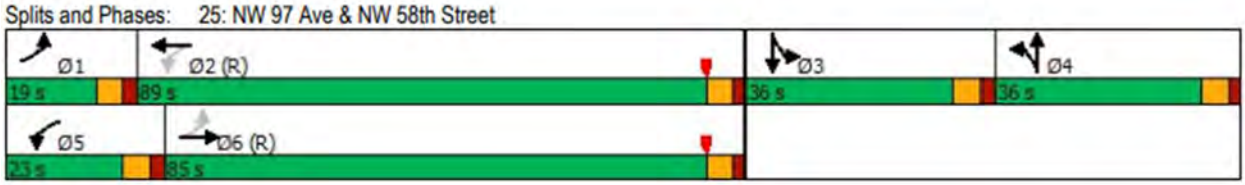
AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 97 Ave & NW 58th Street

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 63 (35%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 75.2	Intersection LOS: E
Intersection Capacity Utilization 93.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 55.5	Intersection LOS: E
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street



AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 79th Avenue & NW 58th Street

Existing:

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 74 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.49	
Intersection Signal Delay: 64.8	Intersection LOS: E
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street



Proposed:

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 102 (64%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 57.2	Intersection LOS: E
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street



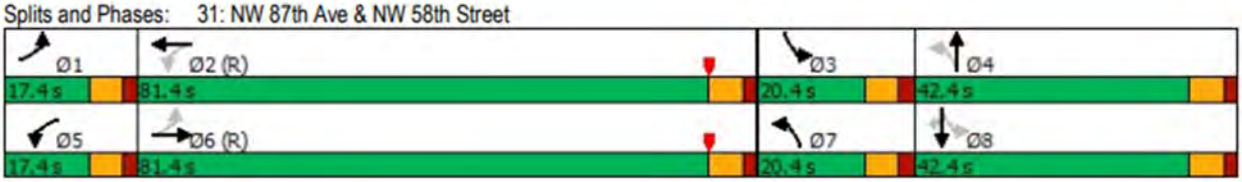
AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 87th Ave & NW 58th Street

Existing:

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 25 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 56.6	Intersection LOS: E
Intersection Capacity Utilization 88.7%	ICU Level of Service E
Analysis Period (min) 15	

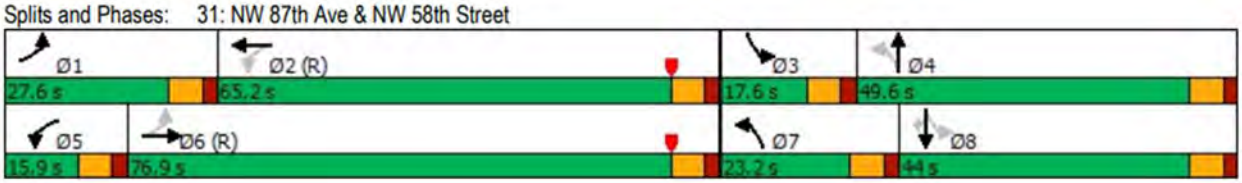
Splits and Phases: 31: NW 87th Ave & NW 58th Street



Proposed:

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 28 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 62.4	Intersection LOS: E
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street



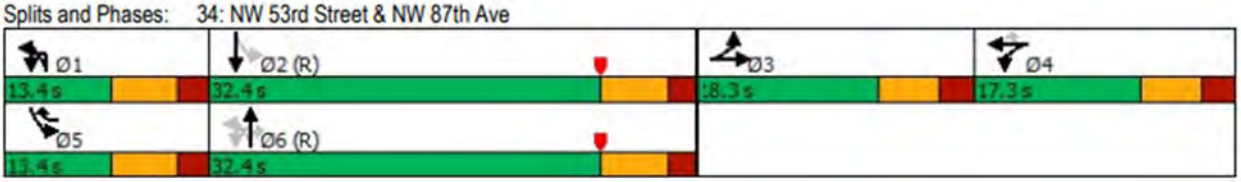
AM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 53rd Street & NW 87th Ave

Existing:

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 38 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

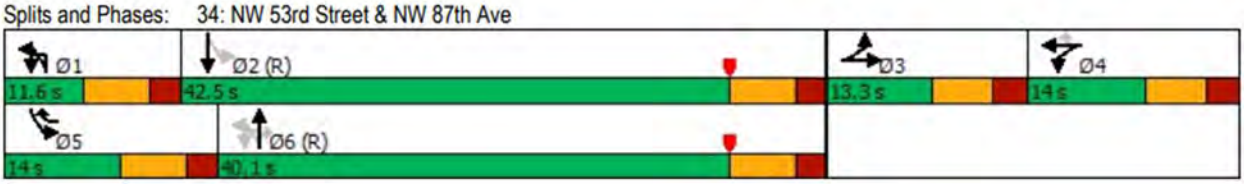
Splits and Phases: 34: NW 53rd Street & NW 87th Ave



Proposed:

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: NW 53rd Street & NW 87th Ave



PM Signal timing
comparison for the proposed
and existing scenarios

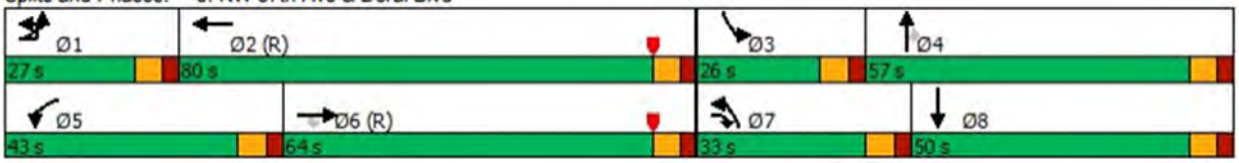
PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 87th Ave & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 171 (90%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 72.9	Intersection LOS: E
Intersection Capacity Utilization 91.9%	ICU Level of Service F
Analysis Period (min) 15	

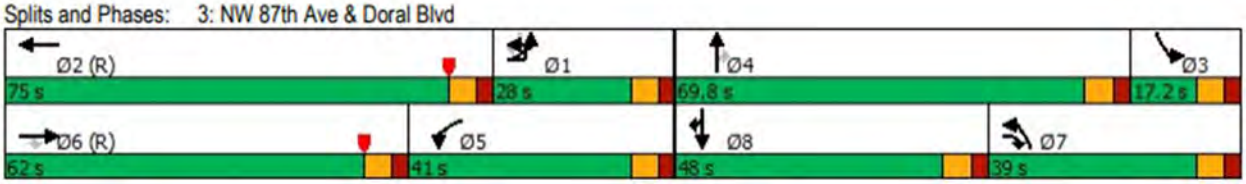
Splits and Phases: 3: NW 87th Ave & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 134 (71%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 57.2	Intersection LOS: E
Intersection Capacity Utilization 93.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: NW 87th Ave & Doral Blvd



PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 87th Ave & 41st Street

Existing:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 168 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street



Proposed:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 46 (24%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: NW 87th Ave & 41st Street



PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 8800 Block & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 158 (83%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 167 (88%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 11.3	Intersection LOS: B
Intersection Capacity Utilization 66.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: NW 8800 Block & Doral Blvd



PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 93rd Ct & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 6 (7%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 57.7%	ICU Level of Service B
Analysis Period (min) 15	

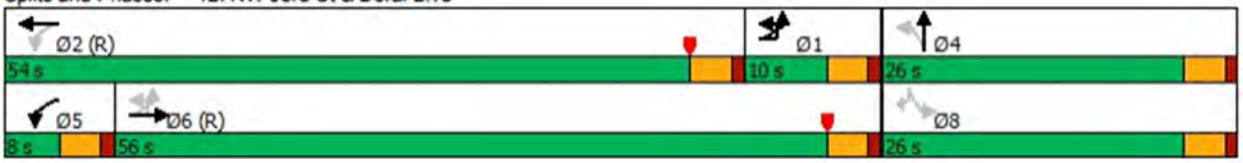
Splits and Phases: 12: NW 93rd Ct & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 17 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: NW 93rd Ct & Doral Blvd



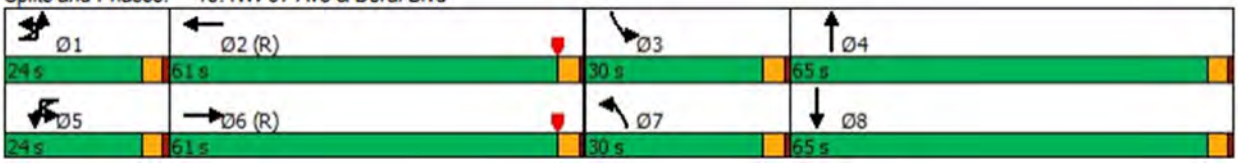
PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 97 Ave & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 150 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 63.6	Intersection LOS: E
Intersection Capacity Utilization 82.1%	ICU Level of Service E
Analysis Period (min) 15	

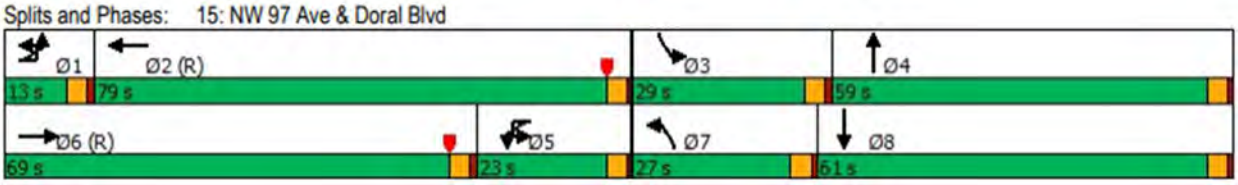
Splits and Phases: 15: NW 97 Ave & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 12 (7%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 61.1	Intersection LOS: E
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: NW 97 Ave & Doral Blvd



8/30/2023

PM Synchro Summary [Existing vs Future Improvements with Median Closures]

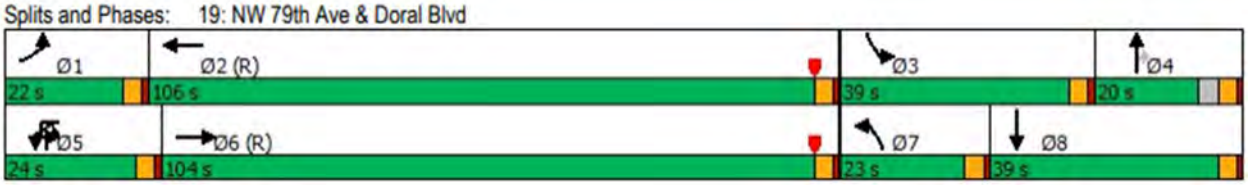
NW 79th Ave & Doral Blvd

Existing:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 49 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.63	
Intersection Signal Delay: 62.6	Intersection LOS: E
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

! Phase conflict between lane groups.

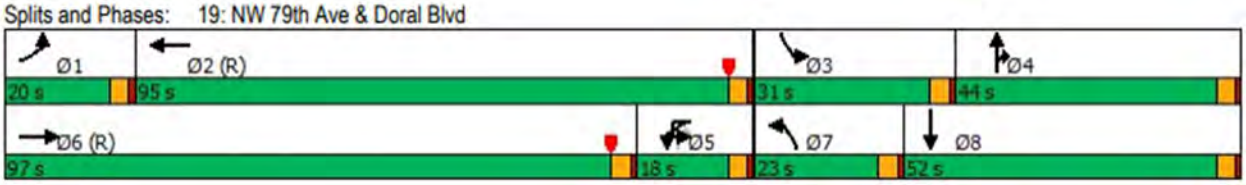
Splits and Phases: 19: NW 79th Ave & Doral Blvd



Proposed:

Intersection Summary	
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 32 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 58.5	Intersection LOS: E
Intersection Capacity Utilization 90.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 19: NW 79th Ave & Doral Blvd



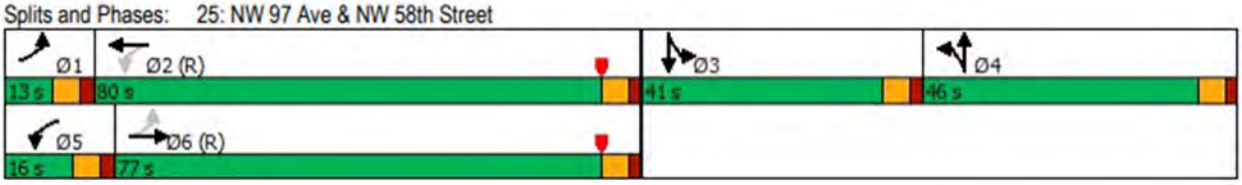
PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 97 Ave & NW 58th Street

Existing:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 9 (5%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.86	
Intersection Signal Delay: 105.1	Intersection LOS: F
Intersection Capacity Utilization 91.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street



Proposed:

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 56.1	Intersection LOS: E
Intersection Capacity Utilization 80.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: NW 97 Ave & NW 58th Street



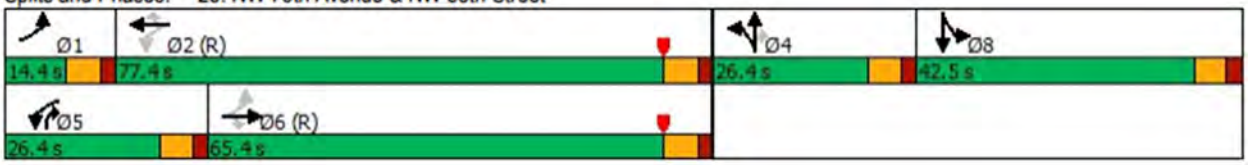
PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 79th Avenue & NW 58th Street

Existing:

Intersection Summary	
Cycle Length: 160.7	
Actuated Cycle Length: 160.7	
Offset: 107 (67%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.50	
Intersection Signal Delay: 86.7	Intersection LOS: F
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: NW 79th Avenue & NW 58th Street

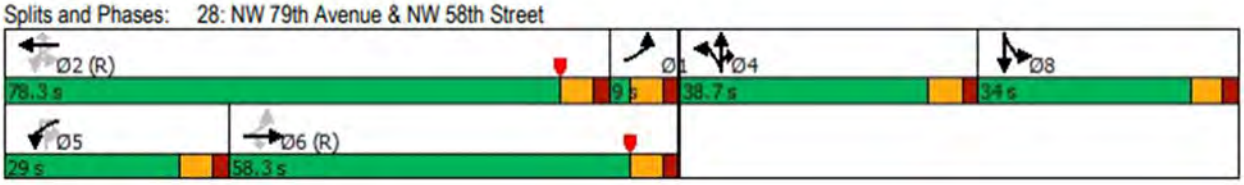


Proposed:

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 143 (89%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 70.0	Intersection LOS: E
Intersection Capacity Utilization 116.9%	ICU Level of Service H
Analysis Period (min) 15	

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 28: NW 79th Avenue & NW 58th Street



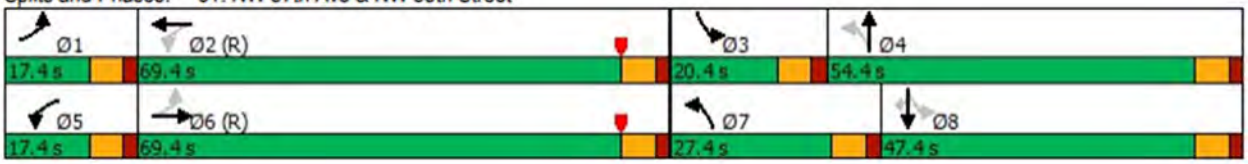
PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 87th Ave & NW 58th Street

Existing:

Intersection Summary	
Cycle Length: 161.6	
Actuated Cycle Length: 161.6	
Offset: 46 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 54.5	Intersection LOS: D
Intersection Capacity Utilization 86.9%	ICU Level of Service E
Analysis Period (min) 15	

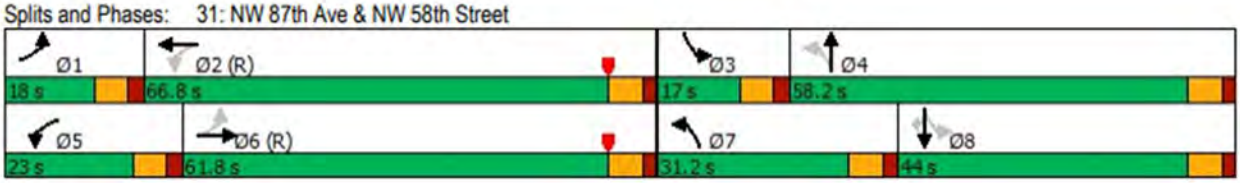
Splits and Phases: 31: NW 87th Ave & NW 58th Street



Proposed:

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 48 (30%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 58.5	Intersection LOS: E
Intersection Capacity Utilization 91.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 31: NW 87th Ave & NW 58th Street



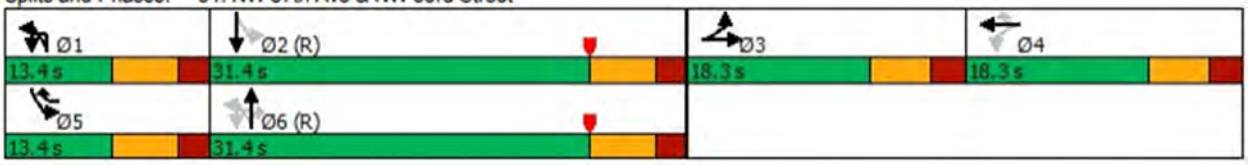
PM Synchro Summary [Existing vs Future Improvements with Median Closures]

NW 53rd Street & NW 87th Ave

Existing:

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 46 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 22.5	Intersection LOS: C
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

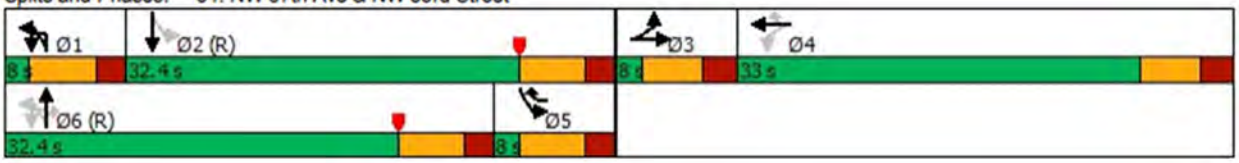
Splits and Phases: 34: NW 87th Ave & NW 53rd Street



Proposed:

Intersection Summary	
Cycle Length: 81.4	
Actuated Cycle Length: 81.4	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 21.7	Intersection LOS: C
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: NW 87th Ave & NW 53rd Street



APPENDIX H: Driveway Analysis Ordinance and Queueing Analysis for Driveway#3 and Rideshare

CHAPTER IX. ROADS AND VEHICULAR USE AREAS

Section 1. Purpose and intent.

To ensure effective, efficient and safe design of vehicular use facilities, the following chapter specifies criteria for all development as stated herein. This chapter is intended to serve the following purposes:

(a) Maintain functional roadway capacity and travel speeds by requiring traffic analyses for new development to determine the need for transportation improvements.

(b) Promote safe and well-designed traffic patterns and enhance functional roadway capacity by maintaining standards for access control.

(c) Provide adequate parking and loading spaces for specific uses within the city.

(d) Establish standards for bicycle parking for specific uses within the city.

(e) Establish positive design standards for the layout and construction of vehicular use areas which promote safe and logical traffic patterns.

(f) Provide required stacking area for drive-through facilities.

(g) Provide for construction of sidewalks and bikeways to maintain safe bicycle and pedestrian movements, and to encourage use of alternative transportation.

(h) Establish ultimate right-of-way widths for roadways within the city network.

Section 2. General provisions.

(a) *Traffic analysis required.* New development proposed within the city shall be required to provide a traffic analysis in accordance with the requirements established for concurrency review of this code.

(b) *Transportation improvements required.*

(1) *Turning lanes.*

a. Left turn lanes. A left turn lane with a minimum of 150 feet of storage and 100 feet of transition shall be provided at each access point with an average daily trip end [volume] of 1,000 vehicles or more, and/or an average peak hour inbound left turn volume of 25 vehicles or more. Increased storage and transition lengths may be required by the city to provide for all deceleration outside the through lane.

b. Right turn deceleration lanes. A right turn deceleration lane with a minimum of 150 feet of storage and 100 feet of transition shall be

required at each access point when the speed limit equals or exceeds 35 miles per hour or if the development will generate 100 or more right turn movements during the peak hour. Increased storage and transition lengths may be required by the city to provide for all deceleration outside the through lane.

(2) *Intersection improvements.* At any intersection which abuts the development, the following improvements shall be provided:

a. A right turn lane shall be provided if the speed limit of the street equals or exceeds 35 miles per hour and if the development will generate 100 or more right turns during the peak hour.

b. A left turn lane shall be provided if the speed limit of the street equals or exceeds 35 miles per hour and if the development will generate 25 or more left turns during the peak hour, provided sufficient right of way is available or can be acquired without significantly altering the alignment of the roadway.

(3) *Access drive.* The design of access drives shall be in accordance with the following provisions:

a. Minor driveway entrance. This driveway type shall be provided for a maximum daily trip end volume of 500 vehicles and/or a maximum average peak hour volume of 50 vehicles. The minimum distance from the street right-of-way line at any ingress or egress minor driveway to the outer edge of any interior service drive or parking space with direct access to such driveway shall be 35 feet, measured perpendicular from the street. The city may require a turn lane of twelve 12 feet in width, with minimum 150 feet of storage and 100 feet of transition, unless a traffic engineering study acceptable to the city demonstrates that the absence of such a lane will not adversely impact traffic conditions.

b. Intermediate driveway entrance. This driveway type shall be provided for a maximum average daily trip end volume of 1,500 vehicles and/or a maximum average peak hour volume of 150 vehicles. The minimum distance from the street right-of-way line at any ingress or egress intermediate driveway to the outer edge of any interior service drive or parking space with direct access to such driveway shall be 60 feet, measured perpendicular from the street. A minimum turn lane 12 feet wide, with minimum 150 feet of storage and 100 feet of transition shall be provided, unless a traffic engineering study acceptable to the city demonstrates that the absence of such a lane will not adversely impact traffic conditions.

c. Major driveway entrance. This driveway type shall be provided for a maximum average daily trip end volume of 5,000 vehicles and/or maximum average peak hour volume of 500 vehicles. The minimum distance from the street right-of-way line at any ingress or egress major driveway to the outer edge of any interior service drive or parking space with direct access to such driveway shall be 100 feet, measured perpendicular from the street. A minimum turn lane 12 feet wide, with minimum 200 feet of storage and 100 feet of transition

shall be provided, unless a traffic engineering study acceptable to the city demonstrates that the absence of such a lane will not adversely impact traffic conditions.

d. Major driveway signalized. Any major drive requiring a traffic signal shall conform to those warrants specified in the Manual of Uniform Traffic Control Devices (MUTCD) in addition to the following minimum requirements:

1. The installation of any traffic signal shall be subject to the approval of the appropriate jurisdiction responsible for the roadway upon which the signal is to be installed.

2. A continuous right turn lane shall be provided at all driveway locations where posted speeds are 35 miles per hour or greater and the total driveway volume of the development meets or exceeds 20 percent of the one-way directional flow on the street from which the driveway is provided access.

(4) *Traffic control signs.* Traffic control signs shall be provided on-site and off-site in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

(5) *Pavement markings.* Pavement markings shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

(6) *Bus stops.* New commercial developments exceeding 50,000 square feet in gross floor area and all new residential developments of more than 200 dwelling units shall provide on-site space for bus stops if located on an existing or proposed bus route. Such bus stops shall be separate and adjacent to travel lanes.

(7) Traffic Calming. The design of Traffic Calming shall be in accordance with the following provisions:

a. Traffic Calming measures shall be implemented in all new development in residential areas where the completion of the development will create a straight length of roadway in excess of 1200 feet in length.

b. Where roadway abuts residential zoning, up to 1200 linear feet of roadway may be exempt. Commercial and industrial developments are exempt unless abutting residential with a physical connection between the two uses. Where roadway abutting residential areas is equal to or exceeds 1200 linear feet in length, Traffic Calming Measures will be required every 600 feet minimum, with a maximum of 600 feet from each terminus.

c. Approved Traffic Calming measures are as follows:

1. Traffic Circle at intersection.

Formatted: Bullets and Numbering

Formatted: Indent: Left: 40.5 pt

Formatted: Bullets and Numbering

Formatted: Indent: Left: 40.5 pt

Formatted: Bullets and Numbering

Formatted: Indent: Left: 40.5 pt

Deleted: <#>

Deleted: <#>¶
¶

Deleted: *Bus stops.* New commercial developments exceeding 50,000 square feet in gross floor area and all new residential developments of more than 200 dwelling units shall provide on-site space for bus stops if located on an existing or proposed bus route. Such bus stops shall be separate and adjacent to travel lane

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

2. Median Island offset.
3. Tangent with Delta angle greater than 30 degrees
4. Chokers.

Note: Speed Bumps or other devices that create a hazardous break in level surface of roadway shall not be permitted

Formatted: Indent: Left: 120 pt

d. Petition by existing developments for new Traffic Calming should follow Miami-Dade County Public Works guidelines for eligibility.

Formatted: Bullets and Numbering

(c) *Classification of streets.* For purposes of this code, streets shall be classified as they are identified for future functional classification in the comprehensive plan.

Section 3. Access control.

(a) *In general.* The following regulations are designed to promote the safety of vehicular and pedestrian traffic, minimize traffic congestion, promote roadside aesthetics and enhance the functional capacity of roads and highways in the City of Doral. These regulations shall be in addition to those imposed by the Florida Department of Transportation and the Miami Dade County on roads under their jurisdiction[s].

Where recorded cross-access easements exist, all properties with cross-access shall be considered as one parcel under the provisions of this section. Further, where two or more of these regulations conflict, the more stringent requirement shall apply.

(b) *Number of entrances.* All parcels shall be allowed one access point, consisting of one two-way driveway or a pair of one-way driveways, except for those properties restricted by subdivision plats or otherwise stated herein. The minimum frontage to allow two access points shall be as follows:

TABLE INSET:

Driveway Classification**	Section Line Rd	Half Section Line Rd	Quarter Section Line Rd	Local
Residential A	*	*	100'	75'
Residential B	*	200'	150'	125'
Light commercial	500'	400'	300'	200'
Heavy commercial	500'	450'	350'	300'

*Undesirable uses on roads of this classification and generally not permitted.
** Driveway Classification
Residential A driveway. An accessway serving a single-family detached, single-family attached or multifamily building of four units or less.
Residential B driveway. An accessway serving a multifamily development of five to 25 units.
Light commercial driveway. An accessway serving office and nonresidential uses of 80,000 square feet or less, and multifamily development of more than 25 units.

Heavy commercial driveway. An accessway serving office and nonresidential uses of more than 80,000 square feet, warehouse and industrial uses, and other uses with heavy truck traffic.

A third access point may be allowed for properties with at least two times the frontage cited above.

(c) *Distance between access points and intersections.* Access points upstream from intersections of higher or similar classification to the accessed road should be located as far as feasible from the intersection to provide for stacking and protection of left turn movements. Minimum distance from the intersecting right-of-way line to nearest edge of driveway shall be as follows:

TABLE INSET:

	Section Line Rd	Half Section Line Rd	Quarter Section Line Rd	Local
Residential A	*	*	45'	30'
Residential B	*	60'	60'	45'
Light commercial	150'	120'	90'	60'
Heavy commercial	200'	150'	105'	60'

*Undesirable uses on roads of this classification and generally not permitted.

(d) *Distance between two-way access points on one parcel.* The minimum distance between two two-way access point centerlines on one parcel shall be as follows:

TABLE INSET:

	Section Line Rd	Half Section Line Rd	Quarter Section Line Rd	Local
Residential A	*	*	80'	50’
Residential B	*	140'	120'	75'
Light commercial	350'	280'	210'	140'
Heavy commercial	350'	315'	245'	140'

* Undesirable uses on roads of this classification and generally not permitted.

(e) *Distance between access point and property line.* The minimum distance between the nearest edge of an access drive and any property line without a cross-access easement shall be as follows:

TABLE INSET:

	Section Line	Half Section	Quarter Section	Local

	Rd	Line Rd	Line Rd	
Residential A	*	*	7.5'	5'
Residential B	*	10'	10'	7.5'
Light commercial	25'	20'	15'	10'
Heavy commercial	25'	22.5'	17.5'	10'

* Undesirable uses on roads of this classification and generally not permitted.

(f) *Width and radii of access drives.* Width of two-way driveway access and radii shall be within the dimensions specified below. Actual width and radii shall be based on a) classification of the roadway, b) number of entrances to the parcel, and c) expected traffic demand, including truck usage.

TABLE INSET:

	Width		Radius	
	Minimum	Maximum	Minimum	Maximum
Residential A	18'	24'	5'	10'
Residential B	20'	24'	10'	20'
Light commercial	24'	30'	20'	35'
Heavy commercial	24'	35'	25'	40'

Where one-way turning motions are dictated, reverse radii with a 2.5-foot radius bullnose shall be provided.

(g) *Single-family and duplex drives.*

(1) *Dimensions.* The following dimensions shall apply to drives within the front yard setback of all single-family and duplex dwellings.

TABLE INSET:

	Width		
	Minimum	Maximum*	Minimum Lot Frontage
Standard drive	10'	20'	N/A
Circular drive	10'	12'	75'
Standard drive with circular drive	10'	20'**	75'

*Driveways in excess of the maximum width may be approved by the administrative official when such driveway width is proportional to the size of the residence, the number of garage parking spaces, and the size of the lot. To mitigate the impact of a driveway in excess of the above stated maximum width, the administrative official may require alternative paving surfaces, landscaping, screening, or other devices necessary to achieve the intent of this chapter.

**Maximum width shall only be permitted for the portion of the circular drive which diverges to create a standard drive.

QUEUING ANALYSIS WORKSHEET

PROJECT DESCRIPTION: Doral International Towers
DATE: 12/26/2023
ANALYST: RK
QUEUING LOCATION: Rideshare Drop Off Loop

Inputs

Parameter	Parameter Description	Formula / Source	Peak Period			
			AM	PM	Other Peak	Max
V	Design Traffic Volume = Demand per hour	Traffic Study[A]	46	61	-	61
PHF	Peak-hour factor	Chapter 9[B]	0.9	0.9	-	0.90
v	Peak hourly flow rate = ratio of Design Traffic Volume to PHF	V ÷ PHF	51	68	-	68
μ_{des}	Design service rate, vph.	Table 9-2[C]	200	200	-	200
μ_{max}	Maximum service rate, vph.	Table 9-2[C]	250	250	-	250

Output

Parameter	Parameter Description	Formula / Source	Peak Period			
			AM	PM	Other Peak	Max
i	Traffic intensity = ratio of peak flow rate to maximum service rate	$v \div \mu_{max}$	0.20	0.27	-	0.271
Wq	Average wait before being served (Secs)	$i \div (\mu_{max} - v)$.	4	5	-	5
n	number of lanes required	$v \div (PHF \times \mu_{des})$.	1	1	-	1
Lq_{Avg}	Average length of queue, (number of vehicles behind control point service position).	$i^2 \div (1-i)$	1	1	-	1
Lq_{95th}	95th Percentile Queue	Figure 9-4[D]	2	2	-	2

Notes:

A. Estimated from trip generation calculation and entering driveway distribution split in traffic study

General: The following guidelines/assumptions are obtained from Chapter 9, Garage Design, Parking, Eno Foundation for Transportation

B. PHF generally range between 0.75 and 0.90

C. Assumed easy or straight approach along with a "Fixed fee to cashier-wtlh gate" control to approximate this driveway's operations

D. For parking design purposes a 90 or 95 percent probability is typically used to develop queue estimates

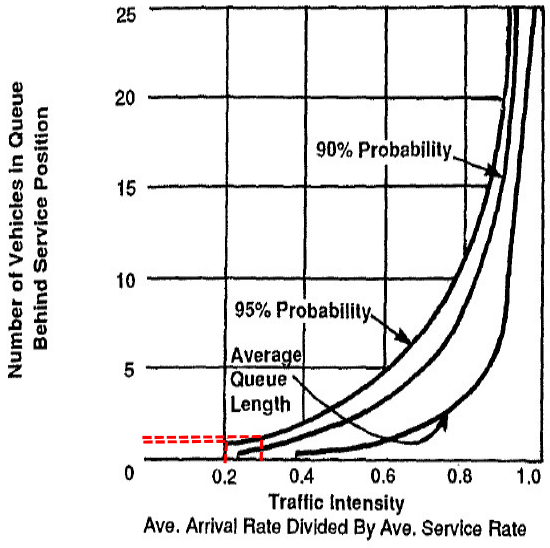


Figure 9.4 Reservoir needs versus traffic intensity based on single channel queuing theory.

QUEUING ANALYSIS WORKSHEET

PROJECT DESCRIPTION: Doral International Towers
DATE: 12/26/2023
ANALYST: RK
QUEUING LOCATION: Driveway 3 Guard House

Inputs

Parameter	Parameter Description	Formula / Source	Peak Period			
			AM	PM	Other Peak	Max
V	Design Traffic Volume = Demand per hour	Traffic Study[A]	192	254	-	254
PHF	Peak-hour factor	Chapter 9[B]	0.9	0.9	-	0.90
v	Peak hourly flow rate = ratio of Design Traffic Volume to PHF	V ÷ PHF	213	282	-	282
μ_{des}	Design service rate, vph.	Table 9-2[C]	300	300	-	300
μ_{max}	Maximum service rate, vph.	Table 9-2[C]	375	375	-	375

Output

Parameter	Parameter Description	Formula / Source	Peak Period			
			AM	PM	Other Peak	Max
i	Traffic intensity = ratio of peak flow rate to maximum service rate	$v \div \mu_{max}$	0.57	0.75	-	0.753
Wq	Average wait before being served (Secs)	$i \div (\mu_{max} - v)$.	13	29	-	29
n	number of lanes required	$v \div (PHF \times \mu_{des})$.	1	1	-	1
Lq_{Avg}	Average length of queue, (number of vehicles behind control point service position).	$i^2 \div (1-i)$	1	3	-	3
Lq_{95th}	95th Percentile Queue	Figure 9-4[D]	4	8	-	8

Notes:

A. Estimated from trip generation calculation and entering driveway distribution split in traffic study

General: The following guidelines/assumptions are obtained from Chapter 9, Garage Design, Parking, Eno Foundation for Transportation

B. PHF generally range between 0.75 and 0.90

C. Assumed easy or straight approach along with a "Fixed fee to cashier-no gate" control to approximate this driveway's operations

D. For parking design purposes a 90 or 95 percent probability is typically used to develop queue estimates

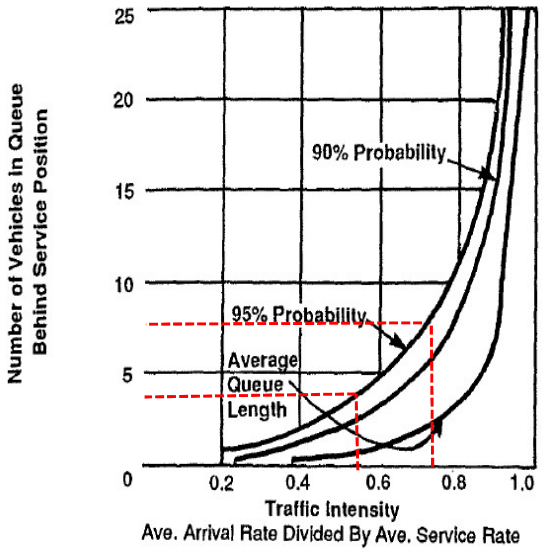


Figure 9.4 Reservoir needs versus traffic intensity based on single channel queuing theory.

Access Design for Vehicular Traffic

Garage access design should enable vehicles to enter and leave the facility with minimum delay, and with minimum queuing across sidewalks and onto public streets. This requires adequate entrance and exit capacity and reservoir space. Design calls for relating peak-hour traffic flow rates to the capacity of the specific access control strategy to determine the number of lanes and length of queuing space needed.

Typically, the peak 15-minute flow rate (converted to vehicles per hour) should be used as a basis for estimating access requirements. Traffic flow rates are compared with the *design* processing or service rate of the access control means to estimate the number of lanes needed. Peak traffic flow rate is compared to the *maximum* service rate of the control point to estimate length of queuing space needed.

Design Traffic Volume. Traffic arrival, accumulation and departure characteristics are generally reflected by the trip purpose of the parker and type of traffic generator the garage is to serve. Most land uses exhibit regular peaks of activity for arriving and departing traffic. Peak-hour volumes can be expressed as the ratio of entering or exiting vehicles per hour to the total number of parking spaces in the facility. Thus, if the inbound morning peak-hour vehicle volume is equal to half the number of parking spaces provided, the entering ratio is 0.50. For a 400-space garage this means that 200 vehicles would enter during the morning peak hour. (There also may be vehicles leaving the garage during the inbound peak hour.)

Typical peak-hour traffic volume percentages for parking facilities serving common land uses are shown in Table 9-1. This table, drawn from numerous traffic and parking studies, provides a basis for preparing initial estimates of peak-hour traffic. Site-specific study may be necessary for large garages or special situations.

During the peak hour, there are surges of traffic. Accordingly, a peak-hour factor (PHF) is used to upwardly adjust peak-hour volumes to account for periods of traffic surges. This factor is obtained by measuring traffic volumes in 15-minute intervals within the peak traffic hour, selecting the highest 15-minute volume and converting it to an equivalent hourly rate of flow (v). The resulting hourly flow rate becomes the design hour volume.

Thus, the design volume can be estimated based on the following formula:

$$v = V/(PHF)$$

where:

V= Volume of vehicles during peak hour.
PHF = Peak-hour factor.
v = Design hourly flow rate of peak-hour traffic.

The appropriate peak-hour factor can be determined from field observations or assumed based on experience. Peak-hour factors will generally range between 0.75 and 0.90. However, special events and employee parking typically call for a factor of 0.50 to 0.65. For example, if special event parking were to empty 50 percent of its capacity in 15 minutes, the peak-hour factor would be 0.50. Employee parking, where all employees are expected to start and end work at the same time, may require a factor similar to special event parking.

In general, the higher the traffic volume the more access lanes are required, and the higher the peak-hour factor that can be used. This is because the peaks and valleys in activity tend to be moderated as overall activity increases, and because the surges in traffic can be distributed over several lanes. At access points where only one entrance or exit lane is provided, the peak-hour factor should be no higher than 0.75. As additional lanes in the same direction are added, the PHF can be increased, to about 0.85 for two lanes and to 0.90 for three lanes or more.

Access Servicing Rates. Either a gated or non-gated system is used at points of parking access. Gated systems typically require parkers to stop at both the entrance and exit to perform some type of transaction in connection with paying for parking and/or assuring authorization to use the gated parking facility. Traffic flow is interrupted by these stops and the volume of traffic passing through the gate is a function of the gate's service rate, approach geometry, and traffic conditions beyond the gate, as well as patron's familiarity with the control.

Typical service rate capacities, measured in vehicles per hour are shown in Table 9-2 for various types of access control. The *design capacities*, which approximate 85 percent of the maximum service rates, should be used in determining the number of lanes required.

The *maximum* service rate capacities should be used only for queuing analysis. This is because the various queuing models are based on maximum service rates.

Table 9-2 gives values for conditions of easy and difficult access lane approaches. The difficulty of the approach is a function of drivers' familiarity with the facility, approach geometry and pavement surface condition. The length of reservoir space and traffic conditions beyond the entrance and exit gate also affect capacity.

Number of Access Lanes. The number of lanes required to provide garage access depends on the expected peak-period flow rate and the method of access control. An estimate of the number access lanes needed (n) can be made by dividing the expected peak-hour traffic volume (V) by the product of the peak-hour factor (PHF) and the service rate (u) of the access control to be used.

$$n = V/(PHF \times u)$$

Fractional lanes resulting from this calculation should be increased to the next highest number (i.e., n = 2.1 would require 3 lanes).

Lane requirements also can be estimated based on the number of spaces provided, given the likely number of vehicles to arrive or depart in the peak hour. The formula is as follows:

$$n = \frac{S \times R}{(PHF)\ u}$$

where:

n = Number of lanes.
R = % of garage capacity entering or leaving in the peak hour. (See Table 9-1)
S = Number of spaces.
(PHF) = Peak-hour factor.
u = Service processing rate (design capacity).

Similarly, the number of spaces that one lane can accommodate can be estimated as follows:

$$s = \frac{(PHF)(u)}{R}$$

where:

s = Spaces per access lane.

Based on a peak-hour factor of 0.80, and 60

Table 9-1. Typical Peak-hour Volumes as a Percentage of the Total Parking Spaces

Type of Activity	*AM Peak Hour*		*PM Peak Hour*	
	In	*Out*	*In*	*Out*
Hotel-motel	30-50	30-50	30-60	10- 30
Residential	5-10	30-50	30-50	10- 30
Office	40-70	5-15	5-20	40- 70
Medical office	40-60	10-20	10-30	60- 80
Hospital				
Visitor	30-40	40-50	40-60	50- 75
Employee	60-75	5-10	10-15	60- 75
Retail-commerrcial	10-30	10-20	30-60	40- 65
Central business district	40-60	10-20	10-30	40- 60
Airport-All	40-65	30-50	70-90	70- 90
Short-term (0-3 hours)	50-75	80-100	90-100	90-100
Mid-term (4-24 hours)	10-30	5-10	10-30	10- 30
Long-term (more than 24 hours)	5-10	5-10	5-10	5- 10
Special events	Before event — (in) 80-100		After event — (out) 85-200[a]	

a. Maximum assumes a 30-minute departure.

Source: Adapted from: Robert W. Crommelin, "Entrance-Exit Design and Control for Major Parking Facilities," a seminar presentation (Encino, CA: Robert Crommelin and Associates, Inc., 1972), and Anthony P. Chest, Mary S, Smith, Sam Bhuyan, *Parking Structures Planning, Design, Construction, Maintenance and Repair*, (*Van Nostrand Reinhold*, New York: 1989).

Table 9-2. Typical Parking Control Service Rates per Lane

Type of Control	*Vehicles Per Hour*			
	Design Service Rate		*Maximum Service Rate*	
	EA[a]	*STU*[b]	*EA*[a]	*STU*[b]
Entrance				
Ticket dispenser-automatic	525	300	650	400
Ticket dispenser-push button	450	250	525	300
Ticket dispenser-machine read	375	200	450	250
Coded-card reader	350	225	400	275
Proximity card reader	500	275	550	325
Coin/Token operated gate	150	100	200	125
Fixed fee to cashier-wtih gate	200	150	250	200
Fixed fee to cashier-no gate	250	200	350	275
No required stop	800	550	1,050	700
Exit				
Coded-card reader	350	225	400	275
Proximity card reader	500	275	550	325
Token operated gate	150	100	200	125
Fixed fee to cashier- with gate	200	150	250	200
Fixed fee to cashier-no gate	250	200	350	275
Variable fee to cashier	150	100	200	150
Validated/Pre-cashiered ticket	300	200	350	250
Machine read ticket	375	200	425	250
with manual license plate check	100	100	125	125
with camera license plate check	75	75	85	85
No required stop	375	250	475	300

a. EA = Easy or straight approach to control service position.
b. STU = Sharp turn within 100 feet of either side of the control position and/or patrons unfamiliar with facility

Source: Estimated based on various sources including Robert W. Crommelin's research and A. Chrest, M. Smith, S. Bhuyan, *Parking Structures*, 1989.

percent of the parkers departing in a peak hour, the following numbers of spaces per lane result:

Design Service Rate (Vehicles per Hour)	Spaces Per Lane (rounded)
200	270
250	330
300	400
350	470

Reservoir Requirement. Storage areas for entering and exiting traffic should be sufficiently long to minimize backups of traffic onto surrounding streets or within the garage. A minimum of two-vehicle lengths of storage should be provided between the street and the garage, but more is often necessary.

Estimates of needed reservoir storage space can be obtained by applying standard queuing formulas. These formulas indicate the expected queue lengths and delays for various "traffic intensity" conditions. They define the traffic intensity as the ratio between the peak flow rate and the maximum service capacity rate.

The queuing model assumes random arrivals of traffic and exponentially distributed service times. For uniform service times, the queues would be half as long. Thus, there is a factor of safety in the queuing analysis.

The "single channel" queuing formulas apply to access points providing a single entrance or exit lane. They produce a reasonable (conservative) approximation of queues resulting where there is more than one lane in the same traffic direction and at the same point of access; in such cases, the flows are assumed to be divided equally among the available lanes.

The queuing formulas work well where the traffic intensity ranges from 0.50 to 0.85. Beyond 0.85, they give unrealistically high results, since they are based on steady state conditions.

The basic formulas are as follows:

Average length of queue

$$Lq = \frac{i^2}{1 - i}$$

Average wait before being served

$$Wq = \frac{i}{u - v}$$

where:

i = Traffic intensity = ratio of peak flow rate to maximum service rate.

u = Maximum service rate, vph.

v = Design flow rate, vph.

Lq = Average length of queue, (number of vehicles behind control point service position).

Wq = Average wait before being served (hours).

For example, if u = 300 vph and v = 200 vph, i = 0.66, the average queue length would be 1.3 vehicles. The average delay would be 24 seconds.

Average queues would be exceeded about 50 percent of the time. Therefore, it is customary to introduce a probability value that represents the frequency that the design reservoir length will be exceeded. For example, a 95 percent probability suggests that the reservoir length would be exceeded only five times in 100. For parking design purposes a 90 or 95 percent probability is typically used, this results in a failure of not more than 10 and 5 percent respectively. Figure 9.4 gives curves for the average and 90 and 95 percent probability conditions.

Introduction of a probability factor increases the reservoir space indicated by the calculated average queue length. For a traffic intensity between 0.6 and 0.8, a 90 percent probability increases calculated average queue length by about two vehicle lengths; a 95 percent probability increases average queue length by nearly three vehicle lengths.

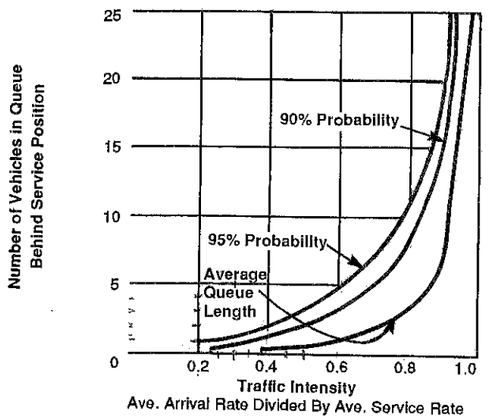


Figure 9.4 Reservoir needs versus traffic intensity based on single channel queuing theory.

RAMP SYSTEMS

Vehicular travel between different levels in a parking structure can be provided in several ways. A sloping surface (ramp) permits vehicles to be driven between parking levels, direct street connections can be provided to various levels from a sloping site, or mechanical conveyances can be used to transport vehicles between levels.

General Considerations

Safety, convenience, and traffic operating efficiency are principal ramp design concerns. Circulation travel distance should be as short as possible, with minimum turns and traffic crossings. Ramp arrangements should be as consistent and simple as possible to facilitate driver comprehension.

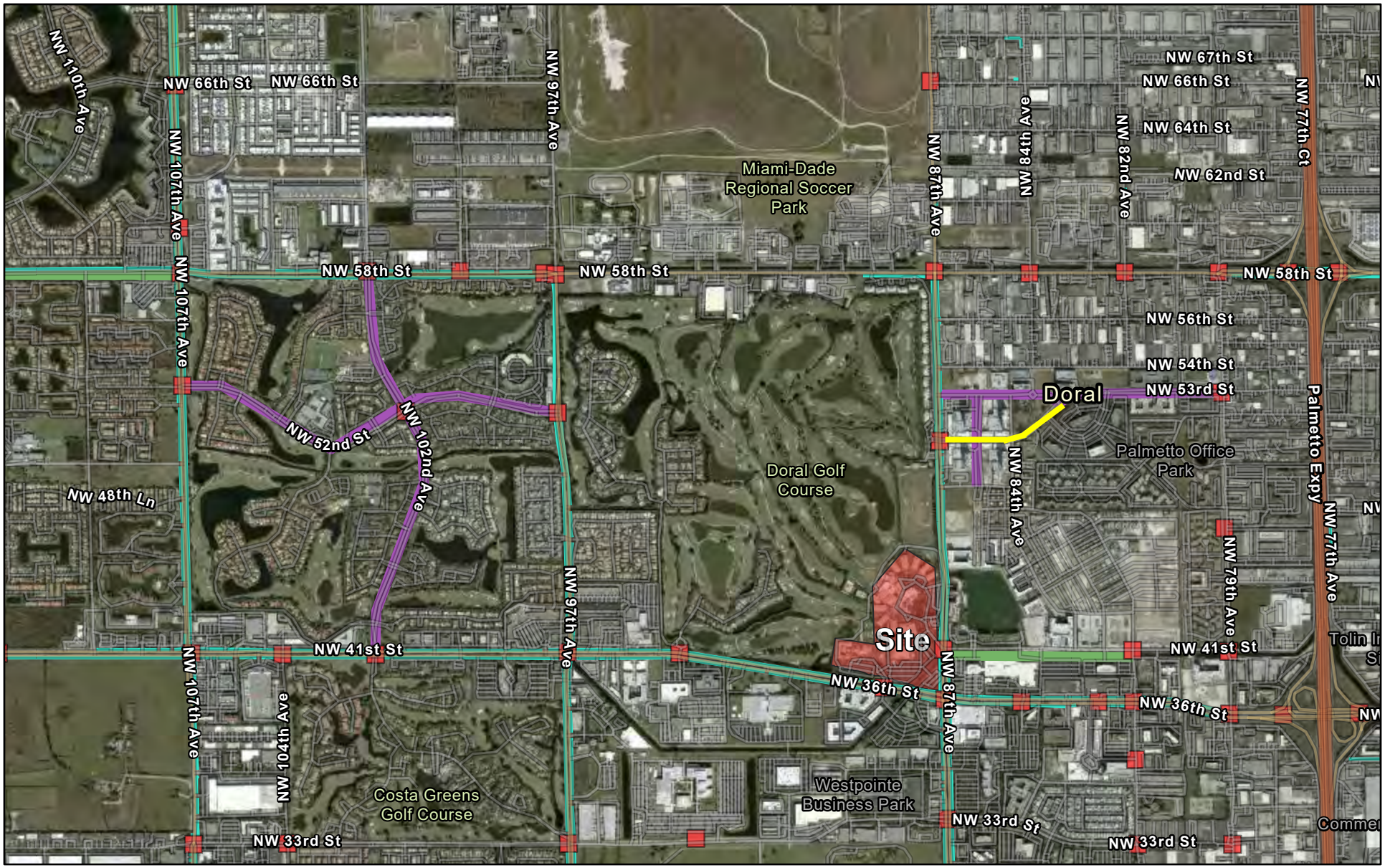
Ramp design and arrangement is influenced by (1) orientation of ramp traffic flow to the street entrance and exit points and to other ramp systems that might exist in the same garage; and (2) needed traffic capacity. The choice is further influenced by site shape and dimensions, parking demand characteristics, and development type (integrated-use structure or free standing garage). Thus, no single ramp system is best for all applications.

In some instances, site topography will allow direct access to more than one parking level from the street system. This is a desirable arrangement, since it leaves more floor space for parking and provides better flexibility for traffic distribution between the street system and parking facility. It may not be convenient for patrons to easily circulate to other levels in search of a parking space.

Time and convenience are important to ramp travel and should be considered in any comparison of ramp types. Actual travel time on ramps varies little among different ramp system types; however, some ramp systems have more potential for delay caused by conflicting traffic movements that limit ramp capacity. Other factors influencing ramp design include accident hazards, construction cost, and ability to conveniently accommodate vehicles and, in some designs, pedestrians.

Ramps may be designed for one-way or two-

APPENDIX I: Bicycle and Transit Amenities



4/25/2022

1:25,609

0 0.2 0.4 0.8 mi

0 0.3 0.6 1.2 km

Traffic Signals - TrafficSignals

Sidewalk On County Roadways

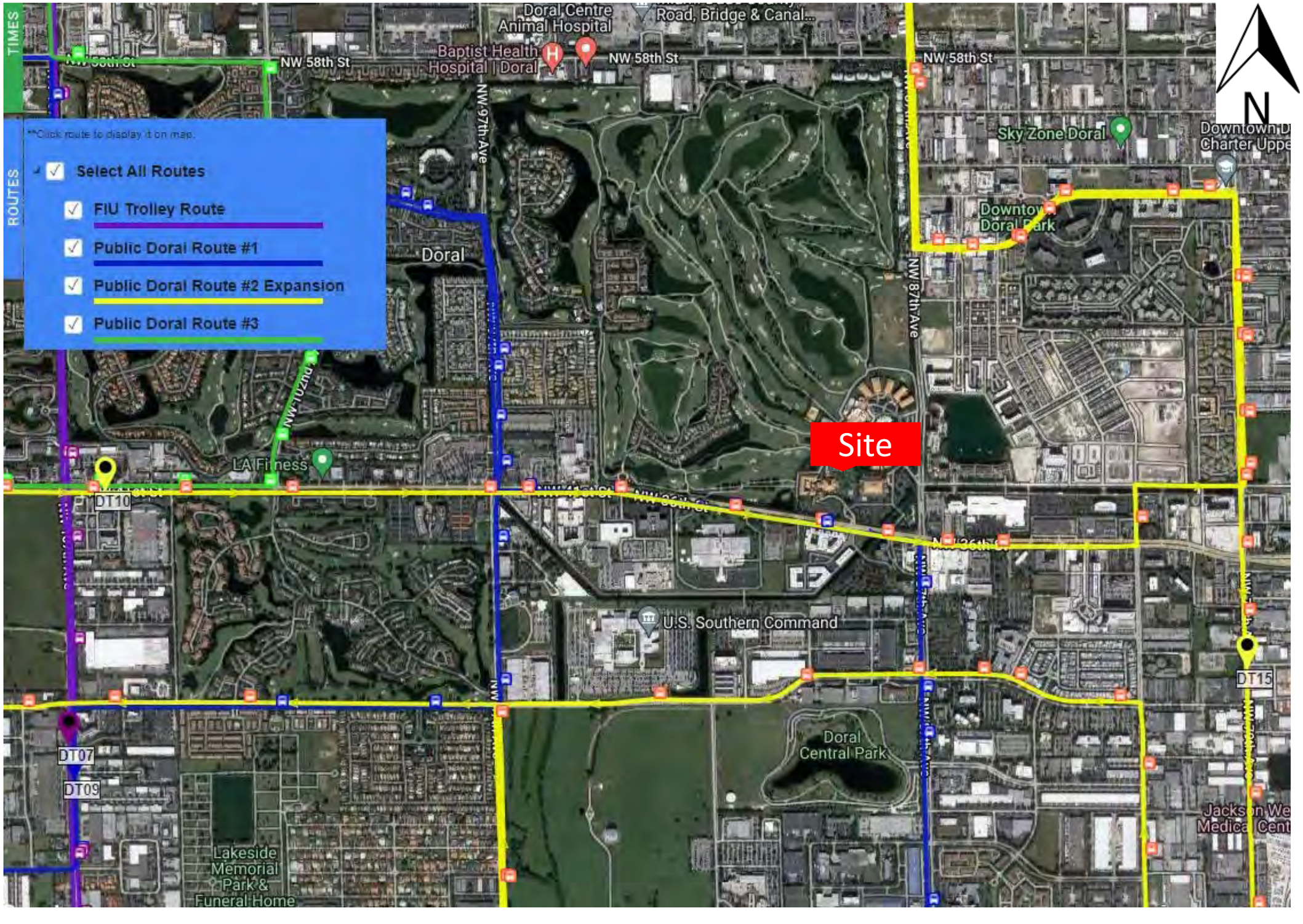
Paved Path - PavedPath

Bike Lane - BikeLane

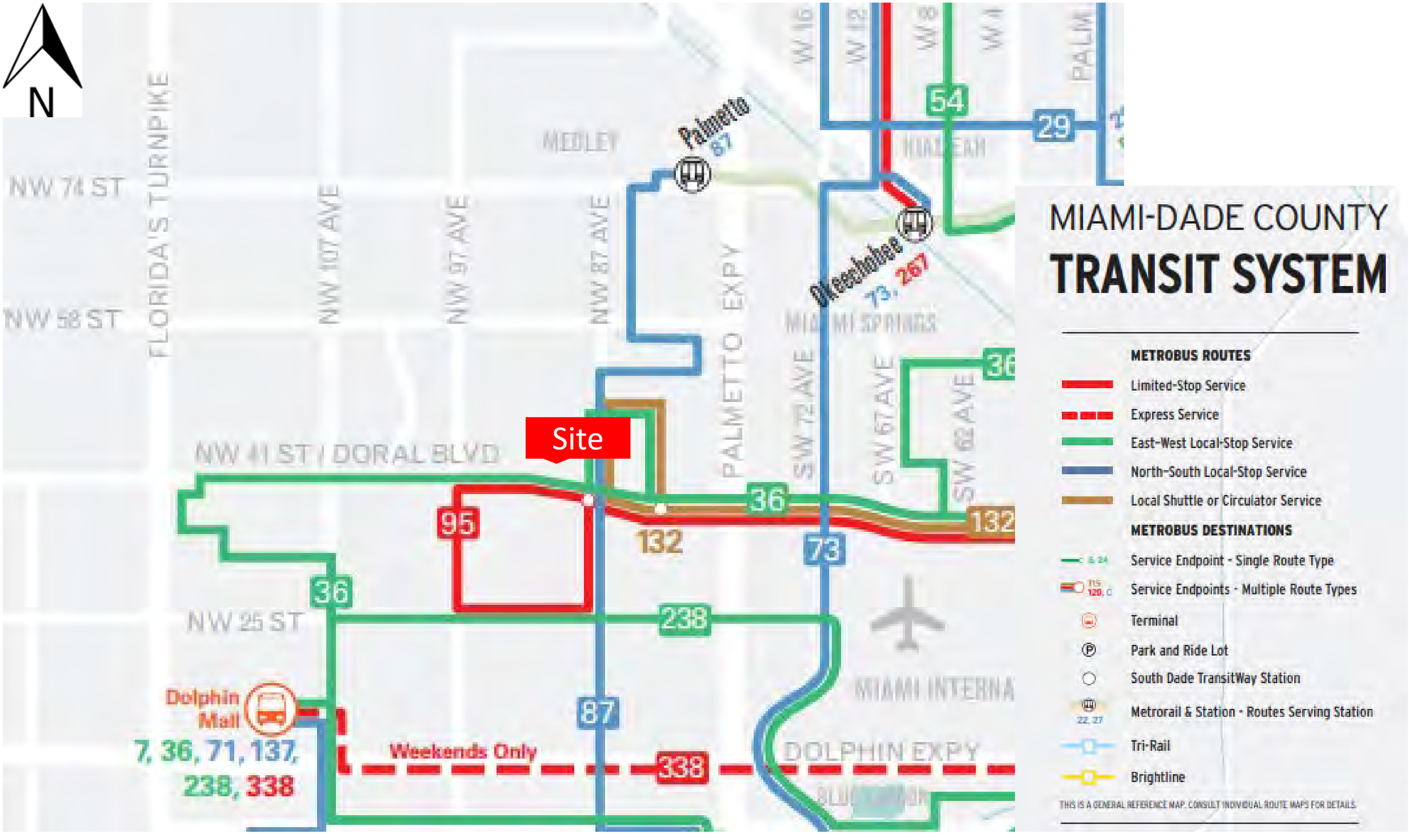
Sharrows

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Source: Esri, DigitalGlobe,

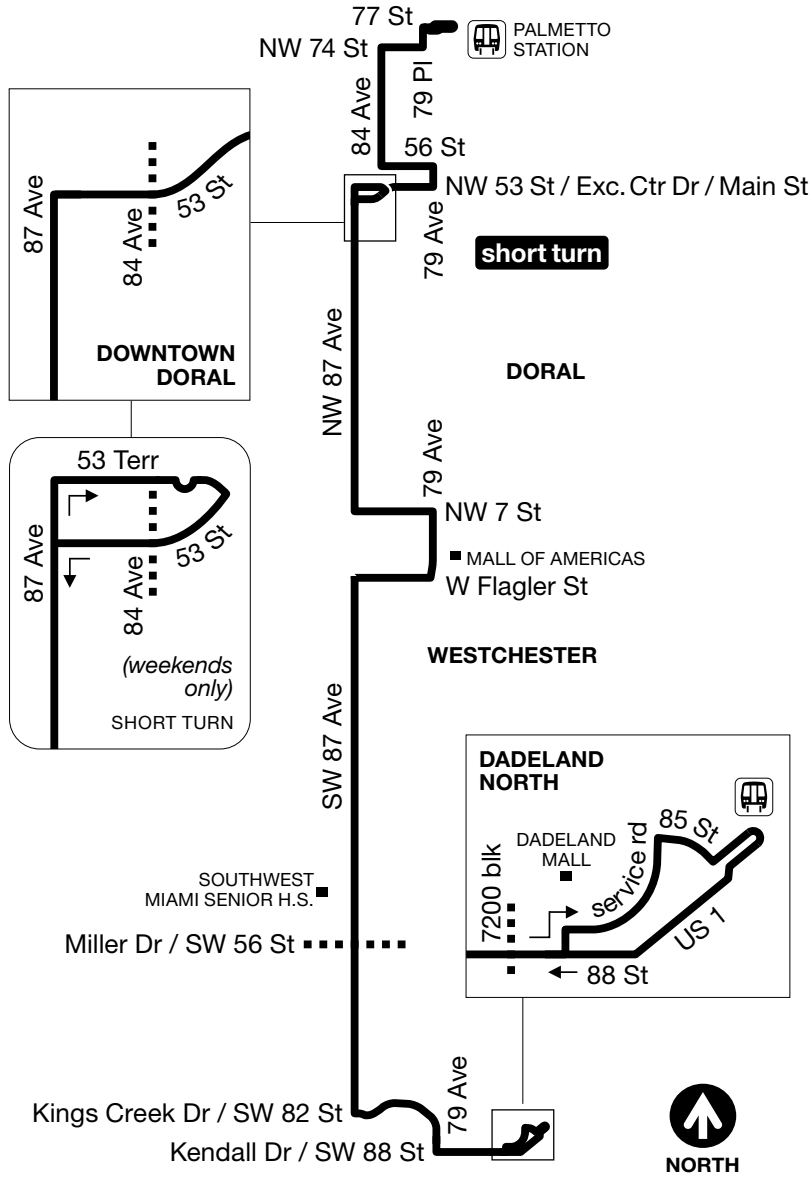
City of Doral Trolley Network
Doral International Towers – Traffic Study



Miami-Dade Transit System Map
Doral International Towers – Traffic Study



87


77 St
NW 74 St
PALMETTO STATION
79 Pl
84 Ave
56 St
NW 53 St / Exc. Ctr Dr / Main St
79 Ave
short turn
87 Ave
84 Ave
53 St
DOWNTOWN DORAL
DORAL
NW 87 Ave
79 Ave
NW 7 St
MALL OF AMERICAS
W Flagler St
53 Terr
87 Ave
84 Ave
53 St
(weekends only)
SHORT TURN
WESTCHESTER
SW 87 Ave
DADELAND NORTH
DADELAND MALL
85 St
service rd
7200 blk
US 1
88 St
SOUTHWEST MIAMI SENIOR H.S.
Miller Dr / SW 56 St
79 Ave
Kings Creek Dr / SW 82 St
Kendall Dr / SW 88 St
NORTH
02/2017

WEEKDAYS / DIAS LABORABLES / LASEMÈN

NORTHBOUND RUMBO NORTE / DIREKSYON NÒ	MORNING / MAÑANA / MATEN											AM	PM	AFTERNOON / TARDE / APRÈ MIDI										
Dadeland North Metrorail Station	5:14	5:45	6:13	6:33	6:58	7:28	8:02	8:40	9:20	10:05	10:45	11:30	12:15	1:00	1:40	2:25	3:10	3:40	4:10	4:42	5:14	5:46	6:31	7:31	8:31
SW 87 Ave & 56 St	5:27	5:58	6:28	6:48	7:17	7:47	8:21	8:59	9:39	10:24	11:04	11:49	12:34	1:19	1:59	2:44	3:29	3:59	4:29	5:01	5:33	6:05	6:44	7:44	8:44
SW 87 Ave & 24 St	5:35	6:08	6:38	6:58	7:29	7:59	8:33	9:11	9:50	10:35	11:15	12:00	12:45	1:30	2:10	2:55	3:40	4:12	4:42	5:14	5:46	6:18	6:53	7:53	8:53
Mall of The Americas	5:46	6:21	6:51	7:17	7:48	8:18	8:52	9:26	10:05	10:50	11:30	12:15	1:00	1:45	2:25	3:10	3:55	4:27	4:57	5:29	6:01	6:33	7:06	8:06	9:06
NW 87 Ave & 25 St	5:55	6:32	7:02	7:28	7:59	8:29	9:04	9:38	10:17	11:02	11:42	12:27	1:12	1:57	2:37	3:22	4:07	4:39	5:09	5:41	6:13	6:42	7:15	8:15	9:15
NW 53 St & NW 84 Ave	6:02	6:39	7:09	7:35	8:06	8:36	9:11	9:45	10:24	11:09	11:49	12:34	1:19	2:04	2:44	3:29	4:14	4:46	5:16	5:48	6:20	6:47	7:20	8:20	9:20
Palmetto Metrorail Station	6:14	6:51	7:23	7:49	8:20	8:50	9:22	9:56	10:35	11:20	12:00	12:45	1:30	2:15	2:55	3:40	4:28	5:00	5:30	6:02	6:34	6:58	7:31	8:31	9:31

SOUTHBOUND RUMBO SUR / DIREKSYON SID	MORNING / MAÑANA / MATEN										AM	PM	AFTERNOON / TARDE / APRÈ MIDI											
Palmetto Metrorail Station	6:03	6:32	7:02	7:32	8:02	8:37	9:16	10:01	10:46	11:31	12:16	1:01	1:46	2:31	3:11	3:36	4:04	4:36	5:08	5:40	6:15	7:00	7:46	8:47
NW 53 St & NW 84 Ave	6:14	6:43	7:16	7:46	8:16	8:51	9:30	10:15	11:00	11:45	12:30	1:15	2:00	2:45	3:25	3:50	4:19	4:51	5:23	5:55	6:30	7:12	7:58	8:59
NW 87 Ave & 25 St	6:20	6:49	7:24	7:54	8:24	8:59	9:37	10:22	11:07	11:52	12:37	1:22	2:07	2:52	3:32	3:57	4:28	5:00	5:32	6:04	6:39	7:18	8:04	9:05
Mall of The Americas	6:32	7:04	7:39	8:09	8:39	9:14	9:48	10:33	11:18	12:03	12:48	1:33	2:19	3:04	3:44	4:14	4:45	5:17	5:49	6:21	6:56	7:29	8:15	9:16
SW 87 Ave & 25 St	6:46	7:20	7:55	8:25	8:55	9:29	10:03	10:48	11:33	12:18	1:03	1:48	2:37	3:22	4:04	4:34	5:05	5:37	6:07	6:39	7:14	7:43	8:29	9:30
SW 87 Ave & 56 St	6:54	7:30	8:05	8:35	9:05	9:38	10:12	10:57	11:42	12:27	1:12	1:57	2:46	3:31	4:14	4:44	5:15	5:47	6:17	6:49	7:22	7:51	8:37	9:38
Dadeland North Metrorail Station	7:12	7:48	8:23	8:53	9:22	9:55	10:29	11:14	11:59	12:44	1:29	2:16	3:05	3:50	4:33	5:03	5:34	6:06	6:36	7:08	7:38	8:07	8:53	9:54

Scheduled times are approximate. Actual arrival and departure times may vary depending on traffic and road conditions.
Las horas publicadas son aproximadas, pues dependen del trafico y otras condiciones de las vias. Ore yo apwoksimatif. Vre le bis yo ap rive oswa deplase ka varye selon kondisyon sikilasyon sou wout yo.

SATURDAY / SÁBADO / SAMDI

NORTHBOUND RUMBO NORTE / DIREKSYON NÒ	MORNING MAÑANA / MATEN AM					AFTERNOON TARDE / APRÈ MIDI PM								
Dadeland North Metrorail Station	8:42	9:27	10:12	10:57	11:42	12:27	1:12	1:57	2:42	3:27	4:13	4:58	5:51	6:47
SW 87 Ave & 56 St	8:56	9:42	10:27	11:12	11:57	12:42	1:27	2:12	2:57	3:42	4:27	5:12	6:05	7:01
SW 87 Ave & 24 St	9:07	9:53	10:38	11:23	12:08	12:53	1:38	2:23	3:08	3:53	4:38	5:23	6:13	7:09
Mall of The Americas	9:23	10:09	10:54	11:39	12:24	1:09	1:54	2:39	3:24	4:09	4:51	5:36	6:24	7:20
NW 87 Ave & 25 St	9:32	10:18	11:03	11:48	12:33	1:18	2:03	2:48	3:33	4:19	5:01	5:46	6:32	7:28
NW 53 St & 84 Ave	9:39	10:25	11:10	11:55	12:40	1:25	2:10	2:55	3:40	4:26	5:08	5:53	6:37	7:33

SOUTHBOUND RUMBO SUR / DIREKSYON SID	MORNING MAÑANA / MATEN AM				PM AFTERNOON TARDE / APRÈ MIDI									
NW 53 St & 84 Ave	8:53	9:48	10:33	11:18	12:03	12:48	1:33	2:18	3:03	3:48	4:33	5:18	6:05	6:48
NW 87 Ave & 25 St	8:59	9:54	10:39	11:24	12:09	12:54	1:39	2:24	3:09	3:54	4:39	5:24	6:10	6:53
Mall of The Americas	9:09	10:04	10:49	11:34	12:19	1:04	1:49	2:34	3:19	4:04	4:49	5:34	6:18	7:01
SW 87 Ave & 25 St	9:22	10:17	11:02	11:47	12:32	1:17	2:02	2:47	3:32	4:17	5:02	5:47	6:29	7:12
SW 87 Ave & 56 St	9:30	10:25	11:10	11:55	12:40	1:25	2:10	2:55	3:40	4:25	5:10	5:55	6:36	7:19
Dadeland North Metrorail Station	9:45	10:40	11:25	12:10	12:55	1:40	2:25	3:10	3:55	4:40	5:25	6:10	6:50	07:33

Scheduled times are approximate. Actual arrival and departure times may vary depending on traffic and road conditions.
Las horas publicadas son aproximadas, pues dependen del trafico y otras condiciones de las vias.
Ore yo apwoksimatif. Vre le bis yo ap rive oswa deplase ka varye selon kondisyon sikilasyon sou wout yo.

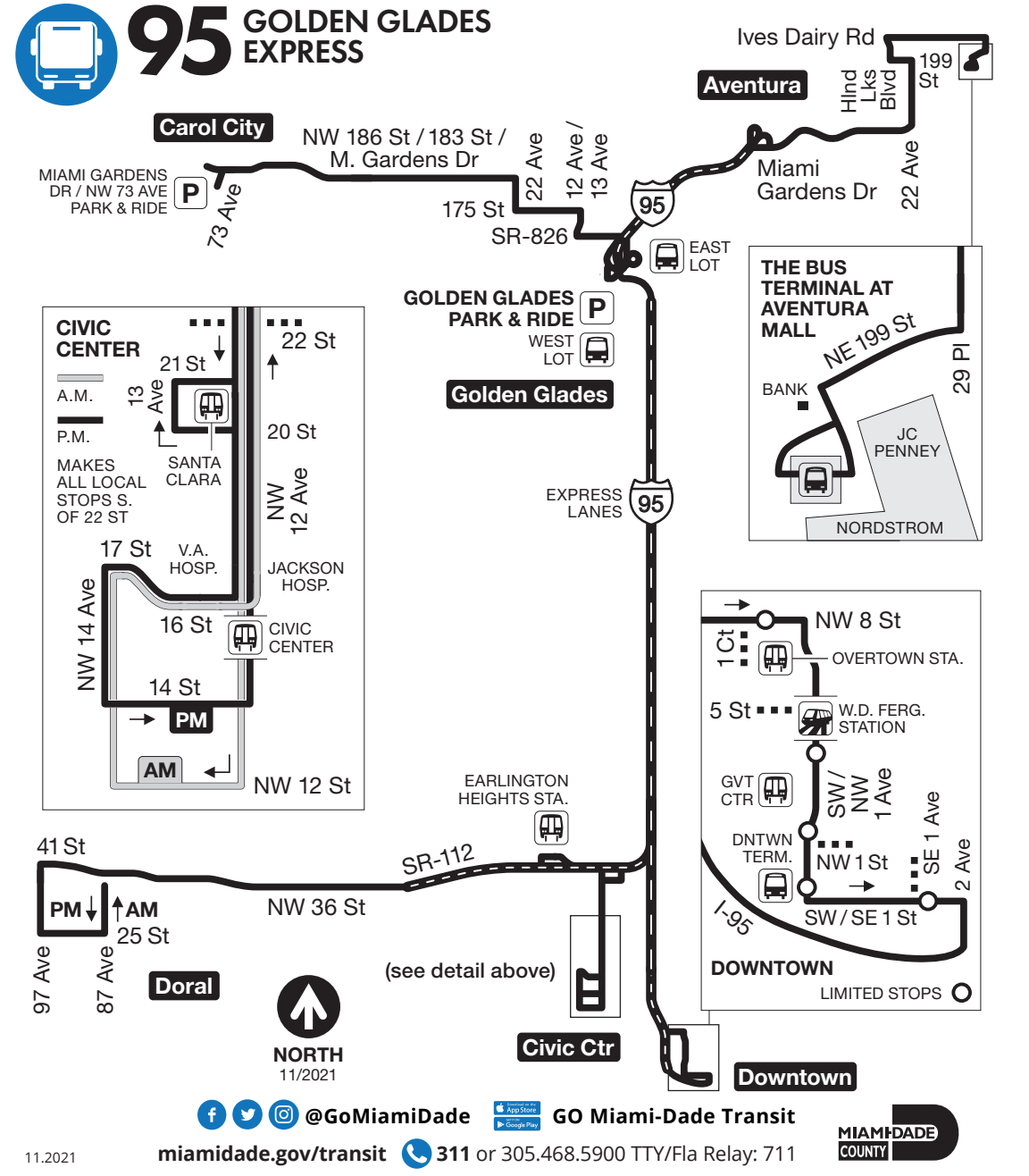
SUNDAY / DOMINGO / DIMANCH

NORTHBOUND RUMBO NORTE / DIREKSYON NÒ	MORNING MAÑANA / MATEN AM				AFTERNOON TARDE / APRÈ MIDI PM						
Dadeland North Metrorail Station	8:48	9:48	10:48	11:48	12:48	1:48	2:48	3:48	4:48	5:48	6:48
SW 87 Ave & 56 St	9:03	10:03	11:03	12:03	1:03	2:03	3:03	4:03	5:02	6:02	7:01
SW 87 Ave & 24 St	9:14	10:14	11:14	12:14	1:14	2:14	3:14	4:14	5:13	6:10	7:09
Mall of The Americas	9:29	10:29	11:29	12:29	1:29	2:29	3:29	4:29	5:28	6:21	7:20
NW 87 Ave & 25 St	9:38	10:38	11:38	12:38	1:38	2:38	3:38	4:38	5:37	6:27	7:26
NW 53 St & 84 Ave	9:43	10:43	11:43	12:43	1:43	2:43	3:43	4:43	5:42	6:30	7:29

SOUTHBOUND RUMBO SUR / DIREKSYON SID	MORNING MAÑANA / MATEN AM				AFTERNOON TARDE / APRÈ MIDI PM						
NW 53 St & 84 Ave	8:48	9:48	10:48	11:48	12:48	1:48	2:48	3:48	4:48	5:48	6:48
NW 87 Ave & 25 St	8:52	9:53	10:53	11:53	12:53	1:53	2:53	3:53	4:53	5:53	6:51
Mall of The Americas	8:59	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	6:57
SW 87 Ave & 25 St	9:11	10:12	11:12	12:12	1:12	2:12	3:12	4:12	5:12	6:10	7:07
SW 87 Ave & 56 St	9:20	10:21	11:21	12:21	1:21	2:21	3:21	4:21	5:21	6:17	7:14
Dadeland North Metrorail Station	9:35	10:36	11:36	12:36	1:36	2:36	3:36	4:36	5:36	6:30	7:27

Scheduled times are approximate. Actual arrival and departure times may vary depending on traffic and road conditions.
Las horas publicadas son aproximadas, pues dependen del trafico y otras condiciones de las vias.
Ore yo apwoksimatif. Vre le bis yo ap rive oswa deplase ka varye selon kondisyon sikilasyon sou wout yo.

95 GOLDEN GLADES EXPRESS



@GoMiamiDade GO Miami-Dade Transit

11.2021 miamidade.gov/transit 311 or 305.468.5900 TTY/Fla Relay: 711

MIAMI-DADE COUNTY

WEEKDAYS / DIAS LABORABLES / JOU LASÈMEN

SOUTHBOUND
RUMBO SUR / DIREKSYON SID

MORNING / MAÑANA / MATEN (AM)

Stop																																													
NW 186 St & 73 Ave				5:40										6:22														6:57										7:32							
Bus Terminal at Aventura Mall												6:25											6:54								7:14														
Golden Glades (East Lot)	5:28	5:58	6:01	6:08	6:16	6:18	6:28	6:31	6:38	6:44	6:45	6:51	6:53	6:58	7:03	7:06	7:08	7:11	7:13	7:16	7:18	7:20	7:21	7:23	7:28	7:30	7:31	7:33	7:35	7:38	7:41	7:43	7:48	7:53	7:56	7:58	8:03	8:08	8:13	8:16	8:18	8:28	8:38	9:03	9:28
NW 8 St & 1 Ct																																													
SE 1 St & 1 Ave	5:50	6:23		6:33		6:43	6:53		7:09		7:16		7:24	7:29	7:34		7:39		7:44		7:49	7:51		7:54	7:59	8:01		8:04	8:06	8:09		8:14	8:19	8:24		8:29	8:34	8:39	8:44		8:49	8:59	9:09	9:25	9:50
Santa Clara Metrorail Station																																													
NW 16 St & 12 Ave			6:18		6:33			6:48				7:14				7:28		7:33		7:38			7:44				7:53				8:04				8:18					8:38					
Earlington Heights Metrorail Station										7:00																																			
NW 36 St & East Dr										7:11																																			
NW 97 Ave & 41 St										7:29																																			
NW 87 Ave & 36 St										7:42																																			

(PM) **AFTERNOON** TARDE / APREMIDI

Stop									
NW 186 St & 73 Ave									
Bus Terminal at Aventura Mall									
Golden Glades (East Lot)	2:23	3:28	4:00	4:15	4:17	4:32	5:05	5:40	6:15
NW 8 St & 1 Ct	2:45	3:50	4:22	4:37			5:27	6:02	6:35
SE 1 St & 1 Ave									
Santa Clara Metrorail Station					4:42	4:57			
NW 16 St & 12 Ave									
Earlington Heights Metrorail Station									
NW 36 St & East Dr									
NW 97 Ave & 41 St									
NW 87 Ave & 36 St									

NORTHBOUND
RUMBO NORTE / DIREKSYON NÒ

MORNING / MAÑANA / MATEN (AM)

Stop																						
NW 87 Ave & 36 St																						
NW 41 St & 97 Ave																						
NW 36 St & Miller Dr																						
Earlington Heights Metrorail Station																						
Santa Clara Metrorail Station																						
NW 16 St & 12 Ave		6:18		6:48				7:33		7:44							8:18					
NW 8 St & 1 Ct																						
SE 1 St & 1 Ave	5:50		6:33		6:53	7:09	7:24		7:39		7:49	7:54	7:59	8:04	8:09	8:19		8:29	8:44	8:59	9:25	9:50
Golden Glades (East Lot)	6:12	6:44	6:55	7:15	7:15	7:31	7:46	8:00	8:01	8:11	8:11	8:16	8:21	8:26	8:31	8:41	8:45	8:51	9:06	9:21	9:47	10:12
Bus Terminal At Aventura Mall																						
NW 73 Ave & 186 St																						

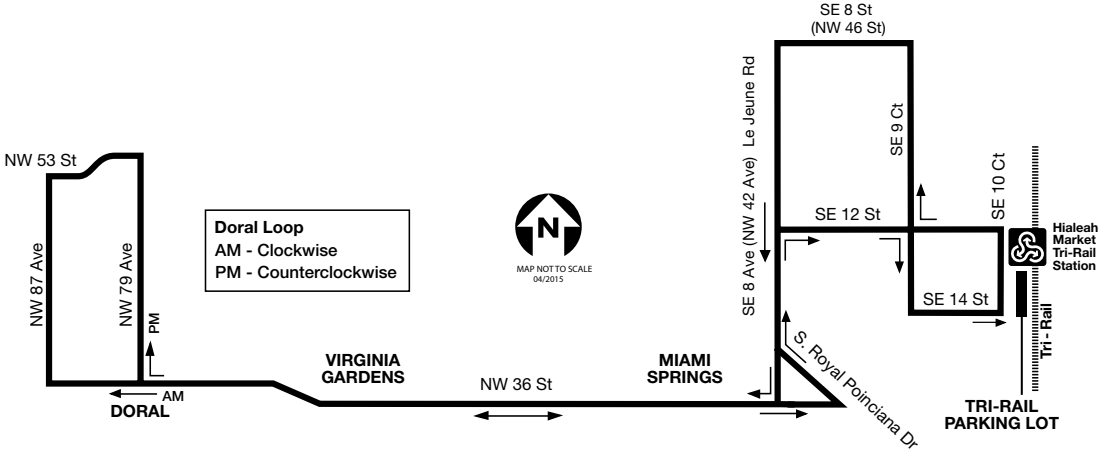
(PM) **AFTERNOON / TARDE / APREMIDI**

Stop																				
NW 87 Ave & 36 St																				
NW 41 St & 97 Ave																				
NW 36 St & Miller Dr																				
Earlington Heights Metrorail Station																				
Santa Clara Metrorail Station		3:27		3:37			3:57		4:07			4:17			4:27				4:42	
NW 16 St & 12 Ave		3:30		3:40			4:00		4:10			4:20			4:30				4:45	
NW 8 St & 1 Ct	3:02		3:22		3:37	3:52		3:57		4:07	4:12		4:17	4:22		4:27	4:32	4:37		4:42
SE 1 St & 1 Ave	3:10		3:30		3:45	4:00		4:05		4:15	4:20		4:25	4:30		4:35	4:40	4:45		4:50
Golden Glades (East Lot)	3:38	3:56	3:58	4:13	4:15	4:30	4:33	4:35	4:43	4:45	4:50	4:53	4:55	5:00	5:03	5:05	5:10	5:15	5:18	5:20
Bus Terminal At Aventura Mall												5:25								
NW 73 Ave & 186 St								5:10										5:50		

Stop																				
NW 87 Ave & 36 St																5:08				
NW 41 St & 97 Ave																5:29				
NW 36 St & Miller Dr																6:06				
Earlington Heights Metrorail Station																6:13				
Santa Clara Metrorail Station			4:57					5:12				5:32			6:07					
NW 16 St & 12 Ave			5:00					5:15				5:35			6:10					
NW 8 St & 1 Ct	4:47	4:52		4:57	4:59	5:02	5:07		5:17	5:22	5:27		5:37	5:52			6:07	6:22	6:52	7:22
SE 1 St & 1 Ave	4:55	5:00		5:05	5:07	5:10	5:15		5:25	5:30	5:35		5:45	6:00			6:15	6:30	7:00	7:30
Golden Glades (East Lot)	5:25	5:30	5:33	5:35	5:37	5:40	5:45	5:48	5:55	6:00	6:05	6:08	6:15	6:26	6:32	6:36	6:41	6:56	7:26	7:56
Bus Terminal At Aventura Mall								6:20				6:40								
NW 73 Ave & 186 St										6:35				7:01						

Scheduled times are approximate. Actual arrival and departure times may vary depending on traffic and road conditions. | Las horas publicadas son aproximadas, pues dependen del trafico y otras condiciones de las vias. | Ore yo apwoksimatif. Vre le bis yo ap rive oswa deplase ka varye selon kondisyon sikilasyon sou wout yo.

132 TRI-RAIL DORAL SHUTTLE



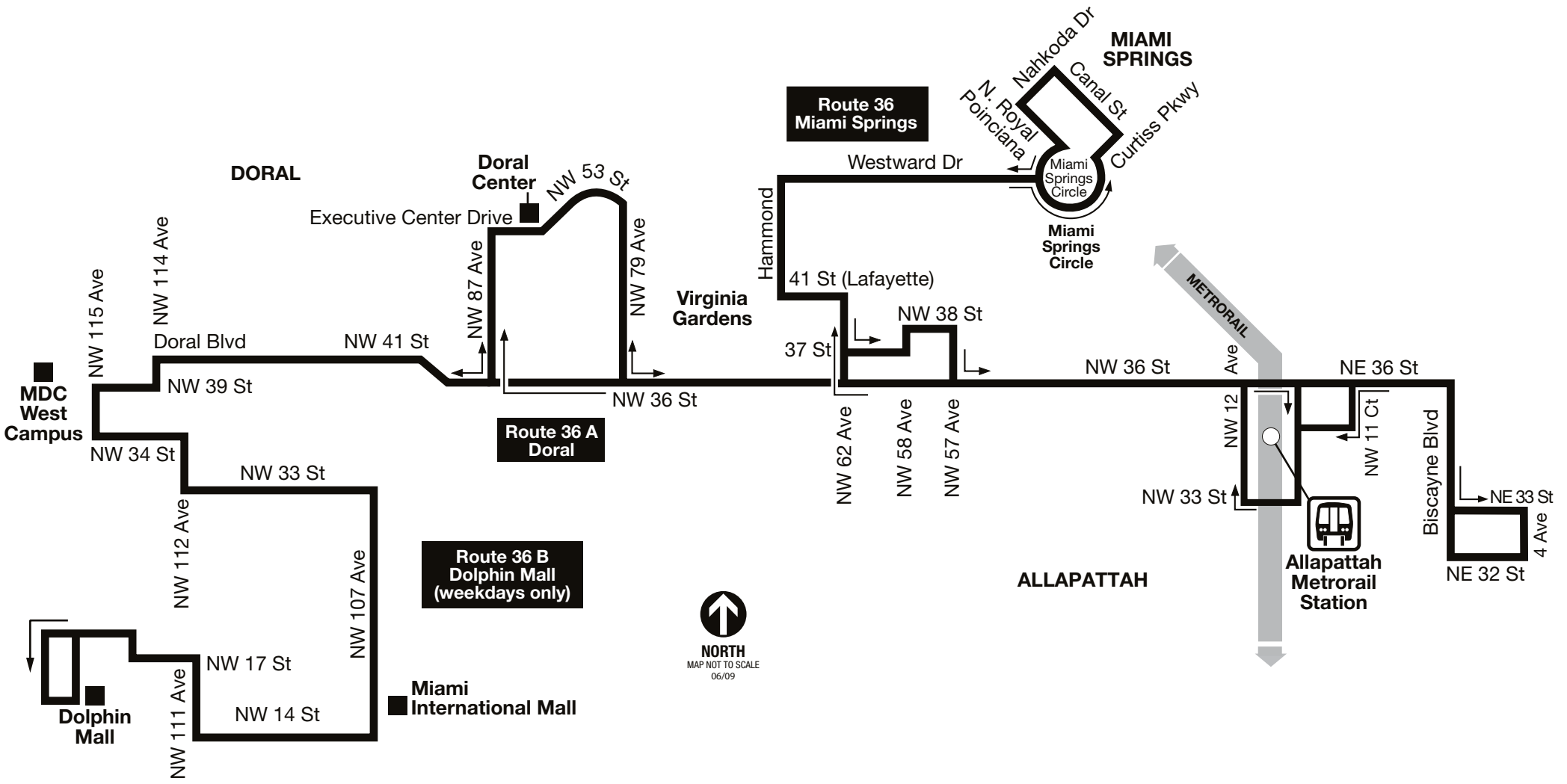
WEEKDAYS / DIAS LABORABLES / JOU LASEMÈN

EASTBOUND RUMBO ESTE / DIREKSYON IS	**MORNING** AM MAÑANA / MATEN		PM **AFTERNOON** TARDE / APREMIDI		
NW 53 St & 79 Ave	6:59	8:19	3:43	4:46	5:44
NW 36 St & 87 Ave	–	–	3:46	4:49	5:47
NW 36 St & Palmetto Dr	7:13	8:33	4:02	5:05	6:03
Hialeah Market Tri-Rail Station	7:27	8:47	4:15	5:18	6:16

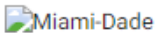
WESTBOUND RUMBO OESTE / DIREKSYON IWÈS	**MORNING** AM MAÑANA / MATEN			PM **AFTERNOON** TARDE / APREMIDI		
Hialeah Market Tri-Rail Station	6:31	7:51	8:51	2:56	4:15	5:18
NW 36 St & Palmetto Dr	6:43	8:03	9:03	3:08	4:27	5:30
NW 36 St & 87 Ave	6:56	8:16	9:16	–	–	–
NW 53 St & 79 Ave	6:59	8:19	9:19	3:22	4:41	5:44

Scheduled times are approximate. Actual arrival and departure times may vary depending on traffic and road conditions.
Las horas publicadas son aproximadas, pues dependen del trafico y otras condiciones de las vias. / Ore yo apwoksimatif. Vre le bis yo ap rive oswa deplase ka varye selon kondisyon sikilasyon sou wout yo.

Route 36


Route 36
Miami Springs
MIAMI
SPRINGS
Nahkoda Dr
Canal St
N. Royal
Poinciana
Curtiss Pkwy
Miami
Springs
Circle
Miami
Springs
Circle
Westward Dr
Hammond
41 St (Lafayette)
NW 38 St
37 St
METRORAIL
DORAL
Doral
Center
NW 53 St
Executive Center Drive
NW 87 Ave
NW 79 Ave
Virginia
Gardens
NW 115 Ave
NW 114 Ave
Doral Blvd
NW 41 St
NW 39 St
MDC
West
Campus
NW 36 St
NW 62 Ave
NW 58 Ave
NW 57 Ave
NW 12 Ave
NE 36 St
NW 11 Ct
Biscayne Blvd
NE 33 St
4 Ave
NE 32 St
NW 33 St
Route 36 A
Doral
NW 34 St
NW 33 St
NW 112 Ave
NW 107 Ave
Route 36 B
Dolphin Mall
(weekdays only)
ALLAPATTAH
Allapattah
Metrorail
Station
NORTH
MAP NOT TO SCALE
06/09
NW 17 St
NW 111 Ave
NW 14 St
Dolphin
Mall
Miami
International Mall

Metrobus Routes Schedule



METROBUS

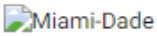
36 (Eastbound) WEEKDAY												
DOLPHIN MALL	NW 115 AV & 37 ST	NW 41 ST & 107 AV	NW 53 ST & NW 84 AV	NAHKODA DRIVE & CANAL ST	NW 36 ST & 57 AV	NW 36 ST & 42 AV	NW 36 ST & 33 AV	NW 36 ST & 32 AV	NW 36 ST & 27 AV	ALLAPATTAH METRORAIL STATION	NE 36 ST & BISCAYNE BLVD	NE 33 ST & BISCAYNE BLVD
-	-	-	5:37AM	-	5:48AM	5:53AM	5:56AM	5:57AM	5:58AM	6:05AM	6:14AM	6:16AM
-	-	-	-	5:52AM	6:03AM	6:08AM	6:12AM	6:13AM	6:14AM	6:21AM	6:30AM	6:32AM
6:16AM	6:33AM	6:41AM	6:49AM	-	7:03AM	7:10AM	7:14AM	7:15AM	7:17AM	7:26AM	7:38AM	7:40AM
-	-	-	6:17AM	-	6:31AM	6:36AM	6:40AM	6:41AM	6:42AM	6:49AM	6:58AM	7:00AM
-	-	-	-	6:35AM	6:46AM	6:51AM	6:55AM	6:56AM	6:57AM	7:06AM	7:18AM	7:20AM
-	-	-	7:10AM	-	7:23AM	7:30AM	7:34AM	7:35AM	7:37AM	7:46AM	7:58AM	8:00AM
7:18AM	7:32AM	7:38AM	7:48AM	-	8:03AM	8:10AM	8:14AM	8:15AM	8:17AM	8:26AM	8:38AM	8:40AM
-	-	-	-	7:33AM	7:43AM	7:50AM	7:54AM	7:55AM	7:57AM	8:06AM	8:18AM	8:20AM
-	-	-	8:08AM	-	8:23AM	8:30AM	8:34AM	8:35AM	8:37AM	8:46AM	8:58AM	9:00AM
8:26AM	8:40AM	8:49AM	8:59AM	-	9:14AM	9:21AM	9:25AM	9:26AM	9:28AM	9:37AM	9:48AM	9:50AM
-	-	-	-	8:28AM	8:44AM	8:51AM	8:55AM	8:56AM	8:58AM	9:07AM	9:18AM	9:20AM
-	-	-	-	9:25AM	9:39AM	9:46AM	9:50AM	9:51AM	9:53AM	10:02AM	10:13AM	10:15AM
9:25AM	9:38AM	9:44AM	9:54AM	-	10:09AM	10:16AM	10:20AM	10:21AM	10:23AM	10:32AM	10:43AM	10:45AM
10:25AM	10:38AM	10:44AM	10:54AM	-	11:09AM	11:16AM	11:20AM	11:21AM	11:23AM	11:32AM	11:43AM	11:45AM
-	-	-	-	10:25AM	10:39AM	10:46AM	10:50AM	10:51AM	10:53AM	11:02AM	11:13AM	11:15AM
-	-	-	-	11:23AM	11:37AM	11:44AM	11:48AM	11:49AM	11:51AM	12:01PM	12:13PM	12:15PM

11:30AM	11:43AM	11:49AM	11:59AM	-	12:16PM	12:23PM	12:28PM	12:29PM	12:31PM	12:41PM	12:53PM	12:55PM
12:29PM	12:43PM	12:48PM	12:59PM	-	01:16PM	01:23PM	01:28PM	01:29PM	01:31PM	01:41PM	01:53PM	01:55PM
-	-	-	-	12:34PM	12:46PM	12:53PM	12:58PM	12:59PM	01:01PM	01:11PM	01:23PM	01:25PM
01:39PM	01:53PM	01:58PM	02:09PM	-	02:26PM	02:33PM	02:38PM	02:39PM	02:41PM	02:51PM	03:03PM	03:05PM
-	-	-	-	01:39PM	01:51PM	01:58PM	02:03PM	02:04PM	02:06PM	02:16PM	02:28PM	02:30PM
-	-	-	-	02:40PM	02:52PM	02:59PM	03:04PM	03:05PM	03:07PM	03:17PM	03:29PM	03:31PM
02:44PM	02:58PM	03:03PM	03:15PM	-	03:32PM	03:39PM	03:44PM	03:45PM	03:47PM	03:57PM	04:10PM	04:12PM
-	-	-	02:46PM	-	03:03PM	03:10PM	03:15PM	03:16PM	03:18PM	03:28PM	03:40PM	03:42PM
-	-	-	-	03:42PM	03:54PM	04:01PM	04:06PM	04:07PM	04:08PM	04:17PM	04:30PM	04:32PM
03:44PM	04:00PM	04:05PM	04:16PM	-	04:37PM	04:44PM	04:49PM	04:50PM	04:51PM	05:00PM	05:13PM	05:15PM
-	-	-	03:53PM	-	04:14PM	04:21PM	04:26PM	04:27PM	04:28PM	04:37PM	04:50PM	04:52PM
04:41PM	04:55PM	05:00PM	05:11PM	-	05:32PM	05:39PM	05:44PM	05:45PM	05:46PM	05:55PM	06:08PM	06:10PM
-	-	-	-	04:42PM	04:52PM	04:59PM	05:04PM	05:05PM	05:06PM	05:15PM	05:28PM	05:30PM
-	-	-	04:51PM	-	05:12PM	05:19PM	05:24PM	05:25PM	05:26PM	05:35PM	05:48PM	05:50PM
-	-	-	-	05:43PM	05:53PM	06:00PM	06:04PM	06:05PM	06:06PM	06:14PM	06:25PM	06:27PM
05:51PM	06:05PM	06:10PM	06:18PM	-	06:38PM	06:44PM	06:48PM	06:49PM	06:50PM	06:58PM	07:09PM	07:11PM
-	-	-	05:53PM	-	06:14PM	06:20PM	06:24PM	06:25PM	06:26PM	06:34PM	06:45PM	06:47PM
-	-	-	-	06:32PM	06:42PM	06:48PM	06:52PM	06:53PM	06:54PM	07:02PM	-	-
-	-	-	06:45PM	-	07:05PM	07:10PM	07:14PM	07:15PM	07:16PM	07:23PM	07:33PM	07:35PM
06:49PM	07:02PM	07:07PM	07:15PM	-	07:28PM	07:33PM	07:36PM	07:37PM	07:38PM	07:45PM	07:55PM	07:57PM
-	-	-	-	07:38PM	07:45PM	07:50PM	07:54PM	07:55PM	07:56PM	08:03PM	08:11PM	08:12PM
07:45PM	07:58PM	08:03PM	08:11PM	-	08:23PM	08:28PM	08:31PM	08:32PM	08:33PM	08:40PM	08:48PM	08:49PM
08:30PM	08:42PM	08:46PM	08:54PM	-	09:06PM	09:11PM	09:14PM	09:15PM	09:16PM	09:23PM	-	-

-	-	-	-	08:38PM	08:46PM	08:51PM	08:54PM	08:55PM	08:56PM	09:03PM	09:11PM	09:12PM
-	-	-	09:21PM	-	09:33PM	09:38PM	09:41PM	09:42PM	09:43PM	09:50PM	09:58PM	09:59PM

Back to previous page

Metrobus Routes Schedule



METROBUS

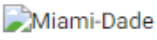
36 (Westbound) WEEKDAY												
NE 33 ST & BISCAYNE BLVD	NE 36 ST & BISCAYNE BLVD	ALLAPATTAH METRORAIL STATION	NW 36 ST & 27 AV	NW 36 ST & 32 AV	NW 36 ST & 33 AV	NW 36 ST & COOLIDGE DR	NW 36 ST & 57 AV	NAHKODA DRIVE & CANAL ST	NW 36 ST & 82 AV	NW 53 ST & NW 84 AV WKD	NW 53 ST & NW 84 AV	NW 41 ST & 107 AV
5:05AM	5:07AM	5:14AM	5:20AM	5:22AM	5:23AM	5:26AM	5:30AM	-	-	5:41AM	-	5:48AM
5:25AM	5:27AM	5:34AM	5:40AM	5:42AM	5:43AM	5:46AM	5:50AM	5:59AM	-	-	-	-
5:45AM	5:47AM	5:54AM	6:02AM	6:04AM	6:05AM	6:09AM	6:14AM	-	-	6:27AM	-	6:38AM
6:05AM	6:07AM	6:16AM	6:24AM	6:26AM	6:27AM	6:31AM	6:36AM	-	6:45AM	-	6:50AM	-
6:25AM	6:27AM	6:36AM	6:44AM	6:46AM	6:47AM	6:51AM	6:56AM	7:09AM	-	-	-	-
6:35AM	6:37AM	6:46AM	6:54AM	6:56AM	6:57AM	7:02AM	7:07AM	-	7:17AM	-	7:22AM	-
6:45AM	6:47AM	6:56AM	7:05AM	7:07AM	7:08AM	7:13AM	7:18AM	-	-	7:33AM	-	7:44AM
7:05AM	7:08AM	7:18AM	7:27AM	7:29AM	7:30AM	7:35AM	7:40AM	-	7:50AM	-	7:55AM	-
7:25AM	7:28AM	7:38AM	7:47AM	7:49AM	7:50AM	7:55AM	8:00AM	8:11AM	-	-	-	-
7:45AM	7:48AM	7:58AM	8:07AM	8:09AM	8:10AM	8:16AM	8:21AM	-	-	8:39AM	-	8:50AM
8:05AM	8:09AM	8:19AM	8:28AM	8:30AM	8:31AM	8:37AM	8:42AM	-	8:54AM	-	8:59AM	-
8:25AM	8:29AM	8:39AM	8:48AM	8:50AM	8:51AM	8:57AM	9:02AM	9:12AM	-	-	-	-
8:45AM	8:49AM	8:59AM	9:08AM	9:10AM	9:11AM	9:16AM	9:21AM	-	-	9:37AM	-	9:48AM
9:05AM	9:09AM	9:18AM	9:27AM	9:29AM	9:30AM	9:35AM	9:40AM	-	9:51AM	-	9:56AM	-
9:25AM	9:29AM	9:38AM	9:47AM	9:49AM	9:50AM	9:55AM	10:00AM	10:10AM	-	-	-	-
9:50AM	9:54AM	10:03AM	10:12AM	10:14AM	10:15AM	10:20AM	10:25AM	-	-	10:41AM	-	10:52AM

10:20AM	10:24AM	10:33AM	10:42AM	10:44AM	10:45AM	10:50AM	10:55AM	11:05AM	-	-	-	-
10:50AM	10:54AM	11:03AM	11:12AM	11:14AM	11:15AM	11:20AM	11:25AM	-	-	11:41AM	-	11:52AM
11:20AM	11:24AM	11:33AM	11:42AM	11:44AM	11:45AM	11:50AM	11:55AM	12:05PM	-	-	-	-
11:50AM	11:54AM	12:04PM	12:14PM	12:16PM	12:17PM	12:24PM	12:30PM	-	-	12:47PM	-	01:00PM
12:20PM	12:24PM	12:34PM	12:44PM	12:46PM	12:47PM	12:54PM	01:00PM	01:09PM	-	-	-	-
12:50PM	12:54PM	01:04PM	01:14PM	01:16PM	01:17PM	01:24PM	01:30PM	-	-	01:47PM	-	02:00PM
01:20PM	01:24PM	01:34PM	01:44PM	01:46PM	01:47PM	01:54PM	02:00PM	02:09PM	-	-	-	-
01:50PM	01:54PM	02:04PM	02:14PM	02:16PM	02:17PM	02:24PM	02:30PM	-	-	02:47PM	-	03:00PM
02:20PM	02:24PM	02:34PM	02:44PM	02:46PM	02:47PM	02:54PM	03:00PM	03:10PM	-	-	-	-
02:50PM	02:54PM	03:04PM	03:14PM	03:16PM	03:17PM	03:25PM	03:30PM	-	-	03:46PM	-	03:59PM
03:15PM	03:19PM	03:29PM	03:39PM	03:41PM	03:42PM	03:50PM	03:55PM	04:05PM	-	-	-	-
03:35PM	03:39PM	03:49PM	03:59PM	04:01PM	04:02PM	04:13PM	04:18PM	-	04:30PM	-	04:38PM	-
03:55PM	03:59PM	04:09PM	04:21PM	04:23PM	04:24PM	04:35PM	04:40PM	-	-	04:55PM	-	05:13PM
04:15PM	04:20PM	04:30PM	04:42PM	04:44PM	04:45PM	04:56PM	05:01PM	05:11PM	-	-	-	-
04:35PM	04:40PM	04:50PM	05:02PM	05:04PM	05:05PM	05:16PM	05:21PM	-	05:33PM	-	05:41PM	-
04:55PM	05:00PM	05:10PM	05:22PM	05:24PM	05:25PM	05:36PM	05:41PM	-	-	05:56PM	-	06:14PM
05:15PM	05:20PM	05:30PM	05:42PM	05:44PM	05:45PM	05:56PM	06:01PM	06:11PM	-	-	-	-
05:35PM	05:40PM	05:50PM	06:02PM	06:04PM	06:05PM	06:13PM	06:17PM	-	06:26PM	-	06:34PM	-
05:55PM	06:00PM	06:09PM	06:19PM	06:21PM	06:22PM	06:30PM	06:34PM	-	-	06:48PM	-	07:01PM
06:25PM	06:29PM	06:38PM	06:48PM	06:50PM	06:51PM	06:59PM	07:03PM	07:12PM	-	-	-	-
06:55PM	06:59PM	07:08PM	07:15PM	07:17PM	07:18PM	07:22PM	07:26PM	-	-	07:39PM	-	07:50PM
07:40PM	07:42PM	07:50PM	07:57PM	07:59PM	08:00PM	08:04PM	08:08PM	08:17PM	-	-	-	-
08:25PM	08:28PM	08:36PM	08:43PM	08:45PM	08:46PM	08:50PM	08:54PM	-	09:01PM	-	09:06PM	-



Back to previous page

Metrobus Routes Schedule



METROBUS

36 (Eastbound) SATURDAY												
DOLPHIN MALL	NW 115 AV & 37 ST	NW 41 ST & 107 AV	NW 53 ST & NW 84 AV	NAHKODA DRIVE & CANAL ST	NW 36 ST & 57 AV	NW 36 ST & 42 AV	NW 36 ST & 33 AV	NW 36 ST & 32 AV	NW 36 ST & 27 AV	ALLAPATTAH METRORAIL STATION	NE 36 ST & BISCAYNE BLVD	NE 33 ST & BISCAYNE BLVD
-	-	-	-	6:00AM	6:10AM	6:15AM	6:18AM	6:19AM	6:21AM	6:27AM	6:36AM	6:38AM
-	-	-	6:34AM	-	6:46AM	6:51AM	6:54AM	6:55AM	6:57AM	7:04AM	7:13AM	7:15AM
-	-	-	-	7:00AM	7:10AM	7:14AM	7:17AM	7:18AM	7:20AM	7:27AM	7:36AM	7:38AM
-	-	-	7:35AM	-	7:46AM	7:50AM	7:53AM	7:54AM	7:56AM	8:03AM	8:13AM	8:15AM
-	-	-	-	8:00AM	8:11AM	8:16AM	8:19AM	8:20AM	8:22AM	8:29AM	8:39AM	8:41AM
-	-	-	8:28AM	-	8:38AM	8:43AM	8:46AM	8:47AM	8:49AM	8:56AM	9:07AM	9:09AM
-	-	-	-	8:55AM	9:06AM	9:11AM	9:15AM	9:16AM	9:18AM	9:26AM	9:37AM	9:39AM
-	-	-	9:23AM	-	9:36AM	9:41AM	9:45AM	9:46AM	9:48AM	9:56AM	10:07AM	10:09AM
-	-	-	-	9:55AM	10:06AM	10:11AM	10:15AM	10:16AM	10:18AM	10:26AM	10:37AM	10:39AM
-	-	-	10:23AM	-	10:36AM	10:41AM	10:45AM	10:46AM	10:48AM	10:56AM	11:07AM	11:09AM
-	-	-	-	10:55AM	11:06AM	11:11AM	11:15AM	11:16AM	11:18AM	11:26AM	11:37AM	11:39AM
-	-	-	11:23AM	-	11:36AM	11:41AM	11:45AM	11:46AM	11:48AM	11:56AM	12:07PM	12:09PM
-	-	-	-	11:55AM	12:06PM	12:11PM	12:15PM	12:16PM	12:18PM	12:26PM	12:37PM	12:39PM
-	-	-	12:23PM	-	12:36PM	12:41PM	12:45PM	12:46PM	12:48PM	12:56PM	01:07PM	01:09PM
-	-	-	-	12:55PM	01:06PM	01:11PM	01:15PM	01:16PM	01:18PM	01:26PM	01:37PM	01:39PM

-	-	-	01:23PM	-	01:36PM	01:41PM	01:45PM	01:46PM	01:48PM	01:56PM	02:07PM	02:09PM
-	-	-	-	01:55PM	02:06PM	02:11PM	02:15PM	02:16PM	02:18PM	02:26PM	02:37PM	02:39PM
-	-	-	02:23PM	-	02:36PM	02:41PM	02:45PM	02:46PM	02:48PM	02:56PM	03:07PM	03:09PM
-	-	-	-	02:53PM	03:05PM	03:10PM	03:14PM	03:15PM	03:17PM	03:26PM	03:37PM	03:39PM
-	-	-	03:22PM	-	03:35PM	03:40PM	03:44PM	03:45PM	03:47PM	03:56PM	04:07PM	04:09PM
-	-	-	-	03:53PM	04:05PM	04:11PM	04:15PM	04:16PM	04:18PM	04:26PM	04:37PM	04:39PM
-	-	-	04:23PM	-	04:35PM	04:41PM	04:45PM	04:46PM	04:48PM	04:56PM	05:07PM	05:09PM
-	-	-	-	04:53PM	05:05PM	05:11PM	05:15PM	05:16PM	05:18PM	05:26PM	05:37PM	05:39PM
-	-	-	05:23PM	-	05:35PM	05:41PM	05:45PM	05:46PM	05:48PM	05:56PM	06:07PM	06:09PM
-	-	-	-	05:52PM	06:04PM	06:09PM	06:13PM	06:14PM	06:16PM	06:24PM	06:35PM	06:37PM
-	-	-	06:21PM	-	06:33PM	06:38PM	06:42PM	06:43PM	06:45PM	06:53PM	07:04PM	07:06PM
-	-	-	-	06:43PM	06:55PM	07:00PM	07:04PM	07:05PM	07:07PM	07:15PM	07:25PM	07:27PM
-	-	-	07:22PM	-	07:33PM	07:37PM	07:41PM	07:42PM	07:44PM	07:52PM	08:02PM	08:04PM
-	-	-	08:10PM	-	08:21PM	08:25PM	08:28PM	08:29PM	08:31PM	08:38PM	08:48PM	08:50PM

Back to previous page

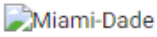
Metrobus Routes Schedule

36 (Westbound) SATURDAY

NE 33 ST & BISCAYNE BLVD	NE 36 ST & BISCAYNE BLVD	ALLAPATTAH METRORAIL STATION	NW 36 ST & 27 AV	NW 36 ST & 32 AV	NW 36 ST & 33 AV	NW 36 ST & COOLIDGE DR	NW 36 ST & 57 AV	NAHKODA DRIVE & CANAL ST	NW 36 ST & 82 AV	NW 53 ST & NW 84 AV WKD	NW 53 ST & NW 84 AV	NW 41 ST & 107 AV	NW 115 AV & 37 ST	DOLPHIN MALL
5:48AM	5:50AM	5:57AM	6:05AM	6:08AM	6:09AM	6:13AM	6:16AM	-	6:24AM	-	6:28AM	-	-	-
-	-	-	-	6:39AM	6:40AM	6:44AM	6:47AM	6:55AM	-	-	-	-	-	-
6:44AM	6:46AM	6:54AM	7:02AM	7:05AM	7:06AM	7:10AM	7:14AM	-	7:22AM	-	7:28AM	-	-	-
7:20AM	7:22AM	7:31AM	7:39AM	7:42AM	7:43AM	7:47AM	7:51AM	-	7:59AM	-	8:05AM	-	-	-
-	-	-	-	7:38AM	7:39AM	7:43AM	7:47AM	7:55AM	-	-	-	-	-	-
7:50AM	7:52AM	8:01AM	8:10AM	8:13AM	8:14AM	8:19AM	8:23AM	8:31AM	-	-	-	-	-	-
8:20AM	8:23AM	8:32AM	8:41AM	8:44AM	8:45AM	8:50AM	8:54AM	-	9:03AM	-	9:07AM	-	-	-
8:50AM	8:53AM	9:02AM	9:11AM	9:14AM	9:15AM	9:20AM	9:24AM	9:32AM	-	-	-	-	-	-
9:20AM	9:24AM	9:33AM	9:42AM	9:45AM	9:46AM	9:51AM	9:55AM	-	10:04AM	-	10:08AM	-	-	-
9:50AM	9:54AM	10:03AM	10:12AM	10:15AM	10:16AM	10:21AM	10:25AM	10:33AM	-	-	-	-	-	-
10:20AM	10:24AM	10:33AM	10:42AM	10:45AM	10:46AM	10:51AM	10:55AM	-	11:04AM	-	11:08AM	-	-	-
10:50AM	10:54AM	11:03AM	11:12AM	11:15AM	11:16AM	11:21AM	11:25AM	11:33AM	-	-	-	-	-	-
11:20AM	11:24AM	11:33AM	11:42AM	11:45AM	11:46AM	11:51AM	11:55AM	-	12:05PM	-	12:09PM	-	-	-
11:50AM	11:54AM	12:04PM	12:13PM	12:16PM	12:17PM	12:22PM	12:26PM	12:34PM	-	-	-	-	-	-
12:20PM	12:24PM	12:34PM	12:43PM	12:46PM	12:47PM	12:52PM	12:56PM	-	01:06PM	-	01:10PM	-	-	-
12:50PM	12:54PM	01:04PM	01:13PM	01:16PM	01:17PM	01:22PM	01:26PM	01:34PM	-	-	-	-	-	-
01:20PM	01:24PM	01:34PM	01:43PM	01:46PM	01:47PM	01:52PM	01:56PM	-	02:06PM	-	02:10PM	-	-	-
01:50PM	01:54PM	02:04PM	02:13PM	02:16PM	02:17PM	02:22PM	02:26PM	02:34PM	-	-	-	-	-	-
02:20PM	02:24PM	02:34PM	02:43PM	02:46PM	02:47PM	02:52PM	02:56PM	-	03:06PM	-	03:10PM	-	-	-
02:50PM	02:54PM	03:05PM	03:14PM	03:17PM	03:18PM	03:23PM	03:27PM	03:35PM	-	-	-	-	-	-
03:20PM	03:24PM	03:35PM	03:44PM	03:47PM	03:48PM	03:53PM	03:57PM	-	04:05PM	-	04:09PM	-	-	-
03:50PM	03:54PM	04:05PM	04:14PM	04:17PM	04:18PM	04:23PM	04:27PM	04:35PM	-	-	-	-	-	-
04:20PM	04:24PM	04:34PM	04:43PM	04:46PM	04:47PM	04:52PM	04:56PM	-	05:04PM	-	05:08PM	-	-	-
04:50PM	04:54PM	05:04PM	05:13PM	05:16PM	05:17PM	05:22PM	05:26PM	05:34PM	-	-	-	-	-	-
05:20PM	05:24PM	05:34PM	05:43PM	05:46PM	05:47PM	05:52PM	05:56PM	-	06:04PM	-	06:08PM	-	-	-

05:50PM	05:54PM	06:04PM	06:12PM	06:15PM	06:16PM	06:20PM	06:24PM	06:32PM	-	-	-	-	-	-
06:20PM	06:23PM	06:33PM	06:41PM	06:44PM	06:45PM	06:49PM	06:53PM	-	07:01PM	-	07:05PM	-	-	-
07:15PM	07:18PM	07:27PM	07:35PM	07:38PM	07:39PM	07:43PM	07:47PM	-	07:55PM	-	07:59PM	-	-	-
08:15PM	08:17PM	08:25PM	08:32PM	08:34PM	08:35PM	08:39PM	08:43PM	08:51PM	-	-	-	-	-	-

Metrobus Routes Schedule



METROBUS

36 (Eastbound) SUNDAY												
DOLPHIN MALL	NW 115 AV & 37 ST	NW 41 ST & 107 AV	NW 53 ST & NW 84 AV	NAHKODA DRIVE & CANAL ST	NW 36 ST & 57 AV	NW 36 ST & 42 AV	NW 36 ST & 33 AV	NW 36 ST & 32 AV	NW 36 ST & 27 AV	ALLAPATTAH METRORAIL STATION	NE 36 ST & BISCAYNE BLVD	NE 33 ST & BISCAYNE BLVD
-	-	-	-	6:04AM	6:14AM	6:18AM	6:21AM	6:22AM	6:24AM	6:30AM	6:37AM	6:39AM
-	-	-	6:43AM	-	6:53AM	6:57AM	7:00AM	7:01AM	7:03AM	7:09AM	7:16AM	7:18AM
-	-	-	-	7:05AM	7:15AM	7:19AM	7:22AM	7:23AM	7:25AM	7:31AM	7:38AM	7:40AM
-	-	-	7:32AM	-	7:42AM	7:46AM	7:49AM	7:50AM	7:52AM	8:00AM	8:08AM	8:10AM
-	-	-	-	8:02AM	8:12AM	8:16AM	8:19AM	8:20AM	8:22AM	8:30AM	8:38AM	8:40AM
-	-	-	8:29AM	-	8:39AM	8:43AM	8:46AM	8:47AM	8:49AM	8:57AM	9:06AM	9:08AM
-	-	-	-	8:57AM	9:08AM	9:13AM	9:16AM	9:17AM	9:19AM	9:27AM	9:36AM	9:38AM
-	-	-	9:27AM	-	9:38AM	9:43AM	9:46AM	9:47AM	9:49AM	9:57AM	10:06AM	10:08AM
-	-	-	-	9:57AM	10:08AM	10:13AM	10:16AM	10:17AM	10:19AM	10:27AM	10:36AM	10:38AM
-	-	-	10:27AM	-	10:38AM	10:43AM	10:46AM	10:47AM	10:49AM	10:57AM	11:06AM	11:08AM
-	-	-	-	10:57AM	11:08AM	11:13AM	11:16AM	11:17AM	11:19AM	11:27AM	11:36AM	11:38AM
-	-	-	11:27AM	-	11:38AM	11:43AM	11:46AM	11:47AM	11:49AM	11:57AM	12:06PM	12:08PM
-	-	-	-	11:56AM	12:09PM	12:13PM	12:16PM	12:17PM	12:19PM	12:27PM	12:36PM	12:38PM
-	-	-	12:26PM	-	12:39PM	12:43PM	12:46PM	12:47PM	12:49PM	12:57PM	01:06PM	01:08PM
-	-	-	-	12:56PM	01:09PM	01:13PM	01:16PM	01:17PM	01:19PM	01:27PM	01:36PM	01:38PM

-	-	-	01:26PM	-	01:39PM	01:43PM	01:46PM	01:47PM	01:49PM	01:57PM	02:06PM	02:08PM
-	-	-	-	01:56PM	02:09PM	02:13PM	02:16PM	02:17PM	02:19PM	02:27PM	02:36PM	02:38PM
-	-	-	02:26PM	-	02:39PM	02:43PM	02:46PM	02:47PM	02:49PM	02:57PM	03:06PM	03:08PM
-	-	-	-	02:55PM	03:08PM	03:12PM	03:16PM	03:17PM	03:19PM	03:27PM	03:36PM	03:38PM
-	-	-	03:24PM	-	03:37PM	03:41PM	03:45PM	03:46PM	03:48PM	03:56PM	04:06PM	04:08PM
-	-	-	-	03:54PM	04:07PM	04:11PM	04:15PM	04:16PM	04:18PM	04:26PM	04:36PM	04:38PM
-	-	-	04:24PM	-	04:37PM	04:41PM	04:45PM	04:46PM	04:48PM	04:56PM	05:06PM	05:08PM
-	-	-	-	04:54PM	05:07PM	05:11PM	05:15PM	05:16PM	05:18PM	05:26PM	05:36PM	05:38PM
-	-	-	05:24PM	-	05:37PM	05:41PM	05:45PM	05:46PM	05:48PM	05:56PM	06:06PM	06:08PM
-	-	-	-	05:56PM	06:09PM	06:12PM	06:15PM	06:16PM	06:18PM	06:26PM	06:36PM	06:38PM
-	-	-	06:29PM	-	06:40PM	06:43PM	06:46PM	06:47PM	06:49PM	06:57PM	07:07PM	07:09PM
-	-	-	-	06:59PM	07:10PM	07:13PM	07:16PM	07:17PM	07:19PM	07:26PM	-	-
-	-	-	07:32PM	-	07:42PM	07:45PM	07:48PM	07:49PM	07:51PM	07:58PM	08:07PM	08:09PM
-	-	-	08:07PM	-	08:17PM	08:20PM	08:23PM	08:24PM	08:26PM	08:32PM	-	-

Back to previous page

Metrobus Routes Schedule

METROBUS

36 (Westbound) SUNDAY

NE 33 ST & BISCAYNE BLVD	NE 36 ST & BISCAYNE BLVD	ALLAPATTAH METRORAIL STATION	NW 36 ST & 27 AV	NW 36 ST & 32 AV	NW 36 ST & 33 AV	NW 36 ST & COOLIDGE DR	NW 36 ST & 57 AV	NAHKODA DRIVE & CANAL ST	NW 36 ST & 82 AV	NW 53 ST & NW 84 AV WKD	NW 53 ST & NW 84 AV	NW 41 ST & 107 AV	NW 115 AV & 37 ST	DOLPHIN MALL
-	-	-	-	6:41AM	6:42AM	6:45AM	6:49AM	6:58AM	-	-	-	-	-	-
6:50AM	6:52AM	6:59AM	7:05AM	7:07AM	7:08AM	7:12AM	7:16AM	-	7:24AM	-	7:27AM	-	-	-
7:30AM	7:32AM	7:39AM	7:45AM	7:47AM	7:48AM	7:52AM	7:56AM	-	8:04AM	-	8:07AM	-	-	-
-	-	-	-	7:38AM	7:39AM	7:43AM	7:47AM	7:56AM	-	-	-	-	-	-
7:50AM	7:52AM	7:59AM	8:07AM	8:09AM	8:10AM	8:14AM	8:18AM	8:27AM	-	-	-	-	-	-
8:20AM	8:22AM	8:29AM	8:37AM	8:39AM	8:40AM	8:44AM	8:48AM	-	8:56AM	-	8:59AM	-	-	-
8:50AM	8:52AM	8:59AM	9:07AM	9:10AM	9:11AM	9:15AM	9:19AM	9:28AM	-	-	-	-	-	-
9:20AM	9:22AM	9:30AM	9:38AM	9:41AM	9:42AM	9:46AM	9:50AM	-	9:58AM	-	10:01AM	-	-	-
9:50AM	9:52AM	10:00AM	10:08AM	10:11AM	10:12AM	10:16AM	10:20AM	10:29AM	-	-	-	-	-	-
10:20AM	10:22AM	10:30AM	10:38AM	10:41AM	10:42AM	10:46AM	10:50AM	-	10:58AM	-	11:01AM	-	-	-
10:50AM	10:52AM	11:00AM	11:08AM	11:11AM	11:12AM	11:16AM	11:20AM	11:29AM	-	-	-	-	-	-
11:20AM	11:22AM	11:30AM	11:38AM	11:41AM	11:42AM	11:46AM	11:50AM	-	11:58AM	-	12:01PM	-	-	-
11:49AM	11:51AM	11:59AM	12:07PM	12:10PM	12:11PM	12:15PM	12:19PM	12:28PM	-	-	-	-	-	-
12:19PM	12:22PM	12:30PM	12:38PM	12:41PM	12:42PM	12:46PM	12:50PM	-	12:58PM	-	01:01PM	-	-	-
12:49PM	12:52PM	01:00PM	01:08PM	01:11PM	01:12PM	01:16PM	01:20PM	01:29PM	-	-	-	-	-	-
01:19PM	01:22PM	01:30PM	01:38PM	01:41PM	01:42PM	01:46PM	01:50PM	-	01:58PM	-	02:01PM	-	-	-
01:49PM	01:52PM	02:00PM	02:08PM	02:11PM	02:12PM	02:16PM	02:20PM	02:29PM	-	-	-	-	-	-
02:19PM	02:22PM	02:30PM	02:38PM	02:41PM	02:42PM	02:46PM	02:50PM	-	02:58PM	-	03:01PM	-	-	-
02:49PM	02:52PM	03:00PM	03:08PM	03:10PM	03:11PM	03:15PM	03:19PM	03:28PM	-	-	-	-	-	-
03:19PM	03:22PM	03:30PM	03:38PM	03:40PM	03:41PM	03:45PM	03:49PM	-	03:56PM	-	03:59PM	-	-	-
03:49PM	03:52PM	04:01PM	04:09PM	04:11PM	04:12PM	04:16PM	04:20PM	04:29PM	-	-	-	-	-	-
04:19PM	04:22PM	04:31PM	04:39PM	04:41PM	04:42PM	04:46PM	04:50PM	-	04:57PM	-	05:00PM	-	-	-
04:49PM	04:52PM	05:01PM	05:09PM	05:11PM	05:12PM	05:16PM	05:20PM	05:29PM	-	-	-	-	-	-
05:19PM	05:22PM	05:31PM	05:39PM	05:41PM	05:42PM	05:46PM	05:50PM	-	05:57PM	-	06:00PM	-	-	-
05:49PM	05:52PM	06:01PM	06:08PM	06:10PM	06:11PM	06:15PM	06:19PM	06:28PM	-	-	-	-	-	-

06:19PM	06:22PM	06:30PM	06:37PM	06:39PM	06:40PM	06:44PM	06:48PM	-	06:55PM	-	06:58PM	-	-	-
07:14PM	07:16PM	07:23PM	07:30PM	07:32PM	07:33PM	07:37PM	07:41PM	-	07:48PM	-	07:51PM	-	-	-
08:14PM	08:16PM	08:23PM	08:30PM	08:32PM	08:33PM	08:37PM	08:41PM	08:50PM	-	-	-	-	-	-

APPENDIX J: County Approval Documentation

Memorandum

Date: Thursday, December 21, 2023

Subject: DR 2022006813
Applicant Name: Doral International Towers

PROJECT DESCRIPTION

The proposed redevelopment will include a 470-room hotel, 1,739 apartment units, and 409,754 square-feet for non-residential use that would include the spa, clubhouse, ballroom, and retail space. Trip generation calculations indicate that the proposed development will generate 577 net new trips during the weekday AM peak hour and 593 net new trips during the weekday PM peak hour. The project is expected to be completed by the year 2027. Access to the development will be via seven driveways connecting to NW 87th Avenue and Doral Boulevard as detailed below:

- Driveway 1. Right-in only inbound and right-out only outbound driveway pair on NW 87th Avenue providing access to Building 1.
- Driveway 2. Right-in only inbound and right-out only outbound driveway pair on NW 87th Avenue providing access to Building 2.
- Driveway 3. Full access signalized driveway on NW 87th Avenue providing access to Building 3, Hotel, Ballroom and Clubhouse.
- Rideshare Drop-Off Loop. Right-in only inbound on Doral Boulevard and right-out only outbound driveway pair on NW 87th Avenue providing rideshare vehicles access to Building 3, and adjacent buildings.
- Driveway 4. Full access signalized driveway on Doral Boulevard providing access to Building 3, Building 4, Building 5, Ballroom, spa, and Clubhouse.
- Driveway 5. Right-in only inbound and right-out only outbound driveway pair on Doral Boulevard providing access to Building 4.
- Driveway 6. Right-in/right-out only driveway on Doral Boulevard providing access to Building 6 and the spa. While this driveway currently aligns with an existing full median opening, the development proposes a right-in/right-out only restricted access for the site at this location.

PROJECT LOCATION

The proposed redevelopment is located on a parcel of land within the Trump National Resort Doral located on the northwest corner of the intersection of NW 36th Street Extension/Doral Boulevard and NW 87th Avenue/Galloway Road in the City of Doral.

COMMENTS/RECOMMENDATION

Miami-Dade County Department of Transportation and Public Works (DTPW) Traffic Engineering Division has reviewed the subject application and has no objections to this application, subject to the following conditions:

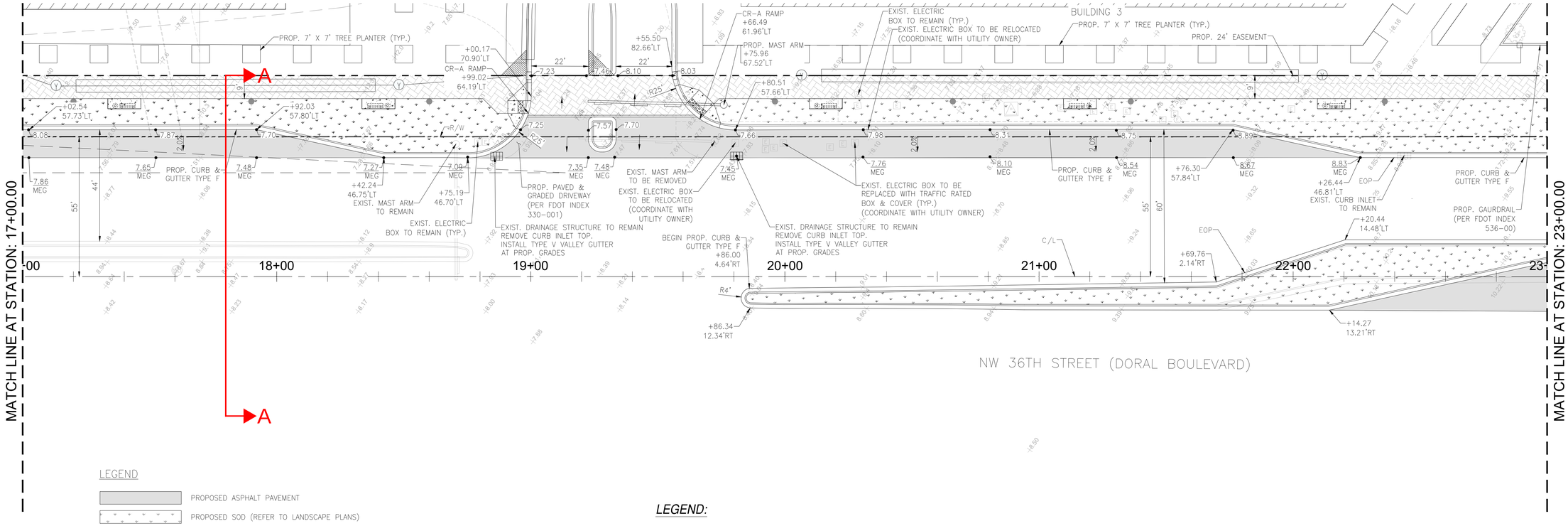
1. Construct an exclusive right-turn deceleration lanes at Driveway 1, 2, 3, 4 and 5 as well as at the westbound entrance to the rideshare drop off loop on Doral Boulevard.
2. Construct an exclusive southbound right-turn lane at the intersection of Doral Boulevard/NW 36th Street and NW 87th Avenue.
3. Construct an exclusive northbound left-turn/U-turn Lane at the median opening on NW 87th Avenue and Windsor Doral apartments.
4. Install high emphasis cross walks at the intersection of Doral Boulevard/NW 36th Street and NW 87th Avenue and at the intersection of NW 87th Avenue with NW 41st Street.
5. Install a channelized island on Doral Boulevard to physically restrict left-turns at the western most project Driveway (Driveway 6) which also aligns with the driveway to the AT&T field office on the southside.
6. Install bus shelters at existing transit stops on westbound Doral Boulevard 480 feet west of NW 87th Avenue and on southbound NW 87th Avenue 200 feet north of NW 41st Street.
7. Extend the eastbound left-turn lane at the intersection of Doral Boulevard/NW 36th Street and NW 87th Avenue. This improvement would require closing the existing directional median opening 350 feet west of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage.
8. Extend the northbound left-turn lane at the intersection of NW 87th Avenue and NW 41st Street (Driveway 3). This improvement would require closing the existing directional median opening 300 feet south of the intersection and reconfiguring to create back-to-back left turn lanes of adequate storage.
9. The Highway Division has provided its approval for the typical sections. Please ensure that the conditions outlined by the Highway Division are met as follows:
   - The typical sections along NW 36th Street are acceptable. The through lanes are to be 11 feet wide and the asphalt shall be comprised of two inches of structural course and one inch of friction course.
   - The typical sections along NW 87th Avenue are acceptable except that the proposed U-turn at approximately sta. 55 will not work unless you widen the southbound pavement (extend the southbound right-turn lane). The through lanes are to be 11 feet wide and the asphalt shall be comprised of two inches of structural course and one inch of friction course.
10. Please ensure that all trees within the sight triangles must comply with the FDOT standards outlined in the "Tree Spacing Table" provided below.

considered.

TREE SPACING TABLE **

Description	Design Speed (mph)													
	30		35		40		45		50		55		60	
Diameter (Within Limits Of Sight Window)	(Inches)													
	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18	>4≤11	>11≤18
	(Feet)													
Minimum Spacing (c. to c. Of Trunk)	25	90	30	105	35	120	40	135	50	150	55	165	60	180

If you have any questions concerning the comments, or wish to discuss this matter further, please contact Leanne Garcia Fernandez at (305) 439-6491.



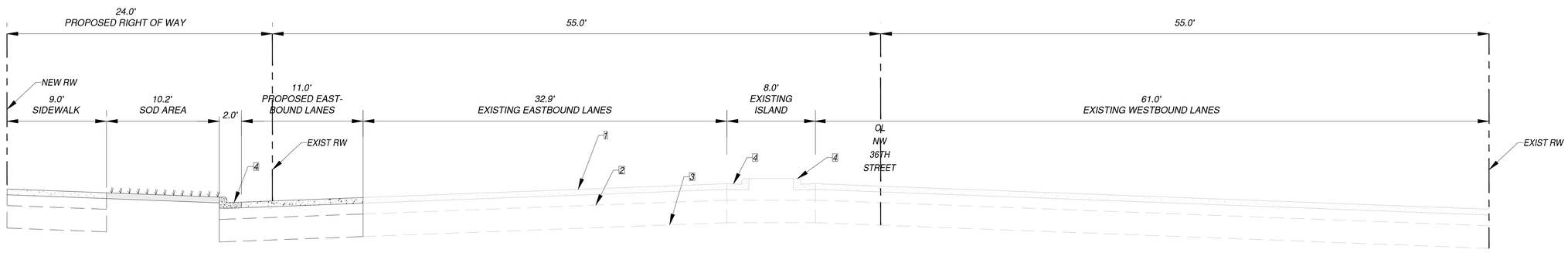
N
1"=20'

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED SOD (REFER TO LANDSCAPE PLANS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BUILDING
- DETECTABLE WARNINGS
- PROPOSED BRICK PAVERS
- 10X10 SIGHT VISIBILITY TRIANGLE
- FDOT CLEAR SIGHT TRIANGLE

LEGEND:

1. *ROADWAY ASPHALT PAVEMENT*
2. *8" LIMEROCK BASE MIN. LBR 100, COMPACTED 98% MAX. DENSITY PER AASHTO T-180.*
3. *12" STABILIZED SUBGRADE MIN. LBR 40, COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.*
4. *TYPE F CURB AND GUTTER*
5. *TYPE D CURB*



TYPICAL SECTION A-A
NW 36TH STREET
N.T.S.
STA: 17+80

bcc engineering
BCC ENGINEERING LLC
6401 SW 87TH AVE #200
MIAMI, FL 33173
(305) 670-2350

DETAILED DESIGN PLANS

REVISIONS:

OWNER:
TRUMP ENDEAVOR 12, LLC

DORAL INTERNATIONAL TOWERS
BY: TRUMP ENDEAVOR 12 LLC
CITY OF DORAL, FLORIDA

SEAL:
DANIEL GIRALDO LICENSE No. 94566 STATE OF FLORIDA PROFESSIONAL ENGINEER

DANIEL GIRALDO, P.E.
FL LICENSE NO. 94566

This item has been digitally signed and sealed by Daniel Giraldo, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

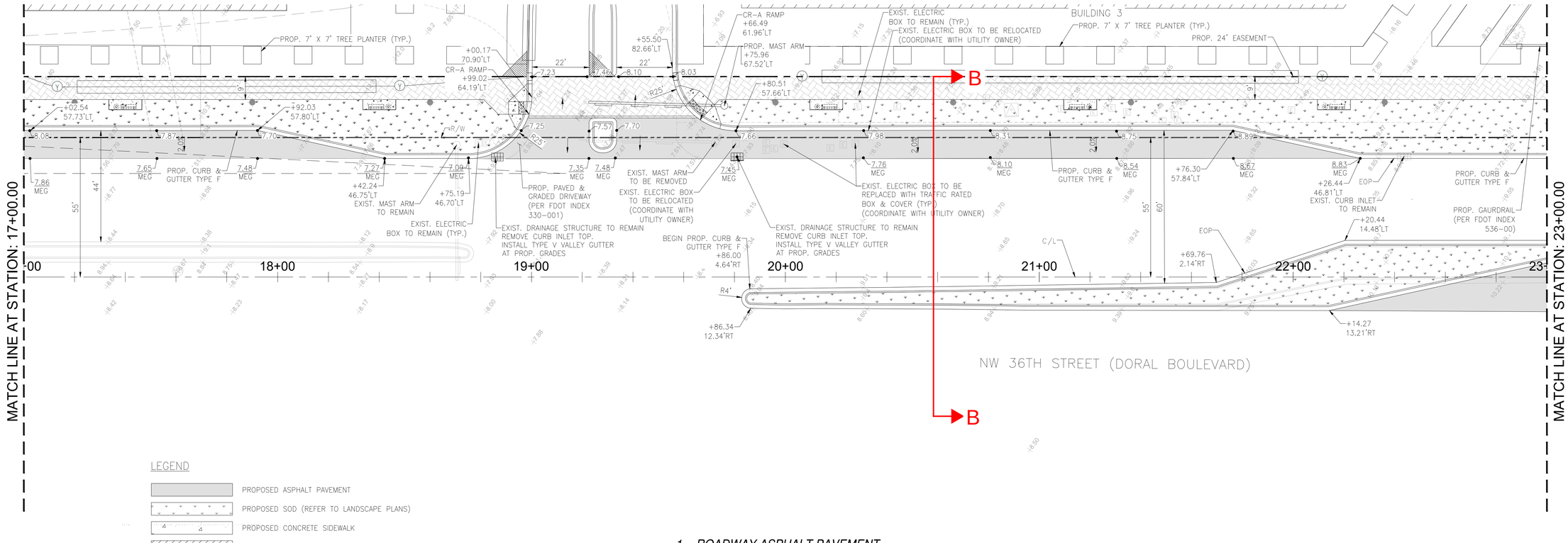
ROADWAY AND DRAINAGE IMPROVEMENTS

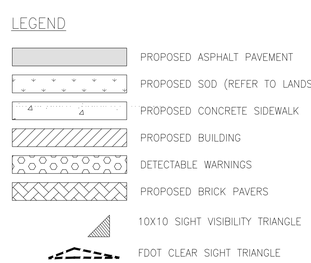
DATE : 11/08/2023
SCALE : AS SHOWN
DRAWN BY: L.O.
CHECK BY: W.R.
JOB NO. : 01022091.00

C-11.1

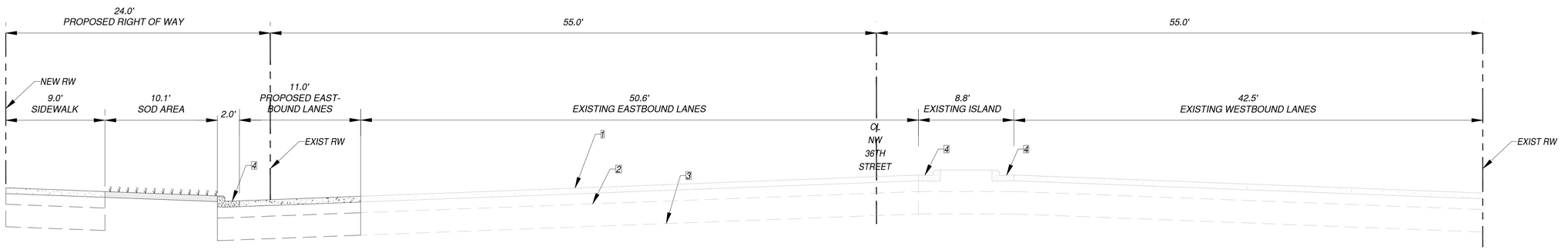
SHEET NO. :

NOT FOR CONSTRUCTION





1. *ROADWAY ASPHALT PAVEMENT*
2. *8" LIMEROCK BASE MIN. LBR 100, COMPACTED 98% MAX. DENSITY PER AASHTO T-180.*
3. *12" STABILIZED SUBGRADE MIN. LBR 40, COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.*
4. *TYPE F CURB AND GUTTER*
5. *TYPE D CURB*



TYPICAL SECTION B-B
NW 36TH STREET
N.T.S.
STA: 20+60

bcc engineering
BCC ENGINEERING LLC
6401 SW 87TH AVE #200
MIAMI, FL 33173
(305) 670-2350

DETAILED DESIGN PLANS

REVISIONS:

OWNER:
TRUMP ENDEAVOR 12, LLC

DORAL INTERNATIONAL TOWERS
BY: TRUMP ENDEAVOR 12 LLC
CITY OF DORAL, FLORIDA

SEAL:

DANIEL GIRALDO, P.E.
FL LICENSE NO. 94566
This item has been digitally signed and sealed by Daniel Giraldo, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

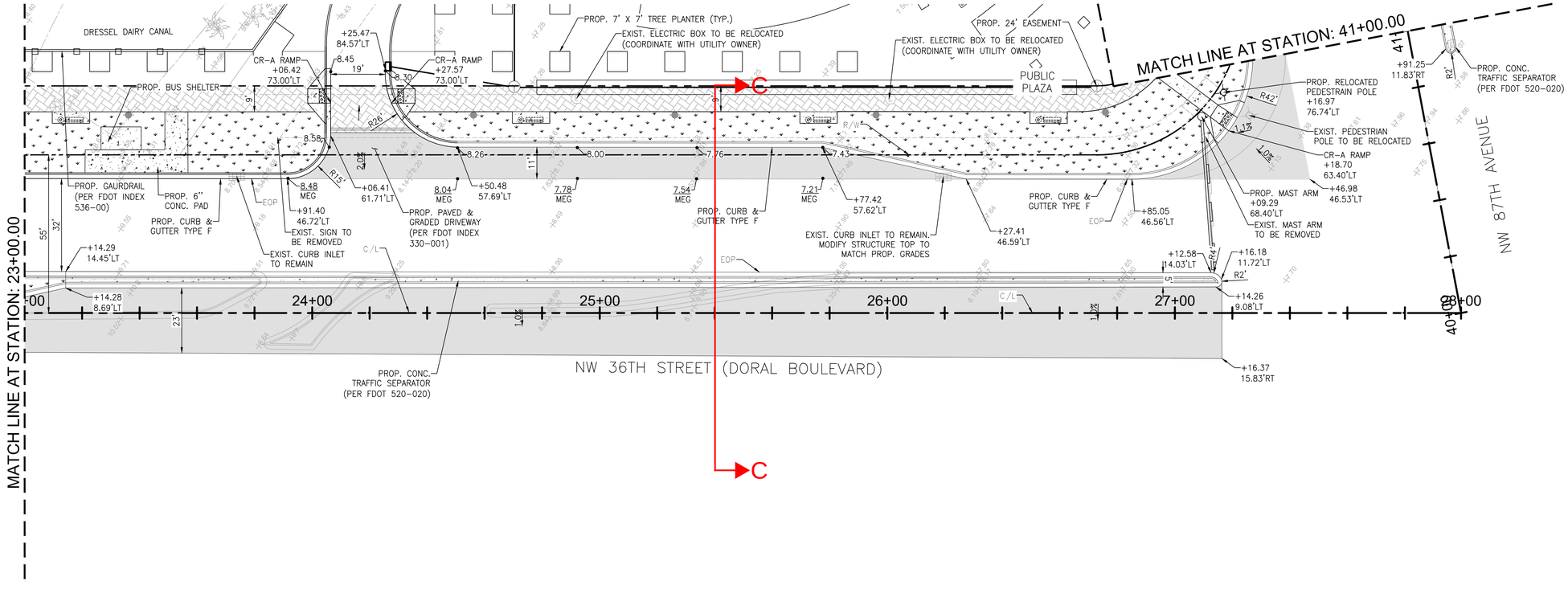
ROADWAY AND DRAINAGE IMPROVEMENTS

DATE : 11/08/2023
SCALE : AS SHOWN
DRAWN BY: L.O.
CHECK BY: W.R.
JOB NO. : 01022091.00

C-11.1

SHEET NO. :

NOT FOR CONSTRUCTION



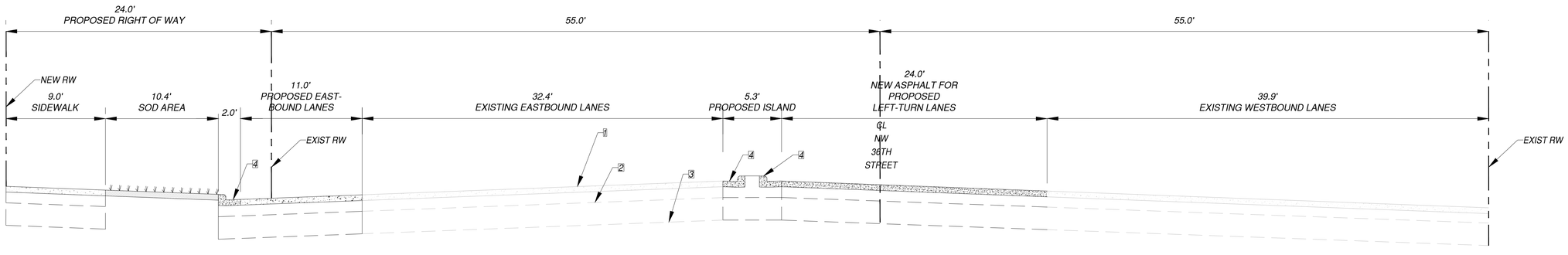
1"=20'

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED SOD (REFER TO LANDSCAPE PLANS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BUILDING
- DETECTABLE WARNINGS
- PROPOSED BRICK PAVERS
- 10X10 SIGHT VISIBILITY TRIANGLE
- FDOT CLEAR SIGHT TRIANGLE

LEGEND:

1. *ROADWAY ASPHALT PAVEMENT*
2. *8" LIMEROCK BASE MIN. LBR 100, COMPACTED 98% MAX. DENSITY PER AASHTO T-180.*
3. *12" STABILIZED SUBGRADE MIN. LBR 40, COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.*
4. *TYPE F CURB AND GUTTER*
5. *TYPE D CURB*



TYPICAL SECTION C-C
NW 36TH STREET
N.T.S.
STA: 25+40

bcc engineering
BCC ENGINEERING LLC
6401 SW 87TH AVE #200
MIAMI, FL 33173
(305) 670-2350

DETAILED DESIGN PLANS

REVISIONS:

OWNER:
TRUMP ENDEAVOR 12, LLC

DORAL INTERNATIONAL TOWERS
BY: TRUMP ENDEAVOR 12 LLC
CITY OF DORAL, FLORIDA

SEAL:

DANIEL GIRALDO LICENSE No. 94566 STATE OF FLORIDA PROFESSIONAL ENGINEER

DANIEL GIRALDO, P.E.
FL LICENSE NO. 94566

This item has been digitally signed and sealed by Daniel Giraldo, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

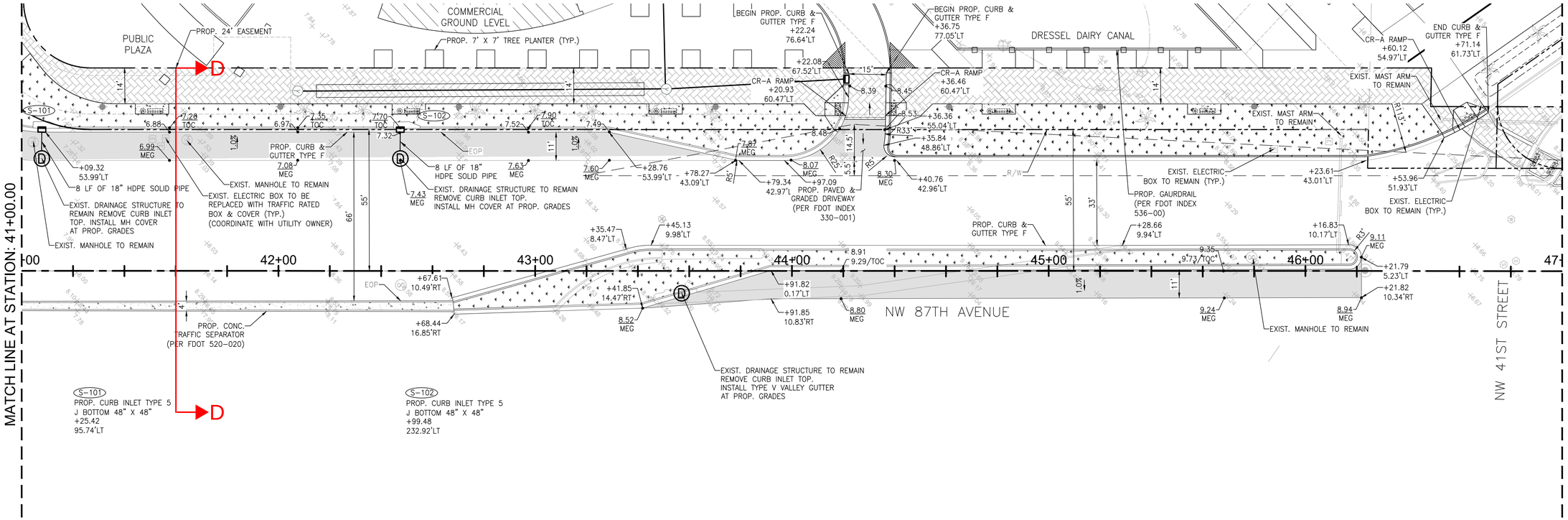
ROADWAY AND DRAINAGE IMPROVEMENTS

DATE : 11/08/2023
SCALE : AS SHOWN
DRAWN BY: L.O.
CHECK BY: W.R.
JOB NO. : 01022091.00

C-11.2

SHEET NO. :

NOT FOR CONSTRUCTION

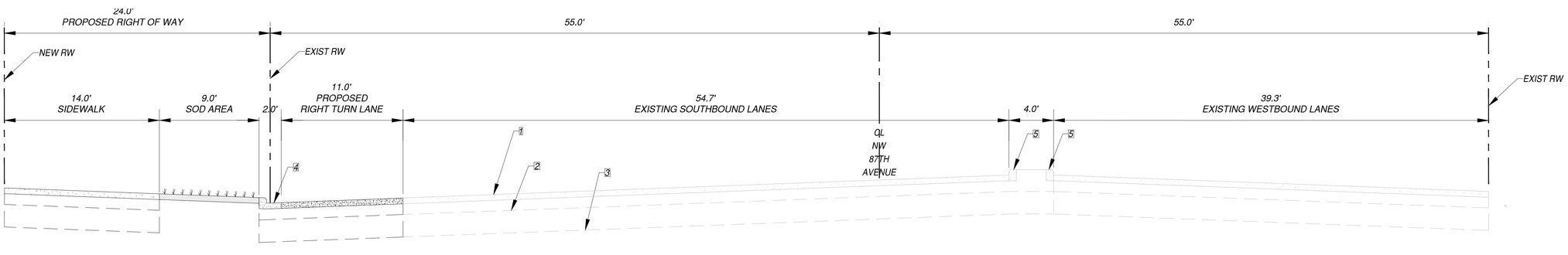


LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED SOD (REFER TO LANDSCAPE PLANS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BUILDING
- DETECTABLE WARNINGS
- PROPOSED BRICK PAVERS
- 10X10 SIGHT VISIBILITY TRIANGLE
- FDOT CLEAR SIGHT TRIANGLE

LEGEND:

1. *ROADWAY ASPHALT PAVEMENT*
2. *8" LIMEROCK BASE MIN. LBR 100, COMPACTED 98% MAX. DENSITY PER AASHTO T-180.*
3. *12" STABILIZED SUBGRADE MIN. LBR 40, COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.*
4. *TYPE F CURB AND GUTTER*
5. *TYPE D CURB*



TYPICAL SECTION D-D
NW 87TH AVE
N.T.S.
STA: 41+60

bcc engineering
BCC ENGINEERING LLC
6401 SW 87TH AVE #200
MIAMI, FL 33173
(305) 670-2350

DETAILED DESIGN PLANS

REVISIONS:

OWNER:
TRUMP ENDEAVOR 12, LLC

DORAL INTERNATIONAL TOWERS
BY: TRUMP ENDEAVOR 12 LLC
CITY OF DORAL, FLORIDA

SEAL:

DANIEL GIRALDO
LICENSE
No. 94566
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

DANIEL GIRALDO, P.E.
FL LICENSE NO. 94566
This item has been digitally signed and sealed by Daniel Giraldo, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

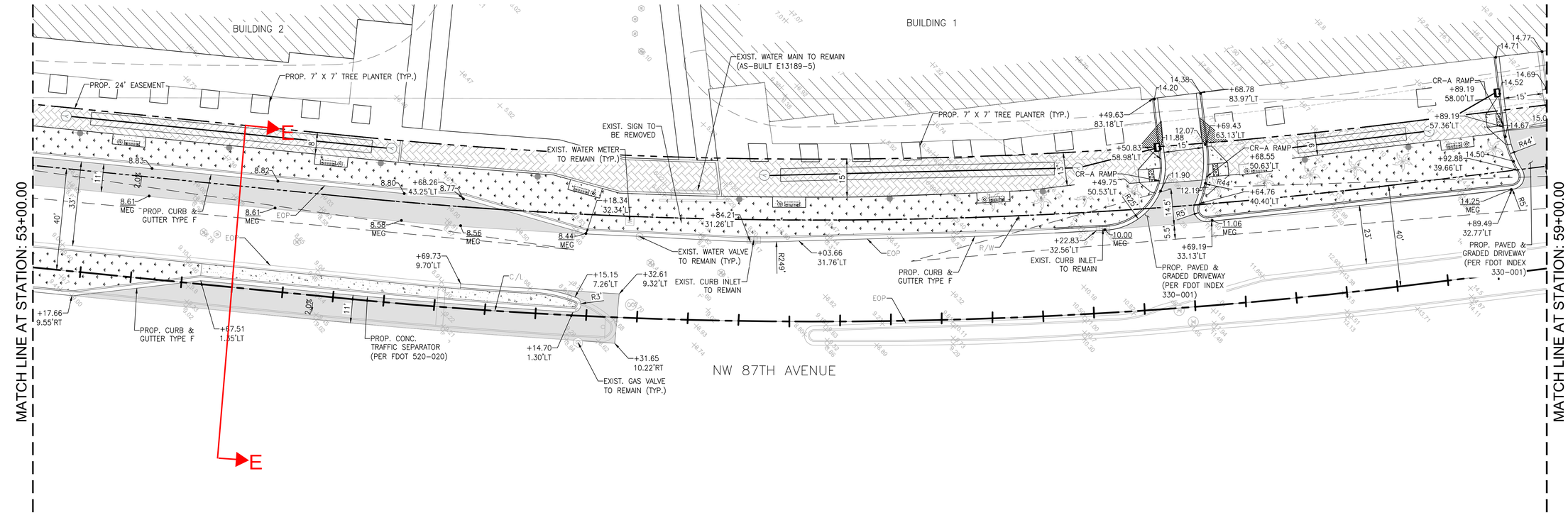
ROADWAY AND DRAINAGE IMPROVEMENTS

DATE : 11/08/2023
SCALE : AS SHOWN
DRAWN BY: L.O.
CHECK BY: W.R.
JOB NO. : 01022091.00

C-11.3

SHEET NO. :

NOT FOR CONSTRUCTION



N

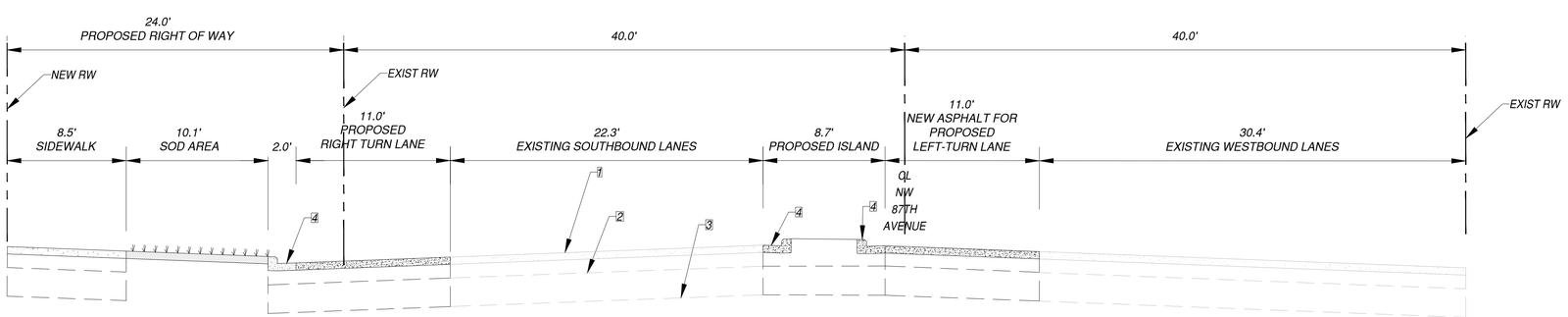
1"=20'

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED SOD (REFER TO LANDSCAPE PLANS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BUILDING
- DETECTABLE WARNINGS
- PROPOSED BRICK PAVERS
- 10X10 SIGHT VISIBILITY TRIANGLE
- FDOT CLEAR SIGHT TRIANGLE

LEGEND:

1. *ROADWAY ASPHALT PAVEMENT*
2. *8" LIMEROCK BASE MIN. LBR 100, COMPACTED 98% MAX. DENSITY PER AASHTO T-180.*
3. *12" STABILIZED SUBGRADE MIN. LBR 40, COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.*
4. *TYPE F CURB AND GUTTER*
5. *TYPE D CURB*



TYPICAL SECTION E-E
NW 87TH AVE
N.T.S.
STA: 53+80

bcc engineering
BCC ENGINEERING LLC
6401 SW 87TH AVE #200
MIAMI, FL 33173
(305) 670-2350

DETAILED DESIGN PLANS

REVISIONS:

OWNER:
TRUMP ENDEAVOR 12, LLC

DORAL INTERNATIONAL TOWERS
BY: TRUMP ENDEAVOR 12 LLC
CITY OF DORAL, FLORIDA

SEAL:

DANIEL GIRALDO LICENSE No. 94566 STATE OF FLORIDA PROFESSIONAL ENGINEER

DANIEL GIRALDO, P.E.
FL LICENSE NO. 94566

This item has been digitally signed and sealed by Daniel Giraldo, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

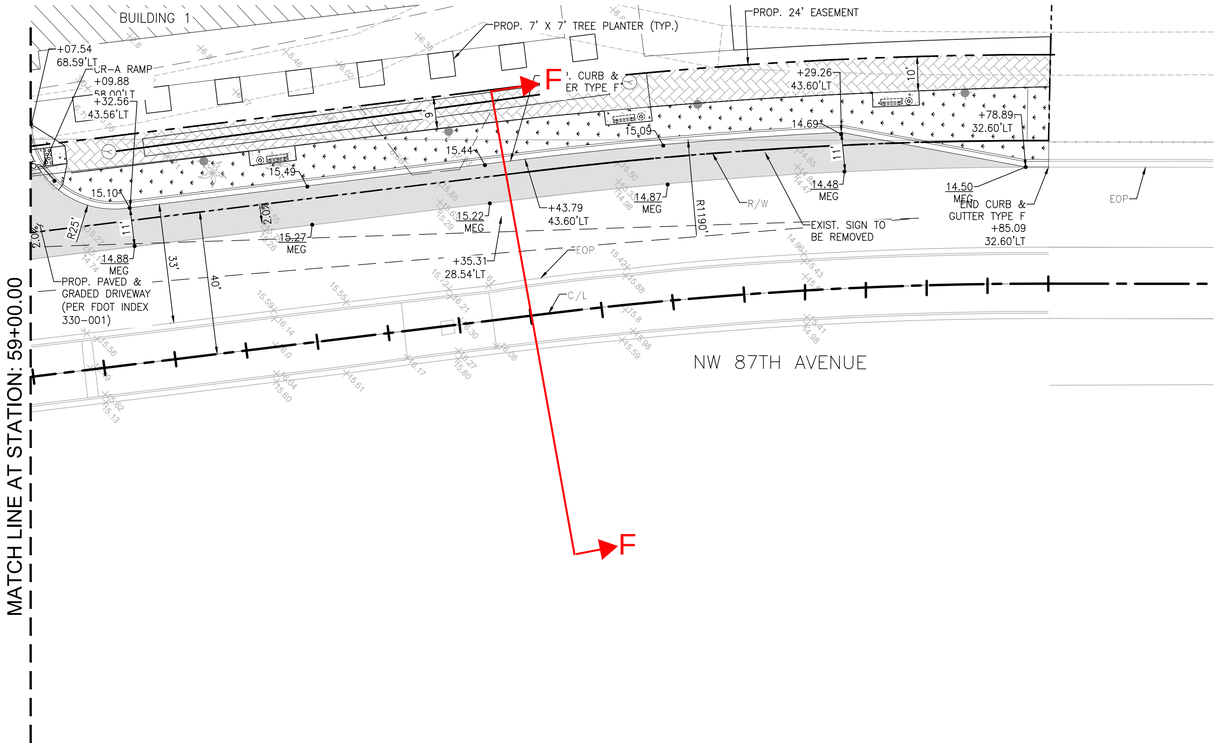
ROADWAY AND DRAINAGE IMPROVEMENTS

DATE : 11/08/2023
SCALE : AS SHOWN
DRAWN BY: L.O.
CHECK BY: W.R.
JOB NO. : 01022091.00

C-11.4

SHEET NO. :

NOT FOR CONSTRUCTION



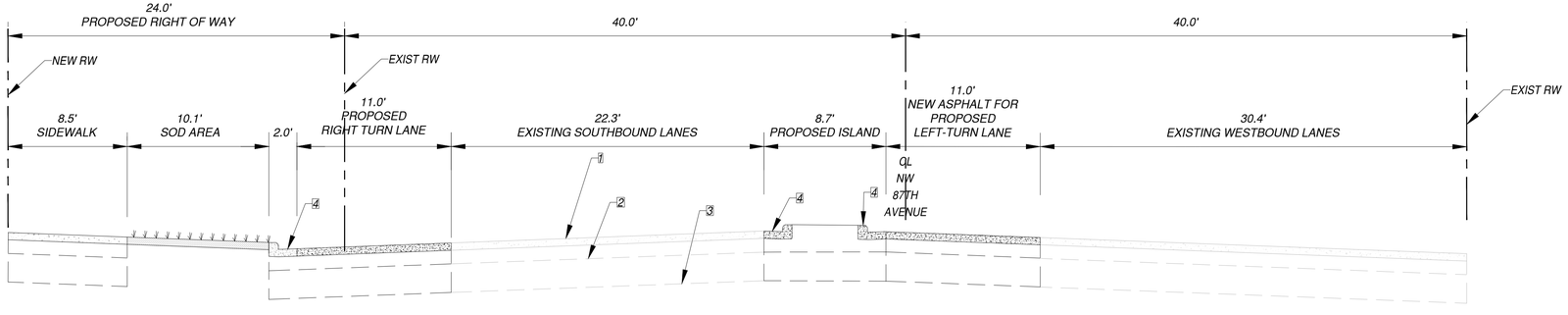


LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED SOD (REFER TO LANDSCAPE PLANS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BUILDING
- DETECTABLE WARNINGS
- PROPOSED BRICK PAVERS
- 10X10 SIGHT VISIBILITY TRIANGLE
- FDOT CLEAR SIGHT TRIANGLE

LEGEND:

1. *ROADWAY ASPHALT PAVEMENT*
2. *8" LIMEROCK BASE MIN. LBR 100, COMPACTED 98% MAX. DENSITY PER AASHTO T-180.*
3. *12" STABILIZED SUBGRADE MIN. LBR 40, COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.*
4. *TYPE F CURB AND GUTTER*
5. *TYPE D CURB*



F — TYPICAL SECTION F-F — F
NW 87TH AVE
N.T.S.
STA: 60+40

bcc engineering
BCC ENGINEERING LLC
6401 SW 87TH AVE #200
MIAMI, FL 33173
(305) 670-2350

DETAILED DESIGN PLANS

REVISIONS:

OWNER:
TRUMP ENDEAVOR 12, LLC

DORAL INTERNATIONAL TOWERS
BY: TRUMP ENDEAVOR 12 LLC
CITY OF DORAL, FLORIDA

SEAL:

DANIEL GIRALDO
LICENSE
No. 94566
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

DANIEL GIRALDO, P.E.
FL LICENSE NO. 94566

This item has been digitally signed and sealed by Daniel Giraldo, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

ROADWAY AND DRAINAGE IMPROVEMENTS

DATE : 11/08/2023
SCALE : AS SHOWN
DRAWN BY: L.O.
CHECK BY: W.R.
JOB NO. : 01022091.00

C-11.4

SHEET NO. :

NOT FOR CONSTRUCTION