Public Works Traffic Analysis Comments

Date: 4-14-2025

Subject: Doral Concourse – Comprehensive Plan Amendment

Permit: LAND-2403-0014

Date Submitted: 4-8-2025

4th Review

Results of the Review:

[X] **Approval Recommended**

The Public Works Department has completed its review of the Traffic Study prepared by TrafTech Engineering, Inc. for the amendment to the Comprehensive Plan Future Land Use Map (FLUM) designation located at 8400 NW 36th St in Doral, Florida. The applicant is proposing Mix-Use (DMU) Development. The Public Works Department recommends approval.

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

- Approval from Miami-Dade County Traffic Division will be required during site plan process.
- 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.

TRAFTECH
ENGINEERING, INC.

Miguel Diaz de la Portilla, Esq.
GUNSTER
600 Brickell Avenue, Suite 3500
Miami, Florida 33131

April 7, 2025

Re: Doral Concourse – Trip Generation Comparison Analysis

Dear Miguel:

Traf Tech Engineering, Inc. has prepared this trip generation comparison analysis in connection with the Doral Concourse development located in the City of Doral, Florida. The trip generation analysis compares the daily, AM peak hour, and PM peak hour trips between the following scenarios:

- Existing *Office and Residential* and *Industrial* designation
- Proposed *Downtown Mixed-Use (DMU)* designation

The above comparison is for a request to amend the Comprehensive Plan Future Land Use Map (FLUM) to allow up to 19,565 square feet of restaurant use. The approximately 5.05-acre site allows up to 110,003 square feet of development with up to 11,000 of those square feet being restaurant space.

Trip Generation Analysis

The generation comparison analysis was performed using the trip generation equations published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual (11th Edition)*. The results of the trip generation comparisons are presented at the bottom of Table 2. As indicated at the bottom of Table 2, the proposed DMU designation results in approximately 9 less AM peak hour trips, and approximately 57 new trips during the typical PM Peak hour. The 57 PM peak hour trips result in approximately one new trip every one minute.

Sincerely,

TRAF TECH ENGINEERING, INC.

Joaquin E. Vargas, P.E.
Senior Transportation Engineer

TABLE 1
Trip Generation Summary (Existing Industrial Commercial Zoning)
Doral Concourse

Land Use	Size		AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Office (LUC 710)	99,003	sf	166	146	20	165	28	137
Restaurant Fast Casual (LUC 930)	5,500	sf	8	4	4	69	38	31
Restaurant Fine Dining (LUC 931)	5,500	sf	4	2	2	43	29	14
Restaurant Total	11,000	sf	12	6	6	112	67	45
Gross trips	**110,003**	**sf**	**178**	**152**	**26**	**277**	**95**	**182**
Internal Trips			-6	-3	-3	-4	-2	-2
Driveway Trips			**172**	**149**	**23**	**273**	**93**	**180**
Restaurant Pass-by			0	0	0	-19	-13	-6
External Trips			**172**	**149**	**23**	**254**	**80**	**174**

Source: ITE Trip Generation Manual (11th Edition)

TABLE 2
Trip Generation Summary (Proposed DMU Zoning)
Doral Concourse

Land Use	Size		AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Office (LUC 710)	90,438	sf	154	136	18	153	26	127
Restaurant Fast Casual (LUC 930)	9,782	sf	14	7	7	123	68	55
Restaurant Fine Dining (LUC 931)	9,783	sf	7	4	3	76	51	25
Restaurant Total	19,565	sf	21	11	10	199	119	80
Gross trips	**110,003**	**sf**	**175**	**147**	**28**	**352**	**145**	**207**
Internal Trips			-12	-6	-6	-8	-4	-4
Driveway Trips			**163**	**141**	**22**	**344**	**141**	**203**
Restaurant Pass-by			0	0	0	-33	-22	-11
External Trips			**163**	**141**	**22**	**311**	**119**	**192**

Source: ITE Trip Generation Manual (11th Edition)

Difference in Trips	AM Peak	Ins	Out	PM Peak	Ins	Out
DMU Zoning Trips - Industrial Commercial Trips	**-9**	**-8**	**-1**	**57**	**39**	**18**

TRAFTECH ENGINEERING, INC.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Doral Concourse	**Organization:**	Traf Tech Engineering, Inc.
Project Location:	City of Doral	**Performed By:**	J. Vargas
Scenario Description:	AM Peak (Existing Industrial Commercial)	**Date:**	12-Mar
Analysis Year:	2045	**Checked By:**	J Vargas
Analysis Period:	**AM Street Peak Hour**	**Date:**	12-Mar

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	710	99,003	sf	166	146	20
Retail				0		
Restaurant	930 & 931	11,000	sf	12	6	6
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				178	152	26

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	1	0	0	0
Retail	0		0	0	0	0
Restaurant	2	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	178	152	26
Internal Capture Percentage	3%	2%	12%
External Vehicle-Trips[3]	172	149	23
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	1%	5%
Retail	N/A	N/A
Restaurant	17%	33%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[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 Concourse	**Organization:**	Traf Tech Engineering, Inc.
Project Location:	City of Doral	**Performed By:**	J. Vargas
Scenario Description:	PM Peak (Existing Industrial Commercial)	**Date:**	3/12/2025
Analysis Year:	2045	**Checked By:**	J Vargas
Analysis Period:	**PM Street Peak Hour**	**Date:**	3/12/2025

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	710	99,003	sf	165	28	137
Retail				0		
Restaurant	930 & 931	11,000	sf	112	67	45
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				277	95	182

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	1	0	0	0
Retail	0		0	0	0	0
Restaurant	1	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	277	95	182
Internal Capture Percentage	1%	2%	1%
External Vehicle-Trips[3]	273	93	180
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	4%	1%
Retail	N/A	N/A
Restaurant	1%	2%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[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

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Doral Concourse	**Organization:**	Traf Tech Engineering, Inc.
Project Location:	City of Doral	**Performed By:**	J. Vargas
Scenario Description:	AM Peak (Proposed DMU)	**Date:**	12-Mar
Analysis Year:	2045	**Checked By:**	J Vargas
Analysis Period:	**AM Street Peak Hour**	**Date:**	12-Mar

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	710	90,438	sf	154	136	18
Retail				0		
Restaurant	930 & 931	19,565	sf	21	11	10
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				175	147	28

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	3	0	0	0
Retail	0		0	0	0	0
Restaurant	3	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	175	147	28
Internal Capture Percentage	7%	4%	21%
External Vehicle-Trips[3]	163	141	22
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	2%	17%
Retail	N/A	N/A
Restaurant	27%	30%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[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.

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NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Doral Concourse	**Organization:**	Traf Tech Engineering, Inc.
Project Location:	City of Doral	**Performed By:**	J. Vargas
Scenario Description:	PM Peak (Proposed DMU)	**Date:**	3/12/2025
Analysis Year:	2045	**Checked By:**	J Vargas
Analysis Period:	**PM Street Peak Hour**	**Date:**	3/12/2025

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	710	90,438	sf	153	26	127
Retail				0		
Restaurant	930 & 931	19,565	sf	199	119	80
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				352	145	207

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	2	0	0	0
Retail	0		0	0	0	0
Restaurant	2	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	352	145	207
Internal Capture Percentage	2%	3%	2%
External Vehicle-Trips[3]	344	141	203
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	8%	2%
Retail	N/A	N/A
Restaurant	2%	3%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[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