

*Traffic Impact Analysis  
For Submittal to the  
City of Pompano Beach*

## POMPANO CITI CENTRE POMPANO BEACH, FLORIDA



# DRC

PZ21-12000042

6/15/2022

Traffic Impact Analysis  
for Submittal to  
the City of Pompano Beach

## POMPANO CITI CENTRE POMPANO BEACH, FLORIDA

*Prepared for:*

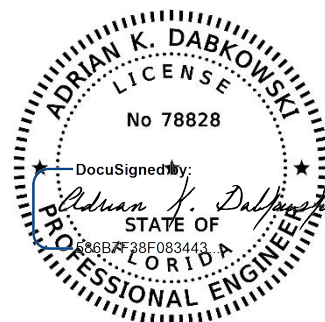
Morgan Group Development, LLC

*Prepared by:*

Kimley-Horn and Associates, Inc.

### Kimley»Horn

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May 2022  
140488004



This item has been digitally signed and sealed by Adrian K. Dabkowski, P.E., PTOE, on 05/03/2022.

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Adrian K. Dabkowski, P.E., PTOE  
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Plantation, FL 33324

## EXECUTIVE SUMMARY

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6/15/2022

Morgan Group Development, LLC is proposing to redevelop the property located at 1200 NE 23<sup>rd</sup> Street in Pompano Beach, Florida. Currently, the site proposed for redevelopment is occupied by a 146,942 square-foot Macy's department store, surface parking lots, and the realignment of the existing mall ring road. The proposed redevelopment consists of 352 mid-rise residential units. The redevelopment is expected to be completed by year 2025.

Access to the proposed redevelopment will be provided via one (1) full access driveway at the south side of 1<sup>st</sup> EW Pompano Square Mall Aisle.

Trip generation for the proposed redevelopment was calculated using rates and/or equations contained in the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 11<sup>th</sup> Edition. The project is expected to generate 129 net new weekday A.M. peak hour trips and a 124 net new weekday P.M. peak hour trips. Note the existing development is currently closed, therefore proposed total trips will be applied to the transportation network and no credit for the existing development will be taken.

Intersection capacity analyses indicate that the project does not result in significant or adverse impacts to the study area intersections.

An entry gate analysis was performed at the proposed redevelopment entry point. The proposed entry gate provides one (1) resident-only lane and one (1) guest-only lane. The proposed redevelopment is expected to result in a queue of less than one (1) vehicle in either lane during the A.M. and P.M. peak hours. Therefore, vehicle queues are expected to be accommodated on-site without extending onto 1<sup>st</sup> EW Pompano Square Mall Aisle.

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## INTRODUCTION

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Morgan Group Development, LLC is proposing to redevelop the property located at 1200 NE 23<sup>rd</sup> Street in Pompano Beach, Florida. Currently, the site proposed for redevelopment is occupied by a 146,942 square-foot Macy's department store, surface parking lots, and the realignment of the existing mall ring road. The proposed redevelopment consists of 352 mid-rise residential units. The redevelopment is expected to be completed by year 2025. A project location map is provided as Figure 1. A conceptual site plan is included in Appendix A.

Kimley-Horn and Associates, Inc. has completed this traffic impact analysis for submittal to the City of Pompano Beach. Methodology correspondences detailing the traffic study requirements are included in Appendix B. The purpose of the study is to assess the proposed redevelopment's impact on the surrounding transportation network. This report summarizes the data collection, project trip generation, trip distribution and assignment, capacity analysis, and entry gate analysis.







## EXISTING TRAFFIC

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A.M. peak period (7:00 A.M. to 9:00 A.M.) and P.M. peak period (4:00 P.M. to 6:00 P.M.) turning movement counts were collected on April 6, 2022 (Wednesday) at the following intersections:

- NE 12<sup>th</sup> Terrace/Pompano Square and E Copans Road
- Pompano Square and 1<sup>st</sup> EW Pompano Square Mall Aisle
- Wendy's Driveway and 1<sup>st</sup> EW Pompano Square Mall Aisle
- US 1/N Federal Highway and Pompano Square/NE 18<sup>th</sup> Street



All traffic volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. Turning movement counts also included pedestrian and bicycle data. The appropriate Florida Department of Transportation (FDOT) peak season conversion factor (PSCF) of 1.00 was applied to the data collected on April 6, 2022.

Additionally, as a result of atypical traffic conditions due to COVID-19, a volume adjustment factor was calculated based on a comparison of historical Annual Average Daily Traffic (AADT) data gathered from FDOT count station no. 0141 located on US 1/N Federal Highway, south of Copans Road. Table 1 summarizes the volume adjustment factor calculations. As Table 1 indicates, a volume adjustment factor of 1.28 was applied to the raw turning movement counts to develop the existing conditions traffic volumes.

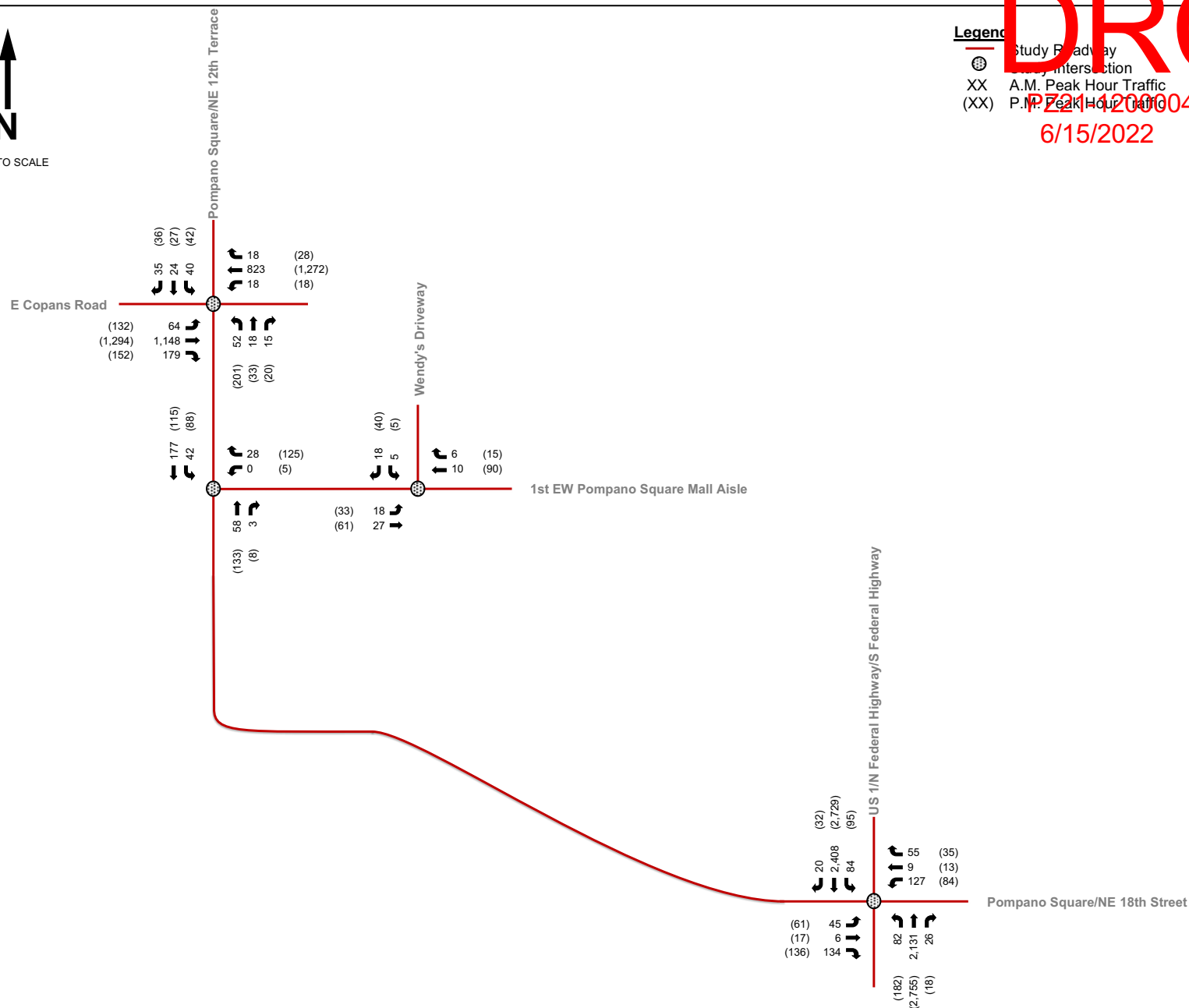
Table 1: Volume Adjustment Factor		
<i>Station 0141 – US 1/N Federal Highway, South of Copans Road</i>		
	<i>Pre-Covid Conditions</i>	<i>Covid Conditions</i>
2019 AADT Volume	56,000	-
Growth Rate	4.29	-
2020 AADT Volume	58,402	45,500
<b>Volume Adjustment Factor</b>	<b>1.28</b>	

The turning movement counts, FDOT historical AADT count data, FDOT peak season factor category reports, and signal timing data are included in Appendix C. Figure 2 presents the existing turning movement volumes at the study intersections during the A.M. and P.M. peak hours.

# DRC

**Legend**  
 Study Roadway  
 Intersection  
 XX A.M. Peak Hour Traffic  
 (XX) P.M. Peak Hour Traffic

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## FUTURE BACKGROUND TRAFFIC

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Future background traffic conditions are defined as expected traffic conditions on the roadway network in the year 2025 without the construction of the proposed redevelopment. Future background traffic volumes used in the analysis are the sum of the existing traffic and additional traffic generated by growth in the study area. Refer to Figure 3 for the future background 2025 peak hour traffic volumes.



### BACKGROUND AREA GROWTH

Traffic growth on the transportation network was determined based upon historic growth trends at nearby FDOT traffic count stations. FDOT count stations referenced in this analysis include:

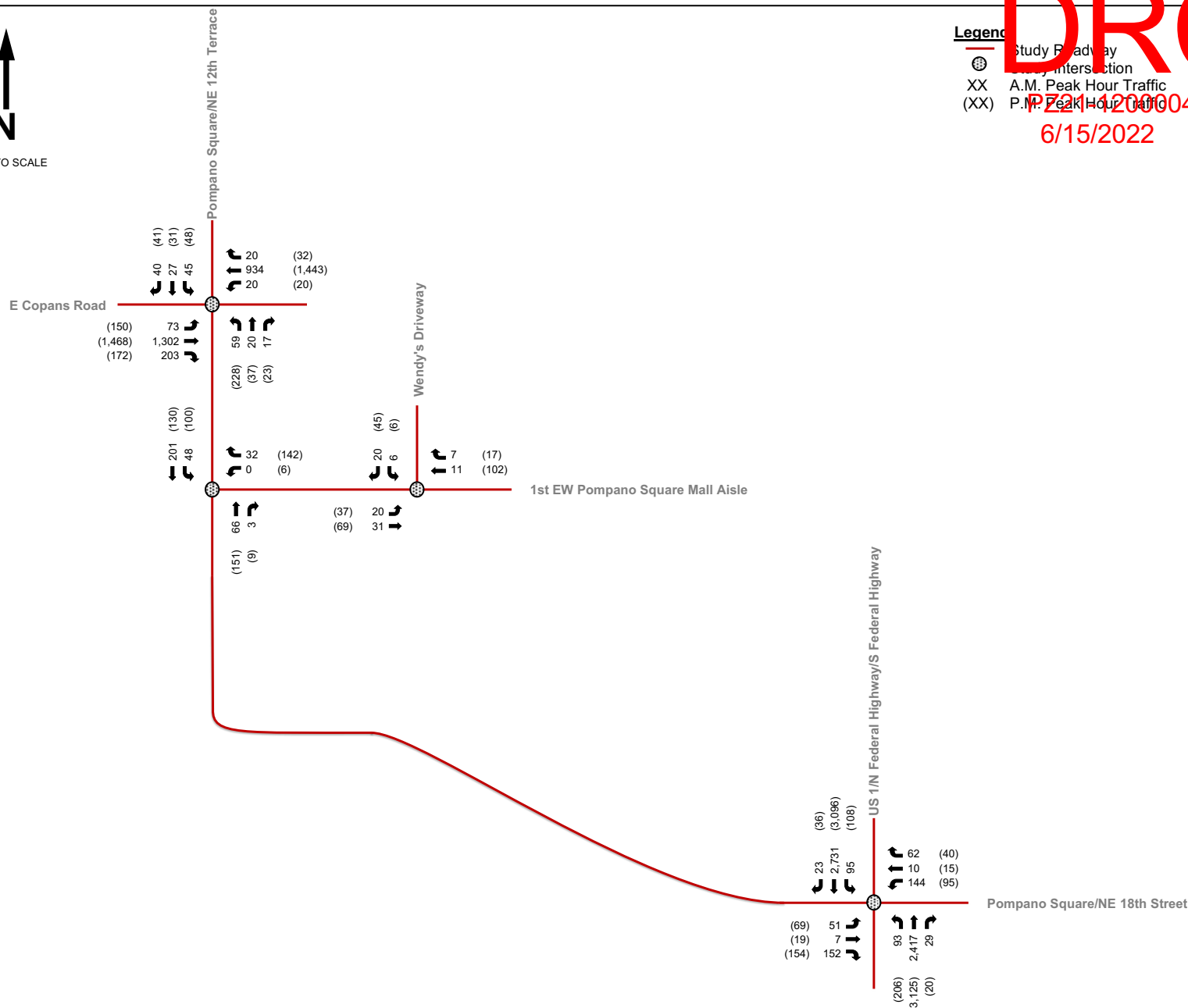
- FDOT count station no. 0141 located on SR 5/US 1, south of Copans Road
- FDOT count station no. 5100 located on SR 5, north of NE 6<sup>th</sup> Street
- FDOT count station no. 5212 located on SR 844/ 14<sup>th</sup> Street, east of SR 5/US 1

The historic growth rate analysis, based on FDOT count stations, examined linear, exponential, and decaying exponential growth rates for the most recent five (5) and ten (10) year periods. The calculated growth rate with the highest  $R^2$  value was determined based on the five (5) year linear growth trend which yielded a growth rate of 4.29 percent (4.29 %). Based on the forecasted volumes obtained from the 2015 and 2045 FSUTMS SERPM, an annual growth rate of 1.29 percent (1.29%) was calculated in the vicinity of the development. To provide for a conservative analysis, a growth rate of 4.29 percent (4.29%) was applied annually to the existing traffic volumes for future (2025) background conditions. Detailed growth calculations are contained in Appendix D.

# DRC

**Legend**  
 Study Roadway  
 Study Intersection  
 XX A.M. Peak Hour Traffic  
 (XX) P.M. Peak Hour Traffic

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## PROJECT TRAFFIC

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Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project and the distribution and assignment of that traffic over the study roadway network.

## EXISTING AND PROPOSED LAND USE

Currently, the site proposed for redevelopment is occupied by a 146,942 square-foot Macy's department store and surface parking lots.

## PROJECT ACCESS

Access to the proposed redevelopment will be provided via one (1) full access driveway at the south side of 1<sup>st</sup> EW Pompano Square Mall Aisle.

## TRIP GENERATION

Trip generation calculations for the proposed redevelopment were performed using rates and/or equations contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition. The trip generation for the proposed redevelopment was determined using ITE LUC 221 (Multifamily Housing [Mid-Rise]). Internal Capture is expected between the proposed redevelopment and Pompano Citi Centre mall. However, to provide a conservative analysis, an internal capture reduction was not taken. Note the existing development is currently closed, therefore proposed total trips will be applied to the transportation network and no credit for the existing development will be taken.

## MULTIMODAL REDUCTION

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in the vicinity of the development. A multimodal factor of 10.1 percent (10.1%) was determined for the proposed development. It is expected that a portion of residents, employees, and guests will choose to walk, bike, or use public transit to and from the proposed development.

## NET NEW PROJECT TRIPS

The project is expected to generate 129 net new weekday A.M. peak hour trips and 124 net new weekday P.M. peak hour trips. Detailed trip generation information is included in Appendix E.

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Table 2: Trip Generation				
<i>A.M. Peak Hour (P.M. Peak Hour)</i>				
Future Land Use (ITE Code)	Scale	Net New External Trips	Entering Trips	Exiting Trips
<i>Proposed Redevelopment</i>				
Multifamily Housing (Mid-Rise) (221)	352 dwelling units	129 (124)	30 (75)	99 (49)
<i>Net New Redevelopment</i>				
Net New Vehicle Trips		129 (124)	30 (75)	99 (49)

## TRIP DISTRIBUTION AND ASSIGNMENT

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The likely distribution of project traffic was forecast for the trips expected to be generated by the proposed redevelopment. Intersection turning movement counts trends were analyzed to determine the traffic distribution of the proposed redevelopment and adjustments were made to account for project trips utilizing the local roadway network as a result of the site's access management restrictions. Figure 4, Figure 5, and Figure 6 detail the project's trip distribution and assignment for the A.M. and P.M. peak hours.

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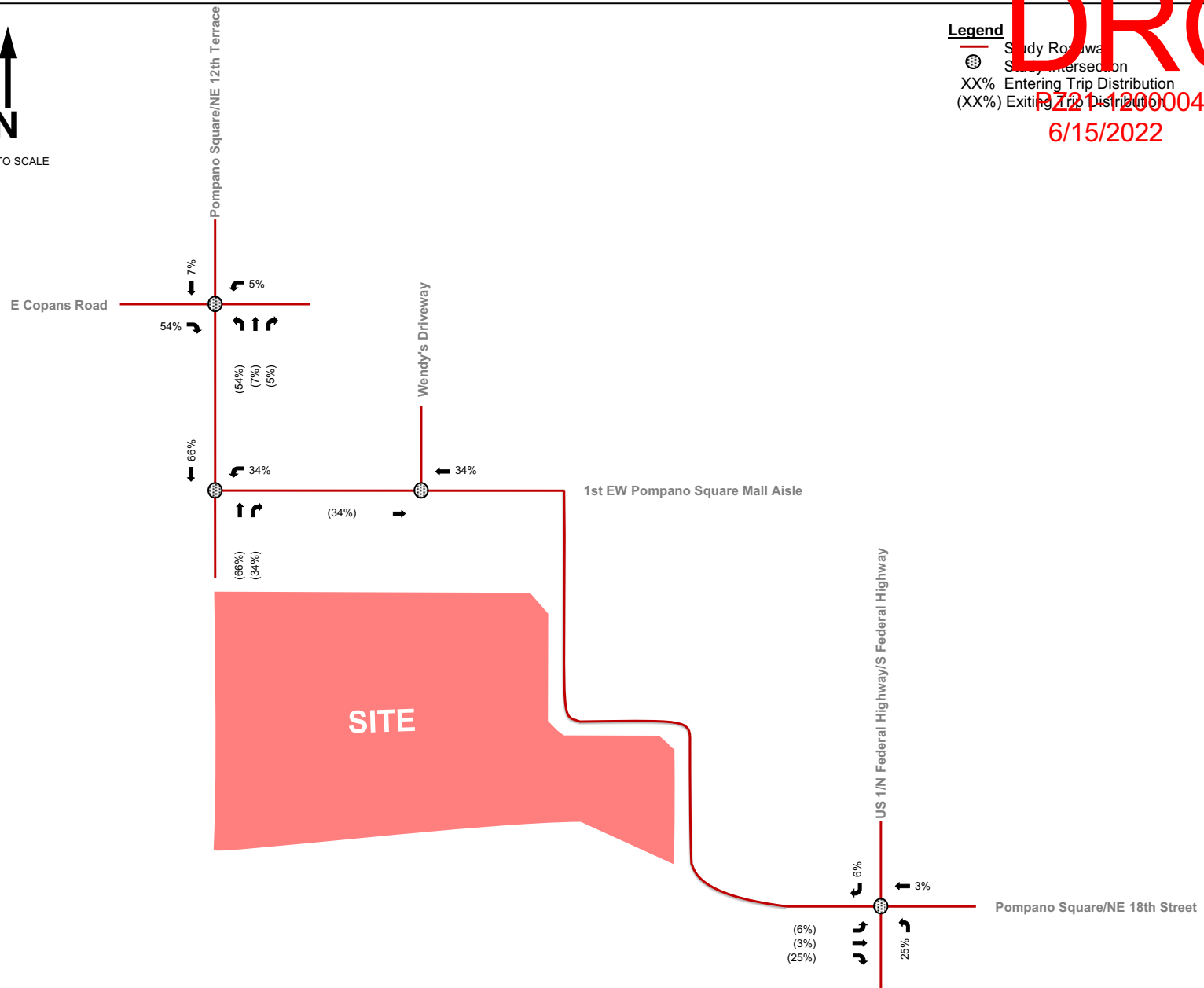
## Legend

- Study Roadway
- Study Intersection
- XX% Entering Trip Distribution
- (XX%) Exiting Trip Distribution

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NOT TO SCALE



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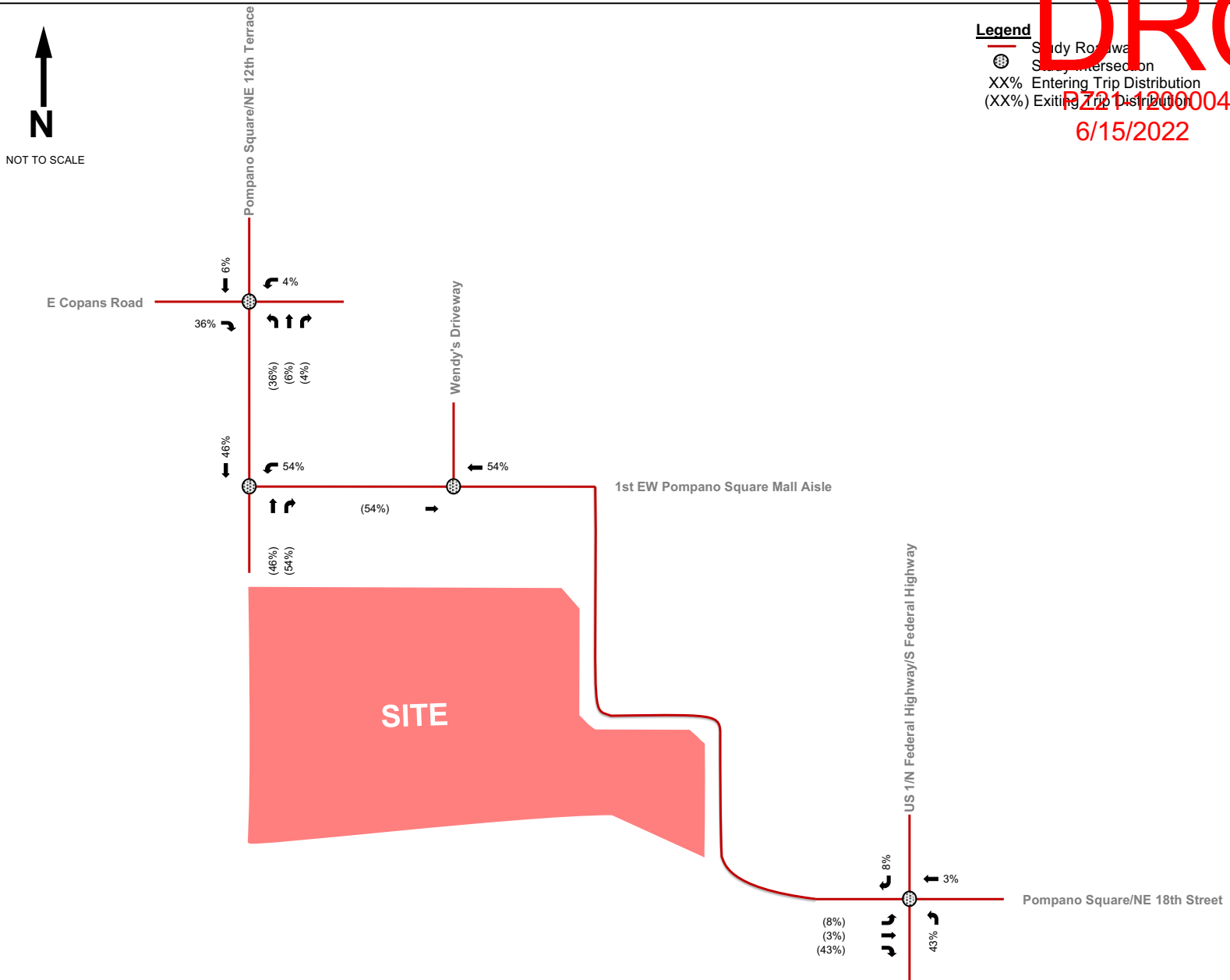
## Legend

- Study Roadway
- Study Intersection
- XX% Entering Trip Distribution
- (XX%) Exiting Trip Distribution

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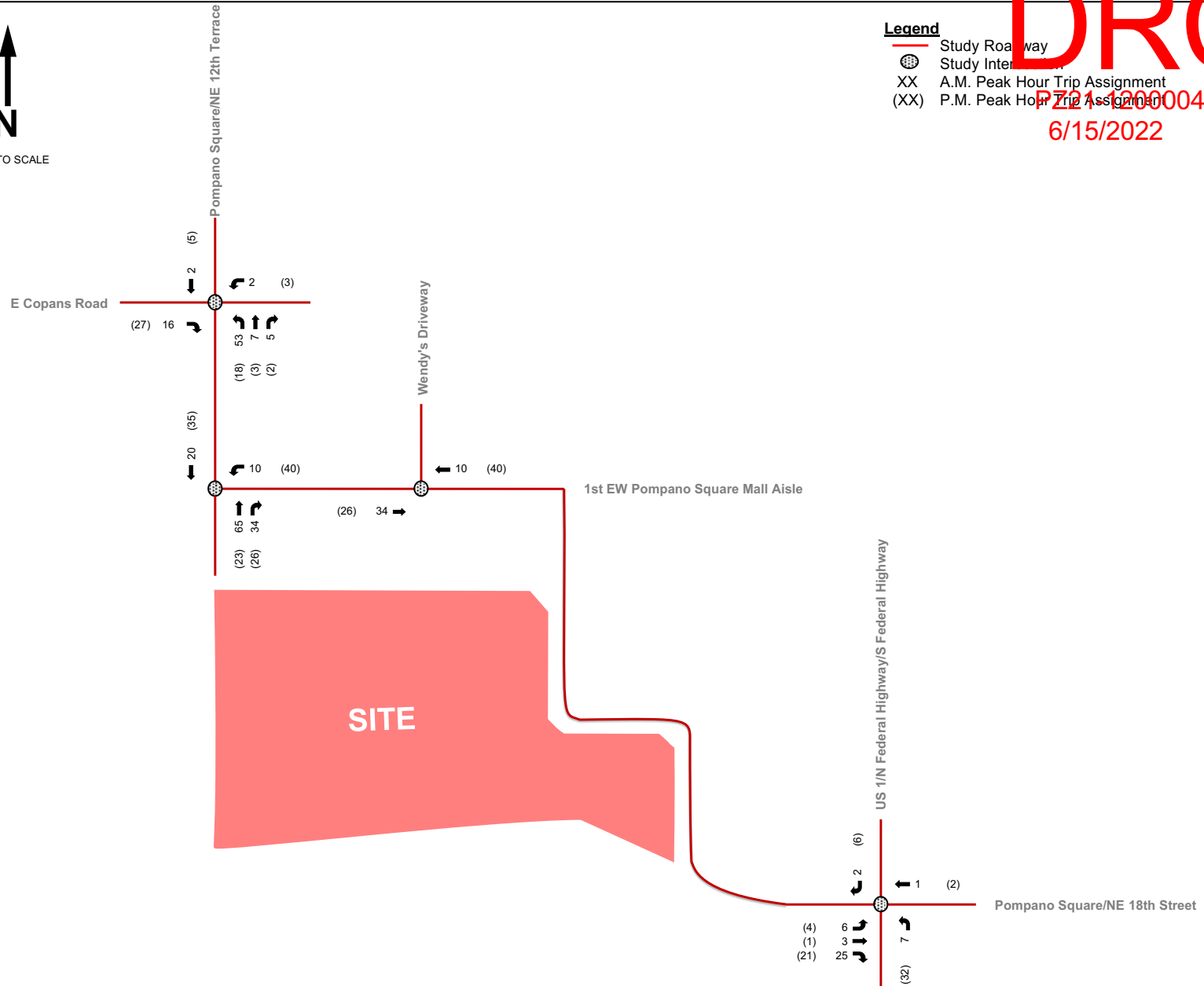
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- Legend**
- Study Roadway
  - Study Intersection
  - XX A.M. Peak Hour Trip Assignment
  - (XX) P.M. Peak Hour Trip Assignment





**FUTURE TOTAL TRAFFIC****PZ21-12000042  
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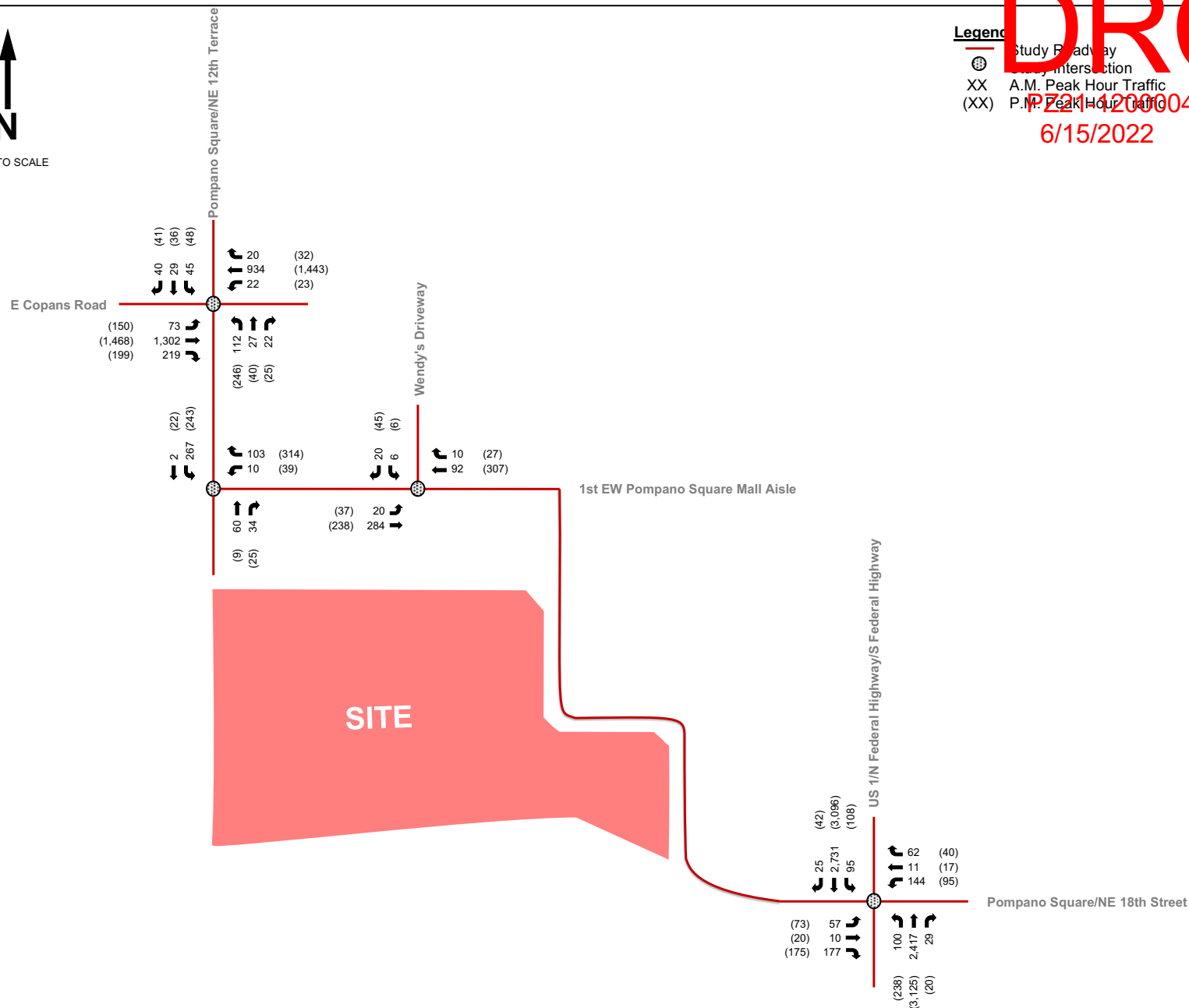
Future total traffic conditions are defined as the expected traffic conditions in the year 2025 after the opening of the project. Total traffic volumes considered in the analysis for this project are the sum of the background traffic volumes and the expected project traffic volumes. As the project proposes a change to the internal circulation of Pompano Citi Center, the trips currently using the south leg of the intersection of Pompano Square and 1<sup>st</sup> EW Pompano Square Mall Aisle were diverted to the adjacent intersection of Wendy's Driveway and 1<sup>st</sup> EW Pompano Square Mall Aisle under future total conditions. Figure 7 presents the future total turning movement volumes at the study intersections during the weekday A.M. and P.M. peak hours. Volume Development worksheets for the study intersections are included in Appendix F.



# DRC

**Legend**  
 Study Roadway  
 Study Intersection  
 XX A.M. Peak Hour Traffic  
 (XX) P.M. Peak Hour Traffic

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## INTERSECTION CAPACITY ANALYSIS

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The study area intersection operating conditions were analyzed for three (3) scenarios (existing conditions, future background conditions, and future total conditions) using Trafficware's *SYNCHRO* software, which applies methodologies outlined in the Transportation Research Board's (TRB's) *Highway Capacity Manual* (HCM) 6<sup>th</sup> Edition. Synchro worksheets for the study intersections are included in Appendix G.

A summary of the intersection analyses for the A.M. and P.M. hour is presented in Table 3. As Table 3 indicates, the study intersections are expected to operate at level of service (LOS E) or better during the A.M. and P.M. peak hours under all analysis scenarios. Intersection capacity analyses indicate that the project does not result in significant or adverse impacts to the study area intersections.

Table 3: Peak Hour Intersection Capacity Analysis						
Intersection	Traffic Control	Overall LOS/Delay	Approach LOS/Delay			
			EB	WB	NB	SB
Existing Conditions (Future Background Conditions) [Future Total Conditions]						
A.M. Peak Hour						
Pompano Square/NE 12 <sup>th</sup> Terrace and East Copans Road	Signalized	A/8.0 sec (A/8.5 sec) [B/11.4 sec]	A (A) [A]	A (A) [A]	E (E) [E]	E (E) [E]
Pompano Square and 1 <sup>st</sup> EW Pompano Square Mall Aisle	Two-Way, Stop Control	(1)	(2) (2) [(3)]	A (A) [(3)]	(3) (3) [A]	(3) (3) [(2)]
Wendy’s Driveway and 1 <sup>st</sup> EW Pompano Square Mall Aisle	Two-Way, Stop Control	(1)	(3)	(3)	(2)	A (A) [B]
US 1/N Federal Highway and Pompano Square/NE 18 <sup>th</sup> Street	Signalized	C/21.2 sec (C/34.0 sec) [D/41.2 sec]	E (E) [E]	F (F) [F]	B (C) [C]	B (C) [D]
P.M. Peak Hour						
Pompano Square/NE 12 <sup>th</sup> Terrace and East Copans Road	Signalized	B/12.5 sec (B/14.5 sec) [B/15.6 sec]	A (A) [A]	A (B) [B]	E (E) [E]	E (E) [E]
Pompano Square and 1 <sup>st</sup> EW Pompano Square Mall Aisle	Two-Way, Stop Control	(1)	(2) (2) [(3)]	B (B) [(3)]	(3) (3) [B]	(3) (3) [(2)]
Wendy’s Driveway and 1 <sup>st</sup> EW Pompano Square Mall Aisle	Two-Way, Stop Control	(1)	(3)	(3)	(2)	A (A) [B]
US 1/N Federal Highway and Pompano Square/NE 18 <sup>th</sup> Street	Signalized	C/24.7 sec (E/56.7 sec) [E/69.1 sec]	E (E) [E]	F (F) [F]	C (E) [E]	B (D) [E]

Notes: (1) Overall intersection LOS is not defined, as intersection operates under stop-control conditions.

(2) Approach does not exist.

(3) Approach operates under free-flow conditions. LOS is not defined.

## ENTRY GATE ANALYSIS

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A 95<sup>th</sup> percentile entry gate analysis for the proposed development using the methodology outlined in ITE's *Transportation and Land Development*, 1988 was performed at the proposed development entry point.

The proposed entry gate provides one (1) resident-only lane and one (1) guest-only lane. Each lane has approximately 30 feet of vehicle storage which can accommodate one (1) vehicle.

To determine the driveway volumes split between resident and guest entrances, it was assumed that 90 percent (90%) of trips generated by the proposed development are residents and 10 percent (10%) of trips generated by the proposed development are guests. Vehicles entering the resident-only lane will gain access via a proximity card. It was assumed that the average service rate will be approximately 600 vehicles per hour (6.0 seconds per vehicle) for residents based on processing times provided in *Parking Structures 3<sup>rd</sup> Edition: Planning, Design, Construction, Maintenance, and Repair*, 2001. Vehicles entering the guest- a call only lane will gain access via box or service booth. It was assumed that the average service rate for the guest-only lane will be approximately 60 vehicles per hour (60.0 seconds per vehicle). As Table 4 indicates, the proposed development is expected to result in a queue of less than one (1) vehicle at the entry gate during the A.M. and P.M. peak hours. Therefore, vehicle queues are expected to be accommodated on-site without extending onto 1<sup>st</sup> EW Pompano Square Mall Aisle. Detailed entry gate calculations are included in Appendix I.

Table 4: Peak Hour Entry Gate Queuing Analysis			
A.M. Peak Hour (P.M. Peak Hour)			
Entry Lane	Entering Volumes (vph)	Service Rates (minutes/vehicle)	95 <sup>th</sup> Percentile Queue Including Service Position
Resident-Only Lane	27 (67)	0.10	< 1 vehicle (< 1 vehicle)
Guest-Only Lane	3 (8)	1.00	< 1 vehicle (< 1 vehicle)

## CONCLUSION

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Morgan Group Development, LLC is proposing to redevelop the property located at 1200 NE 23<sup>rd</sup> Street in Pompano Beach, Florida. Currently, the site proposed for redevelopment is occupied by a 146,942 square-foot Macy's department store, surface parking lots, and the realignment of the existing mall ring road. The proposed redevelopment consists of 352 mid-rise residential units. The redevelopment is expected to be completed by year 2025.

Access to the proposed redevelopment will be provided via one (1) full access driveway at the south side of 1<sup>st</sup> EW Pompano Square Mall Aisle.

Trip generation for the proposed redevelopment was calculated using rates and/or equations contained in the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 11<sup>th</sup> Edition. The project is expected to generate 129 net new weekday A.M. peak hour trips and a 124 net new weekday P.M. peak hour trips. Note the existing development is currently closed, therefore proposed total trips will be applied to the transportation network and no credit for the existing development will be taken.

Intersection capacity analyses indicate that the project does not result in significant or adverse impacts to the study area intersections.

An entry gate analysis was performed at the proposed redevelopment entry point. The proposed entry gate provides one (1) resident-only lane and one (1) guest-only lane. The proposed redevelopment is expected to result in a queue of less than one (1) vehicle in either lane during the A.M. and P.M. peak hours. Therefore, vehicle queues are expected to be accommodated on-site without extending onto 1<sup>st</sup> EW Pompano Square Mall Aisle.

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## **Appendix A**

### Site Plan



## **Appendix B**

### Methodology Correspondence



March 14, 2022

Ms. Jean E. Dolan, CFM  
Principal Planner  
City of Pompano Beach  
100 West Atlantic Boulevard, Room 276  
Pompano Beach, Florida 33060

Re: Citi Centre at Copans – Review of Traffic Methodology

Dear Jean:

Traf Tech Engineering, Inc. reviewed the proposed traffic methodology dated February 2, 2022, prepared by Kimley-Horn and Associates, Inc. for the Citi Centre project. The following comments are provided relative to the traffic methodology:

- It is unclear from the site plan if Pompano Square (the internal circulation roadway that links Copans Road with Federal Highway and is located west and south of the shopping center) will remain in place. Pompano Square serves as a vital access and internal circulation roadway for the shopping center and therefore, should remain.
- Please address any proposed changes to the internal circulation of the Pompano Square shopping center resulting from the proposed residential project. The traffic impacts caused by proposed internal traffic circulation modifications should be documented. The timing of internal circulation modifications, if any, should be documented and the responsible party.
- The site plan contained in the traffic methodology letter shows part of the Macy's building remaining in place. Please explain.
- It is my understanding the Macy's building that will be demolished by this project is currently not generating significant vehicular traffic. Hence, the trips associated with the Macy's building should not be subtracted from the trip generation associated with the proposed residential development (for both peak periods).
- The intersection of Federal Highway/US 1 and Pompano Square/NE 18<sup>th</sup> Street should be evaluated.

- The existing access driveway formed by the east-west drive aisle located north of the Macy's building and Pompano Square needs to be evaluated as part of the traffic study.
- The access driveway for the project also needs to be evaluated.
- The location of the entrance/exit driveway for the residential project is too close to Pompano Square. Sufficient separation needs to be provided for stacking and safety purposes. Additionally, the residential driveway should align with an existing north drive aisle for safer access.



Please give me a call if you have any questions.

TRAF TECH ENGINEERING, INC.

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

**MEMORANDUM**

To: Joaquin E. Vargas, P.E.  
Traf Tech Engineering, Inc.

From: Adrian K. Dabkowski, P.E., PTOE   
Raquel Selanikio, E.I. 

Date: February 2, 2022

**Subject: Pompano Citi Centre  
Traffic Study Methodology**

The purpose of this memorandum is to summarize the traffic study methodology for the proposed redevelopment of a portion of the existing Pompano Citi Centre located at 1200 NE 23<sup>rd</sup> Street in Pompano Beach, Florida. Currently, the site proposed for redevelopment is occupied by a 146,942 square-foot Macy's department store and surface parking lots. The proposed redevelopment consists of 352 mid-rise residential units. A project location map and conceptual site plan are provided in Attachment A. The following sections summarize our proposed methodology.

**TRIP GENERATION**

Trip generation calculations for the existing development and the proposed redevelopment were performed using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition. The trip generation for the existing land uses was determined using ITE Land Use Code (LUC) 821 (Shopping Plaza (40-150k)). The trip generation for the proposed land use was determined using ITE LUC 221 (Multifamily Housing [Mid-Rise]). Note that the typical opening hour for a Macy's department store is 10 A.M. Therefore, credit for the existing retail store was not taken for the A.M. peak hour.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in which the redevelopment is located. A multimodal factor of 10.1 percent (10.1%) was determined for the proposed redevelopment. It is expected that a portion of residents and guests will choose to walk, bike, or use public transit to and from the proposed redevelopment. Transit route information will be documented in the report.

The project is expected to generate 129 net new weekday A.M. peak hour vehicular trips and a reduction of 288 net new weekday P.M. peak hour vehicular trips. Trip generation calculations may be revised based on revisions to the redevelopment program or site plan modifications. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment B.

**STUDY AREA**

Based on the proposed redevelopment plan, and reduction in vehicular trips during the P.M. peak hour the intersection of E Copans Road and Pompano Square/NE 12<sup>th</sup> Terrace is proposed to be analyzed during the A.M. peak hour.

**DATA COLLECTION**

Turning movement counts will be collected at the identified study intersection on a typical weekday (Tuesday, Wednesday, or Thursday) during the A.M. (7:00 A.M. to 9:00 A.M.) peak period. All traffic

counts will be adjusted to peak season conditions using the appropriate FDOT peak season category factors. Turning movement counts will be collected in 15-minute intervals during the A.M. peak period. Turning movement counts will also include pedestrians and bicyclists.

Furthermore, to account for atypical conditions due to the COVID-19 pandemic, a 24-hour continuous count will be collected and compared to FDOT historical data along Copans Road, east of NE 12<sup>th</sup> Avenue. The collected turning movement counts will be adjusted based on the factor determined from the historical comparison.

Signal timing information will be obtained from Broward County Traffic Engineering Division. All traffic data collected will be provided in the Appendix of the traffic analysis report.

### TRIP DISTRIBUTION

Trip distribution will be determined using a select zone analysis for the appropriate Traffic Analysis Zone (TAZ) in the Southeast Florida Regional Planning Model (SERPM). Adjustments to the traffic distribution will be made to account for project trips utilizing the local roadway network as a result of the site's access management restrictions and based on actual turning movement counts collected at study area intersection.

### BACKGROUND GROWTH RATE/MAJOR COMMITTED DEVELOPMENT

A background growth rate will be calculated based on historic growth trends at nearby FDOT traffic count stations. Additionally, growth rates based on the Florida Standard Urban Transportation Model Structure (FSUTMS) Southeast Regional Planning Model (SERPM) projected 2015 and 2045 model network volumes will be examined. The higher of the two (2) growth rates will be used in the analysis. Documentation will be provided in the Appendix of the traffic impact study.

The City's review of this document will determine any committed projects to include in background conditions. The City will provide the corresponding approved traffic study for any committed projects identified.

### CAPACITY ANALYSIS

Capacity analyses will be conducted for the A.M. peak hour at the study intersection. Intersection analyses will be performed using *Synchro* traffic engineering analysis software which applies the Transportation Research Board's (TRB's), *Highway Capacity Manual* (HCM) 2000 and 6<sup>th</sup> Edition methodologies. Capacity analyses will be conducted for three (3) scenarios: existing, future build-out without project (future background conditions), and future build-out with project (future total conditions). If intersection capacity deficiencies created by the redevelopment are identified, strategies may be developed to attain adopted levels of service. A build-out year of 2024 will be used in the analysis.

The following figures will be included for the study intersections:

- Existing conditions
- Future background traffic conditions (with growth rate and committed development traffic)
- Trip distribution
- Trip assignment
- Future total traffic conditions (with project)

**GARAGE ENTRY GATE OPERATIONS ANALYSIS**

A 95<sup>th</sup> percentile entry gate analysis will be prepared for parking garage entry points, if entry gates are provided. The entry gate queuing analysis will be prepared for the weekday A.M. and P.M. peak hours. Entry gate queuing analysis will be conducted consistent with the procedures outlined in ITE's *Transportation and Land Development*, 1988 and/or *Parking Structures – Planning, Design, Construction, Maintenance, and Repair*, 2000 and 2011. The purpose of this analysis is to determine any future queue storage deficiencies at the entry gates and provide preliminary recommendations for mitigating these deficiencies.

**DOCUMENTATION**

The results of the traffic analysis will be summarized in a report. The report will include supporting documents including signal timings, lane geometry, and software output sheets. The report will also include text and graphics necessary to summarize the assumptions and analysis.

K:\FTL\_TPTO\140488004-Pompano Citi Centre\correspondence\Pompano Citi Centre Methodology.docx

**DRC**

PZ21-12000042

6/15/2022

## **Attachment A**

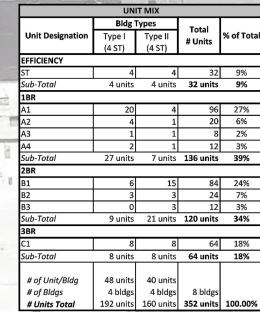
### Project Location Map and Site Plan







PZ21-12000042  
6/15/2022



SITE DATA					
Location:	Pompano Beach, FL				
Existing Zoning:	R-3/PCD General Business Planned Commercial Overlay				
Proposed Zoning:	RM-30				
Faxinating Type of Use:	Commercial				
Proposed Type of Use:	Multi-Family Residence				
Occupancy Classification:	R-2 Residential				
Construction Type:	II-B				
BUILDING DISPOSITION	Required	Provided	Remarks		
A. Lot Area	8,800 min	12,144 acres	529,000 sq ft		
B. Lot Width	75' min	935'-0"			
C. Lot Coverage	60% max	137,285 sq ft	26%		
D. Open Space					
PerVIOUS	25% min	158,394 sq ft	30%		
ImperVIOUS		55,095 sq ft			
E. Total Open Space		113,499 sq ft	40%		
F. Vehicular Use Area		178,231 sq ft	34%		
G. Density	30 du/s/ac	29 du/s/ac			
BUILDING SETBACK					
A. North Setback		91'-4"			
B. East Setback		23'-5"			
C. South Setback		16'-4"			
D. West Setback		15'-0"			
BUILDING HEIGHT					
Max. Height	100' max	52'-0"	4 stories		
BUILDING SQUARE FOOTAGE					
Building Type	Level 1	Level 2	Level 3	Level 4	Total Bldg Sq. Ft.
Type I (A Bldg.)	12,252 sq ft	13,689 sq ft	13,689 sq ft	13,689 sq ft	53,349 sq ft
Type II (A Bldg.)	12,567 sq ft	13,689 sq ft	13,689 sq ft	13,689 sq ft	53,065 sq ft
<b>Total GSF for all Buildings</b>					<b>430,288 sq ft</b>

PARKING				
<b>CODE REQUIRED</b>				
<i>Per table 155.5302.D.1 - Dwelling Multifamily</i>				
	<b>Type</b>	<b># of Units / SF</b>	<b>Code Required</b>	
	5T @ 1 sp/du	32	32 sp	
	18D @ 1.5 sp/du	136	204 sp	
	28D @ 1.5 sp/du	120	180 sp	
	38D @ 2 sp/du	64	128 sp	
<b>Grand Total Required</b>			<b>544 sp</b>	
<b>PROVIDED</b>				
	<b>Type</b>	<b>Standard</b>	<b>HC</b>	<b>Total</b>
	Surface	472 sp	13 sp	485 sp
	Detached Garages	60 sp	1 sp	61 sp
	Ups parking	8 sp		8 sp
	<i>Subtotal</i>	540 sp	14 sp	
<b>Grand Total Provided</b>			<b>554 sp</b>	
				<i>1.57 sp/du</i>
<b>BIKE/PEDAL PARKING</b>				
<b>REQUIRED</b>			20 sp.	
<b>PROVIDED</b>			60 sp.	

**SITE PLAN**  
352 UNITS  
554 PARKING SPACES

---


$$1'' = 60'$$

INITIAL SITE PLAN SUBMITTAL 12/17/2021	BY
---	----

FOR:  
MORGAN GROUP  
LOCATED AT:  
POMPANO BEACH, FLORIDA

JOSE I. SAUMEL  
AR0013085

WMSA ARCHITECTS, INC.  
AAC0000895  
8950 SW 74th COURT  
SUITE 1513  
MIAMI, FLORIDA 33156  
(305) 273-9011

**MSA**  
**ARCHITECTS**  
ARCHITECTURE & PLANNING

DRAWN	
DATE	03/03/2020
SCALE	AS SHOWN
JOB NO.	1880.PRJ
SHEET TITLE:	

## SITE PLAN

SHEET NUMBER:  
**SP-1**

**DRC**

PZ21-12000042

6/15/2022

## **Attachment B**

### Trip Generation Calculations

## AM PEAK HOUR TRIP GENERATION COMPARISON

### EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 1	1 Shopping Plaza (40-150k)	11	821	146.942	ksf	62%	38%	0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code		Rate or Equation		Total:		0	0	0	0.0%	0	0	0	0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0
821		Y=0(X)																							

\*The typical hours of operation for the retail store do not include the A.M. peak hour therefore credit was not taken.

### PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS				
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
					In	Out																				
1 Multifamily Housing (Mid-Rise)	11	221	352	du	23%	77%	33	110	143	10.1%	14	30	99	129	0.0%	0	30	99	129	0.0%	0	30	99	129		
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										
ITE Land Use Code					Rate or Equation		Total:		33	110	143	10.1%	14	30	99	129	0.0%	0	30	99	129	0.0%	0	30	99	129
221					Y=0.44*(X)+-11.61																					

	IN	OUT	TOTAL
NET NEW TRIPS	30	99	129

## PM PEAK HOUR TRIP GENERATION COMPARISON

### EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 1	1 Shopping Plaza (40-150k)	11	821	146.942	ksf	49%	51%	374	389	763	10.1%	77	336	350	686	0.0%	0	336	350	686	40.0%	274	202	210	412
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code						Rate or Equation					Total:														
821						Y=5.19(X)																			

### PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 2	1 Multifamily Housing (Mid-Rise)	11	221	352	du	61%	39%	84	54	138	10.1%	14	75	49	124	0.0%	0	75	49	124	0.0%	0	75	49	124
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code						Rate or Equation					Total:														
221						Y=0.39*(X)+0.34																			

	IN	OUT	TOTAL
NET NEW TRIPS	-127	-161	-288



## MEANS OF TRANSPORTATION TO WORK

**Note:** This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

$(17+23+36) / (769-17) = 10.1\%$

Census Tract 302.02, Broward County, Florida

Label	Estimate	Margin of Error
▼ Total:	769	±126
▼ Car, truck, or van:	619	±120
Drove alone	519	±88
▼ Carpool:	100	±74
In 2-person carpool	63	±65
In 3-person carpool	37	±39
In 4-person carpool	0	±14
In 5- or 6-person carpool	0	±14
In 7-or-more-person carpool	0	±14
▼ Public transportation (excluding taxicab):	17	±37
Bus	17	±37
Subway or elevated rail	0	±14
Long-distance train or commuter rail	0	±14
Light rail, streetcar or trolley (carro público in Puerto Rico)	0	±14
Ferryboat	0	±14
Taxicab	0	±14
Motorcycle	18	±20
Bicycle	23	±35
Walked	36	±43
Other means	39	±59
Worked from home	17	±14

## MEANS OF TRANSPORTATION TO WORK

**Survey/Program:** American Community Survey

**Universe:** Workers 16 years and over

**Year:** 2019

**Estimates:** 5-Year

**Table ID:** B08301

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

2019 ACS data products include updates to several categories of the existing means of transportation question. For more information, see: Change to Means of Transportation.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

The 2015-2019 American Community Survey (ACS) data generally reflect the September 2018 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

### Explanation of Symbols:

An "\*\*\*" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.

An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.

An "+" following a median estimate means the median falls in the upper interval of an open-ended distribution.

An "\*\*\*" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

An "\*\*\*\*\*" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

An "N" entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

An "(X)" means that the estimate is not applicable or not available.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

**DRC**

PZ21-12000042

6/15/2022

## **Appendix C**

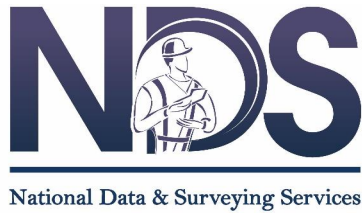
Traffic Data

## Turning Movement Counts



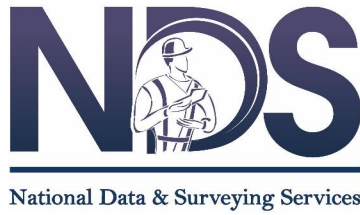
PZ21-12000042  
6/15/2022

PROJECT ID: 22-140  
DATE: Wed, Apr 06, 2022

[illegible]


PZ21-12000042  
6/15/2022

PROJECT ID: 22-140  
DATE: Wed, Apr 06, 2022

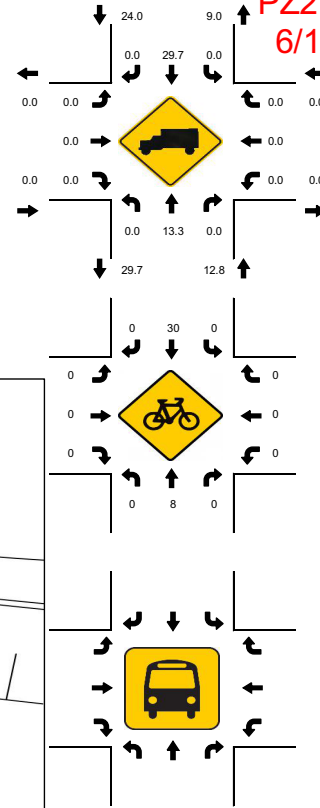
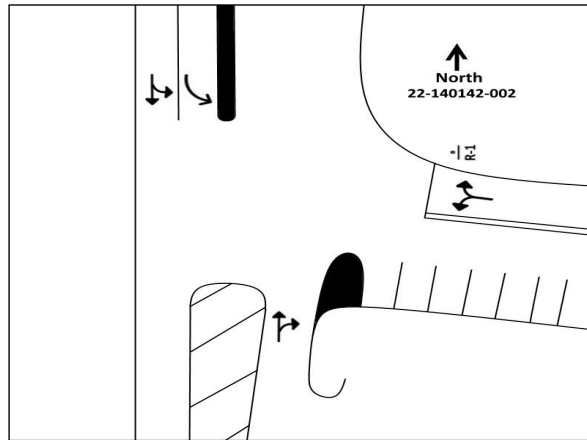
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PZ21-12000042  
6/15/2022

PROJECT ID: 22-140  
DATE: Wed, Apr 06, 2022

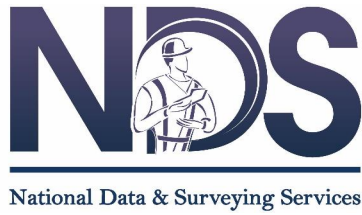


**NDS**  
National Data & Surveying Services

[illegible]

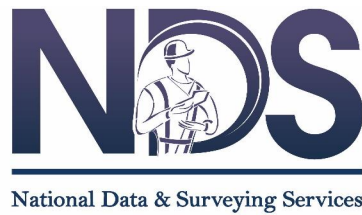
PZ21-12000042  
6/15/2022

PROJECT ID: 22-140  
DATE: Wed, Apr 06, 2022

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PZ21-12000042  
6/15/2022

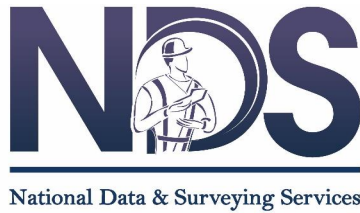
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DATE: Wed, Apr 06, 2022

[illegible]



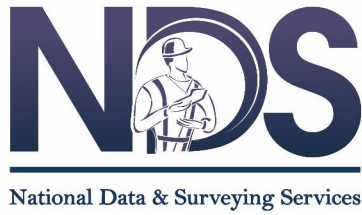
PZ21-12000042  
6/15/2022

PROJECT ID: 22-140  
DATE: Wed, Apr 06, 2022

[illegible]

PZ21-12000042  
6/15/2022

PROJECT ID: 22-140  
DATE: Wed, Apr 06, 2022

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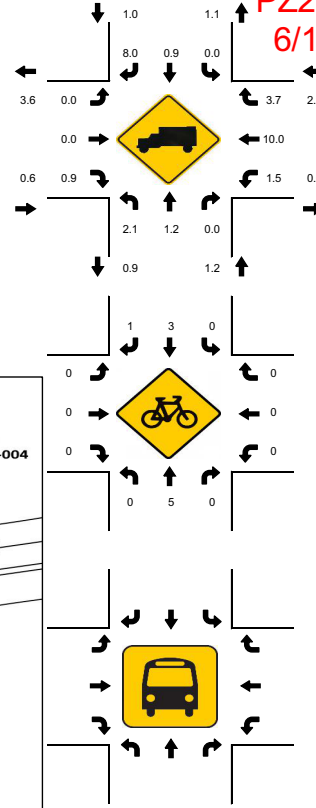
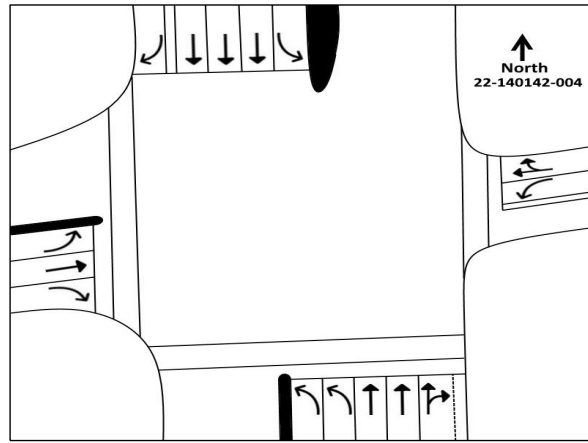
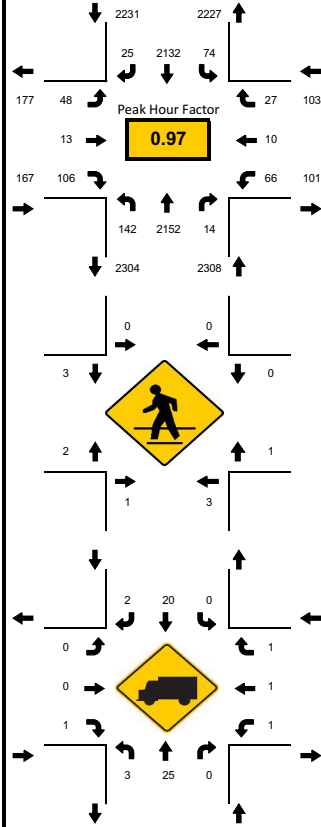
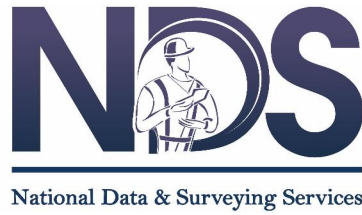
# DRC

PZ21-12000042  
6/15/2022

LOCATION: US 1/N Federal Hwy/S Federal Hwy & Pompano Square/NE 18th St  
CITY/STATE: Pompano Beach, FL

PROJECT ID: 22-140142-004  
DATE: Wed, Apr 06, 2022

Peak-Hour: 05:00 PM - 06:00 PM  
Peak 15-Minute: 05:45 PM - 06:00 PM



15-Min Count Period Beginning At	S 1/N Federal Hwy/S Federal Hwy Northbound					S 1/N Federal Hwy/S Federal Hwy Southbound					Pompano Square/NE 18th St Eastbound					Pompano Square/NE 18th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	33	499	4	1		6	410	9	12		15	4	33	0		31	3	8	0		1068	4588
04:15 PM	49	505	5	9		8	488	9	13		20	6	44	0		8	5	10	0		1179	4734
04:30 PM	30	577	8	4		8	441	7	14		20	2	42	0		21	5	12	0		1191	4715
04:45 PM	27	540	7	1		3	474	2	15		13	5	36	0		17	3	7	0		1150	4721
05:00 PM	26	569	1	3		4	523	5	14		11	2	29	0		17	3	7	0		1214	4809
05:15 PM	39	506	2	4		7	510	6	11		8	5	27	0		24	4	7	0		1160	3595
05:30 PM	29	551	7	2		10	523	5	13		12	4	22	0		14	1	4	0		1197	2435
05:45 PM	36	526	4	3		8	576	9	7		17	2	28	0		11	2	9	0		1238	1238
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	156	2276	28	16		40	2304	36	56		68	20	116	0		96	16	36	0		5264	
Heavy Trucks	8	44	0	0		0	28	4	0		0	0	4	0		4	4	4	0		100	
Pedestrians		16						0				16					4				36	
Bicycles	0	12	0	0		0	8	4	0		0	0	0	0		0	0	0	0		24	
Buses																						
Stopped Buses																						

DRC

PZ21-12000042

6/15/2022

## FDOT Historic AADT Reports

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2020 HISTORICAL AADT REPORT

DRC

PZ21-12000042  
6/15/2022

COUNTY: 86 - BROWARD

SITE: 0141 - SR 5 / US 1 - S OF COPANS RD

YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----	-----	-----	-----	-----
2020	45500 C	N	23000	S 22500	9.00	53.50	6.30
2019	56000 C	N	29000	S 27000	9.00	54.70	8.20
2018	49000 C	N	24500	S 24500	9.00	54.10	8.20
2017	47000 C	N	23000	S 24000	9.00	53.80	8.20
2016	52500 C	N	26500	S 26000	9.00	55.20	4.60
2015	46000 C	N	25000	S 21000	9.00	54.90	4.60
2014	45000 C	N	24500	S 20500	9.00	54.50	6.60
2013	44000 C	N	25000	S 19000	9.00	54.60	6.30
2012	52000 C	N	28000	S 24000	9.00	55.00	4.60
2011	48500 C	N	25000	S 23500	9.00	54.50	3.60
2010	50000 C	N	24000	S 26000	9.37	54.06	2.40
2009	47500 C	N	24000	S 23500	9.31	53.74	4.20
2008	52500 C	N	26500	S 26000	9.70	54.48	4.10
2007	48500 C	N	24500	S 24000	9.10	53.47	2.60
2006	49000 C	N	25000	S 24000	9.48	53.59	5.20
2005	47500 C	N	24000	S 23500	10.60	58.90	5.20

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



## Volume Adjustment Factor Calculations

# DRC

PZ21-12000042

6/15/2022

Volume Adjustment Factor		
Station 0141 -- US 1/N Federal Highway, South of Copans Road		
	2019 FDOT Count	2020 FDOT Count
2019 Daily Volume	56,000	-
Growth Rate	4.29%	-
2020 Daily Volume	-	45,500
2020 AADT Volume	58,402	45,500
<b>Volume Adjustment Factor</b>	<b>1.28</b>	

DRC

PZ21-12000042

6/15/2022

## Signal Timings



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

**DRC**

PZ21-12000042  
6/15/2022

Intersection Number	1345	Initial Operation Date	3/20/84
Controller Type	2070 LN	System Number	1345
Modification Number	7	Modification Date	01/28/2015
Drawing/Project No	B.C. 5079	FPL Grid Number	87890730809
Intersection	COPANS ROAD and NE 12 TERR.(FASHION SQ W)		
Municipality	POMPANO BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3,8	4,7	5	6		
Direction	EBL	WB	SB	NB	WBL	EB		
Initial Green(MIN)	4	7	6	6	5	7		
Vehicle Ext.(GAP)	1.5	3.0	2.0	2.0	1.5	3.0		
Maximum Green I	12	50	20	20	12	50		
Maximum Green II								
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0		
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0		
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN		
Detector Delay				20-RT				
Walk		7		7+A		7		
Pedestrian Clearance		32		30		32		
Permissive	5 SECT				5 SECT			
Flash Operation		YELLOW	RED	RED		YELLOW		

**Attachment**

**NOTES:**

1. ANTI-BACKDOWN EAST/WEST: PHASES 2+6 ON--->OMIT PHASES 1+5.
2. AUDIBLE PEDESTRIAN SIGNAL NORTHBOUND (P4).
3. MOD. 7 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By \_\_\_\_\_

Approved By \_\_\_\_\_

Broward County

Timing Sheet

3/30/2022 9:01:44 AM

Station : 1366 - US 1 & NE 18 St (Pompano) ( Standard File )

Phase	1 (SL)	2 (NT)	3 (ET)	4 (WT)	5 (NL)	6 (SR)	7	8	9	10	11	12	13	14	15	16
Walk		7	7			7										
Ped Clearance		24	27			24										
Min Green	5	12	6	6	5	12										
Gap Ext	1.5	3	2	2	1.5	3										
Max1	18	65	20	20	18	65										
Max2																
Yellow Clr	5	5	4	4	5	5	4	4								
Red Clr	2	2	2	2	2	2										
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON										
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable																
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

## Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash					ON	ON
Override Higher Preempt					ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6		
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8		
Max Presence	180	180	180	180		
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

## Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Dwell Cyc Veh 7					
Dwell Cyc Veh 8					
Dwell Cyc Veh 9					
Dwell Cyc Veh 10					
Dwell Cyc Veh 11					
Dwell Cyc Veh 12					
Dwell Cyc Ped1					
Dwell Cyc Ped2					
Dwell Cyc Ped3					
Dwell Cyc Ped4					
Dwell Cyc Ped5					
Dwell Cyc Ped6					
Dwell vPed7					
Dwell Cyc Ped8					
Exit 1					
Exit 2					
Exit 3					
Exit 4					

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

Broward County

## Timing Sheet

3/30/2022 9:01:44 AM

**Station :** 1366 - US 1 & NE 18 St (Pompano) ( Standard File )

## Coordination

[illegible]



PZ21-12000042

[illegible]

3/30/2022 9:01:44 AM

**Station : 1366 - US 1 & NE 18 St (Pompano) ( Standard File )**

[illegible]

## Scheduler

[illegible]

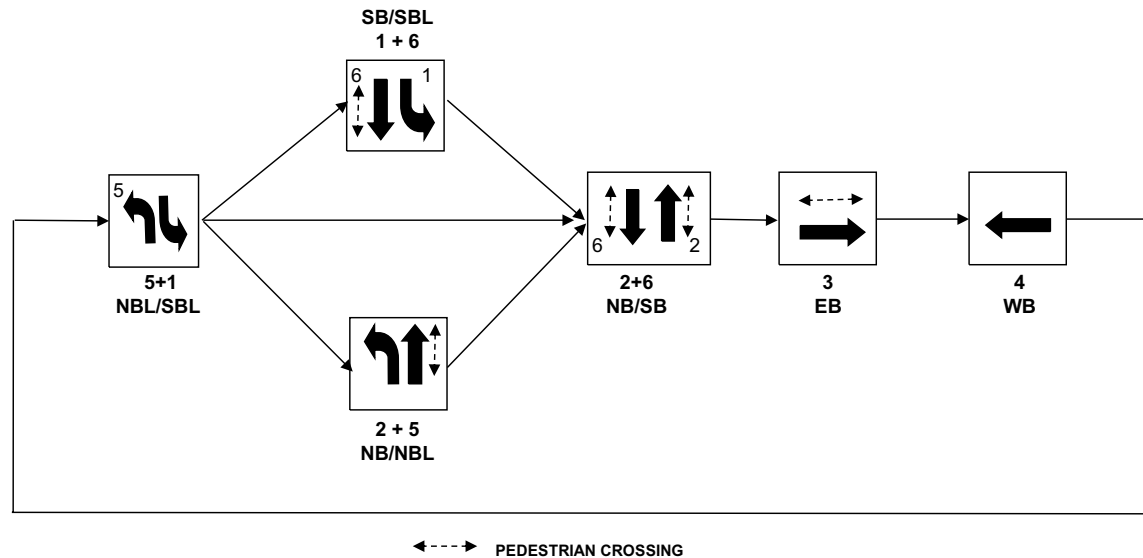
# DRC

23
24
25
26
27
28
29
30
31
32

**User Comments:**

## Sequence of Operation for (1366) Federal Hwy (US 1/SR 5) and NE 18 Street (Fashion Sq)

### Pompano Beach





**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

**DRC**

PZ21-12000042  
6/15/2022

Intersection Number	1366	Initial Operation Date	3/20/84
Controller Type	2070 LN	System Number	1366
Modification Number	10	Modification Date	04/01/2020
Drawing/Project No	86020-3525	FPL Grid Number	87989137502
Intersection	FEDERAL HWY. (US 1/SR 5) and NE 18 STREET (FASHION SQ)		
Municipality	POMPANO BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3,8	4,7	5	6		
Direction	SBL	NB	EB	WB	NBL	SB		
Initial Green(MIN)	5	12	6	6	5	12		
Vehicle Ext.(GAP)	1.5	3.0	2.0	2.0	1.5	3.0		
Maximum Green I	18	65	20	20	18	65		
Maximum Green II								
Yellow Clearance	5.0	5.0	4.0	4.0	5.0	5.0		
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0		
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN		
Detector Delay								
Walk		7	7			7		
Pedestrian Clearance		24	27			24		
Permissive	NO				DUAL			
Flash Operation	RED	YELLOW	RED	RED	RED	YELLOW		

Attachment

**NOTES:**

1. MOD. 10 UPDATES PH.3(EB) WALK VALUE.

Submitted By \_\_\_\_\_

Approved By \_\_\_\_\_

Broward County

Timing Sheet

3/30/2022 9:00:50 AM

Station : 1345 - Copans Rd & NE 12 Ter ( Standard File )

Phase	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		32		30		32										
Min Green	4	7	6	6	5	7										
Gap Ext	1.5	3	2	2	1.5	3										
Max1	12	50	20	20	12	50										
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON										
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

## Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell	ON	ON	ON	ON	ON	ON
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

## Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Dwell Cyc Veh 7					
Dwell Cyc Veh 8					
Dwell Cyc Veh 9					
Dwell Cyc Veh 10					
Dwell Cyc Veh 11					
Dwell Cyc Veh 12					
Dwell Cyc Ped1					
Dwell Cyc Ped2					
Dwell Cyc Ped3					
Dwell Cyc Ped4					
Dwell Cyc Ped5					
Dwell Cyc Ped6					
Dwell vPed7					
Dwell Cyc Ped8					
Exit 1					
Exit 2					
Exit 3					
Exit 4					

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

Broward County

## Timing Sheet

3/30/2022 9:00:50 AM

**Station :** 1345 - Copans Rd & NE 12 Ter ( Standard File )

## Coordination

[illegible]



PZ21-12000042

[illegible]

3/30/2022 9:00:50 AM

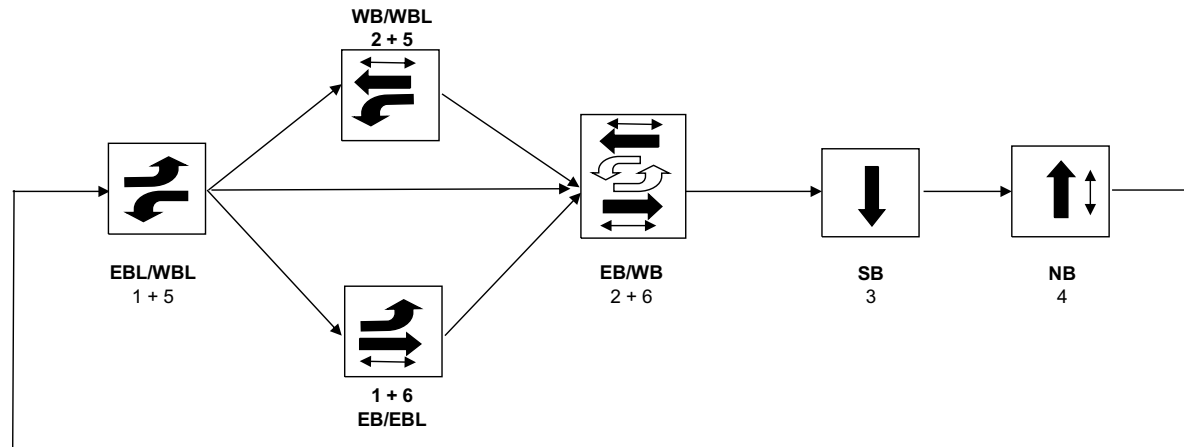
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

# DRC

[illegible]

**User Comments:**

## Sequence of Operation for COPANS ROAD AND NE 12 TERR.(FASHION SQ W) (1345)



 Denotes permissive left turns  
 Denotes pedestrian crosswalk

## Peak Season Conversion Factor

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8601 CEN.-W OF US1 TO SR7

# DRC

MOCF: 0.97

WEEK	DATES	SF	PSCF
1	01/01/2019 - 01/05/2019	1.00	1.03
2	01/06/2019 - 01/12/2019	1.00	1.03
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	0.99	1.02
* 6	02/03/2019 - 02/09/2019	0.98	1.01
* 7	02/10/2019 - 02/16/2019	0.97	1.00
* 8	02/17/2019 - 02/23/2019	0.97	1.00
* 9	02/24/2019 - 03/02/2019	0.97	1.00
*10	03/03/2019 - 03/09/2019	0.96	0.99
*11	03/10/2019 - 03/16/2019	0.96	0.99
*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	0.99	1.02
*18	04/28/2019 - 05/04/2019	0.99	1.02
19	05/05/2019 - 05/11/2019	1.00	1.03
20	05/12/2019 - 05/18/2019	1.00	1.03
21	05/19/2019 - 05/25/2019	1.01	1.04
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	1.03	1.06
28	07/07/2019 - 07/13/2019	1.03	1.06
29	07/14/2019 - 07/20/2019	1.04	1.07
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	1.01	1.04
34	08/18/2019 - 08/24/2019	1.02	1.05
35	08/25/2019 - 08/31/2019	1.03	1.06
36	09/01/2019 - 09/07/2019	1.03	1.06
37	09/08/2019 - 09/14/2019	1.04	1.07
38	09/15/2019 - 09/21/2019	1.05	1.08
39	09/22/2019 - 09/28/2019	1.04	1.07
40	09/29/2019 - 10/05/2019	1.02	1.05
41	10/06/2019 - 10/12/2019	1.01	1.04
42	10/13/2019 - 10/19/2019	1.00	1.03
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	1.00	1.03
46	11/10/2019 - 11/16/2019	1.00	1.03
47	11/17/2019 - 11/23/2019	1.00	1.03
48	11/24/2019 - 11/30/2019	1.00	1.03
49	12/01/2019 - 12/07/2019	1.00	1.03
50	12/08/2019 - 12/14/2019	1.00	1.03
51	12/15/2019 - 12/21/2019	1.00	1.03
52	12/22/2019 - 12/28/2019	1.00	1.03
53	12/29/2019 - 12/31/2019	1.01	1.04

PZ21-12000042

6/15/2022

\* PEAK SEASON

14-FEB-2020 15:39:26

830UPD

4\_8601\_PKSEASON.TXT

## **Appendix D**

### Background Area Growth Calculations



DRC

PZ21-12000042

6/15/2022

## FDOT Historic Growth Trends

# DRC

FDOT Growth Rate Summary

Station Number	Location	Historic Growth- Linear				Historic Growth- Exponential				Historic Growth- Decaying Exponential			
		5-year	R-squared	10-year	R-squared	5-year	R-squared	10-year	R-squared	5-year	R-squared	10-year	R-squared
0141	SR 5 / US 1 -- south of Copans Road	3.53%	39.92%	0.75%	8.41%	3.30%	39.85%	0.68%	7.68%	3.19%	35.21%	0.32%	1.46%
5100	SR 5 -- north of NE 6th Street	1.84%	31.60%	1.75%	65.19%	1.79%	30.83%	1.61%	65.33%	1.19%	13.18%	1.50%	46.00%
5212	SR 844 / 14th Street -- east of SR 5 / US 1	7.51%	96.29%	2.61%	60.14%	6.87%	94.93%	2.31%	58.94%	7.10%	97.73%	2.14%	41.67%
Total		4.29%	55.94%	1.70%	44.58%	3.99%	55.20%	1.53%	43.98%	3.83%	48.71%	1.32%	29.71%

PZ21-12000042  
6/15/2022

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2020 HISTORICAL AADT REPORT

# DRC

PZ21-12000042  
6/15/2022

COUNTY: 86 - BROWARD

SITE: 0141 - SR 5 / US 1 - S OF COPANS RD

YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----	-----	-----	-----	-----
2020	45500 C	N	23000	S 22500	9.00	53.50	6.30
2019	56000 C	N	29000	S 27000	9.00	54.70	8.20
2018	49000 C	N	24500	S 24500	9.00	54.10	8.20
2017	47000 C	N	23000	S 24000	9.00	53.80	8.20
2016	52500 C	N	26500	S 26000	9.00	55.20	4.60
2015	46000 C	N	25000	S 21000	9.00	54.90	4.60
2014	45000 C	N	24500	S 20500	9.00	54.50	6.60
2013	44000 C	N	25000	S 19000	9.00	54.60	6.30
2012	52000 C	N	28000	S 24000	9.00	55.00	4.60
2011	48500 C	N	25000	S 23500	9.00	54.50	3.60
2010	50000 C	N	24000	S 26000	9.37	54.06	2.40
2009	47500 C	N	24000	S 23500	9.31	53.74	4.20
2008	52500 C	N	26500	S 26000	9.70	54.48	4.10
2007	48500 C	N	24500	S 24000	9.10	53.47	2.60
2006	49000 C	N	25000	S 24000	9.48	53.59	5.20
2005	47500 C	N	24000	S 23500	10.60	58.90	5.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE

S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE

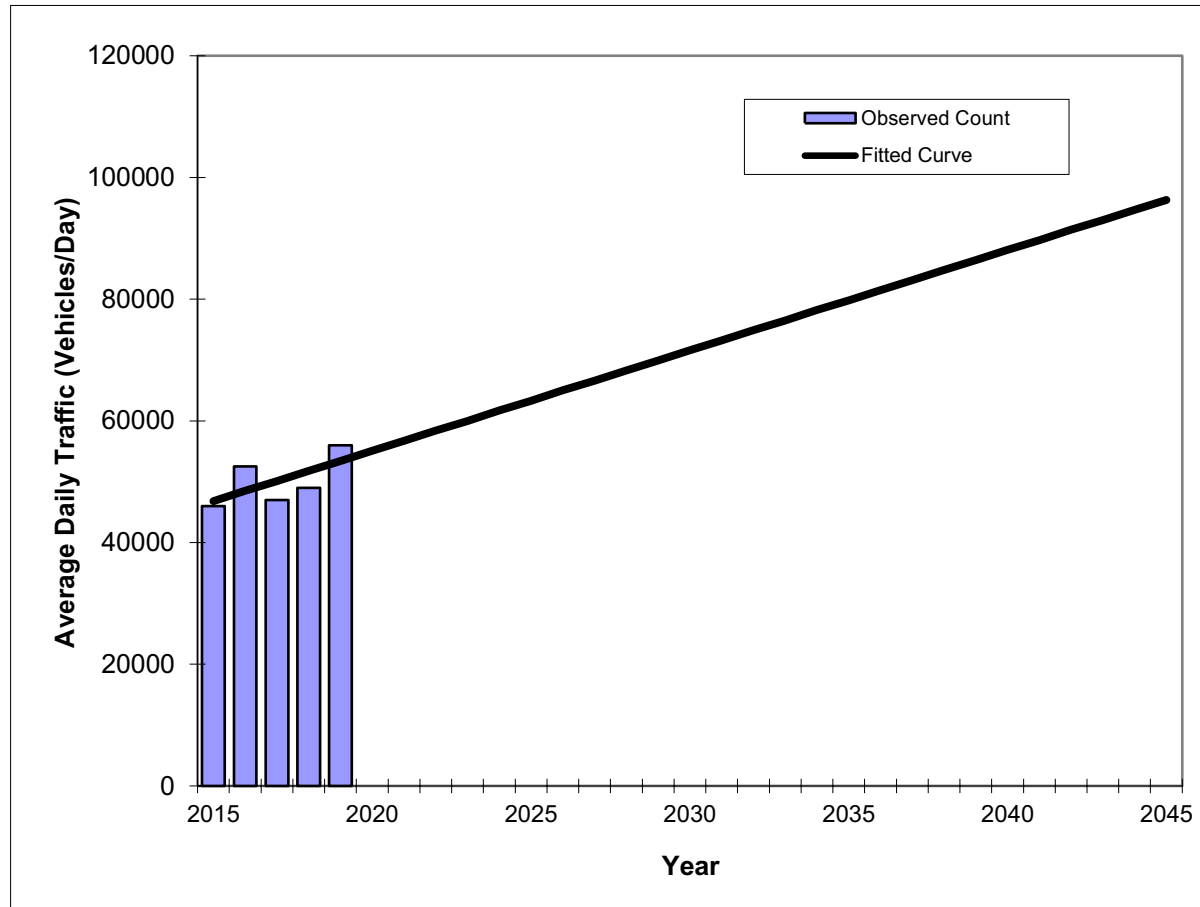
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

## Traffic Trends SR 5 / US 1 -- S OF COPANS ROAD

County:	Broward (26)
Station #:	0143
Highway:	SR 5 / US 1

P721-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	46000	46800
2016	52500	48500
2017	47000	50100
2018	49000	51800
2019	56000	53400

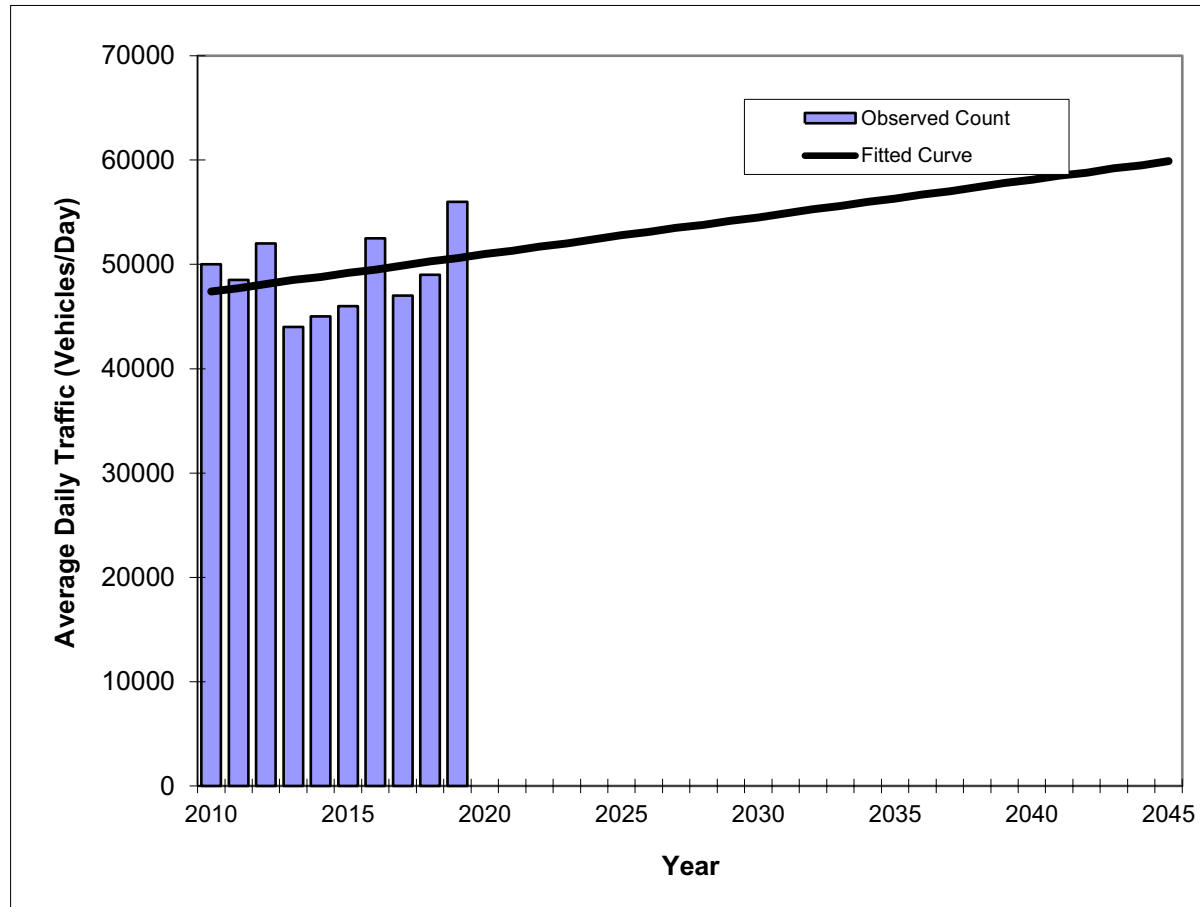
Trend R-squared:	39.92%
Trend Annual Historic Growth Rate:	3.53%
Printed:	19-Apr-22
Straight Line Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 / US 1 -- S OF COPANS ROAD

County:	Broward (26)
Station #:	0143
Highway:	SR 5 / US 1

P791-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	50000	47400
2011	48500	47700
2012	52000	48100
2013	44000	48500
2014	45000	48800
2015	46000	49200
2016	52500	49500
2017	47000	49900
2018	49000	50300
2019	56000	50600

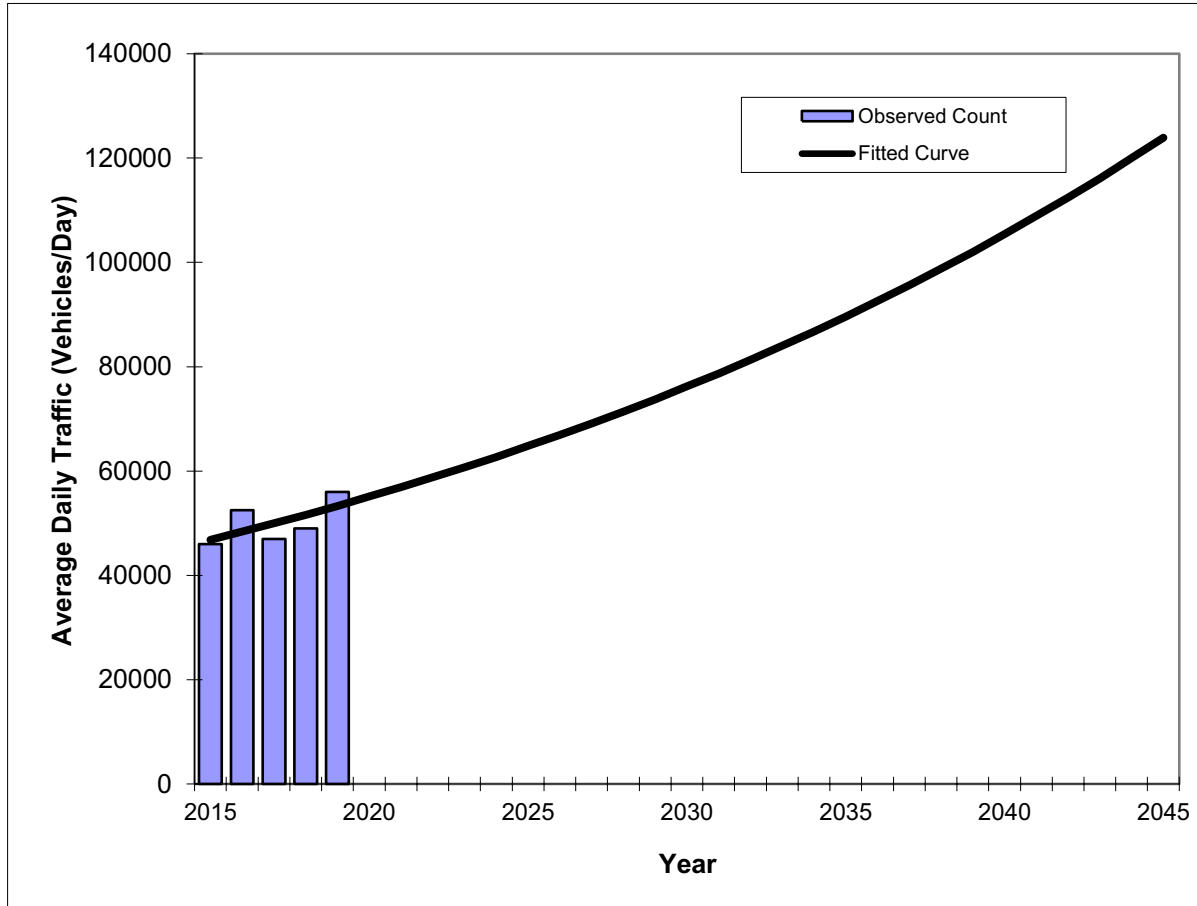
Trend R-squared:	8.41%
Trend Annual Historic Growth Rate:	0.75%
Printed:	19-Apr-22
Straight Line Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 / US 1 -- S OF COPANS ROAD

County:	Broward (26)
Station #:	0143
Highway:	SR 5 / US 1

P721-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	46000	46800
2016	52500	48400
2017	47000	50000
2018	49000	51600
2019	56000	53300

Trend R-squared:	39.85%
Compounded Annual Historic Growth Rate:	3.30%
Printed:	19-Apr-22
Exponential Growth Option	

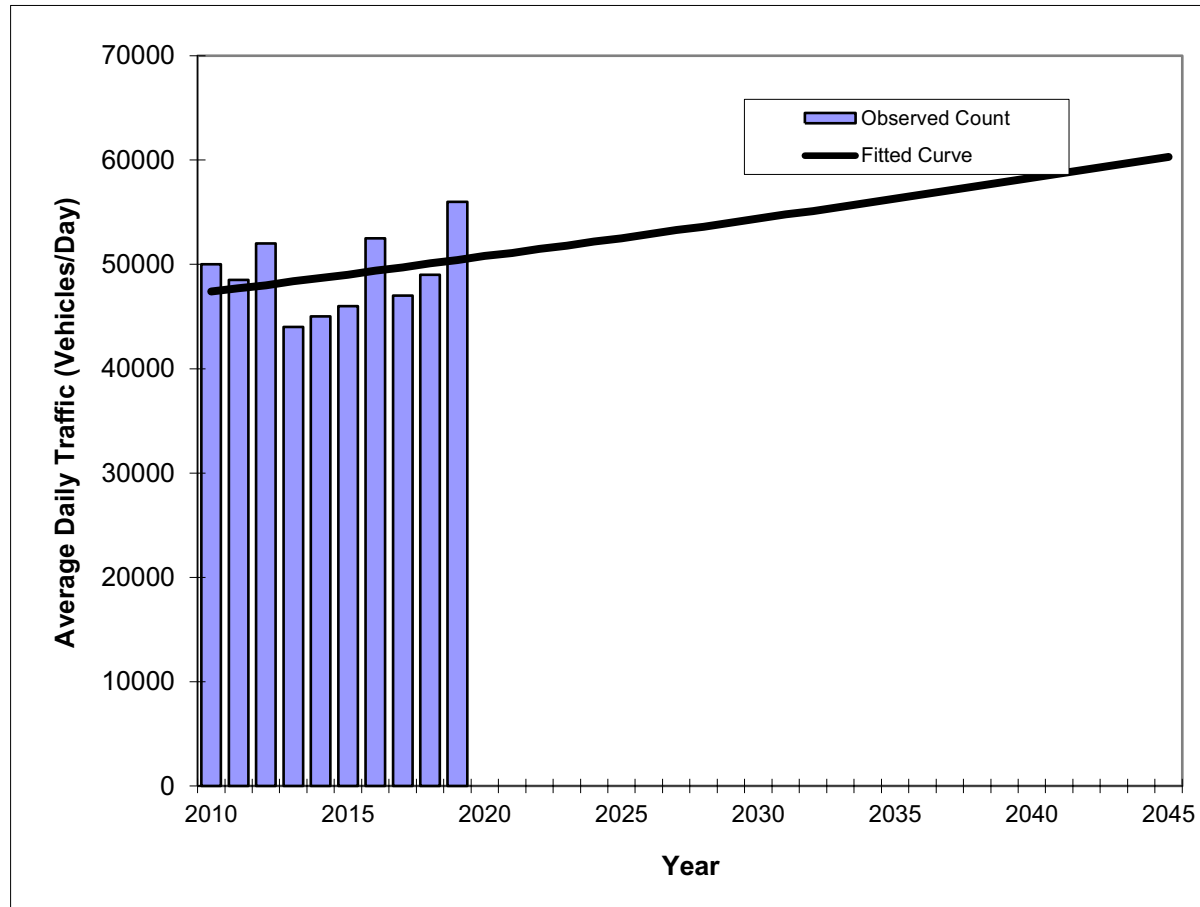
\*Axle-Adjusted



## Traffic Trends SR 5 / US 1 -- S OF COPANS ROAD

County:	Broward (26)
Station #:	0143
Highway:	SR 5 / US 1

P791-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	50000	47400
2011	48500	47700
2012	52000	48000
2013	44000	48400
2014	45000	48700
2015	46000	49000
2016	52500	49400
2017	47000	49700
2018	49000	50100
2019	56000	50400

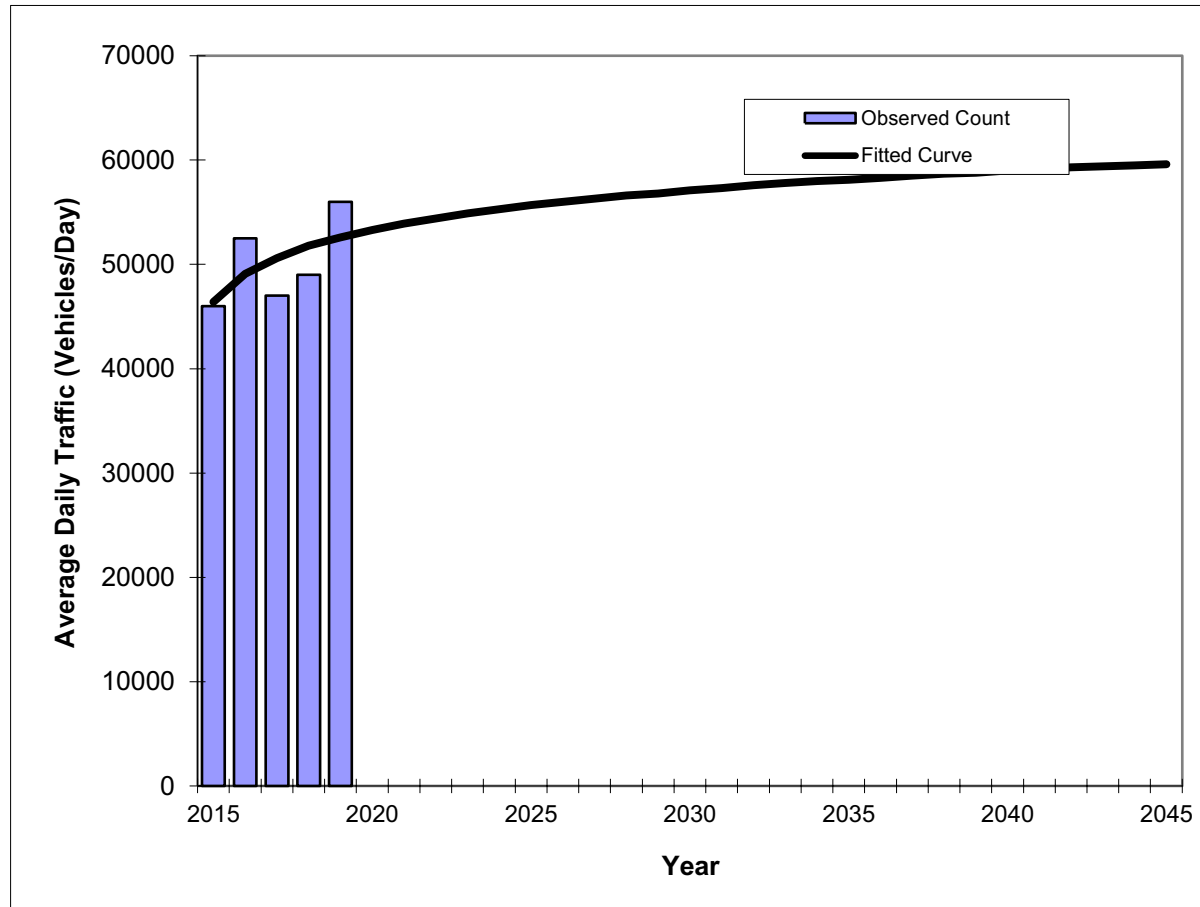
Trend R-squared:	7.68%
Compounded Annual Historic Growth Rate:	0.68%
Printed:	19-Apr-22
Exponential Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 / US 1 -- S OF COPANS ROAD

County:	Broward (26)
Station #:	0143
Highway:	SR 5 / US 1

P721-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	46000	46400
2016	52500	49100
2017	47000	50600
2018	49000	51800
2019	56000	52600

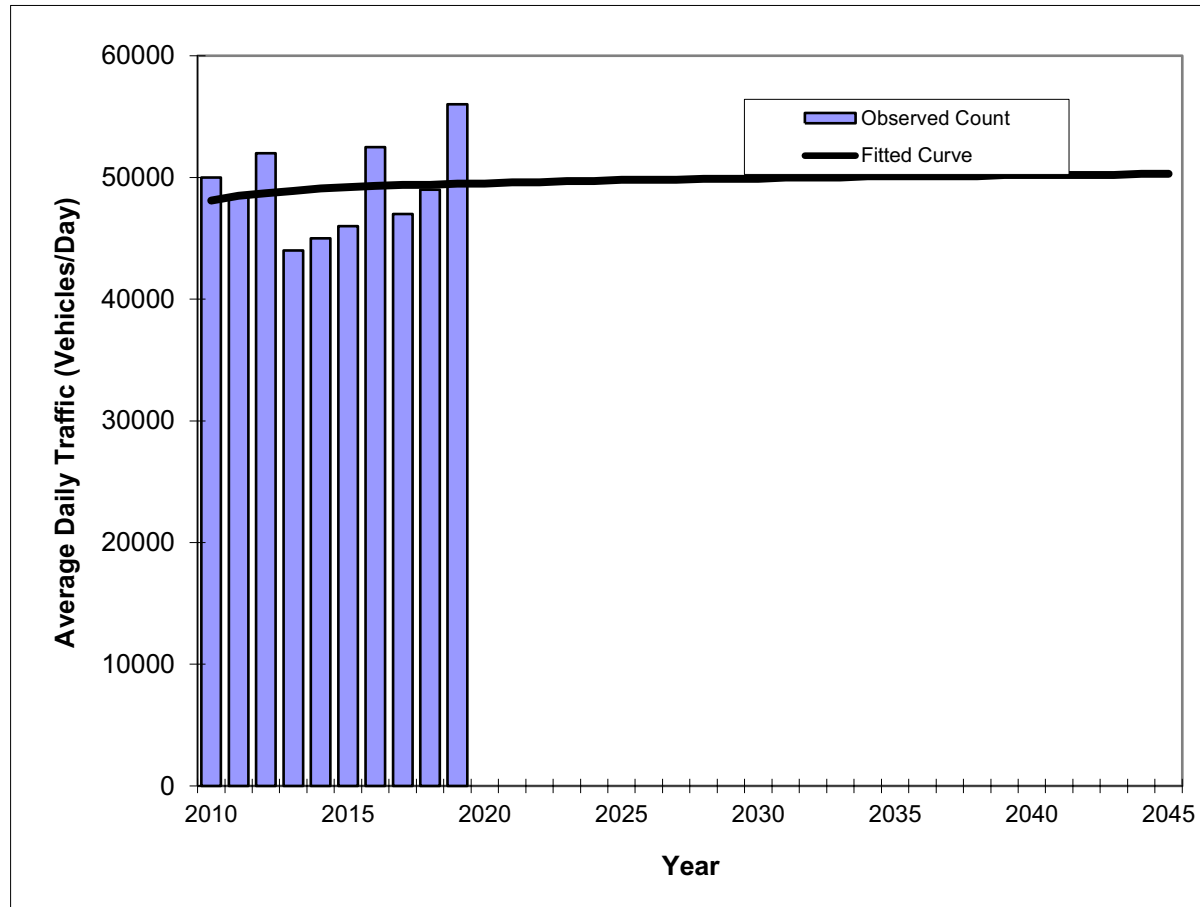
Trend R-squared:	35.21%
Compounded Annual Historic Growth Rate:	3.19%
Printed:	19-Apr-22
Decaying Exponential Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 / US 1 -- S OF COPANS ROAD

County:	Broward (26)
Station #:	0143
Highway:	SR 5 / US 1

P791-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	50000	48100
2011	48500	48500
2012	52000	48700
2013	44000	48900
2014	45000	49100
2015	46000	49200
2016	52500	49300
2017	47000	49400
2018	49000	49400
2019	56000	49500

Trend R-squared:	1.46%
Compounded Annual Historic Growth Rate:	0.32%
Printed:	19-Apr-22
Decaying Exponential Growth Option	

\*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2020 HISTORICAL AADT REPORT

# DRC

PZ21-12000042  
6/15/2022

COUNTY: 86 - BROWARD

SITE: 5100 - SR 5 - N OF NE 6 ST, POMPANO

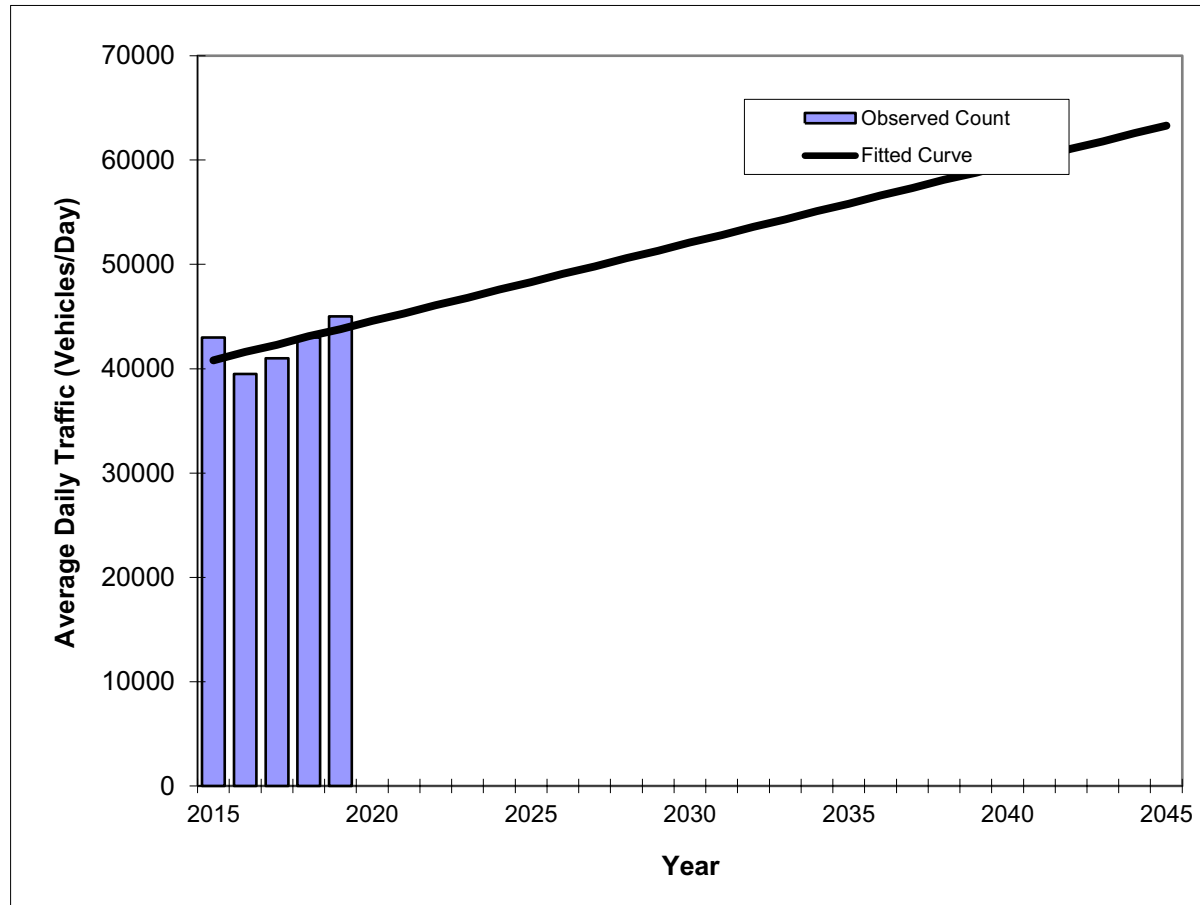
YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----	-----	-----	-----	-----
2020	43000 F	N	22000	S 21000	9.00	53.50	6.10
2019	45000 C	N	23000	S 22000	9.00	54.70	6.10
2018	43000 C	N	22000	S 21000	9.00	54.10	6.10
2017	41000 C	N	21000	S 20000	9.00	53.80	3.90
2016	39500 C	N	19500	S 20000	9.00	55.20	3.90
2015	43000 C	N	21500	S 21500	9.00	54.90	3.90
2014	39500 C	N	19500	S 20000	9.00	54.50	5.50
2013	37500 C	N	18500	S 19000	9.00	54.60	5.50
2012	39000 C	N	21000	S 18000	9.00	55.00	5.50
2011	38000 C	N	18500	S 19500	9.00	54.50	5.50
2010	39000 C	N	19500	S 19500	9.37	54.06	5.50
2009	42000 C	N	21000	S 21000	9.31	53.74	5.50
2008	41500 C	N	20500	S 21000	9.70	54.48	2.70
2007	42500 C	N	21000	S 21500	9.10	53.47	2.70
2006	42000 C	N	21000	S 21000	9.48	53.59	4.40
2005	39000 C	N	19000	S 20000	10.60	58.90	3.50

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

## Traffic Trends SR 5 -- N OF NE 6TH STREET

County:	Broward (26)
Station #:	5109
Highway:	SR 5

P721-12000042  
9/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	43000	40800
2016	39500	41600
2017	41000	42300
2018	43000	43100
2019	45000	43800

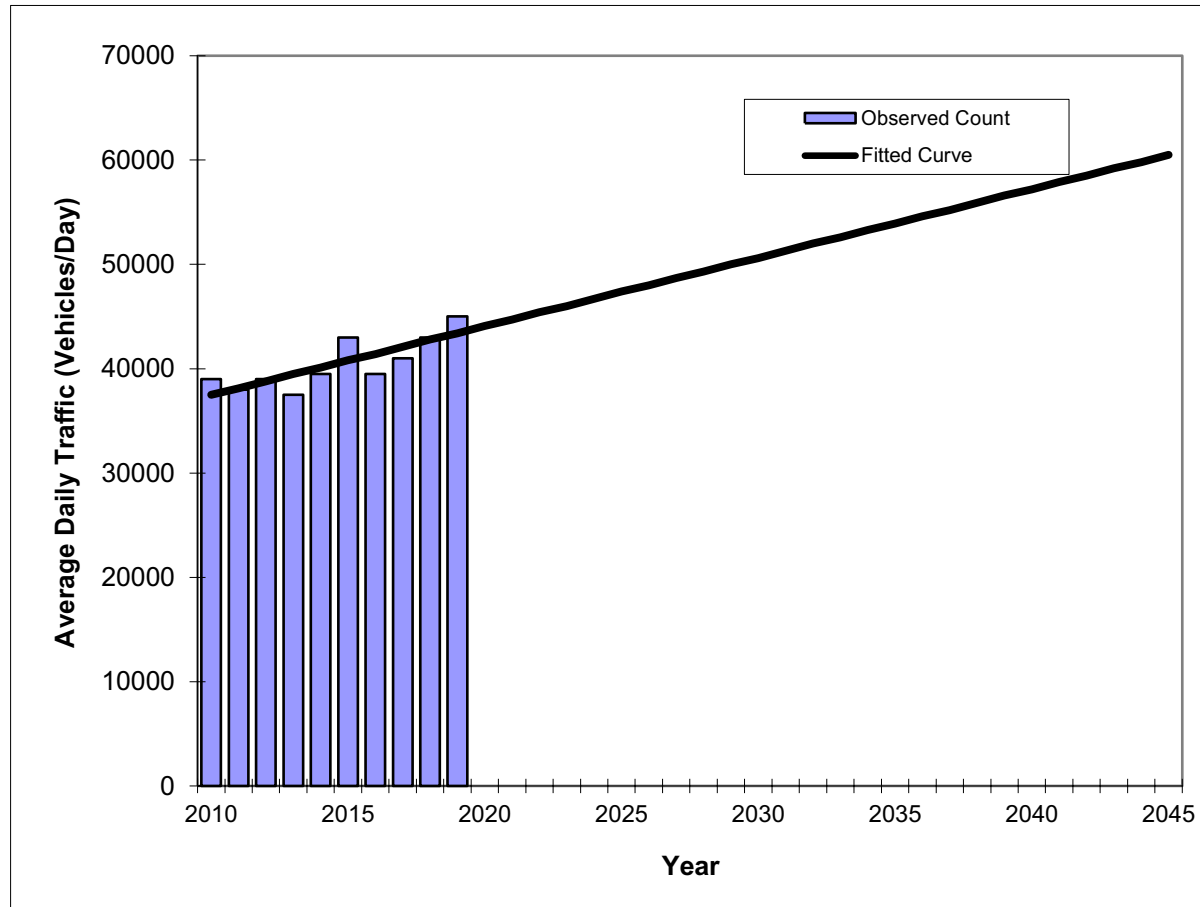
Trend R-squared:	31.60%
Trend Annual Historic Growth Rate:	1.84%
Printed:	19-Apr-22
Straight Line Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 -- N OF NE 6TH STREET

County:	Broward (26)
Station #:	5109
Highway:	SR 5

P791-12000042  
9/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	39000	37500
2011	38000	38100
2012	39000	38800
2013	37500	39500
2014	39500	40100
2015	43000	40800
2016	39500	41400
2017	41000	42100
2018	43000	42800
2019	45000	43400

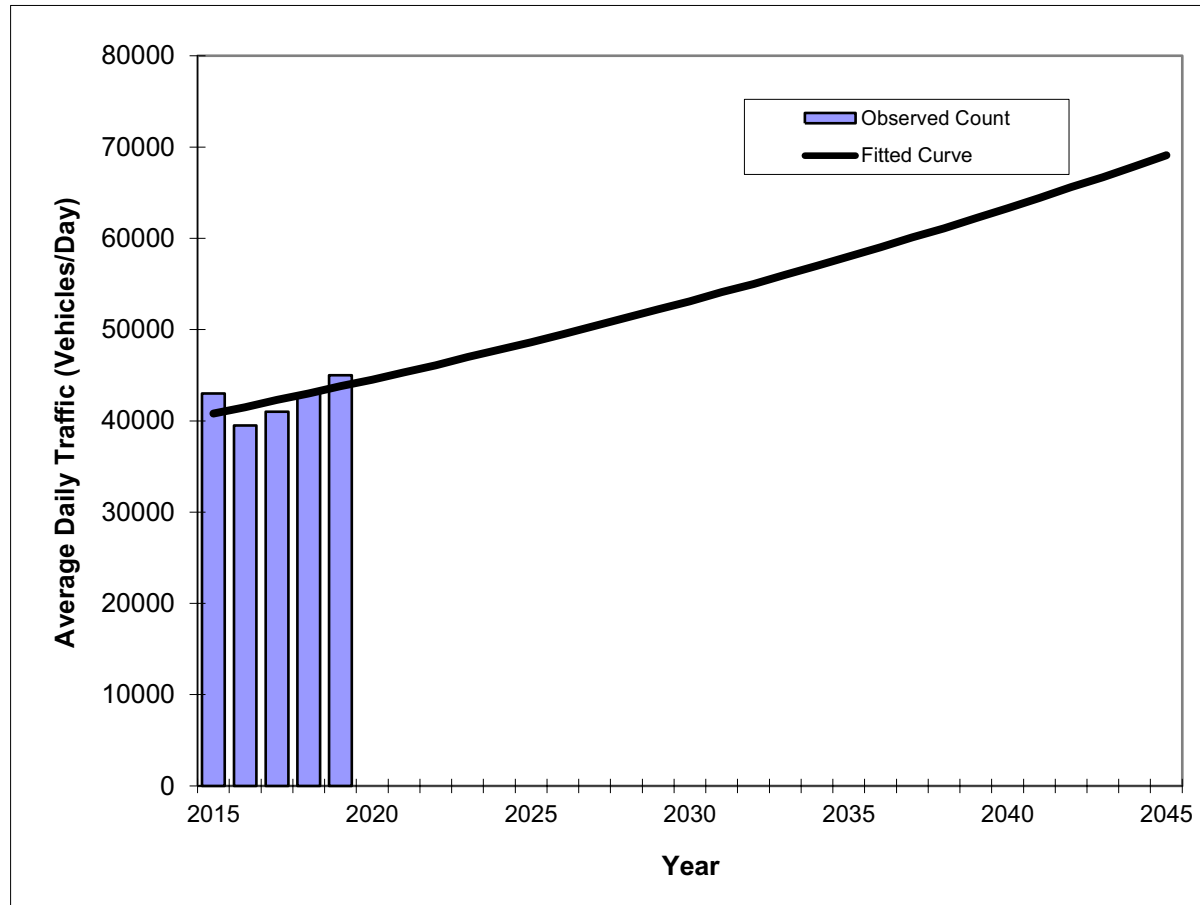
Trend R-squared:	65.19%
Trend Annual Historic Growth Rate:	1.75%
Printed:	19-Apr-22
Straight Line Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 -- N OF NE 6TH STREET

County:	Broward (26)
Station #:	5109
Highway:	SR 5

P721-12000042  
9/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	43000	40800
2016	39500	41500
2017	41000	42300
2018	43000	43000
2019	45000	43800

Trend R-squared:	30.83%
Compounded Annual Historic Growth Rate:	1.79%
Printed:	19-Apr-22
Exponential Growth Option	

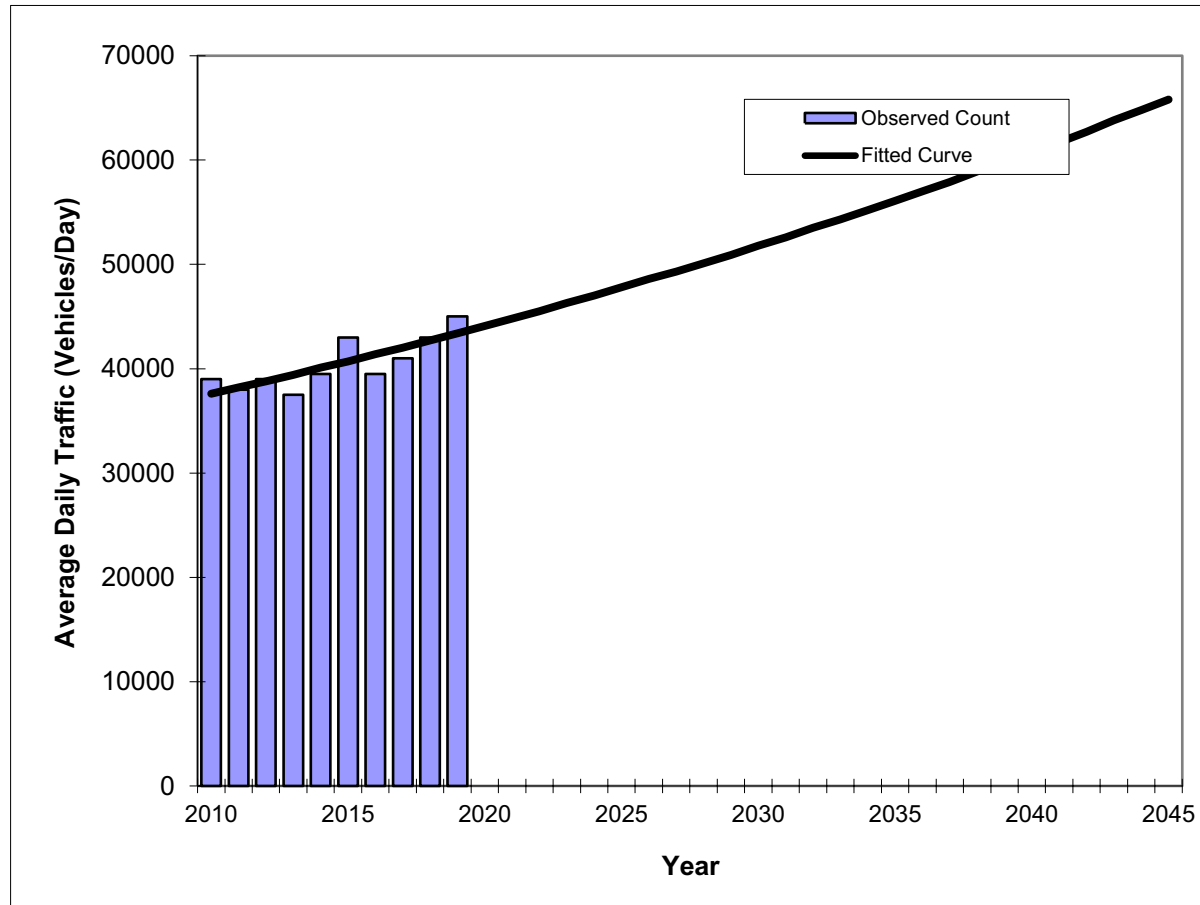
\*Axle-Adjusted



## Traffic Trends SR 5 -- N OF NE 6TH STREET

County:	Broward (26)
Station #:	5109
Highway:	SR 5

P791-12000042  
9/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	39000	37600
2011	38000	38200
2012	39000	38800
2013	37500	39400
2014	39500	40100
2015	43000	40700
2016	39500	41400
2017	41000	42000
2018	43000	42700
2019	45000	43400

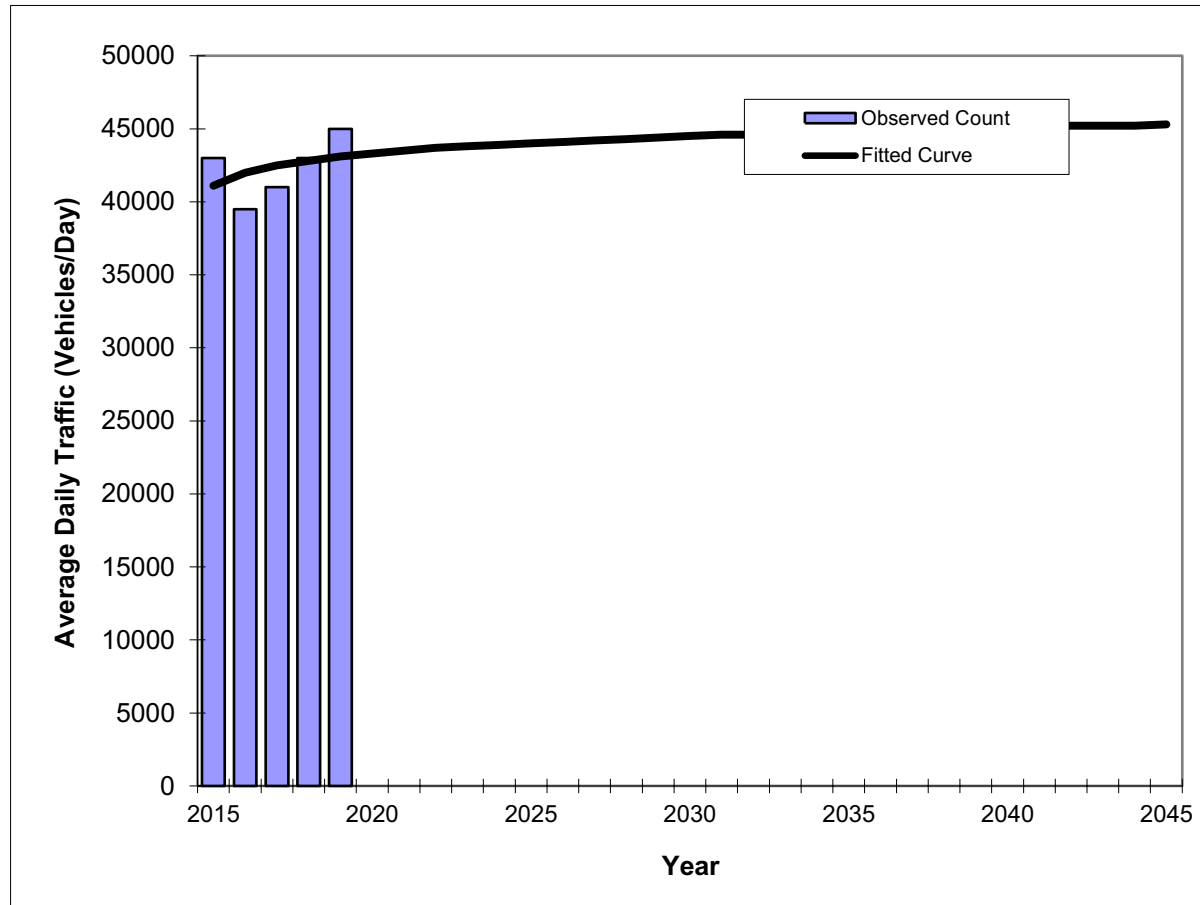
Trend R-squared:	65.33%
Compounded Annual Historic Growth Rate:	1.61%
Printed:	19-Apr-22
Exponential Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 -- N OF NE 6TH STREET

County:	Broward (26)
Station #:	5100
Highway:	SR 5

P721-12000042  
9/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	43000	41100
2016	39500	42000
2017	41000	42500
2018	43000	42800
2019	45000	43100

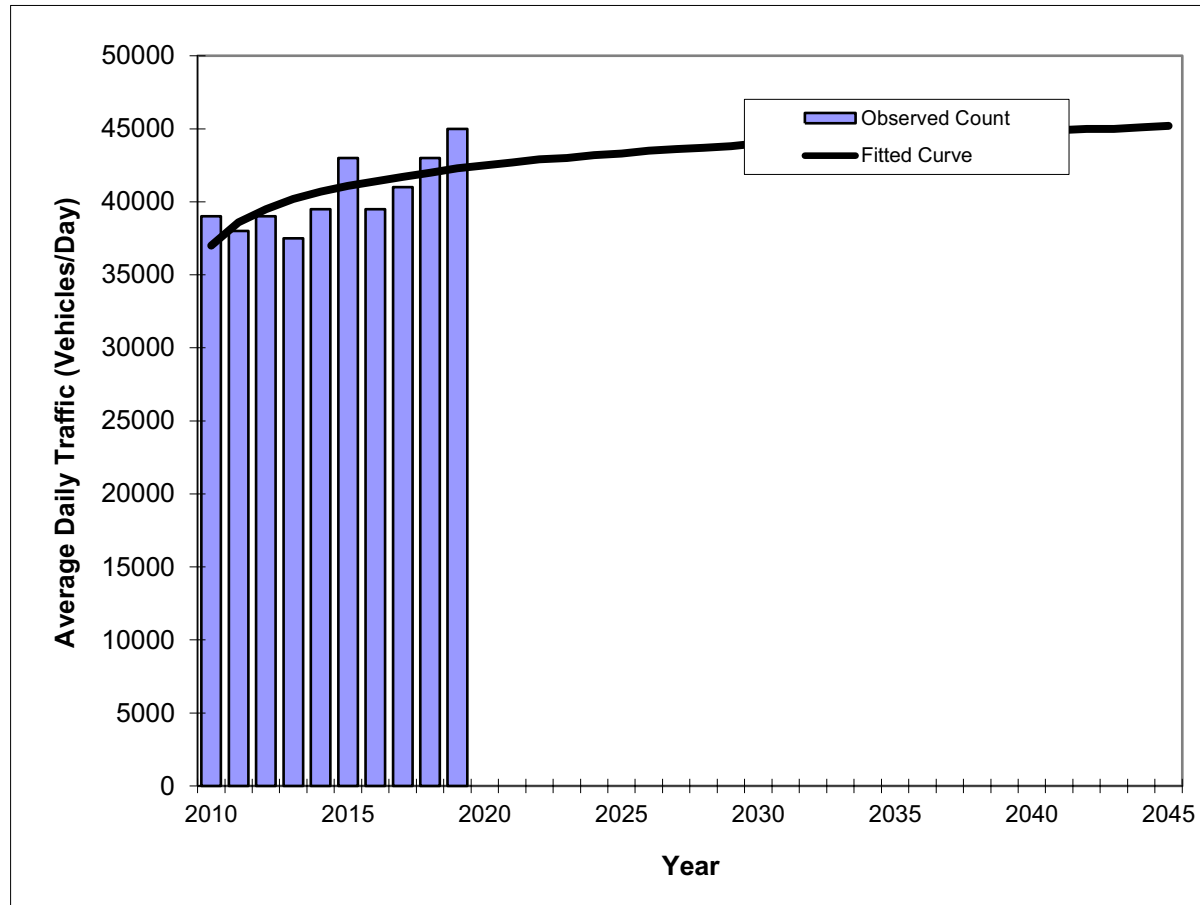
Trend R-squared:	13.18%
Compounded Annual Historic Growth Rate:	1.19%
Printed:	19-Apr-22
Decaying Exponential Growth Option	

\*Axle-Adjusted

## Traffic Trends SR 5 -- N OF NE 6TH STREET

County:	Broward (26)
Station #:	5109
Highway:	SR 5

P791-12000042  
9/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	39000	37000
2011	38000	38600
2012	39000	39500
2013	37500	40200
2014	39500	40700
2015	43000	41100
2016	39500	41400
2017	41000	41700
2018	43000	42000
2019	45000	42300

Trend R-squared:	46.00%
Compounded Annual Historic Growth Rate:	1.50%
Printed:	19-Apr-22
Decaying Exponential Growth Option	

\*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2020 HISTORICAL AADT REPORT

# DRC

PZ21-12000042  
6/15/2022

COUNTY: 86 - BROWARD

SITE: 5212 - SR 844 / 14 ST - E OF SR 5/US 1

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2020	21500 F	E	10000	W	11500	9.00	53.50	3.80
2019	22500 C	E	10500	W	12000	9.00	54.70	3.80
2018	20900 C	E	9900	W	11000	9.00	54.10	3.60
2017	20300 C	E	9800	W	10500	9.00	53.80	3.30
2016	19100 C	E	9200	W	9900	9.00	55.20	3.30
2015	16900 C	E	7900	W	9000	9.00	54.90	3.30
2014	17700 C	E	8600	W	9100	9.00	54.50	3.90
2013	18400 C	E	8700	W	9700	9.00	54.60	3.90
2012	18500 C	E	9800	W	8700	9.00	55.00	4.90
2011	18600 C	E	8900	W	9700	9.00	54.50	4.90
2010	17200 C	E	8400	W	8800	9.37	54.06	4.90
2009	18600 C	E	8800	W	9800	9.31	53.74	3.90
2008	17600 C	E	8300	W	9300	9.70	54.48	3.90
2007	16600 C	E	8100	W	8500	9.10	53.47	3.40
2006	16500 C	E	7900	W	8600	9.48	53.59	3.10
2005	18200 C	E	8500	W	9700	10.60	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

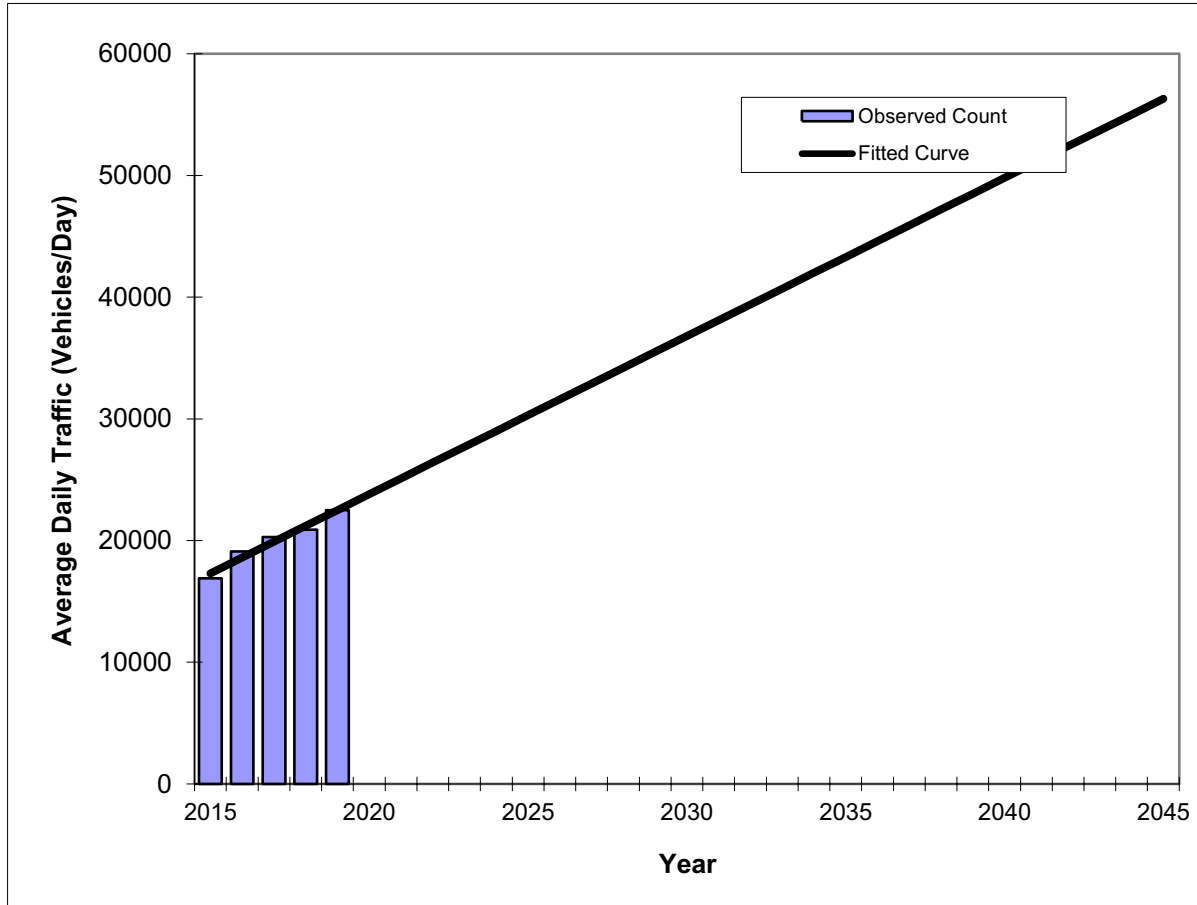
\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

## Traffic Trends

SR 844 / 14th Street -- E OF SR 5/US 1

County:	Broward (26)
Station #:	5213
Highway:	SR 844 / 14th Street

P721-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	16900	17300
2016	19100	18600
2017	20300	19900
2018	20900	21200
2019	22500	22500

Trend R-squared:	96.29%
Trend Annual Historic Growth Rate:	7.51%
Printed:	19-Apr-22
Straight Line Growth Option	

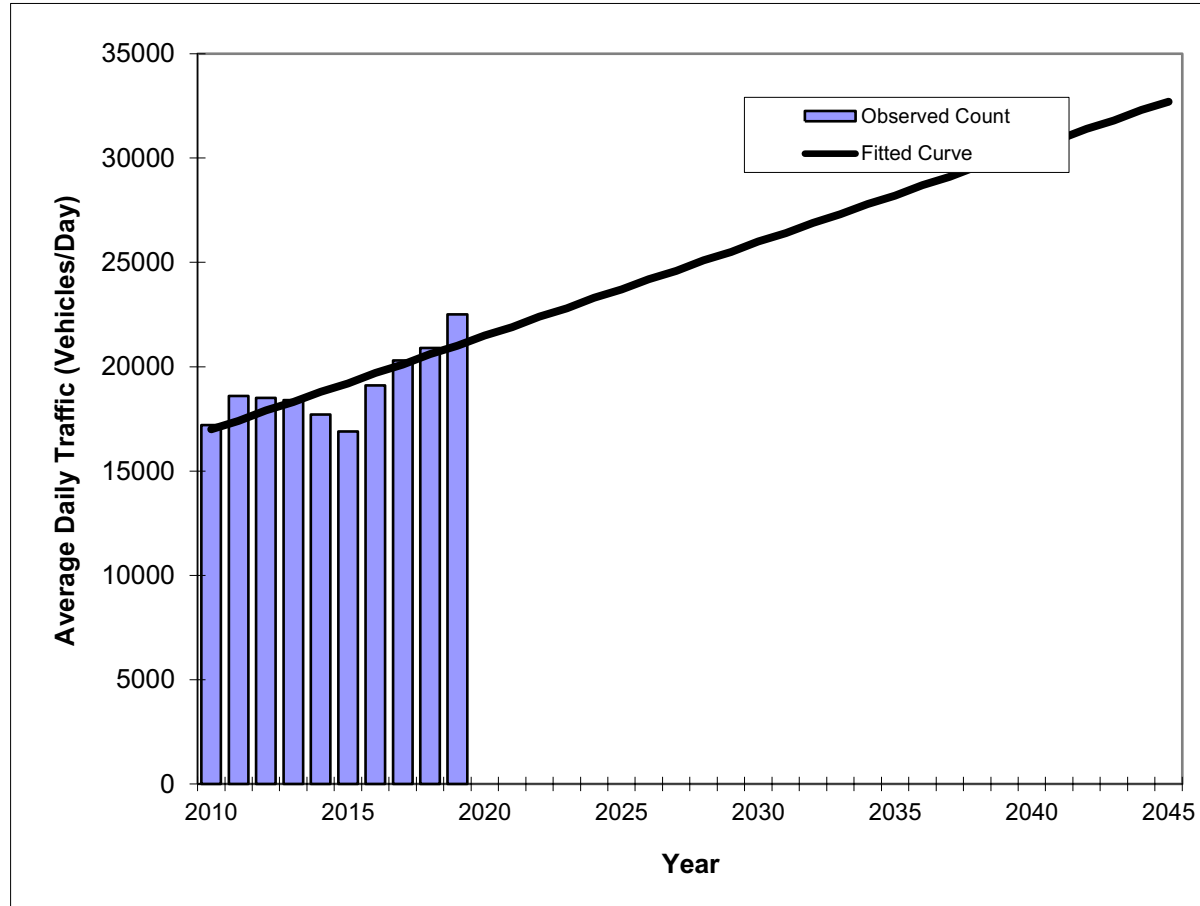
\*Axle-Adjusted

## Traffic Trends

SR 844 / 14th Street -- E OF SR 5/US 1

County:	Broward (26)
Station #:	5213
Highway:	SR 844 / 14th Street

P791-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	17200	17000
2011	18600	17400
2012	18500	17900
2013	18400	18300
2014	17700	18800
2015	16900	19200
2016	19100	19700
2017	20300	20100
2018	20900	20600
2019	22500	21000

Trend R-squared:	60.14%
Trend Annual Historic Growth Rate:	2.61%
Printed:	19-Apr-22
Straight Line Growth Option	

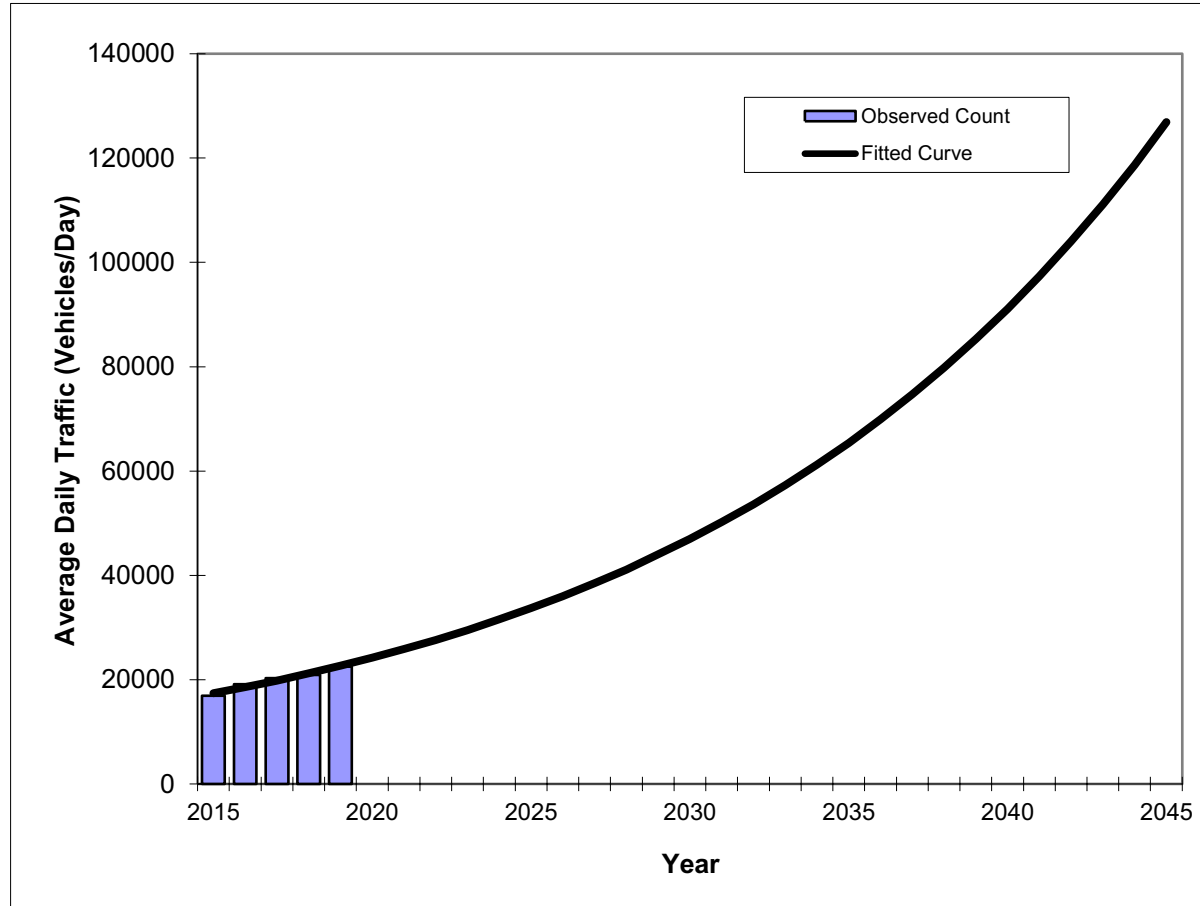
\*Axle-Adjusted

## Traffic Trends

SR 844 / 14th Street -- E OF SR 5/US 1

County:	Broward (86)
Station #:	5213
Highway:	SR 844 / 14th Street

P721-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	16900	17400
2016	19100	18600
2017	20300	19800
2018	20900	21200
2019	22500	22700

Trend R-squared:	94.93%
Compounded Annual Historic Growth Rate:	6.87%
Printed:	19-Apr-22
Exponential Growth Option	

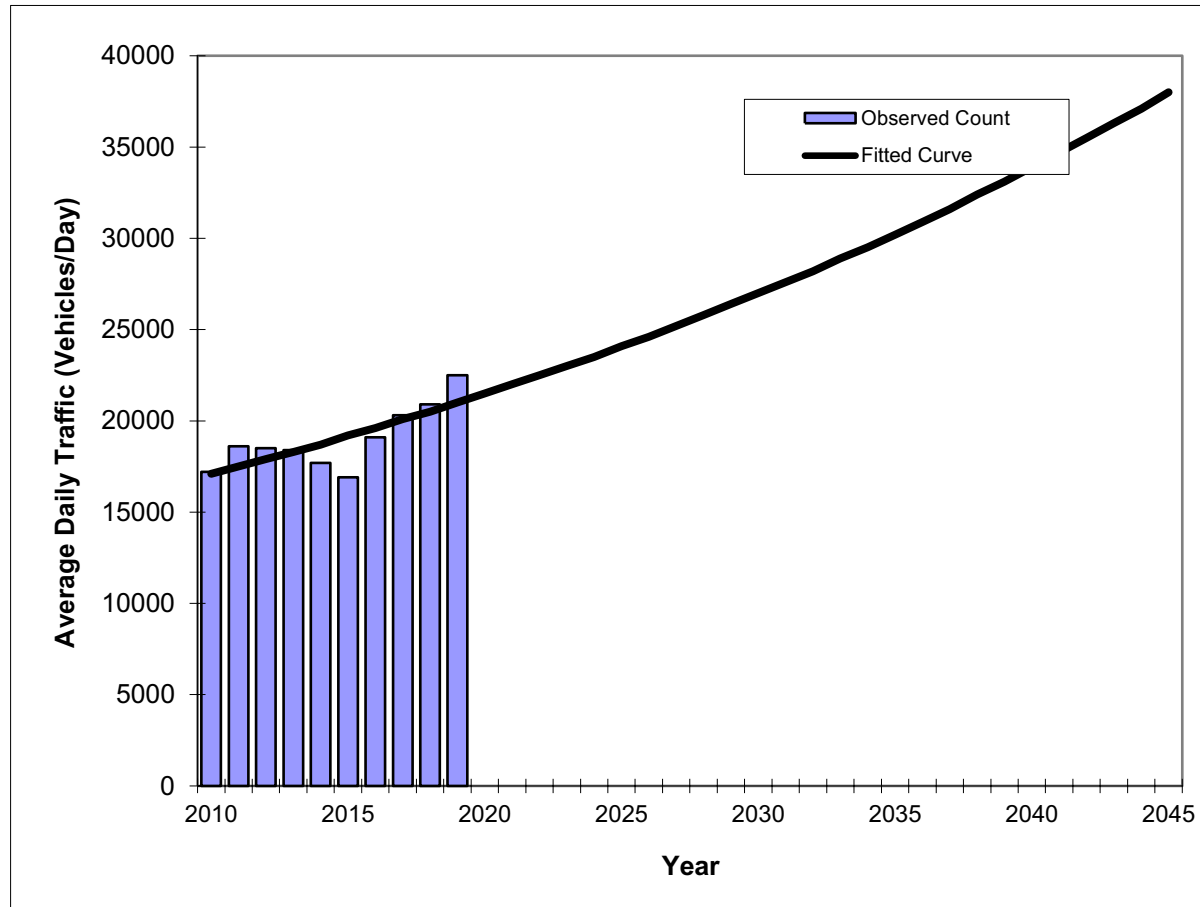
\*Axle-Adjusted

## Traffic Trends

SR 844 / 14th Street -- E OF SR 5/US 1

County:	Broward (26)
Station #:	5213
Highway:	SR 844 / 14th Street

P791-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	17200	17100
2011	18600	17500
2012	18500	17900
2013	18400	18300
2014	17700	18700
2015	16900	19200
2016	19100	19600
2017	20300	20100
2018	20900	20500
2019	22500	21000

Trend R-squared:	58.94%
Compounded Annual Historic Growth Rate:	2.31%
Printed:	19-Apr-22
Exponential Growth Option	

\*Axle-Adjusted



**SR 844 / 14th Street -- E OF SR 5/US 1**

**County:**

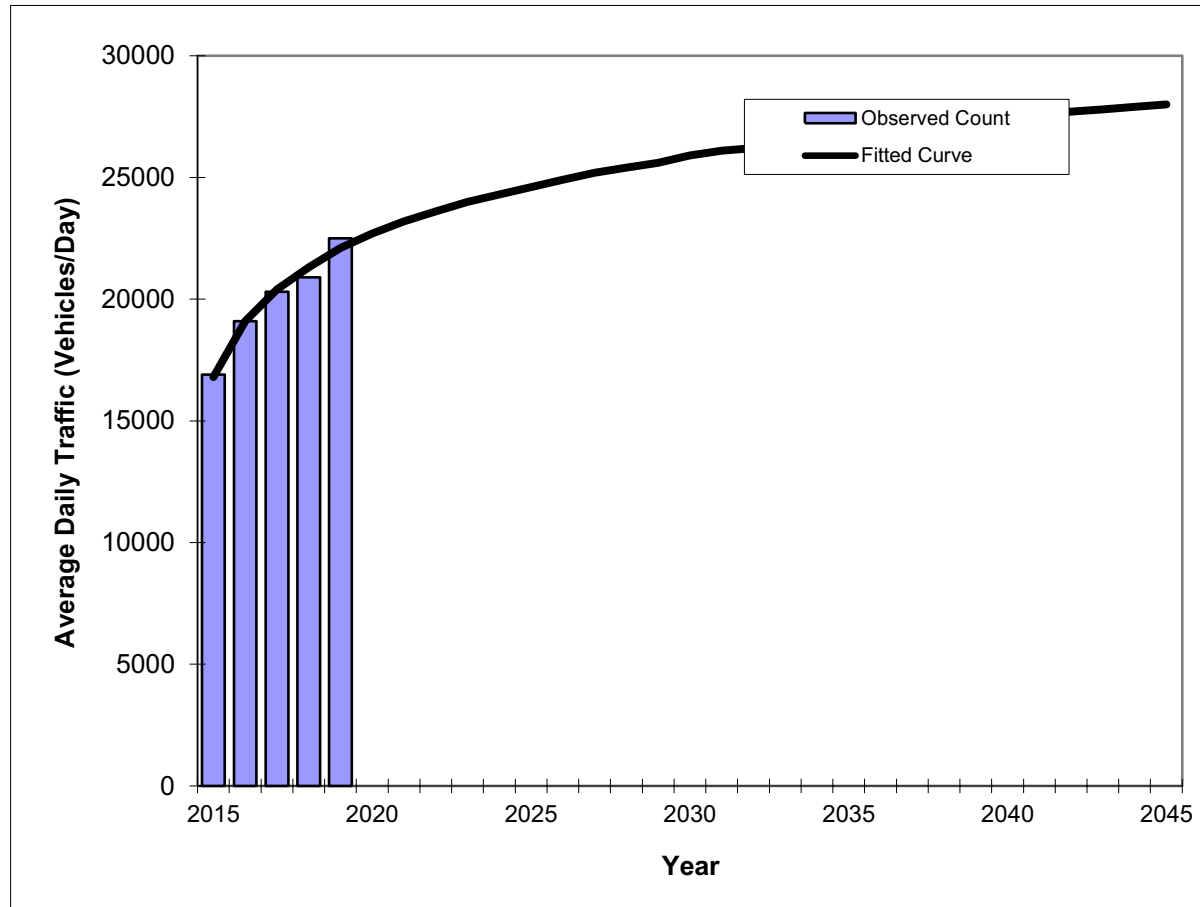
Broward (86)

Station #:

5212

**Highway:**

SR 844 / 14th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	16900	16800
2016	19100	19100
2017	20300	20400
2018	20900	21300
2019	22500	22100

**\*Axle-Adjusted**

Trend R-squared: 97.73%

**Compounded Annual Historic Growth Rate:** 7.10%

Printed: 19-Apr-22

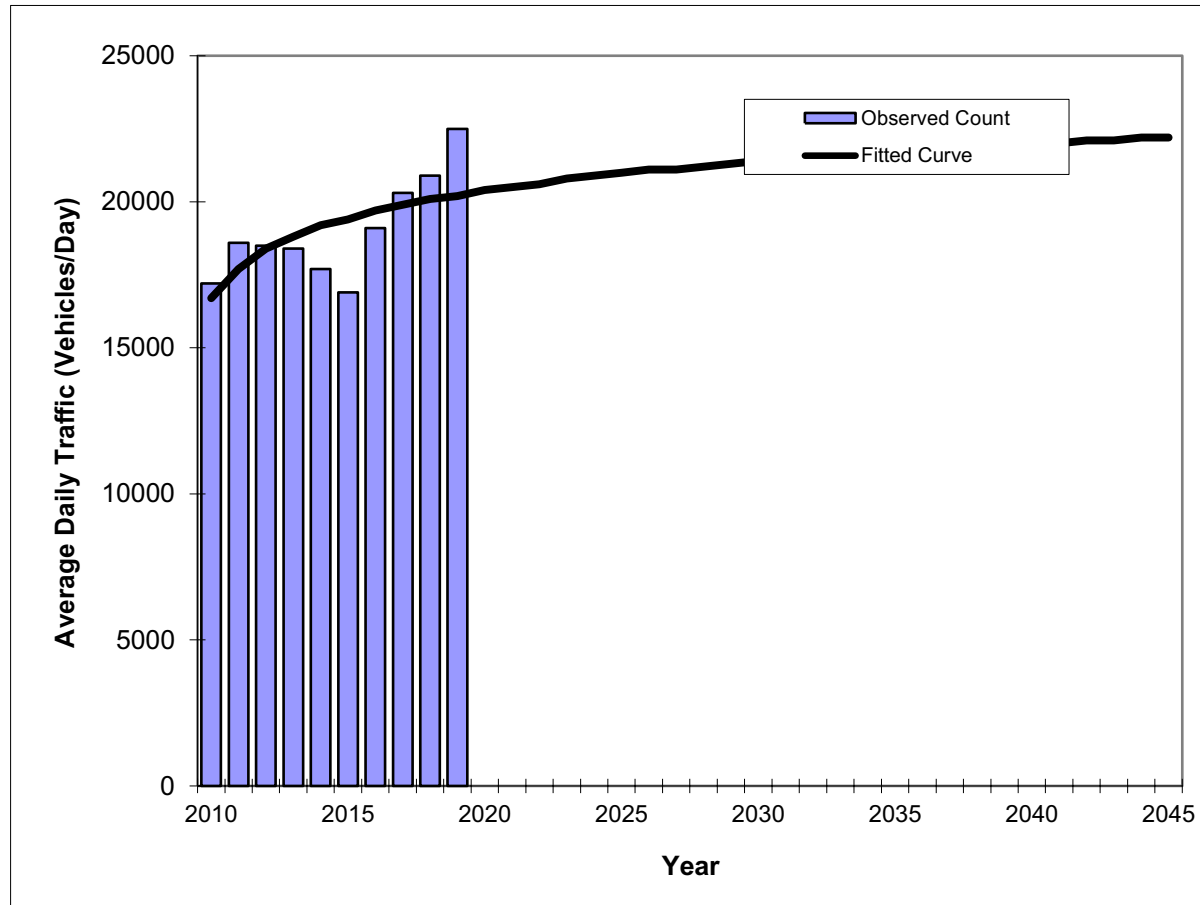
### Decaying Exponential Growth Option

## Traffic Trends

SR 844 / 14th Street -- E OF SR 5/US 1

County:	Broward (26)
Station #:	5213
Highway:	SR 844 / 14th Street

P791-12000042  
6/15/2022



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	17200	16700
2011	18600	17700
2012	18500	18400
2013	18400	18800
2014	17700	19200
2015	16900	19400
2016	19100	19700
2017	20300	19900
2018	20900	20100
2019	22500	20200

Trend R-squared:	41.67%
Compounded Annual Historic Growth Rate:	2.14%
Printed:	19-Apr-22
Decaying Exponential Growth Option	

\*Axle-Adjusted

DRC

PZ21-12000042

6/15/2022

## SERPM Analysis

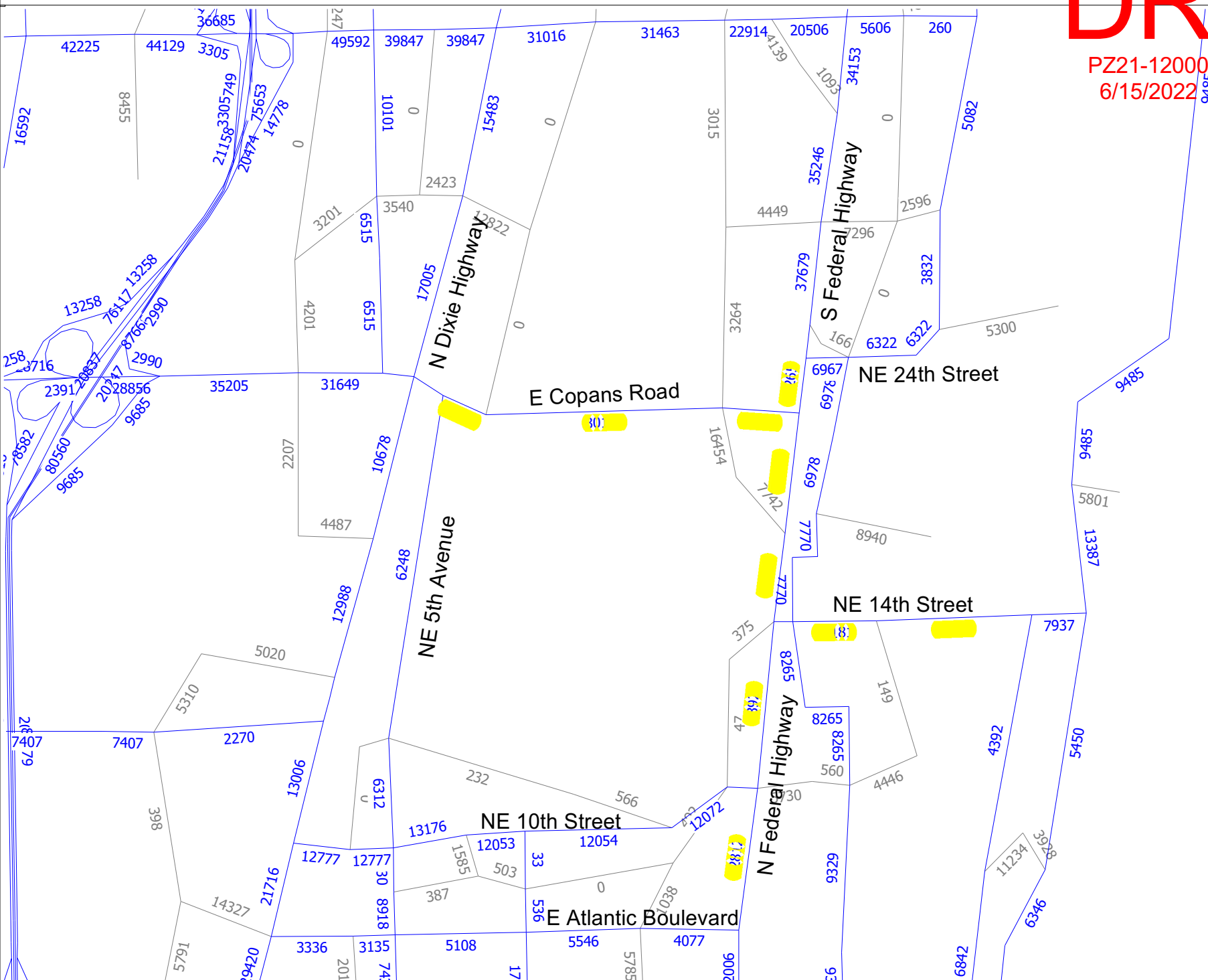
DRC

SERPM Growth Rate Summary					
Street Name	2015	2045	Difference	Growth Rate	Annual Growth Rate
<b>E Copans Road</b>	30,109	44,027	13,918	46.23%	1.54%
	30,109	44,346	14,237	47.28%	1.58%
	18,835	27,853	9,018	47.88%	1.60%
<b>S Federal Highway</b>	32,812	47,018	14,206	43.30%	1.44%
	43,923	61,393	17,470	39.77%	1.33%
	45,517	61,253	15,736	34.57%	1.15%
	37,775	51,779	14,004	37.07%	1.24%
	37,265	50,721	13,456	36.11%	1.20%
<b>NE 14th Street</b>	12,181	11,992	-189	-1.55%	-0.05%
	12,330	12,174	-156	-1.27%	-0.04%
<b>Total</b>	<b>288,526</b>	<b>400,382</b>	<b>111,700</b>	<b>38.77%</b>	<b>1.29%</b>

PZ21-12000042  
6/15/2022

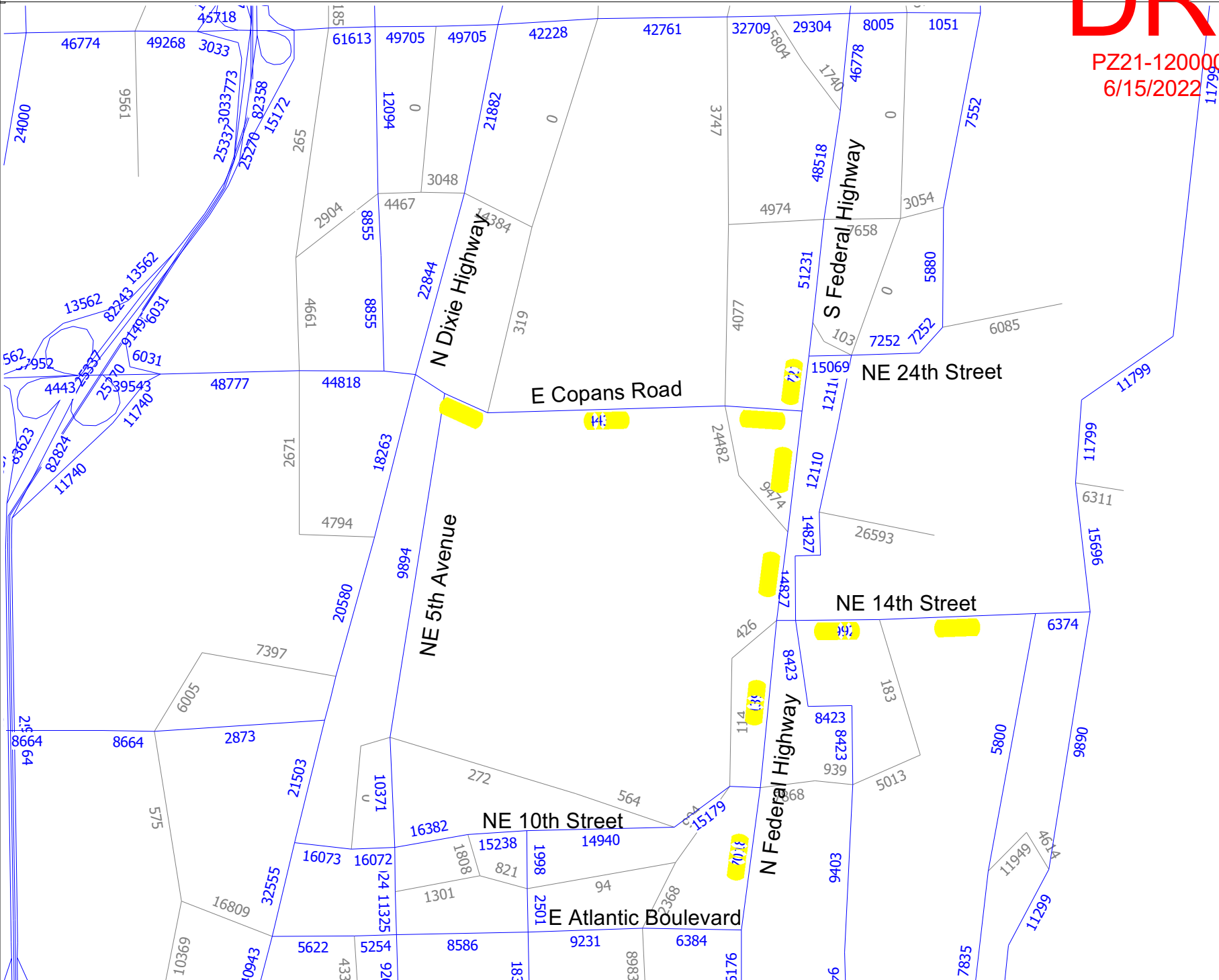
# DRC

PZ21-12000042  
6/15/2022



# DRC

PZ21-12000042  
6/15/2022



## **Appendix E**

### Trip Generation

## AM PEAK HOUR TRIP GENERATION COMPARISON

### EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 1	1 Shopping Plaza (40-150k)	11	821	146,942	ksf	62%	38%	0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code						Rate or Equation					Total:		0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0
821						Y=0(X)																			

\*The existing retail store is currently not operating therefore the A.M. peak hour credit was not taken.

### PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 2	1 Multifamily Housing (Mid-Rise)	11	221	352	du	23%	77%	33	110	143	10.1%	14	30	99	129	0.0%	0	30	99	129	0.0%	0	30	99	129
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code						Rate or Equation					Total:		33	110	143	10.1%	14	30	99	129	0.0%	0	30	99	129
221						Y=0.44*(X)+-11.61																			

	IN	OUT	TOTAL
NET NEW TRIPS	30	99	129



## PM PEAK HOUR TRIP GENERATION COMPARISON

### EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
Land Use		ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 1	1	Shopping Plaza (40-150k)	11	821	146.942	ksf	49%	51%	0	0	0	0.0%	0	0	0	0	0	0	0	0	0.0%	0	0	0	0
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code		Rate or Equation				Total:		0	0	0	0.0%	0	0	0	0	0	0	0	0	0.0%	0	0	0	0	
821		Y=0(X)																							

\*The existing retail store is currently not operating therefore the A.M. peak hour credit was not taken.

### PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION			BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS			
Land Use		ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total	
GROUP 2	1	Multifamily Housing (Mid-Rise)	11	221	352	du	61%	39%	84	54	138	10.1%	14	75	49	124	0.0%	0	75	49	124	0.0%	0	75	49	124
	2																									
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
ITE Land Use Code		Rate or Equation				Total:		84	54	138	10.1%	14	75	49	124	0.0%	0	75	49	124	0.0%	0	75	49	124	
221		Y=0.39*(X)+0.34																								

	IN	OUT	TOTAL
NET NEW TRIPS	75	49	124

## MEANS OF TRANSPORTATION TO WORK

**Note:** This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

$(17+23+36) / (769-17) = 10.1\%$

Census Tract 302.02, Broward County, Florida

Label	Estimate	Margin of Error
▼ Total:	769	±126
▼ Car, truck, or van:	619	±120
Drove alone	519	±88
▼ Carpool:	100	±74
In 2-person carpool	63	±65
In 3-person carpool	37	±39
In 4-person carpool	0	±14
In 5- or 6-person carpool	0	±14
In 7-or-more-person carpool	0	±14
▼ Public transportation (excluding taxicab):	17	±37
Bus	17	±37
Subway or elevated rail	0	±14
Long-distance train or commuter rail	0	±14
Light rail, streetcar or trolley (carro público in Puerto Rico)	0	±14
Ferryboat	0	±14
Taxicab	0	±14
Motorcycle	18	±20
Bicycle	23	±35
Walked	36	±43
Other means	39	±59
Worked from home	17	±14

## MEANS OF TRANSPORTATION TO WORK

**Survey/Program:** American Community Survey

**Universe:** Workers 16 years and over

**Year:** 2019

**Estimates:** 5-Year

**Table ID:** B08301

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

2019 ACS data products include updates to several categories of the existing means of transportation question. For more information, see: Change to Means of Transportation.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

The 2015-2019 American Community Survey (ACS) data generally reflect the September 2018 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

### Explanation of Symbols:

An "\*\*\*" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.

An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.

An "+" following a median estimate means the median falls in the upper interval of an open-ended distribution.

An "\*\*\*" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

An "\*\*\*\*\*" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

An "N" entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

An "(X)" means that the estimate is not applicable or not available.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

## **Appendix F**

### Volume Development Worksheets

PM TOTAL TRAFFIC		150	1,468	199		23	1,443	32		246	40	25		48	36	41
------------------	--	-----	-------	-----	--	----	-------	----	--	-----	----	----	--	----	----	----

PM TOTAL TRAFFIC		0	0	0		39	0	314		0	9	25		243	22	0
------------------	--	---	---	---	--	----	---	-----	--	---	---	----	--	-----	----	---

PM TOTAL TRAFFIC		37	238	0		0	307	27		0	0	0		6	0	45
------------------	--	----	-----	---	--	---	-----	----	--	---	---	---	--	---	---	----

PM TOTAL TRAFFIC		73	20	175		95	17	40		238	3,125	20		108	3,096	42
------------------	--	----	----	-----	--	----	----	----	--	-----	-------	----	--	-----	-------	----



## **Appendix G**

### Intersection Capacity Analysis Worksheets

# DRC

PZ21-12000042

6/15/2022

Existing A.M.

# Timings

## 1: Pompano Square/NE 12th Terrace & East Copans Road



















Existing Conditions

A.M. Peak Hour

**DRC**

PZ21-12000042

6/15/2022

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	64	1148	18	823	52	18	15	40	24
Future Volume (vph)	64	1148	18	823	52	18	15	40	24
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Perm	Split	NA
Protected Phases	1	6	5	2	4	4		8	8
Permitted Phases	6		2				4		
Detector Phase	1	6	5	2	4	4	4	8	8
Switch Phase									
Minimum Initial (s)	4.0	7.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	45.0	11.0	45.0	43.0	43.0	43.0	12.0	12.0
Total Split (s)	15.0	74.0	15.0	74.0	46.0	46.0	46.0	25.0	25.0
Total Split (%)	9.4%	46.3%	9.4%	46.3%	28.8%	28.8%	28.8%	15.6%	15.6%
Yellow Time (s)	4.0	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	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 89 (56%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

### Splits and Phases: 1: Pompano Square/NE 12th Terrace & East Copans Road

			
Ø1	Ø2 (R)	Ø4	Ø8
15 s	74 s	46 s	25 s
			
Ø5	Ø6 (R)		
15 s	74 s		

# HCM 6th Signalized Intersection Summary

## 1: Pompano Square/NE 12th Terrace & East Copans Road

**DRC**  
Existing Conditions  
Am. Peak Hour

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1148	179	18	823	18	52	18	15	40	24	35
Future Volume (veh/h)	64	1148	179	18	823	18	52	18	15	40	24	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	76	1367	213	21	980	21	42	50	18	48	29	42
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	480	3150	491	321	2544	55	86	90	75	99	38	54
Arrive On Green	0.03	0.95	0.95	0.04	0.96	0.96	0.05	0.05	0.05	0.06	0.06	0.06
Sat Flow, veh/h	1767	4410	687	1767	3527	76	1767	1856	1553	1767	670	970
Grp Volume(v), veh/h	76	1047	533	21	490	511	42	50	18	48	0	71
Grp Sat Flow(s),veh/h/ln	1767	1689	1720	1767	1763	1840	1767	1856	1553	1767	0	1640
Q Serve(g_s), s	1.9	4.2	4.2	0.5	2.9	2.9	3.7	4.2	1.8	4.2	0.0	6.8
Cycle Q Clear(g_c), s	1.9	4.2	4.2	0.5	2.9	2.9	3.7	4.2	1.8	4.2	0.0	6.8
Prop In Lane	1.00		0.40	1.00		0.04	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	480	2412	1228	321	1271	1327	86	90	75	99	0	92
V/C Ratio(X)	0.16	0.43	0.43	0.07	0.39	0.39	0.49	0.56	0.24	0.48	0.00	0.77
Avail Cap(c_a), veh/h	537	2412	1228	365	1271	1327	442	464	388	210	0	195
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	1.3	1.3	5.3	1.0	1.0	74.2	74.4	73.3	73.3	0.0	74.5
Incr Delay (d2), s/veh	0.1	0.6	1.1	0.0	0.9	0.8	1.6	2.0	0.6	1.4	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.1	1.4	0.2	1.0	1.1	1.7	2.1	0.7	2.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	1.8	2.4	5.3	1.9	1.8	75.8	76.4	73.9	74.6	0.0	79.6
LnGrp LOS	A	A	A	A	A	A	E	E	E	E	A	E
Approach Vol, veh/h		1656			1022			110			119	
Approach Delay, s/veh		2.2			1.9			75.8			77.6	
Approach LOS		A			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	121.4		13.8	11.0	120.3		15.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	68.0		40.0	9.0	68.0		19.0				
Max Q Clear Time (g_c+l1), s	3.9	4.9		6.2	2.5	6.2		8.8				
Green Ext Time (p_c), s	0.0	8.4		0.2	0.0	18.4		0.2				

### Intersection Summary

HCM 6th Ctrl Delay 8.0  
HCM 6th LOS A

### Notes

User approved volume balancing among the lanes for turning movement.





# HCM 6th TWSC 2: Pompano Square & 1st EW Pompano Square Mall Aisle

**DRC**  
Existing Conditions  
A.M. Peak Hour

PZ21-12000042

6/15/2022

## Intersection

Int Delay, s/veh	1.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	28	58	3	42	177
Future Vol, veh/h	0	28	58	3	42	177
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	34	70	4	51	213

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	388	73	0	0	75
Stage 1	73	-	-	-	-
Stage 2	315	-	-	-	-
Critical Hdwy	4.4	4.9	-	-	4.13
Critical Hdwy Stg 1	4.4	-	-	-	-
Critical Hdwy Stg 2	4.4	-	-	-	-
Follow-up Hdwy	3.8	3.9	-	-	2.227
Pot Cap-1 Maneuver	719	869	-	-	1518
Stage 1	900	-	-	-	-
Stage 2	758	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	694	868	-	-	1517
Mov Cap-2 Maneuver	663	-	-	-	-
Stage 1	899	-	-	-	-
Stage 2	732	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	868	1517
HCM Lane V/C Ratio	-	-	0.039	0.033
HCM Control Delay (s)	-	-	9.3	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

HCM 6th TWSC  
3: 1st EW Pompano Square Mall Aisle & Wendy's Driveway

**DRC**  
Existing Conditions  
A.M. Peak Hour

PZ21-12000042

6/15/2022

Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations		←	→		←	→
Traffic Vol, veh/h	18	27	10	6	5	18
Future Vol, veh/h	18	27	10	6	5	18
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	33	49	18	11	9	33

Major/Minor	Major1	Major2	Minor2
-------------	--------	--------	--------

Conflicting Flow All	29	0	0	139	25
Stage 1	-	-	-	24	-
Stage 2	-	-	-	115	-
Critical Hdwy	4.13	-	-	4.4	4.9
Critical Hdwy Stg 1	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	3.8	3.9
Pot Cap-1 Maneuver	1578	-	-	859	904
Stage 1	-	-	-	925	-
Stage 2	-	-	-	846	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1578	-	-	841	903
Mov Cap-2 Maneuver	-	-	-	841	-
Stage 1	-	-	-	906	-
Stage 2	-	-	-	846	-

Approach	EB	WB	SB
----------	----	----	----

HCM Control Delay, s	2.9	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
-----------------------	-----	-----	-----	-----	-------

Capacity (veh/h)	1578	-	-	-	889
HCM Lane V/C Ratio	0.021	-	-	-	0.047
HCM Control Delay (s)	7.3	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

# Timings





















## 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Existing Conditions

A.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	45	6	134	127	9	82	2131	84	2408	20
Future Volume (vph)	45	6	134	127	9	82	2131	84	2408	20
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases	8	8		4	4	5	2	1	6	
Permitted Phases			8							6
Detector Phase	8	8	8	4	4	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	12.0	5.0	12.0	12.0
Minimum Split (s)	40.0	40.0	40.0	12.0	12.0	12.0	38.0	12.0	38.0	38.0
Total Split (s)	41.0	41.0	41.0	25.0	25.0	25.0	69.0	25.0	69.0	69.0
Total Split (%)	25.6%	25.6%	25.6%	15.6%	15.6%	15.6%	43.1%	15.6%	43.1%	43.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 125 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

### Splits and Phases: 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

			
Ø1	Ø2 (R)	Ø8	Ø4
25 s	69 s	41 s	25 s
			
Ø5	Ø6 (R)		
25 s	69 s		

# HCM 6th Signalized Intersection Summary 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Existing Conditions  
Am. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	6	134	127	9	55	82	2131	26	84	2408	20
Future Volume (veh/h)	45	6	134	127	9	55	82	2131	26	84	2408	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	51	0	141	134	9	58	86	2243	27	88	2535	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	385	0	168	156	19	121	126	2990	36	107	3057	924
Arrive On Green	0.11	0.00	0.11	0.09	0.09	0.09	0.05	0.77	0.77	0.08	0.80	0.60
Sat Flow, veh/h	3534	0	1542	1767	212	1364	3428	5158	62	1767	5066	1531
Grp Volume(v), veh/h	51	0	141	134	0	67	86	1468	802	88	2535	21
Grp Sat Flow(s),veh/h/ln	1767	0	1542	1767	0	1575	1714	1689	1843	1767	1689	1531
Q Serve(g_s), s	2.1	0.0	14.4	12.0	0.0	6.5	3.9	37.7	37.9	7.8	47.3	0.9
Cycle Q Clear(g_c), s	2.1	0.0	14.4	12.0	0.0	6.5	3.9	37.7	37.9	7.8	47.3	0.9
Prop In Lane	1.00		1.00	1.00		0.87	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	385	0	168	156	0	139	126	1958	1068	107	3057	924
V/C Ratio(X)	0.13	0.00	0.84	0.86	0.00	0.48	0.68	0.75	0.75	0.82	0.83	0.02
Avail Cap(c_a), veh/h	773	0	337	210	0	187	386	1958	1068	199	3057	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.5	0.0	69.9	71.9	0.0	69.4	75.2	12.0	12.0	72.7	10.9	12.8
Incr Delay (d2), s/veh	0.1	0.0	4.3	18.1	0.0	1.0	2.4	2.7	4.9	5.8	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	5.9	6.2	0.0	2.7	1.8	11.8	13.5	3.7	13.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.5	0.0	74.2	90.0	0.0	70.4	77.6	14.7	16.9	78.5	13.7	12.8
LnGrp LOS	E	A	E	F	A	E	E	B	B	E	B	B
Approach Vol, veh/h		192			201			2356			2644	
Approach Delay, s/veh		71.6			83.5			17.8			15.8	
Approach LOS		E			F			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.7	99.7		20.2	12.9	103.6		23.4				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	62.0		19.0	18.0	62.0		35.0				
Max Q Clear Time (g_c+l1), s	9.8	39.9		14.0	5.9	49.3		16.4				
Green Ext Time (p_c), s	0.0	17.3		0.2	0.1	11.6		0.3				

## Intersection Summary

HCM 6th Ctrl Delay 21.2  
HCM 6th LOS C

## Notes

User approved volume balancing among the lanes for turning movement.



DRC

PZ21-12000042

6/15/2022

Future Background A.M.

# Timings



















## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Background Conditions

A.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	73	1302	20	934	59	20	17	45	27
Future Volume (vph)	73	1302	20	934	59	20	17	45	27
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Perm	Split	NA
Protected Phases	1	6	5	2	4	4		8	8
Permitted Phases	6		2				4		
Detector Phase	1	6	5	2	4	4	4	8	8
Switch Phase									
Minimum Initial (s)	4.0	7.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	45.0	11.0	45.0	43.0	43.0	43.0	12.0	12.0
Total Split (s)	15.0	74.0	15.0	74.0	46.0	46.0	46.0	25.0	25.0
Total Split (%)	9.4%	46.3%	9.4%	46.3%	28.8%	28.8%	28.8%	15.6%	15.6%
Yellow Time (s)	4.0	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	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 89 (56%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

### Splits and Phases: 1: Pompano Square/NE 12th Terrace & East Copans Road

			
Ø1	Ø2 (R)	Ø4	Ø8
15 s	74 s	46 s	25 s
			
Ø5	Ø6 (R)		
15 s	74 s		

# HCM 6th Signalized Intersection Summary

## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Background Conditions

Am. Peak Hour

**DRC**

**RZ21-12000042**  
**6/15/2022**

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	1302	203	20	934	20	59	20	17	45	27	40
Future Volume (veh/h)	73	1302	203	20	934	20	59	20	17	45	27	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	87	1550	242	24	1112	24	47	56	20	54	32	48
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	425	3110	484	274	2505	54	92	96	81	109	41	61
Arrive On Green	0.03	0.94	0.94	0.04	0.94	0.94	0.05	0.05	0.05	0.06	0.06	0.06
Sat Flow, veh/h	1767	4411	687	1767	3526	76	1767	1856	1554	1767	656	984
Grp Volume(v), veh/h	87	1186	606	24	556	580	47	56	20	54	0	80
Grp Sat Flow(s),veh/h/ln	1767	1689	1720	1767	1763	1840	1767	1856	1554	1767	0	1640
Q Serve(g_s), s	2.2	6.6	6.6	0.6	4.8	4.8	4.1	4.7	2.0	4.7	0.0	7.7
Cycle Q Clear(g_c), s	2.2	6.6	6.6	0.6	4.8	4.8	4.1	4.7	2.0	4.7	0.0	7.7
Prop In Lane	1.00		0.40	1.00		0.04	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	425	2381	1213	274	1252	1307	92	96	81	109	0	101
V/C Ratio(X)	0.20	0.50	0.50	0.09	0.44	0.44	0.51	0.58	0.25	0.49	0.00	0.79
Avail Cap(c_a), veh/h	479	2381	1213	318	1252	1307	442	464	389	210	0	195
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.1	1.7	1.7	5.7	1.4	1.4	73.9	74.2	72.9	72.6	0.0	74.0
Incr Delay (d2), s/veh	0.1	0.7	1.5	0.1	1.1	1.1	1.6	2.1	0.6	1.3	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.6	1.9	0.2	1.5	1.6	1.9	2.3	0.8	2.2	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.2	2.4	3.1	5.8	2.6	2.5	75.5	76.2	73.4	73.9	0.0	79.1
LnGrp LOS	A	A	A	A	A	A	E	E	E	E	A	E
Approach Vol, veh/h		1879			1160			123			134	
Approach Delay, s/veh		2.8			2.6			75.5			77.0	
Approach LOS		A			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	119.6		14.3	11.0	118.8		15.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	68.0		40.0	9.0	68.0		19.0				
Max Q Clear Time (g_c+l1), s	4.2	6.8		6.7	2.6	8.6		9.7				
Green Ext Time (p_c), s	0.0	10.3		0.3	0.0	22.9		0.2				

### Intersection Summary

HCM 6th Ctrl Delay 8.5  
HCM 6th LOS A

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th TWSC 2: Pompano Square & 1st EW Pompano Square Mall Aisle





Future Background Conditions  
A.M. Peak Hour

**DRC**

PZ21-12000042

6/15/2022

## Intersection

Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	32	66	3	48	201
Future Vol, veh/h	0	32	66	3	48	201
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	39	80	4	58	242

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	441	83	0
Stage 1	83	-	-
Stage 2	358	-	-
Critical Hdwy	4.4	4.9	-
Critical Hdwy Stg 1	4.4	-	-
Critical Hdwy Stg 2	4.4	-	-
Follow-up Hdwy	3.8	3.9	-
Pot Cap-1 Maneuver	691	862	-
Stage 1	894	-	-
Stage 2	734	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	663	861	-
Mov Cap-2 Maneuver	638	-	-
Stage 1	893	-	-
Stage 2	705	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	861	1504
HCM Lane V/C Ratio	-	-	0.045	0.038
HCM Control Delay (s)	-	-	9.4	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

# HCM 6th TWSC 3: 1st EW Pompano Square Mall Aisle & Wendy's Driveway

Future Background Conditions  
A.M. Peak Hour

**DRC**

PZ21-12000042

6/15/2022

## Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
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Lane Configurations

Traffic Vol, veh/h	20	31	11	7	6	20
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Future Vol, veh/h	20	31	11	7	6	20
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Conflicting Peds, #/hr	0	0	0	0	0	1
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Sign Control	Free	Free	Free	Free	Stop	Stop
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	-	-	-	0	-
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Veh in Median Storage, #	-	0	0	-	0	-
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Grade, %	-	0	0	-	0	-
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Peak Hour Factor	55	55	55	55	55	55
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Heavy Vehicles, %	3	3	3	3	3	3
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Mvmt Flow	36	56	20	13	11	36
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Major/Minor	Major1	Major2	Minor2
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Conflicting Flow All	33	0	0	155	28
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Stage 1	-	-	-	27	-
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Stage 2	-	-	-	128	-
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Critical Hdwy	4.13	-	-	4.4	4.9
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Critical Hdwy Stg 1	-	-	-	5.43	-
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Critical Hdwy Stg 2	-	-	-	5.43	-
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Follow-up Hdwy	2.227	-	-	3.8	3.9
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Pot Cap-1 Maneuver	1572	-	-	850	902
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Stage 1	-	-	-	923	-
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Stage 2	-	-	-	835	-
---------	---	---	---	-----	---

Platoon blocked, %	-	-	-	-	-
--------------------	---	---	---	---	---

Mov Cap-1 Maneuver	1572	-	-	830	901
--------------------	------	---	---	-----	-----

Mov Cap-2 Maneuver	-	-	-	830	-
--------------------	---	---	---	-----	---

Stage 1	-	-	-	901	-
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Stage 2	-	-	-	835	-
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Approach	EB	WB	SB
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HCM Control Delay, s	2.9	0	9.3
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HCM LOS			A
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Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
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Capacity (veh/h)	1572	-	-	-	884
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HCM Lane V/C Ratio	0.023	-	-	-	0.053
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HCM Control Delay (s)	7.3	0	-	-	9.3
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HCM Lane LOS	A	A	-	-	A
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HCM 95th %tile Q(veh)	0.1	-	-	-	0.2
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# Timings





















## 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Background Conditions

A.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	51	7	152	144	10	93	2417	95	2731	23
Future Volume (vph)	51	7	152	144	10	93	2417	95	2731	23
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases	8	8		4	4	5	2	1	6	
Permitted Phases			8							6
Detector Phase	8	8	8	4	4	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	12.0	5.0	12.0	12.0
Minimum Split (s)	40.0	40.0	40.0	12.0	12.0	12.0	38.0	12.0	38.0	38.0
Total Split (s)	41.0	41.0	41.0	25.0	25.0	25.0	69.0	25.0	69.0	69.0
Total Split (%)	25.6%	25.6%	25.6%	15.6%	15.6%	15.6%	43.1%	15.6%	43.1%	43.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 125 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

### Splits and Phases: 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

			
Ø1	Ø2 (R)	Ø8	Ø4
25 s	69 s	41 s	25 s
			
Ø5	Ø6 (R)		
25 s	69 s		

# HCM 6th Signalized Intersection Summary 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Background Conditions  
Am. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	7	152	144	10	62	93	2417	29	95	2731	23
Future Volume (veh/h)	51	7	152	144	10	62	93	2417	29	95	2731	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	59	0	160	152	11	65	98	2544	31	100	2875	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	426	0	186	174	22	133	139	2841	35	119	2928	885
Arrive On Green	0.12	0.00	0.12	0.10	0.10	0.10	0.05	0.73	0.73	0.09	0.77	0.58
Sat Flow, veh/h	3534	0	1543	1767	229	1351	3428	5157	63	1767	5066	1531
Grp Volume(v), veh/h	59	0	160	152	0	76	98	1664	911	100	2875	24
Grp Sat Flow(s),veh/h/ln	1767	0	1543	1767	0	1579	1714	1689	1842	1767	1689	1531
Q Serve(g_s), s	2.4	0.0	16.3	13.6	0.0	7.3	4.5	61.1	61.8	8.9	85.7	1.1
Cycle Q Clear(g_c), s	2.4	0.0	16.3	13.6	0.0	7.3	4.5	61.1	61.8	8.9	85.7	1.1
Prop In Lane	1.00		1.00	1.00		0.86	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	426	0	186	174	0	155	139	1860	1015	119	2928	885
V/C Ratio(X)	0.14	0.00	0.86	0.87	0.00	0.49	0.71	0.89	0.90	0.84	0.98	0.03
Avail Cap(c_a), veh/h	773	0	338	210	0	188	386	1860	1015	199	2928	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	0.0	69.0	71.2	0.0	68.3	74.7	17.8	17.9	71.9	17.7	14.5
Incr Delay (d2), s/veh	0.1	0.0	4.4	24.7	0.0	0.9	2.4	7.1	12.3	6.1	12.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	6.7	7.4	0.0	3.0	2.0	21.2	24.9	4.2	28.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	0.0	73.5	95.9	0.0	69.2	77.2	24.9	30.2	78.0	30.6	14.5
LnGrp LOS	E	A	E	F	A	E	E	C	C	E	C	B
Approach Vol, veh/h		219			228			2673			2999	
Approach Delay, s/veh		70.6			87.0			28.6			32.1	
Approach LOS		E			F			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.8	95.1		21.7	13.5	99.5		25.3				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	62.0		19.0	18.0	62.0		35.0				
Max Q Clear Time (g_c+l1), s	10.9	63.8		15.6	6.5	87.7		18.3				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.1	0.0		0.3				

## Intersection Summary

HCM 6th Ctrl Delay 34.0  
HCM 6th LOS C

## Notes

User approved volume balancing among the lanes for turning movement.

DRC

PZ21-12000042

6/15/2022

Future Total A.M.



# Timings



















## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Total Conditions

A.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	73	1302	22	934	112	27	22	45	29
Future Volume (vph)	73	1302	22	934	112	27	22	45	29
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Perm	Split	NA
Protected Phases	1	6	5	2	4	4		8	8
Permitted Phases	6		2				4		
Detector Phase	1	6	5	2	4	4	4	8	8
Switch Phase									
Minimum Initial (s)	4.0	7.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	45.0	11.0	45.0	43.0	43.0	43.0	12.0	12.0
Total Split (s)	15.0	74.0	15.0	74.0	46.0	46.0	46.0	25.0	25.0
Total Split (%)	9.4%	46.3%	9.4%	46.3%	28.8%	28.8%	28.8%	15.6%	15.6%
Yellow Time (s)	4.0	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	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 89 (56%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

### Splits and Phases: 1: Pompano Square/NE 12th Terrace & East Copans Road

			
Ø1	Ø2 (R)	Ø4	Ø8
15 s	74 s	46 s	25 s
			
Ø5	Ø6 (R)		
15 s	74 s		

# HCM 6th Signalized Intersection Summary

## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Total Conditions  
Am. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	1302	219	22	934	20	112	27	22	45	29	40
Future Volume (veh/h)	73	1302	219	22	934	20	112	27	22	45	29	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	87	1550	261	26	1112	24	82	103	26	54	35	48
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	404	2951	495	257	2406	52	136	143	120	112	44	60
Arrive On Green	0.04	0.90	0.90	0.04	0.91	0.91	0.08	0.08	0.08	0.06	0.06	0.06
Sat Flow, veh/h	1767	4350	730	1767	3526	76	1767	1856	1560	1767	695	953
Grp Volume(v), veh/h	87	1202	609	26	556	580	82	103	26	54	0	83
Grp Sat Flow(s),veh/h/ln	1767	1689	1703	1767	1763	1840	1767	1856	1560	1767	0	1647
Q Serve(g_s), s	2.5	10.6	10.7	0.7	8.0	8.1	7.2	8.7	2.5	4.7	0.0	8.0
Cycle Q Clear(g_c), s	2.5	10.6	10.7	0.7	8.0	8.1	7.2	8.7	2.5	4.7	0.0	8.0
Prop In Lane	1.00		0.43	1.00		0.04	1.00		1.00	1.00		0.58
Lane Grp Cap(c), veh/h	404	2291	1155	257	1203	1255	136	143	120	112	0	104
V/C Ratio(X)	0.22	0.52	0.53	0.10	0.46	0.46	0.60	0.72	0.22	0.48	0.00	0.80
Avail Cap(c_a), veh/h	455	2291	1155	302	1203	1255	442	464	390	210	0	196
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	3.0	3.0	7.2	2.7	2.7	71.5	72.2	69.3	72.4	0.0	73.9
Incr Delay (d2), s/veh	0.1	0.9	1.7	0.1	1.3	1.2	1.6	2.6	0.3	1.2	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.6	2.9	0.3	2.4	2.5	3.3	4.3	1.0	2.2	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	3.9	4.8	7.2	4.0	4.0	73.1	74.7	69.6	73.6	0.0	79.0
LnGrp LOS	A	A	A	A	A	A	E	E	E	E	A	E
Approach Vol, veh/h		1898			1162			211			137	
Approach Delay, s/veh		4.3			4.1			73.4			76.9	
Approach LOS		A			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	115.2		18.3	11.0	114.5		16.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	68.0		40.0	9.0	68.0		19.0				
Max Q Clear Time (g_c+l1), s	4.5	10.1		10.7	2.7	12.7		10.0				
Green Ext Time (p_c), s	0.0	10.3		0.5	0.0	22.9		0.2				

### Intersection Summary

HCM 6th Ctrl Delay 11.4  
HCM 6th LOS B

### Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
2: Pompano Square/1st EW Pompano Square Mall Aisle

Future Total Conditions  
A.M. Peak Hour

**DRC**




PZ21-12000042

6/15/2022

Intersection

Int Delay, s/veh 2.1

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations    

Traffic Vol, veh/h 267 2 10 103 60 34

Future Vol, veh/h 267 2 10 103 60 34

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - - - 0 0

Veh in Median Storage, # 0 - - 1 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 84 84 84 84 84 84

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 318 2 12 123 71 40

Major/Minor Major1 Major2 Minor1

Conflicting Flow All 0 0 320 0 466 319

Stage 1 - - - - 319 -

Stage 2 - - - - 147 -

Critical Hdwy - - 4.12 - 5 5

Critical Hdwy Stg 1 - - - - 5 -

Critical Hdwy Stg 2 - - - - 5.42 -

Follow-up Hdwy - - 2.218 - 3 3

Pot Cap-1 Maneuver - - 1240 - 758 877

Stage 1 - - - - 877 -

Stage 2 - - - - 1022 -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver - - 1240 - 750 877

Mov Cap-2 Maneuver - - - - 750 -

Stage 1 - - - - 877 -

Stage 2 - - - - 1012 -

Approach EB WB NB

HCM Control Delay, s 0 0.7 9.9

HCM LOS A

Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT

Capacity (veh/h) 750 877 - - 1240 -

HCM Lane V/C Ratio 0.095 0.046 - - 0.01 -

HCM Control Delay (s) 10.3 9.3 - - 7.9 0

HCM Lane LOS B A - - A A

HCM 95th %tile Q(veh) 0.3 0.1 - - 0 -

HCM 6th TWSC  
3: 1st EW Pompano Square Mall Aisle & Wendy's Driveway

Future Total Conditions  
A.M. Peak Hour

PZ21-12000042

6/15/2022

Intersection

Int Delay, s/veh 1

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations		←	→		←	→
Traffic Vol, veh/h	20	284	92	10	6	20
Future Vol, veh/h	20	284	92	10	6	20
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	36	516	167	18	11	36

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	185	0	-	0	764	177
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	588	-
Critical Hdwy	4.13	-	-	-	4.4	4.9
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.8	3.9
Pot Cap-1 Maneuver	1384	-	-	-	542	797
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1384	-	-	-	522	796
Mov Cap-2 Maneuver	-	-	-	-	522	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	524	-

Approach EB WB SB

HCM Control Delay, s	0.5	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1

Capacity (veh/h)	1384	-	-	-	710
HCM Lane V/C Ratio	0.026	-	-	-	0.067
HCM Control Delay (s)	7.7	0	-	-	10.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

# Timings





















## 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Total Conditions

A.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	57	10	177	144	11	100	2417	95	2731	25
Future Volume (vph)	57	10	177	144	11	100	2417	95	2731	25
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases	8	8		4	4	5	2	1	6	
Permitted Phases			8							6
Detector Phase	8	8	8	4	4	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	12.0	5.0	12.0	12.0
Minimum Split (s)	40.0	40.0	40.0	12.0	12.0	12.0	38.0	12.0	38.0	38.0
Total Split (s)	41.0	41.0	41.0	25.0	25.0	25.0	69.0	25.0	69.0	69.0
Total Split (%)	25.6%	25.6%	25.6%	15.6%	15.6%	15.6%	43.1%	15.6%	43.1%	43.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 125 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

### Splits and Phases: 4: US 1/North Federal Highway & Pompano Square/NE 18th Street













			
Ø1	Ø2 (R)	Ø8	Ø4
25 s	69 s	41 s	25 s
			
Ø5	Ø6 (R)		
25 s	69 s		

# HCM 6th Signalized Intersection Summary 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Total Conditions  
A.M. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	10	177	144	11	62	100	2417	29	95	2731	25
Future Volume (veh/h)	57	10	177	144	11	62	100	2417	29	95	2731	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	68	0	186	152	12	65	105	2544	31	100	2875	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	483	0	211	174	24	131	146	2758	34	119	2836	857
Arrive On Green	0.14	0.00	0.14	0.10	0.10	0.10	0.06	0.71	0.71	0.09	0.74	0.56
Sat Flow, veh/h	3534	0	1544	1767	247	1336	3428	5157	63	1767	5066	1530
Grp Volume(v), veh/h	68	0	186	152	0	77	105	1664	911	100	2875	26
Grp Sat Flow(s),veh/h/ln	1767	0	1544	1767	0	1583	1714	1689	1842	1767	1689	1530
Q Serve(g_s), s	2.7	0.0	18.9	13.6	0.0	7.4	4.8	66.0	66.8	8.9	89.6	1.2
Cycle Q Clear(g_c), s	2.7	0.0	18.9	13.6	0.0	7.4	4.8	66.0	66.8	8.9	89.6	1.2
Prop In Lane	1.00		1.00	1.00		0.84	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	483	0	211	174	0	156	146	1806	985	119	2836	857
V/C Ratio(X)	0.14	0.00	0.88	0.87	0.00	0.49	0.72	0.92	0.92	0.84	1.01	0.03
Avail Cap(c_a), veh/h	773	0	338	210	0	188	386	1806	985	199	2836	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.8	0.0	67.8	71.2	0.0	68.4	74.5	20.3	20.4	71.9	20.4	15.8
Incr Delay (d2), s/veh	0.0	0.0	9.3	24.7	0.0	0.9	2.5	9.2	15.4	6.1	20.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	8.0	7.4	0.0	3.0	2.2	24.0	28.2	4.2	33.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	0.0	77.1	95.8	0.0	69.3	77.0	29.5	35.8	78.0	40.9	15.8
LnGrp LOS	E	A	E	F	A	E	E	C	D	E	F	B
Approach Vol, veh/h		254			229			2680			3001	
Approach Delay, s/veh		72.8			86.9			33.5			41.9	
Approach LOS		E			F			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.8	92.6		21.7	13.8	96.6		27.9				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	62.0		19.0	18.0	62.0		35.0				
Max Q Clear Time (g_c+l1), s	10.9	68.8		15.6	6.8	91.6		20.9				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.1	0.0		0.4				

## Intersection Summary

HCM 6th Ctrl Delay 41.2  
HCM 6th LOS D

## Notes

User approved volume balancing among the lanes for turning movement.

# DRC

PZ21-12000042

6/15/2022

Existing P.M.

# Timings

## 1: Pompano Square/NE 12th Terrace & East Copans Road



















Existing Conditions

P.M. Peak Hour

**DRC**

PZ21-12000042

6/15/2022

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	132	1294	18	1272	201	33	20	42	27
Future Volume (vph)	132	1294	18	1272	201	33	20	42	27
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Perm	Split	NA
Protected Phases	1	6	5	2	4	4		8	8
Permitted Phases	6		2				4		
Detector Phase	1	6	5	2	4	4	4	8	8
Switch Phase									
Minimum Initial (s)	4.0	7.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	45.0	11.0	45.0	43.0	43.0	43.0	12.0	12.0
Total Split (s)	20.0	70.0	20.0	70.0	45.0	45.0	45.0	25.0	25.0
Total Split (%)	12.5%	43.8%	12.5%	43.8%	28.1%	28.1%	28.1%	15.6%	15.6%
Yellow Time (s)	4.0	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	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 42 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

### Splits and Phases: 1: Pompano Square/NE 12th Terrace & East Copans Road

 Ø1	 Ø2 (R)	 Ø8	 Ø4
20 s	70 s	25 s	45 s
 Ø5	 Ø6 (R)		
20 s	70 s		





























# HCM 6th Signalized Intersection Summary

## 1: Pompano Square/NE 12th Terrace & East Copans Road

**DRC**  
Existing Conditions  
P.M. Peak Hour

RZ21-12000042  
6/15/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			 				
Traffic Volume (veh/h)	132	1294	152	18	1272	28	201	33	20	42	27	36
Future Volume (veh/h)	132	1294	152	18	1272	28	201	33	20	42	27	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	145	1422	167	20	1398	31	247	0	22	46	30	40
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	328	3105	365	299	2357	52	309	0	137	96	39	52
Arrive On Green	0.05	0.90	0.90	0.04	0.89	0.89	0.09	0.00	0.09	0.05	0.05	0.05
Sat Flow, veh/h	1767	4588	539	1767	3524	78	3534	0	1567	1767	719	958
Grp Volume(v), veh/h	145	1047	542	20	699	730	247	0	22	46	0	70
Grp Sat Flow(s),veh/h/ln	1767	1689	1750	1767	1763	1839	1767	0	1567	1767	0	1677
Q Serve(g_s), s	4.2	8.4	8.4	0.5	14.8	14.9	11.0	0.0	2.1	4.0	0.0	6.6
Cycle Q Clear(g_c), s	4.2	8.4	8.4	0.5	14.8	14.9	11.0	0.0	2.1	4.0	0.0	6.6
Prop In Lane	1.00		0.31	1.00		0.04	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	328	2286	1184	299	1179	1230	309	0	137	96	0	91
V/C Ratio(X)	0.44	0.46	0.46	0.07	0.59	0.59	0.80	0.00	0.16	0.48	0.00	0.77
Avail Cap(c_a), veh/h	414	2286	1184	398	1179	1230	862	0	382	210	0	199
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.4	3.0	3.0	7.4	3.8	3.8	71.6	0.0	67.6	73.4	0.0	74.6
Incr Delay (d2), s/veh	0.3	0.7	1.3	0.0	2.2	2.1	1.8	0.0	0.2	1.4	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.3	2.5	0.2	3.9	4.1	5.1	0.0	0.8	1.9	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	3.7	4.3	7.4	5.9	5.9	73.5	0.0	67.8	74.8	0.0	79.6
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	A	E
Approach Vol, veh/h		1734			1449			269			116	
Approach Delay, s/veh		4.3			5.9			73.0			77.7	
Approach LOS		A			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	113.0		20.0	11.0	114.3		14.7				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	64.0		39.0	14.0	64.0		19.0				
Max Q Clear Time (g_c+l1), s	6.2	16.9		13.0	2.5	10.4		8.6				
Green Ext Time (p_c), s	0.1	14.9		0.5	0.0	17.9		0.2				

### Intersection Summary

HCM 6th Ctrl Delay 12.5  
HCM 6th LOS B

### Notes

User approved volume balancing among the lanes for turning movement.





# HCM 6th TWSC 2: Pompano Square & 1st EW Pompano Square Mall Aisle

**DRC**  
Existing Conditions  
P.M. Peak Hour

PZ21-12000042

6/15/2022

## Intersection

Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	125	133	8	88	115
Future Vol, veh/h	5	125	133	8	88	115
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	6	144	153	9	101	132

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	493	158	0
Stage 1	158	-	-
Stage 2	335	-	-
Critical Hdwy	4.4	4.9	-
Critical Hdwy Stg 1	4.4	-	-
Critical Hdwy Stg 2	4.4	-	-
Follow-up Hdwy	3.8	3.9	-
Pot Cap-1 Maneuver	665	810	-
Stage 1	848	-	-
Stage 2	747	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	616	810	-
Mov Cap-2 Maneuver	615	-	-
Stage 1	848	-	-
Stage 2	692	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	800	1411
HCM Lane V/C Ratio	-	-	0.187	0.072
HCM Control Delay (s)	-	-	10.5	7.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.7	0.2

HCM 6th TWSC  
3: 1st EW Pompano Square Mall Aisle & Wendy's Driveway

**DRC**  
Existing Conditions  
P.M. Peak Hour




PZ21-12000042

6/15/2022

Intersection

Int Delay, s/veh 2.8

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations						
Traffic Vol, veh/h	33	61	90	15	5	40
Future Vol, veh/h	33	61	90	15	5	40
Conflicting Peds, #/hr	0	0	0	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	38	70	103	17	6	46

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	120	0	-	0	259	113
Stage 1	-	-	-	-	112	-
Stage 2	-	-	-	-	147	-
Critical Hdwy	4.13	-	-	-	4.4	4.9
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.8	3.9
Pot Cap-1 Maneuver	1462	-	-	-	789	841
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	819	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1462	-	-	-	768	840
Mov Cap-2 Maneuver	-	-	-	-	768	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	819	-

Approach EB WB SB

HCM Control Delay, s	2.6	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1

Capacity (veh/h)	1462	-	-	-	831
HCM Lane V/C Ratio	0.026	-	-	-	0.062
HCM Control Delay (s)	7.5	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

# Timings





















## 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Existing Conditions

P.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	61	17	136	84	13	182	2755	95	2729	32
Future Volume (vph)	61	17	136	84	13	182	2755	95	2729	32
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases	8	8		4	4	5	2	1	6	
Permitted Phases			8							6
Detector Phase	8	8	8	4	4	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	12.0	5.0	12.0	12.0
Minimum Split (s)	40.0	40.0	40.0	12.0	12.0	12.0	38.0	12.0	38.0	38.0
Total Split (s)	44.0	44.0	44.0	20.0	20.0	25.0	91.0	25.0	91.0	91.0
Total Split (%)	24.4%	24.4%	24.4%	11.1%	11.1%	13.9%	50.6%	13.9%	50.6%	50.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max

### Intersection Summary

Cycle Length: 180







Actuated Cycle Length: 180

Offset: 120 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

### Splits and Phases: 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

			
Ø1	Ø2 (R)	Ø8	Ø4
25 s	91 s	44 s	20 s
			
Ø5	Ø6 (R)		
25 s	91 s		

# HCM 6th Signalized Intersection Summary 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Existing Conditions  
P.M. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	17	136	84	13	35	182	2755	18	95	2729	32
Future Volume (veh/h)	61	17	136	84	13	35	182	2755	18	95	2729	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	49	140	87	13	36	188	2840	19	98	2813	33
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	194	204	171	106	26	71	225	3218	21	116	3139	949
Arrive On Green	0.11	0.11	0.11	0.06	0.06	0.06	0.09	0.82	0.82	0.09	0.82	0.82
Sat Flow, veh/h	1767	1856	1555	1767	428	1186	3428	5191	35	1767	5066	1532
Grp Volume(v), veh/h	40	49	140	87	0	49	188	1845	1014	98	2813	33
Grp Sat Flow(s),veh/h/ln	1767	1856	1555	1767	0	1614	1714	1689	1848	1767	1689	1532
Q Serve(g_s), s	3.7	4.3	15.8	8.8	0.0	5.3	9.7	63.2	64.0	9.8	67.2	0.7
Cycle Q Clear(g_c), s	3.7	4.3	15.8	8.8	0.0	5.3	9.7	63.2	64.0	9.8	67.2	0.7
Prop In Lane	1.00		1.00	1.00		0.73	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	194	204	171	106	0	97	225	2094	1146	116	3139	949
V/C Ratio(X)	0.21	0.24	0.82	0.82	0.00	0.51	0.83	0.88	0.88	0.85	0.90	0.03
Avail Cap(c_a), veh/h	373	392	328	137	0	126	343	2094	1146	177	3139	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.9	73.2	78.3	83.6	0.0	82.0	81.2	11.5	11.6	81.3	11.9	6.1
Incr Delay (d2), s/veh	0.2	0.2	3.6	20.0	0.0	1.5	6.3	5.8	10.1	13.1	4.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.1	6.6	4.6	0.0	2.3	4.4	18.3	21.7	4.9	19.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	73.4	82.0	103.6	0.0	83.5	87.4	17.3	21.7	94.3	16.4	6.1
LnGrp LOS	E	E	F	F	A	F	F	B	C	F	B	A
Approach Vol, veh/h		229			136			3047			2944	
Approach Delay, s/veh		78.6			96.4			23.1			18.9	
Approach LOS		E			F			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.8	118.6		16.8	18.8	118.5		25.8				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	84.0		14.0	18.0	84.0		38.0				
Max Q Clear Time (g_c+l1), s	11.8	66.0		10.8	11.7	69.2		17.8				
Green Ext Time (p_c), s	0.0	16.6		0.1	0.1	13.9		0.4				

## Intersection Summary

HCM 6th Ctrl Delay 24.7  
HCM 6th LOS C

## Notes

User approved volume balancing among the lanes for turning movement.

DRC

PZ21-12000042

6/15/2022

Future Background P.M.

# Timings



















## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Background Conditions

P.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	150	1468	20	1443	228	37	23	48	31
Future Volume (vph)	150	1468	20	1443	228	37	23	48	31
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Perm	Split	NA
Protected Phases	1	6	5	2	4	4		8	8
Permitted Phases	6		2				4		
Detector Phase	1	6	5	2	4	4	4	8	8
Switch Phase									
Minimum Initial (s)	4.0	7.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	45.0	11.0	45.0	43.0	43.0	43.0	12.0	12.0
Total Split (s)	20.0	70.0	20.0	70.0	45.0	45.0	45.0	25.0	25.0
Total Split (%)	12.5%	43.8%	12.5%	43.8%	28.1%	28.1%	28.1%	15.6%	15.6%
Yellow Time (s)	4.0	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	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 42 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

### Splits and Phases: 1: Pompano Square/NE 12th Terrace & East Copans Road

 Ø1	 Ø2 (R)	 Ø8	 Ø4
20 s	70 s	25 s	45 s
 Ø5	 Ø6 (R)		
20 s	70 s		

# HCM 6th Signalized Intersection Summary

## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Background Conditions

P.M. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1468	172	20	1443	32	228	37	23	48	31	41
Future Volume (veh/h)	150	1468	172	20	1443	32	228	37	23	48	31	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	165	1613	189	22	1586	35	280	0	25	53	34	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	277	3039	355	251	2284	50	342	0	152	106	43	57
Arrive On Green	0.06	0.88	0.88	0.04	0.86	0.86	0.10	0.00	0.10	0.06	0.06	0.06
Sat Flow, veh/h	1767	4591	537	1767	3525	78	3534	0	1568	1767	722	956
Grp Volume(v), veh/h	165	1186	616	22	792	829	280	0	25	53	0	79
Grp Sat Flow(s),veh/h/ln	1767	1689	1750	1767	1763	1839	1767	0	1568	1767	0	1678
Q Serve(g_s), s	5.2	12.6	12.7	0.6	24.6	24.9	12.4	0.0	2.3	4.6	0.0	7.4
Cycle Q Clear(g_c), s	5.2	12.6	12.7	0.6	24.6	24.9	12.4	0.0	2.3	4.6	0.0	7.4
Prop In Lane	1.00		0.31	1.00		0.04	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	277	2235	1159	251	1142	1192	342	0	152	106	0	101
V/C Ratio(X)	0.60	0.53	0.53	0.09	0.69	0.70	0.82	0.00	0.16	0.50	0.00	0.78
Avail Cap(c_a), veh/h	352	2235	1159	351	1142	1192	862	0	382	210	0	199
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.2	4.0	4.0	8.6	5.6	5.6	70.9	0.0	66.3	72.9	0.0	74.2
Incr Delay (d2), s/veh	0.8	0.9	1.8	0.1	3.5	3.4	1.9	0.0	0.2	1.3	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.2	3.6	0.3	5.9	6.2	5.8	0.0	1.0	2.2	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	4.9	5.7	8.7	9.1	9.0	72.7	0.0	66.5	74.2	0.0	79.1
LnGrp LOS	B	A	A	A	A	A	E	A	E	E	A	E
Approach Vol, veh/h		1967			1643			305			132	
Approach Delay, s/veh		5.8			9.0			72.2			77.2	
Approach LOS		A			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	109.7		21.5	11.0	111.9		15.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	64.0		39.0	14.0	64.0		19.0				
Max Q Clear Time (g_c+l1), s	7.2	26.9		14.4	2.6	14.7		9.4				
Green Ext Time (p_c), s	0.1	17.2		0.6	0.0	21.6		0.2				

### Intersection Summary

HCM 6th Ctrl Delay 14.5  
HCM 6th LOS B

### Notes

User approved volume balancing among the lanes for turning movement.



# HCM 6th TWSC 2: Pompano Square & 1st EW Pompano Square Mall Aisle

Future Background Conditions  
P.M. Peak Hour





**DRC**

PZ21-12000042

6/15/2022

## Intersection

Int Delay, s/veh 4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	142	151	9	100	130
Future Vol, veh/h	6	142	151	9	100	130
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	7	163	174	10	115	149

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	559	179	0
Stage 1	179	-	-
Stage 2	380	-	-
Critical Hdwy	4.4	4.9	-
Critical Hdwy Stg 1	4.4	-	-
Critical Hdwy Stg 2	4.4	-	-
Follow-up Hdwy	3.8	3.9	-
Pot Cap-1 Maneuver	633	796	-
Stage 1	835	-	-
Stage 2	723	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	580	796	-
Mov Cap-2 Maneuver	586	-	-
Stage 1	835	-	-
Stage 2	662	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	785	1385
HCM Lane V/C Ratio	-	-	0.217	0.083
HCM Control Delay (s)	-	-	10.9	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.8	0.3

# HCM 6th TWSC 3: 1st EW Pompano Square Mall Aisle & Wendy's Driveway

Future Background Conditions  
P.M. Peak Hour

**DRC**

PZ21-12000042

6/15/2022

## Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations

Traffic Vol, veh/h	37	69	102	17	6	45
--------------------	----	----	-----	----	---	----

Future Vol, veh/h	37	69	102	17	6	45
-------------------	----	----	-----	----	---	----

Conflicting Peds, #/hr	0	0	0	0	1	1
------------------------	---	---	---	---	---	---

Sign Control	Free	Free	Free	Free	Stop	Stop
--------------	------	------	------	------	------	------

RT Channelized	-	None	-	None	-	None
----------------	---	------	---	------	---	------

Storage Length	-	-	-	-	0	-
----------------	---	---	---	---	---	---

Veh in Median Storage, #	-	0	0	-	0	-
--------------------------	---	---	---	---	---	---

Grade, %	-	0	0	-	0	-
----------	---	---	---	---	---	---

Peak Hour Factor	87	87	87	87	87	87
------------------	----	----	----	----	----	----

Heavy Vehicles, %	3	3	3	3	3	3
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Mvmt Flow	43	79	117	20	7	52
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Major/Minor	Major1	Major2	Minor2
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Conflicting Flow All	137	0	0	293	128
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Stage 1	-	-	-	127	-
---------	---	---	---	-----	---

Stage 2	-	-	-	166	-
---------	---	---	---	-----	---

Critical Hdwy	4.13	-	-	4.4	4.9
---------------	------	---	---	-----	-----

Critical Hdwy Stg 1	-	-	-	5.43	-
---------------------	---	---	---	------	---

Critical Hdwy Stg 2	-	-	-	5.43	-
---------------------	---	---	---	------	---

Follow-up Hdwy	2.227	-	-	3.8	3.9
----------------	-------	---	---	-----	-----

Pot Cap-1 Maneuver	1441	-	-	770	830
--------------------	------	---	---	-----	-----

Stage 1	-	-	-	836	-
---------	---	---	---	-----	---

Stage 2	-	-	-	804	-
---------	---	---	---	-----	---

Platoon blocked, %	-	-	-	-	-
--------------------	---	---	---	---	---

Mov Cap-1 Maneuver	1441	-	-	746	829
--------------------	------	---	---	-----	-----

Mov Cap-2 Maneuver	-	-	-	746	-
--------------------	---	---	---	-----	---

Stage 1	-	-	-	810	-
---------	---	---	---	-----	---

Stage 2	-	-	-	804	-
---------	---	---	---	-----	---

Approach	EB	WB	SB
----------	----	----	----

HCM Control Delay, s	2.6	0	9.7
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HCM LOS			A
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Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
-----------------------	-----	-----	-----	-----	-------

Capacity (veh/h)	1441	-	-	-	818
------------------	------	---	---	---	-----

HCM Lane V/C Ratio	0.03	-	-	-	0.072
--------------------	------	---	---	---	-------

HCM Control Delay (s)	7.6	0	-	-	9.7
-----------------------	-----	---	---	---	-----

HCM Lane LOS	A	A	-	-	A
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HCM 95th %tile Q(veh)	0.1	-	-	-	0.2
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# Timings





















## 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Background Conditions

P.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	69	19	154	95	15	206	3125	108	3096	36
Future Volume (vph)	69	19	154	95	15	206	3125	108	3096	36
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases	8	8		4	4	5	2	1	6	
Permitted Phases			8							6
Detector Phase	8	8	8	4	4	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	12.0	5.0	12.0	12.0
Minimum Split (s)	40.0	40.0	40.0	12.0	12.0	12.0	38.0	12.0	38.0	38.0
Total Split (s)	44.0	44.0	44.0	20.0	20.0	25.0	91.0	25.0	91.0	91.0
Total Split (%)	24.4%	24.4%	24.4%	11.1%	11.1%	13.9%	50.6%	13.9%	50.6%	50.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max

### Intersection Summary

Cycle Length: 180







Actuated Cycle Length: 180

Offset: 120 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

### Splits and Phases: 4: US 1/North Federal Highway & Pompano Square/NE 18th Street













			
Ø1	Ø2 (R)	Ø8	Ø4
25 s	91 s	44 s	20 s
			
Ø5	Ø6 (R)		
25 s	91 s		

# HCM 6th Signalized Intersection Summary 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Background Conditions  
P.M. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	19	154	95	15	40	206	3125	20	108	3096	36
Future Volume (veh/h)	69	19	154	95	15	40	206	3125	20	108	3096	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	46	56	159	98	15	41	212	3222	21	111	3192	37
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	214	225	188	117	29	78	249	3091	20	129	3017	912
Arrive On Green	0.12	0.12	0.12	0.07	0.07	0.07	0.10	0.79	0.79	0.10	0.79	0.79
Sat Flow, veh/h	1767	1856	1557	1767	433	1184	3428	5192	34	1767	5066	1532
Grp Volume(v), veh/h	46	56	159	98	0	56	212	2093	1150	111	3192	37
Grp Sat Flow(s),veh/h/ln	1767	1856	1557	1767	0	1617	1714	1689	1848	1767	1689	1532
Q Serve(g_s), s	4.2	4.9	18.0	9.9	0.0	6.0	11.0	107.2	107.2	11.1	107.2	0.9
Cycle Q Clear(g_c), s	4.2	4.9	18.0	9.9	0.0	6.0	11.0	107.2	107.2	11.1	107.2	0.9
Prop In Lane	1.00		1.00	1.00		0.73	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	214	225	188	117	0	107	249	2011	1100	129	3017	912
V/C Ratio(X)	0.22	0.25	0.84	0.84	0.00	0.52	0.85	1.04	1.05	0.86	1.06	0.04
Avail Cap(c_a), veh/h	373	392	329	137	0	126	343	2011	1100	177	3017	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	71.7	77.4	83.1	0.0	81.3	80.3	18.7	18.7	80.4	18.7	7.7
Incr Delay (d2), s/veh	0.2	0.2	3.9	27.2	0.0	1.5	10.6	31.7	39.7	20.6	34.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.4	7.5	5.4	0.0	2.6	5.1	40.6	46.9	5.7	41.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	71.9	81.4	110.3	0.0	82.8	91.0	50.4	58.4	101.0	53.1	7.7
LnGrp LOS	E	E	F	F	A	F	F	F	F	F	F	A
Approach Vol, veh/h		261			154			3455			3340	
Approach Delay, s/veh		77.6			100.3			55.6			54.1	
Approach LOS		E			F			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.1	114.2		17.9	20.1	114.2		27.8				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	84.0		14.0	18.0	84.0		38.0				
Max Q Clear Time (g_c+l1), s	13.1	109.2		11.9	13.0	109.2		20.0				
Green Ext Time (p_c), s	0.0	0.0		0.1	0.1	0.0		0.5				

## Intersection Summary

HCM 6th Ctrl Delay 56.7  
HCM 6th LOS E

## Notes

User approved volume balancing among the lanes for turning movement.

# DRC

PZ21-12000042

6/15/2022

Future Total P.M.

# Timings



















## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Total Conditions

P.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	150	1468	23	1443	246	40	25	48	36
Future Volume (vph)	150	1468	23	1443	246	40	25	48	36
Turn Type	pm+pt	NA	pm+pt	NA	Split	NA	Perm	Split	NA
Protected Phases	1	6	5	2	4	4		8	8
Permitted Phases	6		2				4		
Detector Phase	1	6	5	2	4	4	4	8	8
Switch Phase									
Minimum Initial (s)	4.0	7.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	45.0	11.0	45.0	43.0	43.0	43.0	12.0	12.0
Total Split (s)	20.0	70.0	20.0	70.0	45.0	45.0	45.0	25.0	25.0
Total Split (%)	12.5%	43.8%	12.5%	43.8%	28.1%	28.1%	28.1%	15.6%	15.6%
Yellow Time (s)	4.0	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	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

### Intersection Summary

Cycle Length: 160







Actuated Cycle Length: 160

Offset: 42 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

### Splits and Phases: 1: Pompano Square/NE 12th Terrace & East Copans Road

 Ø1	 Ø2 (R)	 Ø8	 Ø4
20 s	70 s	25 s	45 s
 Ø5	 Ø6 (R)		
20 s	70 s		

# HCM 6th Signalized Intersection Summary

## 1: Pompano Square/NE 12th Terrace & East Copans Road

Future Total Conditions  
P.M. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1468	199	23	1443	32	246	40	25	48	36	41
Future Volume (veh/h)	150	1468	199	23	1443	32	246	40	25	48	36	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	165	1613	219	25	1586	35	301	0	27	53	40	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	271	2936	397	242	2248	50	363	0	161	112	50	57
Arrive On Green	0.06	0.87	0.87	0.04	0.85	0.85	0.10	0.00	0.10	0.06	0.06	0.06
Sat Flow, veh/h	1767	4498	609	1767	3525	78	3534	0	1568	1767	795	894
Grp Volume(v), veh/h	165	1210	622	25	792	829	301	0	27	53	0	85
Grp Sat Flow(s),veh/h/ln	1767	1689	1729	1767	1763	1839	1767	0	1568	1767	0	1690
Q Serve(g_s), s	5.3	14.4	14.6	0.8	27.1	27.3	13.4	0.0	2.5	4.6	0.0	7.9
Cycle Q Clear(g_c), s	5.3	14.4	14.6	0.8	27.1	27.3	13.4	0.0	2.5	4.6	0.0	7.9
Prop In Lane	1.00		0.35	1.00		0.04	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	271	2204	1129	242	1124	1173	363	0	161	112	0	107
V/C Ratio(X)	0.61	0.55	0.55	0.10	0.70	0.71	0.83	0.00	0.17	0.47	0.00	0.79
Avail Cap(c_a), veh/h	344	2204	1129	341	1124	1173	862	0	382	210	0	201
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	4.6	4.6	9.3	6.4	6.5	70.4	0.0	65.5	72.4	0.0	73.9
Incr Delay (d2), s/veh	0.8	1.0	1.9	0.1	3.7	3.6	1.9	0.0	0.2	1.2	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.6	4.0	0.3	6.8	7.2	6.2	0.0	1.0	2.2	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	5.6	6.6	9.4	10.1	10.1	72.3	0.0	65.7	73.5	0.0	78.9
LnGrp LOS	B	A	A	A	B	B	E	A	E	E	A	E
Approach Vol, veh/h		1997			1646			328			138	
Approach Delay, s/veh		6.6			10.1			71.7			76.8	
Approach LOS		A			B			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	108.1		22.4	11.0	110.4		16.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	64.0		39.0	14.0	64.0		19.0				
Max Q Clear Time (g_c+l1), s	7.3	29.3		15.4	2.8	16.6		9.9				
Green Ext Time (p_c), s	0.1	16.7		0.6	0.0	21.9		0.2				

### Intersection Summary

HCM 6th Ctrl Delay 15.6  
HCM 6th LOS B

### Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
2: Pompano Square/1st EW Pompano Square Mall Aisle

Future Total Conditions  
P.M. Peak Hour

**DRC**





PZ21-12000042

6/15/2022

Intersection

Int Delay, s/veh 1.1

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations      

Traffic Vol, veh/h 243 22 39 314 9 25

Future Vol, veh/h 243 22 39 314 9 25

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - - - 0 0

Veh in Median Storage, # 0 - - 1 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 264 24 42 341 10 27

Major/Minor Major1 Major2 Minor1

Conflicting Flow All 0 0 288 0 701 276

Stage 1 - - - - 276 -

Stage 2 - - - - 425 -

Critical Hdwy - - 4.12 - 6.42 6.22

Critical Hdwy Stg 1 - - - - 5.42 -

Critical Hdwy Stg 2 - - - - 5.42 -

Follow-up Hdwy - - 2.218 - 3.518 3.318

Pot Cap-1 Maneuver - - 1274 - 405 763

Stage 1 - - - - 771 -

Stage 2 - - - - 659 -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver - - 1274 - 388 763

Mov Cap-2 Maneuver - - - - 388 -

Stage 1 - - - - 771 -

Stage 2 - - - - 632 -

Approach EB WB NB

HCM Control Delay, s 0 0.9 11.1

HCM LOS B

Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT

Capacity (veh/h) 388 763 - - 1274 -

HCM Lane V/C Ratio 0.025 0.036 - - 0.033 -

HCM Control Delay (s) 14.5 9.9 - - 7.9 0

HCM Lane LOS B A - - A A

HCM 95th %tile Q(veh) 0.1 0.1 - - 0.1 -



HCM 6th TWSC  
3: 1st EW Pompano Square Mall Aisle & Wendy's Driveway

Future Total Conditions  
P.M. Peak Hour

**DRC**

PZ21-12000042

6/15/2022

Intersection

Int Delay, s/veh 1.3

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations

Traffic Vol, veh/h 37 238 307 27 6 45

Future Vol, veh/h 37 238 307 27 6 45

Conflicting Peds, #/hr 0 0 0 0 1 1

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - - - 0 -

Veh in Median Storage, # - 0 0 - 0 -

Grade, % - 0 0 - 0 -

Peak Hour Factor 87 87 87 87 87 87

Heavy Vehicles, % 3 3 3 3 3 3

Mvmt Flow 43 274 353 31 7 52

Major/Minor Major1 Major2 Minor2

Conflicting Flow All 384 0 - 0 730 370

Stage 1 - - - - 369 -

Stage 2 - - - - 361 -

Critical Hdwy 4.13 - - - 4.4 4.9

Critical Hdwy Stg 1 - - - - 5.43 -

Critical Hdwy Stg 2 - - - - 5.43 -

Follow-up Hdwy 2.227 - - - 3.8 3.9

Pot Cap-1 Maneuver 1169 - - - 557 677

Stage 1 - - - - 656 -

Stage 2 - - - - 661 -

Platoon blocked, % - - - -

Mov Cap-1 Maneuver 1169 - - - 533 676

Mov Cap-2 Maneuver - - - - 533 -

Stage 1 - - - - 628 -

Stage 2 - - - - 661 -

Approach EB WB SB

HCM Control Delay, s 1.1 0 11

HCM LOS B

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1

Capacity (veh/h) 1169 - - - 655

HCM Lane V/C Ratio 0.036 - - - 0.089

HCM Control Delay (s) 8.2 0 - - 11

HCM Lane LOS A A - - B

HCM 95th %tile Q(veh) 0.1 - - - 0.3

# Timings





















## 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Total Conditions

P.M. Peak Hour

**DRC**

PZ21-12000042  
6/15/2022

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	73	20	175	95	17	238	3125	108	3096	42
Future Volume (vph)	73	20	175	95	17	238	3125	108	3096	42
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases	8	8		4	4	5	2	1	6	
Permitted Phases			8							6
Detector Phase	8	8	8	4	4	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	12.0	5.0	12.0	12.0
Minimum Split (s)	40.0	40.0	40.0	12.0	12.0	12.0	38.0	12.0	38.0	38.0
Total Split (s)	44.0	44.0	44.0	20.0	20.0	25.0	91.0	25.0	91.0	91.0
Total Split (%)	24.4%	24.4%	24.4%	11.1%	11.1%	13.9%	50.6%	13.9%	50.6%	50.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max

### Intersection Summary

Cycle Length: 180







Actuated Cycle Length: 180

Offset: 120 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

### Splits and Phases: 4: US 1/North Federal Highway & Pompano Square/NE 18th Street













			
Ø1	Ø2 (R)	Ø8	Ø4
25 s	91 s	44 s	20 s
			
Ø5	Ø6 (R)		
25 s	91 s		

# HCM 6th Signalized Intersection Summary 4: US 1/North Federal Highway & Pompano Square/NE 18th Street

Future Total Conditions  
P.M. Peak Hour

**DRC**

RZ21-12000042  
6/15/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	20	175	95	17	40	238	3125	20	108	3096	42
Future Volume (veh/h)	73	20	175	95	17	40	238	3125	20	108	3096	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	48	59	180	98	18	41	245	3222	21	111	3192	43
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	235	247	207	117	33	75	281	3028	20	129	2908	879
Arrive On Green	0.13	0.13	0.13	0.07	0.07	0.07	0.11	0.78	0.78	0.10	0.76	0.76
Sat Flow, veh/h	1767	1856	1558	1767	496	1131	3428	5192	34	1767	5066	1531
Grp Volume(v), veh/h	48	59	180	98	0	59	245	2093	1150	111	3192	43
Grp Sat Flow(s),veh/h/ln	1767	1856	1558	1767	0	1627	1714	1689	1848	1767	1689	1531
Q Serve(g_s), s	4.4	5.1	20.4	9.9	0.0	6.3	12.7	105.0	105.0	11.1	103.3	1.2
Cycle Q Clear(g_c), s	4.4	5.1	20.4	9.9	0.0	6.3	12.7	105.0	105.0	11.1	103.3	1.2
Prop In Lane	1.00		1.00	1.00		0.69	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	235	247	207	117	0	108	281	1970	1078	129	2908	879
V/C Ratio(X)	0.20	0.24	0.87	0.84	0.00	0.55	0.87	1.06	1.07	0.86	1.10	0.05
Avail Cap(c_a), veh/h	373	392	329	137	0	127	343	1970	1078	177	2908	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.5	69.8	76.5	83.1	0.0	81.4	79.2	20.2	20.2	80.4	21.3	9.2
Incr Delay (d2), s/veh	0.2	0.2	8.3	27.2	0.0	1.6	16.0	39.3	47.1	20.6	50.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.5	8.7	5.4	0.0	2.7	6.1	43.2	49.6	5.7	46.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.7	70.0	84.8	110.2	0.0	83.0	95.3	59.5	67.3	101.0	71.3	9.3
LnGrp LOS	E	E	F	F	A	F	F	F	F	F	F	A
Approach Vol, veh/h		287			157			3488			3346	
Approach Delay, s/veh		79.2			100.0			64.6			71.5	
Approach LOS		E			F			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.1	112.0		17.9	21.8	110.3		30.0				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	84.0		14.0	18.0	84.0		38.0				
Max Q Clear Time (g_c+l1), s	13.1	107.0		11.9	14.7	105.3		22.4				
Green Ext Time (p_c), s	0.0	0.0		0.1	0.1	0.0		0.5				

## Intersection Summary

HCM 6th Ctrl Delay 69.1  
HCM 6th LOS E

## Notes

User approved volume balancing among the lanes for turning movement.

**DRC**

PZ21-12000042

6/15/2022

## **Appendix H**

### Entry Gate Analysis

## Pompano Citi Centre A.M. Peak Hour (Resident Entry Gate)

Arrival Rate 

IN
27

 veh/hr

Service Rate 

IN
0.10

 mins/veh

Control Delay = min  
N  
0.70 1  
0.75 2

Service Time = 0.10 mins/veh

Number Entry Lanes (N) = 1  
Level of Confidence = 0.95  
Storage Provided On-Site = 1 vehicles

Total Entering and Exiting Vehicles(q) = 27 veh/hr  
Service Capacity per N (60 mins/Service Rate) (Q) = 600.00 veh/hr/pos  
Average Service Rate (t) = 0.10 mins/veh  
rho (t/Q) = 0.045

N-1  
0 P(n=0)= 1.000  
1 P(n=1)= 0.000  
P(0) = 95.50%

Expected (avg.) number of vehicles in the system E(m)= 0.00  
Expected (avg.) number of vehicles waiting in queue E(n)= 0.05  
Mean time in the queue E(w)= 0.00 mins  
Mean time in system E(t)= 0.10 mins

Proportion of customers who wait (P) (E(w) > 0)= 4.50%  
Probability of a queue exceeding a length (M) P(x > M)= 5.00%

Queue length which is exceeded 5.00% of the times is equal to 0.0 vehicles

## Pompano Citi Centre A.M. Peak Hour (Guest Entry Gate)

Arrival Rate 

IN
3

 veh/hr

Service Rate 

IN
1.00

 mins/veh

Control Delay = min  
N  
0.70 1  
0.75 2

Service Time = 1.00 mins/veh

Number Entry Lanes (N) = 1  
Level of Confidence = 0.95  
Storage Provided On-Site = 1 vehicles

Total Entering and Exiting Vehicles(q) = 3 veh/hr  
Service Capacity per N (60 mins/Service Rate) (Q) = 60.00 veh/hr/pos  
Average Service Rate (t) = 1.00 mins/veh  
rho (t/Q) = 0.050

N-1  
0 P(n=0)= 1.000  
1 P(n=1)= 0.000  
P(0) = 95.00%

Expected (avg.) number of vehicles in the system E(m)= 0.00  
Expected (avg.) number of vehicles waiting in queue E(n)= 0.05  
Mean time in the queue E(w)= 0.05 mins  
Mean time in system E(t)= 1.05 mins

Proportion of customers who wait (P) (E(w) > 0)= 5.00%  
Probability of a queue exceeding a length (M) P(x > M)= 5.00%

Queue length which is exceeded 5.00% of the times is equal to 0.0 vehicles

## Pompano Citi Centre P.M. Peak Hour (Resident Entry Gate)

Arrival Rate 

IN
67

 veh/hr

Service Rate 

IN
0.10

 mins/veh

Control Delay =                      min  
    N  
    1  
0.70  
    2  
0.75

Service Time =                      0.10 mins/veh

Number Entry Lanes (N) =                      1  
Level of Confidence =                      0.95  
Storage Provided On-Site =                      1                      vehicles

Total Entering and Exiting Vehicles(q) =                      67                      veh/hr  
Service Capacity per N (60 mins/Service Rate) (Q) =                      600.00                      veh/hr/pos  
Average Service Rate (t) =                      0.10                      mins/veh  
rho (t/Q) =                      0.112

N-1  
    0                      P(n=0)=                      1.000  
    1                      P(n=1)=                      0.000  
  
P(0) =                      88.83%

Expected (avg.) number of vehicles in the system                      E(m)=                      0.01  
Expected (avg.) number of vehicles waiting in queue                      E(n)=                      0.13  
Mean time in the queue                      E(w)=                      0.01                      mins  
Mean time in system                      E(t)=                      0.11                      mins

Proportion of customers who wait (P) (E(w) > 0)=                      11.17%  
Probability of a queue exceeding a length (M) P(x > M)=                      5.00%

Queue length which is exceeded                      5.00%                      of the times is equal to                      0.4                      vehicles

## Pompano Citi Centre P.M. Peak Hour (Guest Entry Gate)

Arrival Rate 

IN
8

 veh/hr

Service Rate 

IN
1.00

 mins/veh

Control Delay = min  
N  
0.70 1  
0.75 2

Service Time = 1.00 mins/veh

Number Entry Lanes (N) = 1  
Level of Confidence = 0.95  
Storage Provided On-Site = 1 vehicles

Total Entering and Exiting Vehicles(q) = 8 veh/hr  
Service Capacity per N (60 mins/Service Rate) (Q) = 60.00 veh/hr/pos  
Average Service Rate (t) = 1.00 mins/veh  
rho (t/Q) = 0.133

N-1  
0 P(n=0)= 1.000  
1 P(n=1)= 0.000  
P(0) = 86.67%

Expected (avg.) number of vehicles in the system E(m)= 0.02  
Expected (avg.) number of vehicles waiting in queue E(n)= 0.15  
Mean time in the queue E(w)= 0.15 mins  
Mean time in system E(t)= 1.15 mins

Proportion of customers who wait (P) (E(w) > 0)= 13.33%  
Probability of a queue exceeding a length (M) P(x > M)= 5.00%

Queue length which is exceeded 5.00% of the times is equal to 0.5 vehicles



Table 4-4. PARC Service Rates

	Veh/hr	
<b>Prepaid Frequent Parker Entry or Exit</b>	435	8.3
Insertion Card	600	6.0
Proximity Card	800	4.5
Automatic Veh ID		
<b>Pay Per Use Patron Vehicular Entry</b>	400	9.0
Push Button Ticket	450	8.0
Auto Spit Ticket	200	18.0
Pay on Entry-flat fee, gated, ticketed	300	12.0
Pay on Entry flat-fee, non gated/ticketed		
<b>Pay Per Use Patron Vehicular Exits</b>		
Cash to cashier-Variable Rate	135	26.7
Credit card-online check (telephone line) and sign	95	38.0
Credit card online check but no sign	110	32.7
Credit card-batched or high speed line and no sign	175	20.7
Validated for free parking	300	12.0
Flat Rate Transaction (gated)	180	20.0
LPI if front plate	100	36.0
LPI if rear plate only	80	45.0
LPR	120	30.0
Insertion Ticket for POF Validation	360	10.0
<b>POF Central Pay to Cashier</b>		
Cash to POF cashier - Variable Rate	175	20.7
Credit card-online check (telephone line) and sign	115	32.7
Credit card-online check but no sign	135	26.7
Credit card-batched or high speed line and no sign	245	14.7
Validated for free parking	600	6.0
<b>POF Central Pay to Machine</b>		
Cash to APS-Variable Rate		
Credit card - online check (telephone line) and sign	75	48.0
Credit card - online check but no sign	NA	NA
Credit card - batched or high speed line and no sign	66	54.5
Validated for free parking	100	36.0
	240	15.0

Sharp turns in the approach to equipment lanes have a significant impact on  $\mu$ . When it is more difficult for a patron to pull into the lane from the first position in the queue, seconds are lost from each transaction. This loss can be accounted for by adding seconds to the average transaction time to represent the turning factor. See Figure 4-10 for diagrams showing appropriate turning factors for design. If, for example, the design of a lane equipped with an insertion card reader requires a very difficult turn into the lane, and thus adds five seconds to the average transaction, the adjusted service rate is  $3600/(8.3+5=13.3)$  seconds per transaction.

See 12000042  
6/15/2022

4.3.

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