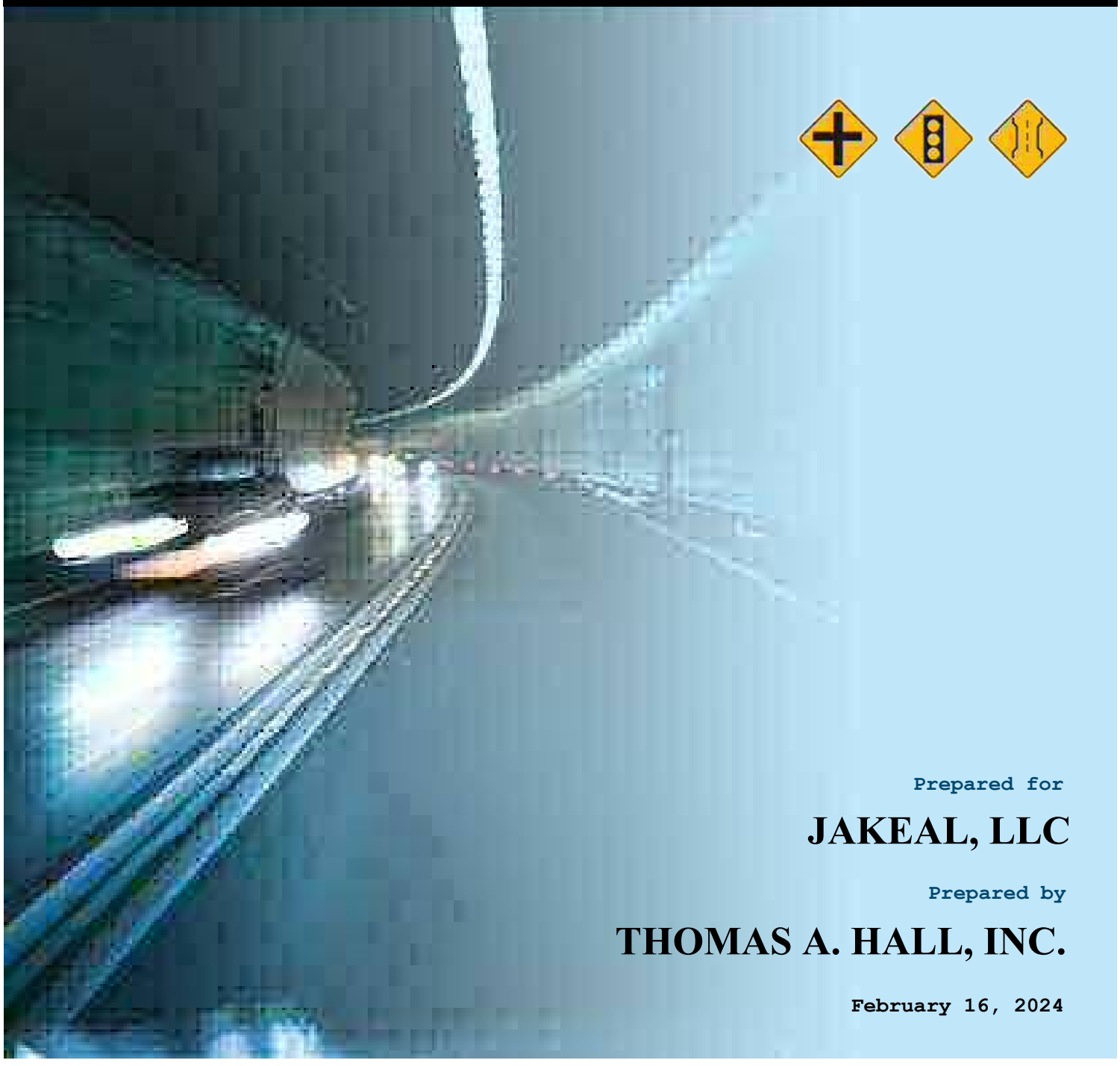
1960 Normandy Drive
Traffic Impact Study (Revised)

City of Miami Beach, Florida



Prepared for

JAKEAL, LLC

Prepared by

THOMAS A. HALL, INC.

February 16, 2024

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Executive Summary

JAKEAL, LLC proposes to construct 1960 Normandy Drive, a new mixed-use development on Normandy Drive (SR 934) in the City of Miami Beach, Florida. While previously used as a utility company's office and warehouse, the project site is proposed to have 120 workplace housing apartment units and 5,091 square feet of retail land use. The proposed project is expected to be built out in 2026. The report is a revision to a previous report completed in 2022.

Access to the project will be via three driveway connections—one to Normandy Drive and the other two to Verdun Court. All entries to the project site's second level parking garage are to be made via the Normandy Drive driveway while ground floor exits from the site will be by means of a westbound exit driveway connecting to Verdun Court. The third driveway is a connection to the existing Everglades Court Alley on the south side of the project site. The alley connects to Verdun Court to the west. There are no gates at any access driveway.

The existing five-foot-wide sidewalk is proposed to remain in the public right of way along the north side of the proposed development and parallel with Normandy Drive. A wide, concrete promenade is proposed to abut the existing public sidewalk and provide excellent pedestrian access to the retail shops in 1960 Normandy Drive.

Trip generation characteristics were obtained from the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 11th Edition. As the tables show, the proposed 1960 Normandy Drive development is anticipated to generate 758 net new daily trips, 36 net new a.m. peak-hour trips and 48 net new p.m. peak-hour trips.

Based on the results of this analysis, it is concluded that the 1960 Normandy Drive development will not have a significant impact upon the study area roadway network. The study area intersections are expected to continue to operate in the same manner with or without the addition of project-related trips in the 2026 build-out year and the roadway segment analysis indicates that the roadway links will operate at an acceptable LOS D,

The 1960 Normandy Drive development is expected to benefit from its close proximity to two Miami-Dade County mass transit bus routes. Those routes: Numbers 112L and 79, which run along Normandy Drive and 71st Street, are within easy walking distance of the project site. Long-term and short-term bicycle storage is included in the project site plan and is meant to encourage and support multi-modal travel to/from the proposed development as are the large pedestrian walkways along Normandy Drive.

Introduction

JAKEAL, LLC proposes to construct 1960 Normandy Drive, a new mixed-use development on Normandy Drive (SR 934) in the City of Miami Beach, Florida. While previously used as a utility company's office and warehouse, the project site is proposed to have 120 workplace housing apartment units and 5,091 square feet of retail land use. The proposed project is expected to be built out in 2026. The report is a revision to a previous report completed in 2022.

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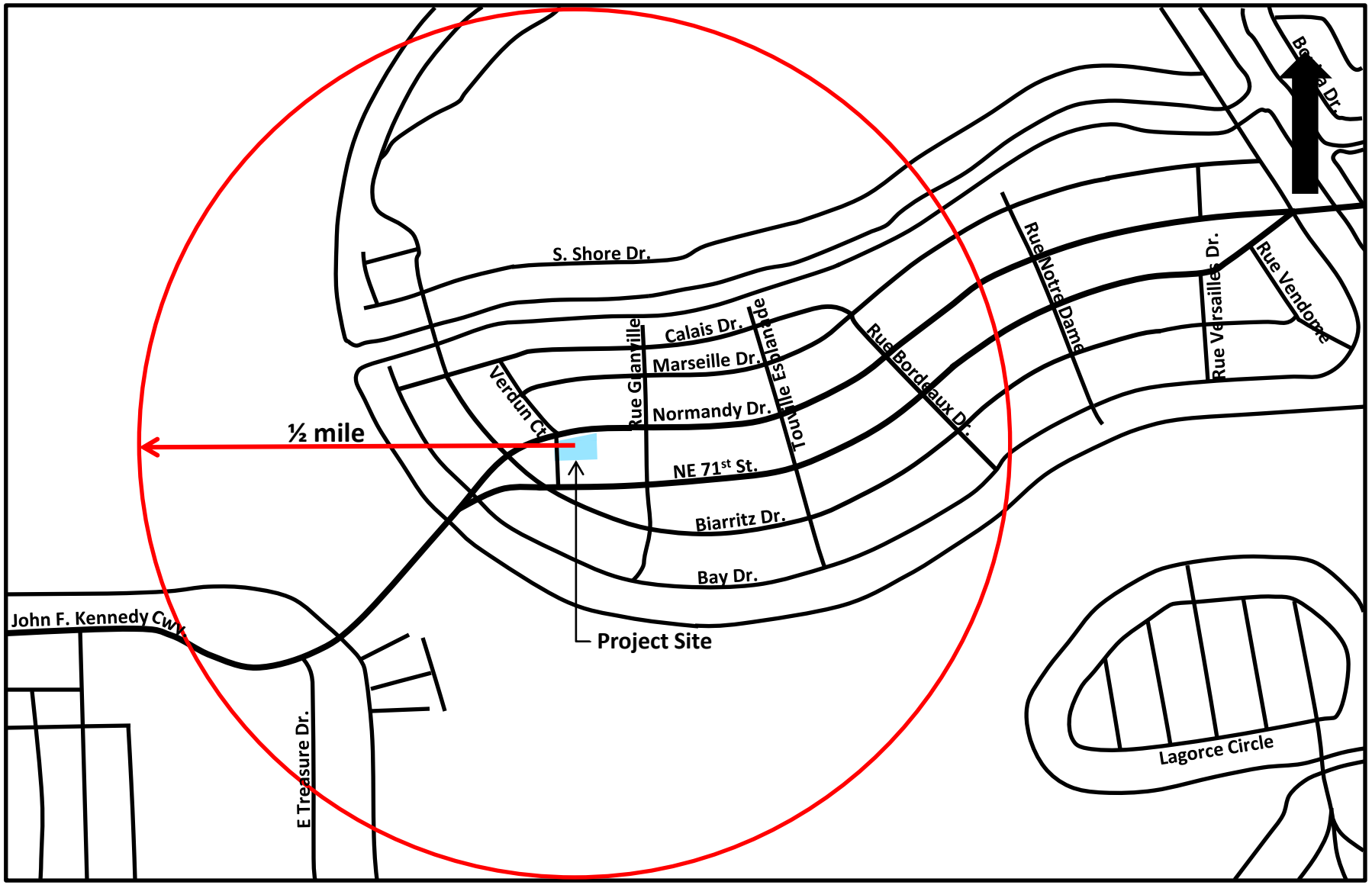
The existing five-foot-wide sidewalk is proposed to remain in the public right of way along the north side of the proposed development and parallel with Normandy Drive. A wide, concrete promenade is proposed to abut the existing public sidewalk and provide excellent pedestrian access to the retail shops in 1960 Normandy Drive.

The purpose of this study is to analyze the impacts of trips generated by the proposed new development on the adjacent roadway network. Intersections that were studied include:

- Normandy Drive at Biarritz Drive;
- Normandy Drive at Trouville Esplanade;
- 71st Street at Trouville Esplanade;
- Normandy Drive/71st Street at Bay Drive;
- Normandy Drive at Verdun Court;
- 71st Street at Verdun Court.
- JFK Causeway at Treasure Drive
- 71st Street at Rue Notre Dame
- Normandy Drive at Rue Versailles Drive
- 71st Street at Rue Vendome
- 71st Street/Normandy Drive at Bay Drive (East)

The study also examines the project entrance intersections with the local roadway network.

Routes 79 and 112L of the Miami-Dade County Transit System run along Normandy Drive/71st Street (SR 934) immediately adjacent to the proposed 1960 Normandy Drive development. **Figure 1 – Site Location**, shows the location of the proposed development.



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Figure 1 – Project Site Location
1960 Normandy Drive
City of Miami Beach, Florida

Data Collection

Four-hour (7-9:00 a.m. and 4-6:00 p.m.), turning-movement counts were collected at the study area intersections of:

- Normandy Drive at Biarritz Drive;
- Normandy Drive at Trouville Esplanade;
- 71st Street at Trouville Esplanade;
- Normandy Drive/71st Street at Bay Drive;
- Normandy Drive at Verdun Court;
- 71st Street at Verdun Court
- JFK Causeway at Treasure Drive
- 71st Street at Rue Notre Dame
- Normandy Drive at Rue Versailles Drive
- 71st Street at Rue Vendome
- 71st Street/Normandy Drive at Bay Drive (East).

Copies of the traffic counts may be found in **Appendix B – Traffic Counts**. **Figure 2 – Study Area Intersections** shows the location of the studied intersections and roadway links.

The turning-movement counts were collected to provide a baseline of existing traffic operational conditions at the significant intersections within the study area.

A preliminary field review was conducted January 25, 2024 to obtain pertinent roadway geometry, pavement markings, signing, etc. In addition to the field review, aerial maps were consulted to verify intersection spacing, storage lane lengths and lane assignments. **Figure 3 – Intersection Geometry/Permitted Movements** shows the permitted movements at each of the studied intersections.

Normandy Drive (SR 934) is a one-way-westbound, three-lane, principal arterial roadway with a posted speed limit of 35 mph east of Bay Drive and 30 mph west of Bay Drive. It forms a one-way pair with 71st Street. A bicycle lane exists on the north side of the road, sidewalks are on both sides of the road, and there is parallel parking on both sides.

71st Street is a one-way eastbound, three-lane, principal arterial roadway with a posted speed limit of 35 mph east of Bay Drive and 30 mph west of Bay Drive. It forms a one-way pair with Normandy Drive. A bicycle lane exists on the south side of the road, sidewalks are on both sides of the road, and there is parallel parking on both sides.

Verdun Court is an 18-foot-wide, two-way, north-south local street on the west side of the proposed 1960 Normandy Drive project. It runs from 71st Street north to Calais Drive. Although no speed limit is posted, it is assumed to be 30 mph. South of Normandy Drive, northbound Verdun Court pavement markings indicate that a left-turn and a through movement are permitted. However, on the north approach to Normandy Drive, pavement

markings indicate that no through movement is permitted and southbound traffic is restricted to a right-turn movement.

Biarritz Drive is a two-way, two-lane, undivided collector roadway. Although no speed limit is posted, it is assumed to be 30 mph. Ninety-degree parking and sidewalks exist on both sides of Biarritz Drive north of Normandy Drive and south of 71st Street.

Trouville Esplanade is a two-way, two-lane, median-divided local roadway. Although no speed limit is posted, it is assumed to be 30 mph. There is sixty-degree parking on the west side of Trouville Esplanade between Normandy Drive and 71st Street.

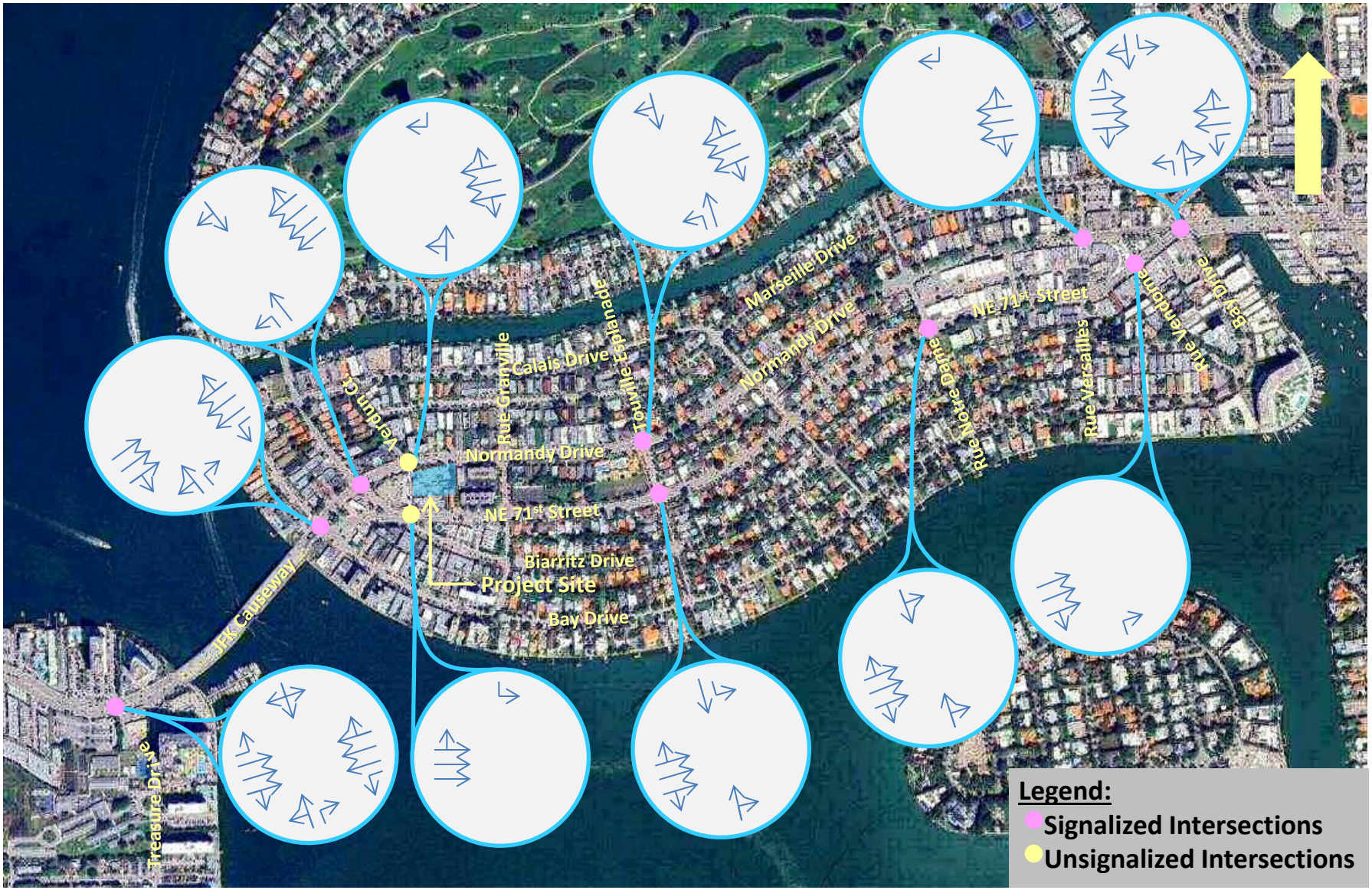
Bay Drive is a two-way, two-lane, undivided local roadway south of Normandy Drive. North of Normandy Drive, it is a one-lane, westbound roadway. Although no speed limit is posted, it is assumed to be 30 mph. There is a combination of parallel parking on the east side and sixty-degree parking on the west side of Bay Drive north of Normandy Drive. There is ninety-degree parking on both sides of Bay Drive south of 71st Street. Sidewalks run on both sides of Bay Drive and on both sides of Normandy Drive/71st Street.

Rue Notre Dame, Rue Versailles Drive, and Rue Vendome are all local, two-lane, undivided local roadways. The speed limit on each road is assumed to be 30 mph. Parallel parking exists at several locations along each roadway.



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Figure 2 – Study Area Intersections
1960 Normandy Drive
City of Miami Beach, Florida



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Figure 3 – Intersection Geometry/Permitted Movements
1960 Normandy Drive
City of Miami Beach, Florida

Analyses

Adjustment Factors

The January 31, 2024 turning-movement counts were adjusted to peak season by the application of a Peak Season Conversion Factor (PSCF) of 1.02 obtained from the Florida Department of Transportation's (FDOT) *2022 Peak Season Factor Category Report*. **Table 1 – AM Peak-hour Turning-movement Counts** and **Table 2 – PM Peak-hour Turning-movement Counts** show both the "raw" and the seasonally-adjusted a.m. and p.m. peak-hour traffic volumes within the study area. **Figure 4 – Existing Traffic Volumes** shows the seasonally adjusted a.m. and p.m. peak-hour traffic volumes at the studied intersections.

An Annual Growth Factor was derived from historic Annual Average Daily Traffic (AADT) reports obtained from FDOT's *2022 Florida Online Traffic Information* for nearby count stations. A five-year growth analysis was conducted for the two count stations on Normandy Drive and 71st Street. A review of the count data, and a comparison of 2017 volumes to 2022 volumes, showed an area-wide average increase of 1.36 percent. Copies of the annual growth rate worksheet and seasonal adjustment factors are provided in **Appendix D – Adjustment Factors**.

Existing Conditions

Synchro intersection operations analysis software was used to construct a model of the existing roadway network in the study area. The model relied upon the adjusted peak-hour, turning-movement counts shown in Tables 1 and 2 and the geometric, pavement marking and signing information obtained from field reviews. In addition, traffic signal timing and phasing information was obtained from Miami-Dade County Public Works and Waste Management Traffic Signals and Signs Division's online database. The traffic signal timing and phasing plans may be found in **Appendix C – Signal Timing Plans**. Copies of the Synchro reports for existing weekday peak-hour, peak-season conditions may be found in **Appendix F – Existing Conditions Analyses**.

Table 3 - Peak-hour Queue Length, Level of Service and Delay, summarizes the critical elements of the analyses. As Table 3 shows, all signalized intersections operate within the acceptable Level of Service (LOS), which is 120 percent of LOS D.

Table 1a
AM Peak-hour Turning-movement Counts
1960 Normandy Drive

Intersection	Adjustment	From West				From East				From South				From North				
		Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
Normandy Drive at Biarritz Drive (Signalized)	**2024 Raw Traffic**	**0**	**1**	**0**	**0**	**0**	**6**	**1,150**	**56**	**0**	**28**	**74**	**0**	**0**	**0**	**45**	**122**	**1,482**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**1**	**0**	**0**	**0**	**6**	**1,173**	**57**	**0**	**29**	**75**	**0**	**0**	**0**	**46**	**124**	**1,512**
	Committed Dev. Trips							**6**										**6**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**1**	**0**	**0**	**0**	**6**	**1,211**	**59**	**0**	**29**	**78**	**0**	**0**	**0**	**47**	**128**	**1,559**
	Project Traffic							7	3							3		13
	Total Future Traffic	**0**	**1**	**0**	**0**	**0**	**6**	**1,218**	**62**	**0**	**29**	**78**	**0**	**0**	**0**	**50**	**128**	**1,572**
Normandy Drive at Trouville Esplanade (Signalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**13**	**1,156**	**3**	**0**	**26**	**18**	**0**	**0**	**0**	**8**	**13**	**1,237**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**13**	**1,179**	**3**	**0**	**27**	**18**	**0**	**0**	**0**	**8**	**13**	**1,262**
	Committed Dev. Trips							**3**			**1**	**1**					**1**	**6**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**14**	**1,214**	**3**	**0**	**28**	**20**	**0**	**0**	**0**	**8**	**15**	**1,302**
	Project Traffic							1			7	2					3	13
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**14**	**1,215**	**3**	**0**	**35**	**22**	**0**	**0**	**0**	**8**	**18**	**1,315**
71st Street at Trouville Esplanade (Signalized)	**2024 Raw Traffic**	**0**	**24**	**1,726**	**18**	**0**	**0**	**0**	**0**	**1**	**0**	**11**	**16**	**0**	**12**	**7**	**0**	**1,815**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**24**	**1,761**	**18**	**0**	**0**	**0**	**0**	**1**	**0**	**11**	**16**	**0**	**12**	**7**	**0**	**1,851**
	Committed Dev. Trips		**2**	**8**									**2**					**12**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**27**	**1,817**	**19**	**0**	**0**	**0**	**0**	**1**	**0**	**12**	**19**	**0**	**13**	**7**	**0**	**1,914**
	Project Traffic		5	1	4							4						14
	Total Future Traffic	**0**	**32**	**1,818**	**23**	**0**	**0**	**0**	**0**	**1**	**0**	**16**	**19**	**0**	**13**	**7**	**0**	**1,928**
Normandy Drive/71st Street at Bay Drive (Signalized)	**2024 Raw Traffic**	**0**	**1**	**1,700**	**21**	**4**	**8**	**1,193**	**16**	**0**	**34**	**0**	**11**	**0**	**0**	**0**	**0**	**2,988**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**1**	**1,734**	**21**	**4**	**8**	**1,217**	**16**	**0**	**35**	**0**	**11**	**0**	**0**	**0**	**0**	**3,048**
	Committed Dev. Trips			**3**				**6**										**9**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**1**	**1,784**	**22**	**4**	**8**	**1,256**	**17**	**0**	**36**	**0**	**12**	**0**	**0**	**0**	**0**	**3,140**
	Project Traffic			8				7										15
	Total Future Traffic	**0**	**1**	**1,792**	**22**	**4**	**8**	**1,263**	**17**	**0**	**36**	**0**	**12**	**0**	**0**	**0**	**0**	**3,155**
Normandy Drive at Verdun Court (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**14**	**1,167**	**46**	**0**	**8**	**2**	**0**	**0**	**0**	**3**	**41**	**1,281**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**14**	**1,190**	**47**	**0**	**8**	**2**	**0**	**0**	**0**	**3**	**42**	**1,307**
	Committed Dev. Trips							**5**									**1**	**6**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**15**	**1,228**	**48**	**0**	**8**	**2**	**0**	**0**	**0**	**3**	**44**	**1,348**
	Project Traffic						1	8			1							10
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**16**	**1,236**	**48**	**0**	**9**	**2**	**0**	**0**	**0**	**3**	**44**	**1,358**
71st Street at Verdun Court (Unsignalized)	**2024 Raw Traffic**	**0**	**20**	**1,735**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**1,774**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**20**	**1,770**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**1,809**
	Committed Dev. Trips			**9**														**9**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**21**	**1,827**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**1,868**
	Project Traffic		8	3											7			18
	Total Future Traffic	**0**	**29**	**1,830**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**0**	**1,886**
Normandy Drive at North Project Drive (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**0**	**1,195**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,195**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**1,219**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,219**
	Committed Dev. Trips							**5**										**5**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**1,257**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,257**
	Project Traffic						8	1			8							17
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**8**	**1,258**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**1,274**
Verdun Court at West Project Drive (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**15**	**0**	**35**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**15**	**0**	**36**
	Committed Dev. Trips																	**0**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**0**	**16**	**0**	**37**
	Project Traffic						7		2									9
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**2**	**0**	**0**	**21**	**0**	**0**	**0**	**16**	**0**	**46**

Table 1b
AM Peak-hour Turning-movement Counts
1960 Normandy Drive

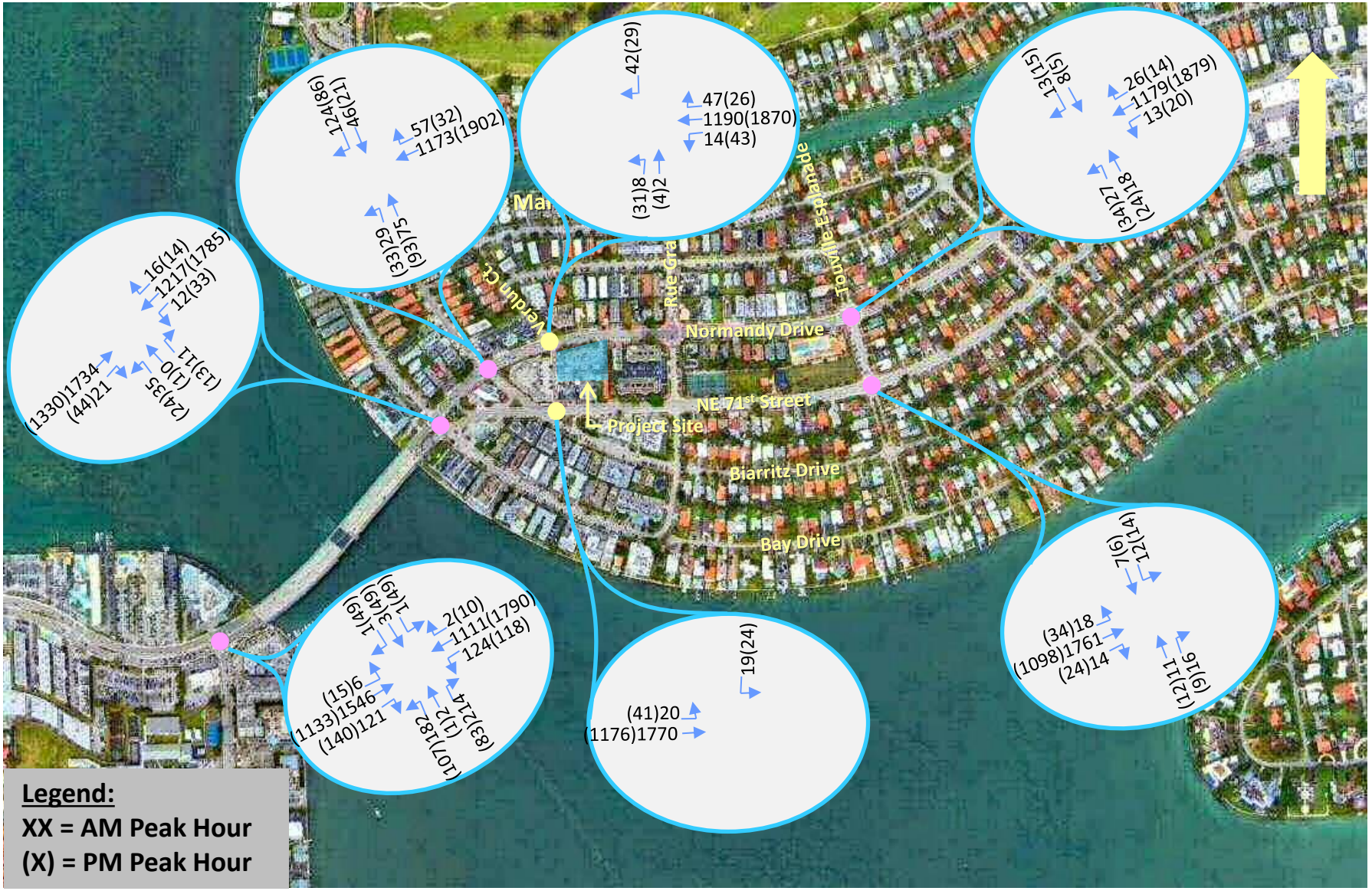
Intersection	Adjustment	From West				From East				From South				From North				
		Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
JFK Causeway at Treasure Drive (Signalized)	**2024 Raw Traffic**	**0**	**6**	**1,516**	**119**	**2**	**120**	**1,089**	**2**	**0**	**178**	**2**	**210**	**0**	**1**	**3**	**1**	**3,249**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**6**	**1,546**	**121**	**2**	**122**	**1,111**	**2**	**0**	**182**	**2**	**214**	**0**	**1**	**3**	**1**	**3,314**
	Committed Dev. Trips							**6**										**6**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**6**	**1,589**	**125**	**2**	**126**	**1,147**	**2**	**0**	**187**	**2**	**220**	**0**	**1**	**3**	**1**	**3,411**
	Project Traffic			8				7										15
	Total Future Traffic	**0**	**6**	**1,597**	**125**	**2**	**126**	**1,154**	**2**	**0**	**187**	**2**	**220**	**0**	**1**	**3**	**1**	**3,426**
71st Street at Rue Notre Dame (Signalized)	**2024 Raw Traffic**	**0**	**74**	**1,606**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**16**	**0**	**64**	**13**	**0**	**13**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**75**	**1,638**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**16**	**0**	**65**	**13**	**0**	**13**
	Committed Dev. Trips			**10**									**1**					**11**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**78**	**1,693**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**18**	**0**	**67**	**14**	**0**	**25**
	Project Traffic			1														1
	Total Future Traffic	**0**	**78**	**1,694**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**18**	**0**	**67**	**14**	**0**	**26**
Normandy Dr. at Rue Versailles Dr. (Signalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**28**	**1,133**	**34**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**42**	**1,240**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**29**	**1,156**	**35**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**43**	**1,265**
	Committed Dev. Trips							**3**	**1**									**4**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**29**	**1,190**	**37**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**44**	**1,303**
	Project Traffic							1										1
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**29**	**1,191**	**37**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**44**	**1,304**
71st Street at Rue Vendome (Signalized)	**2024 Raw Traffic**	**0**	**0**	**1,621**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**1,665**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**1,653**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**0**	**0**	**1,698**
	Committed Dev. Trips			**11**														**11**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**1,710**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**0**	**0**	**0**	**1,756**
	Project Traffic			1														1
	Total Future Traffic	**0**	**0**	**1,711**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**0**	**0**	**0**	**1,757**
71st Street at East Bay Drive (Signalized)	**2024 Raw Traffic**	**8**	**29**	**1,521**	**14**	**13**	**59**	**1,074**	**142**	**0**	**34**	**1**	**86**	**0**	**225**	**7**	**32**	**3,245**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**8**	**30**	**1,551**	**14**	**13**	**60**	**1,095**	**145**	**0**	**35**	**1**	**88**	**0**	**230**	**7**	**33**	**3,310**
	Committed Dev. Trips			**11**			**1**	**4**										**16**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**8**	**30**	**1,605**	**15**	**14**	**63**	**1,129**	**149**	**0**	**36**	**1**	**90**	**0**	**236**	**7**	**34**	**3,417**
	Project Traffic			1				1										2
	Total Future Traffic	**8**	**30**	**1,606**	**15**	**14**	**63**	**1,130**	**149**	**0**	**36**	**1**	**90**	**0**	**236**	**7**	**34**	**3,419**
Verdun Court at Alley (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**14**	**0**	**34**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**14**	**0**	**35**
	Committed Dev. Trips																	**0**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**0**	**15**	**0**	**36**
	Project Traffic												8		1			9
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**8**	**0**	**1**	**15**	**0**	**45**

Table 2a
PM Peak-hour Turning-movement Counts
1960 Normandy Drive

Intersection	Adjustment	From West				From East				From South				From North				
		Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
Normandy Drive at Biarritz Drive (Signalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**7**	**1,865**	**31**	**0**	**32**	**91**	**0**	**0**	**0**	**21**	**84**	**2,131**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**7**	**1,902**	**32**	**0**	**33**	**93**	**0**	**0**	**0**	**21**	**86**	**2,174**
	Committed Dev. Trips							**8**										**8**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**7**	**1,962**	**32**	**0**	**34**	**95**	**0**	**0**	**0**	**22**	**88**	**2,241**
	Project Traffic							9	3							5		17
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**7**	**1,971**	**35**	**0**	**34**	**95**	**0**	**0**	**0**	**27**	**88**	**2,258**
Normandy Drive at Trouville Esplanade (Signalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**20**	**1,842**	**14**	**0**	**33**	**24**	**0**	**0**	**0**	**5**	**15**	**1,953**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**20**	**1,879**	**14**	**0**	**34**	**24**	**0**	**0**	**0**	**5**	**15**	**1,992**
	Committed Dev. Trips							**6**			**1**	**1**					**1**	**9**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**21**	**1,936**	**15**	**0**	**36**	**26**	**0**	**0**	**0**	**5**	**17**	**2,056**
	Project Traffic							1			11	2					4	18
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**21**	**1,937**	**15**	**0**	**47**	**28**	**0**	**0**	**0**	**5**	**21**	**2,074**
71st Street at Trouville Esplanade (Signalized)	**2024 Raw Traffic**	**0**	**32**	**1,076**	**33**	**0**	**0**	**0**	**1**	**0**	**0**	**12**	**9**	**1**	**14**	**6**	**0**	**1,184**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**33**	**1,098**	**34**	**0**	**0**	**0**	**1**	**0**	**0**	**12**	**9**	**1**	**14**	**6**	**0**	**1,208**
	Committed Dev. Trips		**2**	**5**									**2**					**9**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**36**	**1,133**	**35**	**0**	**0**	**0**	**1**	**0**	**0**	**13**	**11**	**1**	**15**	**6**	**0**	**1,250**
	Project Traffic		7	1	4							6						18
	Total Future Traffic	**0**	**43**	**1,134**	**39**	**0**	**0**	**0**	**1**	**0**	**0**	**19**	**11**	**1**	**15**	**6**	**0**	**1,268**
Normandy Drive/71st Street at Bay Drive (Signalized)	**2024 Raw Traffic**	**0**	**1**	**1,304**	**43**	**6**	**26**	**1,750**	**14**	**0**	**24**	**1**	**13**	**0**	**0**	**0**	**0**	**3,182**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**1**	**1,330**	**44**	**6**	**27**	**1,785**	**14**	**0**	**24**	**1**	**13**	**0**	**0**	**0**	**0**	**3,246**
	Committed Dev. Trips			**3**				**8**										**11**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**1**	**1,370**	**45**	**6**	**27**	**1,842**	**15**	**0**	**25**	**1**	**14**	**0**	**0**	**0**	**0**	**3,346**
	Project Traffic			9				12										21
	Total Future Traffic	**0**	**1**	**1,379**	**45**	**6**	**27**	**1,854**	**15**	**0**	**25**	**1**	**14**	**0**	**0**	**0**	**0**	**3,367**
Normandy Drive at Verdun Court (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**42**	**1,833**	**25**	**0**	**30**	**4**	**0**	**0**	**0**	**0**	**28**	**1,962**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**43**	**1,870**	**26**	**0**	**31**	**4**	**0**	**0**	**0**	**0**	**29**	**2,001**
	Committed Dev. Trips							**7**										**7**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**44**	**1,928**	**26**	**0**	**31**	**4**	**0**	**0**	**0**	**0**	**29**	**2,063**
	Project Traffic						2	10	1		2							15
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**46**	**1,938**	**27**	**0**	**33**	**4**	**0**	**0**	**0**	**0**	**29**	**2,078**
71st Street at Verdun Court (Unsignalized)	**2024 Raw Traffic**	**0**	**40**	**1,153**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**1,217**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**41**	**1,176**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**1,241**
	Committed Dev. Trips			**6**														**6**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**42**	**1,214**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**0**	**1,281**
	Project Traffic		12	5											7			24
	Total Future Traffic	**0**	**54**	**1,219**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**32**	**0**	**0**	**1,305**
Normandy Drive at North Project Drive (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**0**	**1,891**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,891**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**1,929**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,929**
	Committed Dev. Trips							**7**										**7**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**1,989**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,989**
	Project Traffic						14	2			11							27
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**14**	**1,991**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**2,016**
Verdun Court at West Project Drive (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**0**	**0**	**0**	**43**	**0**	**83**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**41**	**0**	**0**	**0**	**44**	**0**	**85**
	Committed Dev. Trips																	**0**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**42**	**0**	**0**	**0**	**45**	**0**	**87**
	Project Traffic						7		1									8
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**1**	**0**	**0**	**42**	**0**	**0**	**0**	**45**	**0**	**95**

Table 2b
PM Peak-hour Turning-movement Counts
1960 Normandy Drive

Intersection	Adjustment	From West				From East				From South				From North				
		Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
JFK Causeway at Treasure Drive (Signalized)	**2024 Raw Traffic**	**2**	**13**	**1,111**	**137**	**1**	**115**	**1,755**	**10**	**1**	**104**	**1**	**81**	**0**	**5**	**1**	**1**	**3,338**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**2**	**13**	**1,133**	**140**	**1**	**117**	**1,790**	**10**	**1**	**106**	**1**	**83**	**0**	**5**	**1**	**1**	**3,405**
	Committed Dev. Trips							**8**										**8**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**2**	**14**	**1,164**	**144**	**1**	**121**	**1,847**	**10**	**1**	**109**	**1**	**85**	**0**	**5**	**1**	**1**	**3,506**
	Project Traffic			12				9										21
	Total Future Traffic	**2**	**14**	**1,176**	**144**	**1**	**121**	**1,856**	**10**	**1**	**109**	**1**	**85**	**0**	**5**	**1**	**1**	**3,527**
71st Street at Rue Notre Dame (Signalized)	**2024 Raw Traffic**	**0**	**33**	**1,042**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**10**	**0**	**23**	**19**	**0**	**13**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**34**	**1,063**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**10**	**0**	**23**	**19**	**0**	**13**
	Committed Dev. Trips			**7**									**1**					**8**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**35**	**1,099**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**11**	**0**	**24**	**20**	**0**	**22**
	Project Traffic			1														1
	Total Future Traffic	**0**	**35**	**1,100**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**11**	**0**	**24**	**20**	**0**	**23**
Normandy Dr. at Rue Versailles Dr. (Signalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**15**	**1,867**	**51**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**44**	**1,979**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**15**	**1,904**	**52**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**45**	**2,019**
	Committed Dev. Trips						**1**	**5**	**1**									**7**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**17**	**1,961**	**54**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**46**	**2,081**
	Project Traffic							1										1
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**17**	**1,962**	**54**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**46**	**2,082**
71st Street at Rue Vendome (Signalized)	**2024 Raw Traffic**	**0**	**0**	**1,075**	**28**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**31**	**0**	**0**	**0**	**0**	**1,135**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**1,097**	**29**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**32**	**0**	**0**	**0**	**0**	**1,158**
	Committed Dev. Trips			**8**														**8**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**1,135**	**29**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**32**	**0**	**0**	**0**	**0**	**1,197**
	Project Traffic			1														1
	Total Future Traffic	**0**	**0**	**1,136**	**29**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**32**	**0**	**0**	**0**	**0**	**1,198**
71st Street at East Bay Drive (Signalized)	**2024 Raw Traffic**	**13**	**39**	**984**	**16**	**5**	**81**	**1,732**	**151**	**0**	**33**	**3**	**33**	**0**	**146**	**10**	**23**	**3,269**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**13**	**40**	**1,004**	**16**	**5**	**83**	**1,767**	**154**	**0**	**34**	**3**	**34**	**0**	**149**	**10**	**23**	**3,334**
	Committed Dev. Trips			**8**			**1**	**7**	**1**									**17**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**14**	**41**	**1,039**	**17**	**5**	**86**	**1,822**	**159**	**0**	**35**	**3**	**35**	**0**	**153**	**10**	**24**	**3,443**
	Project Traffic			1				1										2
	Total Future Traffic	**14**	**41**	**1,040**	**17**	**5**	**86**	**1,823**	**159**	**0**	**35**	**3**	**35**	**0**	**153**	**10**	**24**	**3,445**
Verdun Court at Alley (Unsignalized)	**2024 Raw Traffic**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**0**	**0**	**0**	**48**	**0**	**88**
	PSCF	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	2024 Existing Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**41**	**0**	**0**	**0**	**49**	**0**	**90**
	Committed Dev. Trips																	**0**
	Annual Growth Factor	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
	2026 Background Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**42**	**0**	**0**	**0**	**50**	**0**	**92**
	Project Traffic												12		2			14
	Total Future Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**42**	**12**	**0**	**2**	**50**	**0**	**106**



Thomas A. Hall, Inc.

Figure 4a – Existing Traffic Volumes

1960 Normandy Drive

City of Miami Beach, Florida



Thomas A. Hall, Inc.

Figure 4b – Existing Traffic Volumes
1960 Normandy Drive
City of Miami Beach, Florida

Table 3a
Existing Conditions Peak Hour Queue Length, Level of Service and Delay
1960 Normandy Drive

Intersection	Auxiliary Lane Length	AM Existing Conditions			Queue Length (Vehicles)	Queue Length (Feet)	PM Existing Conditions			Queue Length (Vehicles)	Queue Length (Feet)
		Movement	LOS	Delay			Movement	LOS	Delay		
Normandy Drive at Biarritz Drive (Signalized)	**N/A**	**Overall**	**B**	**19.9**	**N/A**	**N/A**	**Overall**	**C**	**25.1**	**N/A**	**N/A**
	N/A	WBL	C	22.3	10.1	252.5	WBL	C	27.8	16.3	407.5
	N/A	WBT	C	20.7	7.8	195.0	WBT	C	24.7	12.7	317.5
	N/A	WBR	C	21.6	8.9	222.5	WBR	C	26.1	14.7	367.5
	155'	NBL	B	16.1	0.7	17.5	NBL	B	19.4	0.9	22.5
	N/A	NBT	B	12.6	1.5	37.5	NBT	B	17.7	2.4	60.0
	N/A	SBTR	B	14.7	3.8	95.0	SBTR	B	18.0	2.4	60.0
Normandy Drive at Trouville Esplanade (Signalized)	**N/A**	**Overall**	**D**	**37.9**	**N/A**	**N/A**	**Overall**	**D**	**38.4**	**N/A**	**N/A**
	N/A	WBL	C	21.7	9.8	245.0	WBL	D	48.9	24.5	612.5
	N/A	WBT	C	20.4	8.2	205.0	WBT	C	34.3	17.5	437.5
	N/A	WBR	B	20.0	8.8	220.0	WBR	C	33.3	18.6	465.0
	100'	NBL	B	10.5	0.5	12.5	NBL	B	15.0	0.7	17.5
	N/A	NBT	A	10.0	0.3	7.5	NBT	B	14.3	0.4	10.0
	N/A	SBTR	B	10.0	0.3	7.5	SBTR	B	14.3	0.4	10.0
71st Street at Trouville Esplanade (Signalized)	**N/A**	**Overall**	**B**	**13.8**	**N/A**	**N/A**	**Overall**	**A**	**9.7**	**N/A**	**N/A**
	N/A	EBL	B	14.0	16.8	420.0	EBL	A	8.0	9.2	230.0
	N/A	EBT	B	12.9	13.7	342.5	EBT	A	7.8	7.7	192.5
	N/A	EBR	B	12.8	14.7	367.5	EBR	A	7.7	8.2	205.0
	N/A	NBTR	C	33.2	1.2	30.0	NBTR	D	48.1	1.7	42.5
	100'	SBL	C	34.0	0.6	15.0	SBL	D	49.7	1.3	32.5
	N/A	SBT	C	32.5	0.4	10.0	SBT	D	47	0.5	12.5
Normandy Drive/71st Street at Bay Drive (Signalized)	**N/A**	**Overall**	**A**	**5.0**	**N/A**	**N/A**	**Overall**	**C**	**28.6**	**N/A**	**N/A**
	N/A	EBTR	A	5.7	10.7	267.0	EBTR	C	33.3	10.7	404.0
	250'	WBL	A	3.3	0.2	5.0	WBL	C	24.7	0.2	31.0
	N/A	WBTR	A	2.5	3.7	93.0	WBTR	C	23.8	3.7	501.0
	N/A	NBLT	D	51.3	2.3	57.0	NBLT	C	29.9	2.3	35.0
Normandy Drive at Verdun Court (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.8**	**N/A**	**N/A**	**Overall**	**N/A**	**1.0**	**N/A**	**N/A**
	N/A	WBLTR	A	0.0	0.0	0.0	WBLTR	A	0.0	0.0	0.0
	N/A	NBLT	C	16.9	0.1	2.5	NBLT	D	30.5	0.8	20.0
	N/A	SBR	C	16.7	0.5	12.5	SBR	C	24.8	0.5	12.5
71st Street at Verdun Court (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.3**	**N/A**	**N/A**	**Overall**	**N/A**	**0.3**	**N/A**	**N/A**
	N/A	EBLT	A	0.0	0.0	0.0	EBLT	A	0.0	0.0	0.0
	N/A	SBR	B	14.9	0.3	7.5	SBR	B	13.3	0.2	5.0
Normandy Drive at North Project Drive (Unsignalized)	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**
	N/A	WBT	N/A	N/A	N/A	N/A	WBT	N/A	N/A	N/A	N/A
	N/A	WBL	N/A	N/A	N/A	N/A	WBL	N/A	N/A	N/A	N/A
	N/A	NBL	N/A	N/A	N/A	N/A	NBL	N/A	N/A	N/A	N/A
Verdun Court at Project Drive (Unsignalized)	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**
	N/A	NBT	N/A	N/A	N/A	N/A	NBT	N/A	N/A	N/A	N/A
	N/A	NBR	N/A	N/A	N/A	N/A	NBR	N/A	N/A	N/A	N/A
	N/A	SBL	N/A	N/A	N/A	N/A	SBL	N/A	N/A	N/A	N/A
	N/A	SBT	N/A	N/A	N/A	N/A	SBT	N/A	N/A	N/A	N/A

Table 3b
Existing Conditions Peak Hour Queue Length, Level of Service and Delay
1960 Normandy Drive

Intersection	Auxiliary Lane Length	AM Existing Conditions			Queue Length (Vehicles)	Queue Length (Feet)	PM Existing Conditions			Queue Length (Vehicles)	Queue Length (Feet)
		Movement	LOS	Delay			Movement	LOS	Delay		
JFK Causeway at Treasure Drive (Signalized)	**N/A**	**Overall**	**C**	**22.1**	**N/A**	**N/A**	**Overall**	**B**	**14.7**	**N/A**	**N/A**
	100	EBL	B	11.2	0.3	7.0	EBL	A	8.5	0.4	10.0
	N/A	EBTR	B	19.0	20.6	515.0	EBTR	B	11.1	14.4	360.0
	25	WBL	C	22.6	4.5	112.0	WBL	B	10.7	10.7	267.5
	N/A	WBTR	B	11.1	9.8	246.0	WBTR	B	11.2	11.2	280.0
	N/A	NBLT	F	123.5	13.6	341.0	NBLT	F	80.3	9.6	240.0
	500	NBR	A	6.8	0.6	16.0	NBR	E	62.5	6.8	170.0
	N/A	SBLTR	E	75.3	0.5	13.0	SBLTR	E	74.7	1.1	27.5
71st Street at Rue Notre Dame (Signalized)	**N/A**	**Overall**	**D**	**36.5**	**N/A**	**N/A**	**Overall**	**A**	**5.6**	**N/A**	**N/A**
	N/A	EBL	D	47.3	18.3	457.5	EBL	A	4.0	1.7	42.5
	N/A	EBTR	C	34.0	13.2	330.0	EBTR	A	3.9	1.4	35.0
	N/A	EBR	C	32.8	14.0	350.0	EBR	A	3.8	1.5	37.5
	N/A	NBTR	A	9.9	0.4	10.0	NBTR	C	30.2	0.3	7.5
	N/A	SBLT	B	10.9	1.4	35.0	SBLT	C	31.3	1.1	27.5
Normandy Drive at Rue Versailles Dr. (Signalized)	**N/A**	**Overall**	**A**	**3.8**	**N/A**	**N/A**	**Overall**	**A**	**4.9**	**N/A**	**N/A**
	N/A	WBL	A	2.1	2.9	73.0	WBL	A	2.8	7.6	191.0
	N/A	WBT	A	2.1	2.9	73.0	WBT	A	2.8	7.6	191.0
	N/A	WBR	A	2.1	2.9	73.0	WBR	A	2.8	7.6	191.0
	N/A	SBR	D	54.8	0.7	17.0	SBR	E	67.1	2.2	56.0
71st Street at Rue Vendome (Signalized)	**N/A**	**Overall**	**A**	**3.5**	**N/A**	**N/A**	**Overall**	**A**	**1.1**	**N/A**	**N/A**
	N/A	EBTR	A	3.5	5.0	126.0	EBTR	A	1.1	1.6	40.0
	N/A	EBR	A	3.5	5.0	126.0	EBR	A	1.1	1.6	40.0
	N/A	NBTR	A	1.4	0.0	0.0	NBTR	A	0.6	0.0	0.0
71st Street at Bay Drive (East) (Signalized)	**N/A**	**Overall**	**C**	**32.8**	**N/A**	**N/A**	**Overall**	**C**	**26.9**	**N/A**	**N/A**
	150	EBL	B	15.4	0.6	15.0	EBL	D	48.8	0.6	36.0
	N/A	EBT	D	36.0	22.0	550.0	EBT	B	15.0	22.0	208.0
	N/A	EBR	C	21.8	0.6	15.0	EBR	A	8.6	0.6	2.0
	100	WBL	B	17.0	1.7	42.5	WBL	A	6.6	1.7	45.0
	N/A	WBTR	C	21.8	20.8	520.0	WBTR	C	28.5	20.8	1190.0
	90	NBL	D	39.6	1.6	40.0	NBL	D	52.4	1.6	60.0
	N/A	NBTR	D	39.1	4.2	105.0	NBTR	D	51.0	4.2	35.0
	50	SBL	E	72.4	14.2	355.0	SBL	E	73.4	14.2	212.0
	N/A	SBTR	D	37.6	1.9	47.5	SBTR	D	51.3	1.9	39.0
Verdun Court at Alleyway (Unsignalized)	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**
	N/A	WBLR	N/A	N/A	N/A	N/A	WBLR	N/A	N/A	N/A	N/A
	N/A	SBLT	N/A	N/A	N/A	N/A	SBLT	N/A	N/A	N/A	N/A
	N/A	NBTR	N/A	N/A	N/A	N/A	NBTR	N/A	N/A	N/A	N/A

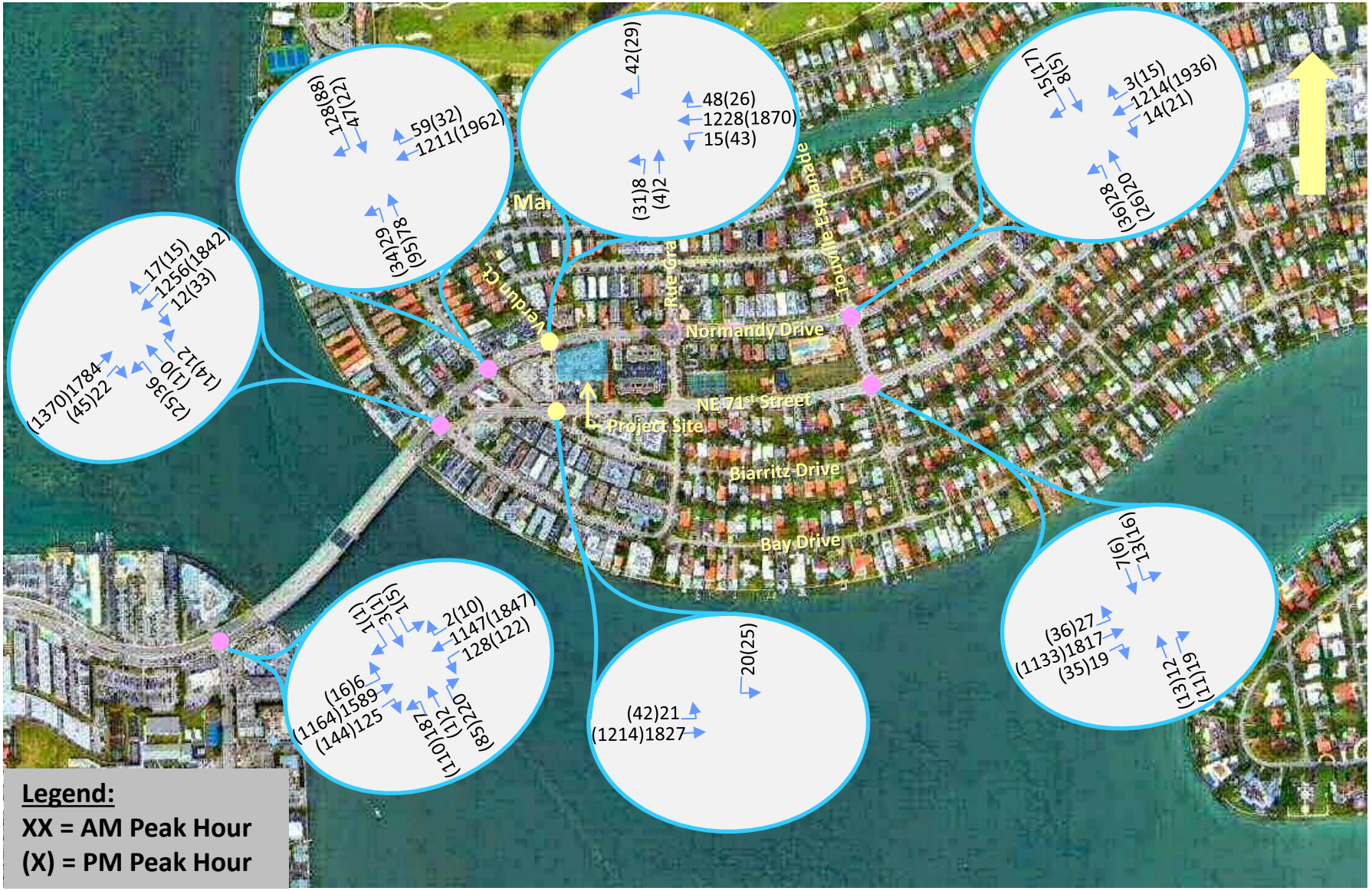
Background Traffic Conditions

Future build-out year (background) traffic volumes without the project were derived by applying the 1.36 percent annual growth rate to the adjusted peak-season, turning-movement counts. **Figure 5 – Background Conditions Traffic Volumes** shows the peak-season background traffic volumes expected during the future build-out year of 2024. In addition, committed development traffic for four approved, but not yet built, developments was added to the future traffic volumes. Those developments are:

- 1787 Normandy;
- Residences at Calais;
- Residences at Trouville.\;
- 72B.

Copies of the committed development's peak-hour traffic assignments may be found in **Appendix D – Adjustment Factors**.

Appendix G – Background Traffic Conditions Analyses contains copies of the Synchro reports for the studied intersections. **Table 4 - Background Conditions Peak-hour Queue Length, Level of Service and Delay** provides a summary of the critical elements of the background conditions analyses and demonstrates that all signalized intersections continue to operate within the acceptable Level of Service (LOS), which is 120 percent of LOS D.



Thomas A. Hall, Inc.

Figure 5a – Background Traffic Volumes
1960 Normandy Drive
City of Miami Beach, Florida



Thomas A. Hall, Inc.

Figure 5b – Background Traffic Volumes

1960 Normandy Drive

City of Miami Beach, Florida

Table 4a
Background Conditions Peak Hour Queue Length, Level of Service and Delay
1960 Normandy Drive

Intersection	Auxiliary Lane Length	AM Existing Conditions Movement	LOS	Delay	Queue Length (Vehicles)	Queue Length (Feet)	PM Existing Conditions Movement	LOS	Delay	Queue Length (Vehicles)	Queue Length (Feet)
Normandy Drive at Biarritz Drive (Signalized)	**N/A**	**Overall**	**B**	**19.7**	**N/A**	**N/A**	**Overall**	**C**	**23.0**	**N/A**	**N/A**
	N/A	WBL	C	21.8	10.2	255.0	WBL	C	24.7	16.2	405.0
	N/A	WBT	C	20.2	8.0	200.0	WBT	C	22.2	12.7	317.5
	N/A	WBR	C	21.1	9.1	227.5	WBR	C	23.2	14.6	365.0
	155'	NBL	B	17.1	0.7	17.5	NBL	C	23.0	1.1	27.5
	N/A	NBT	B	13.3	1.6	40.0	NBT	C	21.1	2.7	67.5
	N/A	SBTR	B	15.8	4.1	102.5	SBTR	C	21.7	2.8	70.0
Normandy Drive at Trouville Esplanade (Signalized)	**N/A**	**Overall**	**B**	**13.7**	**N/A**	**N/A**	**Overall**	**C**	**21.1**	**N/A**	**N/A**
	N/A	WBL	B	14.2	8.0	200.0	WBL	C	23.9	17.4	435.0
	N/A	WBT	B	13.6	6.6	165.0	WBT	B	19.9	13.6	340.0
	N/A	WBR	B	13.4	7.2	180.0	WBR	B	19.3	14.4	360.0
	100'	NBL	B	14.6	0.6	15.0	NBL	B	19.5	0.9	22.5
	N/A	NBT	B	13.8	0.4	10.0	NBT	B	18.5	0.6	15.0
	N/A	SBTR	B	13.9	0.5	12.5	SBTR	B	18.6	0.6	15.0
71st Street at Trouville Esplanade (Signalized)	**N/A**	**Overall**	**B**	**10.6**	**N/A**	**N/A**	**Overall**	**A**	**8.7**	**N/A**	**N/A**
	N/A	EBL	B	10.4	14.5	362.5	EBL	A	6.6	8.4	210.0
	N/A	EBT	A	9.6	11.8	295.0	EBT	A	6.4	7.0	175.0
	N/A	EBR	A	9.5	12.7	317.5	EBR	A	6.4	7.6	190.0
	N/A	NBTR	D	38.6	1.6	40.0	NBTR	D	52.0	2.1	52.5
	100'	SBL	D	39.5	0.7	17.5	SBL	D	53.9	1.5	37.5
	N/A	SBT	D	37.4	0.4	10.0	SBT	D	50.4	0.5	12.5
Normandy Drive/71st Street at Bay Drive (Signalized)	**N/A**	**Overall**	**A**	**5.1**	**N/A**	**N/A**	**Overall**	**C**	**24.3**	**N/A**	**N/A**
	N/A	EBTR	A	5.9	11.2	281.0	EBTR	C	28.3	11.2	404.0
	250'	WBL	A	3.6	0.2	5.0	WBL	B	19.8	0.2	31.0
	N/A	WBTR	A	2.6	3.9	98.0	WBTR	C	34.1	3.9	501.0
	N/A	NBLT	D	51.2	2.4	59.0	NBLT	C	33.3	2.4	35.0
Normandy Drive at Verdun Court (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.8**	**N/A**	**N/A**	**Overall**	**N/A**	**1.0**	**N/A**	**N/A**
	N/A	WBLTR	A	0.0	0.0	0.0	WBLTR	A	0.0	0.0	0.0
	N/A	NBLT	C	17.5	0.1	2.5	NBLT	D	32.6	0.9	22.5
	N/A	SBR	C	17.2	0.5	12.5	SBR	D	25.9	0.5	12.5
71st Street at Verdun Court (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.3**	**N/A**	**N/A**	**Overall**	**N/A**	**0.3**	**N/A**	**N/A**
	N/A	EBLT	A	0.0	0.0	0.0	EBLT	A	0.0	0.0	0.0
	N/A	SBR	C	15.3	0.3	7.5	SBR	B	13.5	0.3	7.5
Normandy Drive at North Project Drive (Unsignalized)	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**
	N/A	WBT	N/A	N/A	N/A	N/A	WBT	N/A	N/A	N/A	N/A
	N/A	WBL	N/A	N/A	N/A	N/A	WBL	N/A	N/A	N/A	N/A
	N/A	NBL	N/A	N/A	N/A	N/A	NBL	N/A	N/A	N/A	N/A
Verdun Court at Project Drive (Unsignalized)	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**
	N/A	NBT	N/A	N/A	N/A	N/A	NBT	N/A	N/A	N/A	N/A
	N/A	NBR	N/A	N/A	N/A	N/A	NBR	N/A	N/A	N/A	N/A
	N/A	SBL	N/A	N/A	N/A	N/A	SBL	N/A	N/A	N/A	N/A
	N/A	SBT	N/A	N/A	N/A	N/A	SBT	N/A	N/A	N/A	N/A

Table 4b
Background Conditions Peak Hour Queue Length, Level of Service and Delay
1960 Normandy Drive

Intersection	Auxiliary Lane Length	AM Existing Conditions			Queue Length (Vehicles)	Queue Length (Feet)	PM Existing Conditions			Queue Length (Vehicles)	Queue Length (Feet)
		Movement	LOS	Delay			Movement	LOS	Delay		
JFK Causeway at Treasure Drive (Signalized)	**N/A**	**Overall**	**C**	**23.2**	**N/A**	**N/A**	**Overall**	**B**	**15.3**	**N/A**	**N/A**
	100	EBL	B	12.4	0.3	7.0	EBL	A	9.0	0.4	10.0
	N/A	EBTR	C	21.5	22.5	563.0	EBTR	B	11.5	15.1	377.5
	25	WBL	C	29.3	5.2	129.0	WBL	B	11.8	2.3	57.5
	N/A	WBTR	B	11.7	10.4	260.0	WBTR	B	11.7	15.8	395.0
	N/A	NBLT	F	114.4	13.6	341.0	NBLT	F	85.9	10.2	255.0
	500	NBR	A	7.2	0.7	17.0	NBR	E	62.1	6.9	172.5
	N/A	SBLTR	E	75.3	0.5	13.0	SBLTR	E	74.7	1.1	27.5
71st Street at Rue Notre Dame (Signalized)	**N/A**	**Overall**	**A**	**7.9**	**N/A**	**N/A**	**Overall**	**A**	**5.7**	**N/A**	**N/A**
	N/A	EBL	A	6.9.	5.3	132.5	EBL	A	4.1	1.8	45.0
	N/A	EBTR	A	6.5	4.2	105.0	EBTR	A	4.0	1.4	35.0
	N/A	EBR	A	6.3	4.6	115.0	EBR	A	3.9	1.6	40.0
	N/A	NBTR	C	22.4	0.8	20.0	NBTR	C	30.1	0.4	10.0
	N/A	SBLT	C	24.9	2.4	60.0	SBLT	C	31.3	1.2	30.0
Normandy Drive at Rue Versailles Dr. (Signalized)	**N/A**	**Overall**	**A**	**3.8**	**N/A**	**N/A**	**Overall**	**A**	**5.0**	**N/A**	**N/A**
	N/A	WBL	A	2.1	3.0	75.0	WBL	A	2.9	8.1	203.0
	N/A	WBT	A	2.1	3.0	75.0	WBT	A	2.9	8.1	203.0
	N/A	WBR	A	2.1	3.0	75.0	WBR	A	2.9	8.1	203.0
	N/A	SBR	D	54.8	0.6	16.0	SBR	E	67.2	2.3	57.0
71st Street at Rue Vendome (Signalized)	**N/A**	**Overall**	**A**	**3.6**	**N/A**	**N/A**	**Overall**	**A**	**1.1**	**N/A**	**N/A**
	N/A	EBTR	A	3.6	5.3	133.0	EBTR	A	1.1	1.6	41.0
	N/A	EBR	A	3.6	5.3	133.0	EBR	A	1.1	1.6	41.0
	N/A	NBTR	A	1.4	0.0	0.0	NBTR	A	0.6	0.0	0.0
71st Street at Bay Drive (East) (Signalized)	**N/A**	**Overall**	**C**	**34.7**	**N/A**	**N/A**	**Overall**	**C**	**31.2**	**N/A**	**N/A**
	150	EBL	B	18.7	0.7	17.5	EBL	C	33.9	1.8	17.5
	N/A	EBT	D	39.2	22.7	567.5	EBT	C	27.9	16.8	567.5
	N/A	EBR	D	40.3	24.9	622.5	EBR	B	18.6	0.8	622.5
	100	WBL	B	19.6	2.0	50.0	WBL	A	9.5	1.8	50.0
	N/A	WBTR	C	26.9	23.9	597.5	WBTR	C	31.1	43.5	597.5
	90	NBL	D	36.3	1.6	40.0	NBL	E	55.1	2.2	40.0
	N/A	NBTR	D	35.7	4.1	102.5	NBTR	D	52.6	2.2	102.5
	50	SBL	E	55.1	12.9	322.5	SBL	E	72.0	10.7	322.5
	N/A	SBTR	C	34.4	1.8	45.0	SBTR	D	52.4	2.1	45.0
Verdun Court at Alleyway (Unsignalized)	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**	**Overall**	**N/A**	**N/A**	**N/A**	**N/A**
	N/A	WBLR	N/A	N/A	N/A	N/A	WBLR	N/A	N/A	N/A	N/A
	N/A	SBLT	N/A	N/A	N/A	N/A	SBLT	N/A	N/A	N/A	N/A
	N/A	NBTR	N/A	N/A	N/A	N/A	NBTR	N/A	N/A	N/A	N/A

Project Trip Generation

Table 5 – Daily Trip Generation, Table 6 – AM Peak-hour Trip Generation and **Table 7 – PM Peak-hour Trip Generation** depict the trip generation for the project site. Trip generation characteristics were obtained from the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 11th Edition. As the tables show, the proposed 1960 Normandy Drive development is anticipated to generate 758 net new daily trips, 36 net new a.m. peak-hour trips and 48 net new p.m. peak-hour trips.

Multi-Modal Trip Reduction

The US Census' *American Community Survey's* Means of Transportation to Work data was reviewed to determine a multimodal factor for the census tracts in the study area. A 16.3 percent multi-modal factor was determined to be appropriate to the study area. A copy of the *American Community Survey* results for zip code 33141 may be found in **Appendix D – Adjustment Factors.** Note that the multi-modal trip reduction was only applied to the residential component of the project trip generation shown in **Table 5 – Daily Trip Generation, Table 6 – AM Peak-hour Trip Generation** and **Table 7 – PM Peak-hour Trip Generation**.

Routes 112L and 79 of the Miami-Dade County Transit System run along Normandy Drive and 71st Street bordering the project site and are expected to provide service to patrons of the proposed 1960 Normandy Drive development. Copies of these transit route's schedules and route maps may be found in **Appendix E – Mass Transit Information.** There are bus stops on both Normandy Drive and 71st Street within 450 feet or less of the proposed development.

Internal Trips Capture

Internal trips capture rates for this mixed-use development were obtained from the National Cooperative Highway Research Board's (NCHRP) Report 684 which provides a spreadsheet for calculating internal capture rates between land uses in a mixed-use development. Copies of the NCHRP's analyses worksheets may be found in **Appendix D – Adjustment Factors**.

Project Distribution and Assignment

Cardinal distribution information was provided by Miami-Dade County's Metropolitan Planning Organization (MPO). **Figure 6 – Project Traffic Distribution** shows the traffic distribution on study area roadways derived from an interpolation of the 2015 and 2045 cardinal distribution data for Traffic Analysis Zone 625. The MPO's 2015 and 2045 distributions and a table showing the interpolated cardinal distribution information for the project build-out year of 2024 is included in **Appendix D – Adjustment Factors.**

Figure 7 – Project Trips Assignment shows the peak-hour project trips assigned to the study area roadway network in accordance with the distribution.

Table 5
Daily Trip Generation
1960 Normandy Drive

Land Use	ITE Code	Intensity		Trip Generation Rate[1]	Total Trips			Internal Trips						External Trips			Multimodal Trips[2]		New Trips			Pass-By Capture[3]		New Trips		
					In	Out	Total	In		Out		Total	%	In	Out	Total			In	Out	Total			In	Out	Total
Existing Use																										
Utility	170	4,377	s.f.	Ln(T) = 0.74 Ln(X) + 2.73 (50/50)	23	23	46	0	0.0%	0	0.0%	0	0.0%	23	23	46	7	16.3%	19	19	38	0	0.0%	19	19	38
Sub-Total					23	23	46	0		0		0		23	23	46	7		19	19	38	0		19	19	38
Proposed Use																										
Multifamily Housing (Mid-Rise)	221	120	d.u.	T = 4.77(X) - 46.46 (50/50)	422	423	845	76	18.0%	30	7.0%	106	12.5%	346	393	739	20	16.3%	360	359	719	0	0.0%	360	359	719
Strip Retail Plaza (<40k s.f.)	822	5,091	s.f.	T=54.45(X) (50/50)	139	138	277	11	8.0%	39	28.0%	50	17.9%	128	99	227	0	0.0%	128	99	227	150	66.0%	39	38	77
Sub-Total					561	561	1,122	87		69		156		474	492	966	20		488	458	946	150		399	397	796
Total					**538**	**538**	**1,076**	**87**		**69**		**156**		**451**	**469**	**920**	**12**		**469**	**439**	**908**	**150**		**380**	**378**	**758**

[1] Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 11th Edition, General Urban/Suburban characteristics.
[2] Multimodal trips estimate obained from US Census Bureau's American Community Survey.
[3] Pass-by Capture rate derived from two smallest retail sites' (9,000 s.f. and 17,000 s.f.) rates shown in the ITE's *Trip Generation Handbook*, 3rd Edition.

Table 6
AM Peak Hour Trip Generation
1960 Normandy Drive

Land Use	ITE Code	Intensity		Trip Generation Rate[1]	Total Trips			Internal Trips						External Trips			Multimodal Trips[2]		New Trips			Pass-By Capture[3]		New Trips		
					In	Out	Total	In		Out		Total	%	In	Out	Total			In	Out	Total			In	Out	Total
Existing Use																										
Utility	170	4,377	s.f.	T=2.33(X) (87/13)	9	1	10	0	0.0%	0	0.0%	0	0.0%	9	1	10	2	16.3%	4	4	8	0	0.0%	4	4	8
Sub-Total					9	1	10	0		0		0		9	1	10	2		4	4	8	0		4	4	8
Proposed Use																										
Multifamily Housing (Mid-Rise)	221	120	d.u.	T = 0.44(X) - 11.61 (23/77)	13	47	60	0	0.0%	0	0.0%	0	0.0%	13	47	60	20	16.3%	10	30	40	0	0.0%	20	20	40
Strip Retail Plaza (<40k s.f.)	822	5,091	s.f.	T=2.36(X) (62/38)	7	5	12	0	0.0%	0	0.0%	0	0.0%	7	5	12	0	0.0%	7	5	12	8	66.0%	3	1	4
Sub-Total					20	52	72	0		0		0		20	52	72	20		17	35	52	8		23	21	44
Total					**11**	**51**	**62**	**0**		**0**		**0**		**11**	**51**	**62**	**18**		**13**	**31**	**44**	**8**		**19**	**17**	**36**

[1] Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 11th Edition, General Urban/Suburban characteristics.
[2] Multimodal trips estimate obained from US Census Bureau's American Community Survey.
[3] Pass-by Capture rate derived from two smallest retail sites' (9,000 s.f. and 17,000 s.f.) rates shown in the ITE's *Trip Generation Handbook*, 3rd Edition.

Table 7
PM Peak Hour Trip Generation
1960 Normandy Drive

Land Use	ITE Code	Intensity		Trip Generation Rate[1]	Total Trips			Internal Trips						External Trips			Multimodal Trips[2]		New Trips			Pass-By Capture[3]		New Trips		
					In	Out	Total	In		Out		Total	%	In	Out	Total			In	Out	Total			In	Out	Total
Existing Use																										
Utility	170	4,377	s.f.	Ln(T) = 0.81 Ln(X) + 0.86 (18/82)	1	7	8	0	0.0%	0	0.0%	0	0.0%	1	7	8	1	16.3%	3	4	7	0	0.0%	3	4	7
Sub-Total					1	7	8	0		0		0		1	7	8	1		3	4	7	0		3	4	7
Proposed Use																										
Multifamily Housing (Mid-Rise)	221	120	d.u.	T = 0.39(X) + 0.34 (61/39)	45	27	72	8	18.0%	2	7.0%	10	13.9%	37	25	62	20	16.3%	25	17	42	0	0.0%	25	17	42
Strip Retail Plaza (<40k s.f.)	822	5,091	s.f.	Ln(T) = 0.71 Ln(X) + 2.72 (50/50)	24	25	49	2	8.0%	7	28.0%	9	17.8%	22	18	40	0	0.0%	20	20	40	27	66.0%	6	7	13
Sub-Total					69	52	121	10		9		19		59	43	102	20		45	37	82	27		31	24	55
Total					**68**	**45**	**113**	**10**		**9**		**19**		**58**	**36**	**94**	**18**		**42**	**33**	**75**	**27**		**28**	**20**	**48**

[1] Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 11th Edition, General Urban/Suburban characteristics.
[2] Multimodal trips estimate obained from US Census Bureau's American Community Survey.

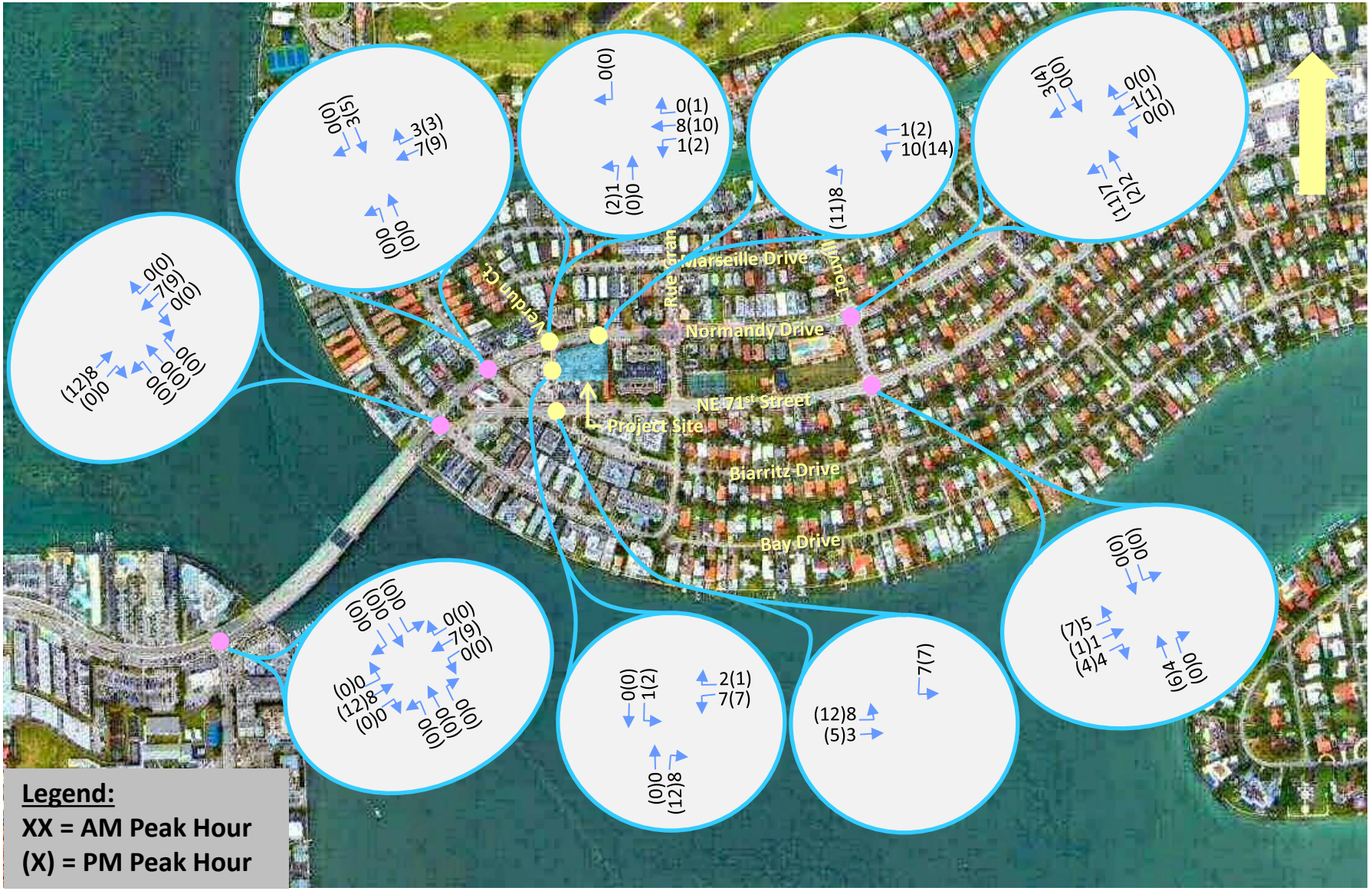


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Figure 6 – Project Traffic Distribution

1960 Normandy Drive

City of Miami Beach, Florida



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Figure 7a – Project Trips Assignment
1960 Normandy Drive
City of Miami Beach, Florida



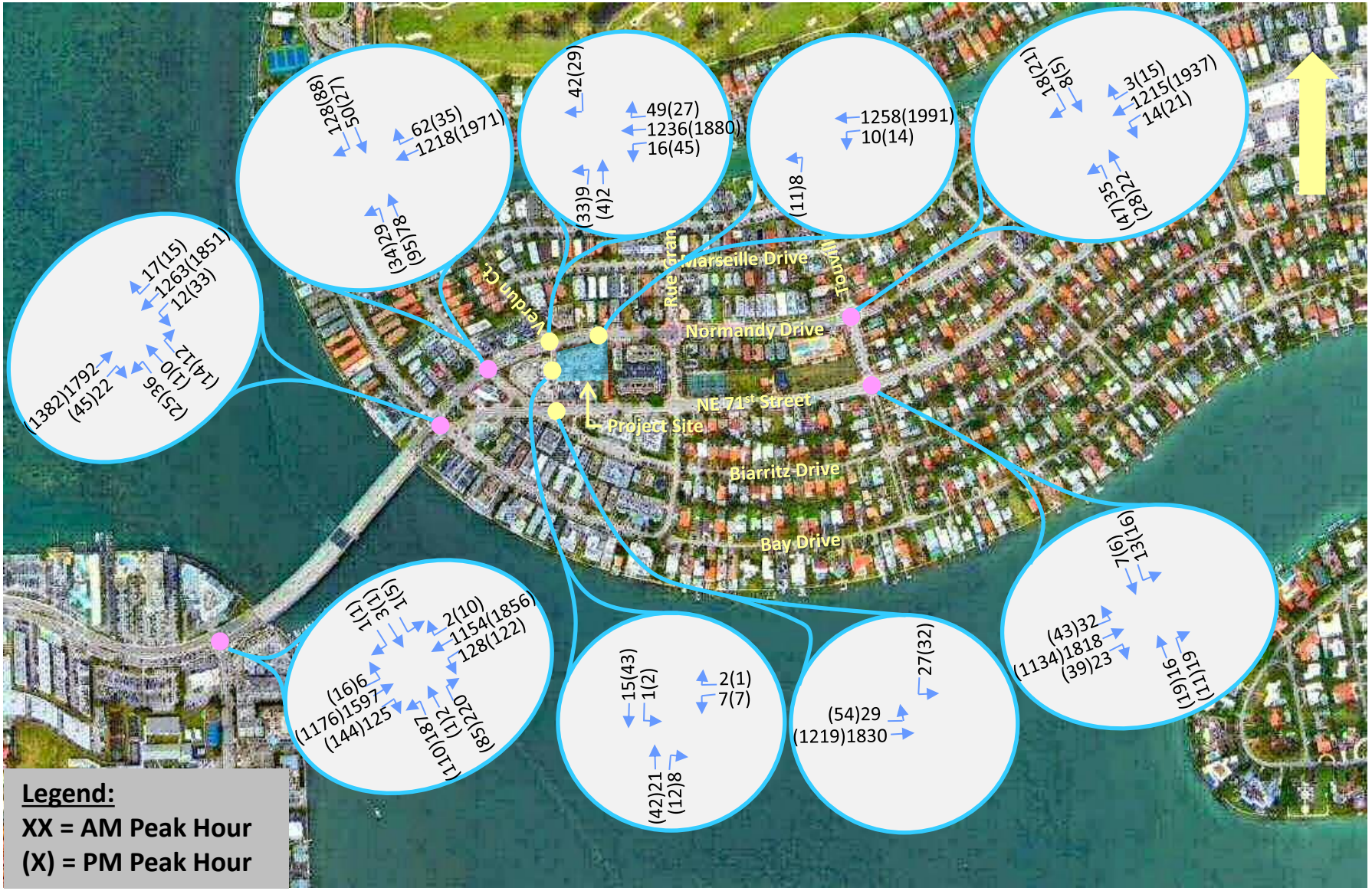
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Figure 7b – Project Trips Assignment
1960 Normandy Drive
City of Miami Beach, Florida

Total Traffic Conditions

Future total traffic volumes including project traffic were obtained by adding the background traffic volumes to the project traffic volumes. The resulting future total traffic volumes are shown in **Figure 8 – Total Traffic Volumes.**

Appendix H – Total Traffic Conditions Analyses contains copies of the Synchro reports for this third analysis condition. **Table 8 – Total Traffic Conditions Peak-hour Queue Length, Level of Service and Delay Findings** provides a summary of the critical elements of these analyses and demonstrates that the addition of project-related traffic has little effect upon the studied intersections. All intersection levels of service remain the same as those determined for the Background Conditions and turn lane queue storage lengths are increased only slightly, if at all.



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Figure 8a – Total Traffic Volumes
1960 Normandy Drive
City of Miami Beach, Florida



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Figure 8b – Total Traffic Volumes

1960 Normandy Drive

City of Miami Beach, Florida

Table 8a
Total Traffic Conditions Peak Hour Queue Length, Level of Service and Delay
1960 Normandy Drive

Intersection	Auxiliary Lane Length	AM Existing Conditions Movement	LOS	Delay	Queue Length (Vehicles)	Queue Length (Feet)	PM Existing Conditions Movement	LOS	Delay	Queue Length (Vehicles)	Queue Length (Feet)
Normandy Drive at Biarritz Drive (Signalized)	**N/A**	**Overall**	**B**	**19.8**	**N/A**	**N/A**	**Overall**	**C**	**23.1**	**N/A**	**N/A**
	N/A	WBL	C	21.9	10.3	257.5	WBL	C	24.8	16.3	407.5
	N/A	WBT	C	20.3	8.1	202.5	WBT	C	22.3	12.8	320.0
	N/A	WBR	C	21.1	9.2	230.0	WBR	C	23.3	14.7	367.5
	155'	NBL	B	17.2	0.7	17.5	NBL	C	23.2	1.1	27.5
	N/A	NBT	B	13.3	1.6	40.0	NBT	C	21.1	2.7	67.5
	N/A	SBTR	B	15.8	4.1	102.5	SBTR	C	21.8	3.0	75.0
Normandy Drive at Trouville Esplanade (Signalized)	**N/A**	**Overall**	**B**	**13.8**	**N/A**	**N/A**	**Overall**	**C**	**21.1**	**N/A**	**N/A**
	N/A	WBL	B	14.2	8.0	200.0	WBL	C	24.0	17.4	435.0
	N/A	WBT	B	13.6	6.6	165.0	WBT	B	19.9	13.6	340.0
	N/A	WBR	B	13.4	7.2	180.0	WBR	B	19.4	14.4	360.0
	100'	NBL	B	14.8	0.8	20.0	NBL	B	19.9	1.1	27.5
	N/A	NBT	B	13.9	0.5	12.5	NBT	B	18.6	0.6	15.0
	N/A	SBTR	B	14.0	0.6	15.0	SBTR	B	18.7	0.7	17.5
71st Street at Trouville Esplanade (Signalized)	**N/A**	**Overall**	**B**	**10.7**	**N/A**	**N/A**	**Overall**	**A**	**9.0**	**N/A**	**N/A**
	N/A	EBL	B	10.5	14.6	365.0	EBL	A	6.7	8.5	212.5
	N/A	EBT	A	9.7	11.9	297.5	EBT	A	6.4	7.1	177.5
	N/A	EBR	A	9.5	12.7	317.5	EBR	A	6.4	7.6	190.0
	N/A	NBTR	D	38.8	1.8	45.0	NBTR	D	52.5	2.6	65.0
	100'	SBL	D	39.7	0.7	17.5	SBL	D	54.5	1.5	37.5
	N/A	SBT	D	37.4	0.4	10.0	SBT	D	50.4	0.5	12.5
Normandy Drive/71st Street at Bay Drive (Signalized)	**N/A**	**Overall**	**A**	**5.2**	**N/A**	**N/A**	**Overall**	**C**	**24.4**	**N/A**	**N/A**
	N/A	EBTR	A	5.9	11.2	281.0	EBTR	C	28.5	11.2	388.0
	250'	WBL	A	3.6	0.2	5.0	WBL	B	22.0	0.2	27.0
	N/A	WBTR	A	2.6	3.9	98.0	WBTR	C	19.9	3.9	476.0
	N/A	NBLT	D	51.2	2.4	59.0	NBLT	C	34.1	2.4	40.0
Normandy Drive at Verdun Court (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.8**	**N/A**	**N/A**	**Overall**	**N/A**	**1.0**	**N/A**	**N/A**
	N/A	WBLTR	A	0.0	0.0	0.0	WBLTR	A	0.0	0.0	0.0
	N/A	NBLT	C	17.4	0.1	2.5	NBLT	D	33.1	1.0	25.0
	N/A	SBR	C	17.3	0.5	12.5	SBR	D	26.1	0.5	12.5
71st Street at Verdun Court (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.4**	**N/A**	**N/A**	**Overall**	**N/A**	**0.4**	**N/A**	**N/A**
	N/A	EBLT	A	0.0	0.0	0.0	EBLT	A	0.0	0.0	0.0
	N/A	SBR	C	15.9	0.4	10.0	SBR	B	14.0	0.4	10.0
Normandy Drive at North Project Drive (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.1**	**N/A**	**N/A**	**Overall**	**N/A**	**0.1**	**N/A**	**N/A**
	N/A	WBL	B	12.2	0.1	2.5	WBL	C	15.6	0.1	2.5
	N/A	NBL	N/A	0.0	0.0	0.0	NBL	N/A	0.0	0.0	0.0
	N/A	NBT	N/A	0.0	0.0	0.0	NBT	N/A	0.0	0.0	0.0
Verdun Court at Project Drive (Unsignalized)	**N/A**	**Overall**	**N/A**	**1.7**	**N/A**	**N/A**	**Overall**	**N/A**	**0.8**	**N/A**	**N/A**
	N/A	WBLR	A	8.7	0.0	0.0	WBLR	A	9.0	0.0	0.0
	N/A	NBTR	A	0.0	0.0	0.0	NBTR	A	0.0	0.0	0.0
	N/A	SBLT	A	0.0	0.0	0.0	SBLT	A	0.0	0.0	0.0

Table 8b
Total Traffic Conditions Peak Hour Queue Length, Level of Service and Delay
1960 Normandy Drive

Intersection	Auxiliary Lane Length	AM Existing Conditions Movement	LOS	Delay	Queue Length (Vehicles)	Queue Length (Feet)	PM Existing Conditions Movement	LOS	Delay	Queue Length (Vehicles)	Queue Length (Feet)
JFK Causeway at Treasure Drive (Signalized)	**N/A**	**Overall**	**C**	**23.3**	**N/A**	**N/A**	**Overall**	**B**	**15.3**	**N/A**	**N/A**
	100	EBL	B	12.4	0.3	7.0	EBL	A	9.0	0.4	10.0
	N/A	EBTR	C	21.6	22.7	567.0	EBTR	B	11.6	15.3	382.5
	25	WBL	C	30.3	5.2	130.0	WBL	B	12.0	2.3	57.5
	N/A	WBTR	B	11.7	10.4	260.0	WBTR	B	11.8	15.9	397.5
	N/A	NBLT	F	114.4	13.6	341.0	NBLT	F	85.9	10.2	255.0
	500	NBR	A	7.2	0.7	17.0	NBR	E	62.2	6.9	172.5
	N/A	SBLTR	E	75.3	0.5	13.0	SBLTR	E	74.7	1.1	27.5
71st Street at Rue Notre Dame (Signalized)	**N/A**	**Overall**	**A**	**7.9**	**N/A**	**N/A**	**Overall**	**A**	**5.7**	**N/A**	**N/A**
	N/A	EBL	A	6.9.	5.3	132.5	EBL	A	4.1	3.2	80.0
	N/A	EBTR	A	6.5	4.2	105.0	EBTR	A	4.0	2.6	65.0
	N/A	EBR	A	6.3	4.6	115.0	EBR	A	3.9	2.8	70.0
	N/A	NBTR	C	22.4	0.8	20.0	NBTR	C	30.1	0.7	17.5
	N/A	SBLT	C	24.9	2.4	60.0	SBLT	C	31.3	2.1	52.5
Normandy Drive at Rue Versailles Dr. (Signalized)	**N/A**	**Overall**	**A**	**3.8**	**N/A**	**N/A**	**Overall**	**A**	**5.0**	**N/A**	**N/A**
	N/A	WBL	A	2.1	3.0	76.0	WBL	A	2.9	8.1	203.0
	N/A	WBT	A	2.1	3.0	76.0	WBT	A	2.9	8.1	203.0
	N/A	WBR	A	2.1	3.0	76.0	WBR	A	2.9	8.1	203.0
	N/A	SBR	D	54.8	0.6	16.0	SBR	E	67.2	2.3	57.0
71st Street at Rue Vendome (Signalized)	**N/A**	**Overall**	**A**	**3.6**	**N/A**	**N/A**	**Overall**	**A**	**1.1**	**N/A**	**N/A**
	N/A	EBTR	A	3.6	5.3	133.0	EBTR	A	1.1	1.6	41.0
	N/A	EBR	A	3.6	5.3	133.0	EBR	A	1.1	1.6	41.0
	N/A	NBTR	A	1.4	0.0	0.0	NBTR	A	0.6	0.0	0.0
71st Street at Bay Drive (East) (Signalized)	**N/A**	**Overall**	**C**	**34.7**	**N/A**	**N/A**	**Overall**	**C**	**31.2**	**N/A**	**N/A**
	150	EBL	B	18.7	0.7	17.5	EBL	C	33.9	1.8	17.5
	N/A	EBT	D	39.2	22.7	567.5	EBT	C	27.9	16.8	567.5
	N/A	EBR	D	40.3	24.9	622.5	EBR	B	18.6	0.8	622.5
	100	WBL	B	19.6	2.0	50.0	WBL	A	9.5	1.8	50.0
	N/A	WBTR	C	26.9	23.9	597.5	WBTR	C	31.2	43.6	597.5
	90	NBL	D	36.3	1.6	40.0	NBL	E	55.1	2.2	40.0
	N/A	NBTR	D	35.7	4.1	102.5	NBTR	D	52.6	2.2	102.5
	50	SBL	E	55.1	12.9	322.5	SBL	E	72.0	10.7	322.5
	N/A	SBTR	C	34.4	1.8	45.0	SBTR	D	52.4	2.1	45.0
Verdun Court at Alleyway (Unsignalized)	**N/A**	**Overall**	**N/A**	**0.2**	**N/A**	**N/A**	**Overall**	**N/A**	**0.1**	**N/A**	**N/A**
	N/A	WB	A	0.0	0.0	0.0	WB	A	0.0	0.0	0.0
	N/A	SBLT	A	0.4	0.0	0.0	SBLT	A	0.3	0.3	0.0
	N/A	NBTR	A	0.0	0.0	0.0	NBTR	A	0.0	0.0	0.0

Planned Roadway Improvements

The Miami-Dade County Transportation Improvement Plan (TIP), 2024-2028 contains no projects affecting the study area. The City of Miami Beach Transportation Master Plan calls for the future modification of both Normandy Drive and 71st Street to reduce the vehicular travel lanes from three to two. The third lane is to eventually become a dedicated mass transit lane. This is Priority 2, Number 7 in the Master Plan and also includes the addition of protected bicycle lanes. A Priority 3 project is Number 17, which calls for the addition of protected bicycle lanes and pedestrian facility improvements on Biarritz Drive south of 71st Street.

While a transportation master plan is an important step in the development of future transportation projects, it should be noted that no current or future funds have been allocated to the design and construction of these projects at this time.

Site Circulation

A review of the project site plan, included in **Appendix A – Site Plan**, revealed that the project has excellent pedestrian connections to the five-foot-wide pedestrian sidewalk along Normandy Drive. There is a wide promenade that runs the length of the property and connects the retail space to the sidewalk along Normandy Drive. On the east side of the development, there is a sidewalk connecting from the public sidewalk along Normandy Drive into the interior of the proposed development. That sidewalk varies in size with a minimum of five feet in width. A similar sidewalk connection is to be constructed along the west side of the property with two more five-foot-wide paved sidewalks that connect the public sidewalk to the middle of the development.

In addition to the pedestrian connections to the external sidewalk system, the project is proposed to have a 22-foot-wide, two-lane, two-way east-west interior driveway that has 90-degree parking on either side. The driveway narrows to 12 feet wide as it approaches Verdun Court from the east. Turning radii for vehicles circulating through the site are more than adequate for passenger vehicles and single-unit trucks with the exception of turn in from Everglades Court Alley. There is a parking space that prevents an entering vehicle to make a right turn without straying into the opposing lane.

There are two trash pickup locations. The resident trash is to be located on the south side of the property just west of the FPL vault and the retail trash is to be located near the southwest end of the site. Access to the trash pickup locations appears to be by way of Everglades Court, an existing alley on the south side of the proposed development. Everglades Court also provides access to three loading zones on the south side of the site.

Note that the original access to and from the site has been changed since the original site plan was reviewed. With the proposed changes in access, all access for the second floor parking garage will be by means of the north driveway connection to Normandy Drive while access to the ground floor is by two driveways that separate the ingress from the

egress. The egress from the project site's ground floor is a direct connection to Verdun Court while the ingress is by means of the existing Everglades Court Alley.

Parking

Sixty-four parking spaces are proposed for the 1960 Normandy Drive project. In addition, seven tandem parking spaces are proposed; however, those seven additional parking spaces do not support additional dwelling units. Instead, they are a second parking space for seven of the dwelling units. All of the parking is to be dedicated to residential use. The retail component of the project will have no dedicated parking on site. However, there is an existing parking lane on Normandy Drive that may be used by retail customers.

Roadway Segment Capacity Analysis

Table 9 – Roadway Link Capacity Analysis shows the expected roadway capacity along both Normandy Drive and 71st Street in the build-out year of 2026. The table relies upon 2022 AADT volumes obtained from the Florida Department of Transportation. These roadway link volumes were "grown" by applying the 1.36 percent annual growth factor noted previously.

Table 9
Roadway Link Capacity Analysis
1960 Normandy Drive

Roadway Segment	From	To	Direction	Existing Lanes	2022 Daily Volume[1]	2026 Daily Background Volume[2]	Project Trips	2026 Daily Total Traffic Volume	Daily Directional Max. Service Volume[3]	V/C Ratio	Segment LOS
Normandy Drive	Bay Drive	N. Shore Dr.	WB	3LU	17,000	17,833	220	18,053	36,000	0.5	D
71st Street	Bay Drive	N. Shore Dr.	EB	3LU	24,000	25,221	455	25,676	36,000	0.71	D

[1]Volumes obtained from FDOT online traffic database.
[2]Volumes grown by means of Annual Growth Factor of 1,36%.
[3]Daily Maximum Service Volume obtained from FDOT's 2020 Quality/Level of Service Handbook and adjusted to 120 percent of LOS D per City of Miami Beach LOS Standards.

Auxiliary Lane Analysis

A left-turn lane evaluation was completed for the entrance driveway connection to Normandy Drive. A copy of that left-turn lane analysis may be found in Appendix H. As the analysis demonstrates, no left-turn lane was warranted along Normandy Drive.

Transportation Demand Management

Transportation demand management strategies that are to be used at the 1960 Normandy Drive development include the following:

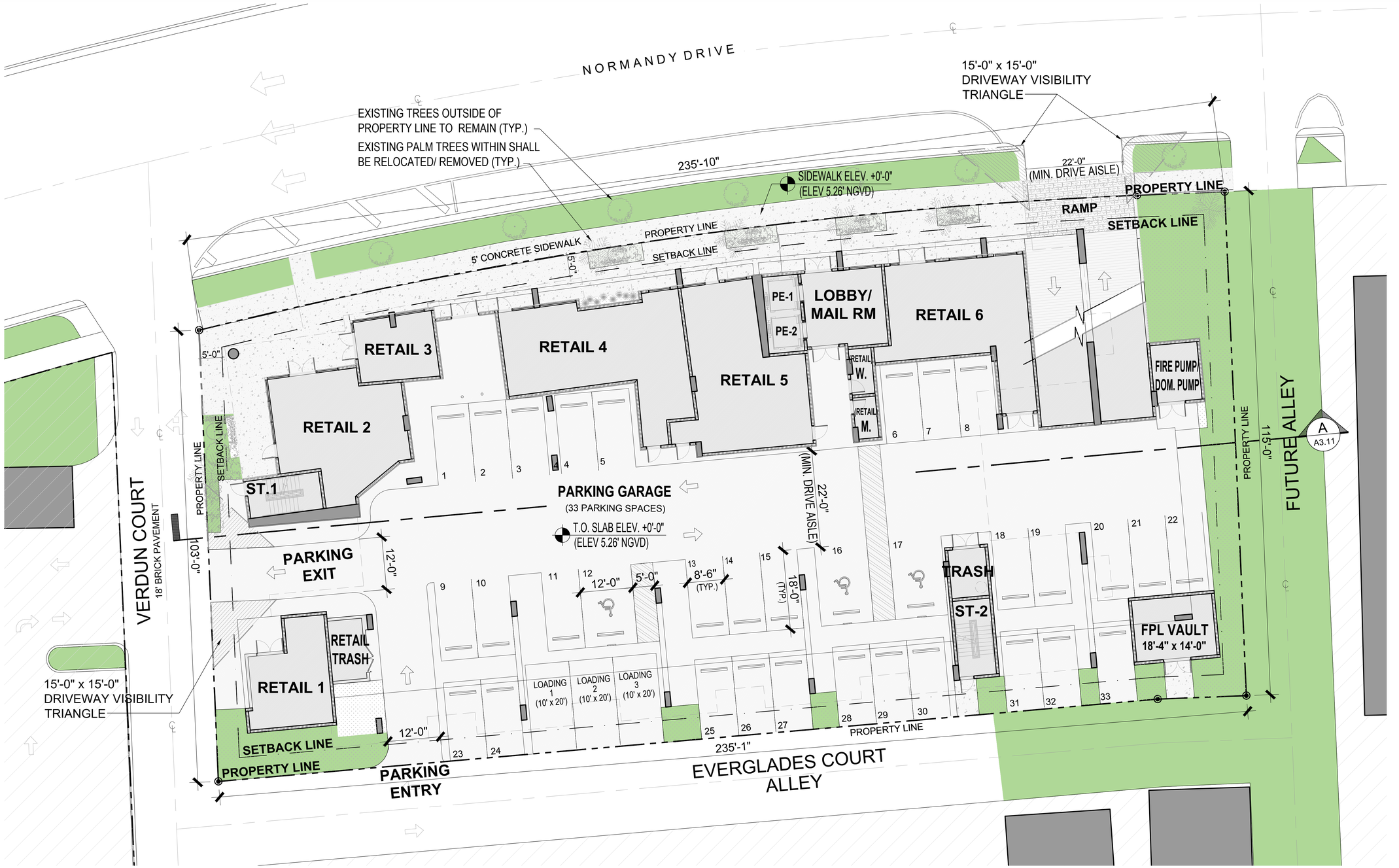
1. Promote use of public transit services by providing information within the site including route schedules and maps.
2. Provide short-term and long-term bicycle storage.
3. Provide enhanced sidewalks and crosswalks throughout the site.

Conclusions

Based on the results of this analysis, it is concluded that the 1960 Normandy Drive development will not have a significant impact upon the study area roadway network. The study area intersections are expected to continue to operate in the same manner with or without the addition of project-related trips in the 2026 build-out year and the roadway segment analysis indicates that the roadway links will operate at an acceptable LOS D,

The 1960 Normandy Drive development is expected to benefit from its close proximity to two Miami-Dade County mass transit bus routes. Those routes: Numbers 112L and 79, which run along Normandy Drive and 71st Street, are within easy walking distance of the project site. Long-term and short-term bicycle storage is included in the project site plan and is meant to encourage and support multi-modal travel to/from the proposed development as are the large pedestrian walkways along Normandy Drive.

Appendix A – Site Plan



1 A2.01 **GROUND FLOOR PLAN**
SCALE: 3/32" = 1'-0"

NORTH

0' 5' 10' 20' 30' 50' 100'
GRAPHIC SCALE

D.R.B. SET 2-15-2024

ARCHITECT:

AR0003917

DAC

DESIGN ARCHITECTURE CONSULTANTS

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2350 CORAL WAY #302, MIAMI, FL 33145
PH:305-377-8850

SEAL:

TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND FIRE-SAFETY STANDARDS AS DETERMINED BY THE AUTHORITY HAVING JURISDICTION (AHJ) IN ACCORDANCE WITH THE 2023 FBC SECTION 110.8.4.4 AND CHAPTER 633 OF THE FLORIDA STATUTES.

Design - Architecture - Consultants
AA 26003917

CONSULTANTS:

STRUCTURAL:

MEP:

PROJECT NAME AND ADDRESS:

MIXED USE PROJECT

LOCATED AT
1960 NORMANDY DRIVE
MIAMI BEACH, FLORIDA 33141

ISSUE RECORD:

REVISIONS:

No.	Date	Description

KEY PLAN:

KEY PLAN

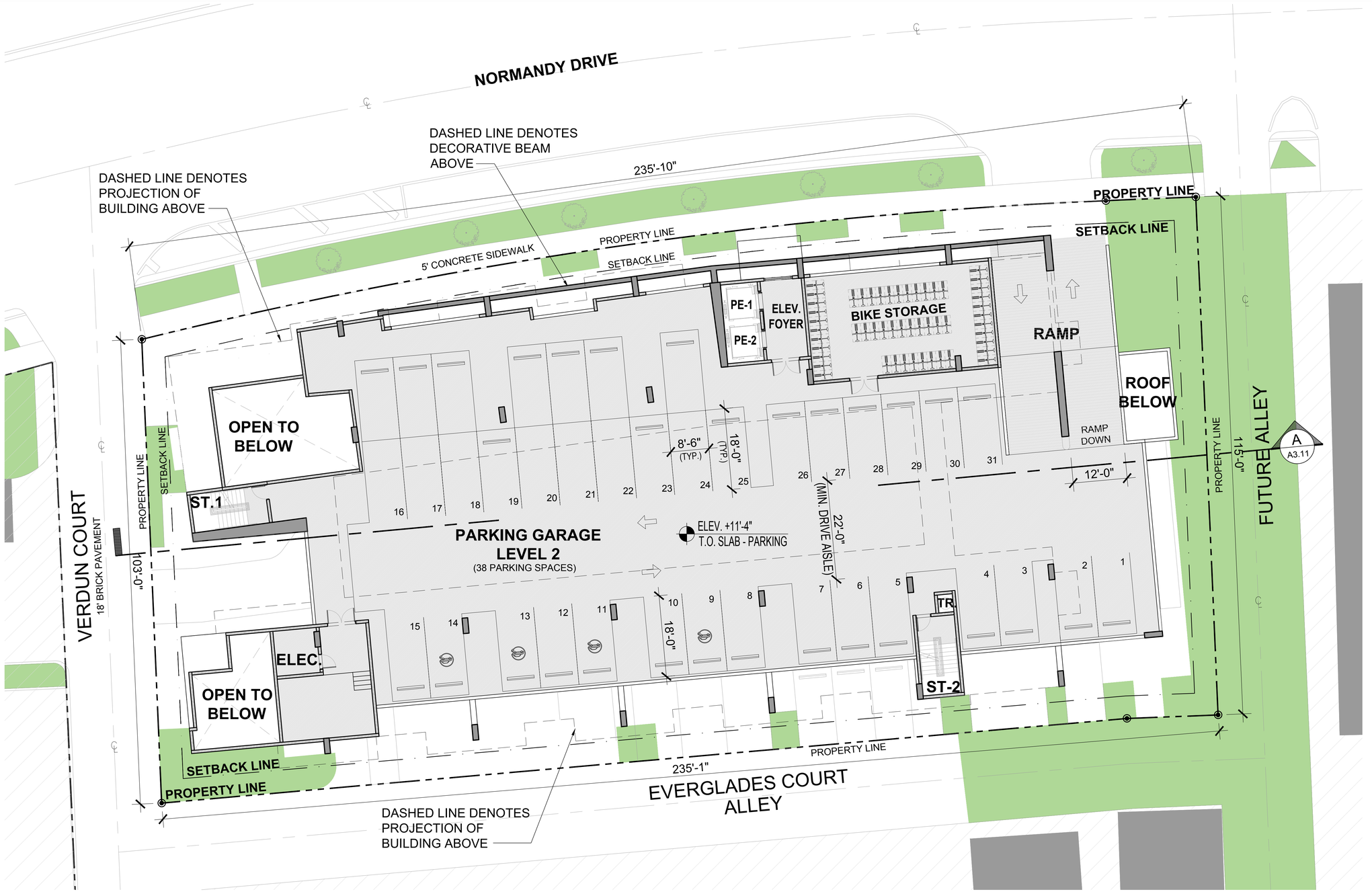
SHEET TITLE

GROUND FLOOR PLAN

Project #:	2309
Scale:	
Drawn:	CH/VF
Checked:	AF

SHEET No.

A2.01



1 / A2.02 **SECOND FLOOR PLAN**
SCALE: 3/32" = 1'-0"

NORTH

GRAPHIC SCALE 0' 5' 10' 20' 30' 50' 100'

D.R.B. SET 2-15-2024

ARCHITECT:
DESIGN ARCHITECTURE CONSULTANTS
2350 CORAL WAY #302, MIAMI, FL 33145
PH:305-377-8850
DAC 2024 ALL RIGHTS RESERVED

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Design - Architecture - Consultants
AA 26003917

CONSULTANTS:
STRUCTURAL:
MEP:

PROJECT NAME AND ADDRESS:
MIXED USE PROJECT
LOCATED AT
1960 NORMANDY DRIVE
MIAMI BEACH, FLORIDA 33141

ISSUE RECORD:

REVISIONS:

No.	Date	Description

KEY PLAN:
KEY PLAN

SHEET TITLE
SECOND FLOOR PLAN

Project #:	2309
Scale:	
Drawn:	CH/VF
Checked:	AF

SHEET No.
A2.02

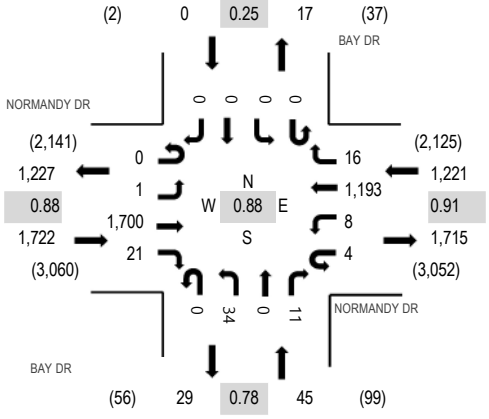
Appendix B – Traffic Counts

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

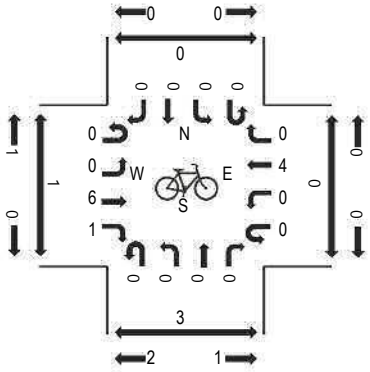
Location: 1 BAY DR & NORMANDY DR AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

West End

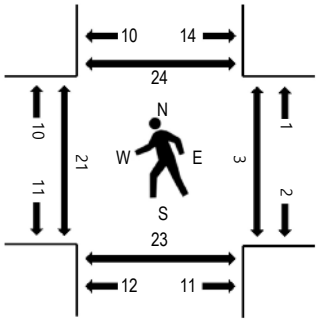
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

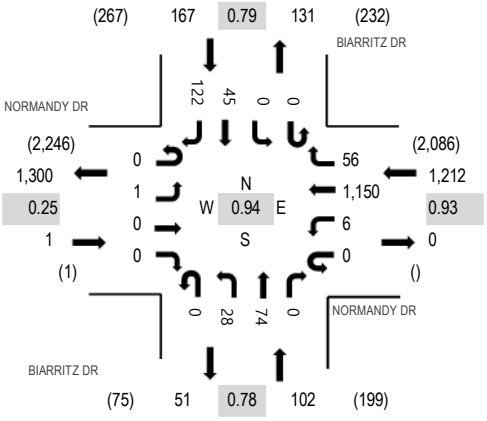
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				BAY DR Northbound				BAY DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	248	1	1	2	194	4	0	8	1	5	0	0	0	2	466	2,298	1	0	3	1
7:15 AM	0	0	255	4	0	1	200	3	0	6	0	3	0	0	0	0	472	2,533	2	0	4	1
7:30 AM	0	0	344	9	0	1	238	6	0	13	0	5	0	0	0	0	616	2,909	4	0	2	8
7:45 AM	0	0	471	6	3	3	242	6	0	11	0	2	0	0	0	0	744	2,985	1	2	6	8
8:00 AM	0	0	417	7	1	1	262	2	0	10	0	1	0	0	0	0	701	2,988	10	1	9	7
8:15 AM	0	1	506	4	1	3	313	6	0	7	0	7	0	0	0	0	848		8	1	6	8
8:30 AM	0	0	382	5	1	1	289	4	0	9	0	1	0	0	0	0	692		2	1	4	4
8:45 AM	0	0	395	5	1	3	329	4	0	8	0	2	0	0	0	0	747		1	0	4	5
Count Total	0	1	3,018	41	8	15	2,067	35	0	72	1	26	0	0	0	2	5,286		29	5	38	42
Peak Hour	0	1	1,700	21	4	8	1,193	16	0	34	0	11	0	0	0	0	2,988		21	3	23	24

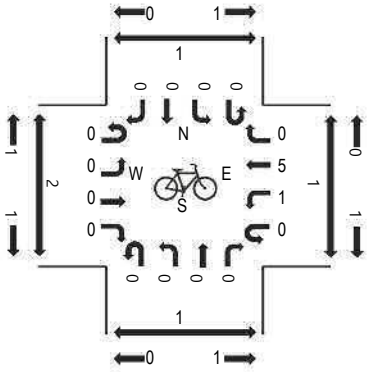
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 BIARRITZ DR & NORMANDY DR AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

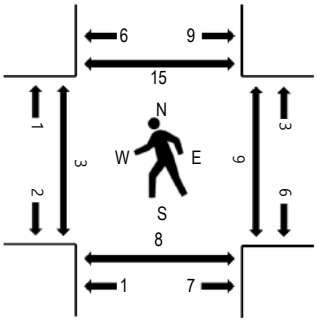
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

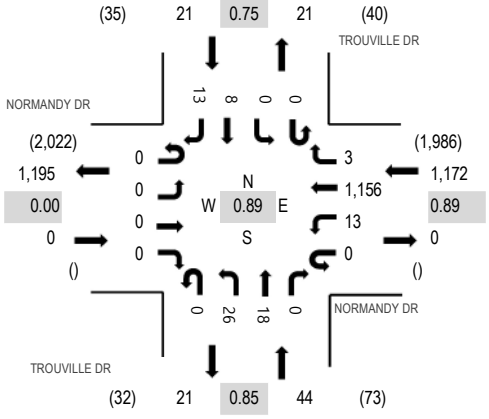
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				BIARRITZ DR Northbound				BIARRITZ DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	1	186	11	0	9	13	0	0	0	3	20	243	1,071	0	1	2	2
7:15 AM	0	0	0	0	0	2	195	5	0	8	10	0	0	0	3	17	240	1,152	1	2	3	3
7:30 AM	0	0	0	0	0	0	234	7	0	8	19	0	0	0	4	19	291	1,299	0	3	0	4
7:45 AM	0	0	0	0	0	1	224	8	0	2	28	0	0	0	10	24	297	1,384	1	3	1	5
8:00 AM	0	0	0	0	0	0	245	16	0	5	17	0	0	0	9	32	324	1,482	0	1	0	2
8:15 AM	0	0	0	0	0	1	297	11	0	14	23	0	0	0	10	31	387		3	1	2	5
8:30 AM	0	0	0	0	0	3	294	20	0	5	22	0	0	0	13	19	376		0	4	5	3
8:45 AM	0	1	0	0	0	2	314	9	0	4	12	0	0	0	13	40	395		0	3	1	5
Count Total	0	1	0	0	0	10	1,989	87	0	55	144	0	0	0	65	202	2,553		5	18	14	29
Peak Hour	0	1	0	0	0	6	1,150	56	0	28	74	0	0	0	45	122	1,482		3	9	8	15

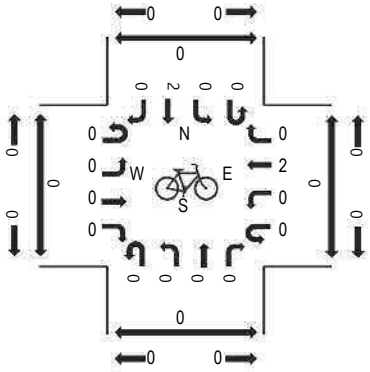
ALL TRAFFIC DATA SERVICES
(303) 216-2439
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Location: 3 TROUVILLE DR & NORMANDY DR AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

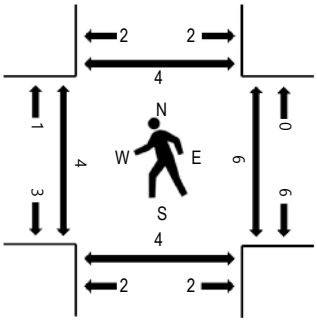
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

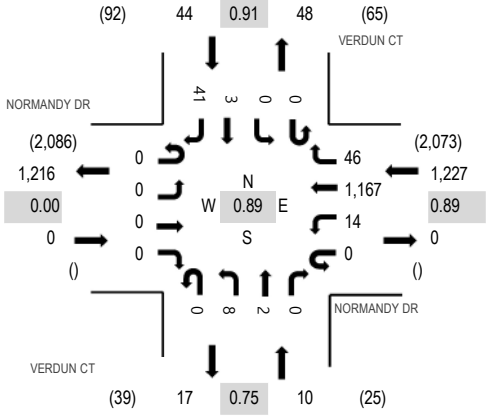
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				TROUVILLE DR Northbound				TROUVILLE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	1	179	2	0	4	1	0	1	0	0	0	188	857	0	0	0	2
7:15 AM	0	0	0	0	0	2	178	0	0	5	2	0	0	0	0	4	191	942	0	0	0	2
7:30 AM	0	0	0	0	0	3	220	3	0	6	5	0	0	0	1	3	241	1,026	0	1	1	1
7:45 AM	0	0	0	0	0	2	221	3	0	4	2	0	0	0	2	3	237	1,126	0	2	0	1
8:00 AM	0	0	0	0	0	6	250	1	0	6	3	0	0	0	1	6	273	1,237	1	2	0	0
8:15 AM	0	0	0	0	0	1	255	1	0	10	3	0	0	0	4	1	275		2	3	1	1
8:30 AM	0	0	0	0	0	1	326	1	0	5	5	0	0	0	0	3	341		0	0	2	2
8:45 AM	0	0	0	0	0	5	325	0	0	5	7	0	0	0	3	3	348		1	1	1	1
Count Total	0	0	0	0	0	21	1,954	11	0	45	28	0	1	0	11	23	2,094		4	9	5	10
Peak Hour	0	0	0	0	0	13	1,156	3	0	26	18	0	0	0	8	13	1,237		4	6	4	4

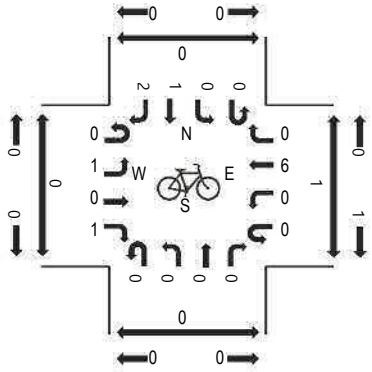
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 VERDUN CT & NORMANDY DR AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

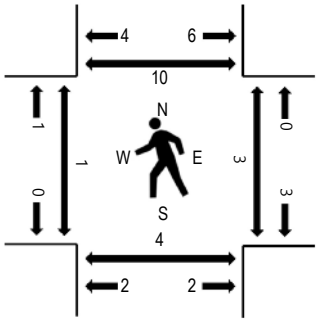
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

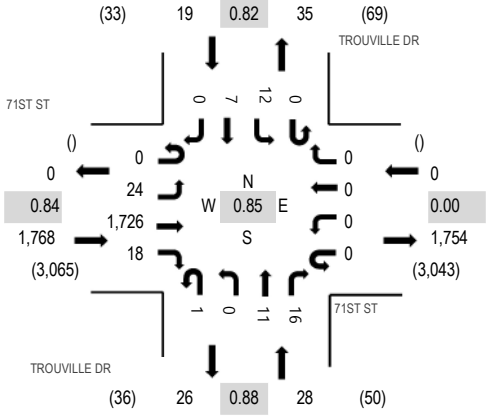
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				VERDUN CT Northbound				VERDUN CT Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	4	183	2	0	2	0	0	0	0	2	9	202	909	1	2	2	1
7:15 AM	0	0	0	0	0	3	188	2	0	3	2	0	0	0	4	10	212	989	0	1	0	0
7:30 AM	0	0	0	0	0	4	228	3	0	1	2	0	0	0	1	12	251	1,086	0	0	1	2
7:45 AM	0	0	0	0	0	2	221	6	0	5	0	0	0	0	2	8	244	1,167	6	2	0	4
8:00 AM	0	0	0	0	0	5	253	9	0	1	0	0	0	0	1	13	282	1,281	1	1	1	1
8:15 AM	0	0	0	0	0	0	288	5	0	5	0	0	0	0	2	9	309		0	1	0	2
8:30 AM	0	0	0	0	0	5	306	11	0	0	1	0	0	0	0	9	332		0	0	1	1
8:45 AM	0	0	0	0	0	4	320	21	0	2	1	0	0	0	0	10	358		0	1	2	6
Count Total	0	0	0	0	0	27	1,987	59	0	19	6	0	0	0	12	80	2,190		8	8	7	17
Peak Hour	0	0	0	0	0	14	1,167	46	0	8	2	0	0	0	3	41	1,281		1	3	4	10

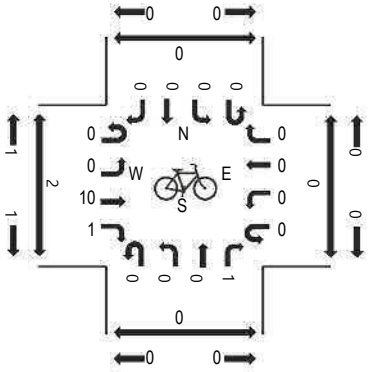
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 TROUVILLE DR & 71ST ST AM
Date: Wednesday, January 31, 2024
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

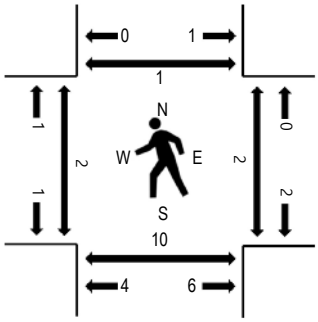
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

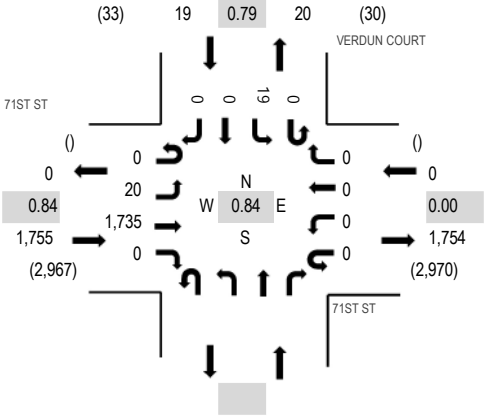
Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				TROUVILLE DR Northbound				TROUVILLE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	261	1	0	0	0	0	0	0	3	4	0	0	1	0	272	1,341	0	0	1	2
7:15 AM	0	5	258	0	0	0	0	0	0	0	1	1	0	2	0	0	267	1,508	0	0	0	1
7:30 AM	0	7	348	0	0	0	0	0	0	0	3	4	0	4	1	0	367	1,777	3	0	5	2
7:45 AM	0	5	415	3	0	0	0	0	0	0	1	5	0	4	2	0	435	1,815	0	0	1	0
8:00 AM	0	7	415	2	0	0	0	0	1	0	1	6	0	5	2	0	439	1,807	2	1	4	1
8:15 AM	0	5	510	9	0	0	0	0	0	0	5	2	0	3	2	0	536		0	1	3	0
8:30 AM	0	7	386	4	0	0	0	0	0	0	4	3	0	0	1	0	405		0	0	2	0
8:45 AM	0	10	400	5	0	0	0	0	0	0	3	3	0	4	2	0	427		0	0	2	2
Count Total	0	48	2,993	24	0	0	0	0	1	0	21	28	0	22	11	0	3,148		5	2	18	8
Peak Hour	0	24	1,726	18	0	0	0	0	1	0	11	16	0	12	7	0	1,815		2	2	10	1

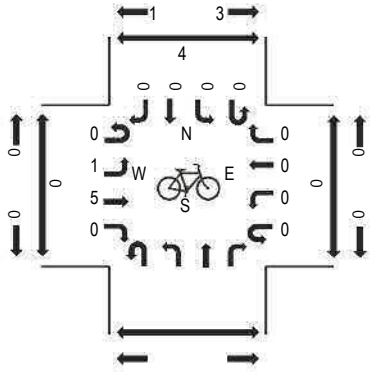
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 VERDUN COURT & 71ST ST AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

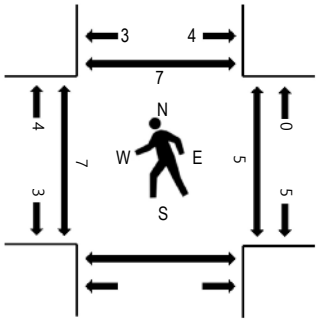
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

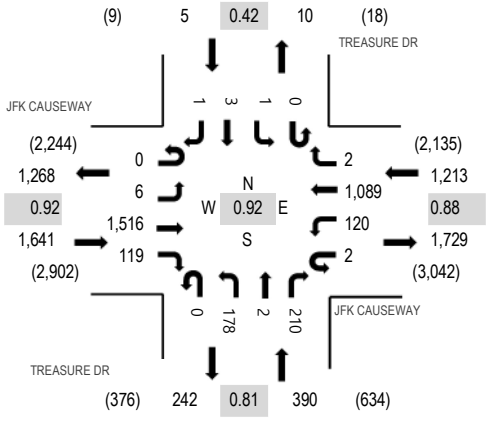
Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				Northbound				VERDUN COURT Southbound					Rolling Hour	Pedestrian Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
7:00 AM	0	1	238	0	0	0	0	0					0	5	0	0	244	1,226	3	2	2
7:15 AM	0	1	255	0	0	0	0	0					0	3	0	0	259	1,431	0	1	1
7:30 AM	0	4	323	0	0	0	0	0					0	2	0	0	329	1,697	1	1	2
7:45 AM	0	4	386	0	0	0	0	0					0	4	0	0	394	1,762	3	5	2
8:00 AM	0	3	441	0	0	0	0	0					0	5	0	0	449	1,774	4	2	2
8:15 AM	0	4	516	0	0	0	0	0					0	5	0	0	525		1	1	1
8:30 AM	0	7	384	0	0	0	0	0					0	3	0	0	394		2	0	3
8:45 AM	0	6	394	0	0	0	0	0					0	6	0	0	406		0	2	1
Count Total	0	30	2,937	0	0	0	0	0					0	33	0	0	3,000		14	14	14
Peak Hour	0	20	1,735	0	0	0	0	0					0	19	0	0	1,774		7	5	7

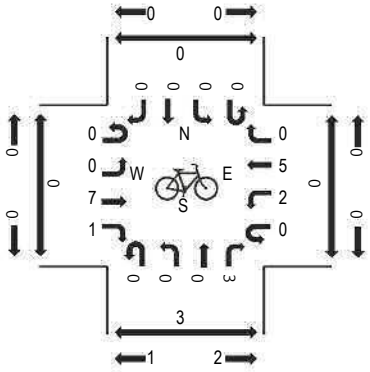
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 TREASURE DR & JFK CAUSEWAY AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

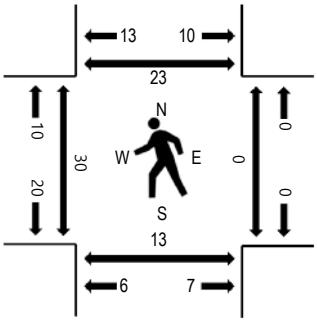
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

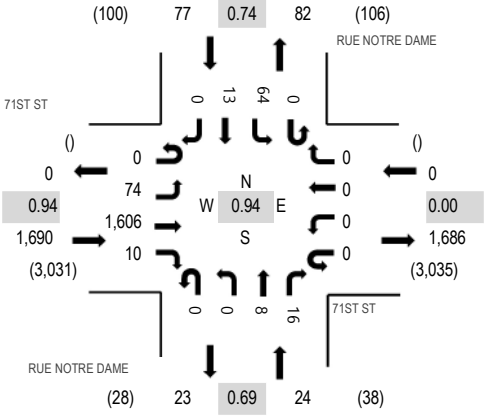
Traffic Counts - Motorized Vehicles

Interval Start Time	JFK CAUSEWAY Eastbound				JFK CAUSEWAY Westbound				TREASURE DR Northbound				TREASURE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	1	228	16	0	3	207	1	0	22	0	19	0	0	0	0	497	2,431	0	0	1	1
7:15 AM	0	1	247	12	1	11	200	1	0	35	0	27	0	3	0	0	538	2,767	3	2	1	2
7:30 AM	0	2	283	19	0	24	230	0	0	37	0	52	0	1	0	0	648	3,114	2	0	6	3
7:45 AM	0	2	422	28	0	21	223	0	0	22	0	30	0	0	0	0	748	3,212	8	0	3	4
8:00 AM	0	4	419	36	1	38	230	0	0	41	0	63	0	0	1	0	833	3,249	11	0	2	5
8:15 AM	0	1	378	41	0	46	297	0	0	52	1	67	0	0	2	0	885		10	0	3	6
8:30 AM	0	1	341	25	1	17	265	1	0	49	1	44	0	1	0	0	746		8	0	6	8
8:45 AM	0	0	378	17	0	19	297	1	0	36	0	36	0	0	0	1	785		1	0	2	4
Count Total	0	12	2,696	194	3	179	1,949	4	0	294	2	338	0	5	3	1	5,680		43	2	24	33
Peak Hour	0	6	1,516	119	2	120	1,089	2	0	178	2	210	0	1	3	1	3,249		30	0	13	23

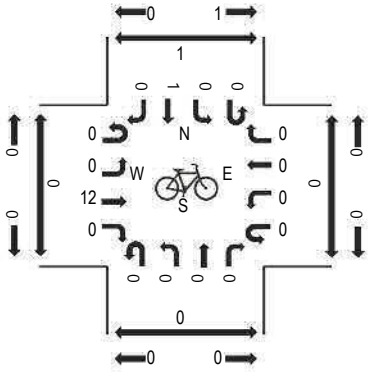
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 8 RUE NOTRE DAME & 71ST ST AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

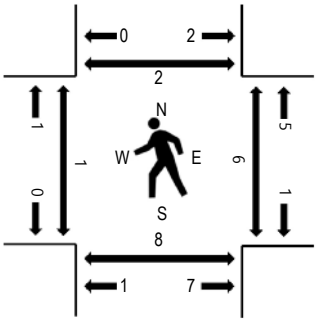
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

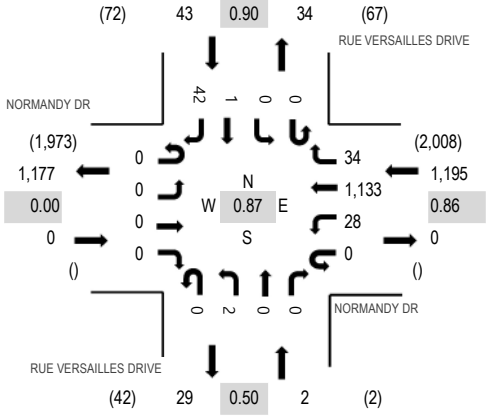
Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				RUE NOTRE DAME Northbound				RUE NOTRE DAME Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	6	269	0	0	0	0	0	0	0	0	1	0	2	0	0	278	1,378	0	0	1	2
7:15 AM	0	5	255	0	0	0	0	0	0	0	0	6	0	3	1	0	270	1,578	0	0	3	2
7:30 AM	0	4	382	0	0	0	0	0	0	0	2	1	0	9	1	0	399	1,781	2	2	5	2
7:45 AM	0	6	413	1	0	0	0	0	0	0	1	3	0	5	2	0	431	1,762	0	6	6	1
8:00 AM	0	14	438	3	0	0	0	0	0	0	0	9	0	10	4	0	478	1,791	0	1	3	0
8:15 AM	0	21	429	2	0	0	0	0	0	0	3	4	0	12	2	0	473		1	1	0	0
8:30 AM	0	18	331	3	0	0	0	0	0	0	3	2	0	20	3	0	380		0	2	2	2
8:45 AM	0	21	408	2	0	0	0	0	0	0	2	1	0	22	4	0	460		0	2	3	0
Count Total	0	95	2,925	11	0	0	0	0	0	0	11	27	0	83	17	0	3,169		3	14	23	9
Peak Hour	0	74	1,606	10	0	0	0	0	0	0	8	16	0	64	13	0	1,791		1	6	8	2

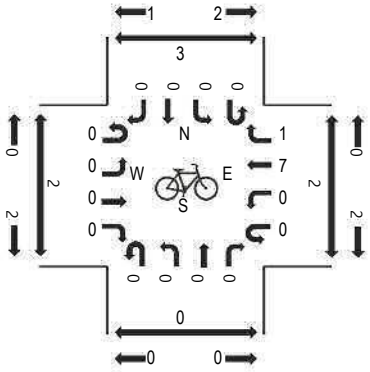
(303) 216-2439
www.alltrafficdata.net

Location: 9 RUE VERSAILLES DRIVE & NORMANDY DR AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

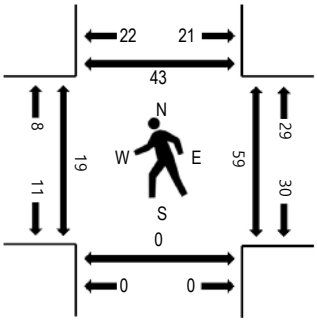
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

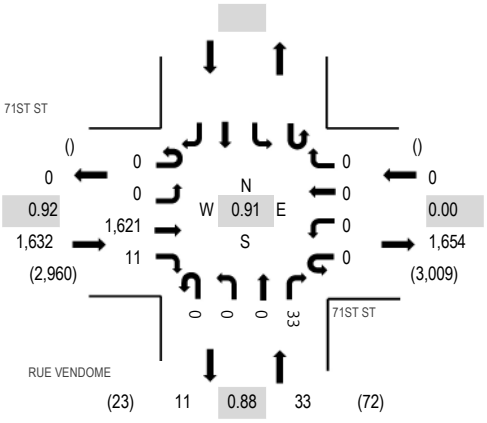
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				RUE VERSAILLES DRIVE Northbound				RUE VERSAILLES DRIVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	2	179	3	0	0	0	0	0	0	0	7	191	842	1	2	7	7
7:15 AM	0	0	0	0	0	5	160	9	0	0	0	0	0	0	0	5	179	909	5	5	1	6
7:30 AM	0	0	0	0	0	1	205	5	0	0	0	0	0	0	0	10	221	1,018	3	7	3	7
7:45 AM	0	0	0	0	0	5	223	16	0	0	0	0	0	0	0	7	251	1,134	3	8	0	10
8:00 AM	0	0	0	0	0	5	233	8	0	0	0	0	0	0	0	12	258	1,240	1	13	0	7
8:15 AM	0	0	0	0	0	7	262	9	0	1	0	0	0	0	0	9	288		1	9	0	11
8:30 AM	0	0	0	0	0	5	310	10	0	1	0	0	0	0	0	11	337		5	12	0	9
8:45 AM	0	0	0	0	0	11	328	7	0	0	0	0	0	0	1	10	357		12	25	0	16
Count Total	0	0	0	0	0	41	1,900	67	0	2	0	0	0	0	1	71	2,082		31	81	11	73
Peak Hour	0	0	0	0	0	28	1,133	34	0	2	0	0	0	0	1	42	1,240		19	59	0	43

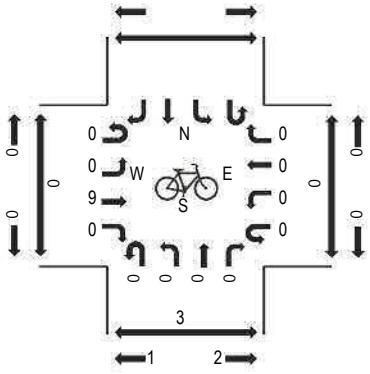
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 10 RUE VENDOME & 71ST ST AM
Date: Wednesday, January 31, 2024
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

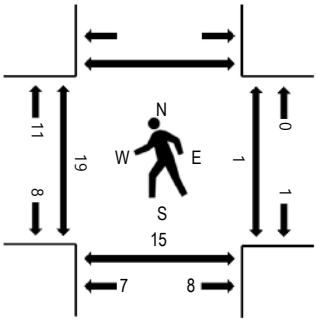
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

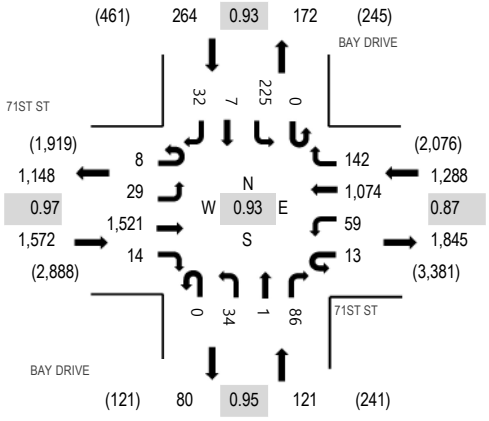
Interval Start Time	71ST ST Eastbound				71ST ST Westbound				RUE VENDOME Northbound				Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	250	4	0	0	0	0	0	0	0	7					261	1,370	5	2	1	
7:15 AM	0	0	286	1	0	0	0	0	0	0	0	9					296	1,564	3	0	9	
7:30 AM	0	0	395	2	0	0	0	0	0	0	0	6					403	1,665	4	0	1	
7:45 AM	0	0	405	1	0	0	0	0	0	0	0	4					410	1,641	4	1	6	
8:00 AM	0	0	441	4	0	0	0	0	0	0	0	10					455	1,662	4	0	2	
8:15 AM	0	0	380	4	0	0	0	0	0	0	0	13					397		7	0	6	
8:30 AM	0	0	364	3	0	0	0	0	0	0	0	12					379		7	0	7	
8:45 AM	0	0	416	4	0	0	0	0	0	0	0	11					431		13	0	7	
Count Total	0	0	2,937	23	0	0	0	0	0	0	0	72					3,032		47	3	39	
Peak Hour	0	0	1,621	11	0	0	0	0	0	0	0	33					1,665		19	1	15	

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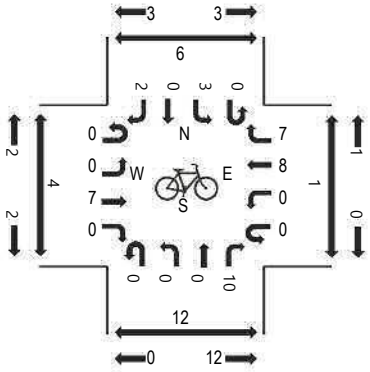
Location: 11 BAY DRIVE & 71ST ST AM
Date: Wednesday, January 31, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

East End

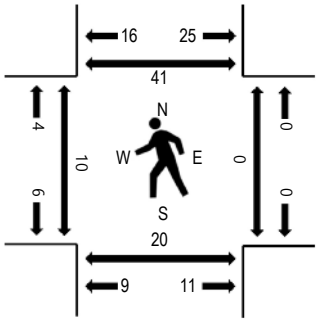
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

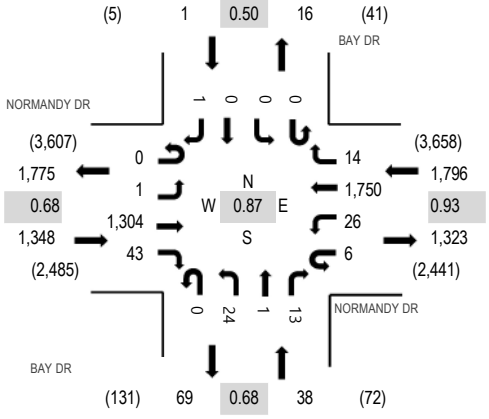
Interval Start Time	71ST ST Eastbound				71ST ST Westbound				BAY DRIVE Northbound				BAY DRIVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	1	7	228	5	1	7	163	5	0	8	1	16	0	33	0	6	481	2,421	1	0	5	3
7:15 AM	2	2	297	1	0	6	147	13	0	5	1	16	0	35	1	9	535	2,714	1	0	8	9
7:30 AM	1	7	363	2	0	9	188	9	0	10	0	26	0	44	2	5	666	2,972	4	0	1	8
7:45 AM	2	2	394	2	0	6	209	25	0	7	1	29	0	54	0	8	739	3,110	5	1	6	8
8:00 AM	1	6	402	1	2	11	221	27	0	7	0	29	0	55	2	10	774	3,245	2	0	3	10
8:15 AM	5	8	385	3	6	11	249	34	0	5	0	27	0	51	0	9	793		1	0	2	10
8:30 AM	0	7	342	2	1	23	287	45	0	10	1	15	0	60	3	8	804		4	0	7	8
8:45 AM	2	8	392	8	4	14	317	36	0	12	0	15	0	59	2	5	874		3	0	8	13
Count Total	14	47	2,803	24	14	87	1,781	194	0	64	4	173	0	391	10	60	5,666		21	1	40	69
Peak Hour	8	29	1,521	14	13	59	1,074	142	0	34	1	86	0	225	7	32	3,245		10	0	20	41

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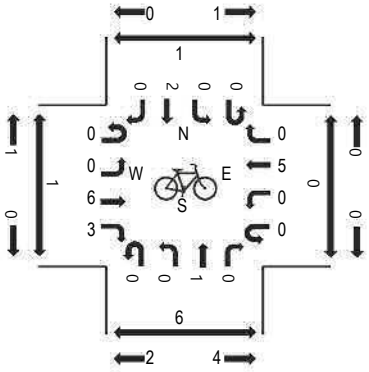
Location: 1 BAY DR & NORMANDY DR PM
Date: Wednesday, January 31, 2024
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

West End

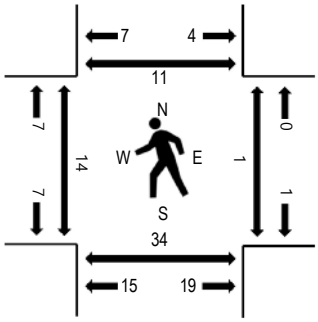
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

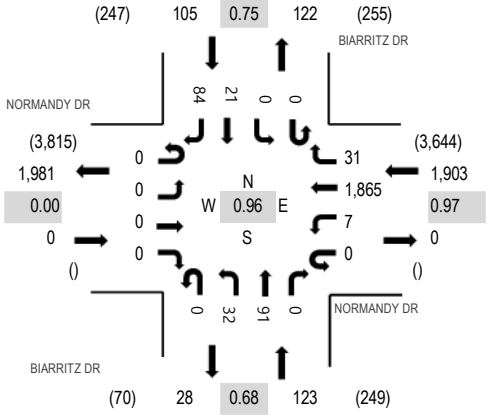
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				BAY DR Northbound				BAY DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	291	7	0	9	426	5	0	5	1	3	0	0	0	1	748	3,037	0	0	1	4
4:15 PM	0	0	247	10	1	4	444	5	0	10	0	1	0	1	0	0	723	3,102	4	0	7	5
4:30 PM	0	2	316	9	2	5	498	6	0	5	0	4	0	0	0	0	847	3,179	0	5	13	4
4:45 PM	0	0	248	7	1	10	441	5	0	1	1	3	0	0	1	1	719	2,984	1	0	7	3
5:00 PM	0	0	321	6	1	7	473	1	0	1	0	3	0	0	0	0	813	3,183	3	0	7	1
5:15 PM	0	1	324	9	3	6	438	6	0	9	1	2	0	0	0	1	800		5	0	7	4
5:30 PM	0	0	184	5	1	3	442	3	0	8	0	6	0	0	0	0	652		3	1	7	1
5:45 PM	0	0	475	23	1	10	397	4	0	6	0	2	0	0	0	0	918		3	0	13	5
Count Total	0	3	2,406	76	10	54	3,559	35	0	45	3	24	0	1	1	3	6,220		19	6	62	27
Peak Hour	0	1	1,304	43	6	26	1,750	14	0	24	1	13	0	0	0	1	3,183		14	1	34	11

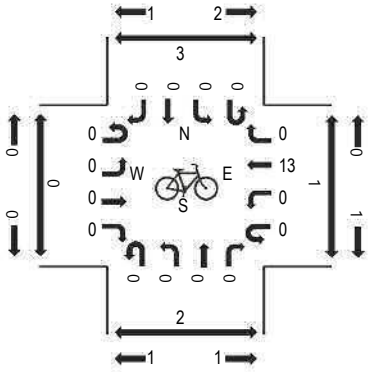
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Location: 2 BIARRITZ DR & NORMANDY DR PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

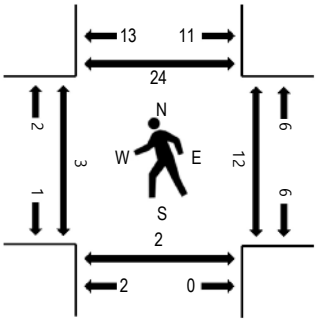
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

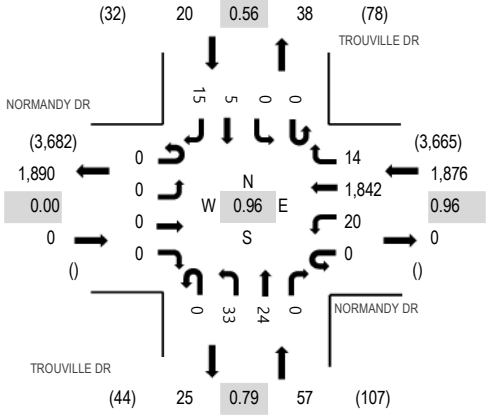
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				BIARRITZ DR Northbound				BIARRITZ DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	1	416	7	0	5	27	0	1	0	3	29	489	2,105	0	3	1	1
4:15 PM	0	0	0	0	0	1	457	8	0	6	23	0	0	0	7	29	531	2,128	0	4	0	2
4:30 PM	0	0	0	0	0	1	473	14	0	8	25	0	0	0	8	24	553	2,131	0	1	0	2
4:45 PM	0	0	0	0	0	3	476	7	0	4	25	0	0	0	1	16	532	2,076	0	2	0	7
5:00 PM	0	0	0	0	0	0	455	5	0	4	16	0	0	0	3	29	512	2,035	0	6	0	7
5:15 PM	0	0	0	0	0	3	461	5	0	16	25	0	0	0	9	15	534		3	3	2	8
5:30 PM	0	0	0	0	0	3	428	5	0	4	15	0	0	0	11	32	498		2	4	2	7
5:45 PM	0	0	0	0	0	4	405	6	0	5	41	0	0	0	12	18	491		0	4	0	11
Count Total	0	0	0	0	0	16	3,571	57	0	52	197	0	1	0	54	192	4,140		5	27	5	45
Peak Hour	0	0	0	0	0	7	1,865	31	0	32	91	0	0	0	21	84	2,131		3	12	2	24

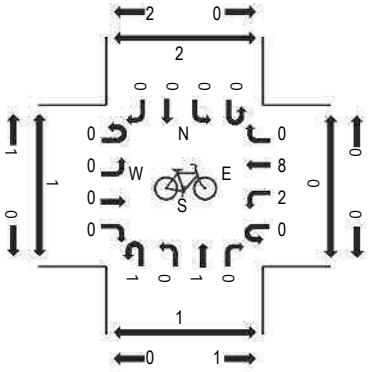
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Location: 3 TROUVILLE DR & NORMANDY DR PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

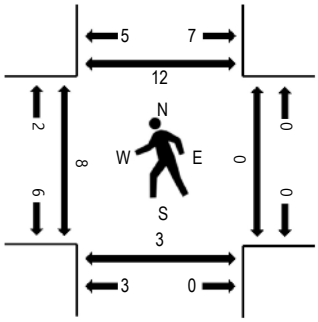
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

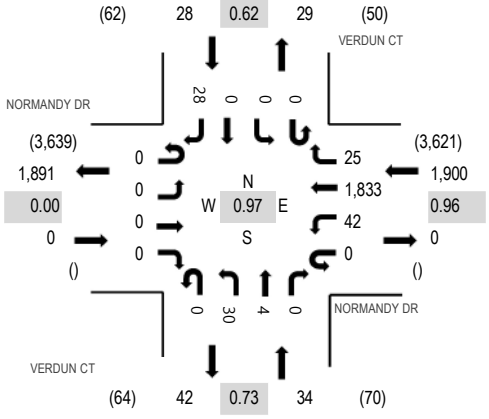
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				TROUVILLE DR Northbound				TROUVILLE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	4	437	6	0	5	7	0	0	0	1	1	461	1,939	0	0	3	1
4:15 PM	0	0	0	0	0	3	462	3	0	4	3	0	0	0	1	1	477	1,929	3	0	0	2
4:30 PM	0	0	0	0	0	2	467	1	0	9	9	0	0	0	0	6	494	1,953	2	0	0	4
4:45 PM	0	0	0	0	0	4	476	7	0	12	6	0	0	0	1	1	507	1,904	1	0	2	3
5:00 PM	0	0	0	0	0	5	424	3	0	6	4	0	0	0	3	6	451	1,865	4	0	1	3
5:15 PM	0	0	0	0	0	9	475	3	0	6	5	0	0	0	1	2	501		1	0	0	2
5:30 PM	0	0	0	0	0	5	424	1	0	5	4	0	0	0	2	4	445		0	0	2	5
5:45 PM	0	0	0	0	0	3	434	7	0	13	9	0	0	0	0	2	468		1	0	1	2
Count Total	0	0	0	0	0	35	3,599	31	0	60	47	0	0	0	9	23	3,804		12	0	9	22
Peak Hour	0	0	0	0	0	20	1,842	14	0	33	24	0	0	0	5	15	1,953		8	0	3	12

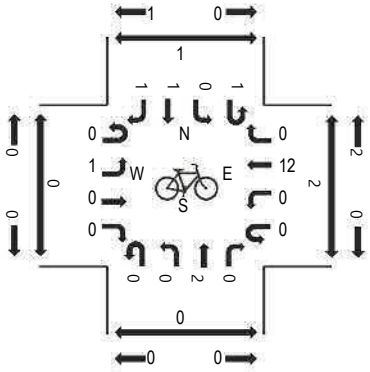
ALL TRAFFIC DATA SERVICES
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Location: 4 VERDUN CT & NORMANDY DR PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

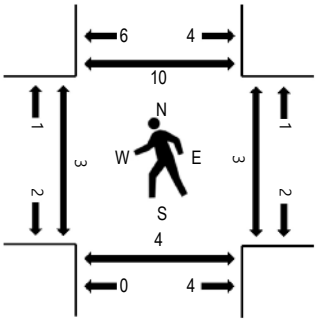
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

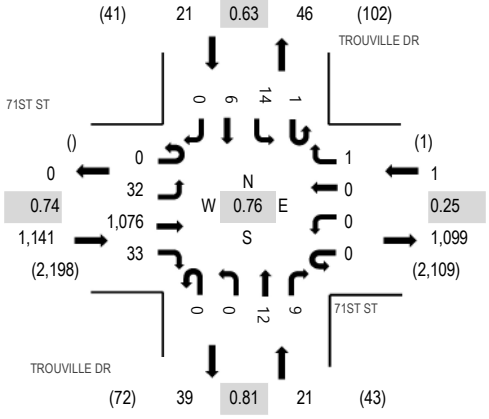
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				VERDUN CT Northbound				VERDUN CT Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	5	416	5	0	3	1	0	0	0	1	8	439	1,920	0	0	1	1
4:15 PM	0	0	0	0	0	4	456	3	0	4	0	0	0	0	0	9	476	1,949	0	0	0	2
4:30 PM	0	0	0	0	0	10	462	9	0	8	1	0	0	0	0	9	499	1,962	2	0	0	3
4:45 PM	0	0	0	0	0	17	471	5	0	9	0	0	0	0	0	4	506	1,906	0	1	2	2
5:00 PM	0	0	0	0	0	5	438	4	0	6	0	0	0	0	0	15	468	1,833	0	2	0	1
5:15 PM	0	0	0	0	0	10	462	7	0	7	3	0	0	0	0	0	489		1	0	2	4
5:30 PM	0	0	0	0	0	2	413	4	0	15	0	0	0	0	1	8	443		2	0	0	2
5:45 PM	0	0	0	0	0	8	400	5	0	10	3	0	0	0	1	6	433		0	0	0	7
Count Total	0	0	0	0	0	61	3,518	42	0	62	8	0	0	0	3	59	3,753		5	3	5	22
Peak Hour	0	0	0	0	0	42	1,833	25	0	30	4	0	0	0	0	28	1,962		3	3	4	10

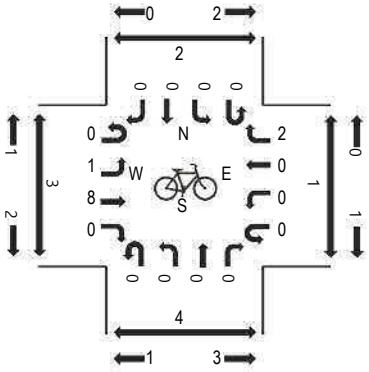
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Location: 5 TROUVILLE DR & 71ST ST PM
Date: Wednesday, January 31, 2024
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

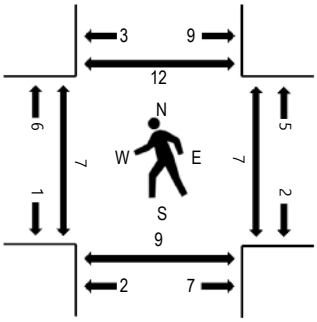
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

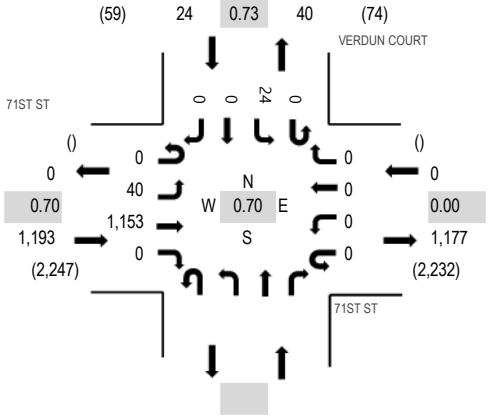
Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				TROUVILLE DR Northbound				TROUVILLE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	10	258	7	0	0	0	0	0	0	2	0	0	7	1	0	285	1,099	1	4	2	4
4:15 PM	0	6	224	4	0	0	0	0	0	0	3	3	0	3	2	0	245	1,109	0	0	0	0
4:30 PM	0	14	278	9	0	0	0	0	0	0	3	3	0	1	1	0	309	1,148	4	0	4	1
4:45 PM	0	12	227	8	0	0	0	0	0	0	6	2	0	4	1	0	260	1,054	2	0	1	2
5:00 PM	0	4	271	4	0	0	0	0	0	0	4	2	0	8	2	0	295	1,184	0	0	0	1
5:15 PM	0	9	253	10	0	0	0	0	0	0	4	2	0	5	1	0	284		1	0	4	3
5:30 PM	0	4	195	7	0	0	0	0	0	0	2	3	1	1	2	0	215		3	1	4	6
5:45 PM	0	15	357	12	0	0	0	1	0	0	2	2	0	0	1	0	390		3	6	1	2
Count Total	0	74	2,063	61	0	0	0	1	0	0	26	17	1	29	11	0	2,283		14	11	16	19
Peak Hour	0	32	1,076	33	0	0	0	1	0	0	12	9	1	14	6	0	1,184		7	7	9	12

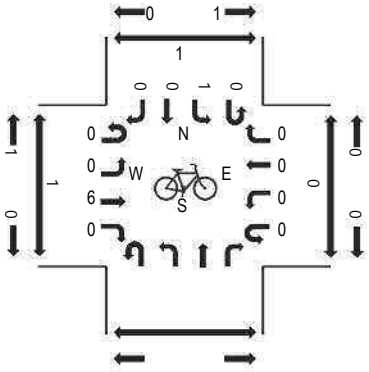
ALL TRAFFIC DATA SERVICES
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Location: 6 VERDUN COURT & 71ST ST PM
Date: Wednesday, January 31, 2024
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

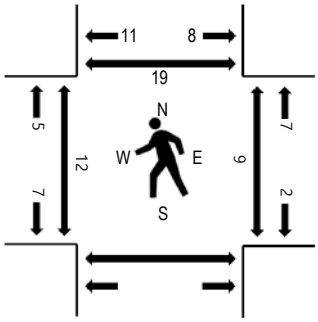
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

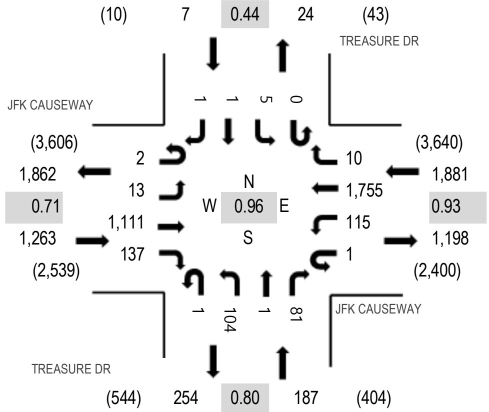
Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				Northbound				VERDUN COURT Southbound					Rolling Hour	Pedestrian Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
4:00 PM	0	7	265	0	0	0	0	0					0	12	0	0	284	1,089	2	0	0
4:15 PM	0	11	230	0	0	0	0	0					0	6	0	0	247	1,112	2	2	2
4:30 PM	0	10	293	0	0	0	0	0					0	7	0	0	310	1,160	2	2	3
4:45 PM	0	6	232	0	0	0	0	0					0	10	0	0	248	1,031	6	2	11
5:00 PM	0	7	294	0	0	0	0	0					0	6	0	0	307	1,217	4	4	6
5:15 PM	0	10	279	0	0	0	0	0					0	6	0	0	295		0	3	5
5:30 PM	0	10	169	0	0	0	0	0					0	2	0	0	181		2	1	4
5:45 PM	0	13	411	0	0	0	0	0					0	10	0	0	434		6	1	4
Count Total	0	74	2,173	0	0	0	0	0					0	59	0	0	2,306		24	15	35
Peak Hour	0	40	1,153	0	0	0	0	0					0	24	0	0	1,217		12	9	19

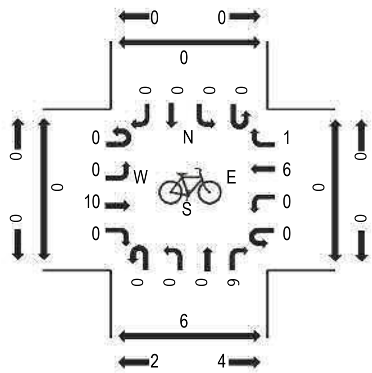
(303) 216-2439
www.alltrafficdata.net

Location: 7 TREASURE DR & JFK CAUSEWAY PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

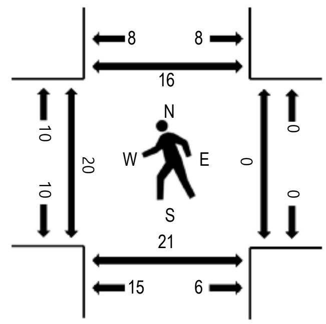
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

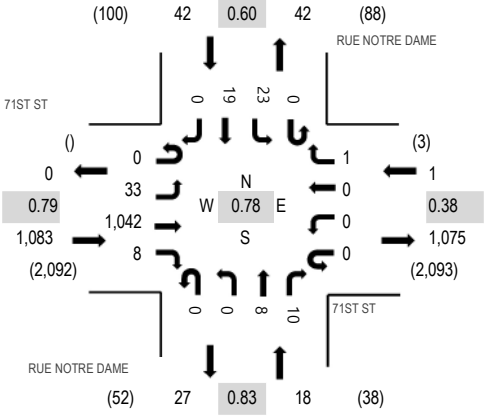
Traffic Counts - Motorized Vehicles

Interval Start Time	JFK CAUSEWAY Eastbound U-Turn	Left	Thru	Right	JFK CAUSEWAY Westbound U-Turn	Left	Thru	Right	TREASURE DR Northbound U-Turn	Left	Thru	Right	TREASURE DR Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	3	255	34	1	32	409	0	0	36	1	17	0	1	0	1	790	3,284	3	1	1	5
4:15 PM	0	4	256	41	1	27	432	0	0	35	0	20	0	0	0	0	816	3,282	3	0	3	4
4:30 PM	0	3	268	24	0	29	475	2	0	37	0	31	0	0	0	0	869	3,338	6	0	7	2
4:45 PM	0	3	282	32	0	26	421	3	0	21	0	19	0	2	0	0	809	3,181	4	0	8	3
5:00 PM	0	1	256	39	0	29	425	3	0	21	1	12	0	1	0	0	788	3,309	4	0	4	7
5:15 PM	2	6	305	42	1	31	434	2	1	25	0	19	0	2	1	1	872		6	0	2	4
5:30 PM	0	0	188	25	0	46	405	1	0	26	0	21	0	0	0	0	712		6	0	2	1
5:45 PM	0	6	411	53	1	31	369	4	0	31	0	30	0	0	1	0	937		7	0	1	0
Count Total	2	26	2,221	290	4	251	3,370	15	1	232	2	169	0	6	2	2	6,593		39	1	28	26
Peak Hour	2	13	1,111	137	1	115	1,755	10	1	104	1	81	0	5	1	1	3,338		20	0	21	16

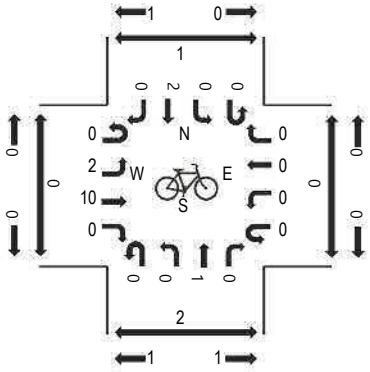
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 8 RUE NOTRE DAME & 71ST ST PM
Date: Wednesday, January 31, 2024
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

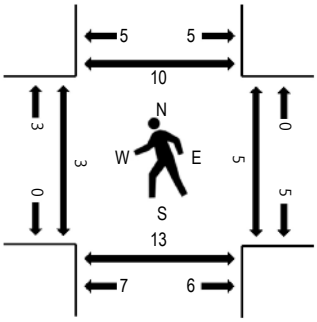
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

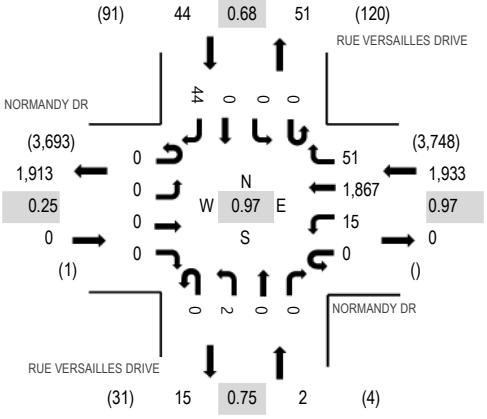
Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				RUE NOTRE DAME Northbound				RUE NOTRE DAME Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	7	253	1	0	0	0	0	0	0	3	2	0	17	7	0	290	1,089	0	2	4	1
4:15 PM	0	9	218	2	0	0	0	0	0	0	2	1	0	8	4	0	244	1,087	3	1	3	1
4:30 PM	0	10	263	2	0	0	0	2	0	0	1	5	0	8	3	0	294	1,098	0	4	6	3
4:45 PM	0	10	232	2	0	0	0	0	0	0	2	4	0	7	4	0	261	1,040	0	0	1	0
5:00 PM	0	15	260	2	0	0	0	0	0	0	3	0	0	5	3	0	288	1,144	3	1	2	2
5:15 PM	0	3	236	2	0	0	0	1	0	0	2	3	0	4	4	0	255		0	1	3	1
5:30 PM	0	6	213	2	0	0	0	0	0	0	0	3	0	7	5	0	236		0	1	6	5
5:45 PM	0	9	333	2	0	0	0	0	0	0	3	4	0	7	7	0	365		0	2	2	2
Count Total	0	69	2,008	15	0	0	0	3	0	0	16	22	0	63	37	0	2,233		6	12	27	15
Peak Hour	0	33	1,042	8	0	0	0	1	0	0	8	10	0	23	19	0	1,144		3	5	13	10

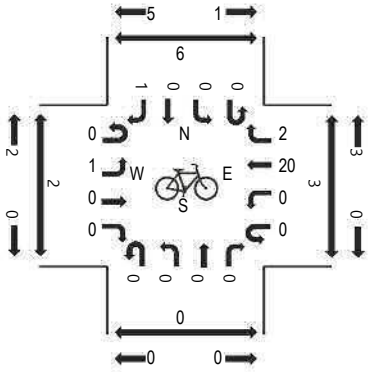
ALL TRAFFIC DATA SERVICES
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Location: 9 RUE VERSAILLES DRIVE & NORMANDY DR PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

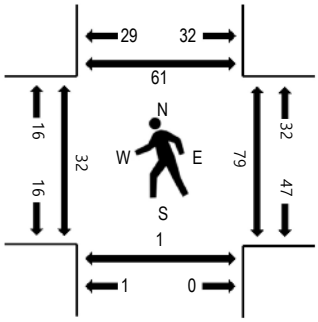
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

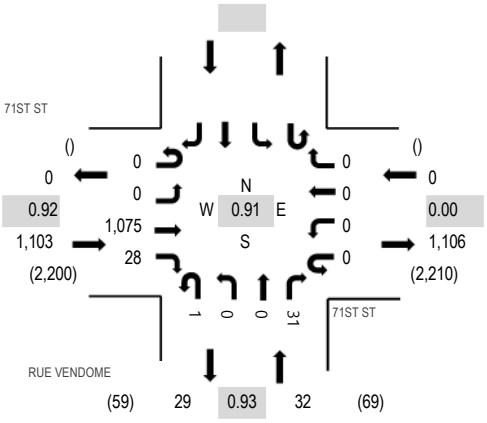
Traffic Counts - Motorized Vehicles

Interval Start Time	NORMANDY DR Eastbound				NORMANDY DR Westbound				RUE VERSAILLES DRIVE Northbound				RUE VERSAILLES DRIVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	1	0	0	0	2	436	10	0	0	0	0	0	0	0	14	463	1,947	5	15	2	14
4:15 PM	0	0	0	0	0	2	446	22	0	1	0	0	0	0	0	10	481	1,956	10	11	2	18
4:30 PM	0	0	0	0	0	5	483	9	0	0	0	0	0	0	0	11	508	1,979	7	18	0	14
4:45 PM	0	0	0	0	0	3	466	16	0	0	0	0	0	0	0	10	495	1,928	9	12	0	12
5:00 PM	0	0	0	0	0	6	436	18	0	1	0	0	0	0	0	11	472	1,897	10	19	1	15
5:15 PM	0	0	0	0	0	1	482	8	0	1	0	0	0	0	0	12	504		6	30	0	20
5:30 PM	0	0	0	0	0	7	427	17	0	0	0	0	0	0	1	5	457		9	9	1	16
5:45 PM	0	0	0	0	0	2	425	19	0	1	0	0	0	0	2	15	464		7	18	2	15
Count Total	0	1	0	0	0	28	3,601	119	0	4	0	0	0	0	3	88	3,844		63	132	8	124
Peak Hour	0	0	0	0	0	15	1,867	51	0	2	0	0	0	0	0	44	1,979		32	79	1	61

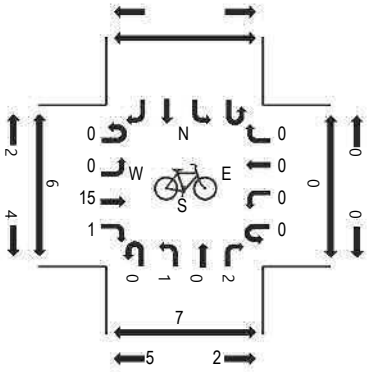
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 10 RUE VENDOME & 71ST ST PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

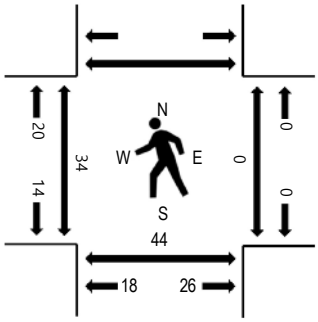
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

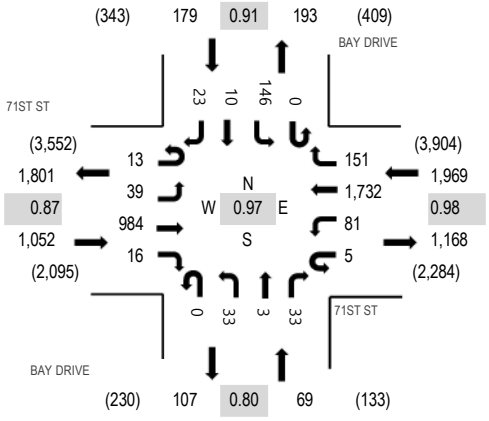
Interval Start Time	71ST ST Eastbound				71ST ST Westbound				RUE VENDOME Northbound				Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	295	6	0	0	0	0	0	0	0	10					311	1,135	11	0	10	
4:15 PM	0	0	229	7	0	0	0	0	0	0	0	11					247	1,109	11	0	10	
4:30 PM	0	0	295	4	0	0	0	0	1	0	0	4					304	1,112	9	0	15	
4:45 PM	0	0	256	11	0	0	0	0	0	0	0	6					273	1,048	3	0	9	
5:00 PM	0	0	266	10	0	0	0	0	0	0	0	9					285	1,134	18	0	34	
5:15 PM	0	0	235	7	0	0	0	0	0	0	0	8					250		10	0	17	
5:30 PM	0	0	227	3	0	0	0	0	0	0	0	10					240		14	0	19	
5:45 PM	0	0	339	10	0	0	0	0	0	0	0	10					359		16	0	20	
Count Total	0	0	2,142	58	0	0	0	0	1	0	0	68					2,269		92	0	134	
Peak Hour	0	0	1,075	28	0	0	0	0	1	0	0	31					1,135		34	0	44	

ALL TRAFFIC DATA SERVICES
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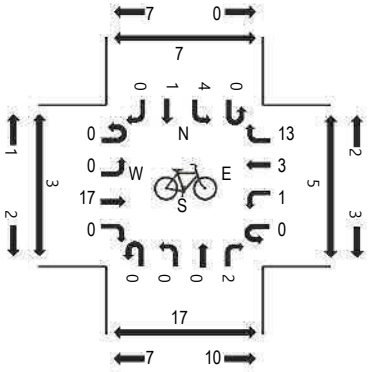
Location: 11 BAY DRIVE & 71ST ST PM
Date: Wednesday, January 31, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

East End

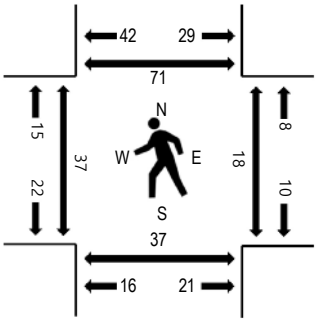
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	71ST ST Eastbound				71ST ST Westbound				BAY DRIVE Northbound				BAY DRIVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	7	9	281	5	2	21	439	39	0	1	2	9	0	28	1	1	845	3,269	7	4	7	22
4:15 PM	3	9	207	4	0	18	427	43	0	9	1	11	0	39	3	9	783	3,231	9	2	7	18
4:30 PM	2	9	271	5	1	21	435	33	0	15	0	9	0	34	1	7	843	3,229	8	4	14	14
4:45 PM	1	12	225	2	2	21	431	36	0	8	0	4	0	45	5	6	798	3,137	13	8	9	17
5:00 PM	5	11	239	4	2	24	412	36	0	15	0	5	0	41	0	13	807	3,206	12	3	16	16
5:15 PM	4	17	207	7	2	17	445	25	0	8	2	4	1	31	4	7	781		12	1	10	18
5:30 PM	2	11	203	6	1	24	408	45	0	6	0	10	0	24	3	8	751		13	1	18	29
5:45 PM	0	16	309	2	2	30	411	51	0	2	1	11	0	25	2	5	867		11	7	13	31
Count Total	24	94	1,942	35	12	176	3,408	308	0	64	6	63	1	267	19	56	6,475		85	30	94	165
Peak Hour	13	39	984	16	5	81	1,732	151	0	33	3	33	0	146	10	23	3,269		37	18	37	71

Appendix C – Traffic Signal Timing

TOD Schedule Report

for 2759: Bay Dr E&Normandy Dr&71 St

Print Date: 10/12/2021

Print Time: 2:03 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2759	Bay Dr E&Normandy Dr&71 St	DOW-3		Free	0	0	N/A	1	Max 1

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	-	NWT	WBL	EBT	-	SET
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	7 - 7 - 7	16 - 16 - 16	4	3
2 WBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	35 - 35 - 35	0 - 0 - 0	4	3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NWT	4 - 4 - 4	24 - 24 - 24	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 12 - 12	22 - 34 - 30	4	3.6
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	7 - 7 - 7	16 - 16 - 16	4	3
6 EBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	35 - 35 - 35	0 - 0 - 0	4	3
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SET	4 - 4 - 4	24 - 24 - 24	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 12 - 12	22 - 34 - 30	4	3.6

Last In Service Date: unknown

Permitted Phases

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

TOD Schedule Report

for 2759: Bay Dr E&Normandy Dr&71 St

Print Date: 10/12/2021

Print Time: 2:03 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 NWT	5 WBL	6 EBT	7 -	8 SET	Ring Offset	Offset
	1	90	8	30	0	30	8	30	0	30	0	67
	2	140	8	82	0	28	8	82	0	28	0	72
	3	140	10	80	0	28	13	77	0	28	0	21
	4	110	11	49	0	28	13	47	0	28	0	79
	5	100	14	34	0	30	14	34	0	30	0	0
	6	150	14	84	0	30	14	84	0	30	0	33
	7	150	14	84	0	30	14	84	0	30	0	33
	8	120	14	54	0	30	14	54	0	30	0	102
	9	80	0	35	0	30	0	35	0	30	0	51
	10	100	14	34	0	30	14	34	0	30	0	93
	11	100	14	34	0	30	14	34	0	30	0	93
	12	140	10	80	0	28	13	77	0	28	0	21
	14	120	15	55	0	28	15	55	0	28	0	7
	15	120	15	55	0	28	15	55	0	28	0	7
	23	90	5	27	0	36	5	27	0	36	0	49

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	14	Su S
0715	14	M T W Th F
0915	4	M T W Th F
1345	12	M T W Th F
1530	2	M T Th F
1530	15	Su S
1630	2	W
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0900	TOD OUTPUTS	----4---	Su S
2000	TOD OUTPUTS	--------	Su S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2765: Rue Vendome&71 St

Print Date: 10/4/2021

Print Time: 3:28 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2765	Rue Vendome&71 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	-	-	NBR	-	EBT	-	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 2 3)	Don't Walk (1 2 3)	Min Initial (1 2 3)	Veh Ext (1 2 3)	Max Limit (1 2 3)	Max 2 (1 2 3)	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBR	5 - 5 - 5	14 - 14 - 14	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 20 - 20	30 - 0 - 0	4	2.4
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 EBT	4 - 4 - 4	14 - 14 - 14	4 - 4 - 4	1 - 1 - 1	60 - 20 - 20	46 - 0 - 0	4	2.1
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	---4-6--
External Permit 0	---4-6--
External Permit 1	---4-6--
External Permit 2	---4-6--

TOD Schedule Report

for 2765: Rue Vendome&71 St

Print Date: 10/4/2021

Print Time: 3:28 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 -	3 -	4 NBR	5 -	6 EBT	7 -	8 -	Ring Offset	Offset
	1	90	0	0	0	20	0	58	0	0	0	60
	2	140	0	0	0	20	0	108	0	0	0	77
	3	90	0	0	0	20	0	58	0	0	0	38
	4	110	0	0	0	20	0	78	0	0	0	87
	5	100	0	0	0	20	0	68	0	0	0	87
	6	150	0	0	0	20	0	118	0	0	0	52
	7	150	0	0	0	20	0	118	0	0	0	52
	8	120	0	0	0	20	0	88	0	0	0	101
	9	80	0	0	0	20	0	48	0	0	0	40
	10	100	0	0	0	20	0	68	0	0	0	40
	11	100	0	0	0	20	0	68	0	0	0	20
	12	70	0	0	0	20	0	38	0	0	0	40
	14	60	0	0	0	20	0	28	0	0	0	45
	15	60	0	0	0	20	0	28	0	0	0	51
	22	90	0	0	0	20	0	58	0	0	0	62
	23	90	0	0	0	20	0	58	0	0	0	62

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	14	Su S
0715	14	M T W Th F
0915	4	M T W Th F
1345	12	M T W Th F
1530	2	M T Th F
1530	15	Su S
1630	2	W
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2760: Normandy Dr&Rue Versailles

Print Date: 10/4/2021

Print Time: 3:27 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2760	Normandy Dr&Rue Versailles	DOW-2	TOD	[02] PRE-AM PEAK	140	66	N/A	1	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	WBT	-	-	-	-	-	SBT
0	101	0	0	0	0	0	27





Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	46 - 46 - 46	0 - 46 - 46	4	2.3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	7 - 7 - 7	19 - 19 - 19	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 12 - 12	26 - 26 - 26	4	2.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-----8
External Permit 0	-2-----8
External Permit 1	-2-----8
External Permit 2	-2-----8

TOD Schedule Report

for 2760: Normandy Dr&Rue Versailles

Print Date: 10/4/2021

Print Time: 3:27 PM

Current TOD Schedule	Plan	Cycle	Green Time 1	2	3	4	5	6	7	8	Ring Offset	Offset
			-	WBT	-	-	-	-	-	SBT		
	1	90	0	51	0	0	0	0	0	27	0	60
	2	140	0	101	0	0	0	0	0	27	0	66
	3	90	0	51	0	0	0	0	0	27	0	51
	4	110	0	71	0	0	0	0	0	27	0	16
	5	100	0	61	0	0	0	0	0	27	0	16
	6	150	0	111	0	0	0	0	0	27	0	140
	7	150	0	111	0	0	0	0	0	27	0	140
	8	120	0	81	0	0	0	0	0	27	0	119
	9	80	0	41	0	0	0	0	0	27	0	56
	10	100	0	61	0	0	0	0	0	27	0	16
	11	100	0	61	0	0	0	0	0	27	0	16
	12	140	0	101	0	0	0	0	0	27	0	16
	14	120	0	81	0	0	0	0	0	27	0	16
	15	120	0	81	0	0	0	0	0	27	0	49

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1530	2	M T Th F
1530	15	Su S
1630	2	W
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 5236: Normandy Dr@Rue Notre Dame-Vichy Dr

Print Date: 10/4/2021

Print Time: 8:03 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5236	Normandy Dr@Rue Notre Dame-Vichy	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	WBT	-	PED	-	-	-	-
0	0	0	0	0	0	0	0
	←		N/A				

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 2 3)	Don't Walk (1 2 3)	Min Initial (1 2 3)	Veh Ext (1 2 3)	Max Limit (1 2 3)	Max 2 (1 2 3)	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	2.5 - 2.5 - 2.5	45 - 45 - 45	0 - 0 - 0	4	2.3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 PED	7 - 7 - 7	20 - 20 - 20	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4----
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

TOD Schedule Report

for 5236: Normandy Dr@Rue Notre Dame-Vichy Dr

Print Date: 10/4/2021

Print Time: 8:03 PM

Current TOD Schedule	Plan	Cycle	Green Time 1	2	3	4	5	6	7	8	Ring Offset	Offset
			-	WBT	-	PED	-	-	-	-		
	1	90	0	56	0	28	0	0	0	0	0	13
	2	140	0	106	0	28	0	0	0	0	0	19
	3	90	0	56	0	28	0	0	0	0	0	4
	4	55	0	21	0	28	0	0	0	0	0	42
	5	50	0	16	0	28	0	0	0	0	0	29
	6	150	0	116	0	28	0	0	0	0	0	42
	7	150	0	116	0	28	0	0	0	0	0	42
	8	120	0	86	0	28	0	0	0	0	0	42
	9	80	0	46	0	28	0	0	0	0	0	19
	10	100	0	66	0	28	0	0	0	0	0	5
	11	100	0	66	0	28	0	0	0	0	0	57
	12	80	0	46	0	28	0	0	0	0	0	4
	14	120	0	86	0	28	0	0	0	0	0	70
	15	130	0	96	0	28	0	0	0	0	0	1

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	14	Su S
0715	14	M T W Th F
0915	4	M T W Th F
1345	12	M T W Th F
1530	2	M T Th F
1630	2	W
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2756: Rue Notre Dame&71 St

Print Date: 10/4/2021

Print Time: 3:26 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2756	Rue Notre Dame&71 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	2 - 2 - 2	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 25 - 25	27 - 0 - 0	4	2.3
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 2.5	50 - 50 - 50	0 - 0 - 0	4	2.2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	2 - 2 - 2	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 25 - 25	27 - 0 - 0	4	2.3

Last In Service Date: unknown

Permitted Phases

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

TOD Schedule Report

for 2756: Rue Notre Dame&71 St

Print Date: 10/4/2021

Print Time: 3:26 PM

Current TOD Schedule	Plan	Cycle	Green Time 1	2	3	4	5	6	7	8	Ring Offset	Offset
			-	-	-	NBT	-	EBT	-	SBT		
	1	90	0	0	0	23	0	55	0	23	0	39
	2	140	0	0	0	23	0	105	0	23	0	37
	3	90	0	0	0	23	0	55	0	23	0	16
	4	55	0	0	0	23	0	20	0	23	0	0
	5	100	0	0	0	23	0	65	0	23	0	0
	6	150	0	0	0	23	0	115	0	23	0	31
	7	150	0	0	0	23	0	115	0	23	0	31
	8	120	0	0	0	23	0	85	0	23	0	82
	9	80	0	0	0	23	0	45	0	23	0	24
	10	100	0	0	0	23	0	65	0	23	0	39
	11	100	0	0	0	23	0	65	0	23	0	93
	12	70	0	0	0	23	0	35	0	23	0	39
	14	55	0	0	0	23	0	20	0	23	0	0
	15	130	0	0	0	23	0	95	0	23	0	99

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0000	12	
0600	5	M T W Th F
0700	4	Su S
0715	14	M T W Th F
0915	4	M T W Th F
1500	12	M T Th F
1930	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2757: Trouville Espl&71 St

Print Date: 10/4/2021

Print Time: 3:26 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2757	Trouville Espl&71 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 2 3)	Don't Walk (1 2 3)	Min Initial (1 2 3)	Veh Ext (1 2 3)	Max Limit (1 2 3)	Max 2 (1 2 3)	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	5 - 7 - 7	20 - 20 - 20	10 - 10 - 10	2.5 - 2.5 - 2.5	10 - 10 - 10	20 - 14 - 20	4	2.3
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 7 - 7	1 - 1 - 1	30 - 30 - 30	0 - 0 - 0	4	2.3
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	5 - 7 - 7	20 - 20 - 20	10 - 10 - 10	2.5 - 2.5 - 2.5	10 - 10 - 10	20 - 14 - 20	4	2.3

Last In Service Date: unknown

Permitted Phases

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

TOD Schedule Report

for 2757: Trouville Espl&71 St

Print Date: 10/4/2021

Print Time: 3:26 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 -	3 -	4 NBT	5 -	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	90	0	0	0	26	0	52	0	26	0	84
	2	140	0	0	0	26	0	102	0	26	0	1
	3	90	0	0	0	26	0	52	0	26	0	74
	4	110	0	0	0	26	0	72	0	26	0	26
	5	100	0	0	0	26	0	62	0	26	0	0
	6	150	0	0	0	26	0	112	0	26	0	141
	7	150	0	0	0	26	0	112	0	26	0	141
	8	120	0	0	0	26	0	82	0	26	0	45
	9	80	0	0	0	26	0	42	0	26	0	71
	10	100	0	0	0	26	0	62	0	26	0	11
	11	100	0	0	0	26	0	62	0	26	0	11
	12	140	0	0	0	26	0	102	0	26	0	4
	14	110	0	0	0	26	0	72	0	26	0	4
	15	130	0	0	0	26	0	92	0	26	0	109

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1500	12	M T W Th F
1930	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2761: Normandy Dr&Trouville Espl

Print Date: 10/4/2021

Print Time: 3:27 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2761	Normandy Dr&Trouville Espl	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3		
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 0 - 0	4	2.3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 10 - 12	35 - 10 - 12	4	2.3
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 10 - 12	35 - 10 - 12	4	2.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	-2-4---8
External Permit 1	-2-4---8
External Permit 2	-2-4---8

TOD Schedule Report

for 2761: Normandy Dr&Trouville Espl

Print Date: 10/4/2021

Print Time: 3:27 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 -	6 -	7 -	8 SBT	Ring Offset	Offset
	1	90	0	52	0	26	0	0	0	26	0	15
	2	140	0	102	0	26	0	0	0	26	0	16
	3	90	0	52	0	26	0	0	0	26	0	13
	4	55	0	17	0	26	0	0	0	26	0	29
	5	100	0	62	0	26	0	0	0	26	0	14
	6	150	0	112	0	26	0	0	0	26	0	46
	7	150	0	112	0	26	0	0	0	26	0	46
	8	120	0	82	0	26	0	0	0	26	0	49
	9	80	0	42	0	26	0	0	0	26	0	17
	10	100	0	62	0	26	0	0	0	26	0	73
	11	100	0	62	0	26	0	0	0	26	0	73
	12	70	0	32	0	26	0	0	0	26	0	38
	14	60	0	22	0	26	0	0	0	26	0	41
	15	130	0	92	0	26	0	0	0	26	0	100

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1500	12	M T W Th F
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2757: Trouville Espl&71 St

Print Date: 10/4/2021

Print Time: 3:26 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 -	3 -	4 NBT	5 -	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	90	0	0	0	26	0	52	0	26	0	84
	2	140	0	0	0	26	0	102	0	26	0	1
	3	90	0	0	0	26	0	52	0	26	0	74
	4	110	0	0	0	26	0	72	0	26	0	26
	5	100	0	0	0	26	0	62	0	26	0	0
	6	150	0	0	0	26	0	112	0	26	0	141
	7	150	0	0	0	26	0	112	0	26	0	141
	8	120	0	0	0	26	0	82	0	26	0	45
	9	80	0	0	0	26	0	42	0	26	0	71
	10	100	0	0	0	26	0	62	0	26	0	11
	11	100	0	0	0	26	0	62	0	26	0	11
	12	140	0	0	0	26	0	102	0	26	0	4
	14	110	0	0	0	26	0	72	0	26	0	4
	15	130	0	0	0	26	0	92	0	26	0	109

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1500	12	M T W Th F
1930	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 3016: J. F. Kennedy Blvd&Treasure Dr E

Print Date: 10/4/2021

Print Time: 3:59 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3016	J. F. Kennedy Blvd&Treasure Dr E	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 5 - 5	14 - 12 - 12	3.7	2.5
2 WBT	4 - 4 - 4	19 - 19 - 19	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4	2.5
3 SBT	4 - 4 - 4	36 - 36 - 36	7 - 7 - 7	2.5 - 2.5 - 2.5	7 - 7 - 7	40 - 10 - 12	4	3
4 NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 2.5 - 2.5	7 - 7 - 7	20 - 12 - 16	4	3.1
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 5 - 5	14 - 10 - 12	3.7	2.5
6 EBT	4 - 4 - 4	19 - 19 - 19	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4	2.5
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

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

TOD Schedule Report

for 3016: J. F. Kennedy Blvd&Treasure Dr E

Print Date: 10/4/2021

Print Time: 3:59 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBT	4 NBT	5 WBL	6 EBT	7 -	8 -	Ring Offset	Offset
	1	120	9	39	34	12	9	39	0	0	0	19
	2	120	8	31	41	14	8	31	0	0	0	106
	3	120	9	35	38	12	9	35	0	0	0	27
	4	150	10	54	41	19	10	54	0	0	0	106
	5	120	9	39	34	12	9	39	0	0	0	29
	6	120	9	39	34	12	9	39	0	0	0	19
	8	150	14	50	41	19	14	50	0	0	0	106
	9	150	11	53	41	19	11	53	0	0	0	146
	11	140	9	50	41	14	9	50	0	0	0	5
	12	110	9	25	38	12	9	25	0	0	0	10
	15	130	8	50	38	8	8	50	0	0	0	48

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	4	M T W Th F
0800	4	Su S
1330	8	M T W Th F
1530	9	M T W Th F
2000	11	Su S
2200	11	M T W Th F

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2764: Bay Dr W&Normandy Dr&71 St

Print Date: 10/4/2021

Print Time: 3:27 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2764	Bay Dr W&Normandy Dr&71 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	Phase Bank 1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3		
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 50 - 50	0 - 0 - 0	4	2.3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	7 - 7 - 7	42 - 42 - 42	7 - 7 - 7	2.5 - 2.5 - 2.5	8 - 20 - 20	59 - 0 - 0	4	2.3
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	20 - 0 - 0	3.7	2
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 50 - 50	0 - 0 - 0	4	2.3
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

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

TOD Schedule Report

for 2764: Bay Dr W&Normandy Dr&71 St

Print Date: 10/4/2021

Print Time: 3:27 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 WBL	6 EBT	7 -	8 -	Ring Offset	Offset
	1	90	0	28	0	50	6	16	0	0	0	50
	2	140	0	78	0	50	6	66	0	0	0	50
	3	90	0	28	0	50	6	16	0	0	0	47
	4	110	0	48	0	50	6	36	0	0	0	98
	5	100	0	38	0	50	6	26	0	0	0	30
	6	150	0	88	0	50	6	76	0	0	0	75
	7	150	0	88	0	50	6	76	0	0	0	75
	8	120	0	58	0	50	6	46	0	0	0	87
	10	100	0	38	0	50	6	26	0	0	0	98
	11	100	0	38	0	50	6	26	0	0	0	98
	12	140	0	78	0	50	7	65	0	0	0	124
	14	110	0	48	0	50	6	36	0	0	0	9
	15	130	0	68	0	50	6	56	0	0	0	76
	23	90	0	28	0	50	6	16	0	0	0	50

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0100	23	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1500	12	M T W Th F
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---5---1	SuM T W ThF S
0100	TOD OUTPUTS	---5----	M T W ThF
0600	TOD OUTPUTS	--------	M T W ThF
2300	TOD OUTPUTS	---5---1	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---5---1	SuM T W ThF S
0100	TOD OUTPUTS	---5----	M T W ThF
0600	TOD OUTPUTS	--------	M T W ThF
0700	TOD OUTPUTS	--------	Su S
2300	TOD OUTPUTS	---5---1	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2763: Biarritz Dr&Normandy Dr

Print Date: 10/4/2021

Print Time: 3:27 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2763	Biarritz Dr&Normandy Dr	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	Phase Bank 1 2 3							
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 58 - 50	0 - 0 - 0	4	2.3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	2 - 2 - 2	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 22 - 25	35 - 0 - 0	4	2.3
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	2 - 2 - 2	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 22 - 25	35 - 0 - 0	4	2.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	-2-4---8
External Permit 1	-2-4---8
External Permit 2	-2-4---8

TOD Schedule Report

for 2763: Biarritz Dr&Normandy Dr

Print Date: 10/4/2021

Print Time: 3:27 PM

Current TOD Schedule	Plan	Cycle	Green Time 1	2	3	4	5	6	7	8	Ring Offset	Offset
			-	WBT	-	NBT	-	-	-	SBT		
	1	90	0	55	0	23	0	0	0	23	0	44
	2	140	0	105	0	23	0	0	0	23	0	43
	3	90	0	55	0	23	0	0	0	23	0	40
	4	110	0	75	0	23	0	0	0	23	0	17
	5	100	0	65	0	23	0	0	0	23	0	53
	6	150	0	115	0	23	0	0	0	23	0	79
	7	150	0	115	0	23	0	0	0	23	0	79
	8	120	0	85	0	23	0	0	0	23	0	79
	9	80	0	45	0	23	0	0	0	23	0	45
	10	100	0	65	0	23	0	0	0	23	0	0
	11	100	0	65	0	23	0	0	0	23	0	4
	12	70	0	35	0	23	0	0	0	23	0	4
	14	60	0	25	0	23	0	0	0	23	0	18
	15	130	0	95	0	23	0	0	0	23	0	98

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1500	12	M T W Th F
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-------1	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
2300	TOD OUTPUTS	-------1	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-------1	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
0700	TOD OUTPUTS	--------	Su S
2300	TOD OUTPUTS	-------1	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2761: Normandy Dr&Trouville Espl

Print Date: 10/4/2021

Print Time: 3:27 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2761	Normandy Dr&Trouville Espl	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

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



Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3	Phase Bank 1 2 3		
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 0 - 0	4	2.3
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 10 - 12	35 - 10 - 12	4	2.3
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 10 - 12	35 - 10 - 12	4	2.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	-2-4---8
External Permit 1	-2-4---8
External Permit 2	-2-4---8

TOD Schedule Report

for 2761: Normandy Dr&Trouville Espl

Print Date: 10/4/2021

Print Time: 3:27 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 -	6 -	7 -	8 SBT	Ring Offset	Offset
	1	90	0	52	0	26	0	0	0	26	0	15
	2	140	0	102	0	26	0	0	0	26	0	16
	3	90	0	52	0	26	0	0	0	26	0	13
	4	55	0	17	0	26	0	0	0	26	0	29
	5	100	0	62	0	26	0	0	0	26	0	14
	6	150	0	112	0	26	0	0	0	26	0	46
	7	150	0	112	0	26	0	0	0	26	0	46
	8	120	0	82	0	26	0	0	0	26	0	49
	9	80	0	42	0	26	0	0	0	26	0	17
	10	100	0	62	0	26	0	0	0	26	0	73
	11	100	0	62	0	26	0	0	0	26	0	73
	12	70	0	32	0	26	0	0	0	26	0	38
	14	60	0	22	0	26	0	0	0	26	0	41
	15	130	0	92	0	26	0	0	0	26	0	100

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	4	Su S
0700	14	M T W Th F
0915	4	M T W Th F
1500	12	M T W Th F
2000	4	M T W Th F
2300	Free	Su M T W Th F S

Current Time of Day Function

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

Local Time of Day Function

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

*** Settings**

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

No Calendar Defined/Enabled

Appendix D – Adjustment Factors

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8700 MIAMI-DADE NORTH

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	1.06	1.10
2	01/02/2022 - 01/08/2022	1.04	1.08
3	01/09/2022 - 01/15/2022	1.02	1.06
4	01/16/2022 - 01/22/2022	1.01	1.05
5	01/23/2022 - 01/29/2022	1.00	1.04
6	01/30/2022 - 02/05/2022	0.98	1.02
7	02/06/2022 - 02/12/2022	0.97	1.01
* 8	02/13/2022 - 02/19/2022	0.96	1.00
* 9	02/20/2022 - 02/26/2022	0.96	1.00
*10	02/27/2022 - 03/05/2022	0.96	1.00
*11	03/06/2022 - 03/12/2022	0.96	1.00
*12	03/13/2022 - 03/19/2022	0.96	1.00
*13	03/20/2022 - 03/26/2022	0.96	1.00
*14	03/27/2022 - 04/02/2022	0.96	1.00
*15	04/03/2022 - 04/09/2022	0.96	1.00
*16	04/10/2022 - 04/16/2022	0.95	0.99
*17	04/17/2022 - 04/23/2022	0.96	1.00
*18	04/24/2022 - 04/30/2022	0.96	1.00
*19	05/01/2022 - 05/07/2022	0.97	1.01
*20	05/08/2022 - 05/14/2022	0.97	1.01
21	05/15/2022 - 05/21/2022	0.98	1.02
22	05/22/2022 - 05/28/2022	0.99	1.03
23	05/29/2022 - 06/04/2022	0.99	1.03
24	06/05/2022 - 06/11/2022	1.00	1.04
25	06/12/2022 - 06/18/2022	1.01	1.05
26	06/19/2022 - 06/25/2022	1.01	1.05
27	06/26/2022 - 07/02/2022	1.01	1.05
28	07/03/2022 - 07/09/2022	1.02	1.06
29	07/10/2022 - 07/16/2022	1.02	1.06
30	07/17/2022 - 07/23/2022	1.02	1.06
31	07/24/2022 - 07/30/2022	1.02	1.06
32	07/31/2022 - 08/06/2022	1.01	1.05
33	08/07/2022 - 08/13/2022	1.01	1.05
34	08/14/2022 - 08/20/2022	1.01	1.05
35	08/21/2022 - 08/27/2022	1.03	1.07
36	08/28/2022 - 09/03/2022	1.04	1.08
37	09/04/2022 - 09/10/2022	1.05	1.09
38	09/11/2022 - 09/17/2022	1.07	1.11
39	09/18/2022 - 09/24/2022	1.05	1.09
40	09/25/2022 - 10/01/2022	1.03	1.07
41	10/02/2022 - 10/08/2022	1.01	1.05
42	10/09/2022 - 10/15/2022	0.99	1.03
43	10/16/2022 - 10/22/2022	1.00	1.04
44	10/23/2022 - 10/29/2022	1.01	1.05
45	10/30/2022 - 11/05/2022	1.01	1.05
46	11/06/2022 - 11/12/2022	1.02	1.06
47	11/13/2022 - 11/19/2022	1.03	1.07
48	11/20/2022 - 11/26/2022	1.04	1.08
49	11/27/2022 - 12/03/2022	1.05	1.09
50	12/04/2022 - 12/10/2022	1.05	1.09
51	12/11/2022 - 12/17/2022	1.06	1.10
52	12/18/2022 - 12/24/2022	1.04	1.08
53	12/25/2022 - 12/31/2022	1.02	1.06

* PEAK SEASON

Annual Growth Factor Worksheet
1960 Normandy Drive

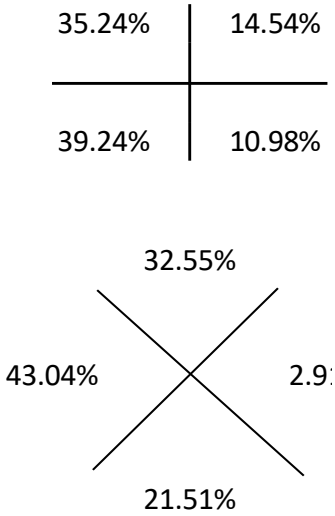
Count Station	2017 AADT	2022 AADT	Annual Compound Growth	Adjusted Annual Compound Growth
Site 875191 - 71st Street West of Rue Vesailles	17000	17000	0.00%	0.00%
Site 870115 - Normandy Dr. W. of Rue Versailles	21000	24000	2.71%	2.71%
Assumed Annual Compound Growth Rate				**1.36%**

1960 Normandy Drive Project Trips Distribution

TAZ 625

Direction	Year 2015[1]	Adjusted 2015	Year 2045[1]	Adjusted 2045	Adjusted 2024
NNE	12.70%	12.71%	9.10%	9.09%	11.63%
ENE	3.30%	3.30%	2.00%	2.00%	2.91%
ESE	0.00%	0.00%	0.00%	0.00%	0.00%
SSE	11.60%	11.61%	9.50%	9.49%	10.98%
SSW	9.00%	9.01%	14.10%	14.09%	10.53%
WSW	27.50%	27.53%	31.50%	31.47%	28.71%
WNW	14.20%	14.21%	14.60%	14.59%	14.33%
NNW	21.60%	21.62%	19.30%	19.28%	20.92%
Total	99.90%	100.00%	100.10%	100.00%	100.00%

[1]Does not total 100% in County report.



COMMUTING CHARACTERISTICS BY SEX

United States® Census Bureau

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.

	ZCTA5 33141	
	Total	
Label	**Estimate**	**Margin of Error**
Workers 16 years and over	22,860	±1,127
MEANS OF TRANSPORTATION TO WORK		
Car, truck, or van	67.3%	±3.4
Drove alone	57.9%	±3.8
Carpooled	9.5%	±1.8
In 2-person carpool	8.2%	±1.8
In 3-person carpool	0.8%	±0.6
In 4-or-more person carpool	0.4%	±0.4
Workers per car, truck, or van	1.08	±0.02
Public transportation (excluding taxicab)	12.1%	±2.6
Walked	3.0%	±1.2
Bicycle	1.2%	±0.6
Taxicab, motorcycle, or other means	7.0%	±1.6
Worked from home	9.4%	±2.1
PLACE OF WORK		
Worked in state of residence	99.1%	±0.5
Worked in county of residence	93.3%	±1.5
Worked outside county of residence	5.7%	±1.5
Worked outside state of residence	0.9%	±0.5
Living in a place	100.0%	±0.2
Worked in place of residence	41.5%	±3.3
Worked outside place of residence	58.5%	±3.3
Not living in a place	0.0%	±0.2
Living in 12 selected states	0.0%	±0.2
Worked in minor civil division of residence	0.0%	±0.2
Worked outside minor civil division of reside	0.0%	±0.2

Table Notes

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	1960 Normandy Drive	**Organization:**	Thomas A. Hall, Inc.
Project Location:	Miami-Dade County	**Performed By:**	
Scenario Description:	EXISTING CONDITIONS	**Date:**	18-Jan-24
Analysis Year:	2024	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	6,924	s.f.	6	4	2
Restaurant				0		
Cinema/Entertainment				0		
Residential	210	2	d.u.	2	1	1
Hotel				0		
All Other Land Uses[2]				0		
Total				8	5	3

Table 2-A: Mode Split and Vehicle Occupancy Estimates

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

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

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

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

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

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	8	5	3
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips[3]	8	5	3
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

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

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

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

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

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

[4]Person-Trips

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

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	1960 Normandy Drive
Analysis Period:	**AM Street Peak Hour**

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

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	4	4	1.00	2	2
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	1	1	1.00	1	1
Hotel	1.00	0	0	1.00	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

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

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	4	4	4	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	1	1	1	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

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

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

[2]Person-Trips

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

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

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	1960 Normandy Drive	**Organization:**	Thomas A. Hall, Inc.
Project Location:	Miami-Dade County	**Performed By:**	
Scenario Description:	EXISTING CONDITIONS	**Date:**	18-Jan-24
Analysis Year:	2024	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	6,924	s.f.	83	41	42
Restaurant				0		
Cinema/Entertainment				0		
Residential	210	2	d.u.	3	2	1
Hotel				0		
All Other Land Uses[2]				0		
Total				86	43	43

Table 2-P: Mode Split and Vehicle Occupancy Estimates

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		200			200	
Retail					200	
Restaurant						
Cinema/Entertainment						
Residential		200				
Hotel						

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	86	43	43
Internal Capture Percentage	2%	2%	2%
External Vehicle-Trips[3]	84	42	42
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	0%	2%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	50%	0%
Hotel	N/A	N/A

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

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

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

[4]Person-Trips

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

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	1960 Normandy Drive
Analysis Period:	**PM Street Peak Hour**

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

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	41	41	1.00	42	42
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	2	2	1.00	1	1
Hotel	1.00	0	0	1.00	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		12	2	11	2
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	21		0	0	0
Cinema/Entertainment	0	2	0		0	0
Residential	0	4	0	0		0
Hotel	0	1	0	0	0	

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

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	41	41	41	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	1	2	1	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	1	41	42	41	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	1	1	1	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

[2]Person-Trips

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

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

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	1960 Normandy Drive	**Organization:**	Thomas A. Hall, Inc.
Project Location:	Miami-Dade County	**Performed By:**	
Scenario Description:	PROPOSED CONDITIONS	**Date:**	18-Jan-24
Analysis Year:	2024	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	822	5,091	s.f.	12	7	5
Restaurant				0		
Cinema/Entertainment				0		
Residential	221	120	d.u.	60	13	47
Hotel				0		
All Other Land Uses[2]				0		
Total				72	20	52

Table 2-A: Mode Split and Vehicle Occupancy Estimates

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

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

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

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

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

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	72	20	52
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips[3]	72	20	52
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

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

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

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

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

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

[4]Person-Trips

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

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	1960 Normandy Drive
Analysis Period:	**AM Street Peak Hour**

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

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	7	7	1.00	5	5
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	13	13	1.00	47	47
Hotel	1.00	0	0	1.00	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		1	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	9	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	1		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

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

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	7	7	7	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	13	13	13	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	5	5	5	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	47	47	47	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

[2]Person-Trips

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

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

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	1960 Normandy Drive	**Organization:**	Thomas A. Hall, Inc.
Project Location:	Miami-Dade County	**Performed By:**	
Scenario Description:	PROPOSED CONDITIONS	**Date:**	18-Jan-24
Analysis Year:	2024	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	822	5,091	s.f.	53	24	29
Restaurant				0		
Cinema/Entertainment				0		
Residential	221	120	d.u.	72	45	27
Hotel				0		
All Other Land Uses[2]				0		
Total				125	69	56

Table 2-P: Mode Split and Vehicle Occupancy Estimates

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		200			200	
Retail					200	
Restaurant						
Cinema/Entertainment						
Residential		200				
Hotel						

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	8	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	2	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	125	69	56
Internal Capture Percentage	16%	14%	18%
External Vehicle-Trips[3]	105	59	46
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	28%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	18%	7%
Hotel	N/A	N/A

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

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

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

[4]Person-Trips

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

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	1960 Normandy Drive
Analysis Period:	**PM Street Peak Hour**

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

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	24	24	1.00	29	29
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	45	45	1.00	27	27
Hotel	1.00	0	0	1.00	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		8	1	8	1
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	11	6	0		1
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	2	0
Retail	0		0	0	21	0
Restaurant	0	12		0	7	0
Cinema/Entertainment	0	1	0		2	0
Residential	0	2	0	0		0
Hotel	0	0	0	0	0	

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

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	2	22	24	22	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	8	37	45	37	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

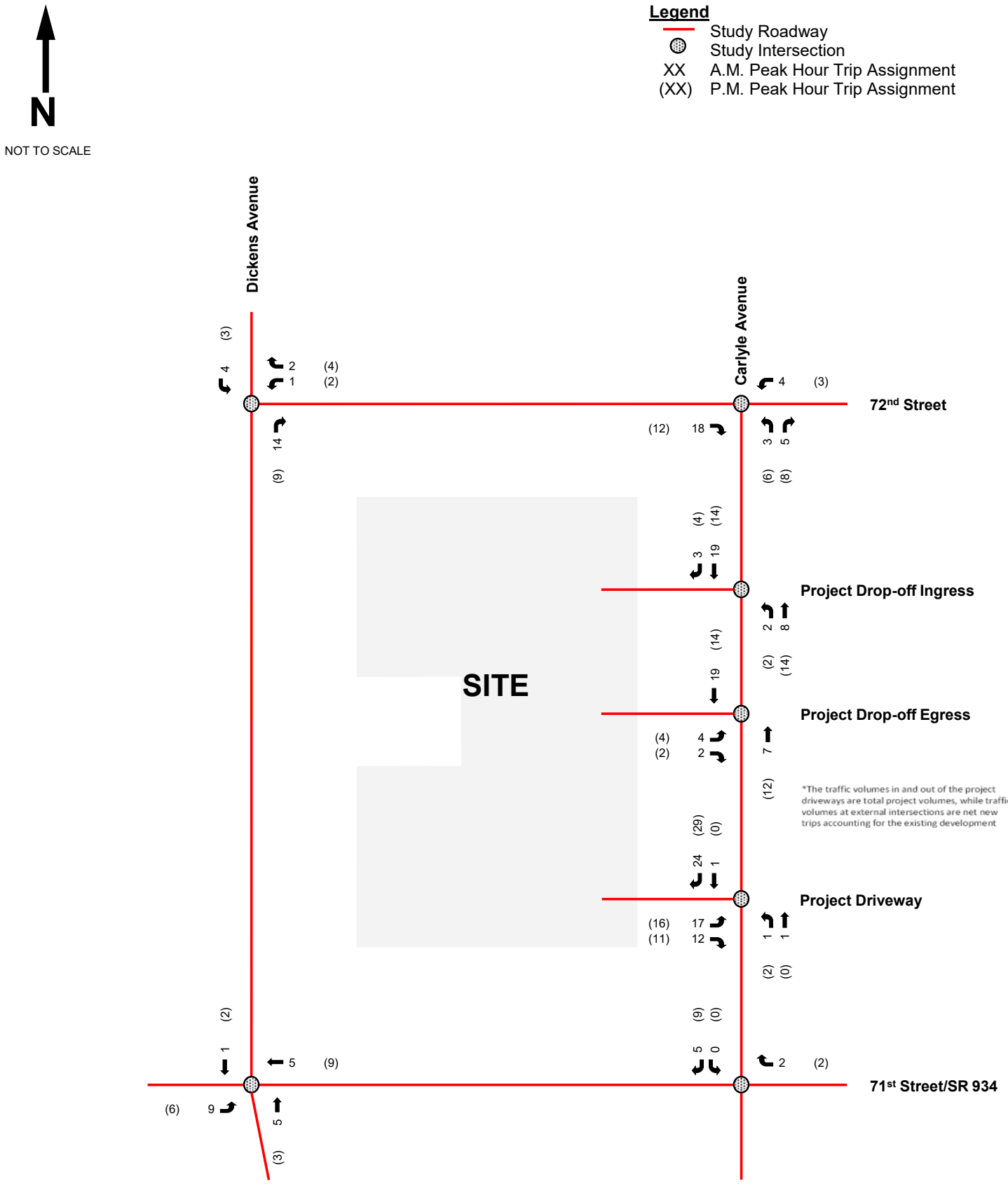
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	8	21	29	21	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	25	27	25	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

[2]Person-Trips

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

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



Kimley»Horn

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Figure 5
Peak Hour Project Trip Assignment
72B
Miami Beach, Florida

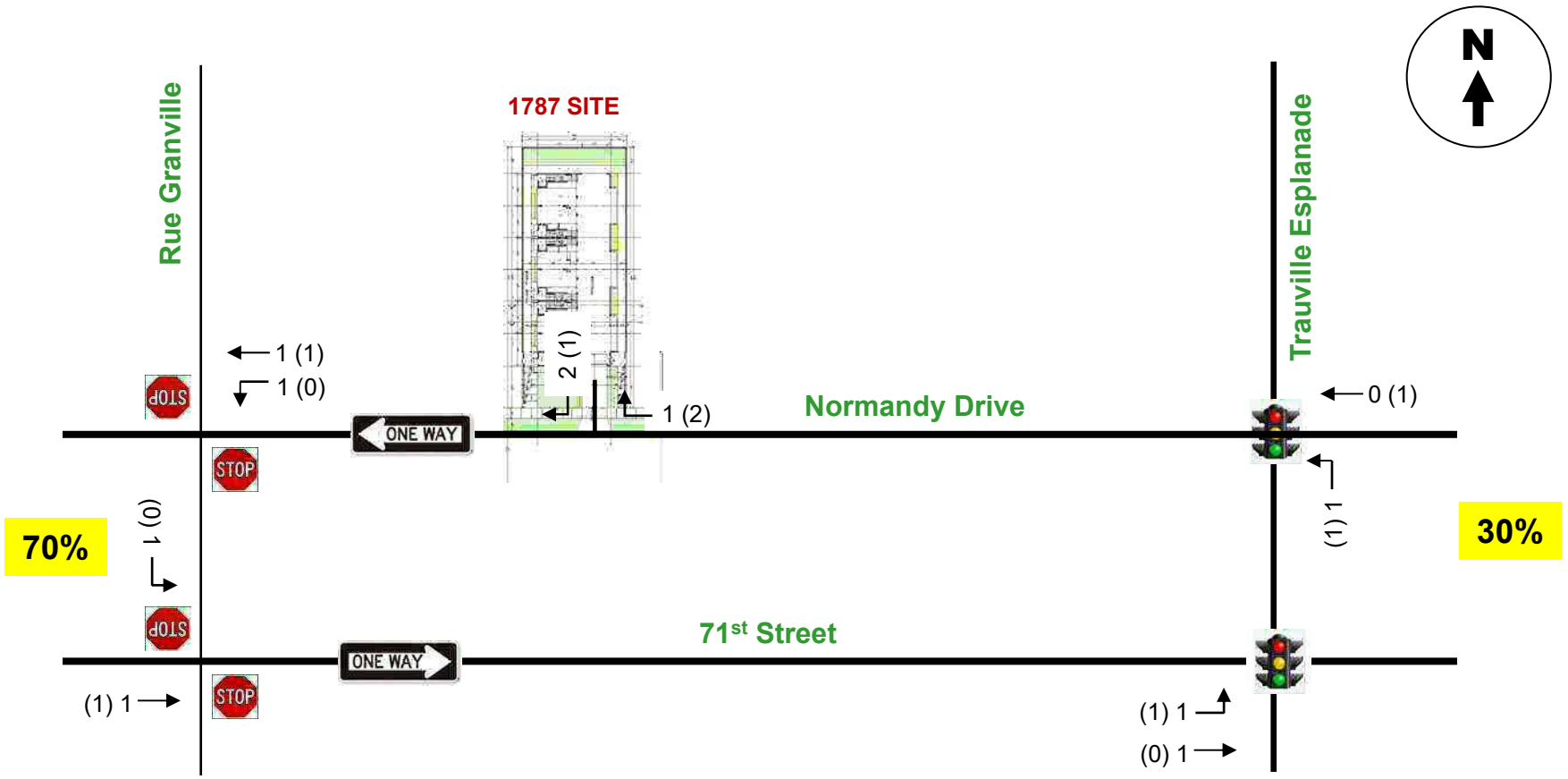


TABLE 1
Trip Generation Summary (Proposed Use)
1787 Normandy Drive

Land Use	Size (units)	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Multifamily Low Rise (LUC 221)	6	44	3	1	2	3	2	1
External Trips		**44**	**3**	**1**	**2**	**3**	**2**	**1**

Source: ITE Trip Generation Manual (10th Edition)

TRAFTECH ENGINEERING, INC.

Traffic Assignment

FIGURE 1
1787 Normandy
Miami Beach, Florida

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Single-Family Detached Housing	10	210	1	du	25%	75%	0	1	1	17.4%	0	0	1	1	0.0%	0	0	1	1	0.0%	0	0	1	1
	2																									
	3																									
	4																									
	5																									
	6																									
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	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	0	1	1	17.4%	0	0	1	1	0.0%	0	0	1	1	0.0%	0	0	1	1
		210		Y=0.74(X)																						

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	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 (Mid-Rise)	10	221	5	du	26%	74%	1	1	2	17.4%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
	2																									
	3																									
	4																									
	5																									
	6																									
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	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	1	1	2	17.4%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
		221		LN(Y) = 0.98*LN(X)+-0.98																						

	IN	OUT	TOTAL
NET NEW TRIPS	**1**	**0**	**1**

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Single-Family Detached Housing	10	210	1	du	63%	37%	1	0	1	17.4%	0	1	0	1	0.0%	0	1	0	1	0.0%	0	1	0	1
	2																									
	3																									
	4																									
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	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	1	0	1	17.4%	0	1	0	1	0.0%	0	1	0	1	0.0%	0	1	0	1
		210		LN(Y) = 0.96*LN(X)+0.2																						

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	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 (Mid-Rise)	10	221	5	du	61%	39%	1	1	2	17.4%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
	2																									
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	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	1	1	2	17.4%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
		221		LN(Y) = 0.96*LN(X)+-0.63																						

	IN	OUT	TOTAL
NET NEW TRIPS	**0**	**1**	**1**

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Multifamily Housing (Low-Rise)	10	220	9	du	23%	77%	1	3	4	17.4%	1	1	2	3	0.0%	0	1	2	3	0.0%	0	1	2	3
	2																									
	3																									
	4																									
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	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	1	3	4	17.4%	1	1	2	3	0.0%	0	1	2	3	0.0%	0	1	2	3
		220		Y=0.46(X)																						

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	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 (Mid-Rise)	10	221	12	du	26%	74%	1	3	4	17.4%	1	1	2	3	0.0%	0	1	2	3	0.0%	0	1	2	3
	2																									
	3																									
	4																									
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	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	1	3	4	17.4%	1	1	2	3	0.0%	0	1	2	3	0.0%	0	1	2	3
		221		LN(Y) = 0.98*LN(X)+-0.98																						

	IN	OUT	TOTAL
NET NEW TRIPS	0	0	0

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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Multifamily Housing (Low-Rise)	10	220	9	du	63%	37%	3	2	5	17.4%	1	2	2	4	0.0%	0	2	2	4	0.0%	0	2	2	4
	2																									
	3																									
	4																									
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	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	3	2	5	17.4%	1	2	2	4	0.0%	0	2	2	4	0.0%	0	2	2	4
		220		Y=0.56(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		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	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 (Mid-Rise)	10	221	12	du	61%	39%	4	2	6	17.4%	1	3	2	5	0.0%	0	3	2	5	0.0%	0	3	2	5
	2																									
	3																									
	4																									
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	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	4	2	6	17.4%	1	3	2	5	0.0%	0	3	2	5	0.0%	0	3	2	5
		221		LN(Y) = 0.96*LN(X)+-0.63																						

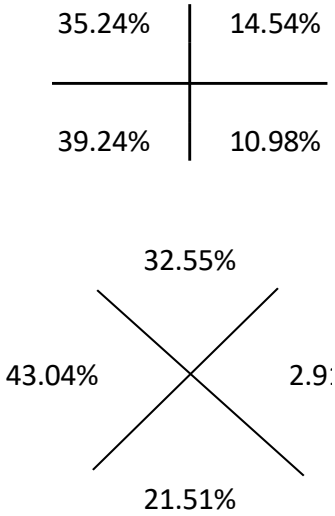
	IN	OUT	TOTAL
NET NEW TRIPS	1	0	1

1960 Normandy Drive Project Trips Distribution

TAZ 625

Direction	Year 2015[1]	Adjusted 2015	Year 2045[1]	Adjusted 2045	Adjusted 2024
NNE	12.70%	12.71%	9.10%	9.09%	11.63%
ENE	3.30%	3.30%	2.00%	2.00%	2.91%
ESE	0.00%	0.00%	0.00%	0.00%	0.00%
SSE	11.60%	11.61%	9.50%	9.49%	10.98%
SSW	9.00%	9.01%	14.10%	14.09%	10.53%
WSW	27.50%	27.53%	31.50%	31.47%	28.71%
WNW	14.20%	14.21%	14.60%	14.59%	14.33%
NNW	21.60%	21.62%	19.30%	19.28%	20.92%
Total	99.90%	100.00%	100.10%	100.00%	100.00%

[1]Does not total 100% in County report.



Miami-Dade 2015 Base Year Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
625	3525	Trips	610	160	-	557	431	1,317	679	1,035	4,961
625	3525	Percent	12.7	3.3	-	11.6	9.0	27.5	14.2	21.6	
626	3526	Trips	122	-	-	-	2,090	2,277	1,198	2,942	9,399
626	3526	Percent	1.4	-	-	-	24.2	26.4	13.9	34.1	
627	3527	Trips	279	-	-	-	2,051	2,578	845	1,965	8,061
627	3527	Percent	3.6	-	-	-	26.6	33.4	11.0	25.5	
628	3528	Trips	298	-	49	79	984	902	332	679	3,579
628	3528	Percent	9.0	-	1.5	2.4	29.6	27.2	10.0	20.5	
629	3529	Trips	1,374	549	344	1,656	1,708	3,707	1,668	2,101	14,261
629	3529	Percent	10.5	4.2	2.6	12.6	13.0	28.3	12.7	16.0	
630	3530	Trips	952	-	210	347	1,696	2,375	794	1,114	8,135
630	3530	Percent	12.7	-	2.8	4.6	22.7	31.7	10.6	14.9	
631	3531	Trips	255	-	-	-	1,215	1,471	440	1,030	4,651
631	3531	Percent	5.8	-	-	-	27.6	33.4	10.0	23.4	
632	3532	Trips	309	-	-	-	1,242	1,751	750	635	4,880
632	3532	Percent	6.6	-	-	-	26.5	37.4	16.0	13.5	
633	3533	Trips	310	-	-	-	1,181	1,428	750	730	4,590
633	3533	Percent	7.0	-	-	-	26.9	32.5	17.1	16.6	
634	3534	Trips	1,502	112	240	837	1,718	1,928	976	1,727	9,998
634	3534	Percent	16.6	1.2	2.7	9.3	19.0	21.3	10.8	19.1	
635	3535	Trips	779	-	-	-	2,021	1,994	952	1,411	8,010
635	3535	Percent	10.9	-	-	-	28.2	27.9	13.3	19.7	
636	3536	Trips	1,041	-	-	686	1,152	2,072	911	1,071	7,384
636	3536	Percent	15.0	-	-	9.9	16.6	29.9	13.1	15.4	
637	3537	Trips	323	31	87	217	126	601	303	290	1,987
637	3537	Percent	16.4	1.6	4.4	11.0	6.4	30.4	15.3	14.7	
638	3538	Trips	152	35	87	86	114	218	162	126	999
638	3538	Percent	15.5	3.6	8.9	8.7	11.6	22.3	16.5	12.9	
639	3539	Trips	825	281	277	1,089	131	1,364	796	599	5,721
639	3539	Percent	15.4	5.2	5.2	20.3	2.4	25.4	14.9	11.2	
640	3540	Trips	344	247	868	104	43	685	405	274	3,053
640	3540	Percent	11.6	8.3	29.2	3.5	1.5	23.1	13.6	9.2	
641	3541	Trips	1,051	1,714	291	723	309	1,572	1,188	916	8,356
641	3541	Percent	13.5	22.1	3.7	9.3	4.0	20.3	15.3	11.8	
642	3542	Trips	1,849	1,404	115	1,263	457	2,697	1,962	1,518	12,299
642	3542	Percent	16.4	12.5	1.0	11.2	4.1	23.9	17.4	13.5	
643	3543	Trips	1,747	551	-	965	479	2,595	1,554	1,715	10,383
643	3543	Percent	18.2	5.7	-	10.1	5.0	27.0	16.2	17.9	
644	3544	Trips	2,022	-	-	-	2,250	4,141	2,585	2,646	15,224
644	3544	Percent	14.8	-	-	-	16.5	30.4	19.0	19.4	
645	3545	Trips	1,268	-	-	-	907	1,498	1,720	1,351	7,018
645	3545	Percent	18.8	-	-	-	13.5	22.2	25.5	20.0	
646	3546	Trips	986	-	156	520	250	1,081	1,094	1,181	5,470
646	3546	Percent	18.7	-	3.0	9.9	4.7	20.5	20.8	22.4	
647	3547	Trips	350	103	114	165	66	354	359	408	1,979
647	3547	Percent	18.2	5.4	5.9	8.6	3.5	18.5	18.7	21.2	
648	3548	Trips	1,027	434	254	401	48	903	1,001	514	4,747
648	3548	Percent	22.4	9.5	5.5	8.8	1.0	19.7	21.9	11.2	
649	3549	Trips	754	192	184	230	41	612	743	427	3,320
649	3549	Percent	23.7	6.0	5.8	7.2	1.3	19.2	23.3	13.4	
650	3550	Trips	45	80	104	0	14	155	304	133	850
650	3550	Percent	5.4	9.6	12.4	0.0	1.6	18.5	36.5	16.0	

Miami-Dade 2045 Cost Feasible Plan Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
625	3525	Trips	515	114	-	541	802	1,791	829	1,096	5,972
625	3525	Percent	9.1	2.0	-	9.5	14.1	31.5	14.6	19.3	
626	3526	Trips	66	-	-	-	2,417	3,260	1,417	2,993	11,237
626	3526	Percent	0.7	-	-	-	23.8	32.1	14.0	29.5	
627	3527	Trips	174	-	-	-	2,276	3,212	1,138	1,885	9,055
627	3527	Percent	2.0	-	-	-	26.2	37.0	13.1	21.7	
628	3528	Trips	238	-	23	101	1,053	1,266	390	660	4,028
628	3528	Percent	6.4	-	0.6	2.7	28.2	33.9	10.5	17.7	
629	3529	Trips	1,686	621	373	1,692	1,801	6,032	2,362	2,490	18,425
629	3529	Percent	9.9	3.6	2.2	9.9	10.6	35.4	13.9	14.6	
630	3530	Trips	888	-	326	303	1,717	3,876	1,515	1,553	11,277
630	3530	Percent	8.7	-	3.2	3.0	16.9	38.1	14.9	15.3	
631	3531	Trips	296	-	-	-	1,351	2,360	838	1,324	6,591
631	3531	Percent	4.8	-	-	-	21.9	38.3	13.6	21.5	
632	3532	Trips	343	-	-	-	1,500	2,647	1,390	1,098	7,499
632	3532	Percent	4.9	-	-	-	21.5	37.9	19.9	15.7	
633	3533	Trips	368	-	-	-	1,052	1,986	859	841	5,391
633	3533	Percent	7.2	-	-	-	20.6	38.9	16.8	16.5	
634	3534	Trips	1,404	80	149	773	1,637	2,733	1,332	1,712	10,593
634	3534	Percent	14.3	0.8	1.5	7.9	16.7	27.8	13.6	17.4	
635	3535	Trips	566	-	-	-	1,311	2,266	1,228	1,254	7,246
635	3535	Percent	8.5	-	-	-	19.8	34.2	18.5	18.9	
636	3536	Trips	1,066	-	-	607	978	3,045	1,398	1,193	8,805
636	3536	Percent	12.9	-	-	7.3	11.8	36.8	16.9	14.4	
637	3537	Trips	468	44	144	315	198	868	501	309	2,865
637	3537	Percent	16.5	1.6	5.1	11.1	6.9	30.5	17.6	10.9	
638	3538	Trips	127	33	78	94	79	401	285	185	1,342
638	3538	Percent	9.9	2.6	6.1	7.3	6.2	31.3	22.2	14.5	
639	3539	Trips	944	303	253	1,068	176	2,395	1,085	905	7,569
639	3539	Percent	13.2	4.3	3.6	15.0	2.5	33.6	15.2	12.7	
640	3540	Trips	119	74	216	10	30	177	136	147	1,166
640	3540	Percent	13.1	8.2	23.7	1.1	3.4	19.4	14.9	16.2	
641	3541	Trips	1,145	1,056	206	569	242	2,378	1,724	1,142	9,066
641	3541	Percent	13.5	12.5	2.4	6.7	2.9	28.1	20.4	13.5	
642	3542	Trips	1,701	1,196	113	964	433	3,470	2,140	1,631	12,324
642	3542	Percent	14.6	10.3	1.0	8.3	3.7	29.8	18.4	14.0	
643	3543	Trips	1,884	580	-	1,133	631	3,768	2,190	2,157	13,183
643	3543	Percent	15.3	4.7	-	9.2	5.1	30.5	17.7	17.5	
644	3544	Trips	1,948	-	-	-	2,227	5,534	3,264	3,082	17,780
644	3544	Percent	12.1	-	-	-	13.9	34.5	20.3	19.2	
645	3545	Trips	1,314	-	-	-	844	1,661	2,170	1,703	8,075
645	3545	Percent	17.1	-	-	-	11.0	21.6	28.2	22.1	
646	3546	Trips	1,025	-	125	496	263	1,741	1,656	1,299	6,976
646	3546	Percent	15.5	-	1.9	7.5	4.0	26.4	25.1	19.7	
647	3547	Trips	296	122	96	109	79	582	661	405	2,490
647	3547	Percent	12.6	5.2	4.1	4.6	3.4	24.8	28.1	17.3	
648	3548	Trips	943	278	128	313	73	1,525	1,351	576	5,397
648	3548	Percent	18.2	5.4	2.5	6.0	1.4	29.4	26.0	11.1	
649	3549	Trips	643	120	121	216	43	873	952	508	3,661
649	3549	Percent	18.5	3.4	3.5	6.2	1.3	25.1	27.4	14.6	
650	3550	Trips	60	71	65	8	14	279	312	136	969
650	3550	Percent	6.4	7.5	6.9	0.9	1.5	29.5	33.0	14.4	

Appendix E – Mass Transit Information

Back

Schedule

79 Street MAX

- Weekday (Westbound)

HARDING AV 72 ST

6:05 AM
Dest: MAX to Northside Sta

6:35 AM
Dest: MAX to Northside Sta

6:59 AM
Dest: MAX to Northside Sta

7:23 AM
Dest: MAX to Northside Sta

7:47 AM
Dest: MAX to Northside Sta

3:30 PM
Dest: MAX to Northside Sta

3:54 PM
Dest: MAX to Northside Sta

4:18 PM
Dest: MAX to Northside Sta

4:42 PM
Dest: MAX to Northside Sta

5:06 PM
Dest: MAX to Northside Sta

5:30 PM
Dest: MAX to Northside Sta

5:54 PM
Dest: MAX to Northside Sta

6:18 PM
Dest: MAX to Northside Sta

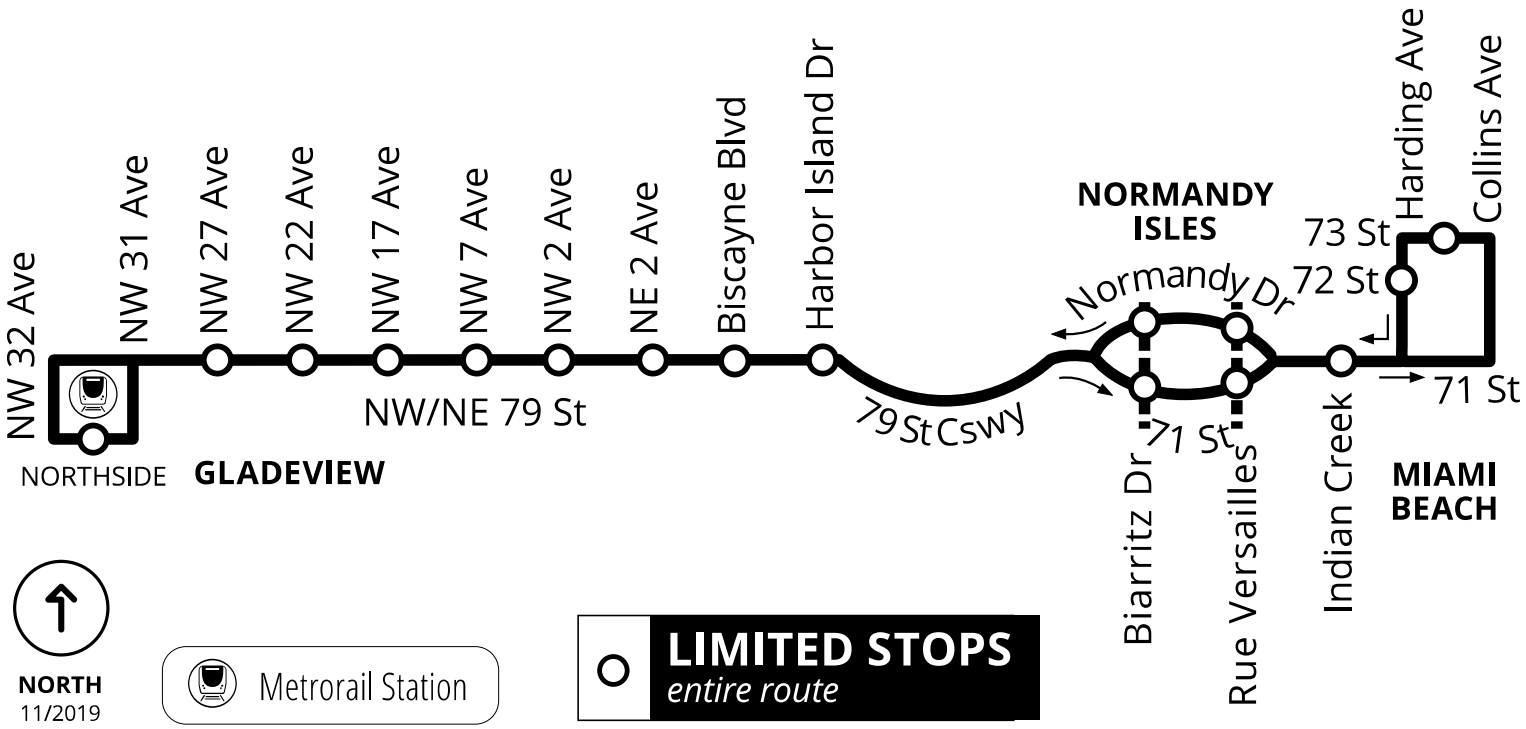
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79

79 ST MAX


NW 32 Ave
NW 31 Ave
NW 27 Ave
NW 22 Ave
NW 17 Ave
NW 7 Ave
NW 2 Ave
NE 2 Ave
Biscayne Blvd
Harbor Island Dr
NORMANDY ISLES
Normandy Dr
73 St
72 St
Harding Ave
Collins Ave
71 St
NW/NE 79 St
79 St Cswy
71 St
Biarritz Dr
Rue Versailles
Indian Creek
NORTHSIDE
GLADEVIEW
MIAMI BEACH
NORTH
11/2019
Metrorail Station
LIMITED STOPS
entire route

WEEKDAYS / DIAS LABORABLES / LACÈMEN

EASTBOUND RUMBO ESTE / DIREKSYON IS	MORNING / MAÑANA / MATIN							AM	PM	AFTERNOON / TARDE / APREMIDI				
Northside Metrorail	5:45	6:18	6:42	7:06	7:30	7:54	8:18			3:56	4:18	4:42	5:06	5:30
NW 79 St & NW 7 Ave	5:52	6:27	6:51	7:16	7:40	8:05	8:29			4:09	4:31	4:55	5:19	5:43
NE 79 St & Biscayne Blvd	5:58	6:35	6:59	7:26	7:50	8:15	8:39			4:18	4:40	5:04	5:28	5:52
Harding Ave & 72 St	6:12	6:49	7:14	7:41	8:05	8:30	8:54			4:34	4:56	5:20	5:44	6:08

WESTBOUND RUMBO OESTE / DIREKSYON WES	MORNING / MAÑANA / MATIN					AM	PM	AFTERNOON / TARDE / APREMIDI						
Harding Ave & 72 St	6:05	6:35	6:59	7:23	7:47			3:30	3:54	4:18	4:42	5:06	5:30	5:54	6:18
NE 79 St & Biscayne Blvd	6:19	6:49	7:14	7:38	8:02			3:46	4:10	4:34	4:58	5:22	5:46	6:10	6:34
NW 79 St & NW 7 Ave	6:29	6:59	7:24	7:48	8:12			3:57	4:21	4:45	5:09	5:33	5:57	6:21	6:45
Northside Metrorail	6:38	7:09	7:34	7:58	8:22			4:08	4:32	4:56	5:20	5:44	6:08	6:32	6:56

Scheduled times are approximate. Actual arrival and departure times may vary depending on traffic and road conditions.
Las horas publicadas son aproximadas, pues dependen del trafico y otras condiciones de las vias.
Ore yo apwoksimatif. Vre le bis yo ap rive oswa deplase ka varye selon kondisyon sikilasyon sou wout yo.

Back

Schedule

79 Street MAX

- Weekday (Westbound)

HARDING AV 72 ST

6:05 AM
Dest: MAX to Northside Sta

6:35 AM
Dest: MAX to Northside Sta

6:59 AM
Dest: MAX to Northside Sta

7:23 AM
Dest: MAX to Northside Sta

7:47 AM
Dest: MAX to Northside Sta

3:30 PM
Dest: MAX to Northside Sta

3:54 PM
Dest: MAX to Northside Sta

4:18 PM
Dest: MAX to Northside Sta

4:42 PM
Dest: MAX to Northside Sta

5:06 PM
Dest: MAX to Northside Sta

5:30 PM
Dest: MAX to Northside Sta

5:54 PM
Dest: MAX to Northside Sta

6:18 PM
Dest: MAX to Northside Sta

MIAMI-DADE COUNTY

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Back

Schedule

112 Route L

- Weekday (Eastbound)

HIALEAH METRORAIL STATION

4:49 AM
Dest: L - Lincoln Road

5:10 AM
Dest: L - Lincoln Road

5:31 AM
Dest: L - Lincoln Road

5:39 AM
Dest: L - Lincoln Road

5:47 AM
Dest: L - Lincoln Road

5:57 AM
Dest: L - Lincoln Road

6:09 AM
Dest: L - Lincoln Road

6:19 AM
Dest: L - Lincoln Road

6:29 AM
Dest: L - Lincoln Road

6:38 AM
Dest: L - Lincoln Road

6:47 AM
Dest: L - Lincoln Road

6:59 AM
Dest: L - Lincoln Road

7:08 AM
Dest: L - Lincoln Road

7:30 AM
Dest: L - Lincoln Road

7:54 AM
Dest: L - Lincoln Road

8:20 AM
Dest: L - Lincoln Road

8:46 AM
Dest: L - Lincoln Road

9:16 AM
Dest: L - Lincoln Road

9:46 AM
Dest: L - Lincoln Road

10:16 AM
Dest: L - Lincoln Road

10:46 AM
Dest: L - Lincoln Road

11:16 AM
Dest: L - Lincoln Road

11:46 AM
Dest: L - Lincoln Road

12:16 PM
Dest: L - Lincoln Road

12:46 PM
Dest: L - Lincoln Road

1:17 PM
Dest: L - Lincoln Road

1:45 PM
Dest: L - Lincoln Road

Back

Schedule



2:43 PM
Dest: L - Lincoln Road

3:07 PM
Dest: L - Lincoln Road

3:31 PM
Dest: L - Lincoln Road

3:55 PM
Dest: L - Lincoln Road

4:19 PM
Dest: L - Lincoln Road

4:43 PM
Dest: L - Lincoln Road

5:07 PM
Dest: L - Lincoln Road

5:32 PM
Dest: L - Lincoln Road

5:57 PM
Dest: L - Lincoln Road

6:30 PM
Dest: L - Lincoln Road

7:02 PM
Dest: L - Lincoln Road

7:41 PM
Dest: L - Lincoln Road

8:08 PM
Dest: L - Lincoln Road

8:45 PM
Dest: L - Lincoln Road

9:23 PM
Dest: L - Lincoln Road

9:45 PM
Dest: L - Lincoln Road

10:25 PM
Dest: L - Lincoln Road

11:05 PM (16 min)
Dest: L - Lincoln Road

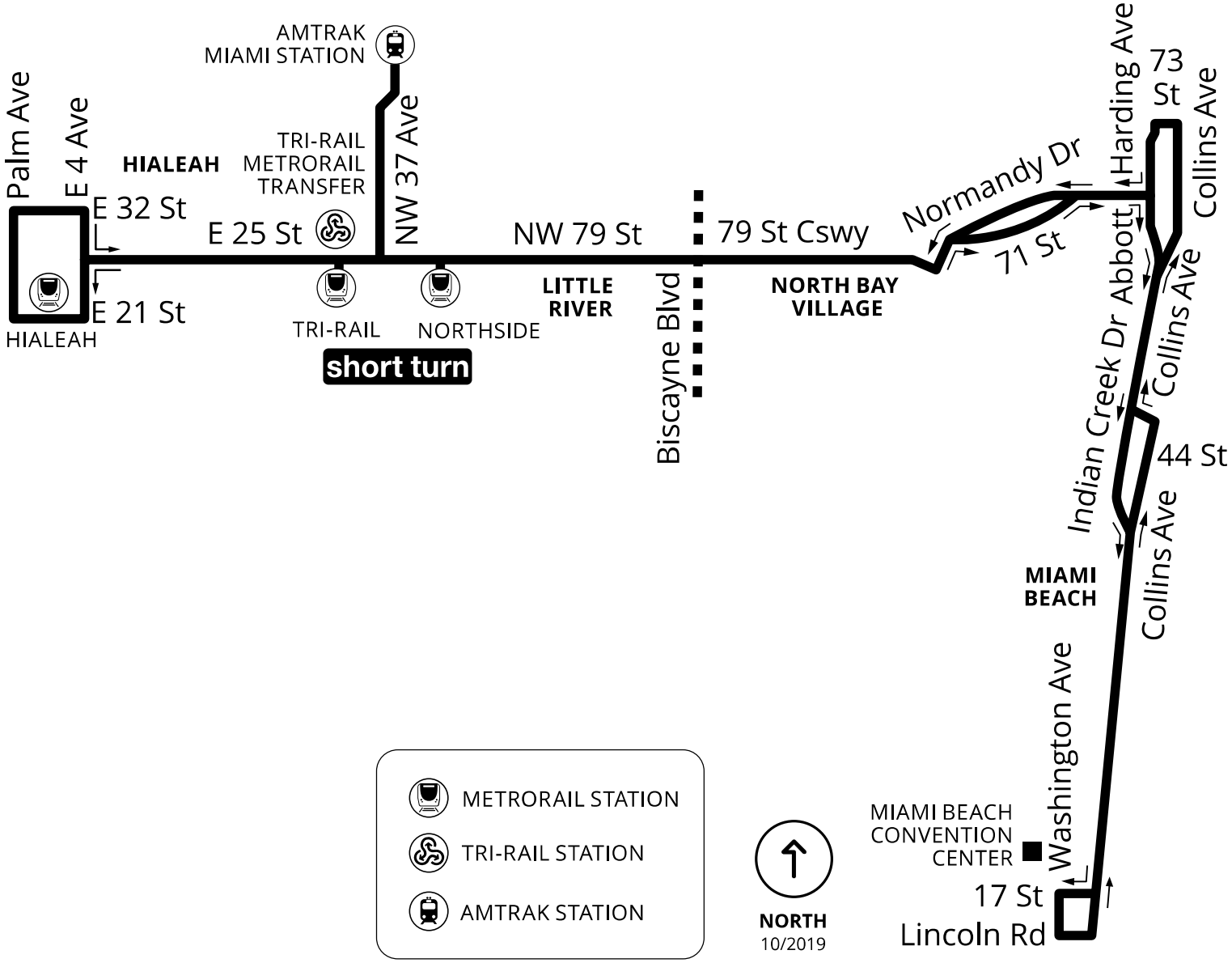
11:51 PM
Dest: L - 69 St / Abbott Ave



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L


AMTRAK
MIAMI STATION
Palm Ave
E 4 Ave
HIALEAH
TRI-RAIL
METRORAIL
TRANSFER
NW 37 Ave
E 32 St
E 25 St
NW 79 St
79 St Cswy
Normandy Dr
Harding Ave
73
St
Collins Ave
71 St
Abbott
E 21 St
HIALEAH
TRI-RAIL
NORTHSIDE
LITTLE
RIVER
Biscayne Blvd
NORTH BAY
VILLAGE
short turn
Indian Creek Dr
Collins Ave
44 St
MIAMI
BEACH
Collins Ave
Washington Ave
MIAMI BEACH
CONVENTION
CENTER
17 St
Lincoln Rd
METRORAIL STATION
TRI-RAIL STATION
AMTRAK STATION
NORTH
10/2019

Back

Schedule

112 Route L

- Weekday (Westbound)

WASHINGTON AV 17 ST

4:39 AM
Dest: L - Hialeah Station

5:21 AM
Dest: L - Hialeah Station

6:06 AM
Dest: L - Amtrak Station

6:23 AM
Dest: L - Amtrak Station

6:35 AM
Dest: L - Hialeah Station

6:47 AM
Dest: L - Amtrak Station

6:59 AM
Dest: L - Hialeah Station

7:11 AM
Dest: L - Amtrak Station

7:23 AM
Dest: L - Hialeah Station

7:35 AM
Dest: L - Amtrak Station

7:47 AM
Dest: L - Hialeah Station

7:59 AM
Dest: L - Amtrak Station

8:11 AM
Dest: L - Hialeah Station

8:23 AM
Dest: L - Amtrak Station

8:35 AM
Dest: L - Hialeah Station

8:47 AM
Dest: L - Amtrak Station

8:59 AM
Dest: L - Hialeah Station

9:11 AM
Dest: L - Amtrak Station

9:23 AM
Dest: L - Hialeah Station

9:35 AM
Dest: L - Amtrak Station

9:47 AM
Dest: L - Hialeah Station

9:59 AM
Dest: L - Amtrak Station

10:14 AM
Dest: L - Hialeah Station

10:29 AM
Dest: L - Amtrak Station

10:44 AM
Dest: L - Hialeah Station

10:59 AM
Dest: L - Amtrak Station

11:14 AM
Dest: L - Hialeah Station

Back

Schedule

11:44 AM
Dest: L - Hialeah Station

11:59 AM
Dest: L - Amtrak Station

12:14 PM
Dest: L - Hialeah Station

12:29 PM
Dest: L - Amtrak Station

12:44 PM
Dest: L - Hialeah Station

12:59 PM
Dest: L - Amtrak Station

1:14 PM
Dest: L - Hialeah Station

1:29 PM
Dest: L - Amtrak Station

1:44 PM
Dest: L - Hialeah Station

1:59 PM
Dest: L - Amtrak Station

2:14 PM
Dest: L - Hialeah Station

2:29 PM
Dest: L - Amtrak Station

2:44 PM
Dest: L - Hialeah Station

2:59 PM
Dest: L - Amtrak Station

3:12 PM
Dest: L - Hialeah Station

3:23 PM
Dest: L - Amtrak Station

3:35 PM
Dest: L - Hialeah Station

3:47 PM
Dest: L - Amtrak Station

3:59 PM
Dest: L - Hialeah Station

4:11 PM
Dest: L - Amtrak Station

4:23 PM
Dest: L - Hialeah Station

4:35 PM
Dest: L - Amtrak Station

4:47 PM
Dest: L - Hialeah Station

4:59 PM
Dest: L - Hialeah Station

5:11 PM
Dest: L - Amtrak Station

5:23 PM
Dest: L - Hialeah Station

5:35 PM
Dest: L - Amtrak Station

5:47 PM
Dest: L - Hialeah Station

5:59 PM
Dest: L - Amtrak Station

Back

Schedule

6:23 PM
Dest: L - Northside Station

6:38 PM
Dest: L - Hialeah Station

6:53 PM
Dest: L - Hialeah Station

7:10 PM
Dest: L - Northside Station

7:23 PM
Dest: L - Hialeah Station

7:39 PM
Dest: L - Northside Station

7:59 PM
Dest: L - Hialeah Station

8:19 PM
Dest: L - Hialeah Station

8:49 PM
Dest: L - Hialeah Station

9:29 PM
Dest: L - Hialeah Station

10:09 PM
Dest: L - Hialeah Station

10:49 PM
Dest: L - Hialeah Station

11:29 PM (39 min)
Dest: L - Northside Station

12:09 AM (Under 1 min)
Dest: L - Hialeah Station

12:41 AM (Under 1 min)
Dest: L - Northside Station

1:41 AM (Under 1 min)
Dest: L - Northside Station

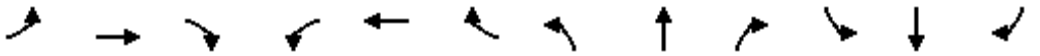
2:41 AM (Under 1 min)
Dest: L - Northside Station

3:41 AM (Under 1 min)
Dest: L - Amtrak Station

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Appendix F - Existing Traffic Conditions Analysis

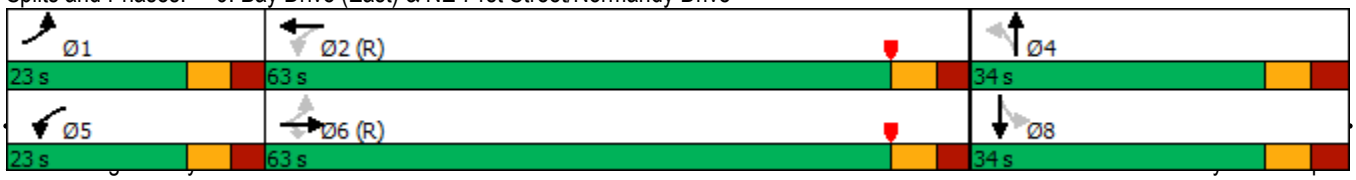


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1551	14	73	1095	145	35	1	88	230	7	33
Future Volume (vph)	30	1551	14	73	1095	145	35	1	88	230	7	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	90		0	50		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982			0.852			0.878	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5136	1615	1805	3545	0	1805	1619	0	1805	1668	0
Flt Permitted	0.114			0.104			0.729			0.696		
Satd. Flow (perm)	217	5136	1615	198	3545	0	1385	1619	0	1322	1668	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			105		16			93			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1479			1470			539			580	
Travel Time (s)		33.6			33.4			12.3			13.2	
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	31	1599	14	84	1259	167	37	1	93	247	8	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	1599	14	84	1426	0	37	94	0	247	43	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	40		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	15.0	55.0	55.0	15.0	55.0		28.0	28.0		28.0	28.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	63.0	63.0	23.0	63.0		34.0	34.0		34.0	34.0	
Total Split (%)	19.2%	52.5%	52.5%	19.2%	52.5%		28.3%	28.3%		28.3%	28.3%	
Maximum Green (s)	16.0	56.0	56.0	16.0	56.0		26.4	26.4		26.4	26.4	
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)	3.0	3.0	3.0	3.0	3.0		3.6	3.6		3.6	3.6	
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)	7.0	7.0	7.0	7.0	7.0		7.6	7.6		7.6	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	1.0	1.0	2.0	1.0		2.5	2.5		2.5	2.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	73.9	69.5	69.5	77.5	73.1		24.7	24.7		24.7	24.7	
Actuated g/C Ratio	0.62	0.58	0.58	0.65	0.61		0.21	0.21		0.21	0.21	
v/c Ratio	0.15	0.54	0.01	0.39	0.66		0.13	0.23		0.91	0.12	
Control Delay	11.6	20.6	0.0	12.8	18.4		39.1	9.3		82.3	15.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.6	20.6	0.0	12.8	18.4		39.1	9.3		82.3	15.9	
LOS	B	C	A	B	B		D	A		F	B	
Approach Delay		20.2			18.1			17.7			72.5	
Approach LOS		C			B			B			E	
Queue Length 50th (ft)	8	286	0	21	406		23	1		185	5	
Queue Length 95th (ft)	27	450	m0	38	471		54	45		#330	36	
Internal Link Dist (ft)		1399			1390			459			500	
Turn Bay Length (ft)	150			100			90			50		
Base Capacity (vph)	357	2976	980	347	2166		304	428		290	394	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.54	0.01	0.24	0.66		0.12	0.22		0.85	0.11	

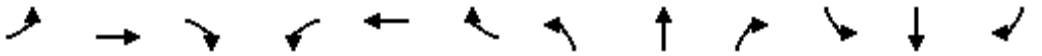
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 7 (6%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 23.5	Intersection LOS: C
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 9: Bay Drive (East) & NE 71st Street/Normandy Drive



HCM 6th Signalized Intersection Summary
9: Bay Drive (East) & NE 71st Street/Normandy Drive

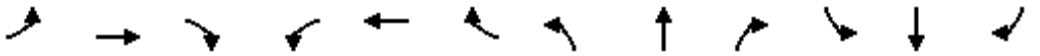
02/15/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1551	14	73	1095	145	35	1	88	230	7	33
Future Volume (veh/h)	30	1551	14	73	1095	145	35	1	88	230	7	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1900	1885	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	31	1599	14	84	1259	167	37	1	93	247	8	35
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	221	2887	903	220	1837	243	336	4	351	287	68	297
Arrive On Green	0.01	0.19	0.19	0.04	0.57	0.57	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1810	5147	1610	1810	3206	423	1385	17	1596	1323	308	1349
Grp Volume(v), veh/h	31	1599	14	84	706	720	37	0	94	247	0	43
Grp Sat Flow(s),veh/h/ln	1810	1716	1610	1810	1805	1824	1385	0	1613	1323	0	1657
Q Serve(g_s), s	0.9	33.9	0.9	2.3	32.9	33.4	2.6	0.0	5.8	20.6	0.0	2.5
Cycle Q Clear(g_c), s	0.9	33.9	0.9	2.3	32.9	33.4	5.1	0.0	5.8	26.4	0.0	2.5
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.99	1.00		0.81
Lane Grp Cap(c), veh/h	221	2887	903	220	1035	1045	336	0	355	287	0	365
V/C Ratio(X)	0.14	0.55	0.02	0.38	0.68	0.69	0.11	0.00	0.26	0.86	0.00	0.12
Avail Cap(c_a), veh/h	414	2887	903	390	1035	1045	336	0	355	287	0	365
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	35.3	21.8	16.6	18.0	18.1	39.5	0.0	38.8	50.5	0.0	37.5
Incr Delay (d2), s/veh	0.1	0.7	0.0	0.4	3.6	3.7	0.1	0.0	0.3	21.9	0.0	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(95%),veh/ln	0.6	22.0	0.6	1.7	20.4	20.8	1.6	0.0	4.2	14.2	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	36.0	21.8	17.0	21.6	21.8	39.6	0.0	39.1	72.4	0.0	37.6
LnGrp LOS	B	D	C	B	C	C	D	A	D	E	A	D
Approach Vol, veh/h		1644			1510			131			290	
Approach Delay, s/veh		35.5			21.4			39.2			67.3	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	75.8		34.0	11.7	74.3		34.0				
Change Period (Y+Rc), s	7.0	7.0		7.6	7.0	7.0		7.6				
Max Green Setting (Gmax), s	16.0	56.0		26.4	16.0	56.0		26.4				
Max Q Clear Time (g_c+I1), s	2.9	35.4		7.8	4.3	35.9		28.4				
Green Ext Time (p_c), s	0.0	1.1		0.3	0.1	2.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			32.3									
HCM 6th LOS			C									

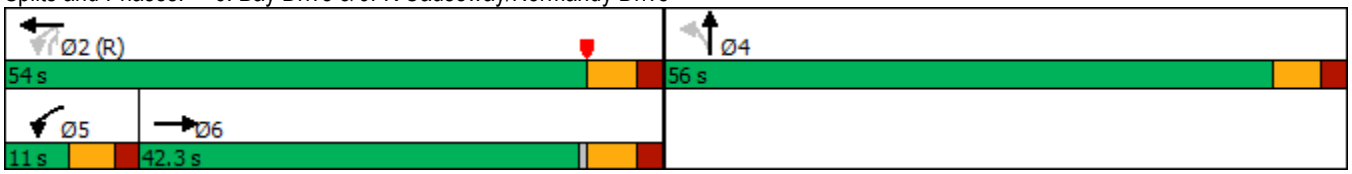


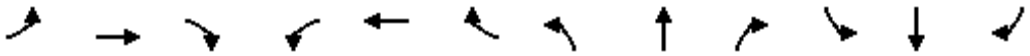
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1734	21	12	1217	16	0	35	11	0	0	0
Future Volume (vph)	0	1734	21	12	1217	16	0	35	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		100	0		0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.998				0.850			
Flt Protected				0.950								
Satd. Flow (prot)	0	4797	0	1805	5177	0	0	1900	1615	0	0	0
Flt Permitted				0.076								
Satd. Flow (perm)	0	4797	0	144	5177	0	0	1900	1615	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2				33			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3100			1397			932			973	
Travel Time (s)		70.5			31.8			21.2			22.1	
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.78	0.78	0.78	0.25	0.25	0.25
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1970	24	13	1337	18	0	45	14	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1994	0	13	1355	0	0	45	14	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1		1	1	1			
Detector Template		Thru		Left	Thru		Left	Thru	Right			
Leading Detector (ft)		40		40	40		20	40	40			
Trailing Detector (ft)		0		0	0		0	0	0			
Detector 1 Position(ft)		0		0	0		0	0	0			
Detector 1 Size(ft)		40		40	40		20	40	40			
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Queue (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Delay (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Turn Type		NA		pm+pt	NA			NA	custom			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		2			
Detector Phase		6		5	2		4	4	2			
Switch Phase												
Minimum Initial (s)		16.0		1.0	16.0		7.0	7.0	16.0			
Minimum Split (s)		36.0		6.7	50.0		50.0	50.0	50.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)		42.3		11.0	54.0		56.0	56.0	54.0			
Total Split (%)		38.5%		10.0%	49.1%		50.9%	50.9%	49.1%			
Maximum Green (s)		36.0		5.3	47.7		49.7	49.7	47.7			
Yellow Time (s)		4.0		3.7	4.0		4.0	4.0	4.0			
All-Red Time (s)		2.3		2.0	2.3		2.3	2.3	2.3			
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0			
Total Lost Time (s)		6.3		5.7	6.3			6.3	6.3			
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		1.0		2.0	1.0		2.5	2.5	1.0			
Recall Mode		None		None	C-Max		None	None	C-Max			
Act Effct Green (s)		89.0		92.5	93.2			8.1	93.2			
Actuated g/C Ratio		0.81		0.84	0.85			0.07	0.85			
v/c Ratio		0.51		0.07	0.31			0.32	0.01			
Control Delay		5.7		2.8	2.6			54.1	0.3			
Queue Delay		0.0		0.0	0.0			0.0	0.0			
Total Delay		5.7		2.8	2.6			54.1	0.3			
LOS		A		A	A			D	A			
Approach Delay		5.7			2.6			41.3				
Approach LOS		A			A			D				
Queue Length 50th (ft)		122		1	65			31	0			
Queue Length 95th (ft)		267		5	93			57	1			
Internal Link Dist (ft)		3020			1317			852			893	
Turn Bay Length (ft)				250					100			
Base Capacity (vph)		3881		201	4386			858	1373			
Starvation Cap Reductn		0		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.51		0.06	0.31			0.05	0.01			

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 9 (8%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 5.1		Intersection LOS: A	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			

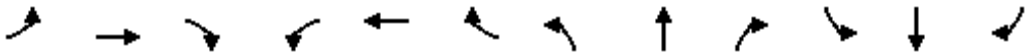
Splits and Phases: 6: Bay Drive & JFK Causeway/Normandy Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1734	21	12	1217	16	0	35	11	0	0	0
Future Volume (vph)	0	1734	21	12	1217	16	0	35	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.3		5.7	6.3			6.3	6.3			
Lane Util. Factor		0.91		1.00	0.91			1.00	1.00			
Frt		1.00		1.00	1.00			1.00	0.85			
Flt Protected		1.00		0.95	1.00			1.00	1.00			
Satd. Flow (prot)		4798		1805	5177			1900	1615			
Flt Permitted		1.00		0.08	1.00			1.00	1.00			
Satd. Flow (perm)		4798		145	5177			1900	1615			
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.78	0.78	0.78	0.25	0.25	0.25
Adj. Flow (vph)	0	1970	24	13	1337	18	0	45	14	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	0	1994	0	13	1355	0	0	45	12	0	0	0
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA		pm+pt	NA			NA	custom			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		2			
Actuated Green, G (s)		83.1		90.7	90.7			6.7	90.7			
Effective Green, g (s)		83.1		90.7	90.7			6.7	90.7			
Actuated g/C Ratio		0.76		0.82	0.82			0.06	0.82			
Clearance Time (s)		6.3		5.7	6.3			6.3	6.3			
Vehicle Extension (s)		1.0		2.0	1.0			2.5	1.0			
Lane Grp Cap (vph)		3624		148	4268			115	1331			
v/s Ratio Prot		c0.42		0.00	c0.26			c0.02				
v/s Ratio Perm				0.07					0.01			
v/c Ratio		0.55		0.09	0.32			0.39	0.01			
Uniform Delay, d1		5.6		3.3	2.3			49.7	1.7			
Progression Factor		1.00		1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.1		0.1	0.2			1.6	0.0			
Delay (s)		5.7		3.3	2.5			51.3	1.7			
Level of Service		A		A	A			D	A			
Approach Delay (s)		5.7			2.5			39.5			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	5.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

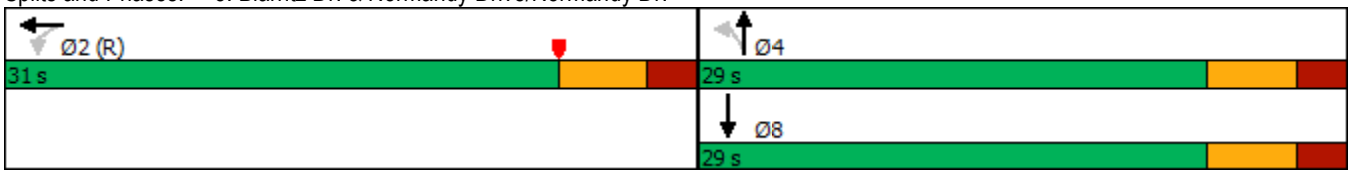


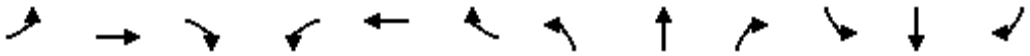
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	1173	57	29	75	0	0	46	124
Future Volume (vph)	0	0	0	6	1173	57	29	75	0	0	46	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	155		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.993						0.901	
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6328	0	1805	1900	0	0	1712	0
Flt Permitted							0.624					
Satd. Flow (perm)	0	0	0	0	6328	0	1186	1900	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					19						17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			117			185			590	
Travel Time (s)		8.0			2.7			4.2			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	6	1261	61	37	96	0	0	58	157
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1328	0	37	96	0	0	215	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				16.0	16.0		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.0	25.0		23.0	23.0			23.0	
Total Split (s)				31.0	31.0		29.0	29.0			29.0	
Total Split (%)				51.7%	51.7%		48.3%	48.3%			48.3%	
Maximum Green (s)				24.7	24.7		22.7	22.7			22.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					24.7		22.7	22.7			22.7	
Actuated g/C Ratio					0.41		0.38	0.38			0.38	
v/c Ratio					0.51		0.08	0.13			0.33	
Control Delay					4.8		12.7	12.9			13.9	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					4.8		12.7	12.9			13.9	
LOS					A		B	B			B	
Approach Delay					4.8			12.8			13.9	
Approach LOS					A			B			B	
Queue Length 50th (ft)					29		8	22			49	
Queue Length 95th (ft)					36		21	41			80	
Internal Link Dist (ft)		272			37			105			510	
Turn Bay Length (ft)							155					
Base Capacity (vph)					2616		448	718			658	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.51		0.08	0.13			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 18 (30%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 6.6		Intersection LOS: A	
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Biarritz Dr. & Normandy Drive/Normandy Dr.





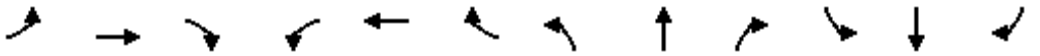
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	6	1173	57	29	75	0	0	46	124
Future Volume (veh/h)	0	0	0	6	1173	57	29	75	0	0	46	124
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				6	1261	61	37	96	0	0	58	157
Peak Hour Factor				0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				12	2737	136	460	719	0	0	171	464
Arrive On Green				0.14	0.14	0.14	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				30	6648	330	1185	1900	0	0	453	1226
Grp Volume(v), veh/h				385	603	341	37	96	0	0	0	215
Grp Sat Flow(s),veh/h/ln				1899	1634	1841	1185	1900	0	0	0	1679
Q Serve(g_s), s				11.3	10.2	10.2	1.4	2.0	0.0	0.0	0.0	5.5
Cycle Q Clear(g_c), s				11.3	10.2	10.2	6.9	2.0	0.0	0.0	0.0	5.5
Prop In Lane				0.02		0.18	1.00		0.00	0.00		0.73
Lane Grp Cap(c), veh/h				782	1345	758	460	719	0	0	0	635
V/C Ratio(X)				0.49	0.45	0.45	0.08	0.13	0.00	0.00	0.00	0.34
Avail Cap(c_a), veh/h				782	1345	758	460	719	0	0	0	635
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				20.1	19.7	19.7	15.7	12.2	0.0	0.0	0.0	13.3
Incr Delay (d2), s/veh				2.2	1.1	1.9	0.3	0.4	0.0	0.0	0.0	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				10.1	7.8	8.9	0.7	1.5	0.0	0.0	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				22.3	20.7	21.6	16.1	12.6	0.0	0.0	0.0	14.7
LnGrp LOS				C	C	C	B	B	A	A	A	B
Approach Vol, veh/h					1328			133			215	
Approach Delay, s/veh					21.4			13.6			14.7	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	31.0	29.0			29.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 25	* 23			* 23			
Max Q Clear Time (g_c+I1), s	13.3	8.9			7.5			
Green Ext Time (p_c), s	1.1	0.3			0.5			

Intersection Summary		
HCM 6th Ctrl Delay	19.9	
HCM 6th LOS	B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

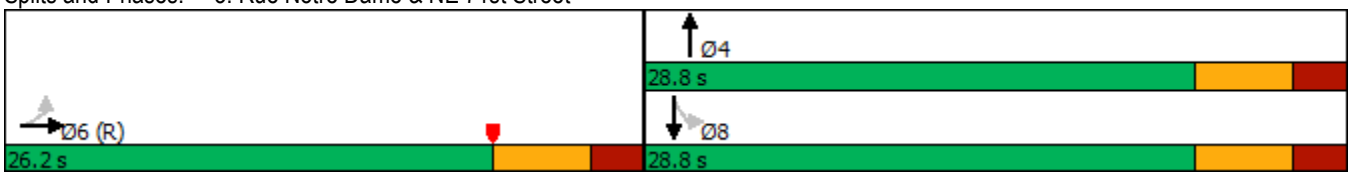


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	1638	10	0	0	0	0	8	16	65	13	0
Future Volume (vph)	75	1638	10	0	0	0	0	8	16	65	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.911				
Flt Protected		0.998									0.960	
Satd. Flow (prot)	0	4950	0	0	0	0	0	1558	0	0	1642	0
Flt Permitted		0.998									0.758	
Satd. Flow (perm)	0	4950	0	0	0	0	0	1558	0	0	1296	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						1				
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		910			2580			388			447	
Travel Time (s)		17.7			58.6			8.8			10.2	
Peak Hour Factor	0.94	0.94	0.94	0.25	0.25	0.25	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0						0			0	
Adj. Flow (vph)	80	1743	11	0	0	0	0	12	23	88	18	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1834	0	0	0	0	0	35	0	0	106	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Minimum Split (s)	20.0	20.0						23.0		23.0	23.0	
Total Split (s)	26.2	26.2						28.8		28.8	28.8	
Total Split (%)	47.6%	47.6%						52.4%		52.4%	52.4%	
Maximum Green (s)	20.0	20.0						22.5		22.5	22.5	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.2	2.2						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		20.0						22.5			22.5	
Actuated g/C Ratio		0.36						0.41			0.41	
v/c Ratio		1.02						0.05			0.20	
Control Delay		45.9						10.0			11.8	
Queue Delay		0.0						0.0			0.0	
Total Delay		45.9						10.0			11.8	
LOS		D						A			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		45.9						10.0			11.8	
Approach LOS		D						A			B	
Queue Length 50th (ft)		~222						6			21	
Queue Length 95th (ft)		#331						15			38	
Internal Link Dist (ft)		830			2500			308			367	
Turn Bay Length (ft)												
Base Capacity (vph)		1801						637			530	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		1.02						0.05			0.20	

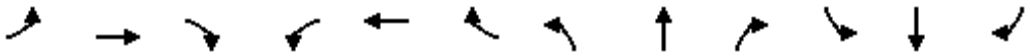
Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 43.5		Intersection LOS: D	
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Rue Notre Dame & NE 71st Street



HCM 6th Signalized Intersection Summary
3: Rue Notre Dame & NE 71st Street

02/15/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1638	10	0	0	0	0	8	16	65	13	0
Future Volume (veh/h)	75	1638	10	0	0	0	0	8	16	65	13	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	80	1743	11				0	12	23	88	18	0
Peak Hour Factor	0.94	0.94	0.94				0.69	0.69	0.69	0.74	0.74	0.74
Percent Heavy Veh, %	0	1	0				0	0	0	0	0	0
Cap, veh/h	82	1895	12				0	238	457	601	113	0
Arrive On Green	0.36	0.36	0.36				0.00	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	224	5210	34				0	583	1117	1176	275	0
Grp Volume(v), veh/h	668	556	610				0	0	35	106	0	0
Grp Sat Flow(s),veh/h/ln	1874	1716	1879				0	0	1699	1451	0	0
Q Serve(g_s), s	19.4	16.8	16.8				0.0	0.0	0.7	2.0	0.0	0.0
Cycle Q Clear(g_c), s	19.4	16.8	16.8				0.0	0.0	0.7	2.7	0.0	0.0
Prop In Lane	0.12		0.02				0.00		0.66	0.83		0.00
Lane Grp Cap(c), veh/h	681	624	683				0	0	695	713	0	0
V/C Ratio(X)	0.98	0.89	0.89				0.00	0.00	0.05	0.15	0.00	0.00
Avail Cap(c_a), veh/h	681	624	683				0	0	695	713	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.3	16.5	16.5				0.0	0.0	9.8	10.4	0.0	0.0
Incr Delay (d2), s/veh	30.0	17.5	16.3				0.0	0.0	0.1	0.4	0.0	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
%ile BackOfQ(95%),veh/ln	18.3	13.2	14.0				0.0	0.0	0.4	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	34.0	32.8				0.0	0.0	9.9	10.9	0.0	0.0
LnGrp LOS	D	C	C				A	A	A	B	A	A
Approach Vol, veh/h		1834						35			106	
Approach Delay, s/veh		38.4						9.9			10.9	
Approach LOS		D						A			B	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				28.8		26.2		28.8				
Change Period (Y+Rc), s				* 6.3		6.2		* 6.3				
Max Green Setting (Gmax), s				* 23		20.0		* 23				
Max Q Clear Time (g_c+I1), s				2.7		21.4		4.7				
Green Ext Time (p_c), s				0.0		0.0		0.2				

Intersection Summary			
HCM 6th Ctrl Delay			36.5
HCM 6th LOS			D

Notes

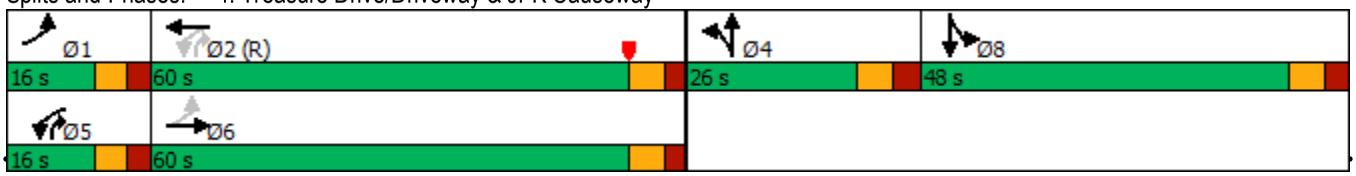
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1546	121	124	1111	2	182	2	214	1	3	1
Future Volume (vph)	6	1546	121	124	1111	2	182	2	214	1	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	25		0	0		500	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989							0.850		0.975	
Flt Protected	0.950			0.950				0.953			0.991	
Satd. Flow (prot)	1805	4735	0	1805	5187	0	0	1811	1615	0	1836	0
Flt Permitted	0.204			0.076				0.953			0.991	
Satd. Flow (perm)	388	4735	0	144	5187	0	0	1811	1615	0	1836	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9							264		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			3100			603			197	
Travel Time (s)		15.5			70.5			13.7			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.81	0.81	0.81	0.42	0.42	0.42
Heavy Vehicles (%)	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	1680	132	141	1263	2	225	2	264	2	7	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1812	0	141	1265	0	0	227	264	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	40		40	40		20	40	40	20	40	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	40	40		40	40		20	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	custom	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6			2					2			
Detector Phase	1	6		5	2		4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	3.8	7.0		3.8	7.0		7.0	7.0	3.8	7.0	7.0	
Minimum Split (s)	10.0	54.0		10.0	54.0		19.0	19.0	10.0	41.0	41.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	16.0	60.0		16.0	60.0		26.0	26.0	16.0	48.0	48.0	
Total Split (%)	10.7%	40.0%		10.7%	40.0%		17.3%	17.3%	10.7%	32.0%	32.0%	
Maximum Green (s)	9.8	53.5		9.8	53.5		18.9	18.9	9.8	41.0	41.0	
Yellow Time (s)	3.7	4.0		3.7	4.0		4.0	4.0	3.7	4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		3.1	3.1	2.5	3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	2.0	1.0		2.0	1.0		3.0	3.0	2.0	2.5	2.5	
Recall Mode	None	None		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	100.4	95.4		112.1	109.6			18.9	112.1		7.1	
Actuated g/C Ratio	0.67	0.64		0.75	0.73			0.13	0.75		0.05	
v/c Ratio	0.02	0.60		0.64	0.33			1.00	0.21		0.12	
Control Delay	7.5	18.4		28.0	8.6			122.7	1.2		63.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	7.5	18.4		28.0	8.6			122.7	1.2		63.2	
LOS	A	B		C	A			F	A		E	
Approach Delay		18.4			10.5			57.4			63.2	
Approach LOS		B			B			E			E	
Queue Length 50th (ft)	1	307		28	112			225	0		9	
Queue Length 95th (ft)	7	515		112	246			#341	16		13	
Internal Link Dist (ft)		602			3020			523			117	
Turn Bay Length (ft)	100			25					500			
Base Capacity (vph)	365	3015		232	3788			228	1273		503	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.60		0.61	0.33			1.00	0.21		0.02	

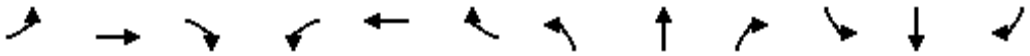
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 106 (71%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 72.8%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: Treasure Drive/Driveway & JFK Causeway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1546	121	124	1111	2	182	2	214	1	3	1
Future Volume (vph)	6	1546	121	124	1111	2	182	2	214	1	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1805	4735		1805	5186			1810	1615		1837	
Flt Permitted	0.20	1.00		0.08	1.00			0.95	1.00		0.99	
Satd. Flow (perm)	389	4735		143	5186			1810	1615		1837	
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.81	0.81	0.81	0.42	0.42	0.42
Adj. Flow (vph)	7	1680	132	141	1262	2	225	2	264	2	7	2
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	75	0	2	0
Lane Group Flow (vph)	7	1808	0	141	1265	0	0	227	189	0	9	0
Heavy Vehicles (%)	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	custom	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6			2					2			
Actuated Green, G (s)	92.2	91.2		107.6	100.4			18.9	107.6		2.9	
Effective Green, g (s)	92.2	91.2		107.6	100.4			18.9	107.6		2.9	
Actuated g/C Ratio	0.61	0.61		0.72	0.67			0.13	0.72		0.02	
Clearance Time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Vehicle Extension (s)	2.0	1.0		2.0	1.0			3.0	2.0		2.5	
Lane Grp Cap (vph)	248	2878		215	3471			228	1158		35	
v/s Ratio Prot	0.00	0.38		c0.04	0.24			c0.13	0.01		c0.00	
v/s Ratio Perm	0.02			c0.42					0.11			
v/c Ratio	0.03	0.63		0.66	0.36			1.00	0.16		0.26	
Uniform Delay, d1	11.2	18.7		17.2	10.8			65.5	6.8		72.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.3		5.4	0.3			58.0	0.0		2.8	
Delay (s)	11.2	19.0		22.6	11.1			123.5	6.8		75.3	
Level of Service	B	B		C	B			F	A		E	
Approach Delay (s)		18.9			12.3			60.8			75.3	
Approach LOS		B			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

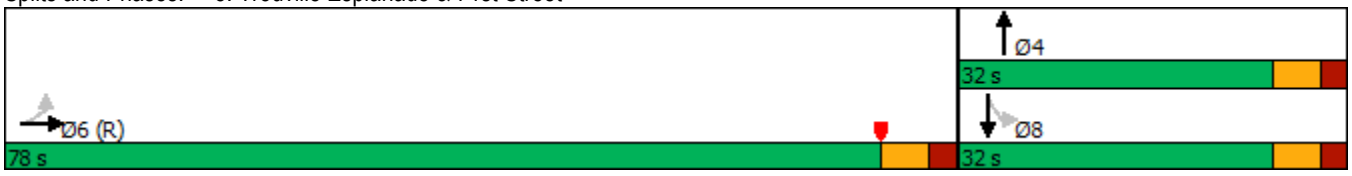


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	1761	18	0	0	0	0	11	16	12	7	0
Future Volume (vph)	24	1761	18	0	0	0	0	11	16	12	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.922				
Flt Protected		0.999								0.950		
Satd. Flow (prot)	0	4953	0	0	0	0	0	1752	0	1805	1900	0
Flt Permitted		0.999								0.737		
Satd. Flow (perm)	0	4953	0	0	0	0	0	1752	0	1400	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3						13				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1600			1203			590			226	
Travel Time (s)		36.4			27.3			13.4			5.1	
Peak Hour Factor	0.84	0.84	0.84	0.25	0.25	0.25	0.88	0.88	0.88	0.82	0.82	0.82
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	29	2096	21	0	0	0	0	13	18	15	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2146	0	0	0	0	0	31	0	15	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	16.0	16.0						10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	72.0	72.0						26.0		26.0	26.0	
Total Split (s)	78.0	78.0						32.0		32.0	32.0	
Total Split (%)	70.9%	70.9%						29.1%		29.1%	29.1%	
Maximum Green (s)	71.7	71.7						25.7		25.7	25.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.3	2.3						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		6.3						6.3		6.3	6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						1.0		2.5	2.5	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		71.7						25.7		25.7	25.7	
Actuated g/C Ratio		0.65						0.23		0.23	0.23	
v/c Ratio		0.66						0.07		0.05	0.02	
Control Delay		13.0						23.0		33.3	32.7	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		13.0						23.0		33.3	32.7	
LOS		B						C		C	C	
Approach Delay		13.0						23.0			33.1	
Approach LOS		B						C			C	
Queue Length 50th (ft)		310						10		8	5	
Queue Length 95th (ft)		316						34		24	17	
Internal Link Dist (ft)		1520			1123			510			146	
Turn Bay Length (ft)										100		
Base Capacity (vph)		3229						419		327	443	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.66						0.07		0.05	0.02	

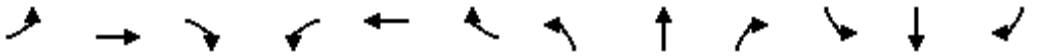
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 4 (4%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Trouville Esplanade & 71st Street



HCM 6th Signalized Intersection Summary
8: Trouville Esplanade & 71st Street

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1761	18	0	0	0	0	11	16	12	7	0
Future Volume (veh/h)	24	1761	18	0	0	0	0	11	16	12	7	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	29	2096	21				0	12	18	15	9	0
Peak Hour Factor	0.84	0.84	0.84				0.88	0.88	0.88	0.82	0.82	0.82
Percent Heavy Veh, %	0	1	0				0	0	0	0	0	0
Cap, veh/h	45	3486	36				0	160	240	374	444	0
Arrive On Green	0.65	0.65	0.65				0.00	0.23	0.23	0.23	0.23	0.00
Sat Flow, veh/h	70	5348	55				0	686	1029	1401	1900	0
Grp Volume(v), veh/h	784	650	712				0	0	30	15	9	0
Grp Sat Flow(s),veh/h/ln	1882	1716	1875				0	0	1715	1401	1900	0
Q Serve(g_s), s	27.4	23.4	23.4				0.0	0.0	1.5	0.9	0.4	0.0
Cycle Q Clear(g_c), s	27.4	23.4	23.4				0.0	0.0	1.5	2.4	0.4	0.0
Prop In Lane	0.04		0.03				0.00		0.60	1.00		0.00
Lane Grp Cap(c), veh/h	1227	1118	1222				0	0	401	374	444	0
V/C Ratio(X)	0.64	0.58	0.58				0.00	0.00	0.07	0.04	0.02	0.00
Avail Cap(c_a), veh/h	1227	1118	1222				0	0	401	374	444	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.4	10.7	10.7				0.0	0.0	32.9	33.8	32.5	0.0
Incr Delay (d2), s/veh	2.6	2.2	2.0				0.0	0.0	0.4	0.2	0.1	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
%ile BackOfQ(95%),veh/ln	16.8	13.7	14.7				0.0	0.0	1.2	0.6	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	12.9	12.8				0.0	0.0	33.2	34.0	32.5	0.0
LnGrp LOS	B	B	B				A	A	C	C	C	A
Approach Vol, veh/h		2146						30			24	
Approach Delay, s/veh		13.3						33.2			33.5	
Approach LOS		B						C			C	

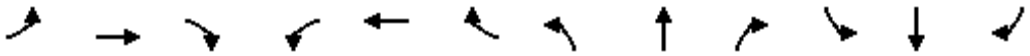
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				32.0		78.0		32.0				
Change Period (Y+Rc), s				* 6.3		6.3		* 6.3				
Max Green Setting (Gmax), s				* 26		71.7		* 26				
Max Q Clear Time (g_c+I1), s				3.5		29.4		4.4				
Green Ext Time (p_c), s				0.0		9.3		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

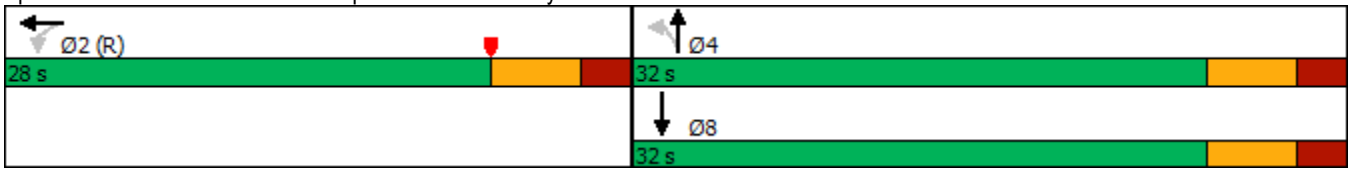


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	13	1179	3	27	18	0	0	8	13
Future Volume (vph)	0	0	0	13	1179	3	27	18	0	0	8	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.917	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	5009	0	1805	1900	0	0	1742	0
Flt Permitted					0.999		0.740					
Satd. Flow (perm)	0	0	0	0	5009	0	1406	1900	0	0	1742	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	14	1268	3	35	23	0	0	10	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1285	0	35	23	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				22.0	22.0		26.0	26.0			26.0	
Total Split (s)				28.0	28.0		32.0	32.0			32.0	
Total Split (%)				46.7%	46.7%		53.3%	53.3%			53.3%	
Maximum Green (s)				21.7	21.7		25.7	25.7			25.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					21.7		25.7	25.7			25.7	
Actuated g/C Ratio					0.36		0.43	0.43			0.43	
v/c Ratio					0.71		0.06	0.03			0.03	
Control Delay					19.1		10.5	10.1			8.1	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					19.1		10.5	10.1			8.1	
LOS					B		B	B			A	
Approach Delay					19.1			10.3			8.1	
Approach LOS					B			B			A	
Queue Length 50th (ft)					142		7	5			3	
Queue Length 95th (ft)					187		18	13			13	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					1812		602	813			751	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.71		0.06	0.03			0.03	

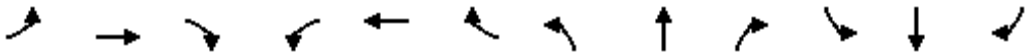
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 41 (68%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 18.5		Intersection LOS: B	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.



HCM 6th Signalized Intersection Summary
6: Trouville Esplanade & Normandy Dr.

02/16/2024



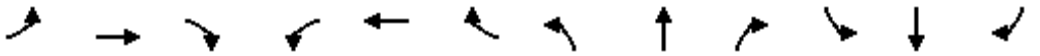
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	13	1179	3	27	18	0	0	8	13
Future Volume (veh/h)	0	0	0	13	1179	3	27	18	0	0	8	13
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				14	1268	3	35	23	0	0	10	16
Peak Hour Factor				0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				20	1972	5	710	814	0	0	282	451
Arrive On Green				0.36	0.36	0.36	0.43	0.43	0.00	0.00	0.43	0.43
Sat Flow, veh/h				57	5454	13	1407	1900	0	0	658	1053
Grp Volume(v), veh/h				469	389	427	35	23	0	0	0	26
Grp Sat Flow(s),veh/h/ln				1897	1729	1898	1407	1900	0	0	0	1711
Q Serve(g_s), s				12.6	11.1	11.1	0.9	0.4	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s				12.6	11.1	11.1	1.4	0.4	0.0	0.0	0.0	0.5
Prop In Lane				0.03		0.01	1.00		0.00	0.00		0.62
Lane Grp Cap(c), veh/h				686	625	686	710	814	0	0	0	733
V/C Ratio(X)				0.68	0.62	0.62	0.05	0.03	0.00	0.00	0.00	0.04
Avail Cap(c_a), veh/h				686	625	686	710	814	0	0	0	733
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				16.2	15.8	15.8	10.4	9.9	0.0	0.0	0.0	10.0
Incr Delay (d2), s/veh				5.5	4.6	4.2	0.1	0.1	0.0	0.0	0.0	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
%ile BackOfQ(95%),veh/ln				9.8	8.2	8.8	0.5	0.3	0.0	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.7	20.4	20.0	10.5	10.0	0.0	0.0	0.0	10.0
LnGrp LOS				C	C	B	B	A	A	A	A	B
Approach Vol, veh/h					1285			58			26	
Approach Delay, s/veh					20.7			10.3			10.0	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	28.0	32.0			32.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 22	* 26			* 26			
Max Q Clear Time (g_c+I1), s	14.6	3.4			2.5			
Green Ext Time (p_c), s	0.8	0.1			0.0			

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



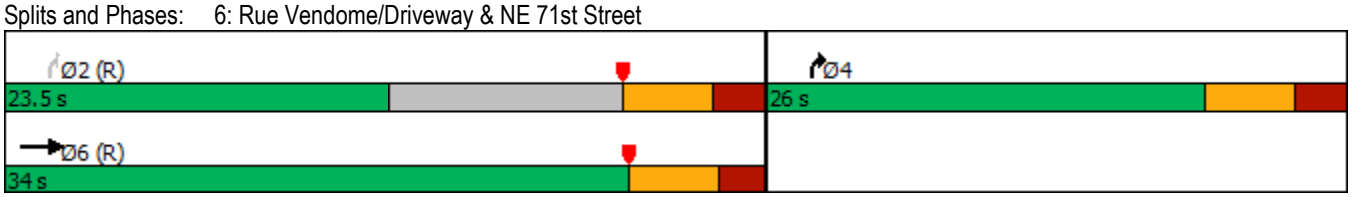
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1653	11	0	0	0	0	0	34	0	0	0
Future Volume (vph)	0	1653	11	0	0	0	0	0	34	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999							0.865			
Flt Protected												
Satd. Flow (prot)	0	4960	0	0	0	0	0	0	1644	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	4960	0	0	0	0	0	0	1644	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2580			1479			445			1028	
Travel Time (s)		50.3			33.6			10.1			23.4	
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.88	0.88	0.88	0.25	0.25	0.25
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	0	1797	12	0	0	0	0	0	39	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1809	0	0	0	0	0	0	39	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1							1			
Detector Template		Thru							Right			
Leading Detector (ft)		40							40			
Trailing Detector (ft)		0							0			
Detector 1 Position(ft)		0							0			
Detector 1 Size(ft)		40							40			
Detector 1 Type		Cl+Ex							Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0							0.0			
Detector 1 Queue (s)		0.0							0.0			
Detector 1 Delay (s)		0.0							0.0			
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Detector Phase		6							4			
Switch Phase												
Minimum Initial (s)		4.0							7.0			
Minimum Split (s)		28.0							20.0			
Total Split (s)		34.0							26.0			
Total Split (%)		56.7%							43.3%			

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	23.5
Total Split (s)	23.5
Total Split (%)	39%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)		27.9							19.6			
Yellow Time (s)		4.0							4.0			
All-Red Time (s)		2.1							2.4			
Lost Time Adjust (s)		0.0							0.0			
Total Lost Time (s)		6.1							6.4			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							2.5			
Recall Mode		C-Max							None			
Act Effct Green (s)		52.2							60.0			
Actuated g/C Ratio		0.87							1.00			
v/c Ratio		0.42							0.02			
Control Delay		2.9							0.0			
Queue Delay		0.0							0.0			
Total Delay		2.9							0.0			
LOS		A							A			
Approach Delay		2.9										
Approach LOS		A										
Queue Length 50th (ft)		0							0			
Queue Length 95th (ft)		126							0			
Internal Link Dist (ft)		2500			1399			365			948	
Turn Bay Length (ft)												
Base Capacity (vph)		4315							1644			
Starvation Cap Reductn		0							0			
Spillback Cap Reductn		0							0			
Storage Cap Reductn		0							0			
Reduced v/c Ratio		0.42							0.02			

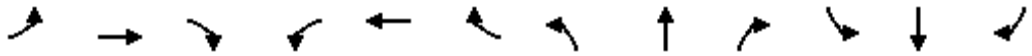
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 17.1 (29%), Referenced to phase 2:NBR and 6:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 2.8		Intersection LOS: A	
Intersection Capacity Utilization 77.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Rue Vendome/Driveway & NE 71st Street



Lane Group	Ø2
Maximum Green (s)	17.1
Yellow Time (s)	4.0
All-Red Time (s)	2.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.5
Recall Mode	C-Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1653	11	0	0	0	0	0	34	0	0	0
Future Volume (vph)	0	1653	11	0	0	0	0	0	34	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.1							6.4			
Lane Util. Factor		0.91							1.00			
Frt		1.00							0.86			
Flt Protected		1.00							1.00			
Satd. Flow (prot)		4960							1644			
Flt Permitted		1.00							1.00			
Satd. Flow (perm)		4960							1644			
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	0	1797	12	0	0	0	0	0	39	0	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1808	0	0	0	0	0	0	39	0	0	0
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Actuated Green, G (s)		44.7							47.2			
Effective Green, g (s)		44.7							47.2			
Actuated g/C Ratio		0.75							0.79			
Clearance Time (s)		6.1							6.4			
Vehicle Extension (s)		1.0							2.5			
Lane Grp Cap (vph)		3695							1644			
v/s Ratio Prot		c0.36							c0.00			
v/s Ratio Perm									0.02			
v/c Ratio		0.49							0.02			
Uniform Delay, d1		3.1							1.4			
Progression Factor		1.00							1.00			
Incremental Delay, d2		0.5							0.0			
Delay (s)		3.5							1.4			
Level of Service		A							A			
Approach Delay (s)		3.5			0.0			1.4			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	1770	0	0	19	0
Future Vol, veh/h	20	1770	0	0	19	0
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	-
Veh in Median Storage, #	-	0	16979	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	92	92	58	58
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	1863	0	0	33	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	787	-
Stage 1	-	-	0	-
Stage 2	-	-	787	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	396	0
Stage 1	-	-	-	0
Stage 2	-	-	371	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	396	-
Mov Cap-2 Maneuver	-	-	396	-
Stage 1	-	-	-	-
Stage 2	-	-	371	-

Approach	EB	SB
HCM Control Delay, s		14.9
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	396
HCM Lane V/C Ratio	-	-	0.083
HCM Control Delay (s)	-	-	14.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

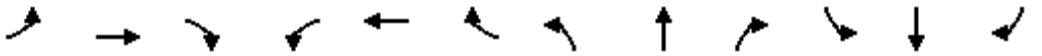
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	14	1190	47	8	2	0	0	0	42
Future Vol, veh/h	0	0	0	14	1190	47	8	2	0	0	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	97	97	97	83	83	83	82	82	82
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	1227	48	10	2	0	0	0	51

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	519	1303	-	-	-	638
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	519	1303	-	-	-	-
Critical Hdwy	5.5	-	-	6.44	6.54	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	3.2	-	-	3.82	4.02	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	-	484	159	0	0	0	359
Stage 1	-	-	-	-	-	0	0	0	-
Stage 2	-	-	-	464	229	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	415	159	-	-	-	359
Mov Cap-2 Maneuver	-	-	-	415	159	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	398	229	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		16.9	16.7
HCM LOS		C	C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	314	-	-	-	359
HCM Lane V/C Ratio	0.038	-	-	-	0.143
HCM Control Delay (s)	16.9	-	-	-	16.7
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

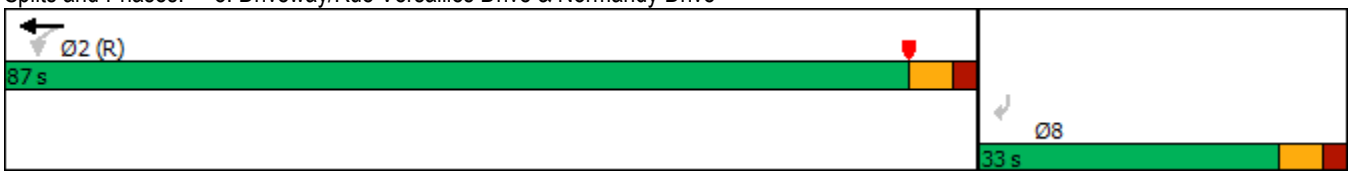


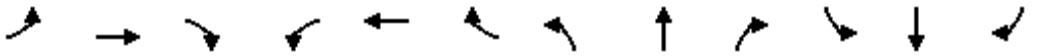
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	1156	35	0	0	0	0	0	43
Future Volume (vph)	0	0	0	29	1156	35	0	0	0	0	0	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected					0.999							
Satd. Flow (prot)	0	0	0	0	5161	0	0	0	0	0	0	1479
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	5161	0	0	0	0	0	0	1479
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					14							76
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		1857			1893			1028			837	
Travel Time (s)		42.2			36.9			23.4			19.0	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.50	0.50	0.50	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Adj. Flow (vph)	0	0	0	34	1344	41	0	0	0	0	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1419	0	0	0	0	0	0	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1							1
Detector Template				Left	Thru							Right
Leading Detector (ft)				20	40							40
Trailing Detector (ft)				0	0							0
Detector 1 Position(ft)				0	0							0
Detector 1 Size(ft)				20	40							40
Detector 1 Type				Cl+Ex	Cl+Ex							Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0							0.0
Detector 1 Queue (s)				0.0	0.0							0.0
Detector 1 Delay (s)				0.0	0.0							0.0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Detector Phase				2	2							8
Switch Phase												
Minimum Initial (s)				7.0	7.0							7.0
Minimum Split (s)				81.0	81.0							27.0
Total Split (s)				87.0	87.0							33.0
Total Split (%)				72.5%	72.5%							27.5%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)				80.7	80.7							26.7
Yellow Time (s)				4.0	4.0							4.0
All-Red Time (s)				2.3	2.3							2.3
Lost Time Adjust (s)					0.0							0.0
Total Lost Time (s)					6.3							6.3
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0							2.5
Recall Mode				C-Max	C-Max							None
Act Effct Green (s)					104.3							7.0
Actuated g/C Ratio					0.87							0.06
v/c Ratio					0.32							0.31
Control Delay					2.1							9.7
Queue Delay					0.0							0.0
Total Delay					2.1							9.7
LOS					A							A
Approach Delay					2.1						9.7	
Approach LOS					A						A	
Queue Length 50th (ft)					67							0
Queue Length 95th (ft)					73							17
Internal Link Dist (ft)		1777			1813			948			757	
Turn Bay Length (ft)												
Base Capacity (vph)					4488							388
Starvation Cap Reductn					0							0
Spillback Cap Reductn					0							0
Storage Cap Reductn					0							0
Reduced v/c Ratio					0.32							0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 16 (13%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay: 2.3		Intersection LOS: A	
Intersection Capacity Utilization 78.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 8: Driveway/Rue Versailles Drive & Normandy Drive

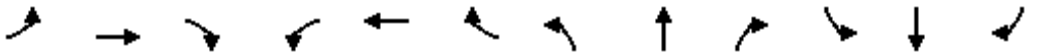




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	1156	35	0	0	0	0	0	43
Future Volume (vph)	0	0	0	29	1156	35	0	0	0	0	0	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.3							6.3
Lane Util. Factor					0.91							1.00
Frt					1.00							0.86
Flt Protected					1.00							1.00
Satd. Flow (prot)					5158							1479
Flt Permitted					1.00							1.00
Satd. Flow (perm)					5158							1479
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.50	0.50	0.50	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	1344	41	0	0	0	0	0	48
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	46
Lane Group Flow (vph)	0	0	0	0	1417	0	0	0	0	0	0	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Actuated Green, G (s)					101.8							5.6
Effective Green, g (s)					101.8							5.6
Actuated g/C Ratio					0.85							0.05
Clearance Time (s)					6.3							6.3
Vehicle Extension (s)					1.0							2.5
Lane Grp Cap (vph)					4375							69
v/s Ratio Prot												
v/s Ratio Perm					0.27							c0.00
v/c Ratio					0.32							0.03
Uniform Delay, d1					1.9							54.6
Progression Factor					1.00							1.00
Incremental Delay, d2					0.2							0.1
Delay (s)					2.1							54.8
Level of Service					A							D
Approach Delay (s)		0.0			2.1			0.0			54.8	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

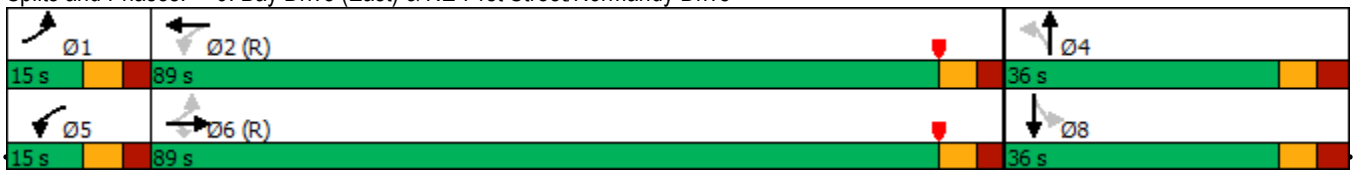


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	1004	16	88	1767	154	34	3	34	149	10	23
Future Volume (vph)	40	1004	16	88	1767	154	34	3	34	149	10	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	90		0	50		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.862			0.896	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5136	1615	1805	3567	0	1805	1638	0	1805	1702	0
Flt Permitted	0.044			0.241			0.734			0.732		
Satd. Flow (perm)	84	5136	1615	458	3567	0	1395	1638	0	1391	1702	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90		11			36			25	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1479			1470			539			580	
Travel Time (s)		33.6			33.4			12.3			13.2	
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	41	1035	16	101	2031	177	36	3	36	160	11	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	1035	16	101	2208	0	36	39	0	160	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	40		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	1.0	7.0	7.0	1.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	8.0	82.0	82.0	8.0	82.0		28.0	28.0		28.0	28.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	15.0	89.0	89.0	15.0	89.0		36.0	36.0		36.0	36.0	
Total Split (%)	10.7%	63.6%	63.6%	10.7%	63.6%		25.7%	25.7%		25.7%	25.7%	
Maximum Green (s)	8.0	82.0	82.0	8.0	82.0		28.4	28.4		28.4	28.4	
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)	3.0	3.0	3.0	3.0	3.0		3.6	3.6		3.6	3.6	
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)	7.0	7.0	7.0	7.0	7.0		7.6	7.6		7.6	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	1.0	1.0	2.0	1.0		2.5	2.5		2.5	2.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	96.5	91.1	91.1	100.1	94.5		20.8	20.8		20.8	20.8	
Actuated g/C Ratio	0.69	0.65	0.65	0.72	0.68		0.15	0.15		0.15	0.15	
v/c Ratio	0.33	0.31	0.01	0.26	0.92		0.17	0.14		0.78	0.13	
Control Delay	21.4	16.0	0.3	7.3	28.4		51.4	17.0		81.0	23.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.4	16.0	0.3	7.3	28.4		51.4	17.0		81.0	23.8	
LOS	C	B	A	A	C		D	B		F	C	
Approach Delay		15.9			27.4			33.5			70.5	
Approach LOS		B			C			C			E	
Queue Length 50th (ft)	14	148	0	22	881		29	2		142	9	
Queue Length 95th (ft)	36	208	2	45	#1190		60	35		212	39	
Internal Link Dist (ft)		1399			1390			459			500	
Turn Bay Length (ft)	150			100			90			50		
Base Capacity (vph)	157	3341	1082	407	2412		282	360		282	365	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.26	0.31	0.01	0.25	0.92		0.13	0.11		0.57	0.10	

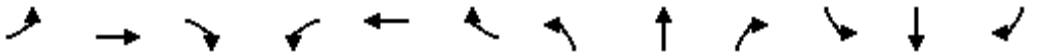
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 72 (51%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 26.4		Intersection LOS: C	
Intersection Capacity Utilization 90.0%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Bay Drive (East) & NE 71st Street/Normandy Drive



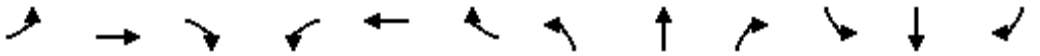
HCM Signalized Intersection Capacity Analysis
9: Bay Drive (East) & NE 71st Street/Normandy Drive

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	1004	16	88	1767	154	34	3	34	149	10	23
Future Volume (vph)	40	1004	16	88	1767	154	34	3	34	149	10	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0		7.6	7.6		7.6	7.6	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	5136	1615	1805	3567		1805	1637		1805	1702	
Flt Permitted	0.04	1.00	1.00	0.24	1.00		0.73	1.00		0.73	1.00	
Satd. Flow (perm)	84	5136	1615	458	3567		1394	1637		1390	1702	
Peak-hour factor, PHF	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	41	1035	16	101	2031	177	36	3	36	160	11	25
RTOR Reduction (vph)	0	0	6	0	4	0	0	31	0	0	21	0
Lane Group Flow (vph)	41	1035	10	101	2204	0	36	8	0	160	15	0
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	95.5	91.0	91.0	99.7	93.1		20.8	20.8		20.8	20.8	
Effective Green, g (s)	95.5	91.0	91.0	99.7	93.1		20.8	20.8		20.8	20.8	
Actuated g/C Ratio	0.68	0.65	0.65	0.71	0.66		0.15	0.15		0.15	0.15	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0		7.6	7.6		7.6	7.6	
Vehicle Extension (s)	2.0	1.0	1.0	2.0	1.0		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	112	3338	1049	389	2372		207	243		206	252	
v/s Ratio Prot	0.01	0.20		c0.01	c0.62			0.01			0.01	
v/s Ratio Perm	0.24		0.01	0.17			0.03			c0.12		
v/c Ratio	0.37	0.31	0.01	0.26	0.93		0.17	0.03		0.78	0.06	
Uniform Delay, d1	29.8	10.7	8.6	6.4	20.6		52.1	51.0		57.4	51.2	
Progression Factor	1.61	1.38	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.2	0.0	0.1	8.0		0.3	0.0		16.0	0.1	
Delay (s)	48.8	15.0	8.6	6.6	28.5		52.4	51.0		73.4	51.3	
Level of Service	D	B	A	A	C		D	D		E	D	
Approach Delay (s)		16.2			27.6			51.7			69.3	
Approach LOS		B			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



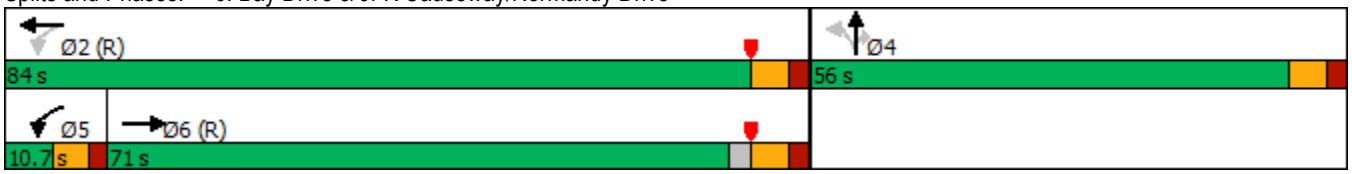
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1330	44	33	1785	14	24	1	13	0	0	0
Future Volume (vph)	0	1330	44	33	1785	14	24	1	13	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		100	0		0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850			
Flt Protected				0.950				0.954				
Satd. Flow (prot)	0	5161	0	1805	5067	0	0	1813	1615	0	0	0
Flt Permitted				0.054				0.954				
Satd. Flow (perm)	0	5161	0	103	5067	0	0	1813	1615	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				70			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3100			1397			932			973	
Travel Time (s)		70.5			31.8			21.2			22.1	
Peak Hour Factor	0.68	0.68	0.68	0.93	0.93	0.93	0.68	0.68	0.68	0.50	0.50	0.50
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	0	1956	65	35	1919	15	35	1	19	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2021	0	35	1934	0	0	36	19	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1		1	1	1			
Detector Template		Thru		Left	Thru		Left	Thru	Right			
Leading Detector (ft)		40		40	40		20	40	40			
Trailing Detector (ft)		0		0	0		0	0	0			
Detector 1 Position(ft)		0		0	0		0	0	0			
Detector 1 Size(ft)		40		40	40		20	40	40			
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Queue (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Delay (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Turn Type		NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		4			
Detector Phase		6		5	2		4	4	4			
Switch Phase												
Minimum Initial (s)		16.0		1.0	7.0		7.0	7.0	7.0			

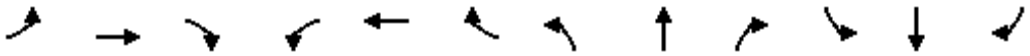
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)		65.0		7.0	78.0		50.0	50.0	50.0			
Total Split (s)		71.0		10.7	84.0		56.0	56.0	56.0			
Total Split (%)		50.7%		7.6%	60.0%		40.0%	40.0%	40.0%			
Maximum Green (s)		64.7		5.0	77.7		49.7	49.7	49.7			
Yellow Time (s)		4.0		3.7	4.0		4.0	4.0	4.0			
All-Red Time (s)		2.3		2.0	2.3		2.3	2.3	2.3			
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0			
Total Lost Time (s)		6.3		5.7	6.3			6.3	6.3			
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		1.0		2.0	2.5		2.5	2.5	2.5			
Recall Mode		C-Max		None	C-Max		Max	Max	Max			
Act Effct Green (s)		69.1		78.3	77.7			49.7	49.7			
Actuated g/C Ratio		0.49		0.56	0.56			0.36	0.36			
v/c Ratio		0.79		0.30	0.69			0.06	0.03			
Control Delay		32.8		20.5	24.0			30.2	0.1			
Queue Delay		0.0		0.0	0.0			0.0	0.0			
Total Delay		32.8		20.5	24.0			30.2	0.1			
LOS		C		C	C			C	A			
Approach Delay		32.8			24.0			19.8				
Approach LOS		C			C			B				
Queue Length 50th (ft)		564		14	447			22	0			
Queue Length 95th (ft)		404		31	501			35	0			
Internal Link Dist (ft)		3020			1317			852			893	
Turn Bay Length (ft)				250					100			
Base Capacity (vph)		2551		118	2812			643	618			
Starvation Cap Reductn		0		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.79		0.30	0.69			0.06	0.03			

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 124 (89%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 28.3 Intersection LOS: C
Intersection Capacity Utilization 51.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Bay Drive & JFK Causeway/Normandy Drive

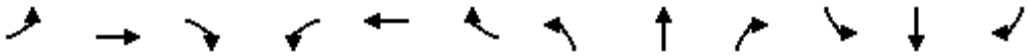




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1330	44	33	1785	14	24	1	13	0	0	0
Future Volume (vph)	0	1330	44	33	1785	14	24	1	13	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.3		5.7	6.3			6.3	6.3			
Lane Util. Factor		0.91		1.00	0.91			1.00	1.00			
Frt		1.00		1.00	1.00			1.00	0.85			
Flt Protected		1.00		0.95	1.00			0.95	1.00			
Satd. Flow (prot)		5162		1805	5067			1812	1615			
Flt Permitted		1.00		0.05	1.00			0.95	1.00			
Satd. Flow (perm)		5162		103	5067			1812	1615			
Peak-hour factor, PHF	0.68	0.68	0.68	0.93	0.93	0.93	0.68	0.68	0.68	0.50	0.50	0.50
Adj. Flow (vph)	0	1956	65	35	1919	15	35	1	19	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	12	0	0	0
Lane Group Flow (vph)	0	2018	0	35	1934	0	0	36	7	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type		NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		4			
Actuated Green, G (s)		68.0		77.7	77.7			49.7	49.7			
Effective Green, g (s)		68.0		77.7	77.7			49.7	49.7			
Actuated g/C Ratio		0.49		0.56	0.56			0.36	0.36			
Clearance Time (s)		6.3		5.7	6.3			6.3	6.3			
Vehicle Extension (s)		1.0		2.0	2.5			2.5	2.5			
Lane Grp Cap (vph)		2507		105	2812			643	573			
v/s Ratio Prot		c0.39		0.01	c0.38							
v/s Ratio Perm				0.17				0.02	0.00			
v/c Ratio		0.81		0.33	0.69			0.06	0.01			
Uniform Delay, d1		30.4		24.1	22.4			29.7	29.2			
Progression Factor		1.00		1.00	1.00			1.00	1.00			
Incremental Delay, d2		2.9		0.7	1.4			0.2	0.0			
Delay (s)		33.3		24.7	23.8			29.9	29.3			
Level of Service		C		C	C			C	C			
Approach Delay (s)		33.3			23.8			29.7			0.0	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



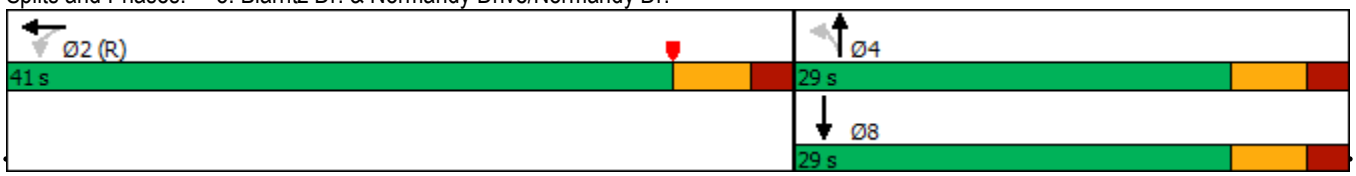
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	7	1902	32	33	93	0	0	21	86
Future Volume (vph)	0	0	0	7	1902	32	33	93	0	0	21	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998						0.892	
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5782	0	1770	1863	0	0	1662	0
Flt Permitted							0.685					
Satd. Flow (perm)	0	0	0	0	5782	0	1276	1863	0	0	1662	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			117			185			590	
Travel Time (s)		8.0			2.7			4.2			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.83	0.83	0.83	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	7	1961	33	40	112	0	0	22	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2001	0	40	112	0	0	111	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				16.0	16.0		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				35.0	35.0		23.0	23.0			23.0	
Total Split (s)				41.0	41.0		29.0	29.0			29.0	
Total Split (%)				58.6%	58.6%		41.4%	41.4%			41.4%	
Maximum Green (s)				34.7	34.7		22.7	22.7			22.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					34.7		22.7	22.7			22.7	
Actuated g/C Ratio					0.50		0.32	0.32			0.32	
v/c Ratio					0.70		0.10	0.19			0.21	
Control Delay					8.7		17.4	18.1			17.8	
Queue Delay					14.8		0.3	0.0			0.6	
Total Delay					23.5		17.7	18.1			18.3	
LOS					C		B	B			B	
Approach Delay					23.5			18.0			18.3	
Approach LOS					C			B			B	
Queue Length 50th (ft)					90		12	34			33	
Queue Length 95th (ft)					m95		29	63			68	
Internal Link Dist (ft)		272			37			105			510	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2869		413	604			541	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					899		160	0			210	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					1.02		0.16	0.19			0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 4 (6%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 22.9		Intersection LOS: C	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

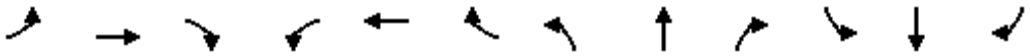
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Biarritz Dr. & Normandy Drive/Normandy Dr.



HCM 6th Signalized Intersection Summary
5: Biarritz Dr. & Normandy Drive/Normandy Dr.

02/16/2024



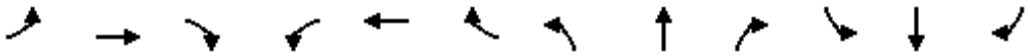
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	7	1902	32	33	93	0	0	21	86
Future Volume (veh/h)	0	0	0	7	1902	32	33	93	0	0	21	86
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1752	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				7	1961	33	40	112	0	0	22	89
Peak Hour Factor				0.97	0.97	0.97	0.83	0.83	0.83	0.97	0.97	0.97
Percent Heavy Veh, %				0	10	0	2	2	0	0	2	2
Cap, veh/h				11	3155	55	455	607	0	0	105	425
Arrive On Green				0.16	0.16	0.16	0.32	0.32	0.00	0.00	0.32	0.32
Sat Flow, veh/h				21	6365	110	1282	1870	0	0	324	1311
Grp Volume(v), veh/h				577	904	520	40	112	0	0	0	111
Grp Sat Flow(s),veh/h/ln				1751	1507	1732	1282	1870	0	0	0	1634
Q Serve(g_s), s				21.7	19.5	19.5	1.6	3.0	0.0	0.0	0.0	3.4
Cycle Q Clear(g_c), s				21.7	19.5	19.5	5.1	3.0	0.0	0.0	0.0	3.4
Prop In Lane				0.01		0.06	1.00		0.00	0.00		0.80
Lane Grp Cap(c), veh/h				868	1494	859	455	607	0	0	0	530
V/C Ratio(X)				0.67	0.61	0.61	0.09	0.18	0.00	0.00	0.00	0.21
Avail Cap(c_a), veh/h				868	1494	859	455	607	0	0	0	530
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				23.8	22.9	22.9	19.0	17.0	0.0	0.0	0.0	17.1
Incr Delay (d2), s/veh				4.0	1.8	3.2	0.4	0.7	0.0	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				16.3	12.7	14.7	0.9	2.4	0.0	0.0	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.8	24.7	26.1	19.4	17.7	0.0	0.0	0.0	18.0
LnGrp LOS				C	C	C	B	B	A	A	A	B
Approach Vol, veh/h					2001			152			111	
Approach Delay, s/veh					26.0			18.1			18.0	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	41.0	29.0	29.0
Change Period (Y+Rc), s	* 6.3	* 6.3	* 6.3
Max Green Setting (Gmax), s	* 35	* 23	* 23
Max Q Clear Time (g_c+I1), s	23.7	7.1	5.4
Green Ext Time (p_c), s	1.8	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

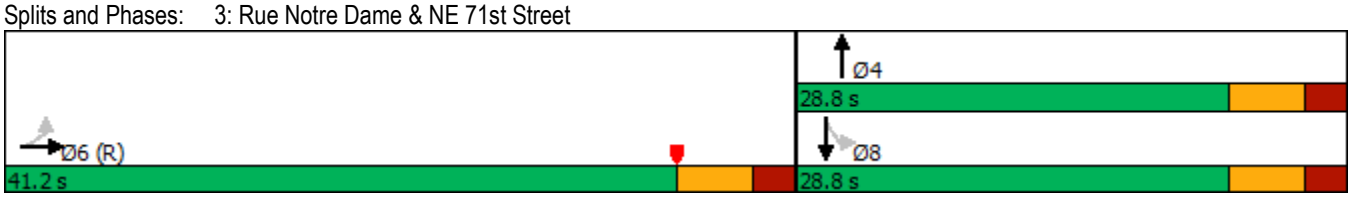


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	1063	8	0	0	0	0	8	10	23	19	0
Future Volume (vph)	34	1063	8	0	0	0	0	8	10	23	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.926				
Flt Protected		0.998									0.974	
Satd. Flow (prot)	0	4999	0	0	0	0	0	1583	0	0	1666	0
Flt Permitted		0.998									0.819	
Satd. Flow (perm)	0	4999	0	0	0	0	0	1583	0	0	1400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						12				
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		910			2580			388			447	
Travel Time (s)		17.7			58.6			8.8			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.83	0.83	0.83	0.60	0.60	0.60
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0						0			0	
Adj. Flow (vph)	43	1346	10	0	0	0	0	10	12	38	32	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1399	0	0	0	0	0	22	0	0	70	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		20	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	13.8	13.8						7.0		7.0	7.0	
Minimum Split (s)	35.0	35.0						23.0		23.0	23.0	
Total Split (s)	41.2	41.2						28.8		28.8	28.8	
Total Split (%)	58.9%	58.9%						41.1%		41.1%	41.1%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	35.0	35.0						22.5		22.5	22.5	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.2	2.2						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						2.5		2.5	2.5	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)		52.6						8.8			8.8	
Actuated g/C Ratio		0.75						0.13			0.13	
v/c Ratio		0.37						0.11			0.40	
Control Delay		4.5						18.8			34.5	
Queue Delay		0.0						0.0			0.0	
Total Delay		4.5						18.8			34.5	
LOS		A						B			C	
Approach Delay		4.5						18.8			34.5	
Approach LOS		A						B			C	
Queue Length 50th (ft)		72						4			29	
Queue Length 95th (ft)		95						19			39	
Internal Link Dist (ft)		830			2500			308			367	
Turn Bay Length (ft)												
Base Capacity (vph)		3759						516			450	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.37						0.04			0.16	

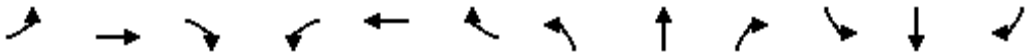
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 39 (56%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Rue Notre Dame & NE 71st Street



HCM 6th Signalized Intersection Summary
3: Rue Notre Dame & NE 71st Street

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1063	8	0	0	0	0	8	10	23	19	0
Future Volume (veh/h)	34	1063	8	0	0	0	0	8	10	23	19	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	43	1346	10				0	10	12	38	32	0
Peak Hour Factor	0.79	0.79	0.79				0.83	0.83	0.83	0.60	0.60	0.60
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	118	3922	30				0	65	79	141	75	0
Arrive On Green	0.74	0.74	0.74				0.00	0.08	0.08	0.08	0.08	0.00
Sat Flow, veh/h	159	5313	41				0	786	944	740	904	0
Grp Volume(v), veh/h	510	424	464				0	0	22	70	0	0
Grp Sat Flow(s),veh/h/ln	1892	1729	1893				0	0	1730	1644	0	0
Q Serve(g_s), s	6.8	6.0	6.0				0.0	0.0	0.8	1.9	0.0	0.0
Cycle Q Clear(g_c), s	6.8	6.0	6.0				0.0	0.0	0.8	2.8	0.0	0.0
Prop In Lane	0.08		0.02				0.00		0.55	0.54		0.00
Lane Grp Cap(c), veh/h	1397	1276	1397				0	0	144	216	0	0
V/C Ratio(X)	0.37	0.33	0.33				0.00	0.00	0.15	0.32	0.00	0.00
Avail Cap(c_a), veh/h	1397	1276	1397				0	0	556	597	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	3.2	3.2				0.0	0.0	29.8	30.6	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.7	0.6				0.0	0.0	0.4	0.6	0.0	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
%ile BackOfQ(50%),veh/ln	1.7	1.4	1.5				0.0	0.0	0.3	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.0	3.9	3.8				0.0	0.0	30.2	31.3	0.0	0.0
LnGrp LOS	A	A	A				A	A	C	C	A	A
Approach Vol, veh/h		1399						22			70	
Approach Delay, s/veh		3.9						30.2			31.3	
Approach LOS		A						C			C	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.1		57.9		12.1				
Change Period (Y+Rc), s				* 6.3		6.2		* 6.3				
Max Green Setting (Gmax), s				* 23		35.0		* 23				
Max Q Clear Time (g_c+I1), s				2.8		8.8		4.8				
Green Ext Time (p_c), s				0.0		0.9		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			5.6									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

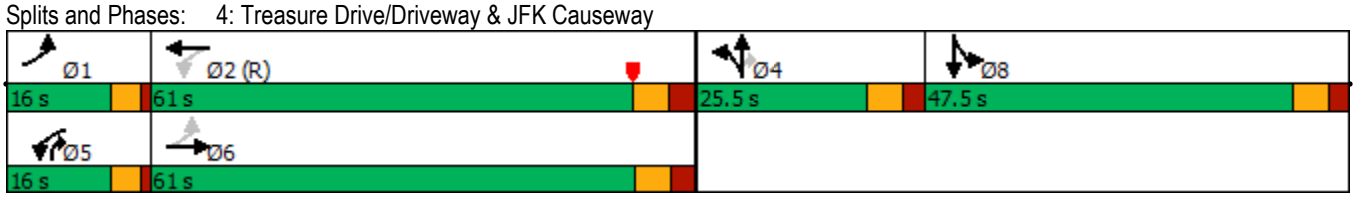
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1133	140	118	1790	10	107	1	83	5	1	1
Future Volume (vph)	15	1133	140	118	1790	10	107	1	83	5	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	25		0	0		500	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.999				0.850		0.982	
Flt Protected	0.950			0.950				0.953			0.965	
Satd. Flow (prot)	1805	5104	0	1805	5081	0	0	1811	1615	0	1800	0
Flt Permitted	0.084			0.088				0.953			0.965	
Satd. Flow (perm)	160	5104	0	167	5081	0	0	1811	1615	0	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			1				104		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			3100			603			197	
Travel Time (s)		15.5			70.5			13.7			4.5	
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.80	0.80	0.80	0.44	0.44	0.44
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	21	1596	197	127	1925	11	134	1	104	11	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1793	0	127	1936	0	0	135	104	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	

Lanes, Volumes, Timings
4: Treasure Drive/Driveway & JFK Causeway 02/16/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6			2					4			
Detector Phase	1	6		5	2		4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0	5.0	7.0	7.0	
Minimum Split (s)	11.0	53.0		11.0	53.0		19.0	19.0	11.0	41.0	41.0	
Total Split (s)	16.0	61.0		16.0	61.0		25.5	25.5	16.0	47.5	47.5	
Total Split (%)	10.7%	40.7%		10.7%	40.7%		17.0%	17.0%	10.7%	31.7%	31.7%	
Maximum Green (s)	11.5	54.0		11.5	53.9		19.0	19.0	11.5	41.0	41.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		4.0	4.0	3.5	4.0	4.0	
All-Red Time (s)	1.0	3.0		1.0	3.1		2.5	2.5	1.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.5	7.0		4.5	7.1			6.5	4.5		6.5	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	3.0	2.5		3.0	3.0		1.0	1.0	3.0	1.0	1.0	
Recall Mode	None	None		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	111.8	103.3		118.7	110.3			14.3	28.0		7.0	
Actuated g/C Ratio	0.75	0.69		0.79	0.74			0.10	0.19		0.05	
v/c Ratio	0.11	0.51		0.55	0.52			0.78	0.27		0.18	
Control Delay	6.8	13.4		16.8	11.2			95.0	7.7		67.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	6.8	13.4		16.8	11.2			95.0	7.7		67.1	
LOS	A	B		B	B			F	A		E	
Approach Delay		13.4			11.5			57.0			67.1	
Approach LOS		B			B			E			E	
Queue Length 50th (ft)	3	237		19	258			131	0		13	
Queue Length 95th (ft)	11	317		78	452			177	29		17	
Internal Link Dist (ft)		602			3020			523			117	
Turn Bay Length (ft)	100			25					500			
Base Capacity (vph)	251	3520		263	3735			229	416		493	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.08	0.51		0.48	0.52			0.59	0.25		0.03	

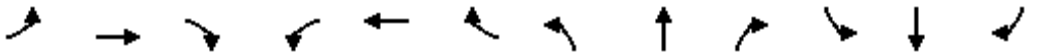
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 146 (97%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 15.2		Intersection LOS: B	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Treasure Drive/Driveway & JFK Causeway



HCM 6th Signalized Intersection Summary
4: Treasure Drive/Driveway & JFK Causeway

02/16/2024



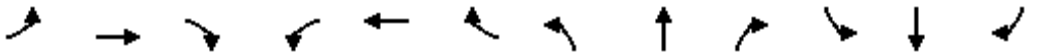
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	1133	140	118	1790	10	107	1	83	5	1	1
Future Volume (veh/h)	15	1133	140	118	1790	10	107	1	83	5	1	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1900	1900	1900	1900	1870	1870	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	1596	197	127	1925	11	134	1	104	11	2	2
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.80	0.80	0.80	0.44	0.44	0.44
Percent Heavy Veh, %	0	0	0	0	2	2	0	0	0	0	0	0
Cap, veh/h	208	3235	398	253	3703	21	158	1	198	28	5	5
Arrive On Green	0.02	0.69	0.69	0.03	0.71	0.71	0.09	0.09	0.09	0.02	0.02	0.02
Sat Flow, veh/h	1810	4678	576	1810	5239	30	1797	13	1610	1314	239	239
Grp Volume(v), veh/h	21	1179	614	127	1251	685	135	0	104	15	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1796	1810	1702	1865	1810	0	1610	1791	0	0
Q Serve(g_s), s	0.5	23.9	24.0	3.1	25.5	25.5	11.0	0.0	9.1	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.5	23.9	24.0	3.1	25.5	25.5	11.0	0.0	9.1	1.2	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.02	0.99		1.00	0.73		0.13
Lane Grp Cap(c), veh/h	208	2391	1242	253	2406	1318	159	0	198	39	0	0
V/C Ratio(X)	0.10	0.49	0.49	0.50	0.52	0.52	0.85	0.00	0.53	0.39	0.00	0.00
Avail Cap(c_a), veh/h	312	2391	1242	329	2406	1318	229	0	260	490	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.3	10.8	10.8	9.7	10.2	10.2	67.4	0.0	61.7	72.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.2	1.0	0.5	1.0	12.9	0.0	0.8	2.3	0.0	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(95%),veh/ln	0.4	13.9	14.4	2.2	13.5	14.8	9.6	0.0	6.8	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.5	10.9	11.1	10.7	10.7	11.2	80.3	0.0	62.5	74.7	0.0	0.0
LnGrp LOS	A	B	B	B	B	B	F	A	E	E	A	A
Approach Vol, veh/h		1814			2063			239			15	
Approach Delay, s/veh		11.0			10.9			72.5			74.7	
Approach LOS		B			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	113.1		19.7	9.7	110.8		9.8				
Change Period (Y+Rc), s	4.5	7.1		6.5	4.5	* 7.1		6.5				
Max Green Setting (Gmax), s	11.5	53.9		19.0	11.5	* 54		41.0				
Max Q Clear Time (g_c+I1), s	2.5	27.5		13.0	5.1	26.0		3.2				
Green Ext Time (p_c), s	0.0	16.8		0.2	0.1	13.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		14.7
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1098	34	0	0	0	0	12	9	15	6	0
Future Volume (vph)	33	1098	34	0	0	0	0	12	9	15	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996						0.941				
Flt Protected		0.999								0.950		
Satd. Flow (prot)	0	4535	0	0	0	0	0	1753	0	1770	1863	0
Flt Permitted		0.999								0.738		
Satd. Flow (perm)	0	4535	0	0	0	0	0	1753	0	1375	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8						13				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1600			1203			590			226	
Travel Time (s)		36.4			27.3			13.4			5.1	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.69	0.69	0.69	0.64	0.64	0.64
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	37	1220	38	0	0	0	0	17	13	23	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1295	0	0	0	0	0	30	0	23	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	16.0	16.0						10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	102.0	102.0						26.0		26.0	26.0	
Total Split (s)	108.0	108.0						32.0		32.0	32.0	
Total Split (%)	77.1%	77.1%						22.9%		22.9%	22.9%	
Maximum Green (s)	101.7	101.7						25.7		25.7	25.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.3	2.3						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		6.3						6.3		6.3	6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						1.0		2.5	2.5	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		101.7						25.7		25.7	25.7	
Actuated g/C Ratio		0.73						0.18		0.18	0.18	
v/c Ratio		0.39						0.09		0.09	0.03	
Control Delay		7.7						32.4		45.7	46.0	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		7.7						32.4		45.7	46.0	
LOS		A						C		D	D	
Approach Delay		7.7						32.4			45.8	
Approach LOS		A						C			D	
Queue Length 50th (ft)		147						13		16	6	
Queue Length 95th (ft)		171						30		m20	m9	
Internal Link Dist (ft)		1520			1123			510			146	
Turn Bay Length (ft)										100		
Base Capacity (vph)		3296						332		252	341	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.39						0.09		0.09	0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 4 (3%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 64.4%		ICU Level of Service C	
Analysis Period (min) 15			

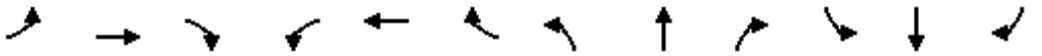
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trouville Esplanade & 71st Street



HCM 6th Signalized Intersection Summary
8: Trouville Esplanade & 71st Street

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1098	34	0	0	0	0	12	9	15	6	0
Future Volume (veh/h)	33	1098	34	0	0	0	0	12	9	15	6	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1752	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	37	1220	38				0	17	13	23	9	0
Peak Hour Factor	0.90	0.90	0.90				0.69	0.69	0.69	0.64	0.64	0.64
Percent Heavy Veh, %	0	10	0				0	2	2	2	2	0
Cap, veh/h	99	3468	112				0	180	138	285	343	0
Arrive On Green	0.73	0.73	0.73				0.00	0.18	0.18	0.18	0.18	0.00
Sat Flow, veh/h	136	4774	154				0	983	752	1380	1870	0
Grp Volume(v), veh/h	474	394	426				0	0	30	23	9	0
Grp Sat Flow(s),veh/h/ln	1745	1594	1724				0	0	1735	1380	1870	0
Q Serve(g_s), s	14.3	12.6	12.6				0.0	0.0	2.0	2.0	0.6	0.0
Cycle Q Clear(g_c), s	14.3	12.6	12.6				0.0	0.0	2.0	4.0	0.6	0.0
Prop In Lane	0.08		0.09				0.00		0.43	1.00		0.00
Lane Grp Cap(c), veh/h	1268	1158	1252				0	0	319	285	343	0
V/C Ratio(X)	0.37	0.34	0.34				0.00	0.00	0.09	0.08	0.03	0.00
Avail Cap(c_a), veh/h	1268	1158	1252				0	0	319	285	343	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.2	7.0	7.0				0.0	0.0	47.5	49.1	46.9	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.7				0.0	0.0	0.6	0.6	0.1	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
%ile BackOfQ(95%),veh/ln	9.2	7.7	8.2				0.0	0.0	1.7	1.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.0	7.8	7.7				0.0	0.0	48.1	49.7	47.0	0.0
LnGrp LOS	A	A	A				A	A	D	D	D	A
Approach Vol, veh/h		1295						30			32	
Approach Delay, s/veh		7.8						48.1			48.9	
Approach LOS		A						D			D	

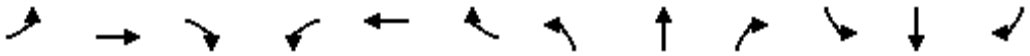
Timer - Assigned Phs			4		6		8					
Phs Duration (G+Y+Rc), s			32.0		108.0		32.0					
Change Period (Y+Rc), s			* 6.3		6.3		* 6.3					
Max Green Setting (Gmax), s			* 26		101.7		* 26					
Max Q Clear Time (g_c+I1), s			4.0		16.3		6.0					
Green Ext Time (p_c), s			0.0		4.2		0.0					

Intersection Summary												
HCM 6th Ctrl Delay			9.7									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	1879	14	34	24	0	0	5	15
Future Volume (vph)	0	0	0	20	1879	14	34	24	0	0	5	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999						0.900	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	4549	0	1770	1863	0	0	1676	0
Flt Permitted					0.999		0.742					
Satd. Flow (perm)	0	0	0	0	4549	0	1382	1863	0	0	1676	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86	0.86
Heavy Vehicles (%)	2%	2%	2%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	22	2111	16	35	24	0	0	6	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2149	0	35	24	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lanes, Volumes, Timings
6: Trouville Esplanade & Normandy Dr.

02/16/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				32.0	32.0		26.0	26.0			26.0	
Total Split (s)				38.0	38.0		32.0	32.0			32.0	
Total Split (%)				54.3%	54.3%		45.7%	45.7%			45.7%	
Maximum Green (s)				31.7	31.7		25.7	25.7			25.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					31.7		25.7	25.7			25.7	
Actuated g/C Ratio					0.45		0.37	0.37			0.37	
v/c Ratio					1.04		0.07	0.04			0.04	
Control Delay					53.0		14.3	14.0			13.7	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					53.0		14.3	14.0			13.7	
LOS					D		B	B			B	
Approach Delay					53.0			14.2			13.7	
Approach LOS					D			B			B	
Queue Length 50th (ft)					~376		9	6			6	
Queue Length 95th (ft)					#463		23	18			19	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2061		507	683			616	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					1.04		0.07	0.04			0.04	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 38 (54%), Referenced to phase 2:WBTL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 51.6 Intersection LOS: D

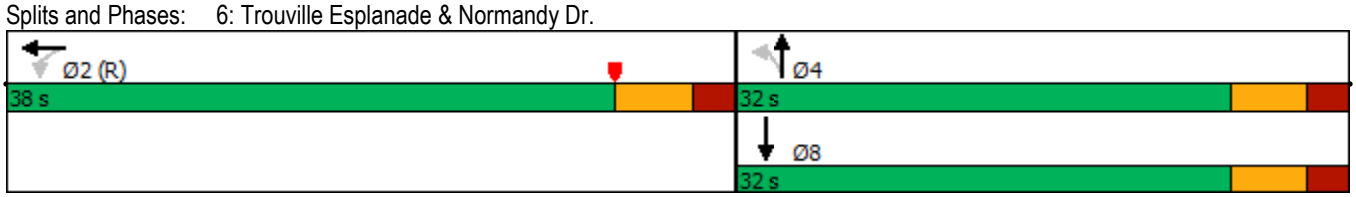
Intersection Capacity Utilization 64.4% ICU Level of Service C

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

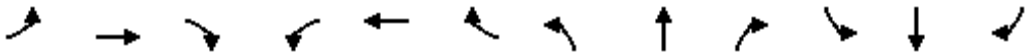
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.



HCM 6th Signalized Intersection Summary
6: Trouville Esplanade & Normandy Dr.

02/16/2024



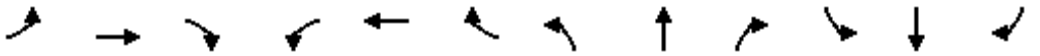
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	20	1879	14	34	24	0	0	5	15
Future Volume (veh/h)	0	0	0	20	1879	14	34	24	0	0	5	15
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1752	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				22	2111	16	35	24	0	0	6	17
Peak Hour Factor				0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86	0.86
Percent Heavy Veh, %				0	10	0	2	2	0	0	2	2
Cap, veh/h				22	2264	18	600	687	0	0	158	448
Arrive On Green				0.45	0.45	0.45	0.37	0.37	0.00	0.00	0.37	0.37
Sat Flow, veh/h				49	5000	39	1388	1870	0	0	431	1220
Grp Volume(v), veh/h				785	651	713	35	24	0	0	0	23
Grp Sat Flow(s),veh/h/ln				1749	1594	1745	1388	1870	0	0	0	1651
Q Serve(g_s), s				31.2	26.4	26.5	1.2	0.6	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s				31.2	26.4	26.5	1.8	0.6	0.0	0.0	0.0	0.6
Prop In Lane				0.03		0.02	1.00		0.00	0.00		0.74
Lane Grp Cap(c), veh/h				792	722	790	600	687	0	0	0	606
V/C Ratio(X)				0.99	0.90	0.90	0.06	0.03	0.00	0.00	0.00	0.04
Avail Cap(c_a), veh/h				792	722	790	600	687	0	0	0	606
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				19.0	17.7	17.7	14.8	14.2	0.0	0.0	0.0	14.2
Incr Delay (d2), s/veh				29.9	16.6	15.6	0.2	0.1	0.0	0.0	0.0	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
%ile BackOfQ(95%),veh/ln				24.5	17.5	18.6	0.7	0.4	0.0	0.0	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				48.9	34.3	33.3	15.0	14.3	0.0	0.0	0.0	14.3
LnGrp LOS				D	C	C	B	B	A	A	A	B
Approach Vol, veh/h					2149			59			23	
Approach Delay, s/veh					39.3			14.7			14.3	
Approach LOS					D			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	38.0	32.0			32.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 32	* 26			* 26			
Max Q Clear Time (g_c+I1), s	33.2	3.8			2.6			
Green Ext Time (p_c), s	0.0	0.1			0.0			

Intersection Summary		
HCM 6th Ctrl Delay	38.4	
HCM 6th LOS	D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



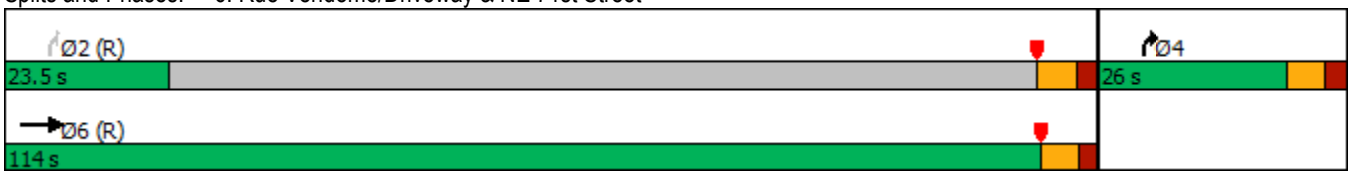
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1097	29	0	0	0	0	0	32	0	0	0
Future Volume (vph)	0	1097	29	0	0	0	0	0	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996							0.865			
Flt Protected												
Satd. Flow (prot)	0	4994	0	0	0	0	0	0	1644	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	4994	0	0	0	0	0	0	1644	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		9										
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2580			1479			445			1028	
Travel Time (s)		50.3			33.6			10.1			23.4	
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.93	0.93	0.25	0.25	0.25
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	0	1192	32	0	0	0	0	0	34	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1224	0	0	0	0	0	0	34	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1							1			
Detector Template		Thru							Right			
Leading Detector (ft)		40							40			
Trailing Detector (ft)		0							0			
Detector 1 Position(ft)		0							0			
Detector 1 Size(ft)		40							40			
Detector 1 Type		Cl+Ex							Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0							0.0			
Detector 1 Queue (s)		0.0							0.0			
Detector 1 Delay (s)		0.0							0.0			
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Detector Phase		6							4			
Switch Phase												
Minimum Initial (s)		4.0							7.0			
Minimum Split (s)		108.0							20.0			
Total Split (s)		114.0							26.0			
Total Split (%)		81.4%							18.6%			

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	23.5
Total Split (s)	23.5
Total Split (%)	17%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)		107.9							19.6			
Yellow Time (s)		4.0							4.0			
All-Red Time (s)		2.1							2.4			
Lost Time Adjust (s)		0.0							0.0			
Total Lost Time (s)		6.1							6.4			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							2.5			
Recall Mode		C-Max							None			
Act Effct Green (s)		128.3							140.0			
Actuated g/C Ratio		0.92							1.00			
v/c Ratio		0.27							0.02			
Control Delay		1.0							0.0			
Queue Delay		0.0							0.0			
Total Delay		1.0							0.0			
LOS		A							A			
Approach Delay		1.0										
Approach LOS		A										
Queue Length 50th (ft)		36							0			
Queue Length 95th (ft)		40							0			
Internal Link Dist (ft)		2500			1399			365			948	
Turn Bay Length (ft)												
Base Capacity (vph)		4577							1644			
Starvation Cap Reductn		0							0			
Spillback Cap Reductn		0							0			
Storage Cap Reductn		0							0			
Reduced v/c Ratio		0.27							0.02			

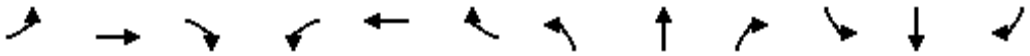
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 77 (55%), Referenced to phase 2:NBR and 6:EBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 0.9		Intersection LOS: A	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Rue Vendome/Driveway & NE 71st Street



Lane Group	Ø2
Maximum Green (s)	17.1
Yellow Time (s)	4.0
All-Red Time (s)	2.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.5
Recall Mode	C-Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1097	29	0	0	0	0	0	32	0	0	0
Future Volume (vph)	0	1097	29	0	0	0	0	0	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.1							6.4			
Lane Util. Factor		0.91							1.00			
Frt		1.00							0.86			
Flt Protected		1.00							1.00			
Satd. Flow (prot)		4994							1644			
Flt Permitted		1.00							1.00			
Satd. Flow (perm)		4994							1644			
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1192	32	0	0	0	0	0	34	0	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1223	0	0	0	0	0	0	34	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Actuated Green, G (s)		123.3							127.2			
Effective Green, g (s)		123.3							127.2			
Actuated g/C Ratio		0.88							0.91			
Clearance Time (s)		6.1							6.4			
Vehicle Extension (s)		1.0							2.5			
Lane Grp Cap (vph)		4398							1644			
v/s Ratio Prot		c0.24							c0.00			
v/s Ratio Perm									0.02			
v/c Ratio		0.28							0.02			
Uniform Delay, d1		1.3							0.6			
Progression Factor		0.70							1.00			
Incremental Delay, d2		0.1							0.0			
Delay (s)		1.1							0.6			
Level of Service		A							A			
Approach Delay (s)		1.1			0.0			0.6			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	1.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	1176	0	0	24	0
Future Vol, veh/h	41	1176	0	0	24	0
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	-
Veh in Median Storage, #	-	0	16979	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	92	92	68	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	1352	0	0	35	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	635	-
Stage 1	-	-	0	-
Stage 2	-	-	635	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	471	0
Stage 1	-	-	-	0
Stage 2	-	-	446	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	471	-
Mov Cap-2 Maneuver	-	-	471	-
Stage 1	-	-	-	-
Stage 2	-	-	446	-

Approach	EB	SB
HCM Control Delay, s		13.3
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	471
HCM Lane V/C Ratio	-	-	0.075
HCM Control Delay (s)	-	-	13.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

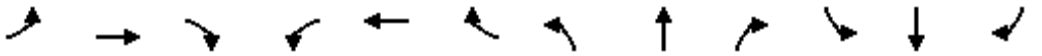
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	43	1870	26	31	4	0	0	0	29
Future Vol, veh/h	0	0	0	43	1870	26	31	4	0	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	96	96	96	85	85	85	98	98	98
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	0	0	45	1948	27	36	5	0	0	0	30

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	869	2065	-	-	-	988
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	869	2065	-	-	-	-
Critical Hdwy	5.5	-	-	6.44	6.54	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	3.2	-	-	3.82	4.02	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	-	305	54	0	0	0	211
Stage 1	-	-	-	-	-	0	0	0	-
Stage 2	-	-	-	284	96	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	262	54	-	-	-	211
Mov Cap-2 Maneuver	-	-	-	262	54	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	244	96	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		30.5	24.8
HCM LOS		D	C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	182	-	-	-	211
HCM Lane V/C Ratio	0.226	-	-	-	0.14
HCM Control Delay (s)	30.5	-	-	-	24.8
HCM Lane LOS	D	-	-	-	C
HCM 95th %tile Q(veh)	0.8	-	-	-	0.5

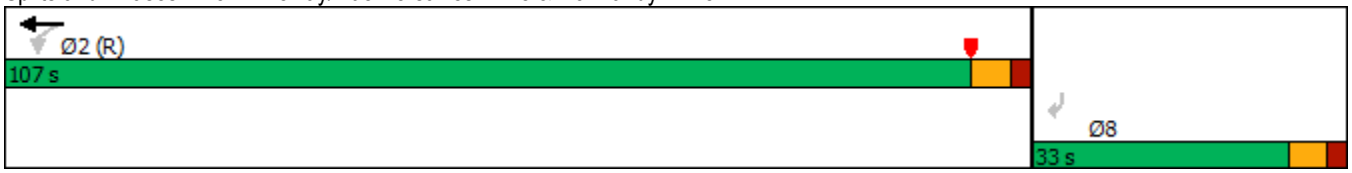


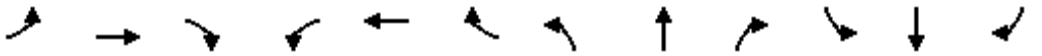
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	1904	52	0	0	0	0	0	45
Future Volume (vph)	0	0	0	15	1904	52	0	0	0	0	0	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5166	0	0	0	0	0	0	1479
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5166	0	0	0	0	0	0	1479
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					9							27
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		1857			1893			1028			837	
Travel Time (s)		42.2			36.9			23.4			19.0	
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.50	0.50	0.50	0.68	0.68	0.68
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Adj. Flow (vph)	0	0	0	15	1963	54	0	0	0	0	0	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2032	0	0	0	0	0	0	66
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1							1
Detector Template				Left	Thru							Right
Leading Detector (ft)				20	40							40
Trailing Detector (ft)				0	0							0
Detector 1 Position(ft)				0	0							0
Detector 1 Size(ft)				20	40							40
Detector 1 Type				Cl+Ex	Cl+Ex							Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0							0.0
Detector 1 Queue (s)				0.0	0.0							0.0
Detector 1 Delay (s)				0.0	0.0							0.0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Detector Phase				2	2							8
Switch Phase												
Minimum Initial (s)				7.0	7.0							7.0
Minimum Split (s)				101.0	101.0							27.0
Total Split (s)				107.0	107.0							33.0
Total Split (%)				76.4%	76.4%							23.6%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)				100.7	100.7							26.7
Yellow Time (s)				4.0	4.0							4.0
All-Red Time (s)				2.3	2.3							2.3
Lost Time Adjust (s)					0.0							0.0
Total Lost Time (s)					6.3							6.3
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0							2.5
Recall Mode				C-Max	C-Max							None
Act Effct Green (s)					121.9							9.4
Actuated g/C Ratio					0.87							0.07
v/c Ratio					0.45							0.53
Control Delay					3.0							54.4
Queue Delay					0.0							0.0
Total Delay					3.0							54.4
LOS					A							D
Approach Delay					3.0						54.4	
Approach LOS					A						D	
Queue Length 50th (ft)					129							35
Queue Length 95th (ft)					191							56
Internal Link Dist (ft)		1777			1813			948			757	
Turn Bay Length (ft)												
Base Capacity (vph)					4498							303
Starvation Cap Reductn					0							0
Spillback Cap Reductn					0							0
Storage Cap Reductn					0							0
Reduced v/c Ratio					0.45							0.22

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 66 (47%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 4.6		Intersection LOS: A	
Intersection Capacity Utilization 82.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Driveway/Rue Versailles Drive & Normandy Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	1904	52	0	0	0	0	0	45
Future Volume (vph)	0	0	0	15	1904	52	0	0	0	0	0	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.3							6.3
Lane Util. Factor					0.91							1.00
Frt					1.00							0.86
Flt Protected					1.00							1.00
Satd. Flow (prot)					5164							1479
Flt Permitted					1.00							1.00
Satd. Flow (perm)					5164							1479
Peak-hour factor, PHF	0.92	0.92	0.92	0.97	0.97	0.97	0.50	0.50	0.50	0.68	0.68	0.68
Adj. Flow (vph)	0	0	0	15	1963	54	0	0	0	0	0	66
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	25
Lane Group Flow (vph)	0	0	0	0	2031	0	0	0	0	0	0	41
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Actuated Green, G (s)					119.4							8.0
Effective Green, g (s)					119.4							8.0
Actuated g/C Ratio					0.85							0.06
Clearance Time (s)					6.3							6.3
Vehicle Extension (s)					1.0							2.5
Lane Grp Cap (vph)					4404							84
v/s Ratio Prot												
v/s Ratio Perm					0.39							c0.03
v/c Ratio					0.46							0.48
Uniform Delay, d1					2.5							64.0
Progression Factor					1.00							1.00
Incremental Delay, d2					0.3							3.2
Delay (s)					2.8							67.1
Level of Service					A							E
Approach Delay (s)		0.0			2.8			0.0			67.1	
Approach LOS		A			A			A			E	

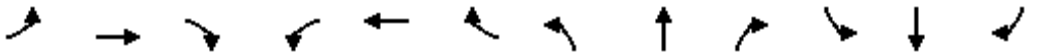
Intersection Summary			
HCM 2000 Control Delay	4.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Appendix G – Background Conditions Analysis

HCM 6th Signalized Intersection Summary
9: Bay Drive (East) & NE 71st Street/Normandy Drive

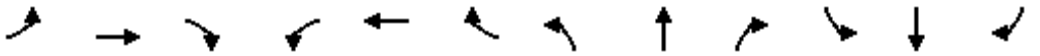
02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1605	15	77	1129	149	36	1	90	236	7	34
Future Volume (veh/h)	30	1605	15	77	1129	149	36	1	90	236	7	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1900	1885	1885	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	31	1655	15	89	1298	171	38	1	95	254	8	37
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	1	0	0	0	0	0	0	0	0	0
Cap, veh/h	190	2767	25	203	1729	226	383	4	406	334	75	346
Arrive On Green	0.01	0.17	0.17	0.04	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1810	5260	48	1810	3209	420	1383	17	1596	1320	294	1361
Grp Volume(v), veh/h	31	1080	590	89	727	742	38	0	96	254	0	45
Grp Sat Flow(s),veh/h/ln	1810	1716	1877	1810	1805	1824	1383	0	1613	1320	0	1655
Q Serve(g_s), s	0.9	34.8	34.8	2.7	37.3	38.0	2.6	0.0	5.7	22.7	0.0	2.5
Cycle Q Clear(g_c), s	0.9	34.8	34.8	2.7	37.3	38.0	5.1	0.0	5.7	28.3	0.0	2.5
Prop In Lane	1.00		0.03	1.00		0.23	1.00		0.99	1.00		0.82
Lane Grp Cap(c), veh/h	190	1805	987	203	972	983	383	0	410	334	0	421
V/C Ratio(X)	0.16	0.60	0.60	0.44	0.75	0.76	0.10	0.00	0.23	0.76	0.00	0.11
Avail Cap(c_a), veh/h	262	1805	987	267	972	983	404	0	435	354	0	447
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.6	37.9	37.9	19.1	21.4	21.5	36.2	0.0	35.5	46.7	0.0	34.3
Incr Delay (d2), s/veh	0.1	1.3	2.4	0.6	5.2	5.4	0.1	0.0	0.2	8.4	0.0	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(95%),veh/ln	0.7	22.7	24.9	2.0	23.3	23.9	1.6	0.0	4.1	12.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	39.2	40.3	19.6	26.6	26.9	36.3	0.0	35.7	55.1	0.0	34.4
LnGrp LOS	B	D	D	B	C	C	D	A	D	E	A	C
Approach Vol, veh/h		1701			1558			134			299	
Approach Delay, s/veh		39.2			26.3			35.9			52.0	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	71.7		38.1	11.7	70.1		38.1				
Change Period (Y+Rc), s	7.0	7.0		7.6	7.0	7.0		7.6				
Max Green Setting (Gmax), s	8.0	58.0		32.4	9.0	57.0		32.4				
Max Q Clear Time (g_c+I1), s	2.9	40.0		7.7	4.7	36.8		30.3				
Green Ext Time (p_c), s	0.0	1.2		0.3	0.0	1.7		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			34.7									
HCM 6th LOS			C									

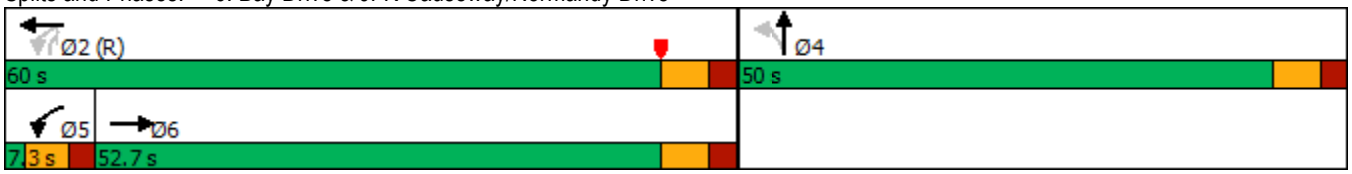


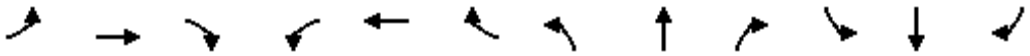
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1784	22	12	1256	17	0	36	12	0	0	0
Future Volume (vph)	0	1784	22	12	1256	17	0	36	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		100	0		0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.998				0.850			
Flt Protected				0.950								
Satd. Flow (prot)	0	4798	0	1805	5177	0	0	1900	1615	0	0	0
Flt Permitted				0.071								
Satd. Flow (perm)	0	4798	0	135	5177	0	0	1900	1615	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2				33			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3100			1397			932			973	
Travel Time (s)		70.5			31.8			21.2			22.1	
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.78	0.78	0.78	0.25	0.25	0.25
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	2027	25	13	1380	19	0	46	15	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2052	0	13	1399	0	0	46	15	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1		1	1	1			
Detector Template		Thru		Left	Thru		Left	Thru	Right			
Leading Detector (ft)		40		40	40		20	40	40			
Trailing Detector (ft)		0		0	0		0	0	0			
Detector 1 Position(ft)		0		0	0		0	0	0			
Detector 1 Size(ft)		40		40	40		20	40	40			
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Queue (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Delay (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Turn Type		NA		pm+pt	NA			NA	custom			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		2			
Detector Phase		6		5	2		4	4	2			
Switch Phase												
Minimum Initial (s)		16.0		1.0	16.0		7.0	7.0	16.0			
Minimum Split (s)		36.0		6.7	50.0		50.0	50.0	50.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)		52.7		7.3	60.0		50.0	50.0	60.0			
Total Split (%)		47.9%		6.6%	54.5%		45.5%	45.5%	54.5%			
Maximum Green (s)		46.4		1.6	53.7		43.7	43.7	53.7			
Yellow Time (s)		4.0		3.7	4.0		4.0	4.0	4.0			
All-Red Time (s)		2.3		2.0	2.3		2.3	2.3	2.3			
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0			
Total Lost Time (s)		6.3		5.7	6.3			6.3	6.3			
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		1.0		2.0	1.0		2.5	2.5	1.0			
Recall Mode		None		None	C-Max		None	None	C-Max			
Act Effct Green (s)		89.0		92.5	93.2			8.2	93.2			
Actuated g/C Ratio		0.81		0.84	0.85			0.07	0.85			
v/c Ratio		0.53		0.07	0.32			0.33	0.01			
Control Delay		5.9		2.8	2.6			54.2	0.2			
Queue Delay		0.0		0.0	0.0			0.0	0.0			
Total Delay		5.9		2.8	2.6			54.2	0.2			
LOS		A		A	A			D	A			
Approach Delay		5.9			2.6			40.9				
Approach LOS		A			A			D				
Queue Length 50th (ft)		129		1	69			32	0			
Queue Length 95th (ft)		281		5	98			59	1			
Internal Link Dist (ft)		3020			1317			852			893	
Turn Bay Length (ft)				250					100			
Base Capacity (vph)		3880		183	4384			754	1372			
Starvation Cap Reductn		0		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.53		0.07	0.32			0.06	0.01			

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 9 (8%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 5.2		Intersection LOS: A	
Intersection Capacity Utilization 58.8%		ICU Level of Service B	
Analysis Period (min) 15			

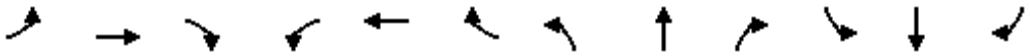
Splits and Phases: 6: Bay Drive & JFK Causeway/Normandy Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1784	22	12	1256	17	0	36	12	0	0	0
Future Volume (vph)	0	1784	22	12	1256	17	0	36	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.3		5.7	6.3			6.3	6.3			
Lane Util. Factor		0.91		1.00	0.91			1.00	1.00			
Frt		1.00		1.00	1.00			1.00	0.85			
Flt Protected		1.00		0.95	1.00			1.00	1.00			
Satd. Flow (prot)		4798		1805	5176			1900	1615			
Flt Permitted		1.00		0.07	1.00			1.00	1.00			
Satd. Flow (perm)		4798		134	5176			1900	1615			
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.78	0.78	0.78	0.25	0.25	0.25
Adj. Flow (vph)	0	2027	25	13	1380	19	0	46	15	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	3	0	0	0
Lane Group Flow (vph)	0	2052	0	13	1399	0	0	46	12	0	0	0
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA		pm+pt	NA			NA	custom			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		2			
Actuated Green, G (s)		83.0		90.6	90.6			6.8	90.6			
Effective Green, g (s)		83.0		90.6	90.6			6.8	90.6			
Actuated g/C Ratio		0.75		0.82	0.82			0.06	0.82			
Clearance Time (s)		6.3		5.7	6.3			6.3	6.3			
Vehicle Extension (s)		1.0		2.0	1.0			2.5	1.0			
Lane Grp Cap (vph)		3620		139	4263			117	1330			
v/s Ratio Prot		c0.43		0.00	c0.27			c0.02				
v/s Ratio Perm				0.08					0.01			
v/c Ratio		0.57		0.09	0.33			0.39	0.01			
Uniform Delay, d1		5.8		3.5	2.3			49.6	1.7			
Progression Factor		1.00		1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.1		0.1	0.2			1.6	0.0			
Delay (s)		5.9		3.6	2.6			51.2	1.7			
Level of Service		A		A	A			D	A			
Approach Delay (s)		5.9			2.6			39.0			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

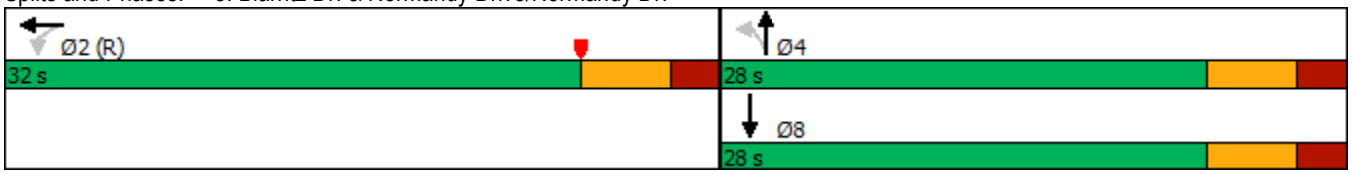


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	1211	59	29	78	0	0	47	128
Future Volume (vph)	0	0	0	6	1211	59	29	78	0	0	47	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	155		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.993						0.901	
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6328	0	1805	1900	0	0	1712	0
Flt Permitted							0.620					
Satd. Flow (perm)	0	0	0	0	6328	0	1178	1900	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			117			185			590	
Travel Time (s)		8.0			2.7			4.2			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	6	1302	63	37	100	0	0	59	162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1371	0	37	100	0	0	221	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				16.0	16.0		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.0	25.0		23.0	23.0			23.0	
Total Split (s)				32.0	32.0		28.0	28.0			28.0	
Total Split (%)				53.3%	53.3%		46.7%	46.7%			46.7%	
Maximum Green (s)				25.7	25.7		21.7	21.7			21.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					25.7		21.7	21.7			21.7	
Actuated g/C Ratio					0.43		0.36	0.36			0.36	
v/c Ratio					0.50		0.09	0.15			0.35	
Control Delay					5.5		13.4	13.7			14.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					5.5		13.4	13.7			14.8	
LOS					A		B	B			B	
Approach Delay					5.5			13.6			14.8	
Approach LOS					A			B			B	
Queue Length 50th (ft)					31		9	24			52	
Queue Length 95th (ft)					39		22	44			84	
Internal Link Dist (ft)		272			37			105			510	
Turn Bay Length (ft)							155					
Base Capacity (vph)					2721		426	687			630	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.50		0.09	0.15			0.35	

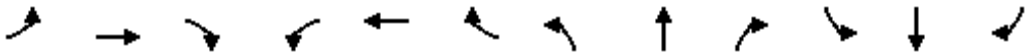
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 18 (30%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 7.3		Intersection LOS: A	
Intersection Capacity Utilization 46.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Biarritz Dr. & Normandy Drive/Normandy Dr.



HCM 6th Signalized Intersection Summary
5: Biarritz Dr. & Normandy Drive/Normandy Dr.

02/16/2024



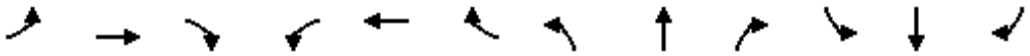
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	6	1211	59	29	78	0	0	47	128
Future Volume (veh/h)	0	0	0	6	1211	59	29	78	0	0	47	128
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				6	1302	63	37	100	0	0	59	162
Peak Hour Factor				0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				12	2848	141	432	687	0	0	162	445
Arrive On Green				0.14	0.14	0.14	0.36	0.36	0.00	0.00	0.36	0.36
Sat Flow, veh/h				29	6649	330	1178	1900	0	0	448	1230
Grp Volume(v), veh/h				397	622	351	37	100	0	0	0	221
Grp Sat Flow(s),veh/h/ln				1899	1634	1841	1178	1900	0	0	0	1679
Q Serve(g_s), s				11.6	10.5	10.5	1.4	2.1	0.0	0.0	0.0	5.8
Cycle Q Clear(g_c), s				11.6	10.5	10.5	7.2	2.1	0.0	0.0	0.0	5.8
Prop In Lane				0.02		0.18	1.00		0.00	0.00		0.73
Lane Grp Cap(c), veh/h				813	1400	788	432	687	0	0	0	607
V/C Ratio(X)				0.49	0.44	0.45	0.09	0.15	0.00	0.00	0.00	0.36
Avail Cap(c_a), veh/h				813	1400	788	432	687	0	0	0	607
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				19.7	19.2	19.2	16.7	12.9	0.0	0.0	0.0	14.1
Incr Delay (d2), s/veh				2.1	1.0	1.8	0.4	0.4	0.0	0.0	0.0	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				10.2	8.0	9.1	0.7	1.6	0.0	0.0	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.8	20.2	21.1	17.1	13.3	0.0	0.0	0.0	15.8
LnGrp LOS				C	C	C	B	B	A	A	A	B
Approach Vol, veh/h					1371			137			221	
Approach Delay, s/veh					20.9			14.4			15.8	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	32.0	28.0			28.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 26	* 22			* 22			
Max Q Clear Time (g_c+I1), s	13.6	9.2			7.8			
Green Ext Time (p_c), s	1.1	0.2			0.5			

Intersection Summary		
HCM 6th Ctrl Delay	19.7	
HCM 6th LOS	B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

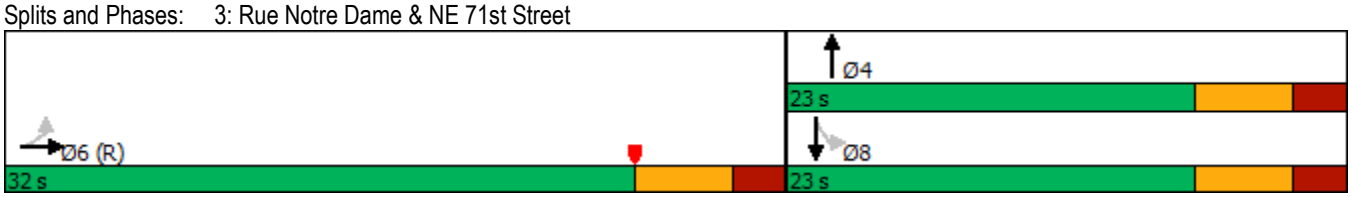


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	1693	10	0	0	0	0	8	18	67	14	0
Future Volume (vph)	78	1693	10	0	0	0	0	8	18	67	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.908				
Flt Protected		0.998									0.960	
Satd. Flow (prot)	0	4950	0	0	0	0	0	1553	0	0	1642	0
Flt Permitted		0.998									0.737	
Satd. Flow (perm)	0	4950	0	0	0	0	0	1553	0	0	1260	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						5				
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		910			2580			388			447	
Travel Time (s)		17.7			58.6			8.8			10.2	
Peak Hour Factor	0.94	0.94	0.94	0.25	0.25	0.25	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0						0			0	
Adj. Flow (vph)	83	1801	11	0	0	0	0	12	26	91	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1895	0	0	0	0	0	38	0	0	110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		20	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	13.8	13.8						7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0						23.0		23.0	23.0	
Total Split (s)	32.0	32.0						23.0		23.0	23.0	
Total Split (%)	58.2%	58.2%						41.8%		41.8%	41.8%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	25.8	25.8						16.7		16.7	16.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.2	2.2						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						2.5		2.5	2.5	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)		36.4						10.0			10.0	
Actuated g/C Ratio		0.66						0.18			0.18	
v/c Ratio		0.58						0.13			0.48	
Control Delay		8.2						16.7			26.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		8.2						16.7			26.6	
LOS		A						B			C	
Approach Delay		8.2						16.7			26.6	
Approach LOS		A						B			C	
Queue Length 50th (ft)		125						9			33	
Queue Length 95th (ft)		213						20			53	
Internal Link Dist (ft)		830			2500			308			367	
Turn Bay Length (ft)												
Base Capacity (vph)		3276						475			382	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.58						0.08			0.29	

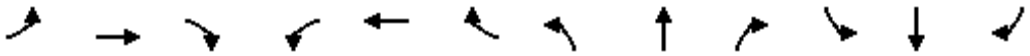
Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Rue Notre Dame & NE 71st Street



HCM 6th Signalized Intersection Summary
3: Rue Notre Dame & NE 71st Street

02/16/2024



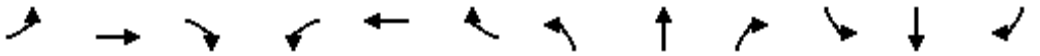
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	1693	10	0	0	0	0	8	18	67	14	0
Future Volume (veh/h)	78	1693	10	0	0	0	0	8	18	67	14	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	83	1801	11				0	12	26	91	19	0
Peak Hour Factor	0.94	0.94	0.94				0.69	0.69	0.69	0.74	0.74	0.74
Percent Heavy Veh, %	0	1	0				0	0	0	0	0	0
Cap, veh/h	148	3427	22				0	61	133	234	31	0
Arrive On Green	0.66	0.66	0.66				0.00	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	225	5211	33				0	534	1157	993	266	0
Grp Volume(v), veh/h	690	575	630				0	0	38	110	0	0
Grp Sat Flow(s),veh/h/ln	1874	1716	1879				0	0	1692	1259	0	0
Q Serve(g_s), s	11.0	9.5	9.5				0.0	0.0	1.1	3.8	0.0	0.0
Cycle Q Clear(g_c), s	11.0	9.5	9.5				0.0	0.0	1.1	4.9	0.0	0.0
Prop In Lane	0.12		0.02				0.00		0.68	0.83		0.00
Lane Grp Cap(c), veh/h	1233	1128	1236				0	0	194	264	0	0
V/C Ratio(X)	0.56	0.51	0.51				0.00	0.00	0.20	0.42	0.00	0.00
Avail Cap(c_a), veh/h	1233	1128	1236				0	0	514	540	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	4.8	4.8				0.0	0.0	22.0	24.1	0.0	0.0
Incr Delay (d2), s/veh	1.8	1.6	1.5				0.0	0.0	0.4	0.8	0.0	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
%ile BackOfQ(95%),veh/ln	5.3	4.2	4.6				0.0	0.0	0.8	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	6.5	6.3				0.0	0.0	22.4	24.9	0.0	0.0
LnGrp LOS	A	A	A				A	A	C	C	A	A
Approach Vol, veh/h		1895						38			110	
Approach Delay, s/veh		6.6						22.4			24.9	
Approach LOS		A						C			C	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.6		42.4		12.6				
Change Period (Y+Rc), s				* 6.3		6.2		* 6.3				
Max Green Setting (Gmax), s				* 17		25.8		* 17				
Max Q Clear Time (g_c+I1), s				3.1		13.0		6.9				
Green Ext Time (p_c), s				0.0		1.3		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			7.9									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

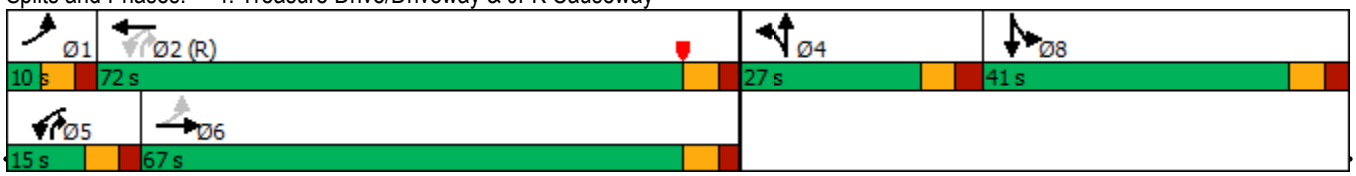


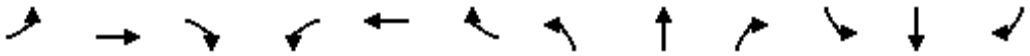
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1589	125	128	1147	2	187	2	220	1	3	1
Future Volume (vph)	6	1589	125	128	1147	2	187	2	220	1	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	25		0	0		500	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989							0.850		0.975	
Flt Protected	0.950			0.950				0.953			0.991	
Satd. Flow (prot)	1805	4735	0	1805	5187	0	0	1811	1615	0	1836	0
Flt Permitted	0.198			0.066				0.953			0.991	
Satd. Flow (perm)	376	4735	0	125	5187	0	0	1811	1615	0	1836	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10							272		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			3100			603			197	
Travel Time (s)		15.5			70.5			13.7			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.81	0.81	0.81	0.42	0.42	0.42
Heavy Vehicles (%)	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	1727	136	145	1303	2	231	2	272	2	7	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1863	0	145	1305	0	0	233	272	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	40		40	40		20	40	40	20	40	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	40	40		40	40		20	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	custom	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6			2					2			
Detector Phase	1	6		5	2		4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	3.8	7.0		3.8	7.0		7.0	7.0	3.8	7.0	7.0	
Minimum Split (s)	10.0	54.0		10.0	54.0		19.0	19.0	10.0	41.0	41.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	10.0	67.0		15.0	72.0		27.0	27.0	15.0	41.0	41.0	
Total Split (%)	6.7%	44.7%		10.0%	48.0%		18.0%	18.0%	10.0%	27.3%	27.3%	
Maximum Green (s)	3.8	60.5		8.8	65.5		19.9	19.9	8.8	34.0	34.0	
Yellow Time (s)	3.7	4.0		3.7	4.0		4.0	4.0	3.7	4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		3.1	3.1	2.5	3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	2.0	1.0		2.0	1.0		3.0	3.0	2.0	2.5	2.5	
Recall Mode	None	None		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	97.3	92.3		111.1	108.6			19.9	111.1		7.1	
Actuated g/C Ratio	0.65	0.62		0.74	0.72			0.13	0.74		0.05	
v/c Ratio	0.02	0.64		0.63	0.35			0.97	0.21		0.12	
Control Delay	8.2	20.9		32.1	9.0			114.7	1.2		63.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	8.2	20.9		32.1	9.0			114.7	1.2		63.2	
LOS	A	C		C	A			F	A		E	
Approach Delay		20.9			11.3			53.6			63.2	
Approach LOS		C			B			D			E	
Queue Length 50th (ft)	1	353		46	121			231	0		9	
Queue Length 95th (ft)	7	563		129	260			#341	17		13	
Internal Link Dist (ft)		602			3020			523			117	
Turn Bay Length (ft)	100			25					500			
Base Capacity (vph)	288	2916		230	3753			240	1266		417	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.64		0.63	0.35			0.97	0.21		0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 106 (71%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 74.2%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

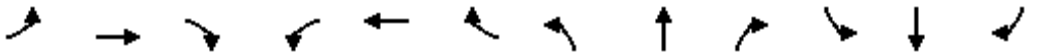
Splits and Phases: 4: Treasure Drive/Driveway & JFK Causeway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1589	125	128	1147	2	187	2	220	1	3	1
Future Volume (vph)	6	1589	125	128	1147	2	187	2	220	1	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1805	4735		1805	5186			1810	1615		1837	
Flt Permitted	0.20	1.00		0.07	1.00			0.95	1.00		0.99	
Satd. Flow (perm)	377	4735		126	5186			1810	1615		1837	
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.81	0.81	0.81	0.42	0.42	0.42
Adj. Flow (vph)	7	1727	136	145	1303	2	231	2	272	2	7	2
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	79	0	2	0
Lane Group Flow (vph)	7	1859	0	145	1305	0	0	233	193	0	9	0
Heavy Vehicles (%)	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	custom	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6			2					2			
Actuated Green, G (s)	89.1	88.1		106.6	99.4			19.9	106.6		2.9	
Effective Green, g (s)	89.1	88.1		106.6	99.4			19.9	106.6		2.9	
Actuated g/C Ratio	0.59	0.59		0.71	0.66			0.13	0.71		0.02	
Clearance Time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Vehicle Extension (s)	2.0	1.0		2.0	1.0			3.0	2.0		2.5	
Lane Grp Cap (vph)	233	2781		227	3436			240	1147		35	
v/s Ratio Prot	0.00	c0.39		c0.05	0.25			c0.13	0.01		c0.00	
v/s Ratio Perm	0.02			0.40					0.11			
v/c Ratio	0.03	0.67		0.64	0.38			0.97	0.17		0.26	
Uniform Delay, d1	12.4	21.0		25.0	11.4			64.8	7.1		72.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.5		4.3	0.3			49.7	0.0		2.8	
Delay (s)	12.4	21.5		29.3	11.7			114.4	7.2		75.3	
Level of Service	B	C		C	B			F	A		E	
Approach Delay (s)		21.5			13.5			56.7			75.3	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

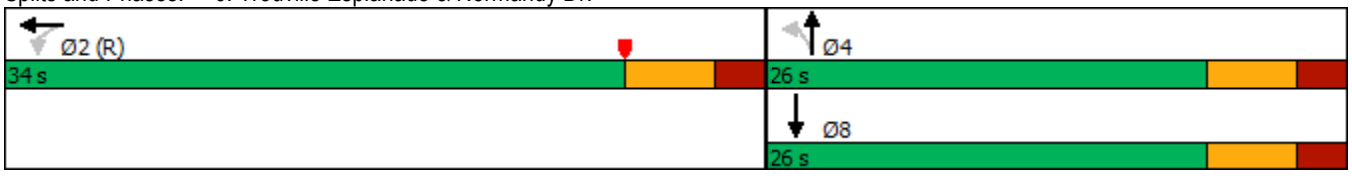


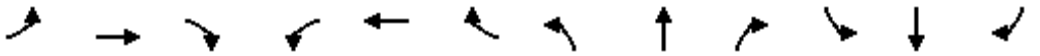
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	14	1214	3	28	20	0	0	8	15
Future Volume (vph)	0	0	0	14	1214	3	28	20	0	0	8	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.912	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	5009	0	1805	1900	0	0	1733	0
Flt Permitted					0.999		0.738					
Satd. Flow (perm)	0	0	0	0	5009	0	1402	1900	0	0	1733	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	15	1305	3	36	26	0	0	10	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1323	0	36	26	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				22.0	22.0		26.0	26.0			26.0	
Total Split (s)				34.0	34.0		26.0	26.0			26.0	
Total Split (%)				56.7%	56.7%		43.3%	43.3%			43.3%	
Maximum Green (s)				27.7	27.7		19.7	19.7			19.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					27.7		19.7	19.7			19.7	
Actuated g/C Ratio					0.46		0.33	0.33			0.33	
v/c Ratio					0.57		0.08	0.04			0.05	
Control Delay					13.0		14.6	14.1			8.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					13.0		14.6	14.1			8.8	
LOS					B		B	B			A	
Approach Delay					13.0			14.4			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					120		9	6			2	
Queue Length 95th (ft)					158		22	18			14	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2313		460	623			581	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.57		0.08	0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 41 (68%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.





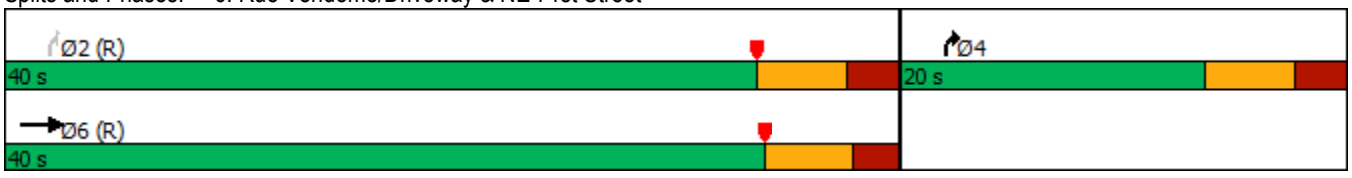
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1710	12	0	0	0	0	0	35	0	0	0
Future Volume (vph)	0	1710	12	0	0	0	0	0	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999							0.865			
Flt Protected												
Satd. Flow (prot)	0	4960	0	0	0	0	0	0	1644	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	4960	0	0	0	0	0	0	1644	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2580			1479			445			1028	
Travel Time (s)		50.3			33.6			10.1			23.4	
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.88	0.88	0.88	0.25	0.25	0.25
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	0	1859	13	0	0	0	0	0	40	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1872	0	0	0	0	0	0	40	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1							1			
Detector Template		Thru							Right			
Leading Detector (ft)		40							40			
Trailing Detector (ft)		0							0			
Detector 1 Position(ft)		0							0			
Detector 1 Size(ft)		40							40			
Detector 1 Type		Cl+Ex							Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0							0.0			
Detector 1 Queue (s)		0.0							0.0			
Detector 1 Delay (s)		0.0							0.0			
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Detector Phase		6							4			
Switch Phase												
Minimum Initial (s)		4.0							7.0			
Minimum Split (s)		28.0							20.0			
Total Split (s)		40.0							20.0			
Total Split (%)		66.7%							33.3%			

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	23.5
Total Split (s)	40.0
Total Split (%)	67%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)		33.9							13.6			
Yellow Time (s)		4.0							4.0			
All-Red Time (s)		2.1							2.4			
Lost Time Adjust (s)		0.0							0.0			
Total Lost Time (s)		6.1							6.4			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							2.5			
Recall Mode		C-Max							None			
Act Effct Green (s)		52.2							60.0			
Actuated g/C Ratio		0.87							1.00			
v/c Ratio		0.43							0.02			
Control Delay		2.9							0.0			
Queue Delay		0.0							0.0			
Total Delay		2.9							0.0			
LOS		A							A			
Approach Delay		2.9										
Approach LOS		A										
Queue Length 50th (ft)		0							0			
Queue Length 95th (ft)		133							0			
Internal Link Dist (ft)		2500			1399			365			948	
Turn Bay Length (ft)												
Base Capacity (vph)		4315							1644			
Starvation Cap Reductn		0							0			
Spillback Cap Reductn		0							0			
Storage Cap Reductn		0							0			
Reduced v/c Ratio		0.43							0.02			

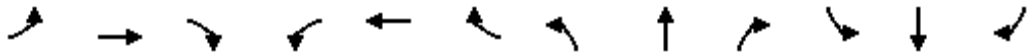
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 17.1 (29%), Referenced to phase 2:NBR and 6:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 2.9		Intersection LOS: A	
Intersection Capacity Utilization 77.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Rue Vendome/Driveway & NE 71st Street



Lane Group	Ø2
Maximum Green (s)	33.6
Yellow Time (s)	4.0
All-Red Time (s)	2.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.5
Recall Mode	C-Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1710	12	0	0	0	0	0	35	0	0	0
Future Volume (vph)	0	1710	12	0	0	0	0	0	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.1							6.4			
Lane Util. Factor		0.91							1.00			
Frt		1.00							0.86			
Flt Protected		1.00							1.00			
Satd. Flow (prot)		4960							1644			
Flt Permitted		1.00							1.00			
Satd. Flow (perm)		4960							1644			
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	0	1859	13	0	0	0	0	0	40	0	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1871	0	0	0	0	0	0	40	0	0	0
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Actuated Green, G (s)		44.7							47.2			
Effective Green, g (s)		44.7							47.2			
Actuated g/C Ratio		0.75							0.79			
Clearance Time (s)		6.1							6.4			
Vehicle Extension (s)		1.0							2.5			
Lane Grp Cap (vph)		3695							1644			
v/s Ratio Prot		c0.38							c0.00			
v/s Ratio Perm									0.02			
v/c Ratio		0.51							0.02			
Uniform Delay, d1		3.1							1.4			
Progression Factor		1.00							1.00			
Incremental Delay, d2		0.5							0.0			
Delay (s)		3.6							1.4			
Level of Service		A							A			
Approach Delay (s)		3.6			0.0			1.4			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1827	0	0	20	0
Future Vol, veh/h	21	1827	0	0	20	0
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	-
Veh in Median Storage, #	-	0	16979	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	92	92	58	58
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	1923	0	0	34	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	813	-
Stage 1	-	-	0	-
Stage 2	-	-	813	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	385	0
Stage 1	-	-	-	0
Stage 2	-	-	360	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	385	-
Mov Cap-2 Maneuver	-	-	385	-
Stage 1	-	-	-	-
Stage 2	-	-	360	-

Approach	EB	SB
HCM Control Delay, s		15.3
HCM LOS		C

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	385
HCM Lane V/C Ratio	-	-	0.09
HCM Control Delay (s)	-	-	15.3
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.3

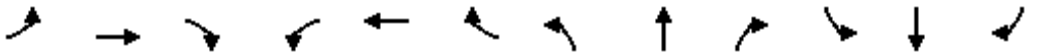
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	15	1228	48	8	2	0	0	0	44
Future Vol, veh/h	0	0	0	15	1228	48	8	2	0	0	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	97	97	97	83	83	83	82	82	82
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	0	0	15	1266	49	10	2	0	0	0	54

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	536	1345	-	-	-	658
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	536	1345	-	-	-	-
Critical Hdwy	5.5	-	-	6.44	6.54	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	3.2	-	-	3.82	4.02	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	-	474	150	0	0	0	349
Stage 1	-	-	-	-	-	0	0	0	-
Stage 2	-	-	-	453	218	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	401	150	-	-	-	349
Mov Cap-2 Maneuver	-	-	-	401	150	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	383	218	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		17.5	17.2
HCM LOS		C	C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	300	-	-	-	349
HCM Lane V/C Ratio	0.04	-	-	-	0.154
HCM Control Delay (s)	17.5	-	-	-	17.2
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

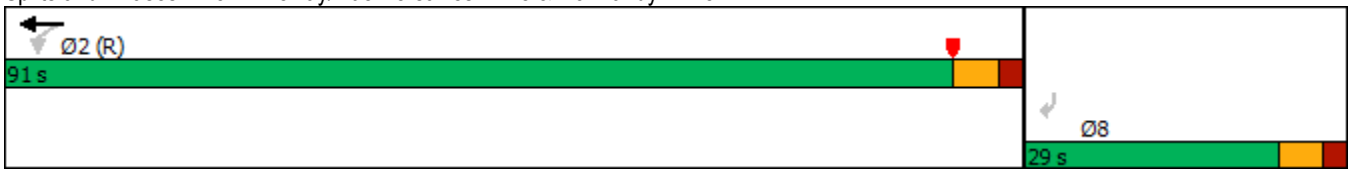


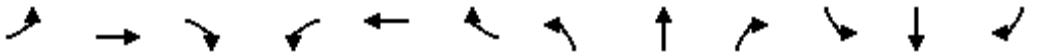
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	1190	37	0	0	0	0	0	44
Future Volume (vph)	0	0	0	29	1190	37	0	0	0	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected					0.999							
Satd. Flow (prot)	0	0	0	0	5161	0	0	0	0	0	0	1479
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	5161	0	0	0	0	0	0	1479
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					16							80
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		1857			1893			1028			837	
Travel Time (s)		42.2			36.9			23.4			19.0	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.50	0.50	0.50	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Adj. Flow (vph)	0	0	0	34	1384	43	0	0	0	0	0	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1461	0	0	0	0	0	0	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1							1
Detector Template				Left	Thru							Right
Leading Detector (ft)				20	40							40
Trailing Detector (ft)				0	0							0
Detector 1 Position(ft)				0	0							0
Detector 1 Size(ft)				20	40							40
Detector 1 Type				Cl+Ex	Cl+Ex							Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0							0.0
Detector 1 Queue (s)				0.0	0.0							0.0
Detector 1 Delay (s)				0.0	0.0							0.0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Detector Phase				2	2							8
Switch Phase												
Minimum Initial (s)				7.0	7.0							7.0
Minimum Split (s)				81.0	81.0							27.0
Total Split (s)				91.0	91.0							29.0
Total Split (%)				75.8%	75.8%							24.2%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)				84.7	84.7							22.7
Yellow Time (s)				4.0	4.0							4.0
All-Red Time (s)				2.3	2.3							2.3
Lost Time Adjust (s)					0.0							0.0
Total Lost Time (s)					6.3							6.3
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0							2.5
Recall Mode				C-Max	C-Max							None
Act Effct Green (s)					104.3							7.0
Actuated g/C Ratio					0.87							0.06
v/c Ratio					0.33							0.30
Control Delay					2.1							8.8
Queue Delay					0.0							0.0
Total Delay					2.1							8.8
LOS					A							A
Approach Delay					2.1						8.8	
Approach LOS					A						A	
Queue Length 50th (ft)					69							0
Queue Length 95th (ft)					75							16
Internal Link Dist (ft)		1777			1813			948			757	
Turn Bay Length (ft)												
Base Capacity (vph)					4488							344
Starvation Cap Reductn					0							0
Spillback Cap Reductn					0							0
Storage Cap Reductn					0							0
Reduced v/c Ratio					0.33							0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 16 (13%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 2.3		Intersection LOS: A	
Intersection Capacity Utilization 78.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 8: Driveway/Rue Versailles Drive & Normandy Drive

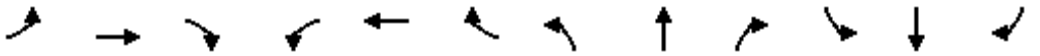




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	1190	37	0	0	0	0	0	44
Future Volume (vph)	0	0	0	29	1190	37	0	0	0	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.3							6.3
Lane Util. Factor					0.91							1.00
Frt					1.00							0.86
Flt Protected					1.00							1.00
Satd. Flow (prot)					5158							1479
Flt Permitted					1.00							1.00
Satd. Flow (perm)					5158							1479
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.50	0.50	0.50	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	1384	43	0	0	0	0	0	49
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	47
Lane Group Flow (vph)	0	0	0	0	1459	0	0	0	0	0	0	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Actuated Green, G (s)					101.8							5.6
Effective Green, g (s)					101.8							5.6
Actuated g/C Ratio					0.85							0.05
Clearance Time (s)					6.3							6.3
Vehicle Extension (s)					1.0							2.5
Lane Grp Cap (vph)					4375							69
v/s Ratio Prot												
v/s Ratio Perm					0.28							c0.00
v/c Ratio					0.33							0.03
Uniform Delay, d1					1.9							54.6
Progression Factor					1.00							1.00
Incremental Delay, d2					0.2							0.1
Delay (s)					2.1							54.8
Level of Service					A							D
Approach Delay (s)		0.0			2.1			0.0			54.8	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

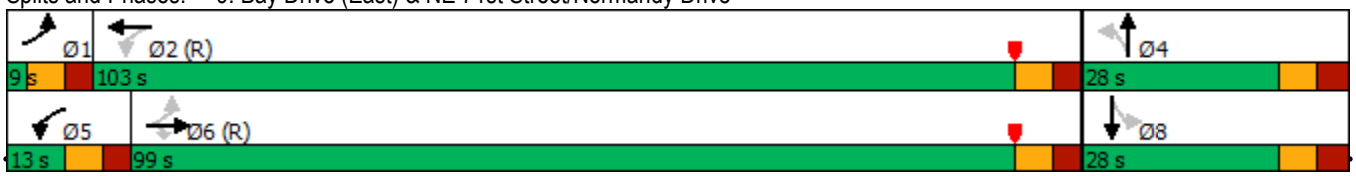


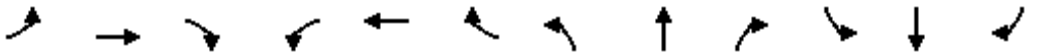
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1039	17	91	1822	159	35	3	34	153	10	24
Future Volume (vph)	41	1039	17	91	1822	159	35	3	34	153	10	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	90		0	50		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.862			0.895	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5136	1615	1805	3567	0	1805	1638	0	1805	1700	0
Flt Permitted	0.043			0.229			0.733			0.732		
Satd. Flow (perm)	82	5136	1615	435	3567	0	1393	1638	0	1391	1700	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90		15			36			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1479			1470			539			580	
Travel Time (s)		33.6			33.4			12.3			13.2	
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	42	1071	18	105	2094	183	37	3	36	165	11	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	1071	18	105	2277	0	37	39	0	165	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	40		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	2.0	7.0	7.0	2.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.0	82.0	82.0	9.0	82.0		28.0	28.0		28.0	28.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	9.0	99.0	99.0	13.0	103.0		28.0	28.0		28.0	28.0	
Total Split (%)	6.4%	70.7%	70.7%	9.3%	73.6%		20.0%	20.0%		20.0%	20.0%	
Maximum Green (s)	2.0	92.0	92.0	6.0	96.0		20.4	20.4		20.4	20.4	
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)	3.0	3.0	3.0	3.0	3.0		3.6	3.6		3.6	3.6	
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)	7.0	7.0	7.0	7.0	7.0		7.6	7.6		7.6	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	1.0	1.0	2.0	1.0		2.5	2.5		2.5	2.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	96.3	93.6	93.6	103.8	99.0		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.69	0.67	0.67	0.74	0.71		0.14	0.14		0.14	0.14	
v/c Ratio	0.47	0.31	0.02	0.28	0.90		0.20	0.15		0.88	0.15	
Control Delay	30.8	14.4	0.4	6.4	23.8		55.6	19.1		98.5	26.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.8	14.4	0.4	6.4	23.8		55.6	19.1		98.5	26.0	
LOS	C	B	A	A	C		E	B		F	C	
Approach Delay		14.8			23.0			36.9			85.2	
Approach LOS		B			C			D			F	
Queue Length 50th (ft)	14	153	0	22	868		30	2		148	9	
Queue Length 95th (ft)	#35	173	2	37	923		66	37		#271	43	
Internal Link Dist (ft)		1399			1390			459			500	
Turn Bay Length (ft)	150			100			90			50		
Base Capacity (vph)	89	3432	1109	381	2526		202	269		202	269	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.47	0.31	0.02	0.28	0.90		0.18	0.14		0.82	0.14	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 72 (51%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Bay Drive (East) & NE 71st Street/Normandy Drive

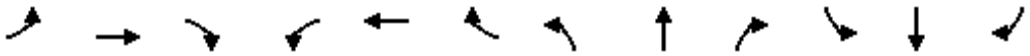




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1039	17	91	1822	159	35	3	34	153	10	24
Future Volume (veh/h)	41	1039	17	91	1822	159	35	3	34	153	10	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1900	1885	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	42	1071	18	105	2094	183	37	3	36	165	11	26
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	102	3436	1075	370	2306	199	228	18	219	225	73	173
Arrive On Green	0.00	0.22	0.22	0.03	0.69	0.69	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1810	5147	1610	1810	3363	290	1393	125	1504	1390	501	1185
Grp Volume(v), veh/h	42	1071	18	105	1109	1168	37	0	39	165	0	37
Grp Sat Flow(s),veh/h/ln	1810	1716	1610	1810	1805	1848	1393	0	1629	1390	0	1687
Q Serve(g_s), s	1.1	24.4	1.2	2.6	70.2	75.5	3.3	0.0	2.9	16.5	0.0	2.7
Cycle Q Clear(g_c), s	1.1	24.4	1.2	2.6	70.2	75.5	6.0	0.0	2.9	19.4	0.0	2.7
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.92	1.00		0.70
Lane Grp Cap(c), veh/h	102	3436	1075	370	1238	1267	228	0	237	225	0	246
V/C Ratio(X)	0.41	0.31	0.02	0.28	0.90	0.92	0.16	0.00	0.16	0.73	0.00	0.15
Avail Cap(c_a), veh/h	102	3436	1075	389	1238	1267	228	0	237	225	0	246
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.9	27.6	18.6	9.3	17.9	18.8	54.9	0.0	52.3	60.8	0.0	52.2
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.2	10.3	12.4	0.2	0.0	0.2	11.2	0.0	0.2
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(95%),veh/ln	1.8	16.8	0.8	1.8	39.4	43.5	2.2	0.0	2.2	10.7	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	27.9	18.6	9.5	28.2	31.1	55.1	0.0	52.6	72.0	0.0	52.4
LnGrp LOS	C	C	B	A	C	C	E	A	D	E	A	D
Approach Vol, veh/h		1131			2382			76			202	
Approach Delay, s/veh		28.0			28.8			53.8			68.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	103.0		28.0	11.5	100.5		28.0				
Change Period (Y+Rc), s	7.0	7.0		7.6	7.0	7.0		7.6				
Max Green Setting (Gmax), s	2.0	96.0		20.4	6.0	92.0		20.4				
Max Q Clear Time (g_c+I1), s	3.1	77.5		8.0	4.6	26.4		21.4				
Green Ext Time (p_c), s	0.0	2.2		0.1	0.0	1.3		0.0				

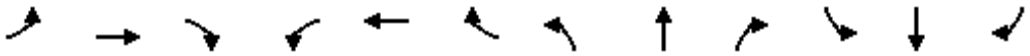
Intersection Summary												
HCM 6th Ctrl Delay			31.2									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1370	45	33	1842	15	25	1	14	0	0	0
Future Volume (vph)	0	1370	45	33	1842	15	25	1	14	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.3		5.7	6.3			6.3	6.3			
Lane Util. Factor		0.91		1.00	0.91			1.00	1.00			
Frt		1.00		1.00	1.00			1.00	0.85			
Flt Protected		1.00		0.95	1.00			0.95	1.00			
Satd. Flow (prot)		5162		1805	5066			1812	1615			
Flt Permitted		1.00		0.05	1.00			0.95	1.00			
Satd. Flow (perm)		5162		96	5066			1812	1615			
Peak-hour factor, PHF	0.68	0.68	0.68	0.93	0.93	0.93	0.68	0.68	0.68	0.50	0.50	0.50
Adj. Flow (vph)	0	2015	66	35	1981	16	37	1	21	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	14	0	0	0
Lane Group Flow (vph)	0	2079	0	35	1997	0	0	38	7	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type		NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		4			
Actuated Green, G (s)		73.8		83.7	83.7			43.7	43.7			
Effective Green, g (s)		73.8		83.7	83.7			43.7	43.7			
Actuated g/C Ratio		0.53		0.60	0.60			0.31	0.31			
Clearance Time (s)		6.3		5.7	6.3			6.3	6.3			
Vehicle Extension (s)		1.0		2.0	2.5			2.5	2.5			
Lane Grp Cap (vph)		2721		108	3028			565	504			
v/s Ratio Prot		c0.40		0.01	c0.39							
v/s Ratio Perm				0.18				0.02	0.00			
v/c Ratio		0.76		0.32	0.66			0.07	0.01			
Uniform Delay, d1		26.2		21.2	18.7			33.8	33.3			
Progression Factor		1.00		1.00	1.00			1.00	1.00			
Incremental Delay, d2		2.1		0.6	1.1			0.2	0.0			
Delay (s)		28.3		21.8	19.8			34.1	33.3			
Level of Service		C		C	B			C	C			
Approach Delay (s)		28.3			19.9			33.8			0.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



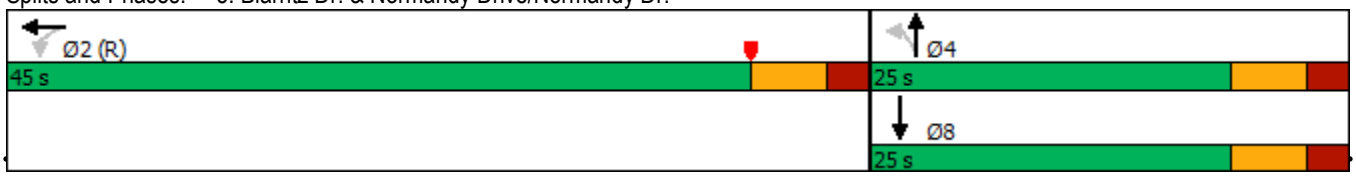
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	7	1962	32	34	95	0	0	22	88
Future Volume (vph)	0	0	0	7	1962	32	34	95	0	0	22	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998						0.892	
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5782	0	1770	1863	0	0	1662	0
Flt Permitted							0.684					
Satd. Flow (perm)	0	0	0	0	5782	0	1274	1863	0	0	1662	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7						7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			117			185			590	
Travel Time (s)		8.0			2.7			4.2			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.83	0.83	0.83	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	7	2023	33	41	114	0	0	23	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2063	0	41	114	0	0	114	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				16.0	16.0		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				35.0	35.0		23.0	23.0			23.0	
Total Split (s)				45.0	45.0		25.0	25.0			25.0	
Total Split (%)				64.3%	64.3%		35.7%	35.7%			35.7%	
Maximum Green (s)				38.7	38.7		18.7	18.7			18.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					38.7		18.7	18.7			18.7	
Actuated g/C Ratio					0.55		0.27	0.27			0.27	
v/c Ratio					0.64		0.12	0.23			0.25	
Control Delay					6.8		20.6	21.6			20.8	
Queue Delay					1.9		0.1	0.0			0.1	
Total Delay					8.7		20.7	21.6			20.9	
LOS					A		C	C			C	
Approach Delay					8.7			21.3			20.9	
Approach LOS					A			C			C	
Queue Length 50th (ft)					77		13	38			36	
Queue Length 95th (ft)					m95		33	70			75	
Internal Link Dist (ft)		272			37			105			510	
Turn Bay Length (ft)							100					
Base Capacity (vph)					3199		340	497			449	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					926		38	0			51	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.91		0.14	0.23			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 4 (6%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 52.8%		ICU Level of Service A	
Analysis Period (min) 15			

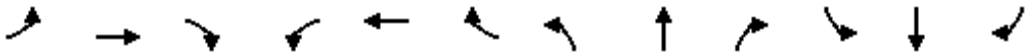
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Biarritz Dr. & Normandy Drive/Normandy Dr.



HCM 6th Signalized Intersection Summary
5: Biarritz Dr. & Normandy Drive/Normandy Dr.

02/16/2024



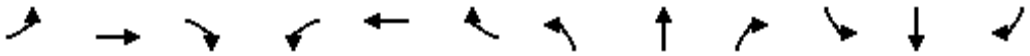
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	7	1962	32	34	95	0	0	22	88
Future Volume (veh/h)	0	0	0	7	1962	32	34	95	0	0	22	88
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1752	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				7	2023	33	41	114	0	0	23	91
Peak Hour Factor				0.97	0.97	0.97	0.83	0.83	0.83	0.97	0.97	0.97
Percent Heavy Veh, %				0	10	0	2	2	0	0	2	2
Cap, veh/h				11	3521	59	374	500	0	0	88	349
Arrive On Green				0.18	0.18	0.18	0.27	0.27	0.00	0.00	0.27	0.27
Sat Flow, veh/h				21	6369	107	1279	1870	0	0	330	1305
Grp Volume(v), veh/h				595	932	536	41	114	0	0	0	114
Grp Sat Flow(s),veh/h/ln				1751	1507	1733	1279	1870	0	0	0	1635
Q Serve(g_s), s				21.9	19.7	19.7	1.8	3.3	0.0	0.0	0.0	3.8
Cycle Q Clear(g_c), s				21.9	19.7	19.7	5.7	3.3	0.0	0.0	0.0	3.8
Prop In Lane				0.01		0.06	1.00		0.00	0.00		0.80
Lane Grp Cap(c), veh/h				968	1666	958	374	500	0	0	0	437
V/C Ratio(X)				0.61	0.56	0.56	0.11	0.23	0.00	0.00	0.00	0.26
Avail Cap(c_a), veh/h				968	1666	958	374	500	0	0	0	437
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				21.8	20.9	20.9	22.4	20.0	0.0	0.0	0.0	20.2
Incr Delay (d2), s/veh				2.9	1.4	2.4	0.6	1.1	0.0	0.0	0.0	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				16.2	12.7	14.6	1.1	2.7	0.0	0.0	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.7	22.2	23.2	23.0	21.1	0.0	0.0	0.0	21.7
LnGrp LOS				C	C	C	C	C	A	A	A	C
Approach Vol, veh/h					2063			155			114	
Approach Delay, s/veh					23.2			21.6			21.7	
Approach LOS					C			C			C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	45.0	25.0	25.0
Change Period (Y+Rc), s	* 6.3	* 6.3	* 6.3
Max Green Setting (Gmax), s	* 39	* 19	* 19
Max Q Clear Time (g_c+I1), s	23.9	7.7	5.8
Green Ext Time (p_c), s	2.0	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

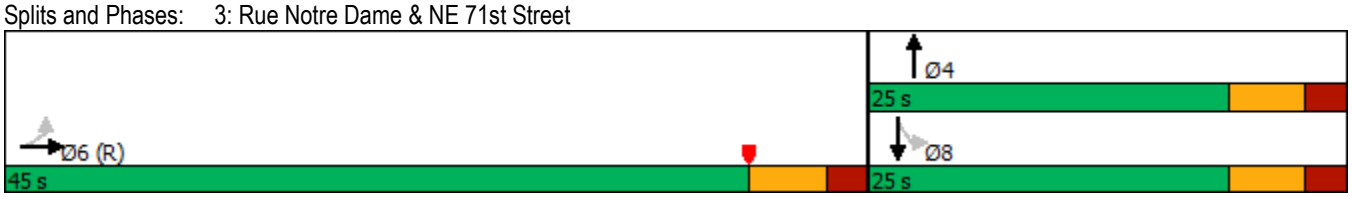


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1099	8	0	0	0	0	8	11	24	20	0
Future Volume (vph)	35	1099	8	0	0	0	0	8	11	24	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.924				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	4999	0	0	0	0	0	1580	0	0	1664	0
Flt Permitted		0.998									0.817	
Satd. Flow (perm)	0	4999	0	0	0	0	0	1580	0	0	1397	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						13				
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		910			2580			388			447	
Travel Time (s)		17.7			58.6			8.8			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.83	0.83	0.83	0.60	0.60	0.60
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0						0			0	
Adj. Flow (vph)	44	1391	10	0	0	0	0	10	13	40	33	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1445	0	0	0	0	0	23	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		20	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	13.8	13.8						7.0		7.0	7.0	
Minimum Split (s)	35.0	35.0						23.0		23.0	23.0	
Total Split (s)	45.0	45.0						25.0		25.0	25.0	
Total Split (%)	64.3%	64.3%						35.7%		35.7%	35.7%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	38.8	38.8						18.7		18.7	18.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.2	2.2						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						2.5		2.5	2.5	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)		52.5						8.9			8.9	
Actuated g/C Ratio		0.75						0.13			0.13	
v/c Ratio		0.39						0.11			0.41	
Control Delay		4.7						18.2			34.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		4.7						18.2			34.6	
LOS		A						B			C	
Approach Delay		4.7						18.2			34.6	
Approach LOS		A						B			C	
Queue Length 50th (ft)		76						4			30	
Queue Length 95th (ft)		101						20			40	
Internal Link Dist (ft)		830			2500			308			367	
Turn Bay Length (ft)												
Base Capacity (vph)		3749						431			373	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.39						0.05			0.20	

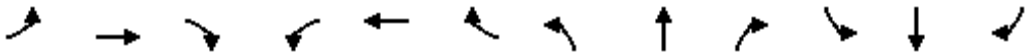
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 39 (56%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Rue Notre Dame & NE 71st Street



HCM 6th Signalized Intersection Summary
3: Rue Notre Dame & NE 71st Street

02/16/2024



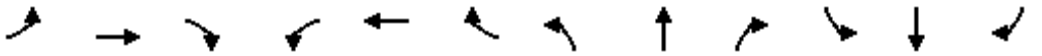
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1099	8	0	0	0	0	8	11	24	20	0
Future Volume (veh/h)	35	1099	8	0	0	0	0	8	11	24	20	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	44	1391	10				0	10	13	40	33	0
Peak Hour Factor	0.79	0.79	0.79				0.83	0.83	0.83	0.60	0.60	0.60
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	116	3918	29				0	63	82	143	75	0
Arrive On Green	0.74	0.74	0.74				0.00	0.08	0.08	0.08	0.08	0.00
Sat Flow, veh/h	158	5317	39				0	750	975	747	886	0
Grp Volume(v), veh/h	527	438	480				0	0	23	73	0	0
Grp Sat Flow(s),veh/h/ln	1892	1729	1893				0	0	1725	1632	0	0
Q Serve(g_s), s	7.1	6.3	6.3				0.0	0.0	0.9	2.1	0.0	0.0
Cycle Q Clear(g_c), s	7.1	6.3	6.3				0.0	0.0	0.9	2.9	0.0	0.0
Prop In Lane	0.08		0.02				0.00		0.57	0.55		0.00
Lane Grp Cap(c), veh/h	1394	1274	1395				0	0	146	218	0	0
V/C Ratio(X)	0.38	0.34	0.34				0.00	0.00	0.16	0.34	0.00	0.00
Avail Cap(c_a), veh/h	1394	1274	1395				0	0	461	509	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	3.2	3.2				0.0	0.0	29.7	30.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.7	0.7				0.0	0.0	0.4	0.7	0.0	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
%ile BackOfQ(50%),veh/ln	1.8	1.4	1.6				0.0	0.0	0.4	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.1	4.0	3.9				0.0	0.0	30.1	31.3	0.0	0.0
LnGrp LOS	A	A	A				A	A	C	C	A	A
Approach Vol, veh/h		1445						23			73	
Approach Delay, s/veh		4.0						30.1			31.3	
Approach LOS		A						C			C	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.2		57.8		12.2				
Change Period (Y+Rc), s				* 6.3		6.2		* 6.3				
Max Green Setting (Gmax), s				* 19		38.8		* 19				
Max Q Clear Time (g_c+I1), s				2.9		9.1		4.9				
Green Ext Time (p_c), s				0.0		0.9		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			5.7									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1164	144	122	1847	10	110	1	85	5	1	1
Future Volume (vph)	16	1164	144	122	1847	10	110	1	85	5	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	25		0	0		500	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.999				0.850		0.982	
Flt Protected	0.950			0.950				0.953			0.965	
Satd. Flow (prot)	1805	5099	0	1805	5081	0	0	1811	1615	0	1800	0
Flt Permitted	0.078			0.081				0.953			0.965	
Satd. Flow (perm)	148	5099	0	154	5081	0	0	1811	1615	0	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			1				106		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			3100			603			197	
Travel Time (s)		15.5			70.5			13.7			4.5	
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.80	0.80	0.80	0.44	0.44	0.44
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	23	1639	203	131	1986	11	138	1	106	11	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	1842	0	131	1997	0	0	139	106	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	

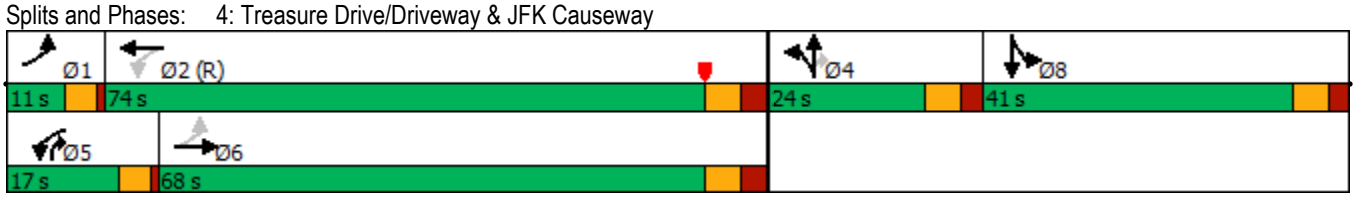
Lanes, Volumes, Timings
4: Treasure Drive/Driveway & JFK Causeway 02/16/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6			2					4			
Detector Phase	1	6		5	2		4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0	5.0	7.0	7.0	
Minimum Split (s)	11.0	53.0		11.0	53.0		19.0	19.0	11.0	41.0	41.0	
Total Split (s)	11.0	68.0		17.0	74.0		24.0	24.0	17.0	41.0	41.0	
Total Split (%)	7.3%	45.3%		11.3%	49.3%		16.0%	16.0%	11.3%	27.3%	27.3%	
Maximum Green (s)	6.5	61.0		12.5	66.9		17.5	17.5	12.5	34.5	34.5	
Yellow Time (s)	3.5	4.0		3.5	4.0		4.0	4.0	3.5	4.0	4.0	
All-Red Time (s)	1.0	3.0		1.0	3.1		2.5	2.5	1.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.5	7.0		4.5	7.1			6.5	4.5		6.5	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	3.0	2.5		3.0	3.0		1.0	1.0	3.0	1.0	1.0	
Recall Mode	None	None		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	110.9	102.4		119.0	110.3			14.3	28.9		7.0	
Actuated g/C Ratio	0.74	0.68		0.79	0.74			0.10	0.19		0.05	
v/c Ratio	0.13	0.53		0.57	0.53			0.81	0.27		0.18	
Control Delay	7.1	14.2		19.2	11.3			98.4	7.5		67.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	7.1	14.2		19.2	11.3			98.4	7.5		67.1	
LOS	A	B		B	B			F	A		E	
Approach Delay		14.1			11.8			59.1			67.1	
Approach LOS		B			B			E			E	
Queue Length 50th (ft)	3	258		20	275			135	0		13	
Queue Length 95th (ft)	11	330		90	461			183	29		17	
Internal Link Dist (ft)		602			3020			523			117	
Turn Bay Length (ft)	100			25					500			
Base Capacity (vph)	182	3487		267	3736			211	429		415	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.13	0.53		0.49	0.53			0.66	0.25		0.04	

Intersection Summary

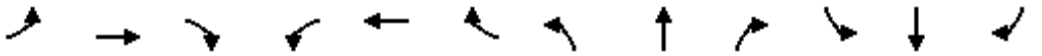
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 146 (97%), Referenced to phase 2:WBTL, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 15.7 Intersection LOS: B
Intersection Capacity Utilization 63.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4: Treasure Drive/Driveway & JFK Causeway



HCM 6th Signalized Intersection Summary
4: Treasure Drive/Driveway & JFK Causeway

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	1164	144	122	1847	10	110	1	85	5	1	1
Future Volume (veh/h)	16	1164	144	122	1847	10	110	1	85	5	1	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1900	1900	1900	1900	1870	1870	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	1639	203	131	1986	11	138	1	106	11	2	2
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.80	0.80	0.80	0.44	0.44	0.44
Percent Heavy Veh, %	0	0	0	0	2	2	0	0	0	0	0	0
Cap, veh/h	200	3220	398	245	3688	20	162	1	203	28	5	5
Arrive On Green	0.02	0.69	0.69	0.04	0.70	0.70	0.09	0.09	0.09	0.02	0.02	0.02
Sat Flow, veh/h	1810	4676	578	1810	5240	29	1797	13	1610	1314	239	239
Grp Volume(v), veh/h	23	1211	631	131	1290	707	139	0	106	15	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1796	1810	1702	1865	1810	0	1610	1791	0	0
Q Serve(g_s), s	0.6	25.2	25.3	3.2	27.1	27.1	11.4	0.0	9.2	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	25.2	25.3	3.2	27.1	27.1	11.4	0.0	9.2	1.2	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.02	0.99		1.00	0.73		0.13
Lane Grp Cap(c), veh/h	200	2381	1237	245	2396	1313	163	0	203	39	0	0
V/C Ratio(X)	0.12	0.51	0.51	0.53	0.54	0.54	0.85	0.00	0.52	0.39	0.00	0.00
Avail Cap(c_a), veh/h	241	2381	1237	331	2396	1313	211	0	246	412	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.70	0.70	0.70	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.7	11.2	11.2	10.5	10.6	10.6	67.3	0.0	61.4	72.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.3	1.3	0.6	1.1	18.6	0.0	0.8	2.3	0.0	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(95%),veh/ln	0.4	14.5	15.1	2.3	14.4	15.8	10.2	0.0	6.9	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	11.3	11.5	11.8	11.2	11.7	85.9	0.0	62.1	74.7	0.0	0.0
LnGrp LOS	A	B	B	B	B	B	F	A	E	E	A	A
Approach Vol, veh/h		1865			2128			245			15	
Approach Delay, s/veh		11.4			11.4			75.6			74.7	
Approach LOS		B			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	112.7		20.0	9.9	110.4		9.8				
Change Period (Y+Rc), s	4.5	7.1		6.5	4.5	* 7.1		6.5				
Max Green Setting (Gmax), s	6.5	66.9		17.5	12.5	* 61		34.5				
Max Q Clear Time (g_c+I1), s	2.6	29.1		13.4	5.2	27.3		3.2				
Green Ext Time (p_c), s	0.0	21.8		0.1	0.2	15.4		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1133	35	0	0	0	0	13	11	16	6	0
Future Volume (vph)	36	1133	35	0	0	0	0	13	11	16	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996						0.938				
Flt Protected		0.999								0.950		
Satd. Flow (prot)	0	4535	0	0	0	0	0	1747	0	1770	1863	0
Flt Permitted		0.999								0.734		
Satd. Flow (perm)	0	4535	0	0	0	0	0	1747	0	1367	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9						16				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1600			1203			590			226	
Travel Time (s)		36.4			27.3			13.4			5.1	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.69	0.69	0.69	0.64	0.64	0.64
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	40	1259	39	0	0	0	0	19	16	25	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1338	0	0	0	0	0	35	0	25	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	16.0	16.0						10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	102.0	102.0						26.0		26.0	26.0	
Total Split (s)	112.0	112.0						28.0		28.0	28.0	
Total Split (%)	80.0%	80.0%						20.0%		20.0%	20.0%	
Maximum Green (s)	105.7	105.7						21.7		21.7	21.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.3	2.3						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		6.3						6.3		6.3	6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						1.0		2.5	2.5	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		105.7						21.7		21.7	21.7	
Actuated g/C Ratio		0.76						0.16		0.16	0.16	
v/c Ratio		0.39						0.12		0.12	0.03	
Control Delay		6.3						33.7		50.4	51.0	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		6.3						33.7		50.4	51.0	
LOS		A						C		D	D	
Approach Delay		6.3						33.7			50.6	
Approach LOS		A						C			D	
Queue Length 50th (ft)		135						15		17	6	
Queue Length 95th (ft)		156						34		m24	m10	
Internal Link Dist (ft)		1520			1123			510			146	
Turn Bay Length (ft)										100		
Base Capacity (vph)		3426						284		211	288	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.39						0.12		0.12	0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 4 (3%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

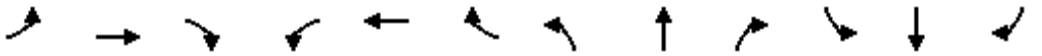
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trouville Esplanade & 71st Street



HCM 6th Signalized Intersection Summary
8: Trouville Esplanade & 71st Street

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1133	35	0	0	0	0	13	11	16	6	0
Future Volume (veh/h)	36	1133	35	0	0	0	0	13	11	16	6	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1752	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	40	1259	39				0	19	16	25	9	0
Peak Hour Factor	0.90	0.90	0.90				0.69	0.69	0.69	0.64	0.64	0.64
Percent Heavy Veh, %	0	10	0				0	2	2	2	2	0
Cap, veh/h	108	3600	115				0	145	122	240	290	0
Arrive On Green	0.75	0.75	0.75				0.00	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	142	4768	153				0	938	790	1373	1870	0
Grp Volume(v), veh/h	490	407	441				0	0	35	25	9	0
Grp Sat Flow(s),veh/h/ln	1745	1594	1724				0	0	1728	1373	1870	0
Q Serve(g_s), s	13.4	11.8	11.8				0.0	0.0	2.4	2.2	0.6	0.0
Cycle Q Clear(g_c), s	13.4	11.8	11.8				0.0	0.0	2.4	4.7	0.6	0.0
Prop In Lane	0.08		0.09				0.00		0.46	1.00		0.00
Lane Grp Cap(c), veh/h	1317	1204	1302				0	0	268	240	290	0
V/C Ratio(X)	0.37	0.34	0.34				0.00	0.00	0.13	0.10	0.03	0.00
Avail Cap(c_a), veh/h	1317	1204	1302				0	0	268	240	290	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.8	5.6	5.6				0.0	0.0	51.0	53.0	50.2	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.7				0.0	0.0	1.0	0.9	0.2	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
%ile BackOfQ(95%),veh/ln	8.4	7.0	7.6				0.0	0.0	2.1	1.5	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.6	6.4	6.4				0.0	0.0	52.0	53.9	50.4	0.0
LnGrp LOS	A	A	A				A	A	D	D	D	A
Approach Vol, veh/h		1338						35			34	
Approach Delay, s/veh		6.5						52.0			53.0	
Approach LOS		A						D			D	

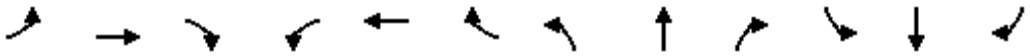
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				28.0		112.0		28.0				
Change Period (Y+Rc), s				* 6.3		6.3		* 6.3				
Max Green Setting (Gmax), s				* 22		105.7		* 22				
Max Q Clear Time (g_c+I1), s				4.4		15.4		6.7				
Green Ext Time (p_c), s				0.0		4.4		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

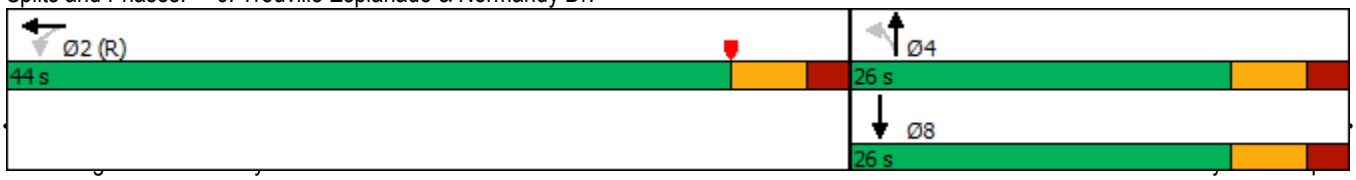


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	1936	15	36	26	0	0	5	17
Future Volume (vph)	0	0	0	21	1936	15	36	26	0	0	5	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999						0.896	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	4549	0	1770	1863	0	0	1669	0
Flt Permitted					0.999		0.740					
Satd. Flow (perm)	0	0	0	0	4549	0	1378	1863	0	0	1669	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86	0.86
Heavy Vehicles (%)	2%	2%	2%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	24	2175	17	37	27	0	0	6	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2216	0	37	27	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				32.0	32.0		26.0	26.0			26.0	
Total Split (s)				44.0	44.0		26.0	26.0			26.0	
Total Split (%)				62.9%	62.9%		37.1%	37.1%			37.1%	
Maximum Green (s)				37.7	37.7		19.7	19.7			19.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					37.7		19.7	19.7			19.7	
Actuated g/C Ratio					0.54		0.28	0.28			0.28	
v/c Ratio					0.90		0.10	0.05			0.06	
Control Delay					21.5		18.1	17.6			16.9	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					21.5		18.1	17.6			16.9	
LOS					C		B	B			B	
Approach Delay					21.5			17.9			16.9	
Approach LOS					C			B			B	
Queue Length 50th (ft)					289		11	8			7	
Queue Length 95th (ft)					#366		26	21			23	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2450		387	524			472	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.90		0.10	0.05			0.06	

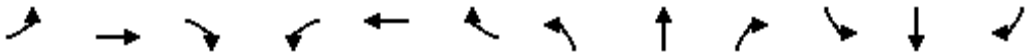
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 38 (54%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 21.3		Intersection LOS: C	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.



HCM 6th Signalized Intersection Summary
6: Trouville Esplanade & Normandy Dr.

02/16/2024



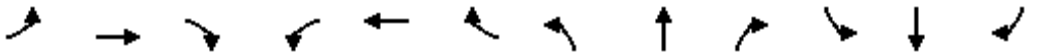
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	21	1936	15	36	26	0	0	5	17
Future Volume (veh/h)	0	0	0	21	1936	15	36	26	0	0	5	17
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1752	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				24	2175	17	37	27	0	0	6	20
Peak Hour Factor				0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86	0.86
Percent Heavy Veh, %				0	10	0	2	2	0	0	2	2
Cap, veh/h				28	2691	22	477	526	0	0	107	356
Arrive On Green				0.54	0.54	0.54	0.28	0.28	0.00	0.00	0.28	0.28
Sat Flow, veh/h				52	4996	40	1385	1870	0	0	379	1264
Grp Volume(v), veh/h				810	671	735	37	27	0	0	0	26
Grp Sat Flow(s),veh/h/ln				1749	1594	1745	1385	1870	0	0	0	1643
Q Serve(g_s), s				27.8	23.5	23.5	1.4	0.7	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s				27.8	23.5	23.5	2.2	0.7	0.0	0.0	0.0	0.8
Prop In Lane				0.03		0.02	1.00		0.00	0.00		0.77
Lane Grp Cap(c), veh/h				942	859	940	477	526	0	0	0	462
V/C Ratio(X)				0.86	0.78	0.78	0.08	0.05	0.00	0.00	0.00	0.06
Avail Cap(c_a), veh/h				942	859	940	477	526	0	0	0	462
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				13.9	12.9	12.9	19.2	18.3	0.0	0.0	0.0	18.4
Incr Delay (d2), s/veh				10.1	7.0	6.5	0.3	0.2	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				17.4	13.6	14.4	0.9	0.6	0.0	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.9	19.9	19.3	19.5	18.5	0.0	0.0	0.0	18.6
LnGrp LOS				C	B	B	B	B	A	A	A	B
Approach Vol, veh/h					2216			64			26	
Approach Delay, s/veh					21.2			19.1			18.6	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	44.0	26.0			26.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 38	* 20			* 20			
Max Q Clear Time (g_c+I1), s	29.8	4.2			2.8			
Green Ext Time (p_c), s	1.6	0.1			0.0			

Intersection Summary		
HCM 6th Ctrl Delay	21.1	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



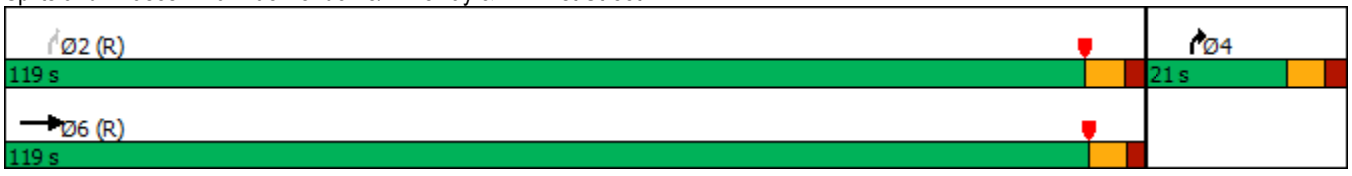
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1135	29	0	0	0	0	0	32	0	0	0
Future Volume (vph)	0	1135	29	0	0	0	0	0	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996							0.865			
Flt Protected												
Satd. Flow (prot)	0	4994	0	0	0	0	0	0	1644	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	4994	0	0	0	0	0	0	1644	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		10										
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2580			1479			445			1028	
Travel Time (s)		50.3			33.6			10.1			23.4	
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.93	0.93	0.25	0.25	0.25
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	0	1234	32	0	0	0	0	0	34	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1266	0	0	0	0	0	0	34	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1							1			
Detector Template		Thru							Right			
Leading Detector (ft)		40							40			
Trailing Detector (ft)		0							0			
Detector 1 Position(ft)		0							0			
Detector 1 Size(ft)		40							40			
Detector 1 Type		Cl+Ex							Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0							0.0			
Detector 1 Queue (s)		0.0							0.0			
Detector 1 Delay (s)		0.0							0.0			
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Detector Phase		6							4			
Switch Phase												
Minimum Initial (s)		4.0							7.0			
Minimum Split (s)		108.0							20.0			
Total Split (s)		119.0							21.0			
Total Split (%)		85.0%							15.0%			

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	23.5
Total Split (s)	119.0
Total Split (%)	85%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)		112.9							14.6			
Yellow Time (s)		4.0							4.0			
All-Red Time (s)		2.1							2.4			
Lost Time Adjust (s)		0.0							0.0			
Total Lost Time (s)		6.1							6.4			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							2.5			
Recall Mode		C-Max							None			
Act Effct Green (s)		128.3							140.0			
Actuated g/C Ratio		0.92							1.00			
v/c Ratio		0.28							0.02			
Control Delay		1.0							0.0			
Queue Delay		0.0							0.0			
Total Delay		1.0							0.0			
LOS		A							A			
Approach Delay		1.0										
Approach LOS		A										
Queue Length 50th (ft)		37							0			
Queue Length 95th (ft)		41							0			
Internal Link Dist (ft)		2500			1399			365			948	
Turn Bay Length (ft)												
Base Capacity (vph)		4577							1644			
Starvation Cap Reductn		0							0			
Spillback Cap Reductn		0							0			
Storage Cap Reductn		0							0			
Reduced v/c Ratio		0.28							0.02			

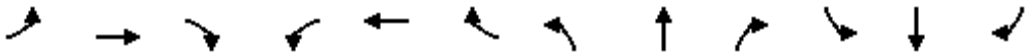
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 77 (55%), Referenced to phase 2:NBR and 6:EBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 1.0		Intersection LOS: A	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Rue Vendome/Driveway & NE 71st Street



Lane Group	Ø2
Maximum Green (s)	112.6
Yellow Time (s)	4.0
All-Red Time (s)	2.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.5
Recall Mode	C-Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1135	29	0	0	0	0	0	32	0	0	0
Future Volume (vph)	0	1135	29	0	0	0	0	0	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.1							6.4			
Lane Util. Factor		0.91							1.00			
Frt		1.00							0.86			
Flt Protected		1.00							1.00			
Satd. Flow (prot)		4995							1644			
Flt Permitted		1.00							1.00			
Satd. Flow (perm)		4995							1644			
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1234	32	0	0	0	0	0	34	0	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1265	0	0	0	0	0	0	34	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Actuated Green, G (s)		123.3							127.2			
Effective Green, g (s)		123.3							127.2			
Actuated g/C Ratio		0.88							0.91			
Clearance Time (s)		6.1							6.4			
Vehicle Extension (s)		1.0							2.5			
Lane Grp Cap (vph)		4399							1644			
v/s Ratio Prot		c0.25							c0.00			
v/s Ratio Perm									0.02			
v/c Ratio		0.29							0.02			
Uniform Delay, d1		1.3							0.6			
Progression Factor		0.69							1.00			
Incremental Delay, d2		0.2							0.0			
Delay (s)		1.1							0.6			
Level of Service		A							A			
Approach Delay (s)		1.1			0.0			0.6			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	1.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

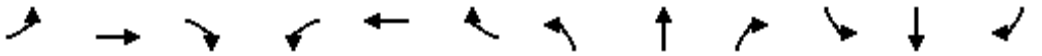
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	44	1928	26	31	4	0	0	0	29
Future Vol, veh/h	0	0	0	44	1928	26	31	4	0	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	96	96	96	85	85	85	98	98	98
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	0	0	46	2008	27	36	5	0	0	0	30

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	895	2127	-	-	-	1018
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	895	2127	-	-	-	-
Critical Hdwy	5.5	-	-	6.44	6.54	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	3.2	-	-	3.82	4.02	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	-	294	49	0	0	0	202
Stage 1	-	-	-	-	-	0	0	0	-
Stage 2	-	-	-	273	89	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	251	49	-	-	-	202
Mov Cap-2 Maneuver	-	-	-	251	49	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	233	89	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		32.6	25.9
HCM LOS		D	D

Minor Lane/Major Mvmt	NBLn1	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	171	-	-	-	202
HCM Lane V/C Ratio	0.241	-	-	-	0.146
HCM Control Delay (s)	32.6	-	-	-	25.9
HCM Lane LOS	D	-	-	-	D
HCM 95th %tile Q(veh)	0.9	-	-	-	0.5

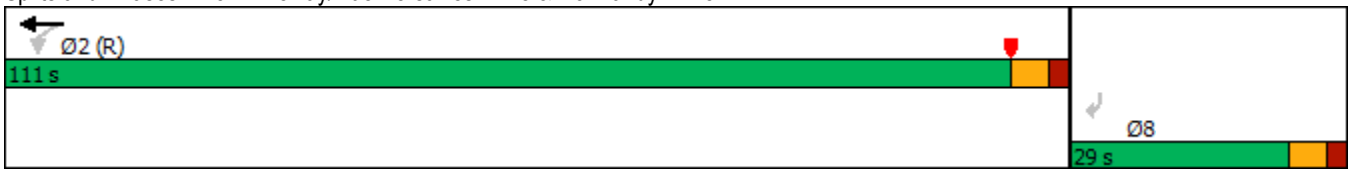


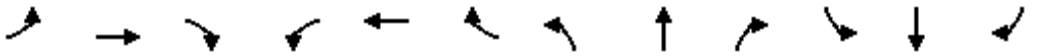
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	1961	54	0	0	0	0	0	46
Future Volume (vph)	0	0	0	17	1961	54	0	0	0	0	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5166	0	0	0	0	0	0	1479
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5166	0	0	0	0	0	0	1479
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					10							28
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		1857			1893			1028			837	
Travel Time (s)		42.2			36.9			23.4			19.0	
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.50	0.50	0.50	0.68	0.68	0.68
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Adj. Flow (vph)	0	0	0	18	2022	56	0	0	0	0	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2096	0	0	0	0	0	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1							1
Detector Template				Left	Thru							Right
Leading Detector (ft)				20	40							40
Trailing Detector (ft)				0	0							0
Detector 1 Position(ft)				0	0							0
Detector 1 Size(ft)				20	40							40
Detector 1 Type				Cl+Ex	Cl+Ex							Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0							0.0
Detector 1 Queue (s)				0.0	0.0							0.0
Detector 1 Delay (s)				0.0	0.0							0.0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Detector Phase				2	2							8
Switch Phase												
Minimum Initial (s)				7.0	7.0							7.0
Minimum Split (s)				101.0	101.0							27.0
Total Split (s)				111.0	111.0							29.0
Total Split (%)				79.3%	79.3%							20.7%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)				104.7	104.7							22.7
Yellow Time (s)				4.0	4.0							4.0
All-Red Time (s)				2.3	2.3							2.3
Lost Time Adjust (s)					0.0							0.0
Total Lost Time (s)					6.3							6.3
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0							2.5
Recall Mode				C-Max	C-Max							None
Act Effct Green (s)					121.8							9.5
Actuated g/C Ratio					0.87							0.07
v/c Ratio					0.47							0.54
Control Delay					3.1							54.4
Queue Delay					0.0							0.0
Total Delay					3.1							54.4
LOS					A							D
Approach Delay					3.1						54.4	
Approach LOS					A						D	
Queue Length 50th (ft)					137							36
Queue Length 95th (ft)					203							57
Internal Link Dist (ft)		1777			1813			948			757	
Turn Bay Length (ft)												
Base Capacity (vph)					4495							263
Starvation Cap Reductn					0							0
Spillback Cap Reductn					0							0
Storage Cap Reductn					0							0
Reduced v/c Ratio					0.47							0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 66 (47%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 83.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Driveway/Rue Versailles Drive & Normandy Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	1961	54	0	0	0	0	0	46
Future Volume (vph)	0	0	0	17	1961	54	0	0	0	0	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.3							6.3
Lane Util. Factor					0.91							1.00
Frt					1.00							0.86
Flt Protected					1.00							1.00
Satd. Flow (prot)					5164							1479
Flt Permitted					1.00							1.00
Satd. Flow (perm)					5164							1479
Peak-hour factor, PHF	0.92	0.92	0.92	0.97	0.97	0.97	0.50	0.50	0.50	0.68	0.68	0.68
Adj. Flow (vph)	0	0	0	18	2022	56	0	0	0	0	0	68
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	26
Lane Group Flow (vph)	0	0	0	0	2095	0	0	0	0	0	0	42
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Actuated Green, G (s)					119.3							8.1
Effective Green, g (s)					119.3							8.1
Actuated g/C Ratio					0.85							0.06
Clearance Time (s)					6.3							6.3
Vehicle Extension (s)					1.0							2.5
Lane Grp Cap (vph)					4400							85
v/s Ratio Prot												
v/s Ratio Perm					0.41							c0.03
v/c Ratio					0.48							0.49
Uniform Delay, d1					2.6							63.9
Progression Factor					1.00							1.00
Incremental Delay, d2					0.4							3.2
Delay (s)					2.9							67.2
Level of Service					A							E
Approach Delay (s)		0.0			2.9			0.0			67.2	
Approach LOS		A			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	5.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

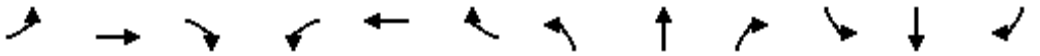
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	1214	0	0	25	0
Future Vol, veh/h	42	1214	0	0	25	0
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	-
Veh in Median Storage, #	-	0	16979	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	92	92	68	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	1395	0	0	37	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	654	-
Stage 1	-	-	0	-
Stage 2	-	-	654	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	461	0
Stage 1	-	-	-	0
Stage 2	-	-	436	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	461	-
Mov Cap-2 Maneuver	-	-	461	-
Stage 1	-	-	-	-
Stage 2	-	-	436	-

Approach	EB	SB
HCM Control Delay, s		13.5
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	461
HCM Lane V/C Ratio	-	-	0.08
HCM Control Delay (s)	-	-	13.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

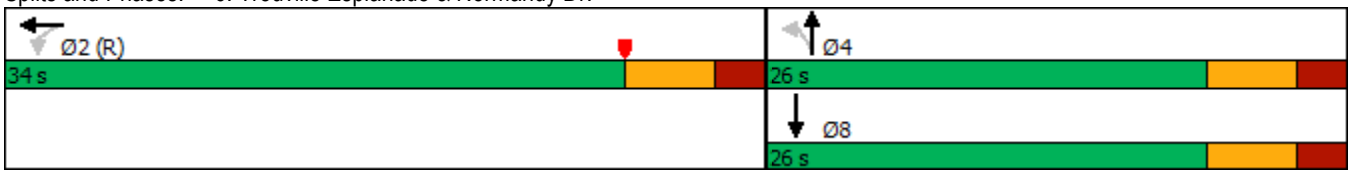


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	14	1214	3	28	20	0	0	8	15
Future Volume (vph)	0	0	0	14	1214	3	28	20	0	0	8	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.912	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	5009	0	1805	1900	0	0	1733	0
Flt Permitted					0.999		0.738					
Satd. Flow (perm)	0	0	0	0	5009	0	1402	1900	0	0	1733	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	15	1305	3	36	26	0	0	10	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1323	0	36	26	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				22.0	22.0		26.0	26.0			26.0	
Total Split (s)				34.0	34.0		26.0	26.0			26.0	
Total Split (%)				56.7%	56.7%		43.3%	43.3%			43.3%	
Maximum Green (s)				27.7	27.7		19.7	19.7			19.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					27.7		19.7	19.7			19.7	
Actuated g/C Ratio					0.46		0.33	0.33			0.33	
v/c Ratio					0.57		0.08	0.04			0.05	
Control Delay					13.0		14.6	14.1			8.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					13.0		14.6	14.1			8.8	
LOS					B		B	B			A	
Approach Delay					13.0			14.4			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					120		9	6			2	
Queue Length 95th (ft)					158		22	18			14	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2313		460	623			581	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.57		0.08	0.04			0.05	

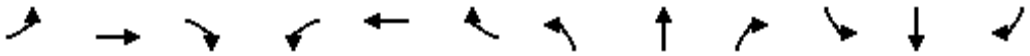
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 41 (68%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.



HCM 6th Signalized Intersection Summary
6: Trouville Esplanade & Normandy Dr.

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	1214	3	28	20	0	0	8	15
Future Volume (veh/h)	0	0	0	14	1214	3	28	20	0	0	8	15
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				15	1305	3	36	26	0	0	10	19
Peak Hour Factor				0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				27	2517	6	564	624	0	0	192	366
Arrive On Green				0.46	0.46	0.46	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				59	5452	13	1403	1900	0	0	586	1114
Grp Volume(v), veh/h				483	401	440	36	26	0	0	0	29
Grp Sat Flow(s),veh/h/ln				1897	1729	1898	1403	1900	0	0	0	1700
Q Serve(g_s), s				11.0	9.7	9.7	1.1	0.6	0.0	0.0	0.0	0.7
Cycle Q Clear(g_c), s				11.0	9.7	9.7	1.8	0.6	0.0	0.0	0.0	0.7
Prop In Lane				0.03		0.01	1.00		0.00	0.00		0.66
Lane Grp Cap(c), veh/h				876	798	876	564	624	0	0	0	558
V/C Ratio(X)				0.55	0.50	0.50	0.06	0.04	0.00	0.00	0.00	0.05
Avail Cap(c_a), veh/h				876	798	876	564	624	0	0	0	558
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				11.7	11.3	11.3	14.4	13.7	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh				2.5	2.2	2.1	0.2	0.1	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				8.0	6.6	7.2	0.6	0.4	0.0	0.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.2	13.6	13.4	14.6	13.8	0.0	0.0	0.0	13.9
LnGrp LOS				B	B	B	B	B	A	A	A	B
Approach Vol, veh/h					1323			62			29	
Approach Delay, s/veh					13.7			14.3			13.9	
Approach LOS					B			B			B	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.0		26.0				26.0				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 28		* 20				* 20				
Max Q Clear Time (g_c+I1), s		13.0		3.8				2.7				
Green Ext Time (p_c), s		0.9		0.1				0.0				

Intersection Summary		
HCM 6th Ctrl Delay		13.7
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix H – Total Traffic Conditions Analysis

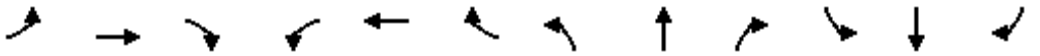
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	8	1258	8	0
Future Vol, veh/h	0	0	8	1258	8	0
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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	9	1367	9	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	565	-
Stage 1	-	-	0	-
Stage 2	-	-	565	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	509	0
Stage 1	-	-	-	0
Stage 2	-	-	486	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	509	-
Mov Cap-2 Maneuver	-	-	509	-
Stage 1	-	-	-	-
Stage 2	-	-	486	-

Approach	WB	NB
HCM Control Delay, s		12.2
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	509	-	-
HCM Lane V/C Ratio	0.017	-	-
HCM Control Delay (s)	12.2	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

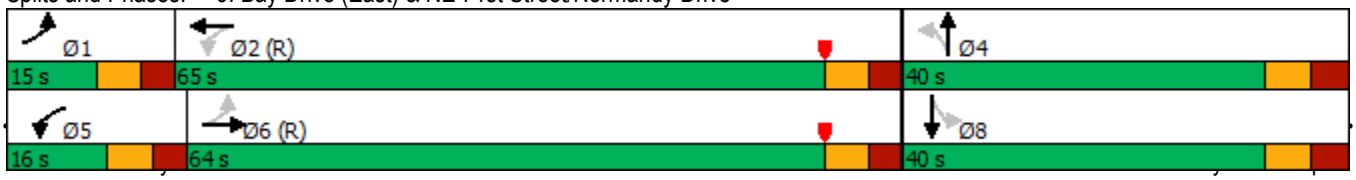


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1606	15	77	1130	149	36	1	90	236	7	34
Future Volume (vph)	30	1606	15	77	1130	149	36	1	90	236	7	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	90		0	50		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.983			0.852			0.877	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5131	0	1805	3549	0	1805	1619	0	1805	1666	0
Flt Permitted	0.099			0.086			0.728			0.695		
Satd. Flow (perm)	188	5131	0	163	3549	0	1383	1619	0	1320	1666	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			16			95			37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1479			1470			539			580	
Travel Time (s)		33.6			33.4			12.3			13.2	
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	31	1656	15	89	1299	171	38	1	95	254	8	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	1671	0	89	1470	0	38	96	0	254	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40		40	40		40	40		40	40	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	15.0	55.0		15.0	55.0		28.0	28.0		28.0	28.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	15.0	64.0		16.0	65.0		40.0	40.0		40.0	40.0	
Total Split (%)	12.5%	53.3%		13.3%	54.2%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	8.0	57.0		9.0	58.0		32.4	32.4		32.4	32.4	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.6	3.6		3.6	3.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.6	7.6		7.6	7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	1.0		2.0	1.0		2.5	2.5		2.5	2.5	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	70.1	64.7		75.5	70.9		26.9	26.9		26.9	26.9	
Actuated g/C Ratio	0.58	0.54		0.63	0.59		0.22	0.22		0.22	0.22	
v/c Ratio	0.17	0.60		0.45	0.70		0.12	0.22		0.86	0.11	
Control Delay	10.7	20.8		17.0	21.6		35.6	8.1		70.4	13.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	10.7	20.8		17.0	21.6		35.6	8.1		70.4	13.7	
LOS	B	C		B	C		D	A		E	B	
Approach Delay		20.6			21.3			15.9			61.9	
Approach LOS		C			C			B			E	
Queue Length 50th (ft)	8	317		24	443		23	1		188	5	
Queue Length 95th (ft)	m25	456		47	558		51	42		#280	34	
Internal Link Dist (ft)		1399			1390			459			500	
Turn Bay Length (ft)	150			100			90			50		
Base Capacity (vph)	221	2765		226	2102		373	506		356	476	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.14	0.60		0.39	0.70		0.10	0.19		0.71	0.09	

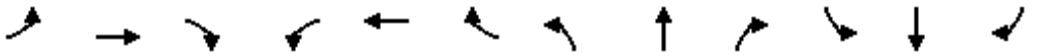
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 7 (6%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 24.1		Intersection LOS: C	
Intersection Capacity Utilization 77.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bay Drive (East) & NE 71st Street/Normandy Drive



HCM 6th Signalized Intersection Summary
9: Bay Drive (East) & NE 71st Street/Normandy Drive

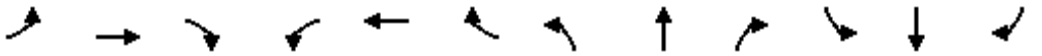
02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1606	15	77	1130	149	36	1	90	236	7	34
Future Volume (veh/h)	30	1606	15	77	1130	149	36	1	90	236	7	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1900	1885	1885	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	31	1656	15	89	1299	171	38	1	95	254	8	37
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	1	0	0	0	0	0	0	0	0	0
Cap, veh/h	190	2767	25	203	1729	226	383	4	406	334	75	346
Arrive On Green	0.01	0.17	0.17	0.04	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1810	5260	48	1810	3209	420	1383	17	1596	1320	294	1361
Grp Volume(v), veh/h	31	1080	591	89	727	743	38	0	96	254	0	45
Grp Sat Flow(s),veh/h/ln	1810	1716	1877	1810	1805	1824	1383	0	1613	1320	0	1655
Q Serve(g_s), s	0.9	34.8	34.8	2.7	37.3	38.0	2.6	0.0	5.7	22.7	0.0	2.5
Cycle Q Clear(g_c), s	0.9	34.8	34.8	2.7	37.3	38.0	5.1	0.0	5.7	28.3	0.0	2.5
Prop In Lane	1.00		0.03	1.00		0.23	1.00		0.99	1.00		0.82
Lane Grp Cap(c), veh/h	190	1805	987	203	972	983	383	0	410	334	0	421
V/C Ratio(X)	0.16	0.60	0.60	0.44	0.75	0.76	0.10	0.00	0.23	0.76	0.00	0.11
Avail Cap(c_a), veh/h	262	1805	987	267	972	983	404	0	435	354	0	447
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.6	37.9	37.9	19.1	21.4	21.5	36.2	0.0	35.5	46.7	0.0	34.3
Incr Delay (d2), s/veh	0.1	1.3	2.4	0.6	5.2	5.4	0.1	0.0	0.2	8.4	0.0	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(95%),veh/ln	0.7	22.7	24.9	2.0	23.3	23.9	1.6	0.0	4.1	12.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	39.2	40.3	19.6	26.6	26.9	36.3	0.0	35.7	55.1	0.0	34.4
LnGrp LOS	B	D	D	B	C	C	D	A	D	E	A	C
Approach Vol, veh/h		1702			1559			134			299	
Approach Delay, s/veh		39.2			26.4			35.9			52.0	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	71.7		38.1	11.7	70.1		38.1				
Change Period (Y+Rc), s	7.0	7.0		7.6	7.0	7.0		7.6				
Max Green Setting (Gmax), s	8.0	58.0		32.4	9.0	57.0		32.4				
Max Q Clear Time (g_c+I1), s	2.9	40.0		7.7	4.7	36.8		30.3				
Green Ext Time (p_c), s	0.0	1.2		0.3	0.0	1.7		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			34.7									
HCM 6th LOS			C									

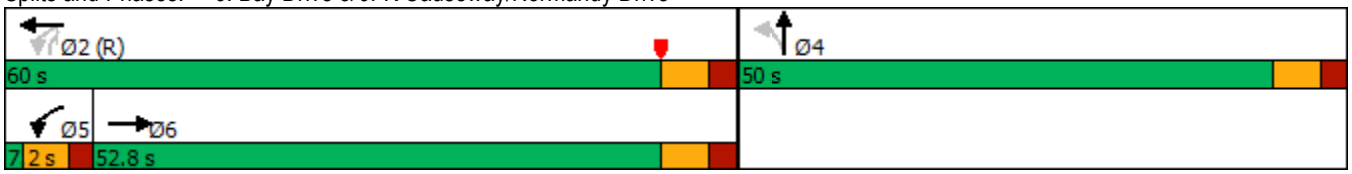


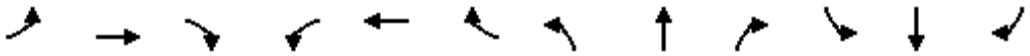
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1792	22	12	1263	17	0	36	12	0	0	0
Future Volume (vph)	0	1792	22	12	1263	17	0	36	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		100	0		0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.998				0.850			
Flt Protected				0.950								
Satd. Flow (prot)	0	4797	0	1805	5177	0	0	1900	1615	0	0	0
Flt Permitted				0.070								
Satd. Flow (perm)	0	4797	0	133	5177	0	0	1900	1615	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2				33			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3100			1397			932			973	
Travel Time (s)		70.5			31.8			21.2			22.1	
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.78	0.78	0.78	0.25	0.25	0.25
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	2036	25	13	1388	19	0	46	15	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2061	0	13	1407	0	0	46	15	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1		1	1	1			
Detector Template		Thru		Left	Thru		Left	Thru	Right			
Leading Detector (ft)		40		40	40		20	40	40			
Trailing Detector (ft)		0		0	0		0	0	0			
Detector 1 Position(ft)		0		0	0		0	0	0			
Detector 1 Size(ft)		40		40	40		20	40	40			
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Queue (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Delay (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Turn Type		NA		pm+pt	NA			NA	custom			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		2			
Detector Phase		6		5	2		4	4	2			
Switch Phase												
Minimum Initial (s)		16.0		1.0	16.0		7.0	7.0	16.0			
Minimum Split (s)		36.0		6.7	50.0		50.0	50.0	50.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)		52.8		7.2	60.0		50.0	50.0	60.0			
Total Split (%)		48.0%		6.5%	54.5%		45.5%	45.5%	54.5%			
Maximum Green (s)		46.5		1.5	53.7		43.7	43.7	53.7			
Yellow Time (s)		4.0		3.7	4.0		4.0	4.0	4.0			
All-Red Time (s)		2.3		2.0	2.3		2.3	2.3	2.3			
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0			
Total Lost Time (s)		6.3		5.7	6.3			6.3	6.3			
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		1.0		2.0	1.0		2.5	2.5	1.0			
Recall Mode		None		None	C-Max		None	None	C-Max			
Act Effct Green (s)		89.0		92.5	93.2			8.2	93.2			
Actuated g/C Ratio		0.81		0.84	0.85			0.07	0.85			
v/c Ratio		0.53		0.07	0.32			0.33	0.01			
Control Delay		5.9		2.8	2.6			54.2	0.2			
Queue Delay		0.0		0.0	0.0			0.0	0.0			
Total Delay		5.9		2.8	2.6			54.2	0.2			
LOS		A		A	A			D	A			
Approach Delay		5.9			2.6			40.9				
Approach LOS		A			A			D				
Queue Length 50th (ft)		130		1	69			32	0			
Queue Length 95th (ft)		283		5	99			59	1			
Internal Link Dist (ft)		3020			1317			852			893	
Turn Bay Length (ft)				250					100			
Base Capacity (vph)		3879		182	4384			754	1372			
Starvation Cap Reductn		0		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.53		0.07	0.32			0.06	0.01			

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 9 (8%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 5.2		Intersection LOS: A	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Bay Drive & JFK Causeway/Normandy Drive



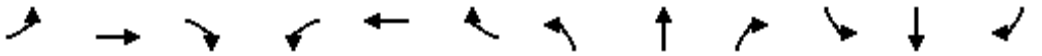


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1792	22	12	1263	17	0	36	12	0	0	0
Future Volume (vph)	0	1792	22	12	1263	17	0	36	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.3		5.7	6.3			6.3	6.3			
Lane Util. Factor		0.91		1.00	0.91			1.00	1.00			
Frt		1.00		1.00	1.00			1.00	0.85			
Flt Protected		1.00		0.95	1.00			1.00	1.00			
Satd. Flow (prot)		4798		1805	5176			1900	1615			
Flt Permitted		1.00		0.07	1.00			1.00	1.00			
Satd. Flow (perm)		4798		133	5176			1900	1615			
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.78	0.78	0.78	0.25	0.25	0.25
Adj. Flow (vph)	0	2036	25	13	1388	19	0	46	15	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	3	0	0	0
Lane Group Flow (vph)	0	2061	0	13	1407	0	0	46	12	0	0	0
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA		pm+pt	NA			NA	custom			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		2			
Actuated Green, G (s)		83.0		90.6	90.6			6.8	90.6			
Effective Green, g (s)		83.0		90.6	90.6			6.8	90.6			
Actuated g/C Ratio		0.75		0.82	0.82			0.06	0.82			
Clearance Time (s)		6.3		5.7	6.3			6.3	6.3			
Vehicle Extension (s)		1.0		2.0	1.0			2.5	1.0			
Lane Grp Cap (vph)		3620		138	4263			117	1330			
v/s Ratio Prot		c0.43		0.00	c0.27			c0.02				
v/s Ratio Perm				0.08					0.01			
v/c Ratio		0.57		0.09	0.33			0.39	0.01			
Uniform Delay, d1		5.8		3.5	2.3			49.6	1.7			
Progression Factor		1.00		1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.1		0.1	0.2			1.6	0.0			
Delay (s)		5.9		3.6	2.6			51.2	1.7			
Level of Service		A		A	A			D	A			
Approach Delay (s)		5.9			2.6			39.0			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Signalized Intersection Summary
5: Biarritz Dr. & Normandy Drive/Normandy Dr.

02/16/2024



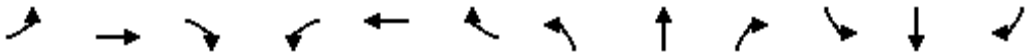
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	6	1218	62	29	78	0	0	50	128
Future Volume (veh/h)	0	0	0	6	1218	62	29	78	0	0	50	128
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				6	1310	67	37	100	0	0	63	162
Peak Hour Factor				0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				12	2839	149	429	687	0	0	170	438
Arrive On Green				0.14	0.14	0.14	0.36	0.36	0.00	0.00	0.36	0.36
Sat Flow, veh/h				28	6628	348	1174	1900	0	0	471	1211
Grp Volume(v), veh/h				401	628	354	37	100	0	0	0	225
Grp Sat Flow(s),veh/h/ln				1899	1634	1837	1174	1900	0	0	0	1682
Q Serve(g_s), s				11.7	10.6	10.6	1.4	2.1	0.0	0.0	0.0	5.9
Cycle Q Clear(g_c), s				11.7	10.6	10.6	7.4	2.1	0.0	0.0	0.0	5.9
Prop In Lane				0.01		0.19	1.00		0.00	0.00		0.72
Lane Grp Cap(c), veh/h				813	1400	787	429	687	0	0	0	608
V/C Ratio(X)				0.49	0.45	0.45	0.09	0.15	0.00	0.00	0.00	0.37
Avail Cap(c_a), veh/h				813	1400	787	429	687	0	0	0	608
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				19.7	19.3	19.3	16.8	12.9	0.0	0.0	0.0	14.1
Incr Delay (d2), s/veh				2.1	1.0	1.9	0.4	0.4	0.0	0.0	0.0	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				10.3	8.1	9.2	0.7	1.6	0.0	0.0	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.9	20.3	21.1	17.2	13.3	0.0	0.0	0.0	15.8
LnGrp LOS				C	C	C	B	B	A	A	A	B
Approach Vol, veh/h					1383			137			225	
Approach Delay, s/veh					21.0			14.4			15.8	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	32.0	28.0			28.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 26	* 22			* 22			
Max Q Clear Time (g_c+I1), s	13.7	9.4			7.9			
Green Ext Time (p_c), s	1.1	0.2			0.5			

Intersection Summary		
HCM 6th Ctrl Delay	19.8	
HCM 6th LOS	B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

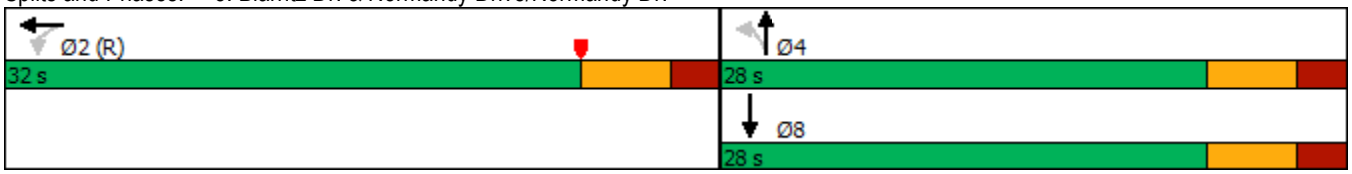


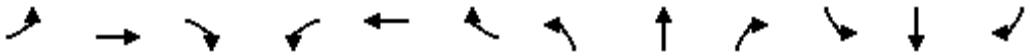
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	1218	62	29	78	0	0	50	128
Future Volume (vph)	0	0	0	6	1218	62	29	78	0	0	50	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	155		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.993						0.903	
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6328	0	1805	1900	0	0	1716	0
Flt Permitted							0.618					
Satd. Flow (perm)	0	0	0	0	6328	0	1174	1900	0	0	1716	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					21						17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			117			185			590	
Travel Time (s)		8.0			2.7			4.2			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	6	1310	67	37	100	0	0	63	162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1383	0	37	100	0	0	225	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				16.0	16.0		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.0	25.0		23.0	23.0			23.0	
Total Split (s)				32.0	32.0		28.0	28.0			28.0	
Total Split (%)				53.3%	53.3%		46.7%	46.7%			46.7%	
Maximum Green (s)				25.7	25.7		21.7	21.7			21.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					25.7		21.7	21.7			21.7	
Actuated g/C Ratio					0.43		0.36	0.36			0.36	
v/c Ratio					0.51		0.09	0.15			0.36	
Control Delay					3.3		13.4	13.7			14.9	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					3.3		13.4	13.7			14.9	
LOS					A		B	B			B	
Approach Delay					3.3			13.6			14.9	
Approach LOS					A			B			B	
Queue Length 50th (ft)					16		9	24			53	
Queue Length 95th (ft)					20		22	44			86	
Internal Link Dist (ft)		272			37			105			510	
Turn Bay Length (ft)							155					
Base Capacity (vph)					2722		424	687			631	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.51		0.09	0.15			0.36	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 18 (30%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 46.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Biarritz Dr. & Normandy Drive/Normandy Dr.



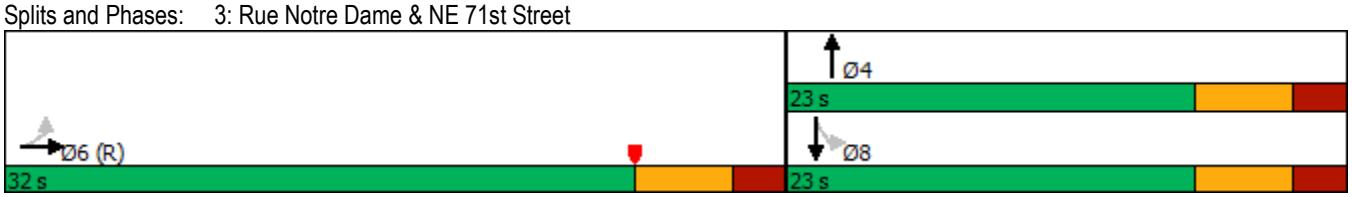


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	1694	10	0	0	0	0	8	18	67	14	0
Future Volume (vph)	78	1694	10	0	0	0	0	8	18	67	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.908				
Flt Protected		0.998									0.960	
Satd. Flow (prot)	0	4950	0	0	0	0	0	1553	0	0	1642	0
Flt Permitted		0.998									0.737	
Satd. Flow (perm)	0	4950	0	0	0	0	0	1553	0	0	1260	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						5				
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		910			2580			388			447	
Travel Time (s)		17.7			58.6			8.8			10.2	
Peak Hour Factor	0.94	0.94	0.94	0.25	0.25	0.25	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0						0			0	
Adj. Flow (vph)	83	1802	11	0	0	0	0	12	26	91	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1896	0	0	0	0	0	38	0	0	110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		20	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	13.8	13.8						7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0						23.0		23.0	23.0	
Total Split (s)	32.0	32.0						23.0		23.0	23.0	
Total Split (%)	58.2%	58.2%						41.8%		41.8%	41.8%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	25.8	25.8						16.7		16.7	16.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.2	2.2						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						2.5		2.5	2.5	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)		36.4						10.0			10.0	
Actuated g/C Ratio		0.66						0.18			0.18	
v/c Ratio		0.58						0.13			0.48	
Control Delay		8.2						16.7			26.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		8.2						16.7			26.6	
LOS		A						B			C	
Approach Delay		8.2						16.7			26.6	
Approach LOS		A						B			C	
Queue Length 50th (ft)		126						9			33	
Queue Length 95th (ft)		213						20			53	
Internal Link Dist (ft)		830			2500			308			367	
Turn Bay Length (ft)												
Base Capacity (vph)		3276						475			382	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.58						0.08			0.29	

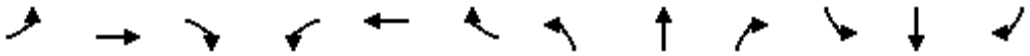
Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 56.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Rue Notre Dame & NE 71st Street



HCM 6th Signalized Intersection Summary
3: Rue Notre Dame & NE 71st Street

02/16/2024



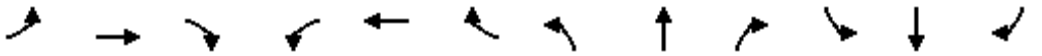
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	1694	10	0	0	0	0	8	18	67	14	0
Future Volume (veh/h)	78	1694	10	0	0	0	0	8	18	67	14	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	83	1802	11				0	12	26	91	19	0
Peak Hour Factor	0.94	0.94	0.94				0.69	0.69	0.69	0.74	0.74	0.74
Percent Heavy Veh, %	0	1	0				0	0	0	0	0	0
Cap, veh/h	148	3428	22				0	61	133	234	31	0
Arrive On Green	0.66	0.66	0.66				0.00	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	225	5211	33				0	534	1157	993	266	0
Grp Volume(v), veh/h	691	575	630				0	0	38	110	0	0
Grp Sat Flow(s),veh/h/ln	1874	1716	1879				0	0	1692	1259	0	0
Q Serve(g_s), s	11.0	9.5	9.5				0.0	0.0	1.1	3.8	0.0	0.0
Cycle Q Clear(g_c), s	11.0	9.5	9.5				0.0	0.0	1.1	4.9	0.0	0.0
Prop In Lane	0.12		0.02				0.00		0.68	0.83		0.00
Lane Grp Cap(c), veh/h	1233	1128	1236				0	0	194	264	0	0
V/C Ratio(X)	0.56	0.51	0.51				0.00	0.00	0.20	0.42	0.00	0.00
Avail Cap(c_a), veh/h	1233	1128	1236				0	0	514	540	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	4.8	4.8				0.0	0.0	22.0	24.1	0.0	0.0
Incr Delay (d2), s/veh	1.8	1.6	1.5				0.0	0.0	0.4	0.8	0.0	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
%ile BackOfQ(95%),veh/ln	5.3	4.2	4.6				0.0	0.0	0.8	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	6.5	6.3				0.0	0.0	22.4	24.9	0.0	0.0
LnGrp LOS	A	A	A				A	A	C	C	A	A
Approach Vol, veh/h		1896						38			110	
Approach Delay, s/veh		6.6						22.4			24.9	
Approach LOS		A						C			C	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		12.6		42.4		12.6						
Change Period (Y+Rc), s		* 6.3		6.2		* 6.3						
Max Green Setting (Gmax), s		* 17		25.8		* 17						
Max Q Clear Time (g_c+I1), s		3.1		13.0		6.9						
Green Ext Time (p_c), s		0.0		1.3		0.2						

Intersection Summary		
HCM 6th Ctrl Delay	7.9	
HCM 6th LOS	A	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

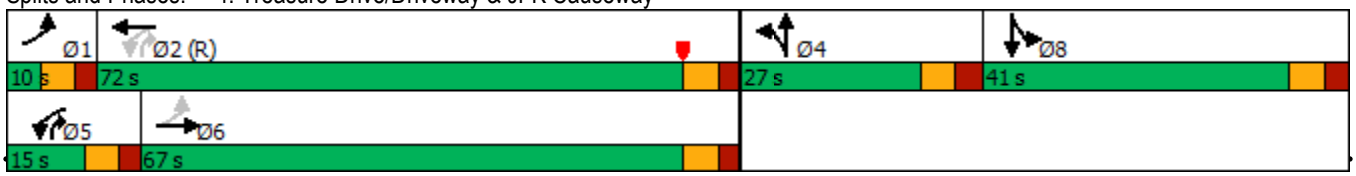


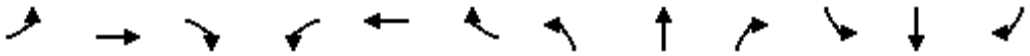
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1597	125	128	1147	2	187	2	220	1	3	1
Future Volume (vph)	6	1597	125	128	1147	2	187	2	220	1	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	25		0	0		500	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989							0.850		0.975	
Flt Protected	0.950			0.950				0.953			0.991	
Satd. Flow (prot)	1805	4735	0	1805	5187	0	0	1811	1615	0	1836	0
Flt Permitted	0.198			0.065				0.953			0.991	
Satd. Flow (perm)	376	4735	0	124	5187	0	0	1811	1615	0	1836	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10							272		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			3100			603			197	
Travel Time (s)		15.5			70.5			13.7			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.81	0.81	0.81	0.42	0.42	0.42
Heavy Vehicles (%)	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	1736	136	145	1303	2	231	2	272	2	7	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1872	0	145	1305	0	0	233	272	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	40		40	40		20	40	40	20	40	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	40	40		40	40		20	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	custom	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6			2					2			
Detector Phase	1	6		5	2		4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	3.8	7.0		3.8	7.0		7.0	7.0	3.8	7.0	7.0	
Minimum Split (s)	10.0	54.0		10.0	54.0		19.0	19.0	10.0	41.0	41.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	10.0	67.0		15.0	72.0		27.0	27.0	15.0	41.0	41.0	
Total Split (%)	6.7%	44.7%		10.0%	48.0%		18.0%	18.0%	10.0%	27.3%	27.3%	
Maximum Green (s)	3.8	60.5		8.8	65.5		19.9	19.9	8.8	34.0	34.0	
Yellow Time (s)	3.7	4.0		3.7	4.0		4.0	4.0	3.7	4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		3.1	3.1	2.5	3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	2.0	1.0		2.0	1.0		3.0	3.0	2.0	2.5	2.5	
Recall Mode	None	None		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	97.3	92.3		111.1	108.6			19.9	111.1		7.1	
Actuated g/C Ratio	0.65	0.62		0.74	0.72			0.13	0.74		0.05	
v/c Ratio	0.02	0.64		0.63	0.35			0.97	0.21		0.12	
Control Delay	8.2	21.0		32.5	9.0			114.7	1.2		63.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	8.2	21.0		32.5	9.0			114.7	1.2		63.2	
LOS	A	C		C	A			F	A		E	
Approach Delay		20.9			11.4			53.6			63.2	
Approach LOS		C			B			D			E	
Queue Length 50th (ft)	1	355		47	121			231	0		9	
Queue Length 95th (ft)	7	567		130	260			#341	17		13	
Internal Link Dist (ft)		602			3020			523			117	
Turn Bay Length (ft)	100			25					500			
Base Capacity (vph)	288	2916		230	3753			240	1266		417	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.64		0.63	0.35			0.97	0.21		0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 106 (71%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 74.4%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

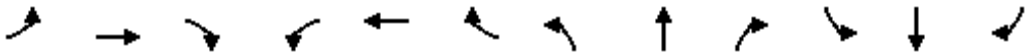
Splits and Phases: 4: Treasure Drive/Driveway & JFK Causeway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1597	125	128	1147	2	187	2	220	1	3	1
Future Volume (vph)	6	1597	125	128	1147	2	187	2	220	1	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1805	4735		1805	5186			1810	1615		1837	
Flt Permitted	0.20	1.00		0.07	1.00			0.95	1.00		0.99	
Satd. Flow (perm)	377	4735		124	5186			1810	1615		1837	
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.81	0.81	0.81	0.42	0.42	0.42
Adj. Flow (vph)	7	1736	136	145	1303	2	231	2	272	2	7	2
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	79	0	2	0
Lane Group Flow (vph)	7	1868	0	145	1305	0	0	233	193	0	9	0
Heavy Vehicles (%)	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	custom	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases	6			2					2			
Actuated Green, G (s)	89.1	88.1		106.6	99.4			19.9	106.6		2.9	
Effective Green, g (s)	89.1	88.1		106.6	99.4			19.9	106.6		2.9	
Actuated g/C Ratio	0.59	0.59		0.71	0.66			0.13	0.71		0.02	
Clearance Time (s)	6.2	6.5		6.2	6.5			7.1	6.2		7.0	
Vehicle Extension (s)	2.0	1.0		2.0	1.0			3.0	2.0		2.5	
Lane Grp Cap (vph)	233	2781		225	3436			240	1147		35	
v/s Ratio Prot	0.00	c0.39		c0.05	0.25			c0.13	0.01		c0.00	
v/s Ratio Perm	0.02			0.40					0.11			
v/c Ratio	0.03	0.67		0.64	0.38			0.97	0.17		0.26	
Uniform Delay, d1	12.4	21.1		25.7	11.4			64.8	7.1		72.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.5		4.7	0.3			49.7	0.0		2.8	
Delay (s)	12.4	21.6		30.3	11.7			114.4	7.2		75.3	
Level of Service	B	C		C	B			F	A		E	
Approach Delay (s)		21.6			13.6			56.7			75.3	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

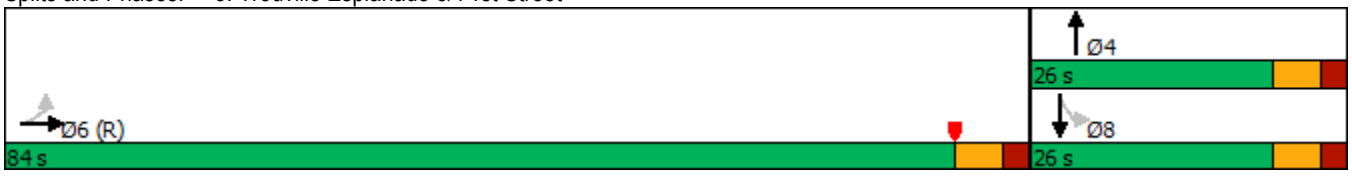


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1818	23	0	0	0	0	16	19	13	7	0
Future Volume (vph)	32	1818	23	0	0	0	0	16	19	13	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.926				
Flt Protected		0.999								0.950		
Satd. Flow (prot)	0	4948	0	0	0	0	0	1759	0	1805	1900	0
Flt Permitted		0.999								0.731		
Satd. Flow (perm)	0	4948	0	0	0	0	0	1759	0	1389	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1600			1203			590			226	
Travel Time (s)		36.4			27.3			13.4			5.1	
Peak Hour Factor	0.84	0.84	0.84	0.25	0.25	0.25	0.88	0.88	0.88	0.82	0.82	0.82
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	38	2164	27	0	0	0	0	18	22	16	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2229	0	0	0	0	0	40	0	16	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	16.0	16.0						10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	72.0	72.0						26.0		26.0	26.0	
Total Split (s)	84.0	84.0						26.0		26.0	26.0	
Total Split (%)	76.4%	76.4%						23.6%		23.6%	23.6%	
Maximum Green (s)	77.7	77.7						19.7		19.7	19.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.3	2.3						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		6.3						6.3		6.3	6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						1.0		2.5	2.5	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		77.7						19.7		19.7	19.7	
Actuated g/C Ratio		0.71						0.18		0.18	0.18	
v/c Ratio		0.64						0.12		0.06	0.03	
Control Delay		9.6						26.3		38.5	37.7	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		9.6						26.3		38.5	37.7	
LOS		A						C		D	D	
Approach Delay		9.6						26.3			38.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		271						14		10	5	
Queue Length 95th (ft)		274						43		27	18	
Internal Link Dist (ft)		1520			1123			510			146	
Turn Bay Length (ft)										100		
Base Capacity (vph)		3496						328		248	340	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.64						0.12		0.06	0.03	

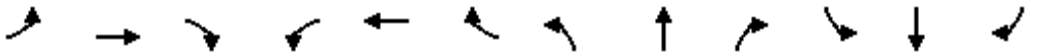
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 4 (4%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Trouville Esplanade & 71st Street



HCM 6th Signalized Intersection Summary
8: Trouville Esplanade & 71st Street

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1818	23	0	0	0	0	16	19	13	7	0
Future Volume (veh/h)	32	1818	23	0	0	0	0	16	19	13	7	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	38	2164	27				0	18	22	16	9	0
Peak Hour Factor	0.84	0.84	0.84				0.88	0.88	0.88	0.82	0.82	0.82
Percent Heavy Veh, %	0	1	0				0	0	0	0	0	0
Cap, veh/h	62	3753	48				0	139	170	287	340	0
Arrive On Green	0.71	0.71	0.71				0.00	0.18	0.18	0.18	0.18	0.00
Sat Flow, veh/h	88	5313	68				0	778	951	1389	1900	0
Grp Volume(v), veh/h	814	676	739				0	0	40	16	9	0
Grp Sat Flow(s),veh/h/ln	1881	1716	1873				0	0	1729	1389	1900	0
Q Serve(g_s), s	24.7	21.0	21.0				0.0	0.0	2.1	1.1	0.4	0.0
Cycle Q Clear(g_c), s	24.7	21.0	21.0				0.0	0.0	2.1	3.2	0.4	0.0
Prop In Lane	0.05		0.04				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	1329	1212	1323				0	0	310	287	340	0
V/C Ratio(X)	0.61	0.56	0.56				0.00	0.00	0.13	0.06	0.03	0.00
Avail Cap(c_a), veh/h	1329	1212	1323				0	0	310	287	340	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.4	7.8	7.8				0.0	0.0	37.9	39.3	37.2	0.0
Incr Delay (d2), s/veh	2.1	1.9	1.7				0.0	0.0	0.9	0.4	0.1	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
%ile BackOfQ(95%),veh/ln	14.6	11.9	12.7				0.0	0.0	1.8	0.7	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.5	9.7	9.5				0.0	0.0	38.8	39.7	37.4	0.0
LnGrp LOS	B	A	A				A	A	D	D	D	A
Approach Vol, veh/h		2229						40			25	
Approach Delay, s/veh		9.9						38.8			38.8	
Approach LOS		A						D			D	

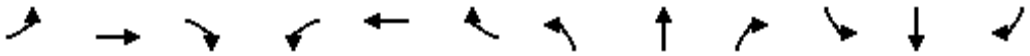
Timer - Assigned Phs		4		6		8			
Phs Duration (G+Y+Rc), s		26.0		84.0		26.0			
Change Period (Y+Rc), s		* 6.3		6.3		* 6.3			
Max Green Setting (Gmax), s		* 20		77.7		* 20			
Max Q Clear Time (g_c+I1), s		4.1		26.7		5.2			
Green Ext Time (p_c), s		0.0		10.3		0.0			

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

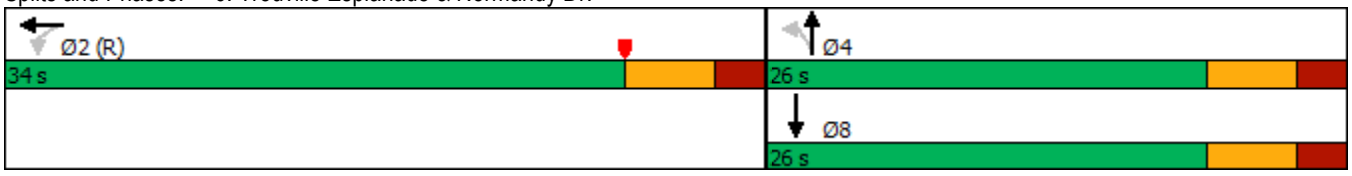


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	14	1215	3	35	22	0	0	8	18
Future Volume (vph)	0	0	0	14	1215	3	35	22	0	0	8	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.906	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	5009	0	1805	1900	0	0	1721	0
Flt Permitted					0.999		0.736					
Satd. Flow (perm)	0	0	0	0	5009	0	1398	1900	0	0	1721	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	15	1306	3	45	28	0	0	10	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1324	0	45	28	0	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				22.0	22.0		26.0	26.0			26.0	
Total Split (s)				34.0	34.0		26.0	26.0			26.0	
Total Split (%)				56.7%	56.7%		43.3%	43.3%			43.3%	
Maximum Green (s)				27.7	27.7		19.7	19.7			19.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					27.7		19.7	19.7			19.7	
Actuated g/C Ratio					0.46		0.33	0.33			0.33	
v/c Ratio					0.57		0.10	0.04			0.06	
Control Delay					13.0		14.8	14.1			8.3	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					13.0		14.8	14.1			8.3	
LOS					B		B	B			A	
Approach Delay					13.0			14.5			8.3	
Approach LOS					B			B			A	
Queue Length 50th (ft)					120		11	7			2	
Queue Length 95th (ft)					158		26	18			15	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2313		459	623			580	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.57		0.10	0.04			0.06	

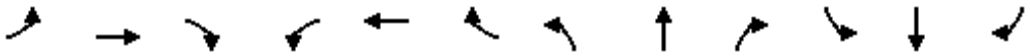
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 41 (68%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.



HCM 6th Signalized Intersection Summary
6: Trouville Esplanade & Normandy Dr.

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	1215	3	35	22	0	0	8	18
Future Volume (veh/h)	0	0	0	14	1215	3	35	22	0	0	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				15	1306	3	45	28	0	0	10	23
Peak Hour Factor				0.93	0.93	0.93	0.78	0.78	0.78	0.79	0.79	0.79
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				27	2517	6	560	624	0	0	168	386
Arrive On Green				0.46	0.46	0.46	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				59	5452	13	1398	1900	0	0	512	1177
Grp Volume(v), veh/h				483	401	440	45	28	0	0	0	33
Grp Sat Flow(s),veh/h/ln				1897	1729	1898	1398	1900	0	0	0	1688
Q Serve(g_s), s				11.0	9.7	9.7	1.4	0.6	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s				11.0	9.7	9.7	2.2	0.6	0.0	0.0	0.0	0.8
Prop In Lane				0.03		0.01	1.00		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				876	798	876	560	624	0	0	0	554
V/C Ratio(X)				0.55	0.50	0.50	0.08	0.04	0.00	0.00	0.00	0.06
Avail Cap(c_a), veh/h				876	798	876	560	624	0	0	0	554
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				11.7	11.3	11.3	14.5	13.7	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh				2.5	2.3	2.1	0.3	0.1	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				8.0	6.6	7.2	0.8	0.5	0.0	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.2	13.6	13.4	14.8	13.9	0.0	0.0	0.0	14.0
LnGrp LOS				B	B	B	B	B	A	A	A	B
Approach Vol, veh/h					1324			73			33	
Approach Delay, s/veh					13.7			14.5			14.0	
Approach LOS					B			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	34.0	26.0			26.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 28	* 20			* 20			
Max Q Clear Time (g_c+I1), s	13.0	4.2			2.8			
Green Ext Time (p_c), s	0.9	0.1			0.0			

Intersection Summary		
HCM 6th Ctrl Delay	13.8	
HCM 6th LOS	B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	1830	0	0	27	0
Future Vol, veh/h	29	1830	0	0	27	0
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	-
Veh in Median Storage, #	-	0	16979	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	92	92	58	58
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	1926	0	0	47	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	832	-
Stage 1	-	-	0	-
Stage 2	-	-	832	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	377	0
Stage 1	-	-	-	0
Stage 2	-	-	351	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	377	-
Mov Cap-2 Maneuver	-	-	377	-
Stage 1	-	-	-	-
Stage 2	-	-	351	-

Approach	EB	SB
HCM Control Delay, s		15.9
HCM LOS		C

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	377
HCM Lane V/C Ratio	-	-	0.123
HCM Control Delay (s)	-	-	15.9
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.4

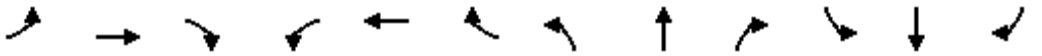
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	16	1236	48	9	2	0	0	0	44
Future Vol, veh/h	0	0	0	16	1236	48	9	2	0	0	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	97	97	97	83	83	83	82	82	82
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	0	0	16	1274	49	11	2	0	0	0	54

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	542	1355	-	-	-	662
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	542	1355	-	-	-	-
Critical Hdwy	5.5	-	-	6.44	6.54	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	3.2	-	-	3.82	4.02	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	-	470	148	0	0	0	347
Stage 1	-	-	-	-	-	0	0	0	-
Stage 2	-	-	-	449	216	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	397	148	-	-	-	347
Mov Cap-2 Maneuver	-	-	-	397	148	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	380	216	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		17.4	17.3
HCM LOS		C	C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	304	-	-	-	347
HCM Lane V/C Ratio	0.044	-	-	-	0.155
HCM Control Delay (s)	17.4	-	-	-	17.3
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

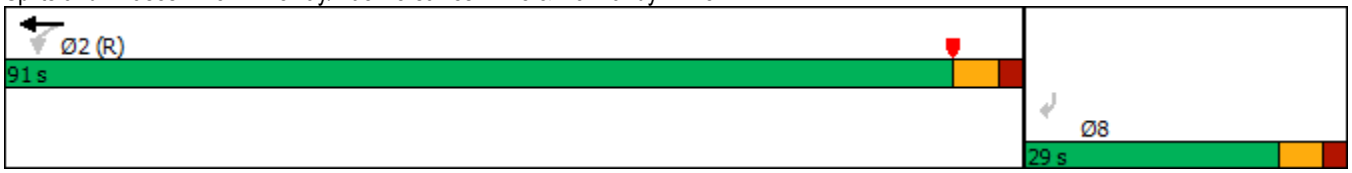


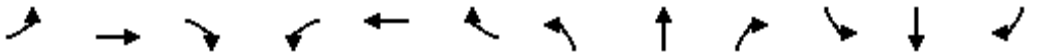
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	1191	37	0	0	0	0	0	44
Future Volume (vph)	0	0	0	29	1191	37	0	0	0	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected					0.999							
Satd. Flow (prot)	0	0	0	0	5161	0	0	0	0	0	0	1479
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	5161	0	0	0	0	0	0	1479
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					16							80
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		1857			1893			1028			837	
Travel Time (s)		42.2			36.9			23.4			19.0	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.50	0.50	0.50	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Adj. Flow (vph)	0	0	0	34	1385	43	0	0	0	0	0	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1462	0	0	0	0	0	0	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1							1
Detector Template				Left	Thru							Right
Leading Detector (ft)				20	40							40
Trailing Detector (ft)				0	0							0
Detector 1 Position(ft)				0	0							0
Detector 1 Size(ft)				20	40							40
Detector 1 Type				Cl+Ex	Cl+Ex							Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0							0.0
Detector 1 Queue (s)				0.0	0.0							0.0
Detector 1 Delay (s)				0.0	0.0							0.0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Detector Phase				2	2							8
Switch Phase												
Minimum Initial (s)				7.0	7.0							7.0
Minimum Split (s)				81.0	81.0							27.0
Total Split (s)				91.0	91.0							29.0
Total Split (%)				75.8%	75.8%							24.2%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)				84.7	84.7							22.7
Yellow Time (s)				4.0	4.0							4.0
All-Red Time (s)				2.3	2.3							2.3
Lost Time Adjust (s)					0.0							0.0
Total Lost Time (s)					6.3							6.3
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0							2.5
Recall Mode				C-Max	C-Max							None
Act Effct Green (s)					104.3							7.0
Actuated g/C Ratio					0.87							0.06
v/c Ratio					0.33							0.30
Control Delay					2.1							8.8
Queue Delay					0.0							0.0
Total Delay					2.1							8.8
LOS					A							A
Approach Delay					2.1						8.8	
Approach LOS					A						A	
Queue Length 50th (ft)					69							0
Queue Length 95th (ft)					76							16
Internal Link Dist (ft)		1777			1813			948			757	
Turn Bay Length (ft)												
Base Capacity (vph)					4488							344
Starvation Cap Reductn					0							0
Spillback Cap Reductn					0							0
Storage Cap Reductn					0							0
Reduced v/c Ratio					0.33							0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 16 (13%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 2.3		Intersection LOS: A	
Intersection Capacity Utilization 78.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 8: Driveway/Rue Versailles Drive & Normandy Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	1191	37	0	0	0	0	0	44
Future Volume (vph)	0	0	0	29	1191	37	0	0	0	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.3							6.3
Lane Util. Factor					0.91							1.00
Frt					1.00							0.86
Flt Protected					1.00							1.00
Satd. Flow (prot)					5158							1479
Flt Permitted					1.00							1.00
Satd. Flow (perm)					5158							1479
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.50	0.50	0.50	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	1385	43	0	0	0	0	0	49
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	47
Lane Group Flow (vph)	0	0	0	0	1460	0	0	0	0	0	0	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Actuated Green, G (s)					101.8							5.6
Effective Green, g (s)					101.8							5.6
Actuated g/C Ratio					0.85							0.05
Clearance Time (s)					6.3							6.3
Vehicle Extension (s)					1.0							2.5
Lane Grp Cap (vph)					4375							69
v/s Ratio Prot												
v/s Ratio Perm					0.28							c0.00
v/c Ratio					0.33							0.03
Uniform Delay, d1					1.9							54.6
Progression Factor					1.00							1.00
Incremental Delay, d2					0.2							0.1
Delay (s)					2.1							54.8
Level of Service					A							D
Approach Delay (s)		0.0			2.1			0.0			54.8	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

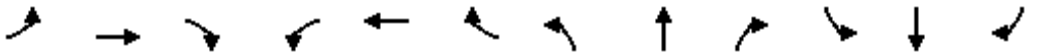
Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	2	21	0	0	16
Future Vol, veh/h	7	2	21	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	23	0	0	17

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	40	23	0	-	-	-
Stage 1	23	-	-	-	-	-
Stage 2	17	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	972	1054	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	1006	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	972	1054	-	-	-	-
Mov Cap-2 Maneuver	972	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	989	-
HCM Lane V/C Ratio	-	0.01	-
HCM Control Delay (s)	-	8.7	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0	-



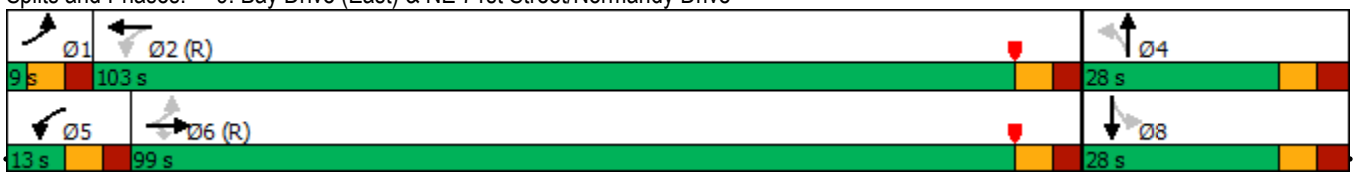
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1039	17	91	1823	159	35	3	34	153	10	24
Future Volume (vph)	41	1039	17	91	1823	159	35	3	34	153	10	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	90		0	50		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.862			0.895	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5136	1615	1805	3567	0	1805	1638	0	1805	1700	0
Flt Permitted	0.043			0.229			0.733			0.732		
Satd. Flow (perm)	82	5136	1615	435	3567	0	1393	1638	0	1391	1700	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90		15			36			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1479			1470			539			580	
Travel Time (s)		33.6			33.4			12.3			13.2	
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	42	1071	18	105	2095	183	37	3	36	165	11	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	1071	18	105	2278	0	37	39	0	165	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	40		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	2.0	7.0	7.0	2.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.0	82.0	82.0	9.0	82.0		28.0	28.0		28.0	28.0	

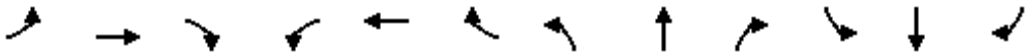
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	9.0	99.0	99.0	13.0	103.0		28.0	28.0		28.0	28.0	
Total Split (%)	6.4%	70.7%	70.7%	9.3%	73.6%		20.0%	20.0%		20.0%	20.0%	
Maximum Green (s)	2.0	92.0	92.0	6.0	96.0		20.4	20.4		20.4	20.4	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.6	3.6		3.6	3.6	
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)	7.0	7.0	7.0	7.0	7.0		7.6	7.6		7.6	7.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	1.0	1.0	2.0	1.0		2.5	2.5		2.5	2.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	96.3	93.6	93.6	103.8	99.0		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.69	0.67	0.67	0.74	0.71		0.14	0.14		0.14	0.14	
v/c Ratio	0.47	0.31	0.02	0.28	0.90		0.20	0.15		0.88	0.15	
Control Delay	30.9	14.4	0.4	6.4	23.8		55.6	19.1		98.5	26.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.9	14.4	0.4	6.4	23.8		55.6	19.1		98.5	26.0	
LOS	C	B	A	A	C		E	B		F	C	
Approach Delay		14.8			23.1			36.9			85.2	
Approach LOS		B			C			D			F	
Queue Length 50th (ft)	14	153	0	22	870		30	2		148	9	
Queue Length 95th (ft)	#35	173	2	37	924		66	37		#271	43	
Internal Link Dist (ft)		1399			1390			459			500	
Turn Bay Length (ft)	150			100			90			50		
Base Capacity (vph)	89	3432	1109	381	2526		202	269		202	269	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.47	0.31	0.02	0.28	0.90		0.18	0.14		0.82	0.14	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 72 (51%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 24.2 Intersection LOS: C
Intersection Capacity Utilization 91.9% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Bay Drive (East) & NE 71st Street/Normandy Drive

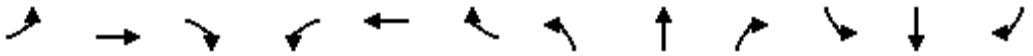




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1039	17	91	1823	159	35	3	34	153	10	24
Future Volume (veh/h)	41	1039	17	91	1823	159	35	3	34	153	10	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1900	1885	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	42	1071	18	105	2095	183	37	3	36	165	11	26
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	101	3436	1075	370	2306	198	228	18	219	225	73	173
Arrive On Green	0.00	0.22	0.22	0.03	0.69	0.69	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1810	5147	1610	1810	3363	289	1393	125	1504	1390	501	1185
Grp Volume(v), veh/h	42	1071	18	105	1110	1168	37	0	39	165	0	37
Grp Sat Flow(s),veh/h/ln	1810	1716	1610	1810	1805	1848	1393	0	1629	1390	0	1687
Q Serve(g_s), s	1.1	24.4	1.2	2.6	70.2	75.6	3.3	0.0	2.9	16.5	0.0	2.7
Cycle Q Clear(g_c), s	1.1	24.4	1.2	2.6	70.2	75.6	6.0	0.0	2.9	19.4	0.0	2.7
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.92	1.00		0.70
Lane Grp Cap(c), veh/h	101	3436	1075	370	1238	1267	228	0	237	225	0	246
V/C Ratio(X)	0.41	0.31	0.02	0.28	0.90	0.92	0.16	0.00	0.16	0.73	0.00	0.15
Avail Cap(c_a), veh/h	101	3436	1075	389	1238	1267	228	0	237	225	0	246
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.0	27.6	18.6	9.3	18.0	18.8	54.9	0.0	52.3	60.8	0.0	52.2
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.2	10.3	12.4	0.2	0.0	0.2	11.2	0.0	0.2
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(95%),veh/ln	1.8	16.8	0.8	1.8	39.5	43.6	2.2	0.0	2.2	10.7	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	27.9	18.6	9.5	28.3	31.2	55.1	0.0	52.6	72.0	0.0	52.4
LnGrp LOS	C	C	B	A	C	C	E	A	D	E	A	D
Approach Vol, veh/h		1131			2383			76			202	
Approach Delay, s/veh		28.0			28.9			53.8			68.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	103.0		28.0	11.5	100.5		28.0				
Change Period (Y+Rc), s	7.0	7.0		7.6	7.0	7.0		7.6				
Max Green Setting (Gmax), s	2.0	96.0		20.4	6.0	92.0		20.4				
Max Q Clear Time (g_c+I1), s	3.1	77.6		8.0	4.6	26.4		21.4				
Green Ext Time (p_c), s	0.0	2.2		0.1	0.0	1.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		31.2	
HCM 6th LOS		C	



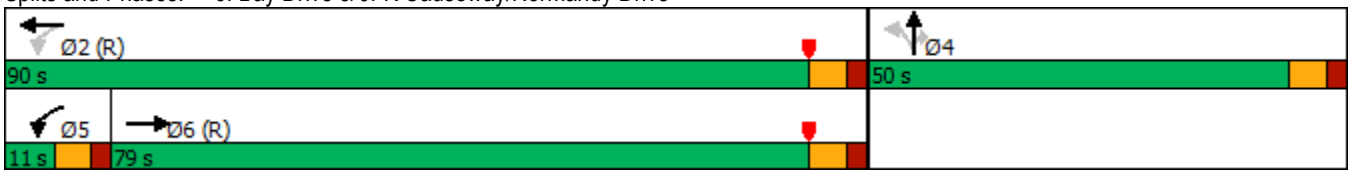
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1379	45	33	1854	15	25	1	14	0	0	0
Future Volume (vph)	0	1379	45	33	1854	15	25	1	14	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		100	0		0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850			
Flt Protected				0.950				0.954				
Satd. Flow (prot)	0	5161	0	1805	5067	0	0	1813	1615	0	0	0
Flt Permitted				0.050				0.954				
Satd. Flow (perm)	0	5161	0	95	5067	0	0	1813	1615	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				70			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3100			1397			932			973	
Travel Time (s)		70.5			31.8			21.2			22.1	
Peak Hour Factor	0.68	0.68	0.68	0.93	0.93	0.93	0.68	0.68	0.68	0.50	0.50	0.50
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	0	2028	66	35	1994	16	37	1	21	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2094	0	35	2010	0	0	38	21	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1		1	1	1			
Detector Template		Thru		Left	Thru		Left	Thru	Right			
Leading Detector (ft)		40		40	40		20	40	40			
Trailing Detector (ft)		0		0	0		0	0	0			
Detector 1 Position(ft)		0		0	0		0	0	0			
Detector 1 Size(ft)		40		40	40		20	40	40			
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Queue (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Detector 1 Delay (s)		0.0		0.0	0.0		0.0	0.0	0.0			
Turn Type		NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		4			
Detector Phase		6		5	2		4	4	4			
Switch Phase												
Minimum Initial (s)		16.0		1.0	7.0		7.0	7.0	7.0			

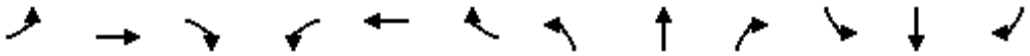
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)		65.0		7.0	78.0		50.0	50.0	50.0			
Total Split (s)		79.0		11.0	90.0		50.0	50.0	50.0			
Total Split (%)		56.4%		7.9%	64.3%		35.7%	35.7%	35.7%			
Maximum Green (s)		72.7		5.3	83.7		43.7	43.7	43.7			
Yellow Time (s)		4.0		3.7	4.0		4.0	4.0	4.0			
All-Red Time (s)		2.3		2.0	2.3		2.3	2.3	2.3			
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0			
Total Lost Time (s)		6.3		5.7	6.3			6.3	6.3			
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		1.0		2.0	2.5		2.5	2.5	2.5			
Recall Mode		C-Max		None	C-Max		Max	Max	Max			
Act Effct Green (s)		75.0		84.3	83.7			43.7	43.7			
Actuated g/C Ratio		0.54		0.60	0.60			0.31	0.31			
v/c Ratio		0.76		0.29	0.66			0.07	0.04			
Control Delay		28.1		17.6	20.1			34.4	0.1			
Queue Delay		0.0		0.0	0.0			0.0	0.0			
Total Delay		28.1		17.6	20.1			34.4	0.1			
LOS		C		B	C			C	A			
Approach Delay		28.1			20.1			22.2				
Approach LOS		C			C			C				
Queue Length 50th (ft)		547		12	426			24	0			
Queue Length 95th (ft)		388		27	476			40	0			
Internal Link Dist (ft)		3020			1317			852			893	
Turn Bay Length (ft)				250					100			
Base Capacity (vph)		2765		121	3029			565	552			
Starvation Cap Reductn		0		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.76		0.29	0.66			0.07	0.04			

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 124 (89%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 24.1 Intersection LOS: C
Intersection Capacity Utilization 52.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Bay Drive & JFK Causeway/Normandy Drive

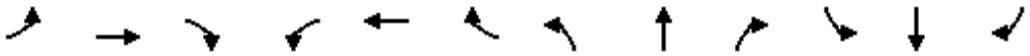




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1379	45	33	1854	15	25	1	14	0	0	0
Future Volume (vph)	0	1379	45	33	1854	15	25	1	14	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.3		5.7	6.3			6.3	6.3			
Lane Util. Factor		0.91		1.00	0.91			1.00	1.00			
Frt		1.00		1.00	1.00			1.00	0.85			
Flt Protected		1.00		0.95	1.00			0.95	1.00			
Satd. Flow (prot)		5162		1805	5066			1812	1615			
Flt Permitted		1.00		0.05	1.00			0.95	1.00			
Satd. Flow (perm)		5162		96	5066			1812	1615			
Peak-hour factor, PHF	0.68	0.68	0.68	0.93	0.93	0.93	0.68	0.68	0.68	0.50	0.50	0.50
Adj. Flow (vph)	0	2028	66	35	1994	16	37	1	21	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	14	0	0	0
Lane Group Flow (vph)	0	2092	0	35	2010	0	0	38	7	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type		NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		6		5	2			4				
Permitted Phases				2			4		4			
Actuated Green, G (s)		73.8		83.7	83.7			43.7	43.7			
Effective Green, g (s)		73.8		83.7	83.7			43.7	43.7			
Actuated g/C Ratio		0.53		0.60	0.60			0.31	0.31			
Clearance Time (s)		6.3		5.7	6.3			6.3	6.3			
Vehicle Extension (s)		1.0		2.0	2.5			2.5	2.5			
Lane Grp Cap (vph)		2721		108	3028			565	504			
v/s Ratio Prot		c0.41		0.01	c0.40							
v/s Ratio Perm				0.18				0.02	0.00			
v/c Ratio		0.77		0.32	0.66			0.07	0.01			
Uniform Delay, d1		26.3		21.4	18.8			33.8	33.3			
Progression Factor		1.00		1.00	1.00			1.00	1.00			
Incremental Delay, d2		2.2		0.6	1.2			0.2	0.0			
Delay (s)		28.5		22.0	19.9			34.1	33.3			
Level of Service		C		C	B			C	C			
Approach Delay (s)		28.5			20.0			33.8			0.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

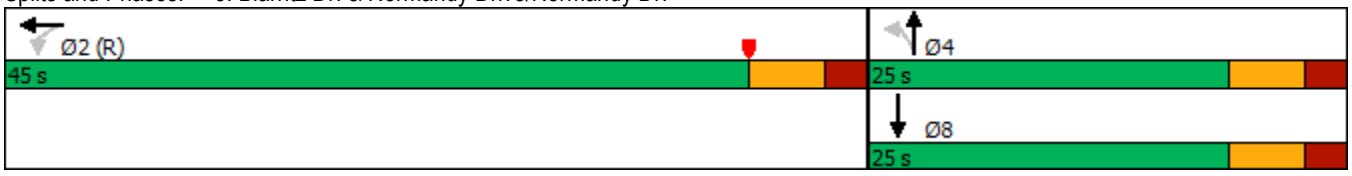


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	7	1971	35	34	95	0	0	27	88
Future Volume (vph)	0	0	0	7	1971	35	34	95	0	0	27	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.997						0.897	
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5776	0	1770	1863	0	0	1671	0
Flt Permitted							0.681					
Satd. Flow (perm)	0	0	0	0	5776	0	1269	1863	0	0	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7						7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			117			185			590	
Travel Time (s)		8.0			2.7			4.2			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.83	0.83	0.83	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	7	2032	36	41	114	0	0	28	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2075	0	41	114	0	0	119	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				16.0	16.0		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				35.0	35.0		23.0	23.0			23.0	
Total Split (s)				45.0	45.0		25.0	25.0			25.0	
Total Split (%)				64.3%	64.3%		35.7%	35.7%			35.7%	
Maximum Green (s)				38.7	38.7		18.7	18.7			18.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					38.7		18.7	18.7			18.7	
Actuated g/C Ratio					0.55		0.27	0.27			0.27	
v/c Ratio					0.65		0.12	0.23			0.26	
Control Delay					2.7		20.6	21.6			20.9	
Queue Delay					3.2		0.1	0.0			0.2	
Total Delay					5.8		20.8	21.6			21.1	
LOS					A		C	C			C	
Approach Delay					5.8			21.3			21.1	
Approach LOS					A			C			C	
Queue Length 50th (ft)					24		13	38			38	
Queue Length 95th (ft)					36		33	70			78	
Internal Link Dist (ft)		272			37			105			510	
Turn Bay Length (ft)							100					
Base Capacity (vph)					3196		339	497			451	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					992		56	0			74	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.94		0.14	0.23			0.32	

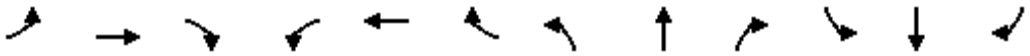
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 4 (6%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Biarritz Dr. & Normandy Drive/Normandy Dr.



HCM 6th Signalized Intersection Summary
5: Biarritz Dr. & Normandy Drive/Normandy Dr.

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	7	1971	35	34	95	0	0	27	88
Future Volume (veh/h)	0	0	0	7	1971	35	34	95	0	0	27	88
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1752	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				7	2032	36	41	114	0	0	28	91
Peak Hour Factor				0.97	0.97	0.97	0.83	0.83	0.83	0.97	0.97	0.97
Percent Heavy Veh, %				0	10	0	2	2	0	0	2	2
Cap, veh/h				11	3515	64	370	500	0	0	103	336
Arrive On Green				0.18	0.18	0.18	0.27	0.27	0.00	0.00	0.27	0.27
Sat Flow, veh/h				20	6359	116	1273	1870	0	0	387	1257
Grp Volume(v), veh/h				599	938	539	41	114	0	0	0	119
Grp Sat Flow(s),veh/h/ln				1751	1507	1731	1273	1870	0	0	0	1644
Q Serve(g_s), s				22.1	19.8	19.8	1.8	3.3	0.0	0.0	0.0	4.0
Cycle Q Clear(g_c), s				22.1	19.8	19.8	5.8	3.3	0.0	0.0	0.0	4.0
Prop In Lane				0.01		0.07	1.00		0.00	0.00		0.76
Lane Grp Cap(c), veh/h				968	1666	957	370	500	0	0	0	439
V/C Ratio(X)				0.62	0.56	0.56	0.11	0.23	0.00	0.00	0.00	0.27
Avail Cap(c_a), veh/h				968	1666	957	370	500	0	0	0	439
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				21.8	20.9	20.9	22.6	20.0	0.0	0.0	0.0	20.3
Incr Delay (d2), s/veh				3.0	1.4	2.4	0.6	1.1	0.0	0.0	0.0	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				16.3	12.8	14.7	1.1	2.7	0.0	0.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.8	22.3	23.3	23.2	21.1	0.0	0.0	0.0	21.8
LnGrp LOS				C	C	C	C	C	A	A	A	C
Approach Vol, veh/h					2075			155			119	
Approach Delay, s/veh					23.3			21.6			21.8	
Approach LOS					C			C			C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	45.0	25.0	25.0
Change Period (Y+Rc), s	* 6.3	* 6.3	* 6.3
Max Green Setting (Gmax), s	* 39	* 19	* 19
Max Q Clear Time (g_c+I1), s	24.1	7.8	6.0
Green Ext Time (p_c), s	2.0	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

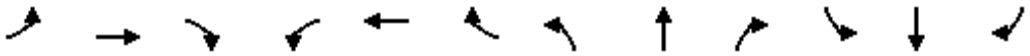
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	14	1991	11	0
Future Vol, veh/h	0	0	14	1991	11	0
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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	15	2164	12	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	896	-
Stage 1	-	-	0	-
Stage 2	-	-	896	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	350	0
Stage 1	-	-	-	0
Stage 2	-	-	325	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	350	-
Mov Cap-2 Maneuver	-	-	350	-
Stage 1	-	-	-	-
Stage 2	-	-	325	-

Approach	WB	NB
HCM Control Delay, s		15.6
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	350	-	-
HCM Lane V/C Ratio	0.034	-	-
HCM Control Delay (s)	15.6	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-

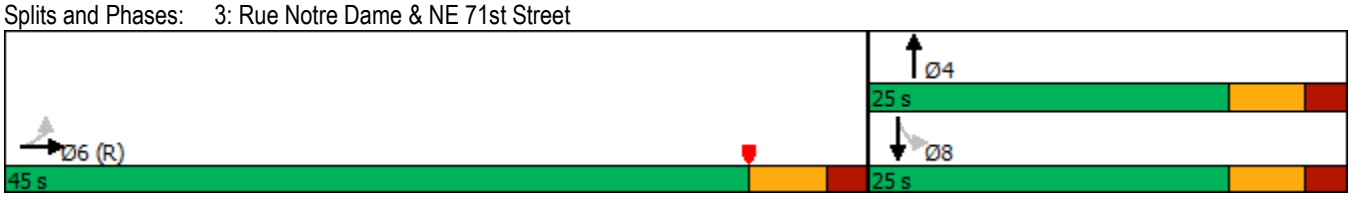


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1100	8	0	0	0	0	8	11	24	20	0
Future Volume (vph)	35	1100	8	0	0	0	0	8	11	24	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.924				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	4999	0	0	0	0	0	1580	0	0	1664	0
Flt Permitted		0.998									0.817	
Satd. Flow (perm)	0	4999	0	0	0	0	0	1580	0	0	1397	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						13				
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		910			2580			388			447	
Travel Time (s)		17.7			58.6			8.8			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.83	0.83	0.83	0.60	0.60	0.60
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0						0			0	
Adj. Flow (vph)	44	1392	10	0	0	0	0	10	13	40	33	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1446	0	0	0	0	0	23	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		20	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	13.8	13.8						7.0		7.0	7.0	
Minimum Split (s)	35.0	35.0						23.0		23.0	23.0	
Total Split (s)	45.0	45.0						25.0		25.0	25.0	
Total Split (%)	64.3%	64.3%						35.7%		35.7%	35.7%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	38.8	38.8						18.7		18.7	18.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.2	2.2						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						2.5		2.5	2.5	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)		52.5						8.9			8.9	
Actuated g/C Ratio		0.75						0.13			0.13	
v/c Ratio		0.39						0.11			0.41	
Control Delay		4.7						18.2			34.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		4.7						18.2			34.6	
LOS		A						B			C	
Approach Delay		4.7						18.2			34.6	
Approach LOS		A						B			C	
Queue Length 50th (ft)		76						4			30	
Queue Length 95th (ft)		101						20			40	
Internal Link Dist (ft)		830			2500			308			367	
Turn Bay Length (ft)												
Base Capacity (vph)		3749						431			373	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.39						0.05			0.20	

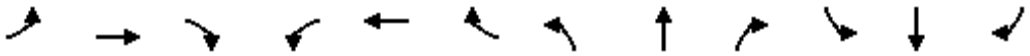
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 39 (56%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Rue Notre Dame & NE 71st Street



HCM 6th Signalized Intersection Summary
3: Rue Notre Dame & NE 71st Street

02/16/2024



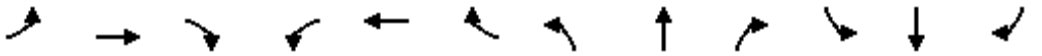
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1100	8	0	0	0	0	8	11	24	20	0
Future Volume (veh/h)	35	1100	8	0	0	0	0	8	11	24	20	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	44	1392	10				0	10	13	40	33	0
Peak Hour Factor	0.79	0.79	0.79				0.83	0.83	0.83	0.60	0.60	0.60
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	116	3918	29				0	63	82	143	75	0
Arrive On Green	0.74	0.74	0.74				0.00	0.08	0.08	0.08	0.08	0.00
Sat Flow, veh/h	158	5317	39				0	750	975	747	886	0
Grp Volume(v), veh/h	527	439	480				0	0	23	73	0	0
Grp Sat Flow(s),veh/h/ln	1892	1729	1893				0	0	1725	1632	0	0
Q Serve(g_s), s	7.1	6.3	6.3				0.0	0.0	0.9	2.1	0.0	0.0
Cycle Q Clear(g_c), s	7.1	6.3	6.3				0.0	0.0	0.9	2.9	0.0	0.0
Prop In Lane	0.08		0.02				0.00		0.57	0.55		0.00
Lane Grp Cap(c), veh/h	1394	1274	1395				0	0	146	218	0	0
V/C Ratio(X)	0.38	0.34	0.34				0.00	0.00	0.16	0.34	0.00	0.00
Avail Cap(c_a), veh/h	1394	1274	1395				0	0	461	509	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	3.2	3.2				0.0	0.0	29.7	30.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.7	0.7				0.0	0.0	0.4	0.7	0.0	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
%ile BackOfQ(95%),veh/ln	3.2	2.6	2.8				0.0	0.0	0.7	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.1	4.0	3.9				0.0	0.0	30.1	31.3	0.0	0.0
LnGrp LOS	A	A	A				A	A	C	C	A	A
Approach Vol, veh/h		1446						23			73	
Approach Delay, s/veh		4.0						30.1			31.3	
Approach LOS		A						C			C	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.2		57.8		12.2				
Change Period (Y+Rc), s				* 6.3		6.2		* 6.3				
Max Green Setting (Gmax), s				* 19		38.8		* 19				
Max Q Clear Time (g_c+I1), s				2.9		9.1		4.9				
Green Ext Time (p_c), s				0.0		0.9		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			5.7									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



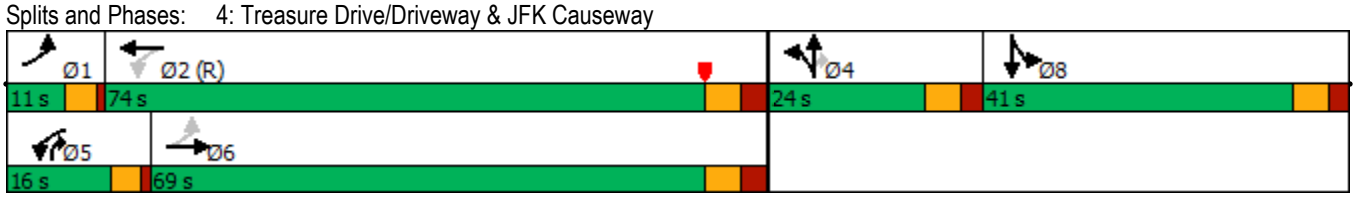
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1176	144	122	1856	10	110	1	85	5	1	1
Future Volume (vph)	16	1176	144	122	1856	10	110	1	85	5	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	25		0	0		500	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.999				0.850		0.982	
Flt Protected	0.950			0.950				0.953			0.965	
Satd. Flow (prot)	1805	5104	0	1805	5081	0	0	1811	1615	0	1800	0
Flt Permitted	0.077			0.079				0.953			0.965	
Satd. Flow (perm)	146	5104	0	150	5081	0	0	1811	1615	0	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			1				106		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			3100			603			197	
Travel Time (s)		15.5			70.5			13.7			4.5	
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.80	0.80	0.80	0.44	0.44	0.44
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	23	1656	203	131	1996	11	138	1	106	11	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	1859	0	131	2007	0	0	139	106	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		4	4	5	8	8	

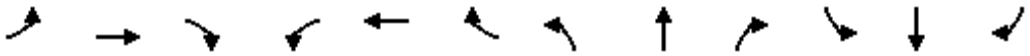
Lanes, Volumes, Timings
4: Treasure Drive/Driveway & JFK Causeway 02/16/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6			2					4			
Detector Phase	1	6		5	2		4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0	5.0	7.0	7.0	
Minimum Split (s)	11.0	53.0		11.0	53.0		19.0	19.0	11.0	41.0	41.0	
Total Split (s)	11.0	69.0		16.0	74.0		24.0	24.0	16.0	41.0	41.0	
Total Split (%)	7.3%	46.0%		10.7%	49.3%		16.0%	16.0%	10.7%	27.3%	27.3%	
Maximum Green (s)	6.5	62.0		11.5	66.9		17.5	17.5	11.5	34.5	34.5	
Yellow Time (s)	3.5	4.0		3.5	4.0		4.0	4.0	3.5	4.0	4.0	
All-Red Time (s)	1.0	3.0		1.0	3.1		2.5	2.5	1.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.5	7.0		4.5	7.1			6.5	4.5		6.5	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	3.0	2.5		3.0	3.0		1.0	1.0	3.0	1.0	1.0	
Recall Mode	None	None		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	110.6	102.2		119.1	110.3			14.3	29.1		7.0	
Actuated g/C Ratio	0.74	0.68		0.79	0.74			0.10	0.19		0.05	
v/c Ratio	0.13	0.53		0.57	0.54			0.81	0.27		0.18	
Control Delay	7.1	14.4		19.9	11.3			98.4	7.5		67.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	7.1	14.4		19.9	11.3			98.4	7.5		67.1	
LOS	A	B		B	B			F	A		E	
Approach Delay		14.3			11.9			59.0			67.1	
Approach LOS		B			B			E			E	
Queue Length 50th (ft)	3	265		20	278			135	0		13	
Queue Length 95th (ft)	11	334		93	464			183	29		17	
Internal Link Dist (ft)		602			3020			523			117	
Turn Bay Length (ft)	100			25					500			
Base Capacity (vph)	180	3481		258	3736			211	423		415	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.13	0.53		0.51	0.54			0.66	0.25		0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 146 (97%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Treasure Drive/Driveway & JFK Causeway





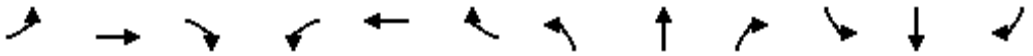
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	1176	144	122	1856	10	110	1	85	5	1	1
Future Volume (veh/h)	16	1176	144	122	1856	10	110	1	85	5	1	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1900	1900	1900	1900	1870	1870	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	1656	203	131	1996	11	138	1	106	11	2	2
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.80	0.80	0.80	0.44	0.44	0.44
Percent Heavy Veh, %	0	0	0	0	2	2	0	0	0	0	0	0
Cap, veh/h	198	3225	394	243	3688	20	162	1	202	28	5	5
Arrive On Green	0.02	0.69	0.69	0.04	0.70	0.70	0.09	0.09	0.09	0.02	0.02	0.02
Sat Flow, veh/h	1810	4683	572	1810	5240	29	1797	13	1610	1314	239	239
Grp Volume(v), veh/h	23	1222	637	131	1296	711	139	0	106	15	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1797	1810	1702	1865	1810	0	1610	1791	0	0
Q Serve(g_s), s	0.6	25.5	25.7	3.2	27.3	27.3	11.4	0.0	9.2	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	25.5	25.7	3.2	27.3	27.3	11.4	0.0	9.2	1.2	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.02	0.99		1.00	0.73		0.13
Lane Grp Cap(c), veh/h	198	2381	1237	243	2396	1313	163	0	202	39	0	0
V/C Ratio(X)	0.12	0.51	0.52	0.54	0.54	0.54	0.85	0.00	0.52	0.39	0.00	0.00
Avail Cap(c_a), veh/h	240	2381	1237	317	2396	1313	211	0	245	412	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.70	0.70	0.70	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.8	11.2	11.3	10.7	10.6	10.6	67.3	0.0	61.4	72.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.3	1.3	0.6	1.1	18.6	0.0	0.8	2.3	0.0	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(95%),veh/ln	0.4	14.7	15.3	2.3	14.5	15.9	10.2	0.0	6.9	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	11.4	11.6	12.0	11.2	11.8	85.9	0.0	62.2	74.7	0.0	0.0
LnGrp LOS	A	B	B	B	B	B	F	A	E	E	A	A
Approach Vol, veh/h		1882			2138			245			15	
Approach Delay, s/veh		11.4			11.5			75.6			74.7	
Approach LOS		B			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	112.7		20.0	9.9	110.4		9.8				
Change Period (Y+Rc), s	4.5	7.1		6.5	4.5	* 7.1		6.5				
Max Green Setting (Gmax), s	6.5	66.9		17.5	11.5	* 62		34.5				
Max Q Clear Time (g_c+I1), s	2.6	29.3		13.4	5.2	27.7		3.2				
Green Ext Time (p_c), s	0.0	21.9		0.1	0.2	15.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		15.3
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

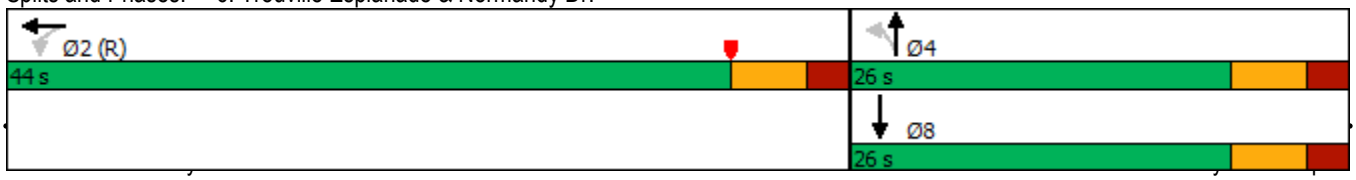


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	1937	15	47	28	0	0	5	21
Future Volume (vph)	0	0	0	21	1937	15	47	28	0	0	5	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999						0.892	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	4549	0	1770	1863	0	0	1662	0
Flt Permitted					0.999		0.738					
Satd. Flow (perm)	0	0	0	0	4549	0	1375	1863	0	0	1662	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1461			1209			226			528	
Travel Time (s)		33.2			27.5			5.1			12.0	
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86	0.86
Heavy Vehicles (%)	2%	2%	2%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Parking (#/hr)					0							
Adj. Flow (vph)	0	0	0	24	2176	17	48	29	0	0	6	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2217	0	48	29	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors				1	1		1	1			1	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	40		40	40			40	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	40		40	40			40	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				15.7	15.7		7.0	7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				32.0	32.0		26.0	26.0			26.0	
Total Split (s)				44.0	44.0		26.0	26.0			26.0	
Total Split (%)				62.9%	62.9%		37.1%	37.1%			37.1%	
Maximum Green (s)				37.7	37.7		19.7	19.7			19.7	
Yellow Time (s)				4.0	4.0		4.0	4.0			4.0	
All-Red Time (s)				2.3	2.3		2.3	2.3			2.3	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					6.3		6.3	6.3			6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		2.5	2.5			2.5	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					37.7		19.7	19.7			19.7	
Actuated g/C Ratio					0.54		0.28	0.28			0.28	
v/c Ratio					0.90		0.12	0.06			0.06	
Control Delay					21.5		19.0	18.1			17.2	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					21.5		19.0	18.1			17.2	
LOS					C		B	B			B	
Approach Delay					21.5			18.6			17.2	
Approach LOS					C			B			B	
Queue Length 50th (ft)					289		16	10			8	
Queue Length 95th (ft)					#367		36	26			25	
Internal Link Dist (ft)		1381			1129			146			448	
Turn Bay Length (ft)							100					
Base Capacity (vph)					2450		386	524			470	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.90		0.12	0.06			0.06	

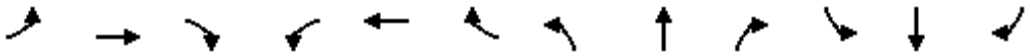
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 38 (54%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 21.4		Intersection LOS: C	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Trouville Esplanade & Normandy Dr.



HCM 6th Signalized Intersection Summary
6: Trouville Esplanade & Normandy Dr.

02/16/2024



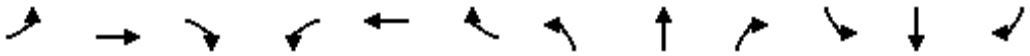
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	21	1937	15	47	28	0	0	5	21
Future Volume (veh/h)	0	0	0	21	1937	15	47	28	0	0	5	21
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1752	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				24	2176	17	48	29	0	0	6	24
Peak Hour Factor				0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86	0.86
Percent Heavy Veh, %				0	10	0	2	2	0	0	2	2
Cap, veh/h				28	2691	22	473	526	0	0	92	368
Arrive On Green				0.54	0.54	0.54	0.28	0.28	0.00	0.00	0.28	0.28
Sat Flow, veh/h				52	4996	40	1380	1870	0	0	327	1308
Grp Volume(v), veh/h				810	671	736	48	29	0	0	0	30
Grp Sat Flow(s),veh/h/ln				1749	1594	1745	1380	1870	0	0	0	1635
Q Serve(g_s), s				27.9	23.5	23.5	1.8	0.8	0.0	0.0	0.0	0.9
Cycle Q Clear(g_c), s				27.9	23.5	23.5	2.8	0.8	0.0	0.0	0.0	0.9
Prop In Lane				0.03		0.02	1.00		0.00	0.00		0.80
Lane Grp Cap(c), veh/h				942	859	940	473	526	0	0	0	460
V/C Ratio(X)				0.86	0.78	0.78	0.10	0.06	0.00	0.00	0.00	0.07
Avail Cap(c_a), veh/h				942	859	940	473	526	0	0	0	460
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.99	0.99	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				13.9	12.9	12.9	19.4	18.4	0.0	0.0	0.0	18.4
Incr Delay (d2), s/veh				10.1	7.0	6.5	0.4	0.2	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				17.4	13.6	14.4	1.1	0.6	0.0	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.0	19.9	19.4	19.9	18.6	0.0	0.0	0.0	18.7
LnGrp LOS				C	B	B	B	B	A	A	A	B
Approach Vol, veh/h					2217			77			30	
Approach Delay, s/veh					21.2			19.4			18.7	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4			8			
Phs Duration (G+Y+Rc), s	44.0	26.0			26.0			
Change Period (Y+Rc), s	* 6.3	* 6.3			* 6.3			
Max Green Setting (Gmax), s	* 38	* 20			* 20			
Max Q Clear Time (g_c+I1), s	29.9	4.8			2.9			
Green Ext Time (p_c), s	1.6	0.1			0.0			

Intersection Summary		
HCM 6th Ctrl Delay	21.1	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1134	39	0	0	0	0	19	11	16	6	0
Future Volume (vph)	43	1134	39	0	0	0	0	19	11	16	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995						0.951				
Flt Protected		0.998								0.950		
Satd. Flow (prot)	0	4526	0	0	0	0	0	1771	0	1770	1863	0
Flt Permitted		0.998								0.728		
Satd. Flow (perm)	0	4526	0	0	0	0	0	1771	0	1356	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						16				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1600			1203			590			226	
Travel Time (s)		36.4			27.3			13.4			5.1	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.69	0.69	0.69	0.64	0.64	0.64
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	48	1260	43	0	0	0	0	28	16	25	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1351	0	0	0	0	0	44	0	25	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		10	15		10	15		10	15		10
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	16.0	16.0						10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	102.0	102.0						26.0		26.0	26.0	
Total Split (s)	112.0	112.0						28.0		28.0	28.0	
Total Split (%)	80.0%	80.0%						20.0%		20.0%	20.0%	
Maximum Green (s)	105.7	105.7						21.7		21.7	21.7	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	2.3	2.3						2.3		2.3	2.3	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		6.3						6.3		6.3	6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						1.0		2.5	2.5	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		105.7						21.7		21.7	21.7	
Actuated g/C Ratio		0.76						0.16		0.16	0.16	
v/c Ratio		0.40						0.15		0.12	0.03	
Control Delay		6.3						37.4		50.5	51.2	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		6.3						37.4		50.5	51.2	
LOS		A						D		D	D	
Approach Delay		6.3						37.4			50.7	
Approach LOS		A						D			D	
Queue Length 50th (ft)		137						22		18	6	
Queue Length 95th (ft)		158						42		m24	m10	
Internal Link Dist (ft)		1520			1123			510			146	
Turn Bay Length (ft)										100		
Base Capacity (vph)		3419						288		210	288	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.40						0.15		0.12	0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 4 (3%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

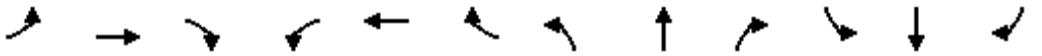
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trouville Esplanade & 71st Street



HCM 6th Signalized Intersection Summary
8: Trouville Esplanade & 71st Street

02/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1134	39	0	0	0	0	19	11	16	6	0
Future Volume (veh/h)	43	1134	39	0	0	0	0	19	11	16	6	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1752	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	48	1260	43				0	28	16	25	9	0
Peak Hour Factor	0.90	0.90	0.90				0.69	0.69	0.69	0.64	0.64	0.64
Percent Heavy Veh, %	0	10	0				0	2	2	2	2	0
Cap, veh/h	128	3566	126				0	173	99	233	290	0
Arrive On Green	0.75	0.75	0.75				0.00	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	169	4724	167				0	1117	638	1362	1870	0
Grp Volume(v), veh/h	495	412	445				0	0	44	25	9	0
Grp Sat Flow(s),veh/h/ln	1743	1594	1722				0	0	1755	1362	1870	0
Q Serve(g_s), s	13.6	11.9	11.9				0.0	0.0	3.0	2.3	0.6	0.0
Cycle Q Clear(g_c), s	13.6	11.9	11.9				0.0	0.0	3.0	5.3	0.6	0.0
Prop In Lane	0.10		0.10				0.00		0.36	1.00		0.00
Lane Grp Cap(c), veh/h	1316	1204	1300				0	0	272	233	290	0
V/C Ratio(X)	0.38	0.34	0.34				0.00	0.00	0.16	0.11	0.03	0.00
Avail Cap(c_a), veh/h	1316	1204	1300				0	0	272	233	290	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.9	5.7	5.7				0.0	0.0	51.3	53.6	50.2	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.7				0.0	0.0	1.3	0.9	0.2	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
%ile BackOfQ(95%),veh/ln	8.5	7.1	7.6				0.0	0.0	2.6	1.5	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	6.4	6.4				0.0	0.0	52.5	54.5	50.4	0.0
LnGrp LOS	A	A	A				A	A	D	D	D	A
Approach Vol, veh/h		1351						44			34	
Approach Delay, s/veh		6.5						52.5			53.4	
Approach LOS		A						D			D	

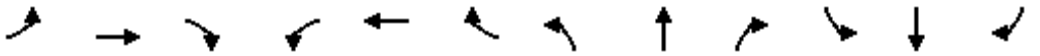
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				28.0		112.0		28.0				
Change Period (Y+Rc), s				* 6.3		6.3		* 6.3				
Max Green Setting (Gmax), s				* 22		105.7		* 22				
Max Q Clear Time (g_c+I1), s				5.0		15.6		7.3				
Green Ext Time (p_c), s				0.0		4.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



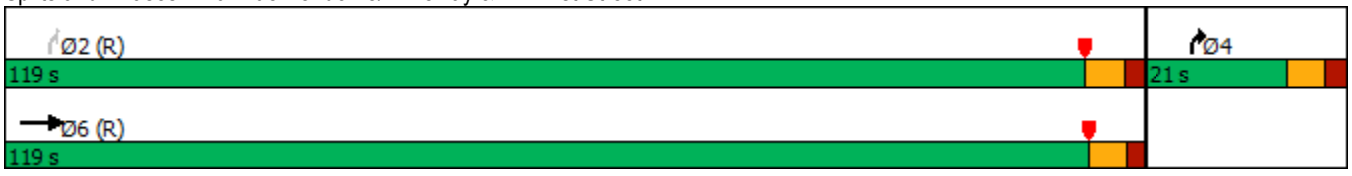
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1136	29	0	0	0	0	0	32	0	0	0
Future Volume (vph)	0	1136	29	0	0	0	0	0	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996							0.865			
Flt Protected												
Satd. Flow (prot)	0	4994	0	0	0	0	0	0	1644	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	4994	0	0	0	0	0	0	1644	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		10										
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2580			1479			445			1028	
Travel Time (s)		50.3			33.6			10.1			23.4	
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.93	0.93	0.25	0.25	0.25
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	0	1235	32	0	0	0	0	0	34	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1267	0	0	0	0	0	0	34	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1							1			
Detector Template		Thru							Right			
Leading Detector (ft)		40							40			
Trailing Detector (ft)		0							0			
Detector 1 Position(ft)		0							0			
Detector 1 Size(ft)		40							40			
Detector 1 Type		Cl+Ex							Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)		0.0							0.0			
Detector 1 Queue (s)		0.0							0.0			
Detector 1 Delay (s)		0.0							0.0			
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Detector Phase		6							4			
Switch Phase												
Minimum Initial (s)		4.0							7.0			
Minimum Split (s)		108.0							20.0			
Total Split (s)		119.0							21.0			
Total Split (%)		85.0%							15.0%			

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	23.5
Total Split (s)	119.0
Total Split (%)	85%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)		112.9							14.6			
Yellow Time (s)		4.0							4.0			
All-Red Time (s)		2.1							2.4			
Lost Time Adjust (s)		0.0							0.0			
Total Lost Time (s)		6.1							6.4			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							2.5			
Recall Mode		C-Max							None			
Act Effct Green (s)		128.3							140.0			
Actuated g/C Ratio		0.92							1.00			
v/c Ratio		0.28							0.02			
Control Delay		1.0							0.0			
Queue Delay		0.0							0.0			
Total Delay		1.0							0.0			
LOS		A							A			
Approach Delay		1.0										
Approach LOS		A										
Queue Length 50th (ft)		37							0			
Queue Length 95th (ft)		41							0			
Internal Link Dist (ft)		2500			1399			365			948	
Turn Bay Length (ft)												
Base Capacity (vph)		4577							1644			
Starvation Cap Reductn		0							0			
Spillback Cap Reductn		0							0			
Storage Cap Reductn		0							0			
Reduced v/c Ratio		0.28							0.02			

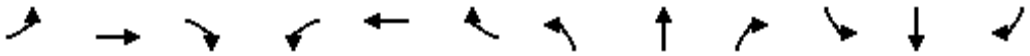
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 77 (55%), Referenced to phase 2:NBR and 6:EBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 1.0		Intersection LOS: A	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Rue Vendome/Driveway & NE 71st Street



Lane Group	Ø2
Maximum Green (s)	112.6
Yellow Time (s)	4.0
All-Red Time (s)	2.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.5
Recall Mode	C-Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1136	29	0	0	0	0	0	32	0	0	0
Future Volume (vph)	0	1136	29	0	0	0	0	0	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.1							6.4			
Lane Util. Factor		0.91							1.00			
Frt		1.00							0.86			
Flt Protected		1.00							1.00			
Satd. Flow (prot)		4995							1644			
Flt Permitted		1.00							1.00			
Satd. Flow (perm)		4995							1644			
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1235	32	0	0	0	0	0	34	0	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1266	0	0	0	0	0	0	34	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Turn Type		NA							custom			
Protected Phases		6							4			
Permitted Phases									2			
Actuated Green, G (s)		123.3							127.2			
Effective Green, g (s)		123.3							127.2			
Actuated g/C Ratio		0.88							0.91			
Clearance Time (s)		6.1							6.4			
Vehicle Extension (s)		1.0							2.5			
Lane Grp Cap (vph)		4399							1644			
v/s Ratio Prot		c0.25							c0.00			
v/s Ratio Perm									0.02			
v/c Ratio		0.29							0.02			
Uniform Delay, d1		1.3							0.6			
Progression Factor		0.69							1.00			
Incremental Delay, d2		0.2							0.0			
Delay (s)		1.1							0.6			
Level of Service		A							A			
Approach Delay (s)		1.1			0.0			0.6			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	1.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	1219	0	0	32	0
Future Vol, veh/h	54	1219	0	0	32	0
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	-
Veh in Median Storage, #	-	0	16979	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	92	92	68	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	1401	0	0	47	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	684	-
Stage 1	-	-	0	-
Stage 2	-	-	684	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	445	0
Stage 1	-	-	-	0
Stage 2	-	-	421	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	445	-
Mov Cap-2 Maneuver	-	-	445	-
Stage 1	-	-	-	-
Stage 2	-	-	421	-

Approach	EB	SB
HCM Control Delay, s		14
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	445
HCM Lane V/C Ratio	-	-	0.106
HCM Control Delay (s)	-	-	14
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.4

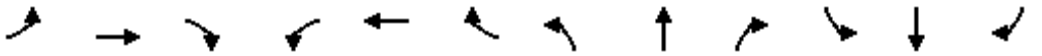
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	46	1938	27	33	4	0	0	0	29
Future Vol, veh/h	0	0	0	46	1938	27	33	4	0	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	96	96	96	85	85	85	98	98	98
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	0	0	48	2019	28	39	5	0	0	0	30

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	904	2143	-	-	-	1024
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	904	2143	-	-	-	-
Critical Hdwy	5.5	-	-	6.44	6.54	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	3.2	-	-	3.82	4.02	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	-	291	48	0	0	0	200
Stage 1	-	-	-	-	-	0	0	0	-
Stage 2	-	-	-	270	87	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	248	48	-	-	-	200
Mov Cap-2 Maneuver	-	-	-	248	48	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	230	87	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		33.1	26.1
HCM LOS		D	D

Minor Lane/Major Mvmt	NBLn1	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	171	-	-	-	200
HCM Lane V/C Ratio	0.255	-	-	-	0.148
HCM Control Delay (s)	33.1	-	-	-	26.1
HCM Lane LOS	D	-	-	-	D
HCM 95th %tile Q(veh)	1	-	-	-	0.5

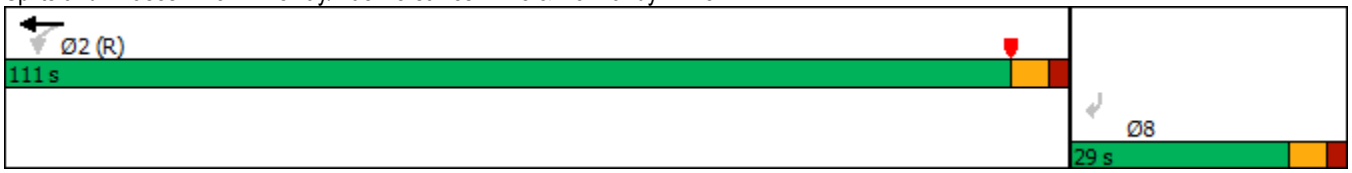


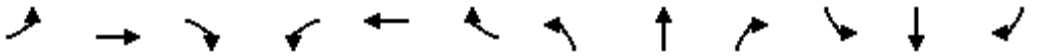
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	1962	54	0	0	0	0	0	46
Future Volume (vph)	0	0	0	17	1962	54	0	0	0	0	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5166	0	0	0	0	0	0	1479
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5166	0	0	0	0	0	0	1479
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					10							28
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		1857			1893			1028			837	
Travel Time (s)		42.2			36.9			23.4			19.0	
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.50	0.50	0.50	0.68	0.68	0.68
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Adj. Flow (vph)	0	0	0	18	2023	56	0	0	0	0	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2097	0	0	0	0	0	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1							1
Detector Template				Left	Thru							Right
Leading Detector (ft)				20	40							40
Trailing Detector (ft)				0	0							0
Detector 1 Position(ft)				0	0							0
Detector 1 Size(ft)				20	40							40
Detector 1 Type				Cl+Ex	Cl+Ex							Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0							0.0
Detector 1 Queue (s)				0.0	0.0							0.0
Detector 1 Delay (s)				0.0	0.0							0.0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Detector Phase				2	2							8
Switch Phase												
Minimum Initial (s)				7.0	7.0							7.0
Minimum Split (s)				101.0	101.0							27.0
Total Split (s)				111.0	111.0							29.0
Total Split (%)				79.3%	79.3%							20.7%

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)				104.7	104.7							22.7
Yellow Time (s)				4.0	4.0							4.0
All-Red Time (s)				2.3	2.3							2.3
Lost Time Adjust (s)					0.0							0.0
Total Lost Time (s)					6.3							6.3
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0							2.5
Recall Mode				C-Max	C-Max							None
Act Effct Green (s)					121.8							9.5
Actuated g/C Ratio					0.87							0.07
v/c Ratio					0.47							0.54
Control Delay					3.1							54.4
Queue Delay					0.0							0.0
Total Delay					3.1							54.4
LOS					A							D
Approach Delay					3.1						54.4	
Approach LOS					A						D	
Queue Length 50th (ft)					137							36
Queue Length 95th (ft)					204							57
Internal Link Dist (ft)		1777			1813			948			757	
Turn Bay Length (ft)												
Base Capacity (vph)					4495							263
Starvation Cap Reductn					0							0
Spillback Cap Reductn					0							0
Storage Cap Reductn					0							0
Reduced v/c Ratio					0.47							0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 66 (47%), Referenced to phase 2:WBTL and 6:, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 83.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Driveway/Rue Versailles Drive & Normandy Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	1962	54	0	0	0	0	0	46
Future Volume (vph)	0	0	0	17	1962	54	0	0	0	0	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.3							6.3
Lane Util. Factor					0.91							1.00
Frt					1.00							0.86
Flt Protected					1.00							1.00
Satd. Flow (prot)					5164							1479
Flt Permitted					1.00							1.00
Satd. Flow (perm)					5164							1479
Peak-hour factor, PHF	0.92	0.92	0.92	0.97	0.97	0.97	0.50	0.50	0.50	0.68	0.68	0.68
Adj. Flow (vph)	0	0	0	18	2023	56	0	0	0	0	0	68
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	26
Lane Group Flow (vph)	0	0	0	0	2096	0	0	0	0	0	0	42
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)												0
Turn Type				Perm	NA							Perm
Protected Phases					2							
Permitted Phases				2								8
Actuated Green, G (s)					119.3							8.1
Effective Green, g (s)					119.3							8.1
Actuated g/C Ratio					0.85							0.06
Clearance Time (s)					6.3							6.3
Vehicle Extension (s)					1.0							2.5
Lane Grp Cap (vph)					4400							85
v/s Ratio Prot												
v/s Ratio Perm					0.41							c0.03
v/c Ratio					0.48							0.49
Uniform Delay, d1					2.6							63.9
Progression Factor					1.00							1.00
Incremental Delay, d2					0.4							3.2
Delay (s)					2.9							67.2
Level of Service					A							E
Approach Delay (s)		0.0			2.9			0.0			67.2	
Approach LOS		A			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	5.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	42	12	2	50
Future Volume (Veh/h)	0	0	42	12	2	50
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	46	13	2	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	110	52			59	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	110	52			59	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	885	1015			1545	

Direction, Lane #	NB 1	SB 1
Volume Total	59	56
Volume Left	0	2
Volume Right	13	0
cSH	1700	1545
Volume to Capacity	0.03	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.3
Lane LOS		A
Approach Delay (s)	0.0	0.3
Approach LOS		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	7.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	1	42	0	0	45
Future Vol, veh/h	7	1	42	0	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1	46	0	0	49

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	95	46	0	-	-	-
Stage 1	46	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	905	1023	-	0	0	-
Stage 1	976	-	-	0	0	-
Stage 2	973	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	905	1023	-	-	-	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	973	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	918	-
HCM Lane V/C Ratio	-	0.009	-
HCM Control Delay (s)	-	9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0	-

Appendix I – Study Methodology

Thomas A. Hall, Inc.
1355 Adams Street
Hollywood, FL 33019
954-288-4447
tomhall1234@gmail.com

February 15, 2024

Harrison (Grant) Webster
Transportation Department
1688 Meridian Avenue, Ste. 801r
Miami Beach, FL 33139

RE: 1960 Normandy Drive Traffic Analysis – Study Methodology
Project No. 202213.02

Dear Mr. Webster:

The purpose of this letter is to summarize the traffic impact study methodology for the proposed mixed-use development located at 1960 Normandy Drive in the City of Miami Beach, Florida. The project is to be constructed in a single phase with a build out year of 2026. The property proposed for development is currently occupied by a 4,377-square-foot utility warehouse. Access to the site is to be located on Normandy Drive, Verdun Court and Everglades Court. A preliminary site plan is enclosed. This study methodology letter is an update of an earlier letter and report that were completed in 2022 for a similar development with only 60 dwelling units.

The proposed development is to include 120 residential apartments and 5,091 square feet of retail land use. Our study is proposed to include:

Data Collection/Study Area

Figure 1 – Proposed Study Area (enclosed) is an aerial map showing the study area. Turning-movement counts will be obtained for the hours of 7:00-9:00 a.m. and 4:00-6:00 p.m. on Tuesdays, Wednesdays or Thursdays at the following locations:

- Normandy Drive/71st Street at Bay Drive
- Normandy Drive at Biarritz Drive
- Normandy Drive at Trouville Drive
- Normandy Drive at Verdun Court
- 71st Street at Trouville Drive
- 71st Street at Verdun Court
- JFK Causeway at Treasure Drive
- 71st Street at Rue Notre Dame
- Normandy Drive at Versailles Court/Rue Versailles Drive
- 71st Street at Rue Vendome
- Normandy Drive/71st Street at Bay Drive

Link volumes for the roadway segments between these intersections will be obtained from FDOT and Miami-Dade County data.

All traffic counts will be adjusted to peak season conditions by the application of FDOT's Peak Season Category Factors. Traffic signal timing plans for the signal-controlled intersections will be obtained from Miami-Dade County Public Works Department's online database. Additional roadway geometric data will be obtained from field reviews and aerial maps. All of the collected data will be included in the report appendices.

The study area will include the intersections noted above as well as the project driveway connections to Verdun Court and Normandy Drive.

Trip Generation

Using information contained in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 11th edition, project trips were estimated for the proposed development. ITE Land Use Code 221 (Multi-Family Housing, Mid Rise) and ITE Land Use Code 822 (Strip Retail Plaza <40k) were used for the 1960 Normandy Drive project. The existing development on the project site's trip generation was estimated using ITE Land Use Code 170 (Utility).

As the enclosed Trip Generation tables show, the proposed project is expected to generate 758 net new daily trips, 36 net new a.m. peak-hour trips and 48 net new p.m. peak-hour trips.

Trip Distribution

Cardinal distribution information will be obtained from Miami-Dade County's *2045 Long Range Transportation Plan Direction Trip Distribution Report* for Traffic Analysis Zone 625. An interpolation between the 2015 and 2045 data in that document will be used to determine the cardinal distribution for the project. Project trips will be assigned in accordance with the cardinal distribution and any manual adjustments required to reflect roadway conditions such as turn restrictions, one-way roadways, etc.

Multi-Modal Trips Reduction

Due to the urban location of the proposed project, it is expected that some portion of the project's trips will be from other travel modes than passenger vehicles. There are two Miami-Dade County Metrobus routes immediately adjacent to the proposed new development (Routes 79 and L run east-west along SR 934). There is an eastbound bus stop on 71st Street south of the project site at Verdun Court and a westbound bus stop on Normandy Drive one block east of the project site. In addition, sidewalks exist on both Normandy Drive and 71st Street, as well as on intersecting roadways, to serve pedestrian traffic. There is a well-defined bike lane both east and westbound on 71st Street and Normandy Drive, respectively. A multi-modal trip reduction of 16.3 percent has been obtained from U.S. Census Data and will be documented in the traffic impact study.

Background Traffic and Committed Development

A review of historic Annual Average Daily Traffic in the immediate study area revealed that there are three count stations bracketing the site along SR 934 that would permit the calculation of an average five-year growth factor.

Committed development traffic provided by City of Miami Beach staff will be added to the background growth in traffic volumes.

Capacity Analysis

Intersection capacity analyses will be completed for both a.m. and p.m. peak hours using Synchro analysis software. Roadway segment capacity analyses will be completed using traffic data obtained from Miami-Dade County Public Works Department's concurrency database and FDOT's online traffic database. Where appropriate, FDOT's Quality and Level of Service Handbook level of service tables may also be used.

Capacity analyses will be completed for three conditions: Existing, Background (future conditions without project), and Total (future conditions with project). The build-out year will be specified in the analysis and is 2026. If intersection or roadway link capacity deficiencies are discovered, mitigation measures will be recommended.

Queuing Analysis

Based on the current project site plan, no gated entrance/exits are planned. Therefore, no queuing analysis is expected to be required.

Transportation Demand Management

Transportation Demand Management (TDM) techniques will be reviewed to determine those opportunities for improving the proposed 1960 Normandy Drive traffic operations. Some techniques to be used are:

1. Promote use of public transit services by providing information within the site including route schedules and maps.
2. Provide short-term and long-term bicycle storage.
3. Provide enhanced sidewalks and crosswalks throughout the site.

Parking Evaluation

The parking layout and operations will be reviewed to ensure that vehicles may enter and exit the site in an efficient manner. In addition, the number of parking spaces proposed for the development will be evaluated to ensure that sufficient parking spaces are provided for the parking demand.

Report

The study methodology will be summarized in a report that includes documentation of the elements discussed above. Graphic figures will show:

1. Site Location Aerial
2. Studied Intersections and Links

3. Permitted Movements at Studied Intersections
4. Existing and Future Traffic Volumes
5. Trip Distribution
6. Trip Assignment

Tables will include intersection turning-movement counts with peak season and annual growth factors applied, and committed development and project trips added. Tabular summaries of capacity analyses will be prepared that show the level of service, intersection and approach delay, and queue storage length requirements.

We look forward to your confirmation of this proposed study methodology. Of course, should you have any questions or comments regarding this proposal, please do not hesitate to contact me.

Very truly yours,

Thomas A. Hall
President

TAH/kh

Enclosures



Thomas A. Hall, Inc.

Figure 2 – Study Area Intersections
1960 Normandy Drive
City of Miami Beach, Florida

Table 5
Daily Trip Generation
1960 Normandy Drive

Land Use	ITE Code	Intensity		Trip Generation Rate[1]	Total Trips			Internal Trips						External Trips			Multimodal Trips[2]		New Trips			Pass-By Capture[3]		New Trips		
					In	Out	Total	In		Out		Total	%	In	Out	Total			In	Out	Total			In	Out	Total
Existing Use																										
Utility	170	4,377	s.f.	Ln(T) = 0.74 Ln(X) + 2.73 (50/50)	23	23	46	0	0.0%	0	0.0%	0	0.0%	23	23	46	7	16.3%	19	19	38	0	0.0%	19	19	38
Sub-Total					23	23	46	0		0		0		23	23	46	7		19	19	38	0		19	19	38
Proposed Use																										
Multifamily Housing (Mid-Rise)	221	120	d.u.	T = 4.77(X) - 46.46 (50/50)	422	423	845	76	18.0%	30	7.0%	106	12.5%	346	393	739	20	16.3%	360	359	719	0	0.0%	360	359	719
Strip Retail Plaza (<40k s.f.)	822	5,091	s.f.	T=54.45(X) (50/50)	139	138	277	11	8.0%	39	28.0%	50	17.9%	128	99	227	0	0.0%	128	99	227	150	66.0%	39	38	77
Sub-Total					561	561	1,122	87		69		156		474	492	966	20		488	458	946	150		399	397	796
Total					**538**	**538**	**1,076**	**87**		**69**		**156**		**451**	**469**	**920**	**12**		**469**	**439**	**908**	**150**		**380**	**378**	**758**

[1] Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 11th Edition, General Urban/Suburban characteristics.
[2] Multimodal trips estimate obained from US Census Bureau's American Community Survey.
[3] Pass-by Capture rate derived from two smallest retail sites' (9,000 s.f. and 17,000 s.f.) rates shown in the ITE's *Trip Generation Handbook*, 3rd Edition.

Table 6
AM Peak Hour Trip Generation
1960 Normandy Drive

Land Use	ITE Code	Intensity		Trip Generation Rate[1]	Total Trips			Internal Trips						External Trips			Multimodal Trips[2]		New Trips			Pass-By Capture[3]		New Trips		
					In	Out	Total	In		Out		Total	%	In	Out	Total			In	Out	Total			In	Out	Total
Existing Use																										
Utility	170	4,377	s.f.	T=2.33(X) (87/13)	9	1	10	0	0.0%	0	0.0%	0	0.0%	9	1	10	2	16.3%	4	4	8	0	0.0%	4	4	8
Sub-Total					9	1	10	0		0		0		9	1	10	2		4	4	8	0		4	4	8
Proposed Use																										
Multifamily Housing (Mid-Rise)	221	120	d.u.	T = 0.44(X) - 11.61 (23/77)	13	47	60	0	0.0%	0	0.0%	0	0.0%	13	47	60	20	16.3%	10	30	40	0	0.0%	20	20	40
Strip Retail Plaza (<40k s.f.)	822	5,091	s.f.	T=2.36(X) (62/38)	7	5	12	0	0.0%	0	0.0%	0	0.0%	7	5	12	0	0.0%	7	5	12	8	66.0%	3	1	4
Sub-Total					20	52	72	0		0		0		20	52	72	20		17	35	52	8		23	21	44
Total					**11**	**51**	**62**	**0**		**0**		**0**		**11**	**51**	**62**	**18**		**13**	**31**	**44**	**8**		**19**	**17**	**36**

[1] Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 11th Edition, General Urban/Suburban characteristics.
[2] Multimodal trips estimate obained from US Census Bureau's American Community Survey.
[3] Pass-by Capture rate derived from two smallest retail sites' (9,000 s.f. and 17,000 s.f.) rates shown in the ITE's *Trip Generation Handbook*, 3rd Edition.

Table 7
PM Peak Hour Trip Generation
1960 Normandy Drive

Land Use	ITE Code	Intensity		Trip Generation Rate[1]	Total Trips			Internal Trips						External Trips			Multimodal Trips[2]		New Trips			Pass-By Capture[3]		New Trips		
					In	Out	Total	In		Out		Total	%	In	Out	Total			In	Out	Total			In	Out	Total
Existing Use																										
Utility	170	4,377	s.f.	Ln(T) = 0.81 Ln(X) + 0.86 (18/82)	1	7	8	0	0.0%	0	0.0%	0	0.0%	1	7	8	1	16.3%	3	4	7	0	0.0%	3	4	7
Sub-Total					1	7	8	0		0		0		1	7	8	1		3	4	7	0		3	4	7
Proposed Use																										
Multifamily Housing (Mid-Rise)	221	120	d.u.	T = 0.39(X) + 0.34 (61/39)	45	27	72	8	18.0%	2	7.0%	10	13.9%	37	25	62	20	16.3%	25	17	42	0	0.0%	25	17	42
Strip Retail Plaza (<40k s.f.)	822	5,091	s.f.	Ln(T) = 0.71 Ln(X) + 2.72 (50/50)	24	25	49	2	8.0%	7	28.0%	9	17.8%	22	18	40	0	0.0%	20	20	40	27	66.0%	6	7	13
Sub-Total					69	52	121	10		9		19		59	43	102	20		45	37	82	27		31	24	55
Total					**68**	**45**	**113**	**10**		**9**		**19**		**58**	**36**	**94**	**18**		**42**	**33**	**75**	**27**		**28**	**20**	**48**

[1] Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 11th Edition, General Urban/Suburban characteristics.
[2] Multimodal trips estimate obained from US Census Bureau's American Community Survey.