71 NOBE
TRAFFIC STUDY

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71 NOBE
TRAFFIC STUDY

Prepared By:
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Prepared For:
North Beach Town Center Development, LLC

Prepared In:
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DPA Job #:
19247

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Responses to the City of Miami Beach Comments *(December 11, 2019)*

Re: 71 NOBE Dated November, 2019

1. Existing Traffic Counts – Please review the peak season conversion factors.

   DPA Response: *The seasonal factor was reviewed and revised, as requested.*

   New Comment - Please review the peak season conversion factors WITHIN THE TEXT OF THE REPORT.

   DPA Response: The text of the report has been revised to clarify that existing traffic counts were adjusted to reflect peak season conditions using seasonal factors published by FDOT.

2. Trips for the AM Peak proposed conditions LUC 820, should have been calculated using the best fit formula. Although it is true that some retailers open after the peak hour, without knowing the specific tenant, the formula needs to be applied.

   DPA Response: *See response to Comment 3.*

3. The trip generation for the site should consider all possible retail uses not only limited to shopping center (LUC820) and provide for a matrix displaying the maximum allowable uses and their trip generation summary. Based on the matrix the highest possible trips should be incorporated in the traffic analysis. Such land uses include but not limited to; Free Standing Discount Store LUC 815, Supermarket LUC 850, Discount Supermarket LUC 854.

   DPA Response: *The applicant is proposing a Target store for this site (see Response to Comment 12). The trip generation has been revised to reflect LUC 875 – Department Store for this use.*

4. Pass by rates/internalization rates as specified in ITE for one peak are not interchangeable to other time periods. E.g. a 34 % pass by suggested for the PM peak should not be assumed for the AM or daily calculations.

   DPA Response: *Pass-by has been removed from the AM peak hour trip generation. ITE does not have pass-by data for LUC 875. Pass-by rates published by ITE for other retail uses were reviewed and are summarized below. Target is a department store that offers many of the services provided by the retail listed below, i.e., pharmacy, furniture, apparel, supermarket service, and the like. Therefore, it is an attraction for vehicles passing by to stop and shop during peak hours. The*

pass-by rate for shopping center was used to account for this component since it is lower than the average of other retail.

Pass-by	
LUC 813 - Free-Standing Discount Superstore	29%
LUC 814 - Variety Store	34%
LUC 815 - Free-Standing Discount Store	17%
LUC 820 - Shopping Center	34%
LUC 850 - Supermarket	36%
LUC 854 - Discount Supermarket	21%
LUC 857 - Discount Club	37%
LUC 862 - Home Improvement Store	42%
LUC 880 - Pharmacy/Drugstore without Drive-Through Window	53%
LUC 890 - Furniture Store	53%
Average	***36%***

New Comment - COMMENTS 2, 3, AND 4: RESPONSES TO THESE COMMENTS DEPEND ON THE LAND USE SELECTED. THE REVISED REPORT CHANGE THE LAND USE CODE FROM 820 TO 875 AND IDENTIFIED THE PROPOSED USED FOR A TARGET. HOWEVER, LUC 875 IS NOT TYPICALLY USED FOR A RETAIL SUCH AS TARGET, INSTEAD LAND USES 813 OR 815 ARE USED DEPENDING ON WHETHER GROCERY SERVICE IS PROVIDED. IN ADDITION, THE CITY STAFF HAD REQUESTED TO PROVIDED FOR A MATRIX DISPLAYING THE MAXIMUM ALLOWABLE USES AND THEIR TRIP GENERATION SUMMARY. BASED ON THE REQUESTED MATRIX, THE HIGHEST POSSIBLE TRIPS SHOULD BE INCORPORATED IN THE TRAFFIC ANALYSIS. THE COMPARISON SHOULD INCLUDE BUT NOT LIMITED TO; LUC 815, 813, 820, LUC 850, AND LUC 854.

***DPA Response**: The applicant has signed a letter of intent and the proposed use is an urban Target Store that will provide supermarket services. Consequently, the design of the space is consistent with this use. Uses such as Supermarket (LUC 850) and/or Discount Supermarket (LUC 854) have use specific design parameters that will not be consistent with the proposed design. Therefore, trip generation data provided for these uses are not applicable to this project. The original study was performed using the Shopping Center (LUC 820) trip generation rates and/or equations. City staff requested a revision to the traffic study. The study was revised to reflect Department Store (LUC 875). ITE provides the following description:*

> ***"A department store is a free-standing facility that specializes in the sales of a wide range of products including apparel, footwear, home products, bedding and linens, luggage, jewelry, and accessories. These stores typically maintain long hours of operations 7 days a week."***

Although this description fits a Target Store, the applicant has stated that an urban Target will provide supermarket services. In addition, Target stores offer centralized cashiering. The definition for Free-Standing Discount Superstore (LUC 813), provided below, includes this service.

> **"A discount superstore is similar to a free-standing discount store with the exception that it also contains a full-service grocery department under the same roof that shares the entrances and exits of the discount store area. These stores usually offer**

a variety of customer services, centralized cashiering, and a wide range of products. They typically maintain long store hours 7 days a week."

The traffic study has once again been updated to reflect Land Use 813, as it adequately describes the proposed use.

5. Please review the % entering/exiting for the PM peak calculations.

   DPA Response: *Trip generation was revised and the % entering/exiting for the residential was revised.*

6. The distribution Figure indicates that out of the 24% traveling northbound on Collins Avenue only 1% turns left onto 69th Street and the remaining 23% turns left on 71st Street to then access the site via Byron Avenue. However, accessing the site using 69th Street is a more direct route (2 additional right turns) compared to using 71st Street (2 additional left turns), therefore a higher percentage of traffic should be assigned to turn left on 69th Street.

   DPA Response: *The distribution was adjusted to reflect the majority of the trip coming from the south using 69th Street, as requested.*

7. Please verify that the pass-by is limited to 10% of the volume of the road.

   DPA Response: *The pass-by volumes were compared to future volumes without project below. They represent less than 0.5% of the volume.*

Location	Direction	Pass-by	Future without Project	% of Passing-by Volume
71st Street at Byron Avenue	EB	7	1,263	0.55%
	WB	8	831	0.96%

8. The study shows a new westbound left turn lane at 69th Street and Abbott as part of the background scenario. Currently, the City does not have a project with this improvement. It needs to be considered as a proposed improvement, if needed.

   DPA Response: *This improvement was removed from the analysis.*

9. Please indicate whether a valet service will be provided.

   DPA Response: *Valet service will not be provided. All parking will be self-park.*

10. Please discuss the type of gates will be using at the garage, their location and how is the residential parking going to be differentiated from the retail and office parking. Please provide Queue analysis if required. Please show the gate in the site plan.

    Applicant Response: *The residential control gate is referenced on Sheet A3.2. The residential control gate will separate the residential parking from the retail parking and is contemplated to either be a rapid-roll-door or a traditional arm gate system. Residents will utilize access cards for entry/exit to their dedicated parking area.*

11. Please indicate the type of loading vehicles that will be serving the project and provide a loading zone maneuverability analysis. Please note that within previous response to comments it was indicated that passenger size vehicles will be used. However, the City staff has express concern regarding the type of vehicle. Passenger size vans are not sufficient for the proposed uses of the site. All The loading spaces need to be sized according to the expected use. The code reads: "For the purpose of these regulations a loading space is a space within the main building or on the same lot, logically and conveniently located for bulk pick-ups and deliveries, scaled to delivery vehicles expected to be used but not less than ten feet by 20 feet, and accessible to such vehicles when required off-street parking spaces are filled. "Logically it does not make sense that a 10 by 20 space will be able to allocate deliveries to a large retail use as it is here proposed.

    Applicant Response: *As per our LOI to PB, Target has agreed to not utilize a loading truck larger than a WB40 to service this store. We have extensively designed our loading area to sufficiently accommodate the loading requirements of Target and the City. Please reference Sheets C1.1 – 1.4 for the loading maneuverability analysis. All required loading spaces are within the proposed building.*

12. Please discuss the garbage pickup operations and provide maneuverability analysis diagrams for this operation.

    Applicant Response: In addition to the commercial loading, garbage pickup operations will be in *accordance with the TC-C regulations (Sec. 142-745.a.12).*

    New Comment - COMMENTS 10, 11 AND 12: RESPONSES TO THESE COMMENTS CALLED FOR SHEETS/DATA THAT WERE NOT PROVIDED. PLEASE PROVIDE PROPER PLANS SHOWING THE DRIVEWAY AND INTERNAL CIRCULATION.

    DPA Response: Pages of the revised site have been included in Appendix A of the revised traffic study.

13. Please note that for the proposed project bicycle racks should be provided. Please show the racks on the site plan.

    Applicant Response: *The exact location of the proposed bike racks has not been determined yet. However, the Applicant plans to incorporate them into the building, likely within the parking levels.*

    New Comment - THE RESPONSE IS INSUFFICIENT. PLEASE IDENTIFY THE LOCATION OF THE BIKE RACKS WITH THE AMOUNT AND TYPE OF RACKS. NOTE THAT THE BICYCLE PARKING AREA SHOULD BE EASILY ACCESSIBLE FROM THE STREET.

DPA Response: Pages of the revised site plan showing the location of the bike racks have been included in Appendix A of the revised traffic study.

14. A TDM is required for this development

DPA Response: *A TDM has been included in the traffic study, as requested.*

New Comment - A TDM is required for this development. - PLEASE PROVIDE THE NAME OF THE PERSON DESIGNATED BY THE APPLICANT TO BE COORDINATING THE IMPLEMENTATION OF THE TDM PLAN WITH THE CITY. PLEASE PROVIDE THE TDM GOALS WITHIN THE PROPOSED PLAN.

DPA Response: TDM goals have been included in the revised traffic study. While the applicant remains responsible for the management of the property, the person in charge of managing the TDM is Oliver O'Donnell. This responsibility will be passed on to future management if necessary.

TABLE OF CONTENTS

LIST OF EXHIBITS

EXECUTIVE SUMMARY

71 Nobe is proposing to redevelop the parcels located along the west side of Abbott Avenue south of 71st Street located in Miami Beach, Florida. The proposed uses include a 170 dwelling unit residential tower and a 30,089 square feet urban Target store. The site is currently used as a surface parking lot. Access to the site will be provided via Byron Avenue. For the purpose of this traffic study, project build-out is anticipated by 2021.

An assessment of the traffic impacts associated with the proposed Abbott Avenue project was performed in accordance with the requirements of the City of Miami Beach. The analysis shows that all intersections are projected to operate within acceptable LOS standards except for the SR 934/71st Street/Indian Creek Drive/Dickens Avenue intersection which currently experiences and will continue to experience delays during the PM peak hour. Project traffic represents less than 0.5% of the projected volume at this intersection resulting in *de-minimus* impact at this location.

A 95th percentile queue analysis was performed to determine if the existing exclusive left-turn lanes along SR 934/71st Street between Carlyle Avenue and SR A1A/Collins Avenue are adequate to accommodate projected vehicle queue lengths for existing as well as future conditions. The results of the analysis indicate that the available storage at intersection turn lanes are sufficient to accommodate vehicle queues at study intersections for all analysis scenarios analyzed with the exception of one (1) movement. The eastbound left-turn lane movement on the 934/71st Street and SR A1A/Collins Avenue intersection does not currently accommodate the vehicle queues within the existing storage length during the PM peak hour, and this is a condition that will continue in the future. This is an existing condition and there is an approximate two (2) vehicle length increase for future conditions with the project. It should also be noted that this approach operates as a continuous left turn lane with the adjacent shared left-turn/through lane based on the eastbound left-turn volumes compared to the eastbound through volumes and based on the intersection geometry.

As part of the study, a mobility and circulation plan was completed. The plan shows that the project area is currently served by five Miami-Dade Transit bus routes and two Miami Beach Trolleys. The project is located in an area that is conducive for pedestrian and bicycle activities providing

ample sidewalks, clearly marked crosswalks, signalized intersections provide pedestrian signals, shared bike lanes, and Citi Bike stations within walking distance to the project. These conditions encourage the use other modes of transportation and reduce the vehicular impact on the roadway network.

A Transportation Demand Management (TDM) Plan was also developed for this project. The development will provide bike racks and proposes a covered sidewalk adjacent to the project. Patrons will be encouraged to participate in ridesharing programs. Miami-Dade County Transportation Agency current local and regional mass transit route and schedule information will be provided. The use of mass transit will be promoted mass by encouraging employers to subsidize transit passes in lieu of subsidized parking. Employers will encourage staggered work hours. Implementation of these items will generate a shift from single vehicle drivers to use other modes of transportation and, thus, reducing the peak hour vehicle trips.

1.0 INTRODUCTION

1.1 Project Background

71 Nobe is proposing to redevelop the parcels located along the west side of Abbott Avenue south of 71st Street located in Miami Beach, Florida (See Exhibit 1). The proposed uses include a 170 dwelling unit residential tower and a 30,089 square feet urban Target store. The site is currently used as a surface parking lot. Access to the site will be provided via Byron Avenue. The proposed site plan is included in Appendix A. For the purpose of this traffic study, project build-out is anticipated by 2021.

1.2 Study Objective

The project will be applying for permits from the City of Miami Beach. As part of this permit, the City of Miami Beach require traffic related studies. The purpose of this study is to assess the traffic impacts associated with the proposed project and to conduct a mobility and circulation analysis.

1.3 Study Area and Methodology

The approved methodology is included in Appendix B. The following is a description of the study components and analysis undertaken:

- Traffic Counts (Intersections) – Two-hour turning movement counts were collected on Tuesday May 23, 2019 during the AM (7 – 9) and PM (4 – 6) peak hour conditions of a regular weekday at the following intersections:
    - SR 934/71st Street and Indian Creek Drive/Dickens Avenue (S)
    - SR 934/71st Street and Byron Avenue (U)
    - SR 934/71st Street and SR A1A/Abbott Avenue (S)
    - SR 934/71st Street and Harding Avenue (S)
    - SR 934/71st Street and SR A1A/Collins Avenue (S)
    - 69th Street and Indian Creek Drive (S)
    - 69th Street and SR A1A/Abbott Avenue (S)
    - 69th Street and Harding Avenue (S)
    - 69th Street and Byron Avenue (U)
    - 69th Avenue and SR A1A/Collins Avenue (S)

      S = Signalized U = Un-signalized

Project Location

Exhibit 1

Location Map

NORTH
MAP NOT TO SCALE

- Adjustment Factors – Traffic counts were adjusted to reflect peak season conditions using the seasonal factors published by the Florida Department of Transportation (FDOT).
- Signal Location and Timing – Existing signal phasing and timing for the signalized intersections were obtained from Miami-Dade County. Signal timing plans are included in Appendix C.
- Future Transportation Projects – The 2020 *Transportation Improvement Program* (TIP) and the *2040 Long Range Transportation Plan* (LRTP) were reviewed to include future transportation projects which add capacity to the network.
- Background Traffic – Available FDOT and Miami-Dade County (MDC) traffic counts were consulted to determine a growth factor consistent with historical annual growth in the area. The growth factor was applied to the existing traffic volumes to establish background traffic.
- Committed Developments – Future traffic associated with the committed developments in the vicinity of the project site was considered in the analysis.
- Project Trip Generation – Trip generation for the project was estimated using trip generation information published by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition and site-specific data.
- Project Trip Distribution / Trip Assignment – Net new external project vehicular trips were assigned to the adjacent street network using the appropriate cardinal distribution from the *Miami-Dade 2040 Long Range Transportation Plan*, published by the Metropolitan Planning Organization. Area traffic patterns were considered when assigning project trips. A figure showing all of the assigned project trips to the adjacent transportation network was provided as part of the study.
- Future Traffic Conditions – Project traffic was combined with background traffic and committed development traffic to obtain future conditions with project. Intersection capacity analyses were performed for existing and future with project conditions.
- Circulation Analysis / Plan – A circulation plan is provided depicting the project site, driveways, location of street signs/signals, crosswalks, sidewalks, location of bus facilities, and bike facilities in the vicinity of this project.

2.0 EXISTING CONDITIONS

Data collection for this study included roadway characteristics, intersection traffic counts, signal timing, and seasonal adjustment factors. The data collection effort is described in the following sections.

2.1 Roadway Characteristics

71st Street (SR 934)

Within the study area, 71st Street is a state principal arterial that provides east/west access all along the City of Miami Beach. West of Indian Creek Drive, 71st Street is a two-way, four-lane divided roadway. East of Indian Creek Drive, 71st Street is a two-way, two-lane divided roadway. There is on-street parking provided on portions of the roadway. Bike lanes are provided along the roadway. FDOT has jurisdiction over this portion of 71st Street. The posted speed limit is 30 mph.

69th Street

69th Street is a local roadway that runs east/west between Indian Creek Road and Collins Avenue. It is a two-way, two-lane undivided road. There is on-street parking provided on both sides of the roadway. The City of Miami Beach has jurisdiction over 69th Street. The speed limit is not posted on this segment of 69th Street, however, if not posted, the City's speed limit is 30 mph.

Indian Creek Drive/Dickens Avenue

Within the study area, Indian Creek Drive is a local roadway that runs northwest/southeast between 61st and 71st Streets. Byron Avenue is a two-way, four-lane undivided road. On-street parking is not permitted. The City of Miami Beach has jurisdiction over Indian Creek Drive. The posted speed limit is 30 mph.

Byron Avenue

Within the study area, Byron Avenue is a local roadway that runs north/south between Indian Creek Drive and 72nd Street. Byron Avenue is a two-way, two-lane undivided road. There is on-street parking provided on both sides of the roadway. The City of Miami Beach has jurisdiction. The speed limit is not posted on this segment of Byron Avenue. However, if not posted, the City's speed limit is 30 mph.

Abbott Avenue (SR A1A)

Abbott Avenue is a principal arterial that provides southbound access along the City of Miami Beach. Within the study area, Abbott Avenue is one-way, three-lane southbound roadway that runs between Indian Creek Drive and 72nd Street. There is on-street parking provided on portions of the road. A southbound bike lane is provided along the roadway. FDOT has jurisdiction over this portion of Abbott Avenue. The posted speed limit is 30 mph.

Harding Avenue

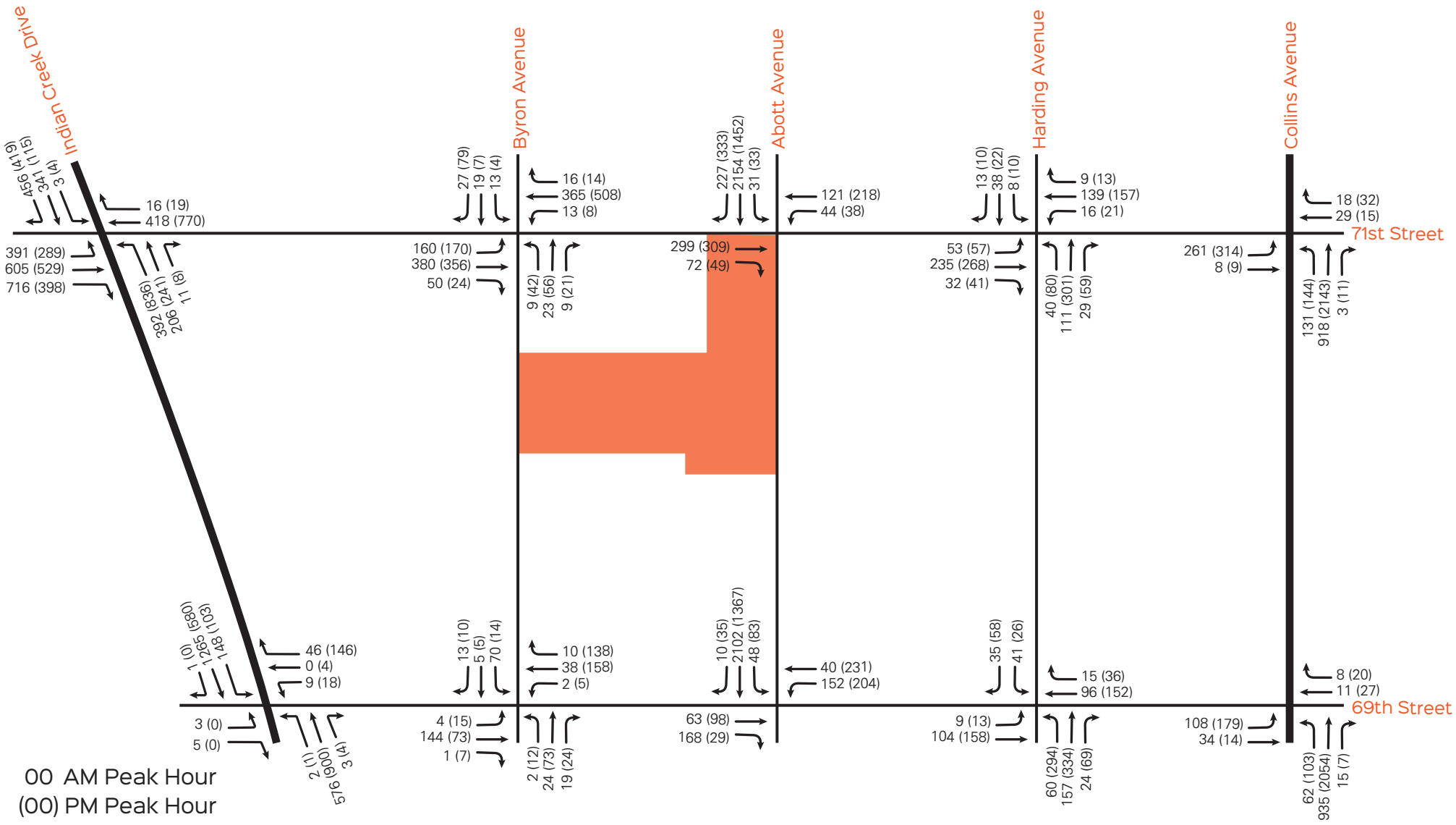
Within the study area, Harding Avenue is a principal arterial that runs north/south between 67th Street and 72nd Street. North of 69th Street, Harding Avenue is a two-way, two-lane undivided roadway. South of 69th Street, Harding Avenue is a one-way, two-lane northbound roadway. There is on-street parking provided on both sides of the roadway. Miami-Dade County has jurisdiction over Harding Avenue. The speed limit is not posted on this segment of Harding Avenue. However, if not posted, the City's speed limit is 30 mph.

Collins Avenue (SR A1A)

Collins Avenue is a state principal arterial that provides north/south access throughout the county. Within the study area, Collins Avenue is a one-way, three-lane northbound roadway. There is on-street parking provided on portions of the roadway. FDOT has jurisdiction over Collins Avenue. The posted speed limit is 30 mph.

2.2 Traffic Counts

Turning movement counts were collected on May 23, 2019 at the study intersections during the AM (7–9) and PM (4 – 6) peak periods. The latest weekly volume adjustment factors were obtained from FDOT. The traffic volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. City of Miami Beach peak season conversion factors were developed from Florida Department of Transportation (FDOT) data and were applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor of 1.23 was applied to the collected turning movement counts. The counts are provided in Appendix C. Existing volumes at the intersection are graphically portrayed in Exhibit 2.



00 AM Peak Hour
(00) PM Peak Hour

Project Location

Exhibit 2

Existing AM & PM Peak Hour Traffic Volumes

NORTH
MAP NOT TO SCALE

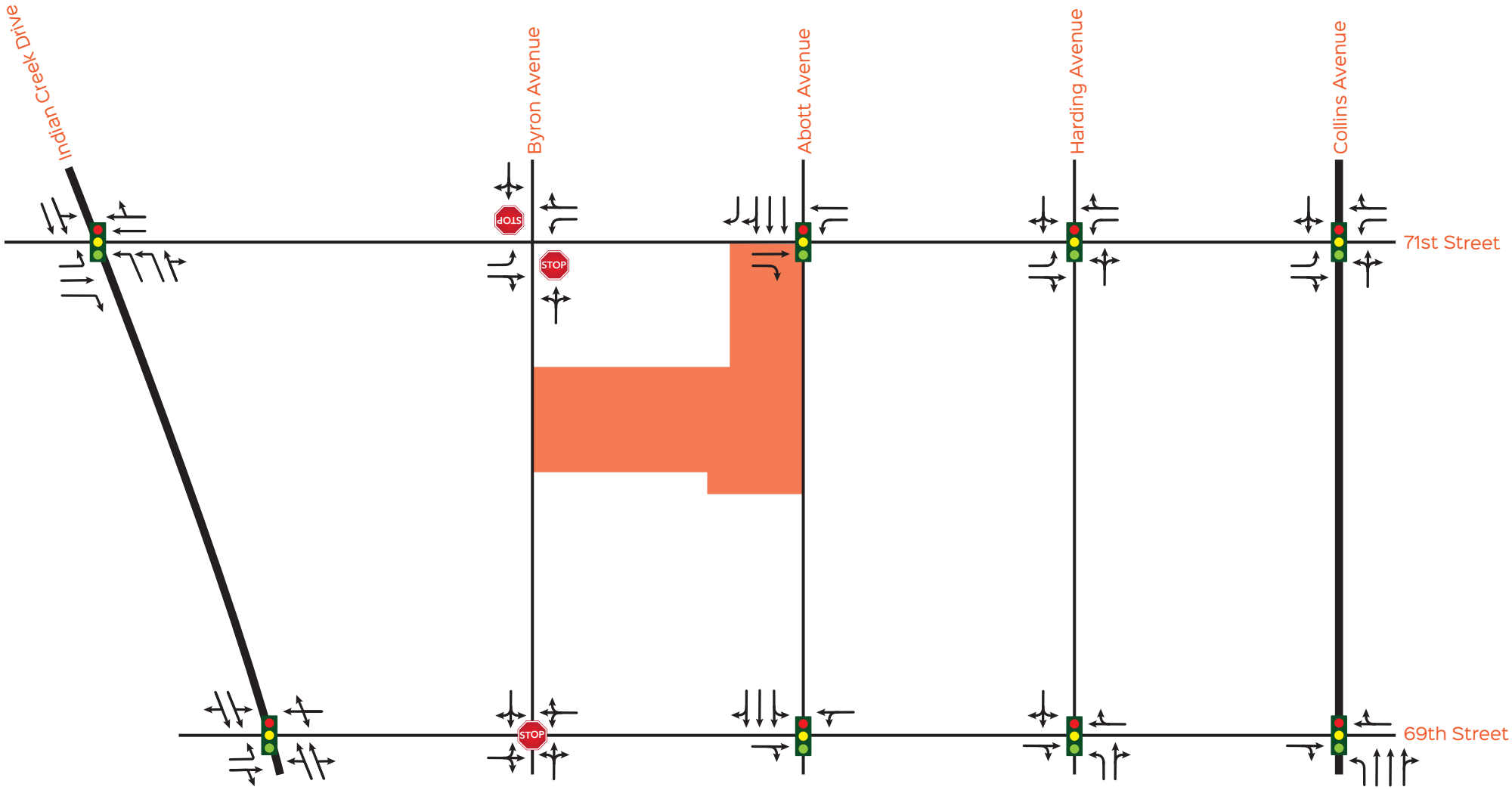
2.3 Intersection Data

A field survey was conducted to obtain the intersection lane configurations to be used in the intersection analysis. Exhibit 3 shows the existing lane configurations at the analyzed intersections. Existing signal phasing and timing for all the intersections were obtained from Miami-Dade County. This information was used for the signal phasing and timing required for the intersection capacity analysis and can be seen in Appendix C.

2.4 Intersection Capacity Analysis

The Synchro Software, based on procedures of the *Highway Capacity Manual 6th Edition*, was used to perform intersection capacity analysis at the analyzed intersections. Synchro is a macroscopic analysis and optimization software application that implements the intersection capacity utilization method for determining intersection capacity. Results for existing conditions intersection analysis are provided in Exhibit 4. Analysis worksheets are included in Appendix D. The analysis shows that all intersections are projected to operate within acceptable LOS standards except for the following location:

- SR 934/71st Street and Indian Creek Drive/Dickens Avenue intersection currently experiences delays during the PM peak hours.



Project Location

Exhibit 3

Existing Lane Configuration

NORTH
MAP NOT TO SCALE

Exhibit 4: Intersection Capacity Analysis Summary – Existing (2019) Conditions

Intersection	Signalized/ Unsignalized	Direction	LOS Standard	AM LOS	AM Delay	PM LOS	PM Delay
SR 934/71st Street /Indian Creek Drive/Dickens Avenue	S	NB	D+20%	D	54.6	E	63.6
		SB		E	77.1	F	178.4
		EB		D	35.0	C	33.0
		WB		D	39.4	E	55.7
		Overall		***D***	***48.4***	***D + 25%***	***68.6***
SR 934/71st Street /Byron Avenue	U	NB	D+20%	C	18.5	E	40.1
		SB		C	16.4	B	14.8
		EBL		A	2.4	A	3.1
		WBL		A	0.3	A	0.1
		Overall		***NA***	***NA***	***NA***	***NA***
SR 934/71st Street /SR A1A/Abbott Avenue	S	SB	D+20%	B	10.5	A	7.3
		EBL		C	30.2	C	30.8
		EBL		D	36.9	D	37.5
		Overall		***B***	***14.4***	***B***	***13.9***
SR 934/71st Street /Harding Avenue	S	NB	D+20%	C	34.3	D	35.7
		SB		C	29.9	B	18.9
		EB		A	5.1	B	14.1
		WB		A	5.6	B	14.0
		Overall		***B***	***14.5***	***C***	***23.4***
SR 934/71st Street /SR A1A /Collins Avenue	S	NB	D+20%	A	6.8	A	9.0
		SB		A	0.0	A	0.0
		EB		C	22.6	F	81.8
		WB		D	43.2	F	86.8
		Overall		***B***	***11.2***	***C***	***23.6***
69th Street and Indian Creek Drive	S	NB	D+20%	A	0.5	A	3.0
		SB		A	1.0	A	2.9
		EB		D	39.3	A	0.0
		WB		D	42.6	D	39.3
		Overall		A	2.1	A	6.4
69th Street/SR A1A /Abbott Avenue	S	NB	D+20%	C	30.6	C	20.9
		EB		C	25.1	B	17.5
		WB		D	41.2	C	33.3
		Overall		***C***	***30.9***	***C***	***23.3***
69th Street /Harding Avenue	S	NB	D+20%	B	14.4	C	25.0
		SB		C	20.1	C	28.3
		EB		B	18.7	C	22.6
		WB		B	18.3	C	23.3
		Overall		***B***	***16.9***	***C***	***24.6***
69th Street and Byron Avenue	All Way Stop	NB	D+20%	A	7.7	A	8.8
		SB		A	8.4	A	8.2
		EB		A	8.7	A	8.4
		WB		A	7.8	A	9.7
		Overall		***NA***	***NA***	***NA***	***NA***
69th Avenue /SR A1A /Collins Avenue	S	NB	D+20%	A	1.2	A	2.1
		EB		D	36.6	F	86.8
		WB		C	32.4	E	59.8
		Overall		***A***	***6.0***	***B***	***10.0***

3.0 PLANNED AND PROGRAMMED ROADWAY IMPROVEMENTS

The 2020 Miami-Dade County *Transportation Improvement Program* (TIP) and the *2040 Long Range Transportation Program* (LRTP) were reviewed to identify any programmed project within the limits of the established study area. These documents show no officially programmed or planned capacity improvement projects within the study area prior to completion of the proposed project.

4.0 FUTURE TRAFFIC CONDITIONS

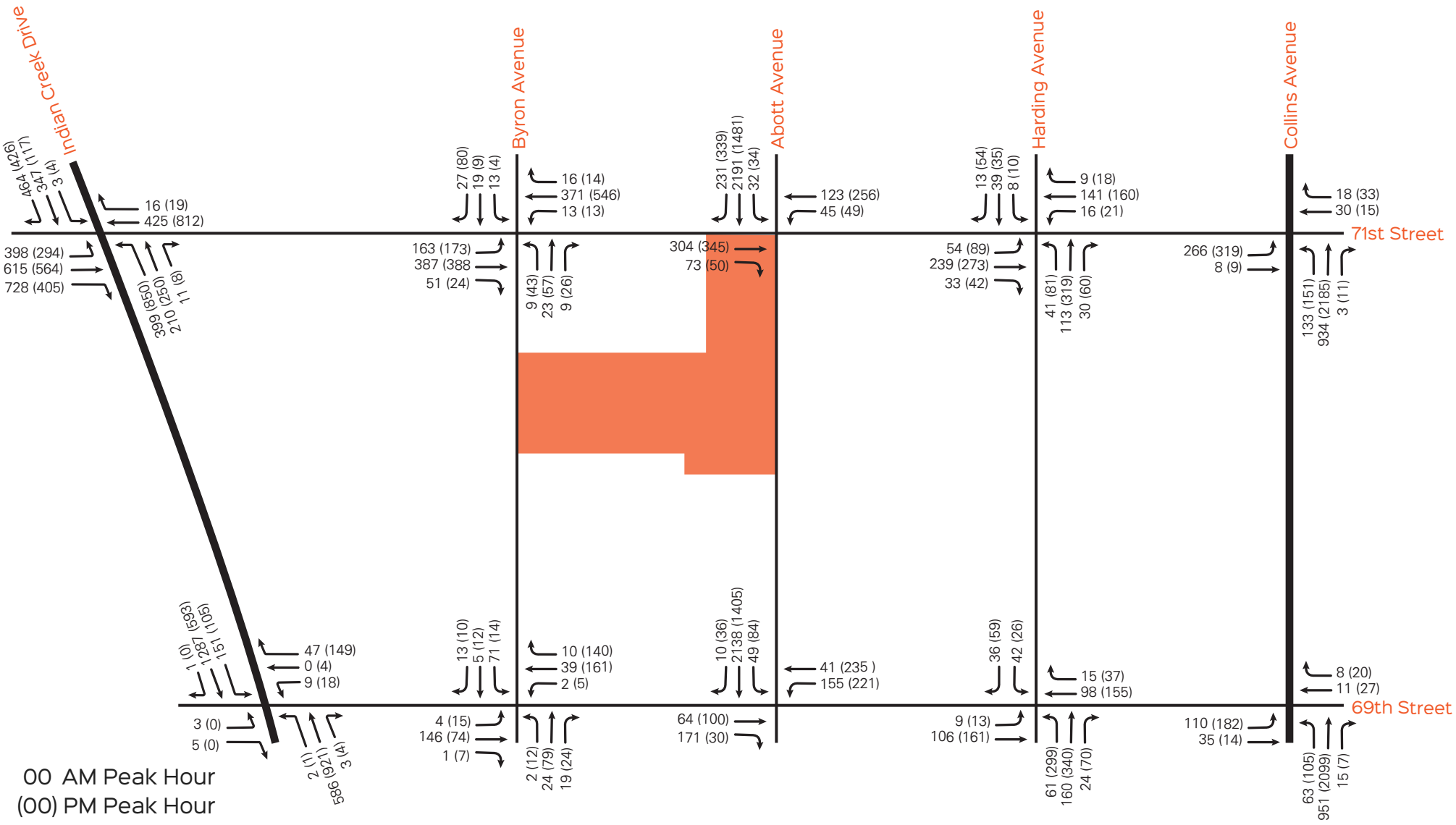
4.1 Background Traffic and Committed Developments

Average Daily Traffic (ADT) counts published by FDOT were reviewed to determine historic growth in the area. This analysis indicated that the annual growth is negative over the past five years. The 2010 and 2040 FSUTMS SERPM forecast volumes were compared and an annual growth rate of 0.86% was obtained. This rate was applied to existing counts to obtain future (2021) background volumes. Historic growth rate documentation is included in Appendix E.

One committed development in the vicinity of the project site were considered for estimating future traffic volumes in this study: The 7140 Collins Hotel redevelopment. Excerpts from the traffic study for this project including trip assignment are also included in Appendix E.

4.2 Future without Project Intersection Capacity Analysis

Future without project turning movement volumes were obtained by applying two years of background growth and committed development trips to the existing network. Exhibit 5 shows the projected AM and PM peak hour turning movement counts for future conditions without project. Exhibit 6 provides a summary of the resulting LOS for the future without project conditions during the AM and PM peak hours. Analysis worksheets are included in Appendix D. Results for intersection analysis for future conditions without project are similar to existing.



00 AM Peak Hour
(00) PM Peak Hour

Project Location

Exhibit 5

Future Without Project AM & PM Peak Hour Traffic Volumes

NORTH
MAP NOT TO SCALE

Exhibit 6: Future without Project Intersection Capacity Analysis
Weekday AM and PM Peak Hour Conditions

Intersection	Signalized/ Unsignalized	Direction	LOS Standard	AM LOS	AM Delay	PM LOS	PM Delay
SR 934/71st Street /Indian Creek Drive/Dickens Avenue	S	NB	D+20%	E	55.2	E	66.3
		SB		F	81.2	F	185.4
		EB		D	37.5	D	37.9
		WB		D	39.9	E	61.0
		Overall		***D***	***50.7***	***D + 33%***	***72.9***
SR 934/71st Street /Byron Avenue	U	NB	D+20%	C	16.7	F	56.2
		SB		C	18.9	C	18.8
		EBL		A	2.4	A	3.3
		WBL		A	0.3	A	0.8
		Overall		***NA***	***NA***	***NA***	***NA***
SR 934/71st Street /SR A1A/Abbott Avenue	S	SB	D+20%	B	11.1	A	8.9
		EBL		C	30.3	C	31.1
		EBL		D	36.9	D	37.7
		Overall		***B***	***15.0***	***B***	***15.7***
SR 934/71st Street /Harding Avenue	S	NB	D+20%	C	32.5	D	35.8
		SB		C	28.5	B	19.0
		EB		A	5.9	B	15.1
		WB		A	6.3	B	15.9
		Overall		***B***	***14.5***	***C***	***23.8***
SR 934/71st Street /SR A1A /Collins Avenue	S	NB	D+20%	A	7.5	A	9.3
		SB		A	0.0	A	0.0
		EB		C	26.8	F	80.5
		WB		D	43.4	F	86.8
		Overall		***B***	***12.6***	***C***	***24.6***
69th Street and Indian Creek Drive	S	NB	D+20%	A	1.0	A	3.1
		SB		A	1.0	A	3.1
		EB		D	35.5	A	0.0
		WB		D	37.2	D	39.2
		Overall		A	2.1	A	6.5
69th Street/SR A1A /Abbott Avenue	S	NB	D+20%	C	33.1	B	15.5
		EB		C	25.3	C	20.4
		WB		D	42.9	E	76.3
		Overall		***C***	***33.1***	***C***	***29.0***
69th Street /Harding Avenue	S	NB	D+20%	B	14.6	C	26.3
		SB		B	19.4	C	28.4
		EB		B	20.0	C	22.6
		WB		B	17.1	C	23.6
		Overall		***B***	***16.9***	***C***	***25.5***
69th Street and Byron Avenue	All Way Stop	NB	D+20%	A	7.7	A	8.9
		SB		A	8.4	A	8.3
		EB		A	8.7	A	8.5
		WB		A	7.8	B	9.9
		Overall		***NA***	***NA***	***NA***	***NA***
69th Avenue /SR A1A /Collins Avenue	S	NB	D+20%	A	2.3	A	2.2
		EB		C	30.4	F	87.7
		WB		C	27.8	E	59.7
		Overall		***A***	***6.1***	***B***	***10.2***

4.3 Project Trip Generation

Trip generation for the proposed project was estimated using trips and/or equations published by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. ITE rates and equations are intended to be used as the base for estimating vehicle trip ends at the driveway of free-standing uses. ITE trip worksheets are provided in Appendix F.

The proposed development plan incorporates residential and retail land uses. Many shopping trips can be satisfied by residents and visitors within the project site (internal trips). The spreadsheet model of the Transportation Research Board's (TRB) National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments was used to establish internal trips for the proposed uses. Report 684 explores an improved methodology to estimate how many internal trips will be generated in mixed-use developments—trips for which both the origin and destination are within the development. Worksheets are included in Appendix F.

The study area is pedestrian friendly and mass transit is readily available (see Section 5 of this report for additional pedestrian and transit information). US Census data shows an existing 26.6% overall use of other modes of transportation in US Census Tract 39.13 where the project is located (see Appendix F). However, consistent with City requirements, a 20% deduction was used to reflect other modes of transportation.

ITE research shows that a certain percent of retail trips are "*pass-by*" trips. These are described as trips "attracted from the traffic passing the site on an adjacent street." These are not new trips, but trips already using the existing roadway network that stop at the proposed use and go back to their original path. Pass-by trips for this use were established based on guidelines provided in ITE's *Trip Generation Handbook*, 3rd Edition. The proposed Target store offers many of the services offering an attraction for vehicles passing by to stop and shop during peak hours. The pass-by rate for the corresponding use was used to account for this component. The project trip generation summary is provided in Exhibit 7.

Exhibit 7: Project Trip Generation Summary

Proposed ITE Land Use Designation[1]	Number of Units	AM Peak Hour Vehicle Trips			PM Peak Hour Vehicle Trips		
		In	Out	Total	In	Out	Total
Multifamily Housing (High-Rise) *Land Use Code: 222*	170 DU	14	46	60	40	26	66
Department Store *Land Use Code: 875*	30,089 SF	11	6	17	30	29	59
Subtotal Gross Vehicle Trips		**25**	**52**	**77**	**70**	**55**	**125**
External Vehicle Trips[2]							
Multifamily Housing High-Rise *Land Use Code: 222*	170 DU	11	46	57	26	18	44
Department Store *Land Use Code: 875*	30,089 SF	9	5	14	22	17	39
Pass-by Trips (Retail)							
PM Peak Hour Pass-by Trips (Retail)	18%	0	0	0	-4	-3	-7
Net External Vehicle Trips							
Net External Vehicle Trips		**20**	**51**	**71**	**44**	**32**	**76**

[1]Based on ITE Trip Generation, 10th Edition .

[2]ITE Trips minus Internal & Other Modes of Transportation (20%).

4.4 Project Trip Assignment

Project traffic was distributed and assigned to the study area using the Cardinal Distribution for TAZ 626 shown in Exhibit 8. The Cardinal Distribution gives a generalized distribution of trips from a TAZ to other parts of Miami-Dade County (see Appendix G). For estimating trip distribution for the project traffic, consideration was given to conditions such as the roadway network accessed by the project traffic, roadways available to travel in the desired direction, and attractiveness of traveling on a specific roadway. Exhibit 9 and 10 shows the project and pass-by trip distributions for the project. Exhibit 11 and 12 graphically portrays the project and pass-by trip assignment of project traffic in the study area.

Exhibit 8: Cardinal Distribution
(TAZ 626)

DIRECTION	2010	2040	2021
NNE	0.90%	0.80%	0.86%
ENE	0.00%	0.00%	0.00%
ESE	0.00%	0.00%	0.00%
SSE	0.00%	0.00%	0.00%
SSW	23.00%	27.20%	24.54%
WSW	30.10%	27.20%	29.04%
WNW	16.50%	13.40%	15.36%
NNW	29.50%	31.50%	30.23%

Source: MDC 2040 Long Range *Transportation Plan*

4.5 Future with Project Intersection Capacity Analysis

Future background, committed development and project traffic were combined to obtain future traffic with project. Total traffic volumes with project are graphically portrayed in Exhibit 13. Results of the intersection analysis for future conditions with the project are summarized in Exhibit 14. Analysis worksheets are included in Appendix D. The analysis shows that all intersections are projected to operate within acceptable LOS standards except for SR 934/71st Street and Indian Creek Drive/Dickens Avenue which currently experiences and will continue to experience significant delays during the PM peak hour. Project traffic represents less than 0.5% of the projected volume at this intersection.

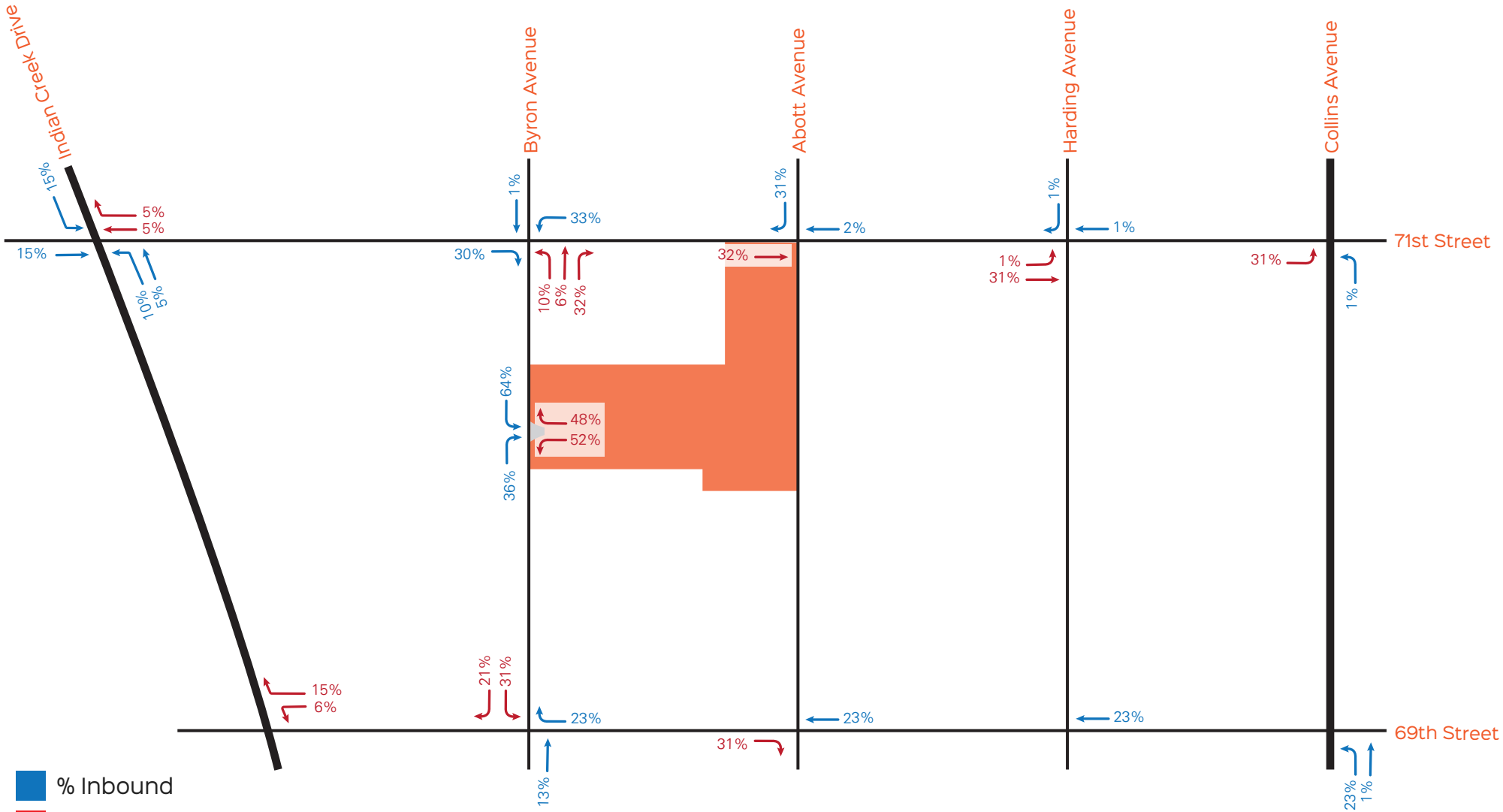


Exhibit 9

Project Trip Distribution

NORTH
MAP NOT TO SCALE

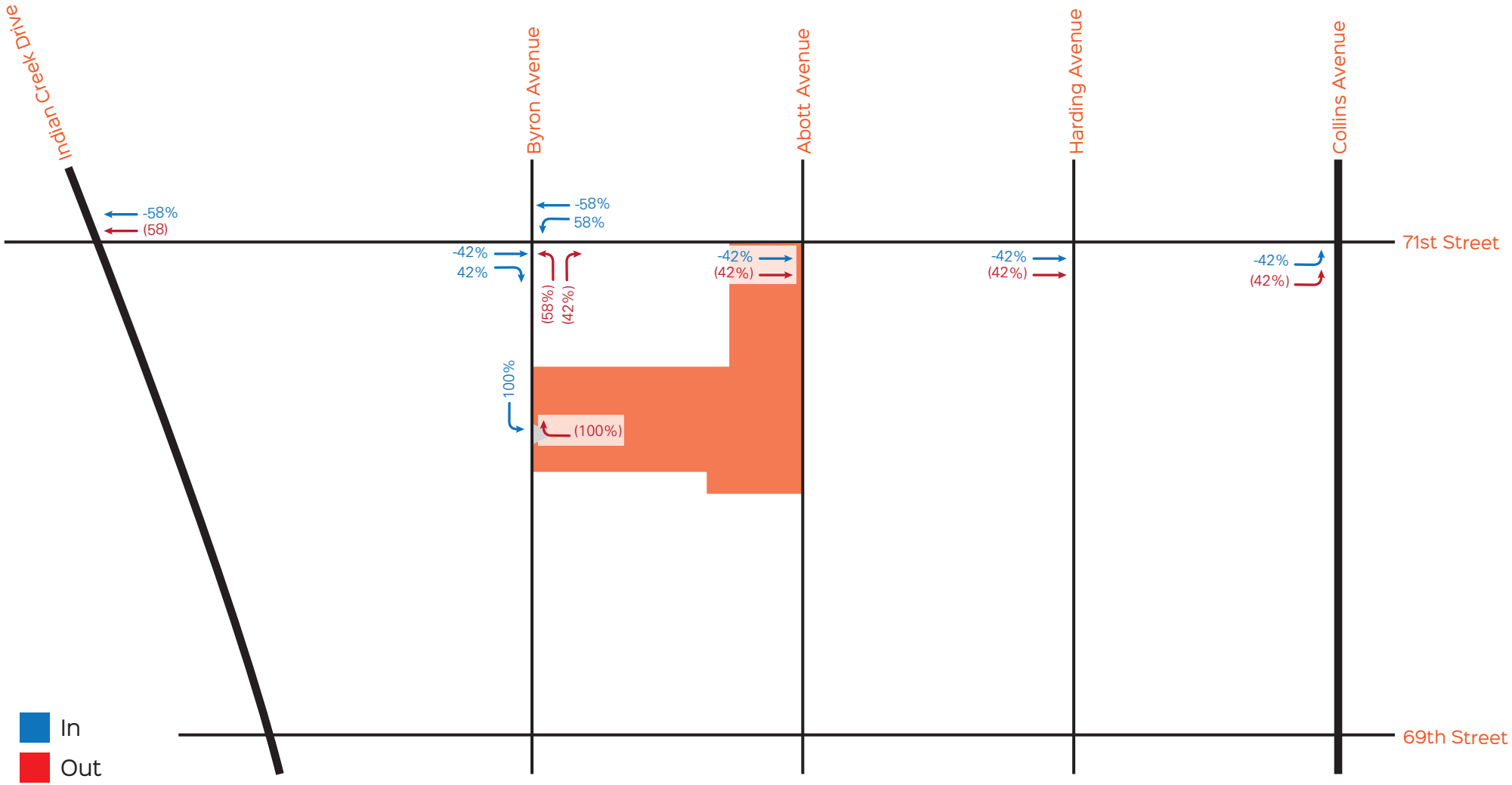


Exhibit 10

Project Pass-By Trip Distribution

NORTH
MAP NOT TO SCALE

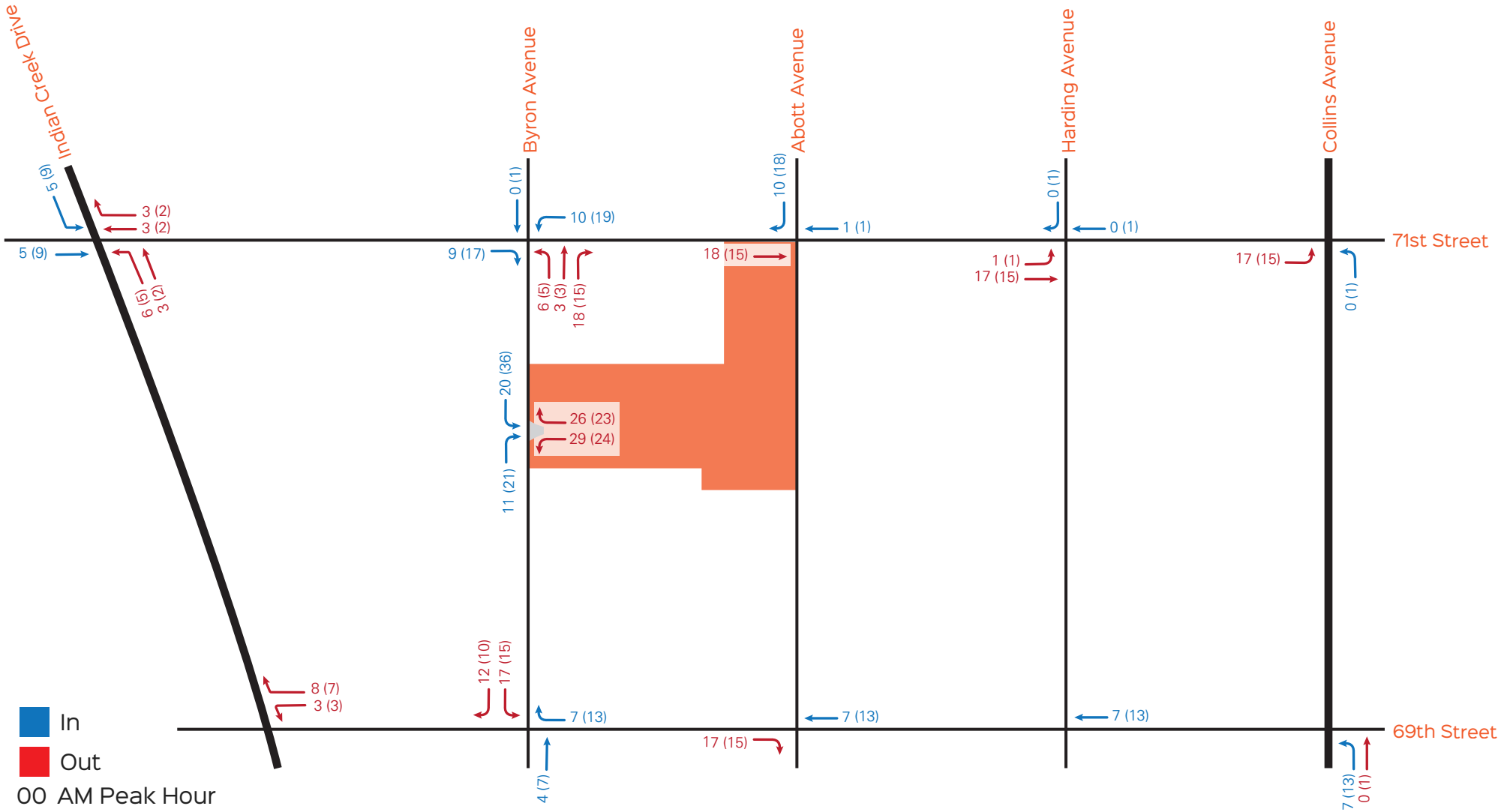
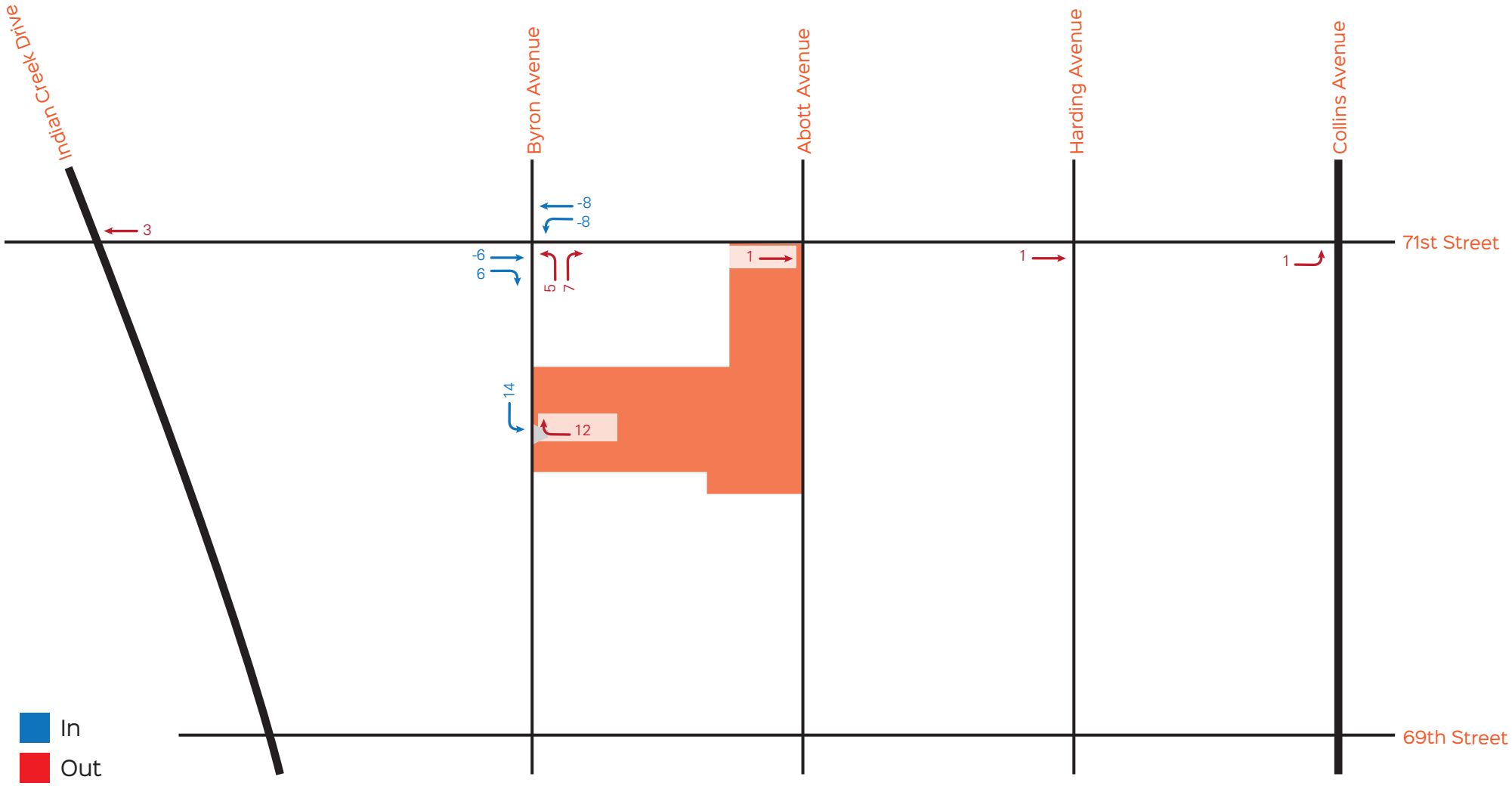


Exhibit 11

Project Trip Assignment

NORTH
MAP NOT TO SCALE



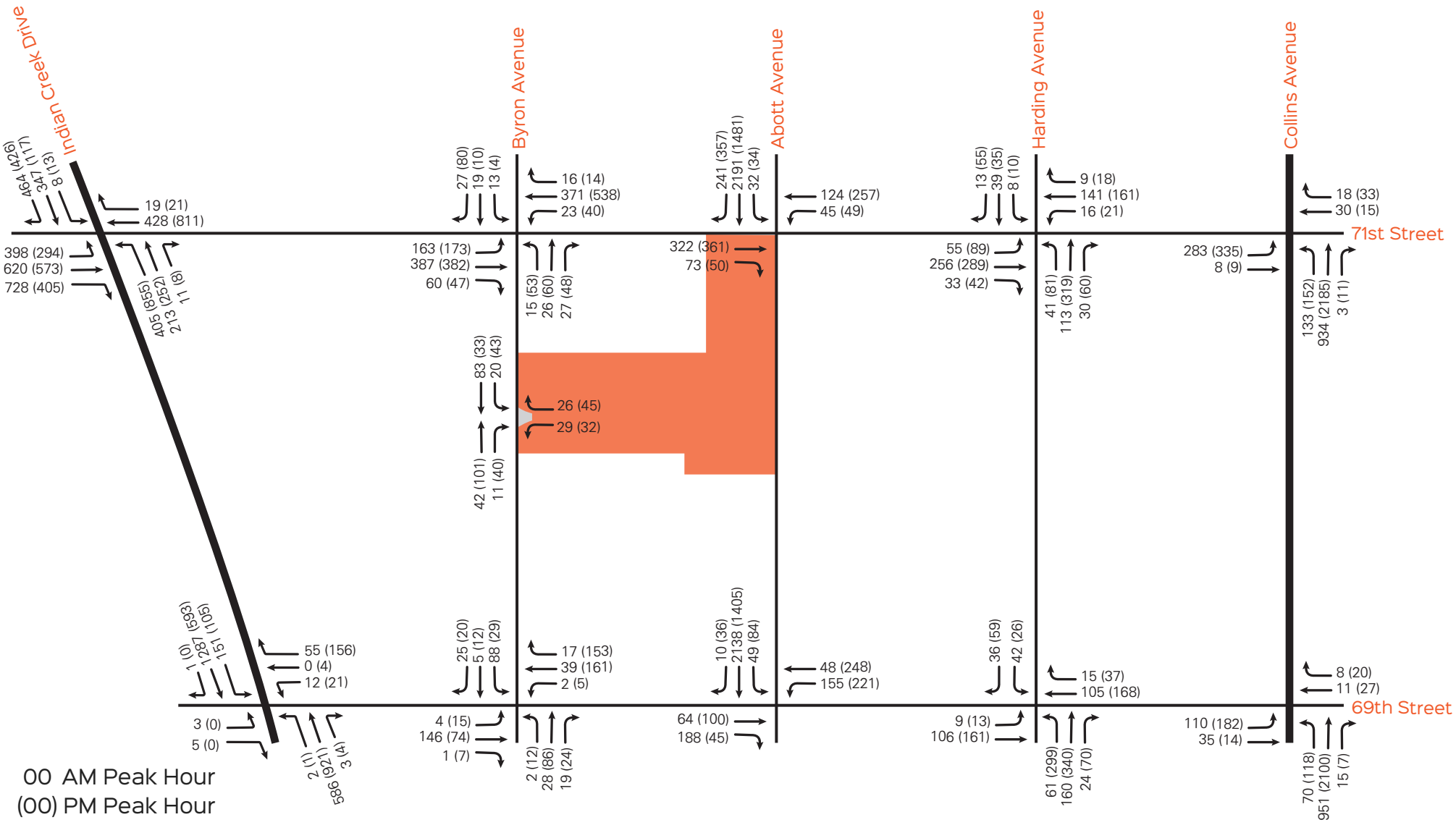
(00) PM Peak Hour

Project Location

Exhibit 12

Project Hour Pass-By Assignment

NORTH
MAP NOT TO SCALE



00 AM Peak Hour
(00) PM Peak Hour

Project Location

Exhibit 13

Future With Project AM & PM Peak Hour Traffic Volumes

NORTH
MAP NOT TO SCALE

Exhibit 14: Future with Project Intersection Capacity Analysis
Weekday AM and PM Peak Hour Conditions

Intersection	Signalized/ Unsignalized	Direction	LOS Standard	AM LOS	AM Delay	PM LOS	PM Delay
SR 934/71st Street /Indian Creek Drive/Dickens Avenue	S	NB	D+20%	E	55.8	E	67.3
		SB		F	83.0	F	184.2
		EB		D	38.5	D	38.2
		WB		D	40.4	E	61.3
		Overall		***D***	***51.7***	***D + 33%***	***73.4***
SR 934/71st Street /Byron Avenue	U	NB	D+20%	C	16.3	D + 2%	35.7
		SB		C	15.9	B	14.7
		EBL		A	2.4	A	2.9
		WBL		A	0.5	A	0.6
		Overall		***NA***	***NA***	***NA***	***NA***
SR 934/71st Street /SR A1A/Abbott Avenue	S	SB	D+20%	B	11.7	A	9.6
		EBL		C	31.0	C	31.2
		EBL		D	36.9	D	37.2
		Overall		***B***	***15.6***	***B***	***16.3***
SR 934/71st Street /Harding Avenue	S	NB	D+20%	C	34.3	D	35.0
		SB		C	29.7	B	19.0
		EB		A	5.4	B	15.7
		WB		A	5.8	B	15.9
		Overall		***B***	***14.5***	***C***	***23.8***
SR 934/71st Street /SR A1A /Collins Avenue	S	NB	D+20%	A	7.0	A	9.8
		SB		A	0.0	A	0.0
		EB		C	27.5	E	79.0
		WB		D	43.4	F	86.8
		Overall		***B***	***12.5***	***B***	***19.8***
69th Street and Indian Creek Drive	S	NB	D+20%	A	0.6	A	3.4
		SB		A	0.9	A	3.3
		EB		D	38.9	A	0.0
		WB		D	43.2	D	38.8
		Overall		***A***	***2.3***	***A***	***6.9***
69th Street/SR A1A /Abbott Avenue	S	NB	D+20%	C	32.7	B	15.4
		EB		C	26.3	C	20.7
		WB		D	49.8	F	98.8
		Overall		***C***	***33.4***	***C***	***34.1***
69th Street /Harding Avenue	S	NB	D+20%	B	14.3	C	26.8
		SB		C	20.5	C	28.6
		EB		B	19.3	C	22.5
		WB		B	19.2	C	24.3
		Overall		***B***	***17.2***	***C***	***25.9***
69th Street and Byron Avenue	All Way Stop	NB	D+20%	A	8.1	A	9.1
		SB		A	9.0	A	8.6
		EB		A	9.7	A	8.7
		WB		A	8.0	B	10.4
		Overall		***NA***	***NA***	***NA***	***NA***
69th Avenue /SR A1A /Collins Avenue	S	NB	D+20%	A	1.3	A	2.2
		EB		D	36.5	F	87.8
		WB		C	32.2	E	59.7
		Overall		***A***	***6.0***	***B***	***10.1***

4.6 Back of Queue Analysis

A 95th percentile queue analysis was performed to determine if the existing exclusive left-turn lanes along SR 934/71st Street between Carlyle Avenue and SR A1A/Collins Avenue have sufficient storage to accommodate project vehicle queue lengths for existing and future conditions. Synchro was used for this analysis. The results of the analysis are summarized in Exhibit 15. Synchro worksheets are included in Appendix D. The results of the analysis indicate that the existing two lanes are sufficient to accommodate anticipated vehicle queues at the studied intersections with the exception of one (1) movement. Queues for the eastbound left-turn lane at the SR 934/71st Street and SR A1A/Collins Avenue intersection currently exceed, and will continue to exceed, the existing storage length during the PM peak hour. It should be noted that the turn lane exceeds its storage length vehicle capacity under existing conditions and future conditions without project. This lane operates as a continuous left-turn lane with the adjacent shared left-turn/through lane based on the eastbound left-turn volumes compared to the eastbound through volumes and based on the intersection geometry.

Exhibit 15: Turn Lane Queuing Analysis

Intersection	Movement	Existing Storage	AM Peak Hour			PM Peak Hour		
			Existing	wo Project	with Project	Existing	wo Project	with Project
SR 934/71st Street /Byron Avenue	EBL	100'	0.5 veh < 22'	0.6 veh < 22'	0.6 veh < 22'	0.7 veh < 22'	1.10 veh < 44'	0.8 veh < 22'
	WBL	105'	0 veh <22'	0.0 veh <22'	0.1 veh <22'	0 veh <22'	0.2 veh <22'	0.1 veh <22'
SR 934/71st Street /SR A1A/Abbott Avenue	WBL	95'	62'	62'	63'	39'	48'	49'
SR 934/71st Street /Harding Avenue	EBL	95'	17'	17'	17'	55'	81'	76'
	WBL	85'	12'	15'	14'	21'	21'	21'
SR 934/71st Street /SR A1A /Collins Avenue	EBL	105'	75'	94'	98'	280'	283'	284'

5.0 CIRCULATION PLAN

The project is located in the west side of Abbott Avenue south of 71st Street in Miami Beach, Florida. Access to the site will be provided via a two-way driveway leading to a parking garage located on Byron Avenue. The area abutting the project is urban in nature providing ample opportunities for the use of other modes of transportation including (but not limited to) transit, walk and bicycle. Sidewalks are available on both sides of 72nd Street, 71st Street, Abbott Avenue, Harding Avenue, Collins Avenue, and 69th Street. All major intersections in the project's study area have clearly marked crosswalks and pedestrian signals are provided at signalized intersections. 71st Street from Collins Avenue to Abbott Avenue provides a shared bike lane on both sides of the road, where it then has its own bike lane to Indian Creek Drive. There is a Citi bikes station located on Byron Avenue just south of 71st Street and one located on the northeast corner of the Harding Avenue and 69th Street intersection. A mobility plan was prepared for the site (see Exhibit 16). The plan shows the project location, bike lanes, shared bike lanes, sidewalk connections, and pedestrian crosswalks.

The area surrounding the project is served by transit. Two trolleys, the North Beach Loop and the Collins Express, are provided by the City of Miami Beach with stops close to the project site. There are five bus routes that traverse that area of Miami Beach (Routes: 79, 112, 115, 119, and 120). The closest bus stop to the project site is located on the northwest corner of the Byron Avenue / 71st Street intersection, approximately 200 feet south of the project. Exhibit 17 shows the available bus routes and bus stops in the area. Transit documentation is provided in Appendix H.

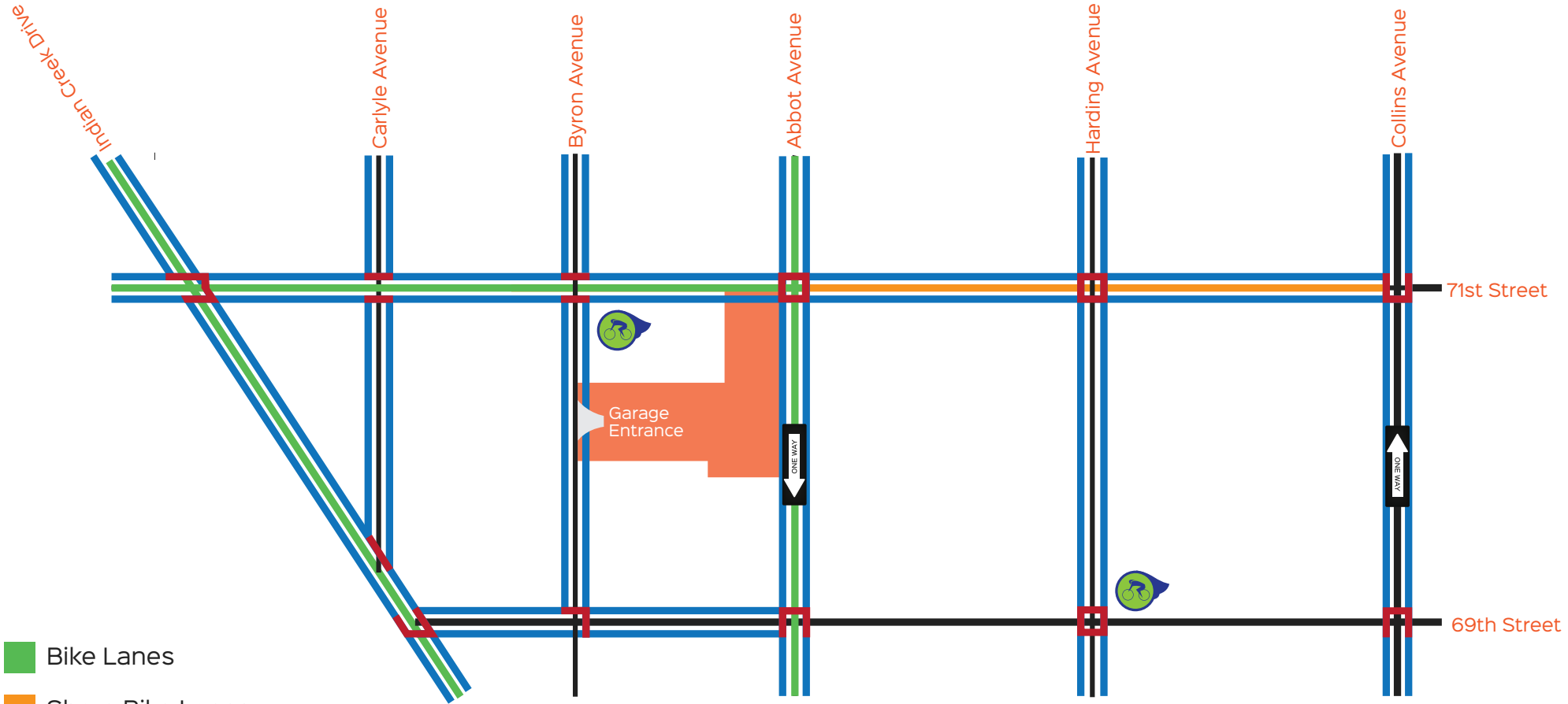
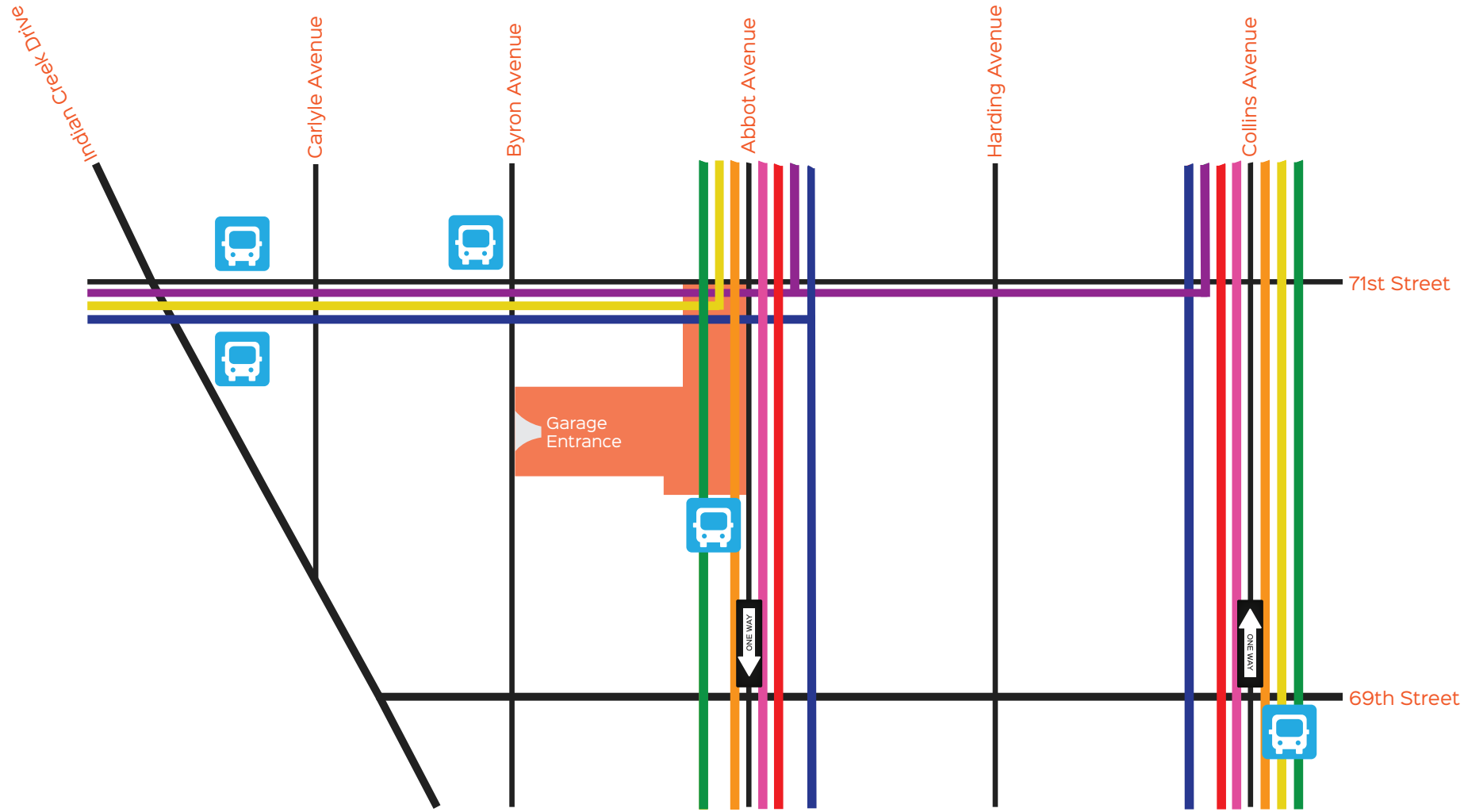


Exhibit 16

Mobility Plan - Pedestrians

NORTH
MAP NOT TO SCALE



Bus Stop

Project Location

Bus Routes
Bus Route 119 (S)
Bus Route 120
Bus Route 115
Bus Route 79
Bus Route 112 (L)

Miami Beach Trolley
Collins Express
North Beach Loop

Exhibit 17

Mobility Plan - Transportation

NORTH
MAP NOT TO SCALE

6.0 TRANSPORTATION MANAGEMENT PLAN

A Transportation Development Management is proposed as part of this project with the following goals:

- ***Reducing congestion*** – by encouraging patrons to shift from single occupancy vehicle trips to use other available modes of transportation.
- ***Conserving energy and reducing emissions*** - the damage caused by vehicle emissions and greenhouse gases is a major contributor to environmental degradation. Therefore, getting people to make better use of shared transportation options is one of the most important ways in which communities can do their part to encourage greener thinking.
- ***Improving community health and fitness levels*** - TDM can lead to better levels of health and fitness among community members by encouraging people to be more active as they move around town. Improving the walkability of cities and adding cycling features are two of the most important ways TDM strategies can be used to promote healthier and more active lifestyles.
- ***Boosting urban livability*** - Studies have shown that community-oriented modes of transportation can lead to significant improvements in personal satisfaction and happiness. People are more engaged when they are active stakeholders in the communities they live in. By improving social quality for residents, commuters, and visitors alike, TDM helps improve the overall livability of cities.

The development will promote the following strategies to further reduce vehicle trips:

- Bike racks will be provided for residents and employees in the parking garage.
- A cover for the sidewalk adjacent to the project is proposed to provide shade and encourage pedestrian activity.

- Encourage patrons to participate in ridesharing programs through South Florida Commuter Services. Available information will be obtained and distributed to residents and employees in the development.
- Miami-Dade County Transportation Agency current local and regional mass transit route and schedule information will be provided to potential transit users in a prominent public area of the development. The information provided and maintained on the premises will be updated, when necessary, at no less than six month intervals.
- Promote mass transit use by encouraging employers to purchase transit passes and make them available to employees at discounted prices or no charge, or in lieu of subsidized parking.
- Encourage employers to implement staggered work hours.

Implementation of these items will generate a shift from single vehicle drivers to use other modes of transportation and, thus, reducing the peak hour vehicle trips.

7.0 CONCLUSIONS

An assessment of the traffic impacts associated with the proposed Abbott Avenue project was performed in accordance with the requirements of the City of Miami Beach. The analysis shows that all intersections are projected to operate within acceptable LOS standards except for the SR 934/71st Street/Indian Creek Drive/Dickens Avenue intersection which currently experiences and will continue to experience delays during the PM peak hour. Project traffic represents less than 0.5% of the projected volume at this intersection resulting in *de-minimus* impact at this location.

A 95th percentile queue analysis was performed to determine if the existing exclusive left-turn lanes along SR 934/71st Street between Carlyle Avenue and SR A1A/Collins Avenue are adequate to accommodate projected vehicle queue lengths for existing as well as future conditions. The results of the analysis indicate that the available storage at intersection turn lanes are sufficient to accommodate vehicle queues at study intersections for all analysis scenarios analyzed with the exception of one (1) movement. The eastbound left-turn lane movement on SR 934/71st Street and SR A1A/Collins Avenue does not currently accommodate the vehicle queues within the existing storage length during the PM peak hour, and this is a condition that will continue in the future. This is an existing condition and there is an approximate two (2) vehicle length increase for future conditions with the project. It should also be noted that this approach operates as a continuous left turn lane with the adjacent shared left-turn/through lane based on the eastbound left-turn volumes compared to the eastbound through volumes and based on the intersection geometry.

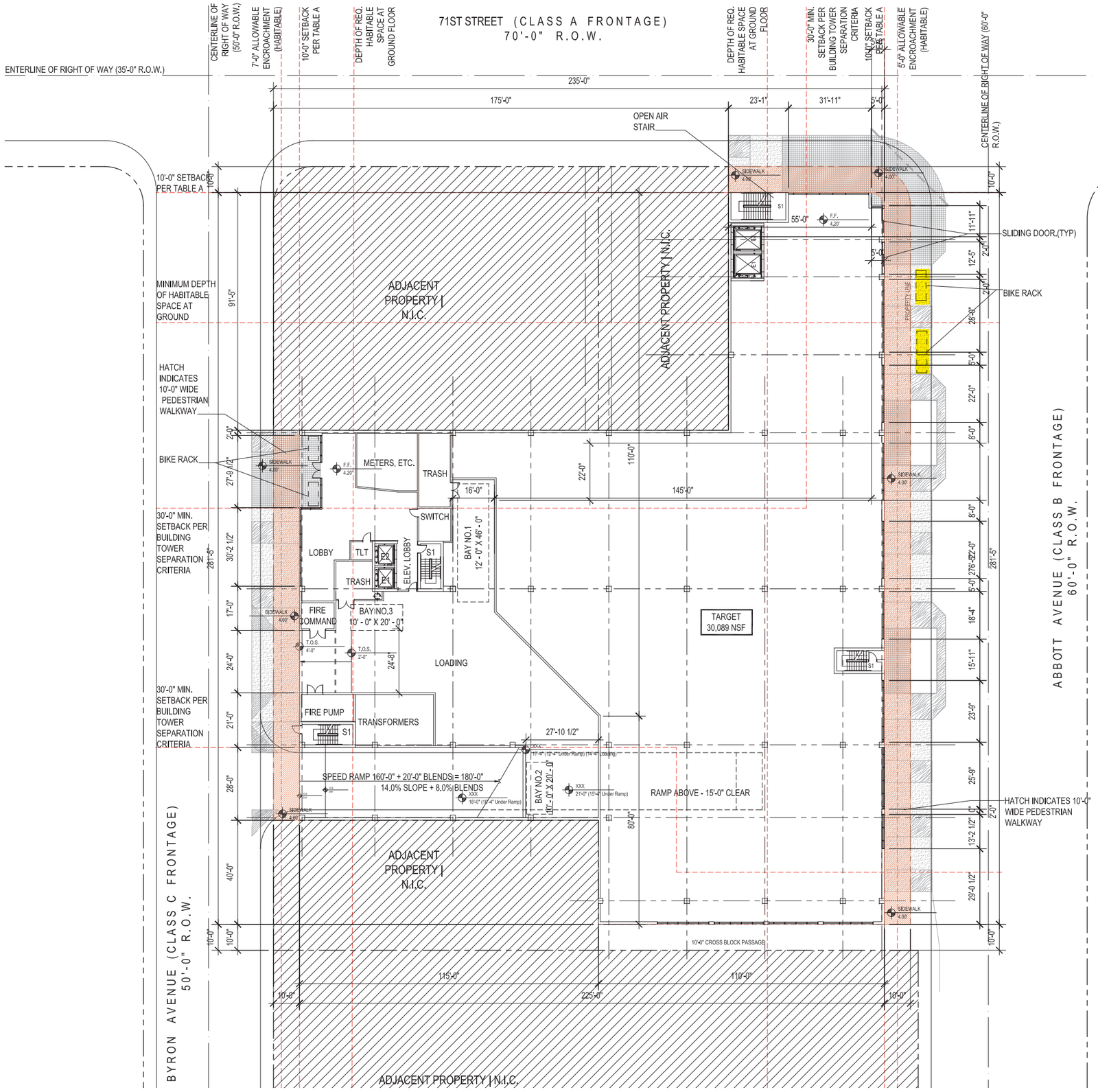
As part of the study, a mobility and circulation plan was completed. The plan shows that the project area is currently served by five Miami-Dade Transit bus routes and two Miami Beach Trolleys. The project is located in an area that is conducive for pedestrian and bicycle activities providing ample sidewalks, clearly marked crosswalks, signalized intersections provide pedestrian signals, shared bike lanes, and Citi Bike stations within walking distance to the project. These conditions encourage the use other modes of transportation and reduce the vehicular impact on the roadway network.

A Transportation Demand Management (TDM) Plan was also developed for this project. The development will provide bike racks and proposes a covered sidewalk adjacent to the project.

Patrons will be encouraged to participate in ridesharing programs. Miami-Dade County Transportation Agency current local and regional mass transit route and schedule information will be provided. The use of mass transit will be promoted mass by encouraging employers to subsidize transit passes in lieu of subsidized parking. Employers will encourage staggered work hours. Implementation of these items will generate a shift from single vehicle drivers to use other modes of transportation and, thus, reducing the peak hour vehicle trips.

W:\19\19247\Traffic Study November 2019\71 NOBE Transportation Impact Study_Nov 2019.docx

Appendix A
Site Plan



CUBE 3, LLC
111 SW 3rd Street, Floor 4
Miami, Florida 33133
License No. L18000278579

Jonathan W. Cardello, AIA

FL License No. AR93391

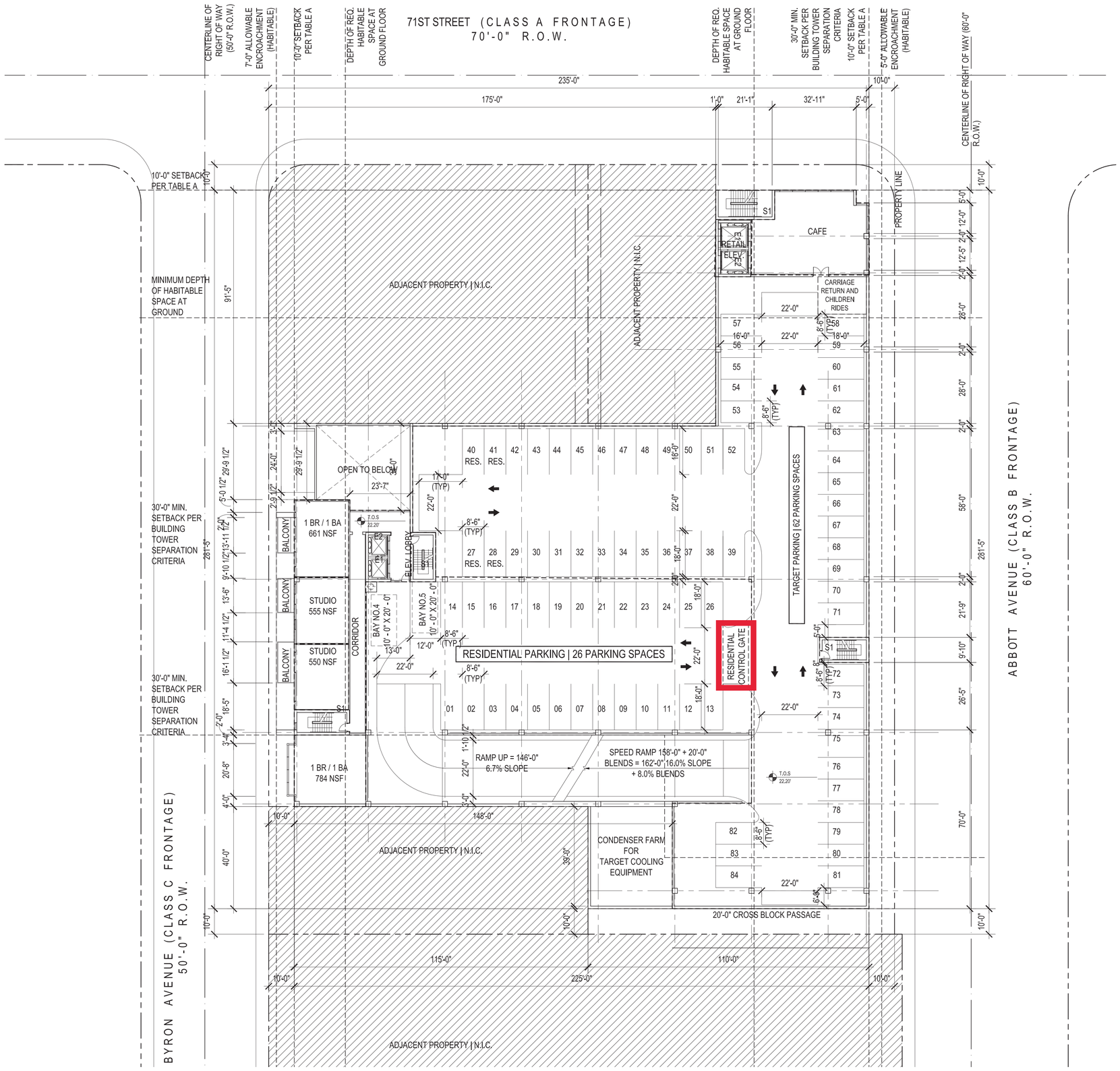
0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Ground Level Plan
Scale: 1" =20'-0"

Planning & Zoning Board
30 Dec. 2019

A3.1



CUBE 3

CUBE 3, LLC
111 SW 3rd Street, Floor 4
Miami, Florida 33133
License No. L18000278579

Jonathan W. Cardello, AIA

FL License No. AR93391

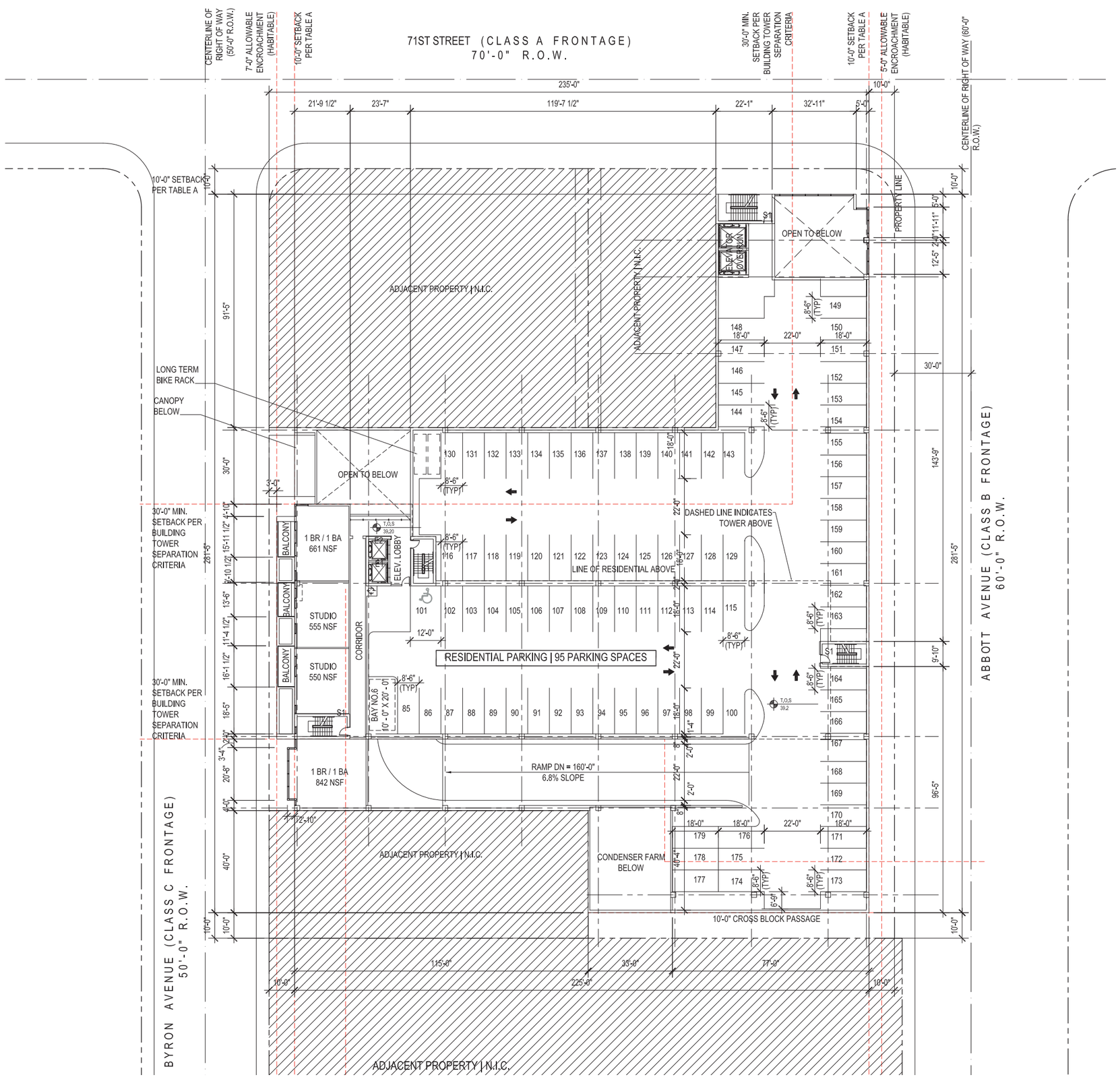
0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Second Level Plan
Scale: 1" = 20'-0"

Design Review Board
18 Nov. 2019

A3.2



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License No. L18000278579

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FL License No. AR93391

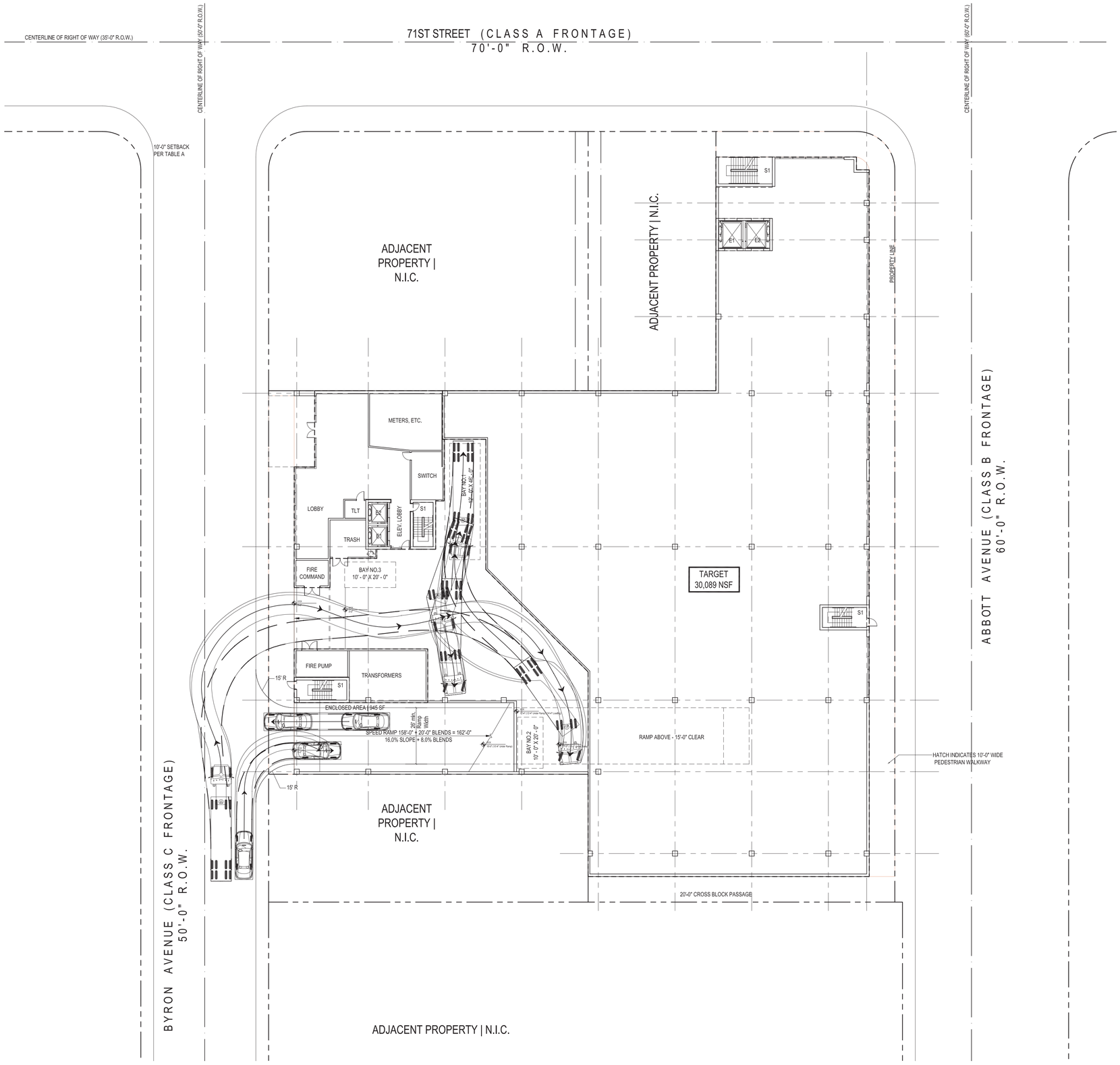
0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Third Level Plan
Scale: 1" = 20'-0"

Planning & Zoning Board
30 Dec. 2019

A3.3



CUBE 3, LLC
111 SW 3rd Street, Floor 4
Miami, Florida 33133
License No. L18000278579

Jonathan W. Cardello, AIA

FL License No. AR93391

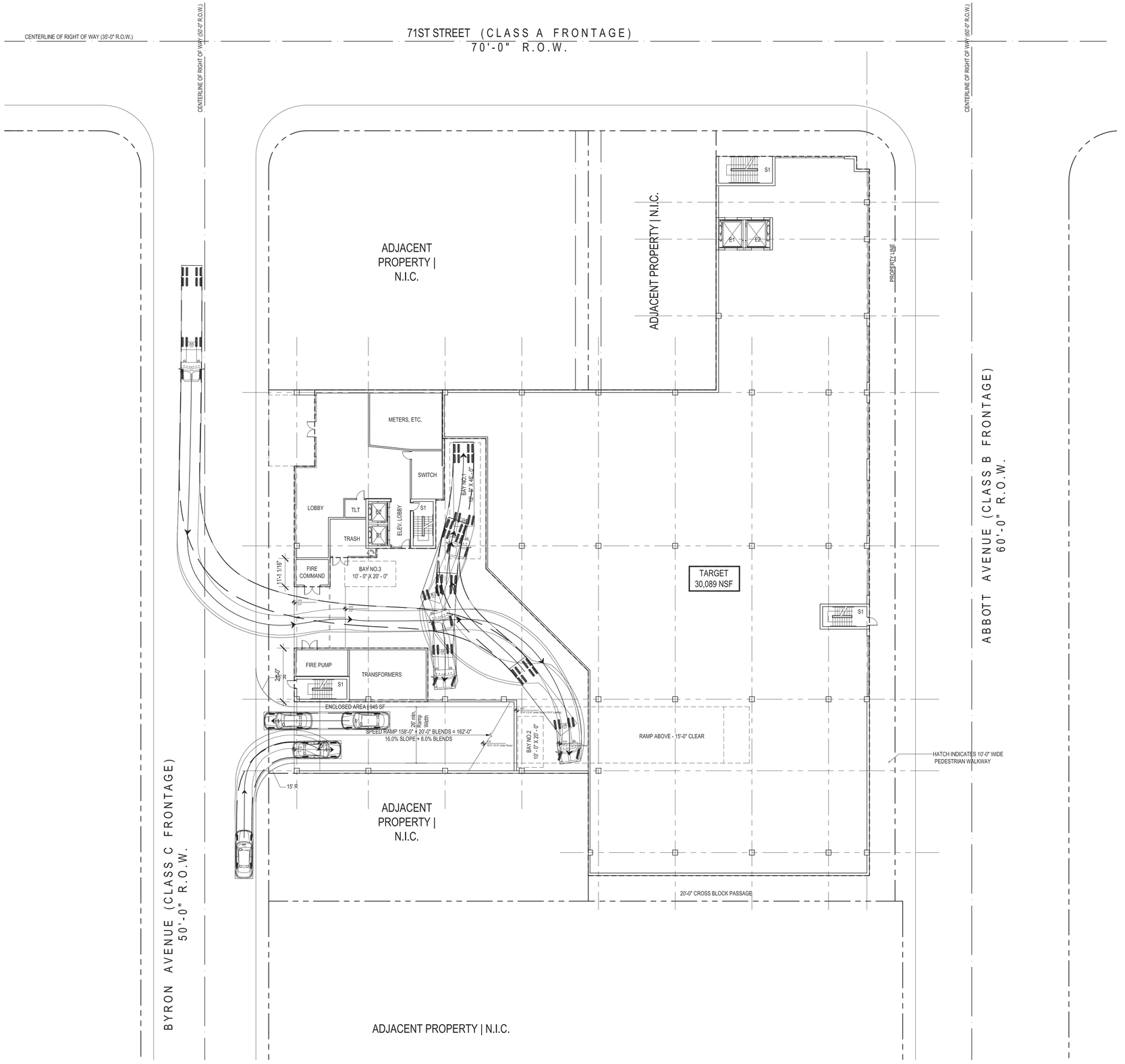
0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Level 1 | Service Truck North Entry
Scale: 1" = 20'-0"

Design Review Board
18 Nov. 2019

C1.1



CUBE 3, LLC
111 SW 3rd Street, Floor 4
Miami, Florida 33133
License No. L18000278579

Jonathan W. Cardello, AIA

FL License No. AR93391

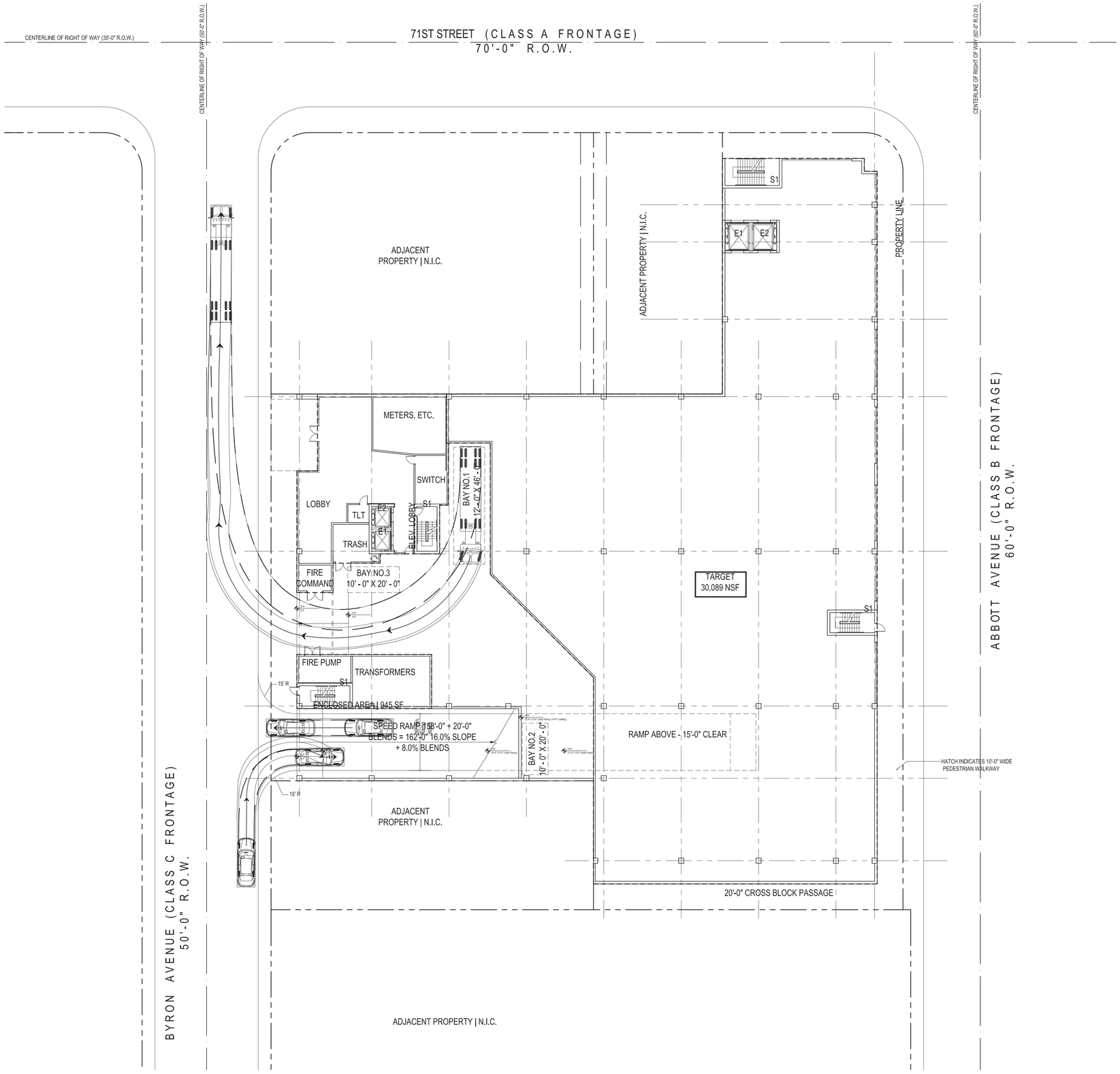
0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Level 1 | Service Truck South Entry 698
Scale: 1" = 20'-0"

Design Review Board
18 Nov. 2019

C1.2



CUBE 3

CUBE 3, LLC
111 SW 3rd Street, Floor 4
Miami, Florida 33133
License No. L18000278579

Jonathan W. Cardello, AIA

FL License No. AR93391

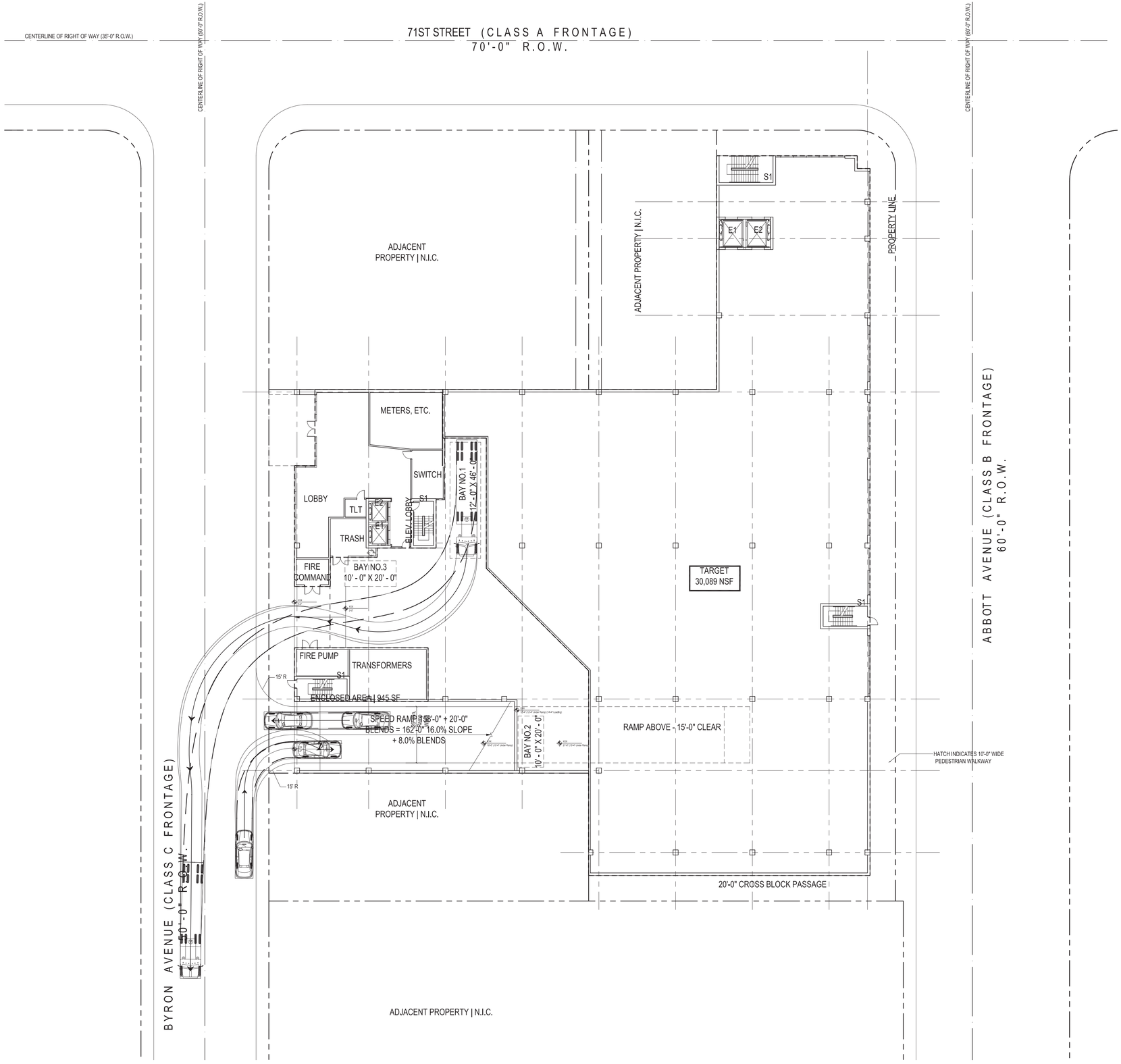
0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Level 1 | Service Truck North Exit
Scale: 1" = 20'-0"

Design Review Board
18 Nov. 2019

C1.3



CUBE 3, LLC
111 SW 3rd Street, Floor 4
Miami, Florida 33133
License No. L18000278579

Jonathan W. Cardello, AIA

FL License No. AR93391

0' 10' 20' 40'

6988 Abbott Avenue
Miami Beach, Florida

Level 1 | Service Truck South Exit
Scale: 1" = 20'-0"

Design Review Board
18 Nov. 2019

C1.4

Appendix B
Methodology

Dabkowski, Adrian

From: Dabkowski, Adrian
Sent: Tuesday, May 14, 2019 11:56 AM
To: 'Akcay, Firat'; 'Ferrer, Josiel'
Cc: 'Aria Mehrabi - Pacific Star Capital (aria@pacificstarcapital.com)'; Kanaan, Omar; 'Oliver O'Donnell'
Subject: RE: 71 NOBE | Traffic Study
Attachments: Trip Generation 051419.pdf

Good morning Firat,

To follow up below is a summary of the current proposed redevelopment program and the previous redevelopment program. As noted in the table below the current redevelopment program results in a reduction of 63 net new AM trips and reduction of 229 net new PM trips when compared to the previous redevelopment program. Detailed trip generation calculations for the proposed redevelopment are attached. Please let me know if we still need to meet Friday.

	A.M. Peak Hour Net New Trip Generation	P.M. Peak Hour Net New Trip Generation
Proposed Redevelopment Program • 42,456 sf of office • 77,772 sf of shopping center • 282 apartment units	280	364
Previous Redevelopment Program • 42,456 sf of office • 142,394 sf of shopping center • 134 apartment units • 25,806 sf supermarket	343	593
Net Change in Trips	**-63**	**-229**

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Dabkowski, Adrian
Sent: Tuesday, May 14, 2019 9:55 AM
To: Akcay, Firat <FiratAkcay@miamibeachfl.gov>; Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>
Cc: Aria Mehrabi - Pacific Star Capital (aria@pacificstarcapital.com) <aria@pacificstarcapital.com>; Kanaan, Omar <omar.kanaan@kimley-horn.com>; Oliver O'Donnell <ODonnell@pacificstarcapital.com>
Subject: RE: 71 NOBE | Traffic Study

Good morning Firat,

Thank you for the quick response. We are working the updating the trip generation analysis and will have it to you later today. I believe the development program update results in a reduction in trips from the previous development program. I'll send it you as soon as we have it completed.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Tuesday, May 14, 2019 9:44 AM
To: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>; Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>
Cc: Aria Mehrabi - Pacific Star Capital (aria@pacificstarcapital.com) <aria@pacificstarcapital.com>; Kanaan, Omar <omar.kanaan@kimley-horn.com>; Oliver O'Donnell <ODonnell@pacificstarcapital.com>
Subject: RE: 71 NOBE | Traffic Study

Good morning Adrian,

Based on the revised program, we believe it will be beneficial to have a new methodology meeting for this study. Based on the agenda deadlines we will need to meet before this Friday, May 17th. Can you please share the updated program with us? I will work on scheduling the meeting.
Thank you

Firat Akcay, M.S.C.E. MBA
Transportation Analyst
Transportation Department
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000, ext 6839

From: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>
Sent: Monday, May 13, 2019 5:30 PM
To: Akcay, Firat <FiratAkcay@miamibeachfl.gov>; Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>
Cc: Aria Mehrabi - Pacific Star Capital (aria@pacificstarcapital.com) <aria@pacificstarcapital.com>; Kanaan, Omar <omar.kanaan@kimley-horn.com>; Oliver O'Donnell <ODonnell@pacificstarcapital.com>
Subject: RE: 71 NOBE | Traffic Study

Good afternoon Firat and Josiel:

I wanted to let you know that the 71 NOBE project is moving forward. The development program has been updated. We will address the comments below with the updated development program. We are anticipating submitting for the September DRB.

Please let me know if you have any questions or comments.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Tuesday, April 10, 2018 1:12 PM
To: 'matthew.barnes@akerman.com' <matthew.barnes@akerman.com>; Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>; Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>; Belush, Michael <MichaelBelush@miamibeachfl.gov>; Garavito, Alejandro <AlejandroGaravito@miamibeachfl.gov>
Cc: Dorman, Cory <cory.dorman@kimley-horn.com>; Kanaan, Omar <omar.kanaan@kimley-horn.com>; aria@pacificstarcapital.com; ODonnell@pacificstarcapital.com
Subject: RE: 71 NOBE | Traffic Study

Dear All,

Please see comments on the transportation impact study:

- The committed developments in the area are limited to 7140 Collins Hotel. There are additional developments in the area which should be incorporated into the study. I will follow up with an email of all committed developments in the area.
- The intersection of 69th Street-Byron Avenue & 69th Street-Collins Avenue shall be analyzed despite not being part of the methodology. These are two crucial intersections that are in immediate vicinity to the project.
- The site map does not display Byron Avenue leading to 69th Street.
- Trip Generation – Please review the calculations for ITE code 710. The equations should be used instead of the average.
- Replacement of the existing City parking lots – The volumes generated at the existing parking lots need to be redirected to the proper proposed driveways. In addition, the gate analysis should account for these volumes as well.
- The LOS D+20 only applies to roadways and not intersections. Please acknowledge LOS D as the threshold.

Transportation Concurrency Management Areas (TCMA) rely on the measurement of capacity on an Areawide basis.

As such the following facilities will have their service volumes averaged at the approved Level of Service, as the calculation of Areawide capacity.

North Beach TCMA – Facilities to be averaged

Roadway	Function	Direction	From	To	TCMA LOS	Service Volume
Collins Avenue- one way	Arterial	N/S	City Limit	63rd Street	D+20	2800
Harding/Abbott/Ave -one way pair	Arterial	N/S	City Limit	Indian Creek Dr	D+20	2800
Indian Creek Drive	Arterial	N/S	71st Street	63rd Street	D+20	3500
SUBTOTAL						8900
71st Street/Normandy Dr.	Arterial	E/W	City Limit	Indian Creek	D+20	1160
63rd Street (share)	Arterial	E/W	Allen Road	Indian Creek	D+20	1160
SUBTOTAL						8300

- Historical growth rates in this case may not be the best representation of the expected growth within the near future due to increase in the area's FAR. Please coordinate with the planning department for an adjusted growth rate.
- There are discrepancies in trip assignment figures. Review and revise accordingly.
- Please provide a breakdown of the uses and intensities within each building.
- Why are no volumes assigned to WBL movements at 71st Street at Harding Avenue and at Byron Avenue?
- Please double check the pass-by assignment. Should the thru movement be 135?
- Please elaborate on the entry driveway on Harding Avenue. The driveway seems to be a passage way for pedestrians. There is a loading zone at this passage way. Please elaborate on the use of this loading area.
- The office use and grocery use is not shown on the site plans.
- Please use the entry gate analysis with 95% confidence interval.
- Please provide the number of employees expected to work at the site

- Please provide the contact information of the person assigned to administer the TDM program. The City will be coordinating with the assigned individual.
- Would the applicant consider as part of their TDM plan offering Citybike and transit passes at a discount to employees? This could add to the list of incentives for employees to use alternative modes of transportation.
- Please elaborate on the use of the parking garage, will it be open to public and types of parking provided.
- There is no valet analysis provided, please clarify if there will be any valet operations provided on-site.
- Please indicate the type of loading vehicles that will be serving the project and provide a loading zone maneuverability analysis. In addition, please discuss the garbage pickup operations and provide maneuverability analysis diagrams for this operation as well.
- Page IV - indicates that there will be a total of 38 bicycle parking spaces provided. The site plan attached showed 25 parking spaces in the west building, and no spaces in the east building. Please indicate where the remaining spaces are located.
- p. 9 – Route 108/Route H doesn't operate within Miami Beach anymore and cannot be used in the analysis. That being said, Attachment F (p.168 – p.172) is not accurate.
- Existing Traffic Counts – Please review the peak season conversion factors. Based on the appendix, the factors used are for I-195.
- Synchro models – Please mark the adjacent parking when present and mark the area as a CDB.
- Existing Signal timing – Please update the signal timing sheets. The timesheets included in the study seemed to be printed some time ago. I.e. The intersection of Abbott at 71st street has been revised for min initial and pedestrian clearance timings.
- p. 187 – Route 120 Beach MAX alignment has been changed on Miami side – doesn't affect the project but map in the attachment is not accurate.
- P. 10 – Miami Beach Trolleys – Collins Link has been extended to Collins Express, which increase headways from 15 minutes to 20 minutes. Route alignment for North Beach Loop was modified as well. Please refer to trolley webpage for your reference. https://www.miamibeachfl.gov/city-hall/transportation/trolley/

Please contact us with any questions, comments you may have,
Thank you

MIAMIBEACH

Firat Akcay, *Transportation Analyst*
TRANSPORTATION DEPARTMENT
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000 X 6839 / www.miamibeachfl.gov

We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic, community.

Please do not print this e-mail unless necessary.

From: matthew.barnes@akerman.com [mailto:matthew.barnes@akerman.com]
Sent: Wednesday, March 28, 2018 4:31 PM
To: Adrian.Dabkowski@Kimley-horn.com; Ferrer, Josiel; Belush, Michael; Garavito, Alejandro; Akcay, Firat
Cc: cory.dorman@kimley-horn.com; omar.kanaan@kimley-horn.com; aria@pacificstarcapital.com; ODonnell@pacificstarcapital.com
Subject: RE: 71 NOBE | Traffic Study

Thanks Adrian, looping in Michael and Alejandro from Planning and Firat from Transportation.

I've opened up four CAP files as Tom wanted. The Planning Board file numbers are PB17-0143 for the East of Abbott project and PB18-0202 for the West of Abbott project. The DRB file numbers are DRB18-0263 (East) and DRB18-0264

(West). Michael – let me know if you want me to go ahead and upload the traffic study to both of the Planning Board files.

Firat – Planning wants the first comments from Transportation to be issued by the time we make our first CAP submittal, which will be Monday, April 9. Thanks.

vCard | Profile | Connect With Me

From: Dabkowski, Adrian [mailto:Adrian.Dabkowski@Kimley-horn.com]
Sent: Wednesday, March 28, 2018 3:48 PM
To: JOSIELFERRER@miamibeachfl.gov
Cc: Dorman, Cory <cory.dorman@kimley-horn.com>; Kanaan, Omar <omar.kanaan@kimley-horn.com>; Barnes, Matthew (Cnslt-Mia) <matthew.barnes@akerman.com>; Aria Mehrabi <aria@pacificstarcapital.com>; Oliver O'Donnell <ODonnell@pacificstarcapital.com>
Subject: 71 NOBE | Traffic Study

Good afternoon Josiel:

For the City's review, the 71 NOBE traffic study can be downloaded by clicking this Link to Documents. Please note that the maneuverability analysis is forthcoming based on the team addressing comments provided by the City Manager's office at our meeting today. Please let us know if the City has any comments.

Thank you
Adrian

Kimley»Horn
Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent 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	General Office Building	9	710	42.456	ksf	88%	12%	84	12	96	20.0%	19	67	10	77	10.4%	8	62	7	69	0.0%	0	62	7	69
	2	Shopping Center	9	820	77.772	ksf	62%	38%	83	51	134	20.0%	27	66	41	107	6.5%	7	62	38	100	0.0%	0	62	38	100
	3	Apartment	9	220	282	du	20%	80%	28	114	142	20.0%	28	22	92	114	2.6%	3	22	89	111	0.0%	0	22	89	111
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	195	177	372	20.0%	74	155	143	298	6.0%	18	146	134	280	0.0%	0	146	134	280
		710		LN(Y) = 0.8*LN(X)+1.57																						
		820		LN(Y) = 0.61*LN(X)+2.24																						
		220		Y=0.49*(X)+3.73																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent 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	General Office Building	9	710	42.456	ksf	17%	83%	21	105	126	20.0%	25	17	84	101	23.8%	24	11	66	77	0.0%	0	11	66	77
	2	Shopping Center	9	820	77.772	ksf	48%	52%	243	263	506	20.0%	101	195	210	405	20.0%	81	159	165	324	34.0%	110	105	109	214
	3	Apartment	9	220	282	du	65%	35%	112	61	173	20.0%	35	90	48	138	47.1%	65	47	26	73	0.0%	0	47	26	73
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	376	429	805	20.0%	161	302	342	644	26.4%	170	217	257	474	23.2%	110	163	201	364
		710		Y=1.12*(X)+78.45																						
		820		LN(Y) = 0.67*LN(X)+3.31																						

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	67	10	17	84
Retail	66	41	195	210
Restaurant				
Cinema/Entertainment				
Residential	22	92	90	48
Hotel				
	155	143	302	342

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	5	3	6	18
Retail	4	3	36	45
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	3	43	22
Hotel	0	0	0	0
	9	9	85	85

OUTPUT

Total % Reduction	*6.0%*	*26.4%*
Office	10.4%	23.8%
Retail	6.5%	20.0%
Restaurant		
Cinema/Entertainment		
Residential	2.6%	47.1%
Hotel		

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	62	7	11	66
Retail	62	38	159	165
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	22	89	47	26
Hotel	0	0	0	0
	146	134	217	257

Dorman, Cory

From:	Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>
Sent:	Tuesday, July 25, 2017 10:03 AM
To:	Dabkowski, Adrian
Cc:	Akcay, Firat; Dorman, Cory; matthew.barnes@akerman.com; Aria Mehrabi
Subject:	Re: 71st Street National Bank Parcel | Traffic Study Methodology
Attachments:	image001.png

Thank you Adrian.

Josiel Ferrer-Diaz
Transportation Manager
City of Miami Beach
Transportation Department
1688 Meridian Avenue, Suite 801
Miami Beach, FL 33139

Sent from my iPhone

On Jul 25, 2017, at 8:34 AM, Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com<mailto:Adrian.Dabkowski@Kimley-horn.com>> wrote:

Thank you Josiel. Based on the description below, we include an analysis of SR 934/71st Street with the left-turn lane removed and with the addition of a westbound through lane.

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Ferrer, Josiel [mailto:JOSIELFERRER@miamibeachfl.gov]
Sent: Monday, July 24, 2017 6:06 PM
To: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com<mailto:Adrian.Dabkowski@Kimley-horn.com>>
Cc: Akcay, Firat <FiratAkcay@miamibeachfl.gov<mailto:FiratAkcay@miamibeachfl.gov>>; Dorman, Cory <cory.dorman@kimley-horn.com<mailto:cory.dorman@kimley-horn.com>>; matthew.barnes@akerman.com<mailto:matthew.barnes@akerman.com>; Aria Mehrabi <aria@pacificstarcapital.com<mailto:aria@pacificstarcapital.com>>
Subject: RE: 71st Street National Bank Parcel | Traffic Study Methodology

Adrian,

I apologize for the delay. Our Master Plan describes the analysis of the feasibility of removal of the turn lanes along 71st Street between Carlyle Avenue and Collins Avenue. Please see below for snapshot from the Master Plan

<image001.png>
Let me know if you have any questions.

Thank you,

Josiel Ferrer-Diaz

Transportation Manager
City of Miami Beach

From: Dabkowski, Adrian [mailto:Adrian.Dabkowski@Kimley-horn.com]
Sent: Monday, July 24, 2017 6:51 AM
To: Ferrer, Josiel
Cc: Akcay, Firat; Dorman, Cory; matthew.barnes@akerman.com<mailto:matthew.barnes@akerman.com>; Aria Mehrabi
Subject: RE: 71st Street National Bank Parcel | Traffic Study Methodology

Good morning Josiel:

We are wrapping up the traffic study for the 71st Street National Bank parcel. Please provide us with the left-turn movements proposed to be prohibited on 71st Street as part of the City's master plan. If we don't receive this information we will not be able to analyze it.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Dabkowski, Adrian
Sent: Tuesday, July 18, 2017 1:07 PM
To: JOSIELFERRER@miamibeachfl.gov<mailto:JOSIELFERRER@miamibeachfl.gov>
Cc: Firat Akcay <FiratAkcay@miamibeachfl.gov<mailto:FiratAkcay@miamibeachfl.gov>>; Dorman, Cory <cory.dorman@kimley-horn.com<mailto:cory.dorman@kimley-horn.com>>; matthew.barnes@akerman.com<mailto:matthew.barnes@akerman.com>; Aria Mehrabi <aria@pacificstarcapital.com<mailto:aria@pacificstarcapital.com>>
Subject: RE: 71st Street National Bank Parcel | Traffic Study Methodology

Good afternoon Josiel:

I hope all is well. As discussed last week, can you please let us know which left-turn movements along 71st Street will be prohibited with the City's proposed master plan. As requested, we need to include this as part of the analysis for the 71st Street National Bank Parcel traffic study, as requested.

We will also remove the L'Atelier Condominium project as a committed development based on our discussions. The updated methodology is attached.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Dabkowski, Adrian
Sent: Friday, July 07, 2017 5:38 AM
To: JOSIELFERRER@miamibeachfl.gov<mailto:JOSIELFERRER@miamibeachfl.gov>

Cc: Firat Akcay <FiratAkcay@miamibeachfl.gov<mailto:FiratAkcay@miamibeachfl.gov>>; Dorman, Cory <cory.dorman@kimley-horn.com<mailto:cory.dorman@kimley-horn.com>>; matthew.barnes@akerman.com<mailto:matthew.barnes@akerman.com>; Aria Mehrabi <aria@pacificstarcapital.com<mailto:aria@pacificstarcapital.com>>
Subject: Fwd: 71st Street National Bank Parcel | Traffic Study Methodology

Good morning Josiel:

I wanted to follow up with you regard the committed developments for the 71st Street National Bank Parcel traffic study. Can you please send us the following studies for us to include:

* 71st Street plans to remove left-turn lanes.
* L'Atelier Condominiums traffic study.

Thank you

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn
Sent from my iPhone

Begin forwarded message:
From: "Dabkowski, Adrian" <Adrian.Dabkowski@Kimley-horn.com<mailto:Adrian.Dabkowski@Kimley-horn.com>>
To: "JOSIELFERRER@miamibeachfl.gov<mailto:JOSIELFERRER@miamibeachfl.gov>" <JOSIELFERRER@miamibeachfl.gov<mailto:JOSIELFERRER@miamibeachfl.gov>>
Cc: "Aria Mehrabi" <aria@pacificstarcapital.com<mailto:aria@pacificstarcapital.com>>, "matthew.barnes@akerman.com<mailto:matthew.barnes@akerman.com>" <matthew.barnes@akerman.com<mailto:matthew.barnes@akerman.com>>, "Akcay, Firat" <FiratAkcay@miamibeachfl.gov<mailto:FiratAkcay@miamibeachfl.gov>>
Subject: 71st Street National Bank Parcel | Traffic Study Methodology Good afternoon Josiel:

Our traffic study methodology for the proposed 71st Street National Bank Parcel is attached. Please also provide us with the following items discussed at the methodology meeting:

* 71st Street plans to remove left-turn lanes.
* L'Atelier Condominiums traffic study.

We have obtained the Collins & 72nd Hotel redevelopment traffic study and will include it as a committed development. Please let us know if the City has any comments on the methodology.

Thank you
Adrian

[http://www.kimley-horn.com/communication/signature/KimleyHorn_LG_LOGO_RGB_PRIMARY_96dpi.jpg]<http://www.kimley-horn.com/>
Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

Kimley»Horn

Memorandum

To: Josiel Ferrer, E.I.
City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
Cory D. Dorman, E.I.

Date: July 18, 2017

Subject: 71st Street National Bank Parcel
Traffic Study Methodology

The purpose of this memorandum is to summarize the traffic study methodology discussed at our June 12, 2017 meeting. The proposed redevelopment is located along the south side of SR 934/71st Street bounded by Byron Avenue to the west and Harding Avenue to the east located in Miami Beach, Florida. The existing land uses include 81,252 square-foot of office, a 3,776 square-foot quality restaurant, and 14 apartment units. The proposed redevelopment consists of 126 apartment units, a 36,943 square-foot grocery store, and 112,609 square feet of retail space. A conceptual site plan and project location map are included in Attachment A. The following sections summarize our proposed methodology.

DATA COLLECTION

The A.M. and P.M. peak periods selected for this study are from 7:00 A.M. to 9:00 AM and 4:00 P.M. to 7:00 P.M. on a typical weekday (Tuesday, Wednesday, or Thursday). All traffic counts will be adjusted to peak season conditions using the appropriate Florida Department of Transportation (FDOT) peak season category factors for Miami Beach. Turning movement counts will be collected in 15-minute intervals during the two (2) peak periods and will include pedestrian and bicycle counts. Signal timing information will be obtained from Miami-Dade County Department of Transportation and Public Works – Signals and Signs Division. All traffic data collected will be provided in the Appendix of the traffic impact study.

STUDY AREA

Based on the proposed redevelopment plan, the following intersections in addition to the project driveways, are proposed to be analyzed.

1. SR 934/71st Street and Indian Creek Drive/Dickens Avenue
2. SR 934/71st Street and Byron Avenue
3. SR 934/71st Street and SR A1A/Abbott Avenue
4. SR 934/71st Street and Harding Avenue
5. SR 934/71st Street and SR A1A/Collins Avenue
6. 69th Street and Indian Creek Drive
7. 69th Street and SR A1A/Abbott Avenue
8. 69th Street and Harding Avenue

Turning movement counts will include pedestrians and bicyclists.

TRIP GENERATION

Trip generation calculations for the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition. The trip generation for the existing development was determined using ITE Land Use Code (LUC) 710 (General Office Building), 931 (Quality Restaurant), and 220 (Apartment). The trip generation for the proposed redevelopment was determined suing ITE LUC 220 (Apartment), 820 (Shopping Center), and 850 (Supermarket). Project trips were estimated for the weekday A.M. and P.M. peak hours.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in the vicinity of the redevelopment. The US Census data indicated that there is a 32.8 percent (32.8%) multimodal factor within the vicinity of the redevelopment. However, a multimodal factor of 20.0 percent (20.0%) was applied to the trip generation calculations to account for the urban environment in which the project site is located based on direction by the City of Miami Beach. It is expected that residents and patrons will choose to walk or use public transit to and from the proposed redevelopment. Transit route information will be documented in the report. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment B.

A portion of the trips generated by the redevelopment will be captured internally on the site. Internal capture rates were based upon values contained in ITE's, *Trip Generation Handbook*, August 2014. The internal capture rate for the existing development is expected to be 4.3 percent (4.3%) during the P.M. peak hour. The internal capture for the proposed redevelopment is expected to be 7.0 percent (7.0%) during the P.M. peak hour.

Pass-by capture rates were determined based on average rates provided in the ITE's *Trip Generation Handbook,* 3rd Edition. The pass-by rate used for the existing restaurant is 44.0 percent (44.0%) during the P.M. peak hour. The pass-by rate for the proposed shopping center is 34.0 percent (34.0%) and 36.0 percent (36.0%) for the supermarket during the P.M. peak hour.

The project is expected to generate 146 net new vehicle trips during the A.M. peak hour and 428 net new vehicle trips during the P.M. peak hour. Detailed trip generation calculations are included as Attachment B.

TRIP DISTRIBUTION

Trip distribution will be determined based on turning movements counts collected at the study area intersections as well as the location of parking facilities used by the proposed redevelopment. Additionally, the distribution will be based on an interpolated cardinal trip distribution for the project site's traffic analysis zones (TAZs) obtained from the Miami-Dade Metropolitan Planning Organization's 2040 Cost Feasible Plan travel demand model 2010 and 2040 data. The trip distribution for the anticipated build-out year of 2019 was interpolated from the 2010 and 2040 data. The project is located within TAZ 626. The detailed cardinal distribution is provided in Attachment C.

BACKGROUND GROWTH RATE/MAJOR COMMITTED DEVELOPMENT

A background growth rate will be calculated based on historic growth trends at nearby Florida Department of Transportation (FDOT) traffic count stations. Additionally, growth rates based on Miami-Dade Metropolitan Planning Organization's (MPO) projected 2010 and 2040 model network volumes

will be examined. The higher of the two (2) growth rates will be used in the analysis. Documentation will be provided in the Appendix of the traffic impact study.

The City has indicated that the Collins & 72nd Hotel (7140 Collins Hotel) committed development to be included in background conditions:

CAPACITY ANALYSIS

Capacity analyses will be conducted for the analysis period for the study intersections. Intersection analyses will be performed using *Synchro 9.0* traffic engineering analysis software which applies the Transportation Research Board's (TRB's), *Highway Capacity Manual* (HCM), 2000 and 2010 methodologies. Capacity analyses will be conducted for four (4) scenarios: existing, build-out without project, build-out with project, and build-out with project and SR 934/71st Street left-turn lane removal. Please note that the build-out with project and SR 934/71st Street left-turn lane removal condition will evaluate the feasibility of the proposed bicycle and pedestrian improvements along SR 934/71st Street. The redevelopment is expected to be built-out by 2019.

The following figures will be included for the study intersections:

- Existing conditions
- Trip distribution
- Trip assignment (will outline which driveways are used for the various land uses)
- Future background traffic conditions (with growth rate and committed development traffic)
- Future total traffic conditions (with project)
- Future total traffic conditions (with project and SR 934/71st Street left-turn lane removal)

SR 934/71ST STREET QUEUING ANALYSIS

A 95th percentile queue analysis utilizing *Synchro 9.0* traffic engineering analysis software, which applies the Transportation Research Board's (TRB) *Highway Capacity Manual* methodology, will be performed for the intersection approaches along SR 934/71st Street. The analysis will examine expected vehicle queuing lengths under existing, background, future total traffic conditions (with project), and future total traffic conditions (with project and SR 934/71st Street left-turn lane removal). If queuing deficiencies are identified, strategies and improvements may be developed to attain acceptable queuing lengths.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Transportation Demand Management (TDM) strategies will be developed to reduce the impact of project traffic on the surrounding roadway network and promote trip reduction. Typical measures promote bicycling and walking, encourage car/vanpooling and offer alternatives to the typical workday hours.

GARAGE ENTRY GATE OPERATIONS ANALYSIS

An entry gate analysis will be prepared for parking garage entry points. The entry gate queuing analysis will be prepared for the weekday A.M. and P.M. peak hours. Entry gate queuing analysis will be conducted consistent with the procedures outlined in *Parking Structures – Planning, Design, Construction, Maintenance, and Repair*, 2000 and 2011. The purpose of this analysis is to determine any future queue storage deficiencies at the entry gates and provide preliminary recommendations for mitigating these deficiencies.

DOCUMENTATION

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

A CD and electronic copy of the reports will be provided as part of the submittal package. Additionally, the Synchro analysis files will be provided on the CD.

MANEUVERABILITY ANALYSIS

A maneuverability analysis for the loading vehicle access and parking garage will be performed utilizing Transoft Solutions' *AutoTURN* software. Deficiencies related to maneuverability, traffic flow, and vehicular conflicts will be documented in a technical memorandum.

K:\FTL_TPTO\043254000-71st St City National Bk Parcels\Correspondence\memo\71st Street Traffic Study Methodology rev.docx

Attachment A

Kimley»Horn

Figure 1
Location Map
71st Street National Bank Parcel
Miami Beach, Florida

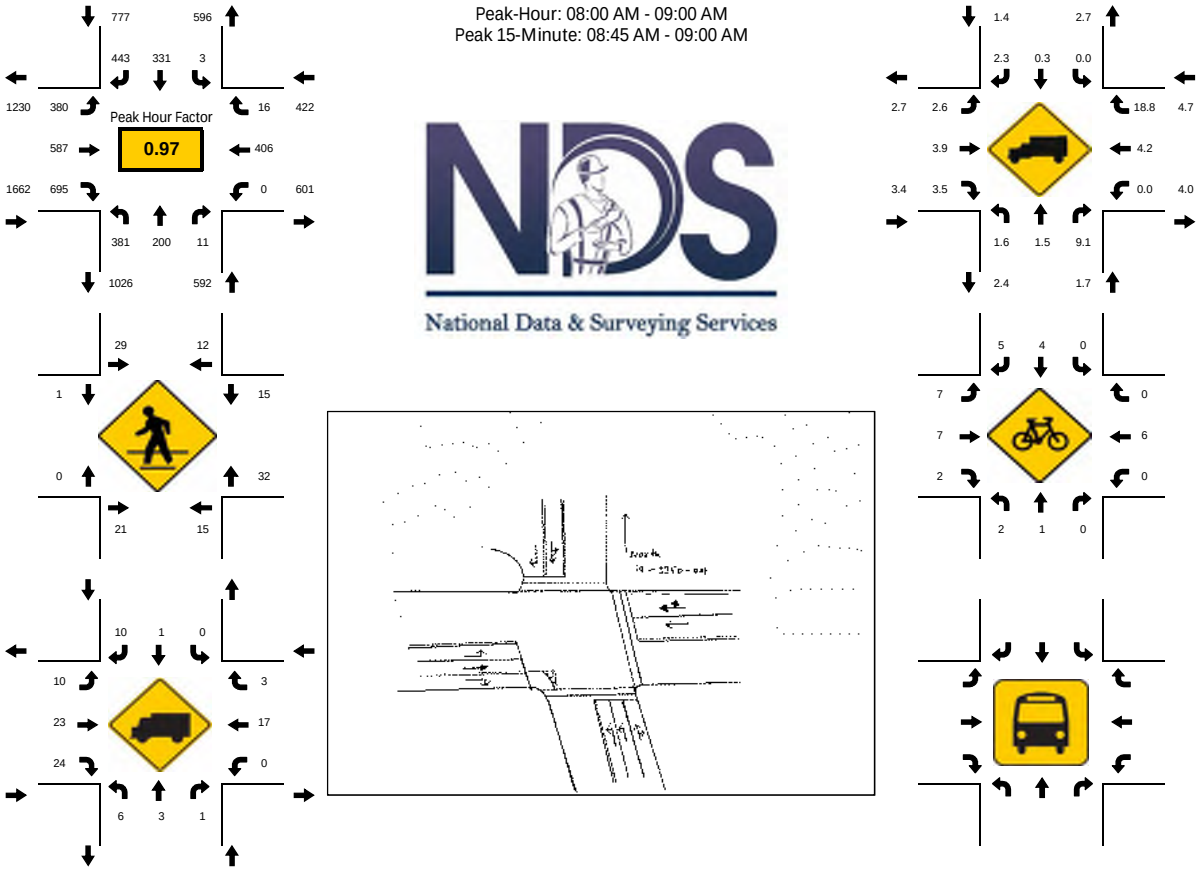
Appendix C
Traffic Data

Traffic Volumes

LOCATION: Indian Creek Dr/Dickens Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-001
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:45 AM - 09:00 AM



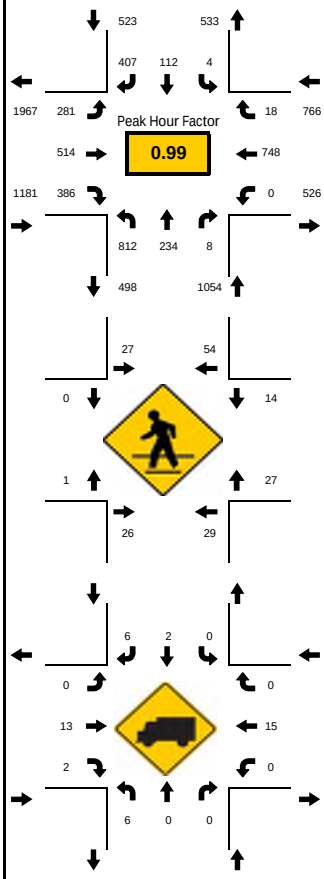
National Data & Surveying Services

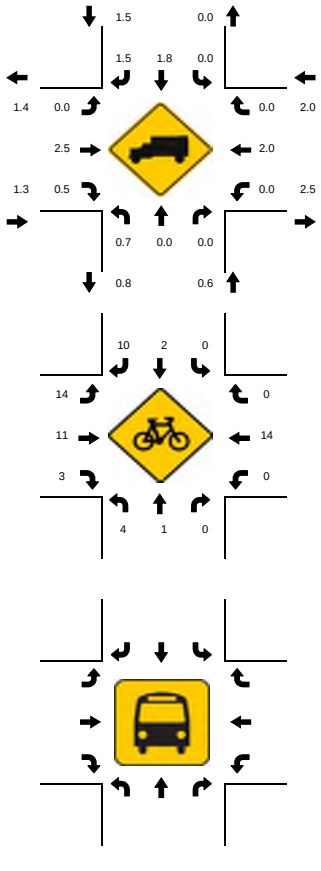
15-Min Count Period Beginning At	Indian Creek Dr/Dickens Ave Northbound					Indian Creek Dr/Dickens Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	45	20	1	0		0	58	57	0		40	73	125	0		0	68	2	0		489	2552
07:15 AM	74	27	0	0		0	74	61	0		43	51	151	0		0	91	2	0		574	2907
07:30 AM	67	30	1	0		1	86	88	0		79	123	182	0		0	83	2	0		742	3179
07:45 AM	78	50	0	0		0	78	83	0		92	114	156	0		0	94	2	0		747	3311
08:00 AM	75	56	2	0		2	88	94	0		107	142	181	0		0	96	1	0		844	3453
08:15 AM	82	38	4	0		1	71	107	0		112	142	189	0		0	94	6	0		846	2609
08:30 AM	94	58	1	0		0	90	134	0		81	151	155	0		0	107	3	0		874	1763
08:45 AM	130	48	4	0		0	82	108	0		80	152	170	0		0	109	6	0		889	889
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	520	232	16	0		8	360	536	0		448	608	756	0		0	436	24	0		**3944**	
Heavy Trucks	12	4	4			0	4	20			12	36	32			0	28	8			**160**	
Pedestrians		64					80					4					80				**228**	
Bicycles	4	4	0			0	8	12			8	8	8			0	12	0			**64**	
Railroad																						
Stopped Buses																						

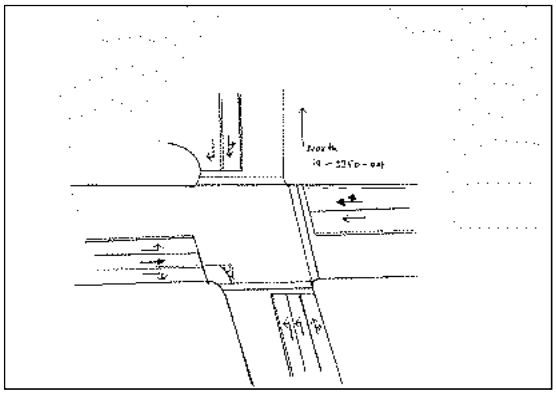
LOCATION: Indian Creek Dr/Dickens Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-001
DATE: 05/23/2019

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







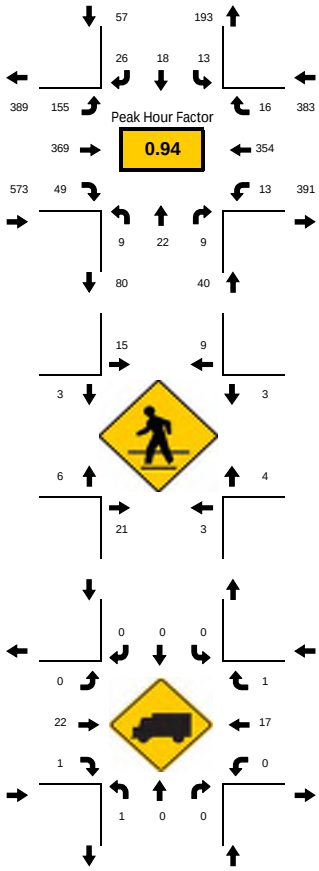
15-Min Count Period Beginning At	Indian Creek Dr/Dickens Ave Northbound					Indian Creek Dr/Dickens Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	134	44	4	0		3	34	106	0		70	126	99	0		0	214	3	0		837	3187
04:15 PM	141	23	1	0		1	51	122	0		65	105	76	0		0	177	7	0		769	3242
04:30 PM	109	23	2	0		1	36	121	0		70	127	93	0		0	221	2	0		805	3348
04:45 PM	160	28	0	0		1	24	109	0		71	105	76	0		0	199	3	0		776	3435
05:00 PM	230	56	2	0		1	29	99	0		70	124	93	0		0	182	6	0		892	3524
05:15 PM	169	46	3	0		1	22	103	0		70	136	113	0		0	210	2	0		875	3428
05:30 PM	234	72	2	0		2	28	95	0		66	118	92	0		0	178	5	0		892	3352
05:45 PM	179	60	1	0		0	33	110	0		75	136	88	0		0	178	5	0		865	3211
06:00 PM	163	53	0	0		2	33	74	0		71	119	98	0		0	176	7	0		796	3070
06:15 PM	179	58	0	0		1	37	83	0		76	124	93	0		0	145	3	0		799	2274
06:30 PM	149	50	2	0		0	32	63	0		82	120	93	0		0	159	1	0		751	1475
06:45 PM	172	64	3	0		0	27	69	0		72	79	96	0		0	139	3	0		724	724

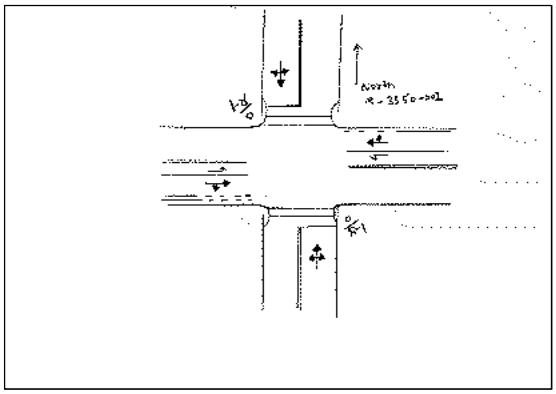
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	936	288	12	0		8	132	440	0		300	544	452	0		0	840	24	0		**3976**
Heavy Trucks	12	0	0			0	4	12			0	16	4			0	24	0			**72**
Pedestrians		72					100					4					52				**228**
Bicycles	12	4	0			0	8	16			24	16	4			0	24	0			**108**
Railroad																					
Stopped Buses																					

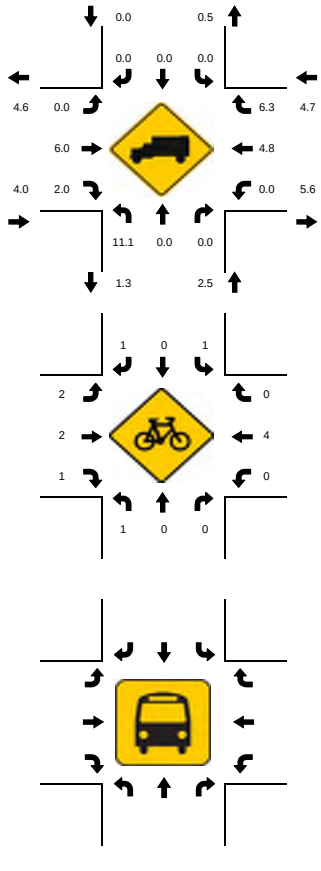
LOCATION: Byron Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-002
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:30 AM - 08:45 AM





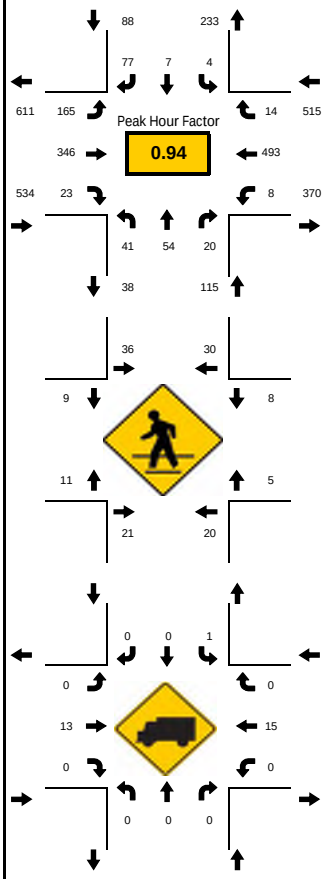


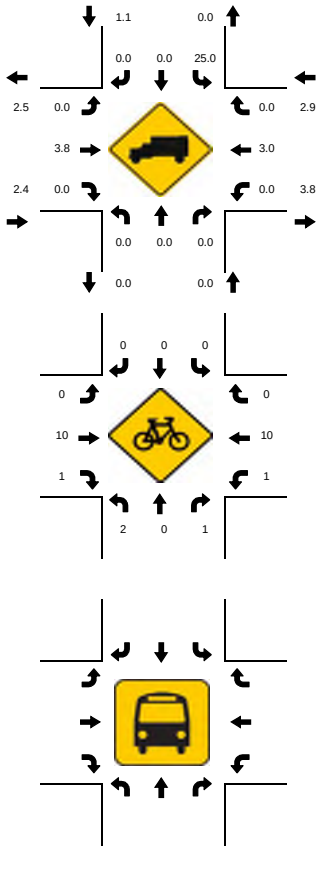
15-Min Count Period Beginning At	Byron Ave Northbound					Byron Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	3	2	0	0		2	1	3	0		7	64	3	0		2	73	1	0		161	727
07:15 AM	5	1	1	0		1	2	1	0		8	45	3	0		0	74	0	0		141	814
07:30 AM	2	3	1	0		3	4	2	0		15	87	6	0		4	86	3	2		218	921
07:45 AM	1	4	1	0		2	4	2	0		30	75	9	0		2	77	0	0		207	983
08:00 AM	3	8	2	0		5	4	8	0		33	91	6	0		0	87	1	0		248	1053
08:15 AM	3	6	3	0		2	6	5	0		45	81	11	0		3	79	4	0		248	805
08:30 AM	1	4	3	0		3	4	6	0		41	93	20	0		6	93	5	1		280	557
08:45 AM	2	4	1	0		3	4	7	0		36	104	12	0		3	95	6	0		277	277
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	12	32	12	0		20	24	32	0		180	416	80	0		24	380	24	4		**1240**	
Heavy Trucks	4	0	0			0	0	0			0	36	4			0	20	4			**68**	
Pedestrians		44					32					12					8				**96**	
Bicycles	4	0	0			4	0	4			4	8	4			0	8	0			**36**	
Railroad																						
Stopped Buses																						

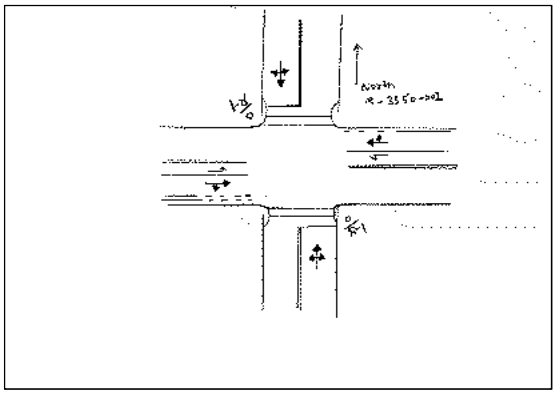
LOCATION: Byron Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-002
DATE: 05/23/2019

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



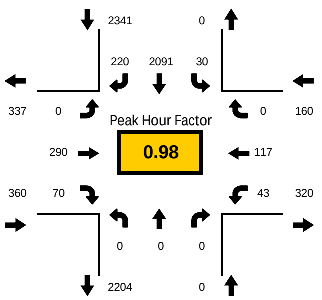




15-Min Count Period Beginning At	Byron Ave Northbound					Byron Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	20	30	9	0		0	1	20	0		40	80	2	0		0	106	2	0		310	1205
04:15 PM	24	11	2	0		0	1	22	0		27	89	7	0		1	107	2	0		293	1227
04:30 PM	30	23	3	0		0	2	22	0		32	73	5	0		3	103	4	0		300	1225
04:45 PM	23	22	13	0		1	1	19	0		23	90	3	0		3	103	1	0		302	1234
05:00 PM	21	22	6	0		0	1	20	0		31	94	6	0		2	126	3	0		332	1252
05:15 PM	9	8	5	0		1	4	21	0		42	78	3	0		3	114	3	0		291	1207
05:30 PM	5	13	2	0		2	1	21	0		45	85	5	0		2	124	4	0		309	1194
05:45 PM	6	11	7	0		1	1	15	0		47	89	9	0		1	129	4	0		320	1149
06:00 PM	1	10	5	0		2	1	15	0		30	81	2	0		3	132	5	0		287	1082
06:15 PM	6	5	5	0		1	0	3	0		36	77	1	0		4	137	3	0		278	795
06:30 PM	3	6	5	0		0	1	3	0		29	82	0	0		5	127	3	0		264	517
06:45 PM	3	4	6	0		0	0	3	0		25	73	1	0		5	132	1	0		253	253
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	84	88	28	0		8	16	84	0		188	376	36	0		12	516	16	0		**1452**	
Heavy Trucks	0	0	0			4	0	0			0	20	0			0	24	0			**48**	
Pedestrians		80					92					28					20				**220**	
Bicycles	4	0	4			0	0	0			0	16	4			4	16	0			**48**	
Railroad																						
Stopped Buses																						

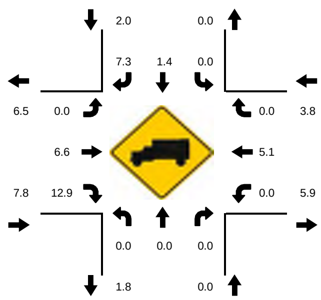
LOCATION: SR A1A/Abbott Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

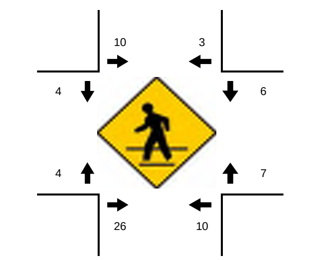
PROJECT ID: 19-03350-003
DATE: 05/23/2019

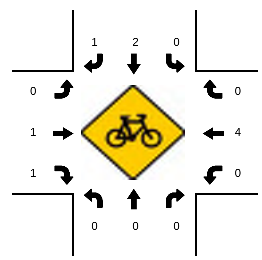


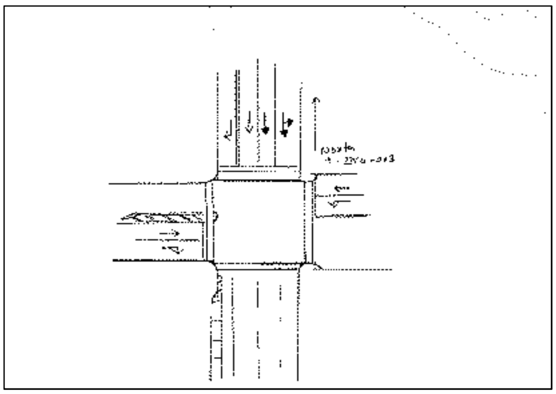
Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 07:45 AM - 08:00 AM

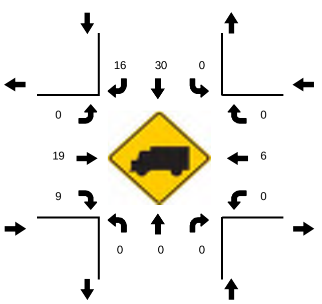
National Data & Surveying Services

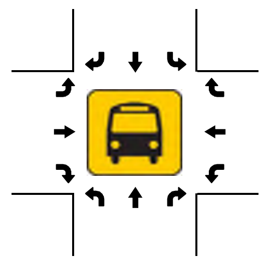












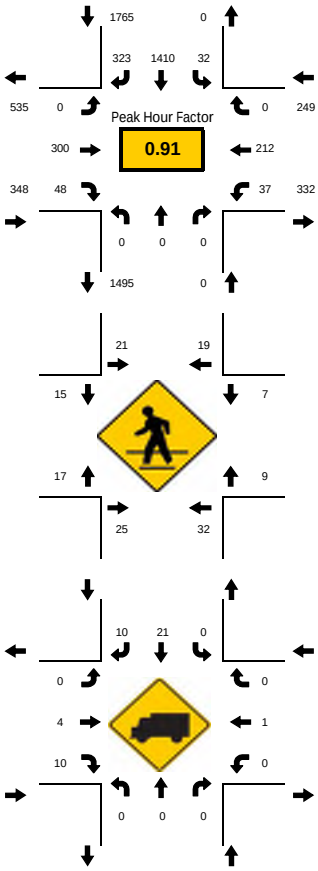
15-Min Count Period Beginning At	SR A1A/Abbott Ave Northbound					SR A1A/Abbott Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	0	0	0		5	375	39	0		0	48	17	0		10	30	0	0		524	2536
07:15 AM	0	0	0	0		8	431	45	0		0	36	10	0		8	27	0	0		565	2720
07:30 AM	0	0	0	0		7	523	66	0		0	77	13	0		9	24	0	0		719	2861
07:45 AM	0	0	0	0		9	542	51	0		0	66	17	0		13	30	0	0		728	2835
08:00 AM	0	0	0	0		7	507	55	0		0	75	22	0		11	31	0	0		708	2813
08:15 AM	0	0	0	0		7	519	48	0		0	72	18	0		10	32	0	0		706	2105
08:30 AM	0	0	0	0		8	481	68	0		0	61	29	0		11	35	0	0		693	1399
08:45 AM	0	0	0	0		8	468	60	0		0	77	36	0		18	39	0	0		706	706

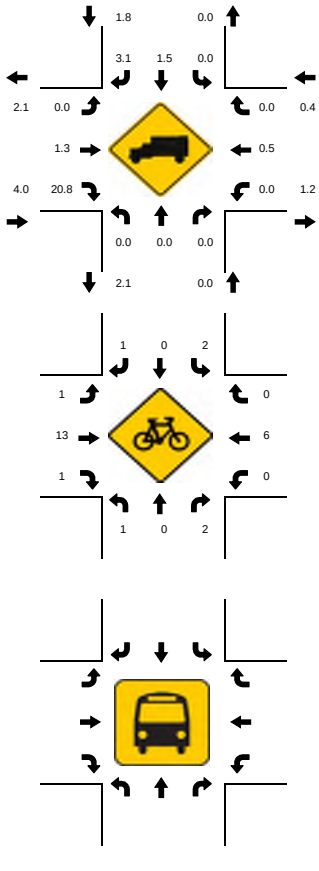
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	0	0	0	0		36	2168	264	0		0	308	88	0		52	128	0	0		3044
Heavy Trucks	0	0	0			0	40	24			0	24	12			0	8	0			108
Pedestrians		68					16					16					20				120
Bicycles	0	0	0			0	4	4			0	4	4			0	8	0			24
Railroad																					
Stopped Buses																					

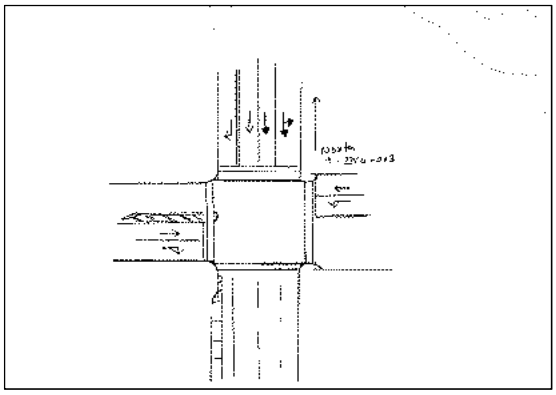
LOCATION: SR A1A/Abbott Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-003
DATE: 05/23/2019

Peak-Hour: 05:45 PM - 06:45 PM
Peak 15-Minute: 06:30 PM - 06:45 PM





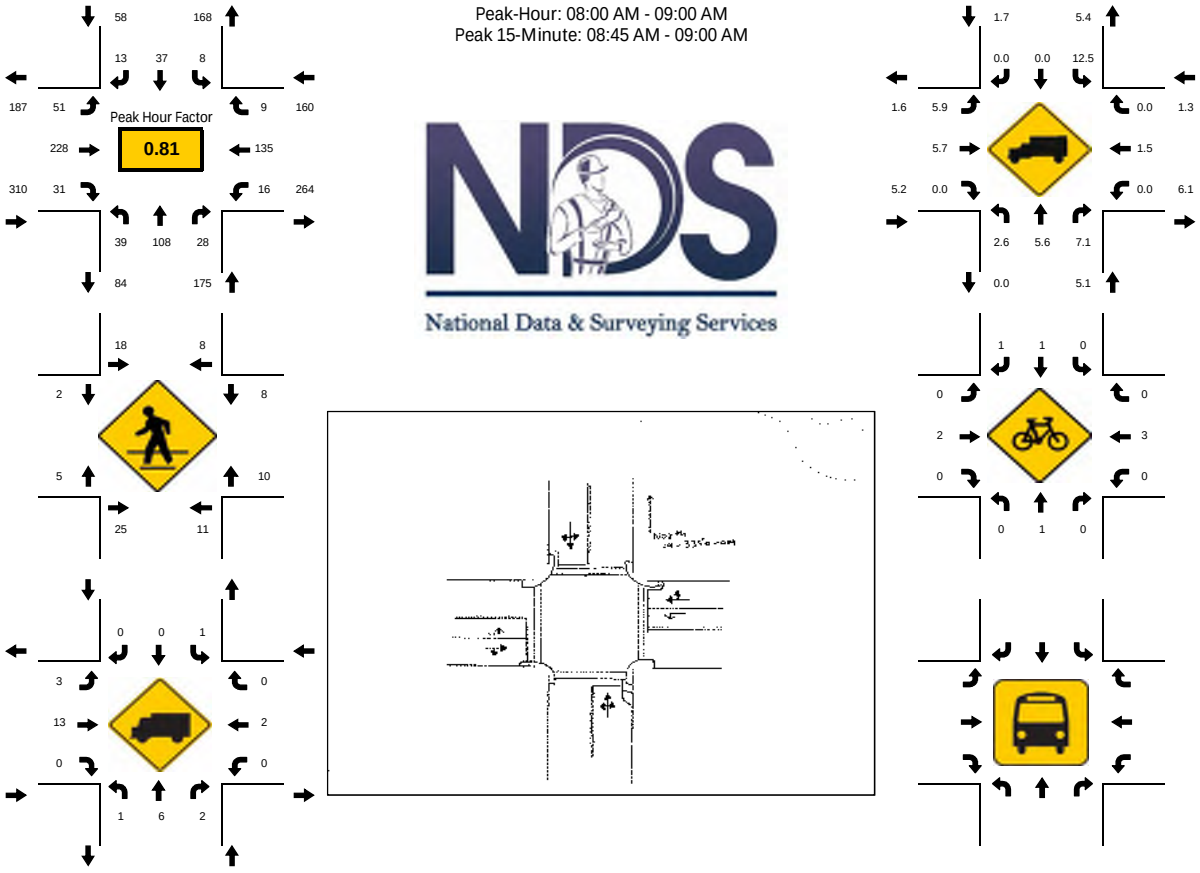


15-Min Count Period Beginning At	SR A1A/Abbott Ave Northbound					SR A1A/Abbott Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	0	0	0		13	303	61	0		0	72	9	0		9	41	0	0		508	2081
04:15 PM	0	0	0	0		15	314	60	0		0	82	11	0		3	35	0	0		520	2140
04:30 PM	0	0	0	0		6	339	58	0		0	72	9	0		6	37	0	0		527	2220
04:45 PM	0	0	0	0		8	299	67	0		0	88	10	0		5	49	0	0		526	2235
05:00 PM	0	0	0	0		9	343	71	0		0	76	20	0		4	44	0	0		567	2255
05:15 PM	0	0	0	0		14	375	67	0		0	74	10	0		10	50	0	0		600	2248
05:30 PM	0	0	0	0		11	313	73	0		0	76	7	0		9	53	0	0		542	2252
05:45 PM	0	0	0	0		11	316	66	0		0	79	15	0		8	51	0	0		546	2362
06:00 PM	0	0	0	0		8	323	82	0		0	68	11	0		7	61	0	0		560	2333
06:15 PM	0	0	0	0		10	361	73	0		0	79	13	0		9	59	0	0		604	1773
06:30 PM	0	0	0	0		3	410	102	0		0	74	9	0		13	41	0	0		652	1169
06:45 PM	0	0	0	0		7	289	86	0		0	68	10	0		8	49	0	0		517	517
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		44	1640	408	0		0	316	60	0		52	244	0	0		**2764**	
Heavy Trucks	0	0	0			0	24	16			0	8	20			0	4	0			**72**	
Pedestrians		68					52					60					24				**204**	
Bicycles	4	0	4			4	0	4			4	16	4			0	8	0			**48**	
Railroad																						
Stopped Buses																						

LOCATION: Harding Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-004
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:45 AM - 09:00 AM

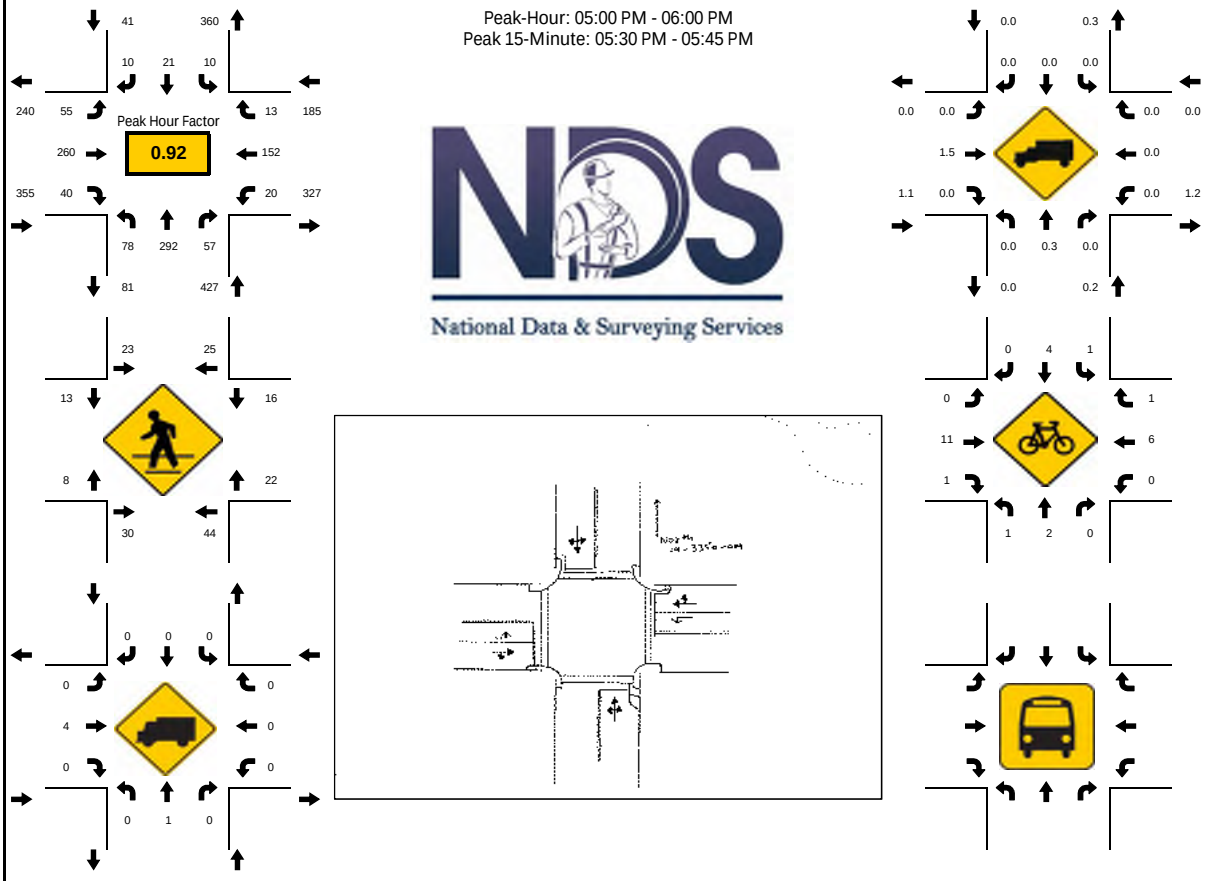


National Data & Surveying Services

15-Min Count Period Beginning At	Harding Ave Northbound					Harding Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	6	9	3	0		1	1	0	0		4	40	6	0		3	35	1	0		109	509
07:15 AM	5	12	4	0		3	2	0	0		4	34	4	0		3	32	0	0		103	564
07:30 AM	7	14	4	0		1	2	1	0		14	56	5	0		1	23	1	0		129	619
07:45 AM	12	23	5	0		0	10	5	0		18	54	9	0		2	30	0	0		168	653
08:00 AM	8	25	6	0		2	5	3	0		13	56	8	0		6	31	1	0		164	703
08:15 AM	6	16	7	0		4	8	2	0		12	54	11	0		1	35	2	0		158	539
08:30 AM	8	28	6	0		1	14	2	0		11	47	7	0		2	36	1	0		163	381
08:45 AM	17	39	9	0		1	10	6	0		15	71	5	0		7	33	5	0		218	218
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	68	156	36	0		16	56	24	0		60	284	44	0		28	144	20	0		**936**	
Heavy Trucks	4	12	8			4	0	0			4	20	0			0	4	0			**56**	
Pedestrians		56					28					8					28				**120**	
Bicycles	0	4	0			0	4	4			0	4	0			0	8	0			**24**	
Railroad																						
Stopped Buses																						

LOCATION: Harding Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-004
DATE: 05/23/2019



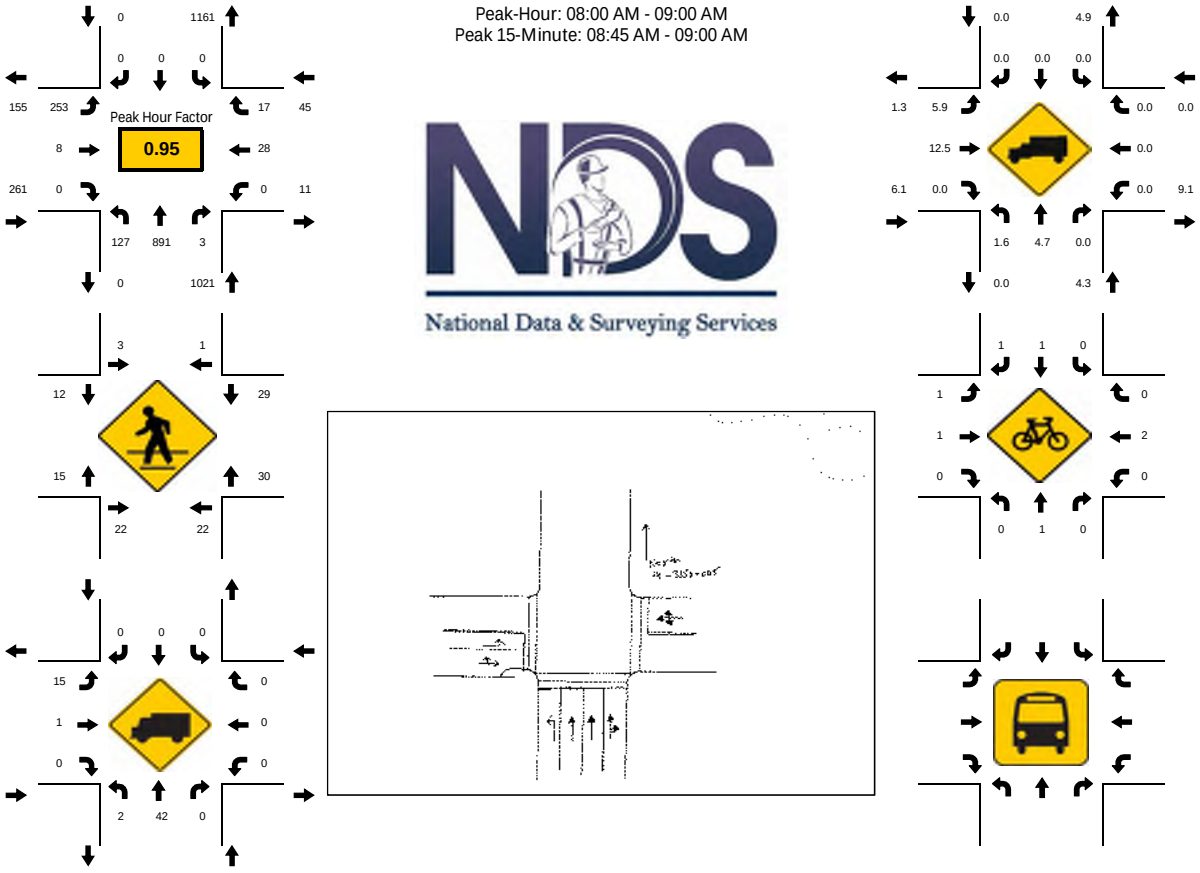
15-Min Count Period Beginning At	Harding Ave Northbound					Harding Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	10	76	14	0		1	5	2	0		21	58	5	0		5	39	6	0		242	941
04:15 PM	11	76	8	0		2	10	2	0		22	65	9	0		4	28	3	0		240	941
04:30 PM	11	70	13	0		3	5	1	0		17	52	9	0		5	27	2	0		215	934
04:45 PM	11	66	12	0		1	10	1	0		19	68	10	0		6	36	4	0		244	992
05:00 PM	13	73	12	0		3	8	2	0		9	68	10	0		5	38	1	0		242	1008
05:15 PM	19	69	10	0		1	4	2	0		15	62	11	0		6	32	2	0		233	994
05:30 PM	24	71	20	0		3	6	2	0		15	67	9	0		5	44	7	0		273	1002
05:45 PM	22	79	15	0		3	3	4	0		16	63	10	0		4	38	3	0		260	920
06:00 PM	19	60	14	0		2	4	0	0		15	50	8	0		3	53	0	0		228	866
06:15 PM	20	57	12	0		2	2	2	0		16	73	4	0		4	45	4	0		241	638
06:30 PM	24	58	12	0		3	0	3	0		9	55	6	0		0	21	0	0		191	397
06:45 PM	20	48	13	0		2	3	4	0		9	60	7	0		1	38	1	0		206	206

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	96	316	80	0		12	32	16	0		64	272	44	0		24	176	28	0		**1160**
Heavy Trucks	0	4	0			0	0	0			0	8	0			0	0	0			**12**
Pedestrians		104					64					32					48				**248**
Bicycles	4	4	0			4	12	0			0	12	4			0	12	4			**56**
Railroad Stopped Buses																					

LOCATION: SR A1A/Collins Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-005
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:45 AM - 09:00 AM

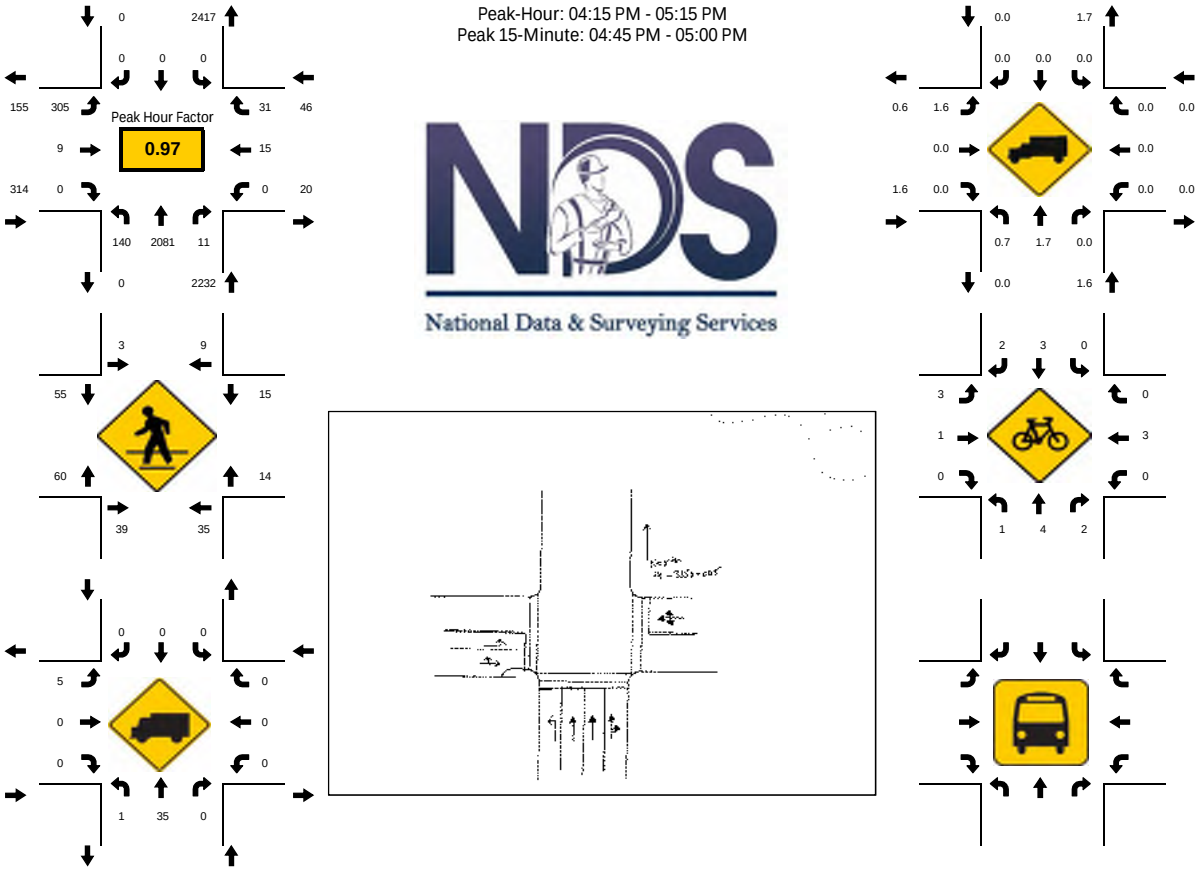


15-Min Count Period Beginning At	SR A1A/Collins Ave Northbound					SR A1A/Collins Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	27	136	1	0		0	0	0	0		40	3	0	0		0	9	2	0		218	1039
07:15 AM	32	185	0	0		0	0	0	0		41	1	0	0		0	5	1	0		265	1135
07:30 AM	19	166	0	0		0	0	0	0		54	2	0	0		0	7	2	0		250	1208
07:45 AM	25	208	0	0		0	0	0	0		56	2	0	0		0	9	6	0		306	1282
08:00 AM	27	208	0	0		0	0	0	0		65	0	0	0		0	7	7	0		314	1327
08:15 AM	31	230	0	0		0	0	0	0		59	5	0	0		0	8	5	0		338	1013
08:30 AM	33	232	2	0		0	0	0	0		52	0	0	0		0	2	3	0		324	675
08:45 AM	36	221	1	0		0	0	0	0		77	3	0	0		0	11	2	0		351	351
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	144	928	8	0		0	0	0	0		308	20	0	0		0	44	28	0		**1480**	
Heavy Trucks	4	56	0			0	0	0			24	4	0			0	0	0			**88**	
Pedestrians		64					12					44					76				**196**	
Bicycles	0	4	0			0	4	4			4	4	0			0	4	0			**24**	
Railroad																						
Stopped Buses																						

LOCATION: SR A1A/Collins Ave & SR 934/71st St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-005
DATE: 05/23/2019

Peak-Hour: 04:15 PM - 05:15 PM
Peak 15-Minute: 04:45 PM - 05:00 PM



National Data & Surveying Services

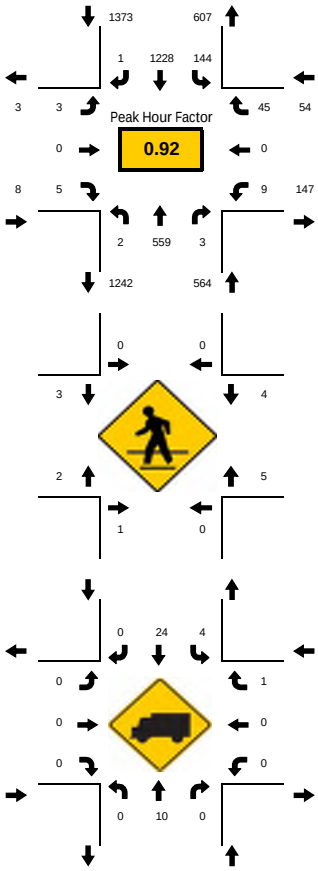
15-Min Count Period Beginning At	SR A1A/Collins Ave Northbound					SR A1A/Collins Ave Southbound					SR 934/71st St Eastbound					SR 934/71st St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	41	462	2	0		0	0	0	0		67	2	0	0		0	5	6	0		585	2546
04:15 PM	33	503	3	0		0	0	0	0		76	3	0	0		0	5	14	0		637	2592
04:30 PM	31	540	2	0		0	0	0	0		68	3	0	0		0	5	9	0		658	2548
04:45 PM	36	534	4	0		0	0	0	0		81	0	0	0		0	4	7	0		666	2573
05:00 PM	40	504	2	0		0	0	0	0		80	3	0	0		0	1	1	0		631	2513
05:15 PM	33	479	2	0		0	0	0	0		67	2	0	0		0	7	3	0		593	2504
05:30 PM	51	531	3	0		0	0	0	0		89	1	0	0		0	5	3	0		683	2455
05:45 PM	42	475	1	0		0	0	0	0		77	4	0	0		0	2	5	0		606	2269
06:00 PM	47	486	5	0		0	0	0	0		67	1	0	0		0	8	8	0		622	2171
06:15 PM	48	403	3	0		0	0	0	0		81	1	0	0		0	5	3	0		544	1549
06:30 PM	24	386	3	0		0	0	0	0		75	1	0	0		0	4	4	0		497	1005
06:45 PM	35	394	0	0		0	0	0	0		67	1	0	0		0	6	5	0		508	508

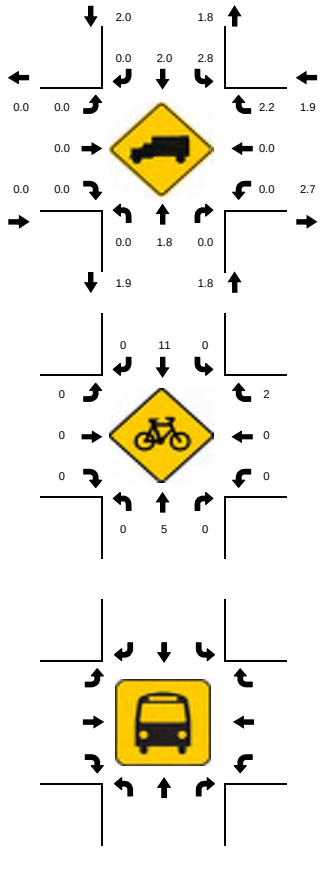
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	160	2160	16	0		0	0	0	0		324	12	0	0		0	20	56	0		**2748**
Heavy Trucks	4	44	0			0	0	0			12	0	0			0	0	0			**60**
Pedestrians		112					20					144					48				**324**
Bicycles	4	8	4			0	12	8			8	4	0			0	4	0			**52**
Railroad																					
Stopped Buses																					

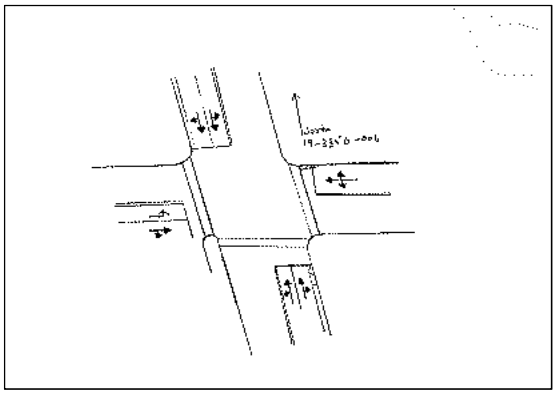
LOCATION: Indian Creek Dr & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-006
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:45 AM - 09:00 AM





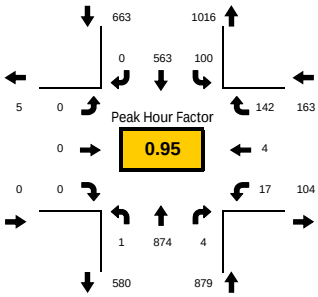


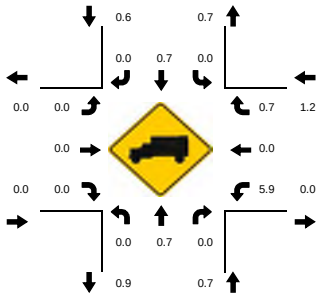
15-Min Count Period Beginning At	Indian Creek Dr Northbound					Indian Creek Dr Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	1	68	1	0		5	230	0	0		2	0	0	0		1	0	4	0		312	1555
07:15 AM	2	83	1	0		2	254	2	0		0	0	0	0		0	1	10	0		355	1728
07:30 AM	0	93	0	0		18	325	0	0		0	0	1	0		3	0	9	0		449	1853
07:45 AM	0	125	0	0		10	294	0	0		3	0	1	0		1	0	5	0		439	1897
08:00 AM	0	120	1	0		19	334	0	0		2	0	1	0		1	0	7	0		485	1999
08:15 AM	1	115	1	0		51	297	1	0		0	0	3	0		0	0	11	0		480	1514
08:30 AM	0	149	1	1		32	292	0	0		1	0	1	0		4	0	12	0		493	1034
08:45 AM	0	175	0	0		41	305	0	1		0	0	0	0		4	0	15	0		541	541
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	4	700	4	4		204	1336	4	4		8	0	12	0		16	0	60	0		**2356**	
Heavy Trucks	0	20	0			8	36	0			0	0	0			0	0	4			**68**	
Pedestrians		4					0					8					12				**24**	
Bicycles	0	8	0			0	20	0			0	0	0			0	0	8			**36**	
Railroad																						
Stopped Buses																						

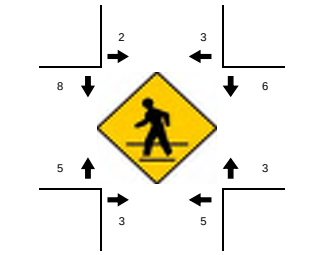
LOCATION: Indian Creek Dr & 69th St
CITY/STATE: Miami Beach, FL

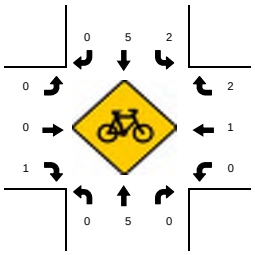
PROJECT ID: 19-03350-006
DATE: 05/23/2019

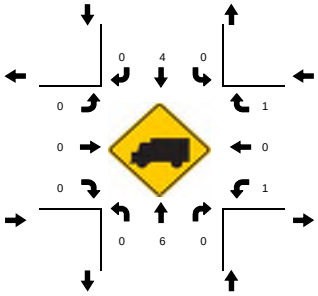
Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:00 PM - 05:15 PM

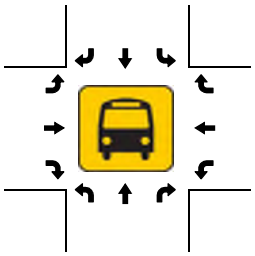


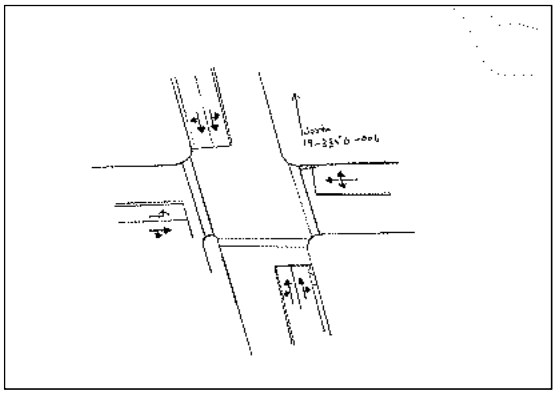












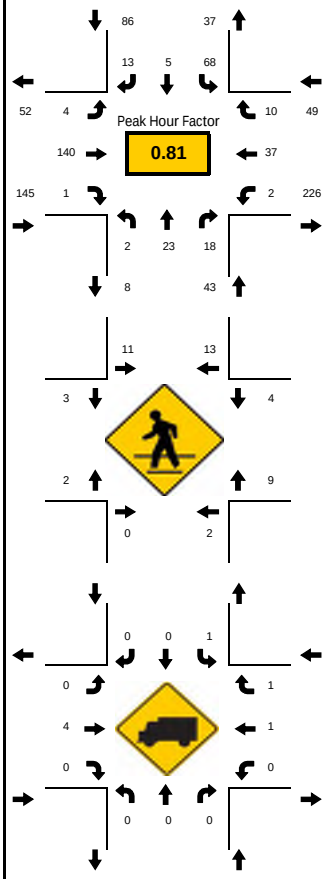
15-Min Count Period Beginning At	Indian Creek Dr Northbound					Indian Creek Dr Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	148	3	0		20	137	0	0		0	0	1	0		3	0	27	0		339	1373
04:15 PM	0	122	0	0		17	141	1	0		0	0	0	0		5	0	44	0		330	1485
04:30 PM	0	136	0	0		27	152	1	0		0	1	1	0		5	2	37	0		362	1551
04:45 PM	0	154	0	0		26	111	1	0		0	0	3	0		5	1	41	0		342	1639
05:00 PM	0	240	0	0		23	142	0	0		0	0	0	0		4	0	42	0		451	1705
05:15 PM	0	186	0	1		26	145	0	1		0	0	0	0		4	0	33	0		396	1637
05:30 PM	0	246	4	0		25	134	0	0		0	0	0	0		3	4	34	0		450	1633
05:45 PM	0	202	0	0		25	142	0	0		0	0	0	0		6	0	33	0		408	1562
06:00 PM	0	199	2	0		24	127	0	0		0	0	0	0		9	0	22	0		383	1534
06:15 PM	0	203	0	0		18	143	0	0		1	0	0	0		0	0	27	0		392	1151
06:30 PM	0	205	2	0		15	134	0	0		0	0	0	0		2	0	21	0		379	759
06:45 PM	0	185	0	0		17	133	0	0		0	0	0	0		8	0	37	0		380	380

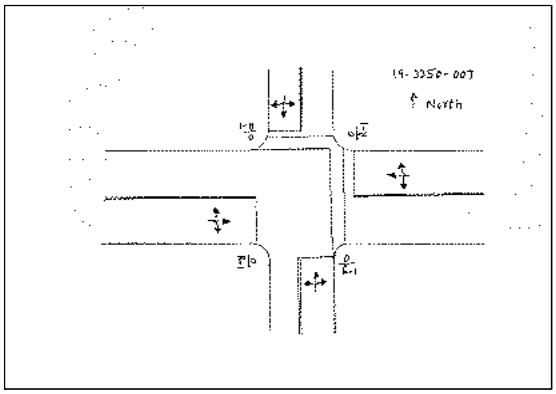
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	0	984	16	4		104	580	0	4		0	0	0	0		24	16	168	0		**1900**
Heavy Trucks	0	12	0			0	8	0			0	0	0			4	0	4			**28**
Pedestrians		12					8					24					20				**64**
Bicycles	0	12	0			4	8	0			0	0	4			0	4	4			**36**
Railroad Stopped Buses																					

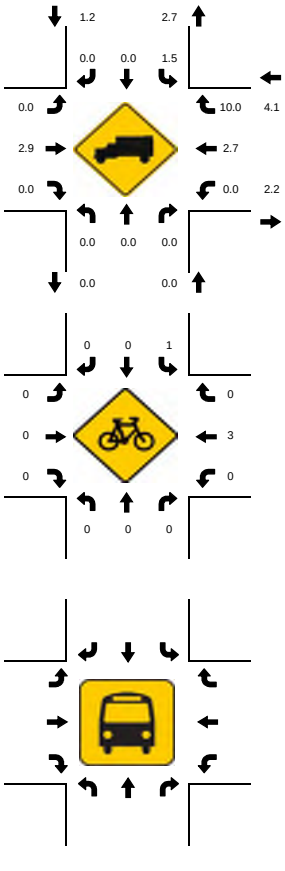
LOCATION: Byron Ave & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-007
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:15 AM - 08:30 AM





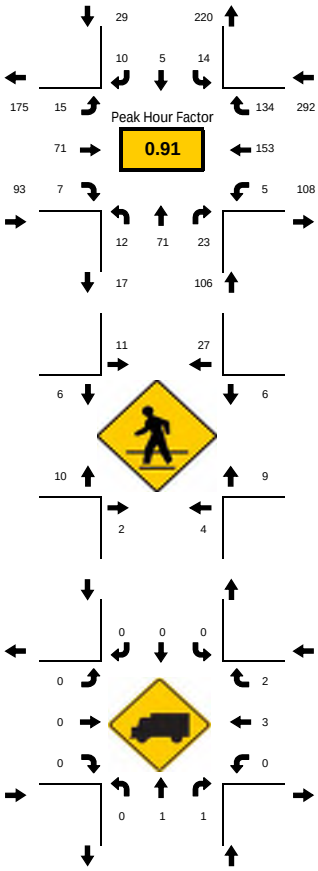


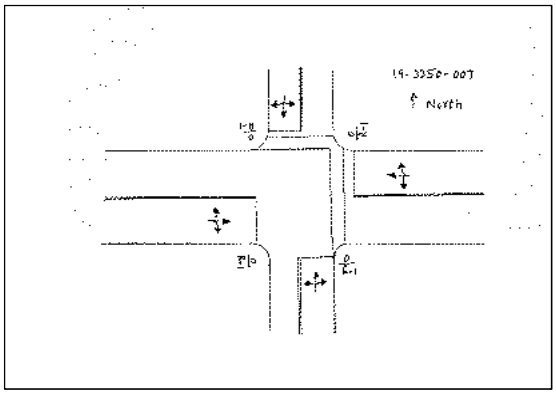
15-Min Count Period Beginning At	Byron Ave Northbound					Byron Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	1	1	2	0		9	0	1	0		0	7	0	0		0	4	1	0		26	148
07:15 AM	2	1	3	0		9	0	0	0		0	5	0	0		1	8	0	0		29	174
07:30 AM	0	1	5	0		12	2	7	0		2	15	1	0		0	5	2	0		52	245
07:45 AM	0	7	4	0		12	0	1	0		0	9	0	1		1	4	2	0		41	275
08:00 AM	1	8	4	0		11	0	1	0		1	18	0	0		1	5	1	1		52	323
08:15 AM	1	6	7	0		19	2	2	1		1	47	1	0		0	9	4	0		100	271
08:30 AM	0	4	2	0		21	2	4	0		1	32	0	1		0	11	4	0		82	171
08:45 AM	0	5	5	0		16	1	6	0		0	43	0	0		0	12	1	0		89	89
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	4	32	28	0		84	8	24	4		4	188	4	4		4	48	16	4		**456**	
Heavy Trucks	0	0	0			4	0	0			0	8	0			0		4	4		**20**	
Pedestrians		4					32					12					16				**64**	
Bicycles	0	0	0			4	0	0			0	0	0			0		4	0		**8**	
Railroad																						
Stopped Buses																						

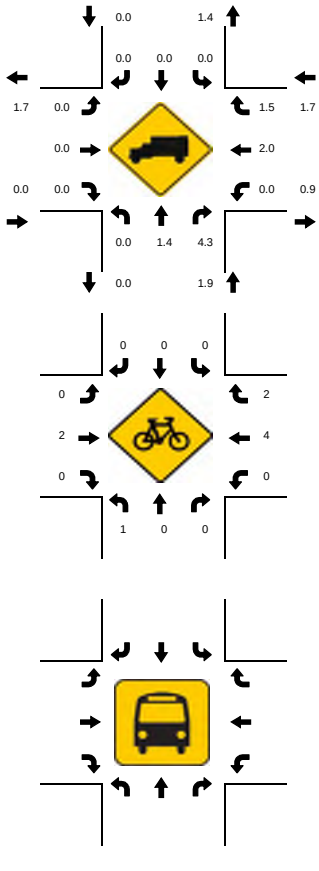
LOCATION: Byron Ave & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-007
DATE: 05/23/2019

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:30 PM - 04:45 PM







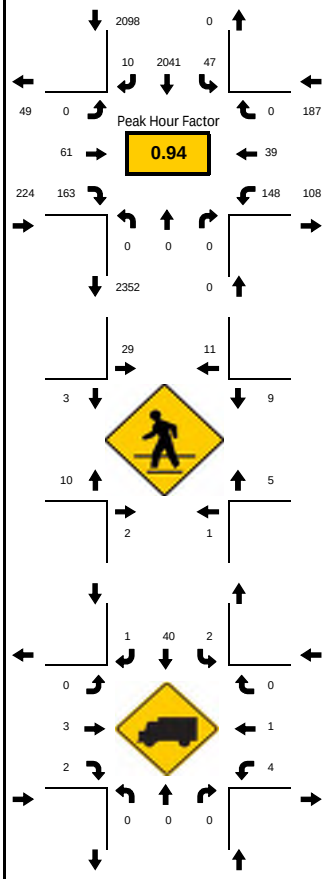
15-Min Count Period Beginning At	Byron Ave Northbound					Byron Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	2	31	8	0		3	1	1	1		3	19	2	0		1	32	20	0		124	520
04:15 PM	2	10	3	0		5	3	2	0		6	11	0	0		1	41	37	0		121	519
04:30 PM	3	18	10	0		4	0	7	0		3	22	3	0		2	36	35	0		143	492
04:45 PM	4	12	2	1		1	1	0	0		3	19	2	0		1	44	42	0		132	456
05:00 PM	3	19	5	1		5	2	7	0		6	20	0	0		0	33	22	0		123	429
05:15 PM	2	8	4	0		6	0	6	1		3	18	0	2		1	29	13	1		94	389
05:30 PM	0	8	4	0		3	3	4	0		4	25	3	0		2	37	14	0		107	361
05:45 PM	1	11	9	0		5	1	4	0		2	22	0	1		1	32	15	1		105	314
06:00 PM	3	6	9	0		4	2	6	0		2	22	1	0		2	21	5	0		83	295
06:15 PM	0	8	4	0		2	0	0	0		1	14	1	0		2	27	7	0		66	212
06:30 PM	1	6	3	0		2	0	2	1		0	18	1	0		1	21	4	0		60	146
06:45 PM	2	9	3	0		3	1	5	0		0	16	0	1		0	37	8	1		86	86

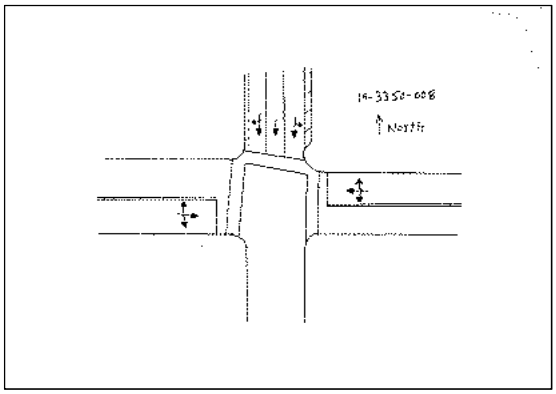
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	16	124	40	4		20	12	28	4		24	88	12	0		8	176	168	0		**724**
Heavy Trucks	0	4	4			0	0	0			0	0	0			0	4	8			**20**
Pedestrians		8					56					24					20				**108**
Bicycles	4	0	0			0	0	0			0	4	0			0	12	4			**24**
Railroad																					
Stopped Buses																					

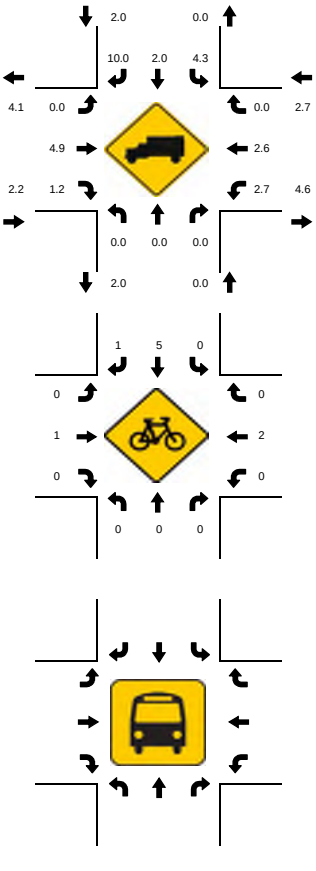
LOCATION: SR A1A/Abbott Ave & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-008
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:15 AM - 08:30 AM





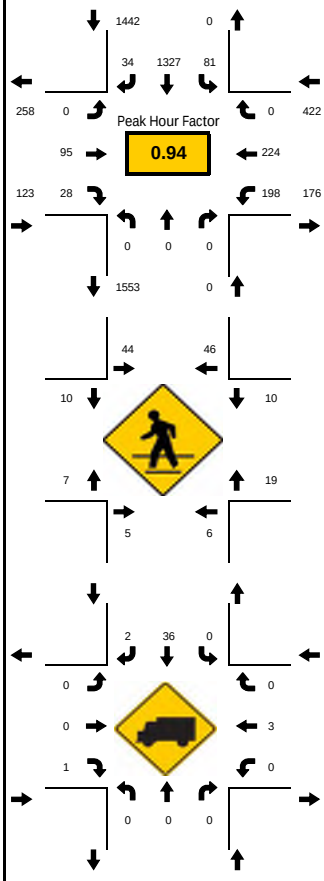


15-Min Count Period Beginning At	SR A1A/Abbott Ave Northbound					SR A1A/Abbott Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	0	0	0		15	388	0	0		0	7	13	0		20	5	0	0		448	2182
07:15 AM	0	0	0	0		5	439	2	0		0	6	15	0		28	9	0	0		504	2345
07:30 AM	0	0	0	0		11	526	4	0		0	11	20	0		27	3	0	0		602	2505
07:45 AM	0	0	0	0		8	554	1	0		0	14	13	0		35	3	0	0		628	2503
08:00 AM	0	0	0	0		12	519	3	0		0	9	30	0		34	4	0	0		611	2509
08:15 AM	0	0	0	0		8	546	1	0		0	17	51	0		26	15	0	0		664	1898
08:30 AM	0	0	0	0		11	491	2	0		0	12	39	0		35	10	0	0		600	1234
08:45 AM	0	0	0	0		16	485	4	0		0	23	43	0		52	10	0	1		634	634
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		64	2184	16	0		0	92	204	0		208	60	0	4		**2832**	
Heavy Trucks	0	0	0			4	56	4			0	4	4			4		4	0		**80**	
Pedestrians		8					60					20					32				**120**	
Bicycles	0	0	0			0	8	4			0	4	0			0		4	0		**20**	
Railroad																						
Stopped Buses																						

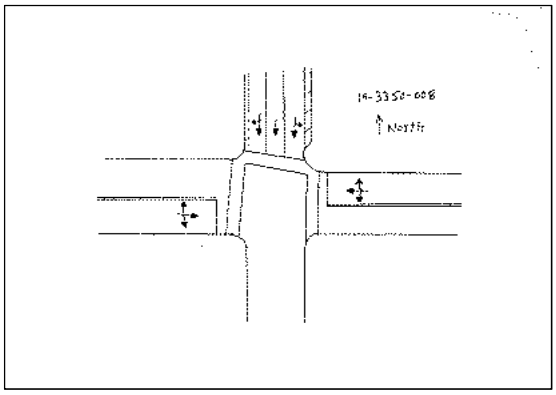
LOCATION: SR A1A/Abbott Ave & 69th St
CITY/STATE: Miami Beach, FL

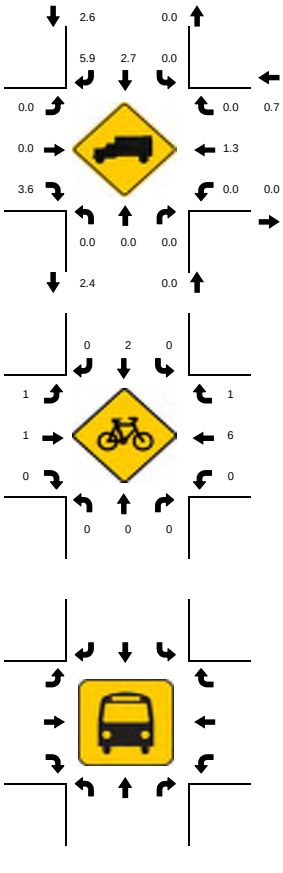
PROJECT ID: 19-03350-008
DATE: 05/23/2019

Peak-Hour: 04:30 PM - 05:30 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services





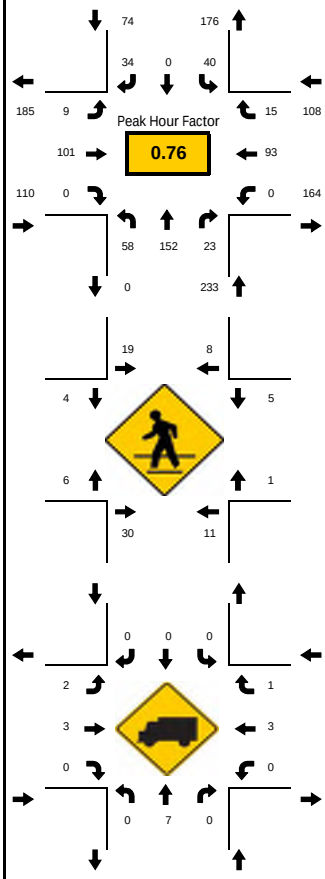
15-Min Count Period Beginning At	SR A1A/Abbott Ave Northbound					SR A1A/Abbott Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	0	0	0		19	301	7	0		0	27	1	0		58	47	0	0		460	1929
04:15 PM	0	0	0	0		19	301	4	0		0	13	8	0		57	72	0	0		474	1932
04:30 PM	0	0	0	0		18	336	7	0		0	28	11	0		52	67	0	0		519	1987
04:45 PM	0	0	0	0		23	298	9	0		0	20	3	0		42	81	0	0		476	1930
05:00 PM	0	0	0	0		20	318	7	0		0	22	8	0		44	44	0	0		463	1935
05:15 PM	0	0	0	0		20	375	11	0		0	25	6	0		60	32	0	0		529	1941
05:30 PM	0	0	0	0		15	314	8	0		0	23	4	0		49	49	0	0		462	1901
05:45 PM	0	0	0	0		22	327	3	0		0	23	9	0		55	42	0	0		481	1951
06:00 PM	0	0	0	0		30	320	7	0		0	25	14	0		48	25	0	0		469	1905
06:15 PM	0	0	0	0		16	361	8	0		0	13	7	0		53	31	0	0		489	1436
06:30 PM	0	0	0	0		20	399	3	0		0	15	9	0		48	18	0	0		512	947
06:45 PM	0	0	0	0		19	297	6	0		0	14	6	0		49	44	0	0		435	435

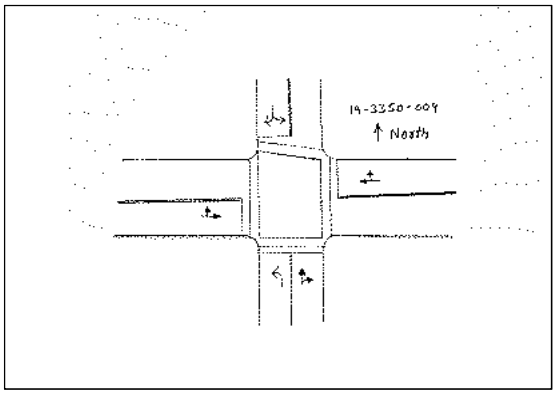
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	0	0	0	0		92	1500	44	0		0	112	44	0		240	324	0	0		**2356**
Heavy Trucks	0	0	0			0	44	4			0	0	4			0	8	0			**60**
Pedestrians		28					116					28					44				**216**
Bicycles	0	0	0			0	4	0			4	4	0			0	12	4			**28**
Railroad																					
Stopped Buses																					

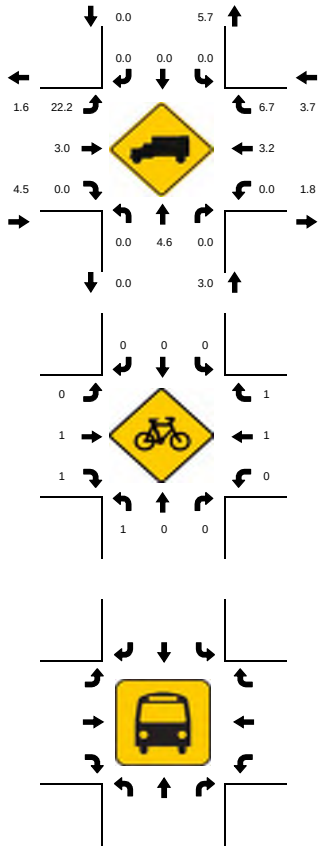
LOCATION: Harding Ave & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-009
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:45 AM - 09:00 AM





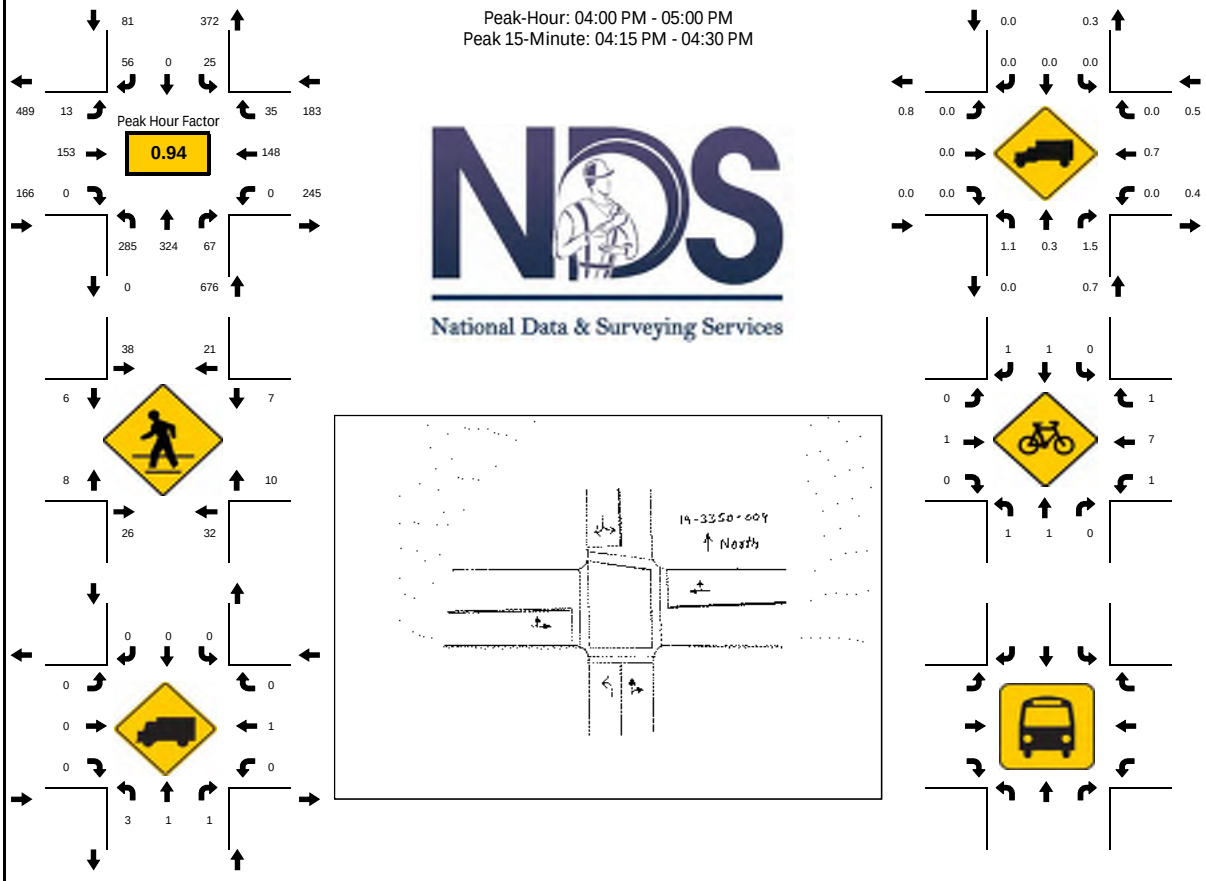


15-Min Count Period Beginning At	Harding Ave Northbound					Harding Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	8	15	1	0		3	0	4	0		1	23	0	0		0	12	2	0		69	340
07:15 AM	11	18	2	0		4	0	7	0		2	9	0	0		0	19	1	0		73	381
07:30 AM	11	23	4	0		4	0	6	0		2	19	0	0		0	12	5	0		86	427
07:45 AM	9	34	9	0		8	0	10	0		0	22	0	0		0	19	1	0		112	464
08:00 AM	10	28	7	0		9	0	7	0		0	21	0	0		0	25	3	0		110	525
08:15 AM	14	30	7	0		14	0	3	0		2	25	0	0		0	20	4	0		119	415
08:30 AM	12	39	6	0		9	0	12	0		2	21	0	0		0	21	1	0		123	296
08:45 AM	22	55	3	0		8	0	12	0		5	34	0	0		0	27	7	0		173	173
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	88	220	28	0		56	0	48	0		20	136	0	0		0	108	28	0		**732**	
Heavy Trucks	0	20	0			0	0	0			8	4	0			0	4	4			**40**	
Pedestrians		52					36					16					16				**120**	
Bicycles	4	0	0			0	0	0			0	4	4			0	4	4			**20**	
Railroad																						
Stopped Buses																						

LOCATION: Harding Ave & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-009
DATE: 05/23/2019

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:15 PM - 04:30 PM



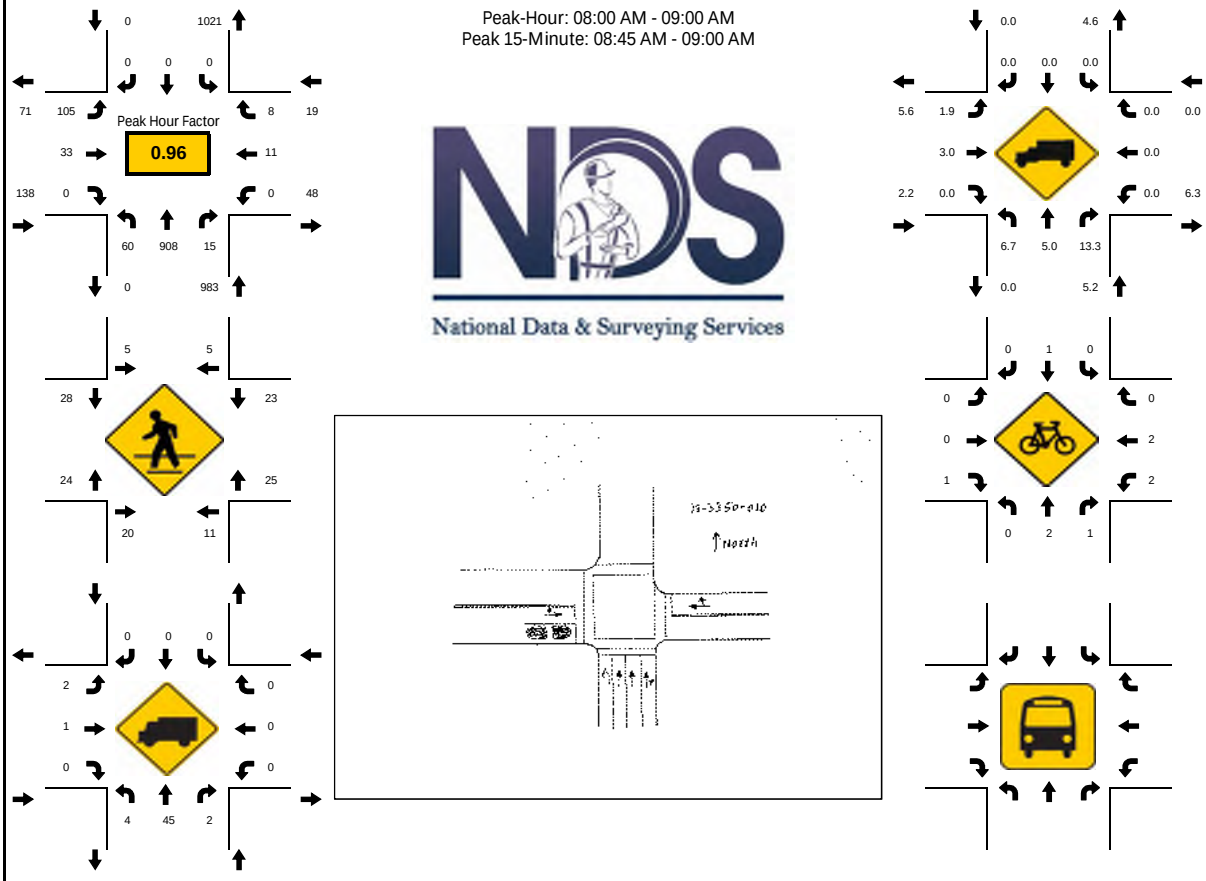
15-Min Count Period Beginning At	Harding Ave Northbound					Harding Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	55	86	9	0		5	0	14	0		5	40	0	0		0	40	13	0		267	1106
04:15 PM	78	95	20	0		6	0	13	0		1	34	0	0		0	42	5	0		294	1072
04:30 PM	75	69	18	0		6	0	15	0		1	38	0	0		0	36	10	0		268	1034
04:45 PM	77	74	20	0		8	0	14	0		6	41	0	0		0	30	7	0		277	1014
05:00 PM	31	71	20	0		15	0	9	0		3	38	0	0		0	40	6	0		233	995
05:15 PM	41	91	7	0		13	0	11	0		3	39	0	0		0	42	9	0		256	985
05:30 PM	43	86	6	0		10	0	11	0		3	38	0	0		0	43	8	0		248	947
05:45 PM	51	89	10	0		9	0	9	0		3	38	0	0		0	43	6	0		258	908
06:00 PM	36	72	7	0		7	0	10	0		6	50	0	0		0	25	10	0		223	845
06:15 PM	30	78	12	0		4	0	9	0		6	25	0	0		0	44	10	0		218	622
06:30 PM	34	73	9	0		5	0	11	0		6	29	0	0		0	30	12	0		209	404
06:45 PM	32	57	6	0		8	0	8	0		5	24	0	0		0	42	13	0		195	195

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	312	380	80	0		32	0	60	0		24	164	0	0		0	168	52	0		**1272**
Heavy Trucks	8	4	4			0	0	0			0	0	0			0	4	0			**20**
Pedestrians		76					80					24					28				**208**
Bicycles	4	4	0			0	4	4			0	4	0			4	12	4			**40**
Railroad																					
Stopped Buses																					

LOCATION: SR A1A/Collins Ave & 69th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 19-03350-010
DATE: 05/23/2019

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:45 AM - 09:00 AM

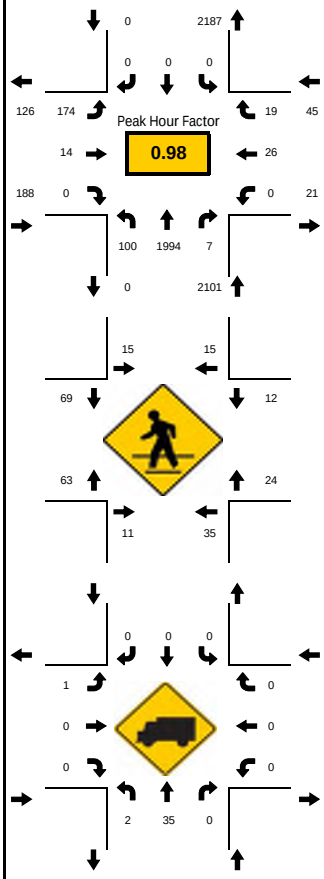


15-Min Count Period Beginning At	SR A1A/Collins Ave Northbound					SR A1A/Collins Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	11	155	0	0		0	0	0	0		18	4	0	0		0	1	2	0		191	866
07:15 AM	12	192	3	0		0	0	0	0		10	3	0	0		0	0	3	0		223	936
07:30 AM	10	166	2	0		0	0	0	0		16	3	0	0		0	0	2	0		199	999
07:45 AM	12	208	4	0		0	0	0	0		17	9	0	0		0	2	1	0		253	1095
08:00 AM	16	206	3	0		0	0	0	0		27	4	0	0		0	4	1	0		261	1140
08:15 AM	9	234	2	0		0	0	0	0		26	11	0	0		0	2	2	0		286	879
08:30 AM	15	237	4	0		0	0	0	0		25	9	0	0		0	2	3	0		295	593
08:45 AM	20	231	6	0		0	0	0	0		27	9	0	0		0	3	2	0		298	298
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	80	948	24	0		0	0	0	0		108	44	0	0		0	16	12	0		**1232**	
Heavy Trucks	8	56	4			0	0	0			4	4	0			0	0	0			**76**	
Pedestrians		64					28					76					72				**240**	
Bicycles	0	4	4			0	4	0			0	0	4			8	4	0			**28**	
Railroad																						
Stopped Buses																						

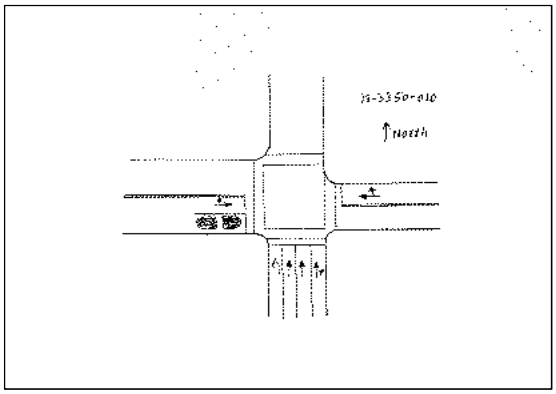
LOCATION: SR A1A/Collins Ave & 69th St
CITY/STATE: Miami Beach, FL

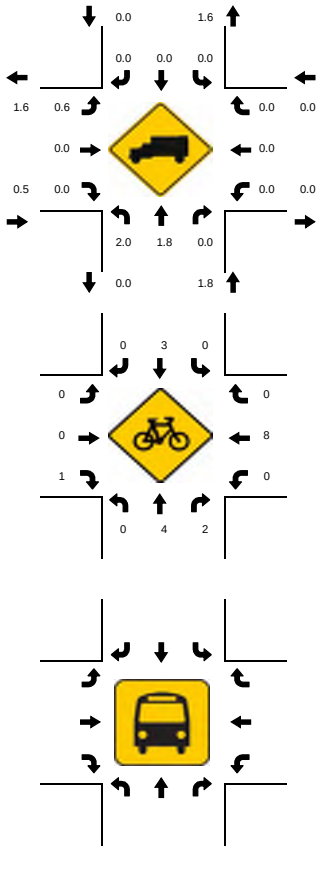
PROJECT ID: 19-03350-010
DATE: 05/23/2019

Peak-Hour: 04:15 PM - 05:15 PM
Peak 15-Minute: 04:45 PM - 05:00 PM



National Data & Surveying Services





15-Min Count Period Beginning At	SR A1A/Collins Ave Northbound					SR A1A/Collins Ave Southbound					69th St Eastbound					69th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	33	437	4	0		0	0	0	0		41	3	0	0		0	12	20	0		550	2317
04:15 PM	25	500	1	0		0	0	0	0		46	1	0	0		0	7	9	0		589	2334
04:30 PM	31	488	3	0		0	0	0	0		44	5	0	0		0	6	7	0		584	2290
04:45 PM	23	523	2	0		0	0	0	0		37	3	0	0		0	5	1	0		594	2307
05:00 PM	21	483	1	0		0	0	0	0		47	5	0	0		0	8	2	0		567	2266
05:15 PM	25	477	2	0		0	0	0	0		31	1	0	0		0	6	3	0		545	2238
05:30 PM	31	525	2	0		0	0	0	0		36	1	0	0		0	1	5	0		601	2182
05:45 PM	24	486	2	0		0	0	0	0		26	11	0	0		0	0	4	0		553	2045
06:00 PM	24	454	3	0		0	0	0	0		51	0	0	0		0	4	3	0		539	1937
06:15 PM	25	422	1	0		0	0	0	0		31	2	0	0		0	3	4	1		489	1398
06:30 PM	23	387	2	0		0	0	0	0		41	1	0	0		0	4	5	1		464	909
06:45 PM	26	383	1	0		0	0	0	0		28	0	0	0		0	5	2	0		445	445
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	124	2092	12	0		0	0	0	0		188	20	0	0		0	32	36	0		**2504**	
Heavy Trucks	4	44	0			0	0	0			4	0	0			0	0	0			**52**	
Pedestrians		84					56					164					44				**348**	
Bicycles	0	8	4			0	8	0			0	0	4			0	16	0			**40**	
Railroad Stopped Buses																						

Signal Timings

TOD Schedule Report

for 2636: Abbott Av&69 St

Print Date: 5/24/2019

Print Time: 10:54 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2636	Abbott Av&69 St	DOW-6	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
-	SBT	-	WBT	-	-	-	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 SBT	7 - 7 - 7	14 - 14 - 14	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 43 - 43	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 WBT	7 - 7 - 7	18 - 18 - 16	7 - 7 - 7	2.5 - 2.5 - 2.5	23 - 18 - 23	60 - 18 - 43	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 EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	23 - 18 - 23	60 - 18 - 43	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 2636: Abbott Av&69 St

Print Date: 5/24/2019

Print Time: 10:54 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SBT	3 -	4 WBT	5 -	6 -	7 -	8 EBT	Ring Offset	Offset
	8	70	0	32	0	26	0	0	0	26	0	40
0600	10	70	0	32	0	26	0	0	0	26	0	44
0700	1	90	0	47	0	31	0	0	0	31	0	70
1500	2	90	0	37	0	41	0	0	0	41	0	47
1930	10	70	0	32	0	26	0	0	0	26	0	44
2100	13	70	0	32	0	26	0	0	0	26	0	45
	3	90	0	43	0	35	0	0	0	35	0	33
	4	80	0	38	0	30	0	0	0	30	0	10
	5	120	0	73	0	35	0	0	0	35	0	11
	6	70	0	34	0	24	0	0	0	24	0	40
	7	70	0	34	0	24	0	0	0	24	0	40
	9	90	0	43	0	35	0	0	0	35	0	37
	11	70	0	34	0	24	0	0	0	24	0	42
	12	100	0	44	0	44	0	0	0	44	0	44
	14	90	0	47	0	31	0	0	0	31	0	55
	20	70	0	34	0	24	0	0	0	24	0	40
	22	80	0	38	0	30	0	0	0	30	0	71
	23	80	0	38	0	30	0	0	0	30	0	71

Local TOD Schedule

Time	Plan	DOW
0000	8	Su M T W Th F S
0600	10	Su M T W Th F
0700	1	M T W Th F
0800	10	Su S
1000	14	Su S
1500	2	M T W Th F
1630	12	Su S
1830	10	Su S
1930	10	M T W Th F
2100	13	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
0700	TOD OUTPUTS	------2-	M T W ThF
0930	TOD OUTPUTS	--------	M T W ThF

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
0700	TOD OUTPUTS	------2-	M T W ThF
0930	TOD OUTPUTS	--------	M T W ThF

*** Settings**

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

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

	Direction		SB	EB	WB	Ped Heads				N
Timing Phases	Head No.		2	8	4	P6	P2		P4	Movements/Display/Actuation
(2)	Dwell		G	R	R	W/F	W/F		DW	P2
	Clear to (4+8)		Y	R	R	DW	DW		DW	2
SB ABBOTT AV										P6
(RECALL)										
	Dwell									
	Clear to									
(4+8)	Dwell		R	G	G	DW	DW		W/F	P4 4
	Clear to (2)		R	Y	Y	DW	DW		DW	8
E/WB 69 STREET (ACTUATED)										
	Dwell									
	Clear to									
	Dwell									
	Clear to									
	Dwell									
	Clear to									
Flashing Operation			FY	FR	FR					Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	Abbott Av & 69 Street		
WILLIAM RIVERA PAZ	09/25/12			
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. HERNANDEZ	9/27/12	Date 11/13/12 By SUU	8	2636

Blank12

TOD Schedule Report

for 2637: Abbott Av&71 St

Print Date: 5/24/2019

Print Time: 10:53 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2637	Abbott Av&71 St	DOW-6	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
-	SBT	-	WBT	-	-	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 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 SBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	35 - 35 - 35	0 - 48 - 48	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 WBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	17 - 17 - 17	65 - 48 - 48	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 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 0	2 - 2 - 0	5 - 7 - 0	12 - 12 - 0	4	2
8 EBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	17 - 17 - 17	65 - 48 - 48	4	2.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4--78
External Permit 0	-2-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 2637: Abbott Av&71 St

Print Date: 5/24/2019

Print Time: 10:53 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SBT	3 -	4 WBT	5 -	6 -	7 WBL	8 EBT	Ring Offset	Offset
	8	70	0	32	0	26	0	0	0	26	0	28
0600	10	70	0	32	0	26	0	0	0	26	0	29
0700	1	90	0	47	0	31	0	0	0	31	0	57
1330	3	90	0	42	0	36	0	0	0	36	0	3
1500	2	90	0	45	0	33	0	0	0	33	0	44
1930	10	70	0	32	0	26	0	0	0	26	0	29
2100	13	70	0	30	0	28	0	0	0	28	0	28
	4	80	0	37	0	31	0	0	0	31	0	65
	5	120	0	72	0	36	0	0	0	36	0	109
	6	70	0	30	0	28	0	0	0	28	0	20
	7	70	0	30	0	28	0	0	0	28	0	20
	9	90	0	39	0	39	0	0	**	39	0	17
	11	70	0	30	0	28	0	0	0	28	0	20
	12	100	0	44	0	44	0	0	0	44	0	35
	14	90	0	46	0	32	0	0	**	32	0	41
	20	70	0	30	0	28	0	0	0	28	0	20
	22	80	0	37	0	31	0	0	0	31	0	54
	23	80	0	37	0	31	0	0	0	31	0	54
	26	110	0	67	0	31	0	0	0	31	0	30

Local TOD Schedule

Time	Plan	DOW
0000	8	Su M T W Th F S
0600	10	Su M T W Th F
0700	1	M T W Th F
0800	10	Su S
1000	14	Su S
1330	3	M T W Th F
1500	2	M T W Th F
1630	12	Su S
1830	10	Su S
1930	10	M T W Th F
2100	13	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---5----	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0700	TOD OUTPUTS	--------	M T W ThF
1930	TOD OUTPUTS	---5----	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---5----	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	---4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S
0700	TOD OUTPUTS	--------	M T W ThF
1000	TOD OUTPUTS	--------	Su S
1830	TOD OUTPUTS	---5----	Su S
1930	TOD OUTPUTS	---5----	M T W ThF

* Settings

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

SIGNAL OPERATING PLAN

	Direction		SB		WB		EB		Ped Heads				N
Timing Phases	Head No.		2		8		7/4	4	P6	P2	P4	P8	Movements/Display/Actuation
(2+6)	Dwell		G		R		R	R	W/F	W/F	DW	DW	P6 ↓ 2 P2
SB ABBOTT AV (RECALL)	Clear to (7+4)		Y		R		R	R	DW	DW	DW	DW	
	Clear to (4+8)		Y		R		R	R	DW	DW	DW	DW	
	Dwell												
	Clear to												
(7+4)	Dwell		R		G		<G/G	R	DW	DW	DW	W/F	P4 ← 4 7/4 ↓
WB 71 STREET (ACTUATED)	Clear to (4+8)		R		Y		<Y/G	R	DW	DW	DW	DW	
	Dwell												
	Clear to												
(4+8)	Dwell		R		G		G	G	DW	DW	W/F	W/F	P4 4 ← 7/4 ↓ 8 → P8
E/WB 71 STREET (RECALL)	Clear to (2+6)		R		R		Y	Y	DW	DW	DW	DW	
	Dwell												
	Clear to												
Flashing Operation			FY		FR		FR	FR					Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	ABBOTT AV & 71 STREET		
WILLIAM RIVERA-PAZ	10/20/2011			
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. HERNANDEZ	10/20/11	Date 12/16/2011 By SGI	5	2637

Blank12

TOD Schedule Report

for 2691: Collins Av&69 St

Print Date: 5/24/2019

Print Time: 10:41 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2691	Collins Av&69 St	DOW-6	TOD	[05] POST-AM PEAK	90	58	N/A	1	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	-	-	EBT	-	NBT	-	WBT
0	0	0	23	0	55	0	23

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 EBT	5 - 5 - 5	17 - 17 - 17	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 12 - 12	43 - 43 - 43	4	2
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 NBT	5 - 5 - 5	19 - 19 - 19	5 - 5 - 5	1 - 1 - 1	35 - 35 - 35	0 - 0 - 0	4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 WBT	5 - 5 - 5	17 - 17 - 17	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 12 - 12	43 - 43 - 43	4	2

Last In Service Date: 08/17/2010 11:14

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 2691: Collins Av&69 St

Print Date: 5/24/2019

Print Time: 10:41 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 -	3 -	4 EBT	5 -	6 NBT	7 -	8 WBT	Ring Offset	Offset
	1	90	0	0	0	23	0	55	0	23	0	33
0600	5	90	0	0	0	23	0	55	0	23	0	58
1600	3	180	0	0	0	36	0	132	0	36	0	82
1900	12	90	0	0	0	22	0	56	0	22	0	54
	2	140	0	0	0	36	0	92	0	36	0	7
	4	180	0	0	0	41	0	127	0	41	0	69
	6	100	0	0	0	23	0	65	0	23	0	34
	8	70	0	0	0	22	0	36	0	22	0	16
	10	70	0	0	0	22	0	36	0	22	0	51
	13	70	0	0	0	22	0	36	0	22	0	31
	14	90	0	0	0	22	0	56	0	22	0	83

Local TOD Schedule

Time	Plan	DOW
0000	13	Su S
0000	1	M T W Th F
0600	5	M T W Th F
1000	14	Su S
1600	3	M T W Th F
1630	6	Su S
1900	12	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	------2-	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0600	TOD OUTPUTS	--------	SuM T W ThF S
1900	TOD OUTPUTS	----4---	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	------2-	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S
0600	TOD OUTPUTS	--------	SuM T W ThF S
1900	TOD OUTPUTS	----4---	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

SIGNAL OPERATING PLAN

N

	Direction	NB	EB	WB	Ped Heads			Movements/Display/Actuation
Timing Phases	Head No.	6	8	4	P2	P8	P4	
6	Dwell	G	R	R	W/F	DW	DW	P2 6
NB	Clear to 4+8	Y	R	R	DW	DW	DW	
COLLINS AV	Clear to							
(RECALL)	Clear to							
	Dwell							
	Clear to							
(4+8)	Dwell	R	G	G	DW	W/F	W/F	P4 4 8 P8
E/WB	Clear to 6	R	Y	Y	DW	DW	DW	
69 Street	Clear to							
(ACTUATED)	Clear to							
	Dwell							
	Clear to							
	Dwell							
	Clear to							
	Dwell							
	Clear to							
Flashing Operation		Y	R	R				Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	Collins Av & 69 Street		
WILLIAM RIVERA PAZ	3/1/2011			
Checked	Date	Placed in Service	Phasing No.	Asset Number
[illegible]	[illegible]	Date 3/16/11	8	2691

S.V.O.

TOD Schedule Report

for 2692: Collins Av&71 St

Print Date: 5/24/2019

Print Time: 10:49 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2692	Collins Av&71 St	DOW-6	TOD	[05] POST-AM PEAK	90	73	N/A	1	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
PED	NBT	EBT	WBT	NBL	-	-	-
21	20	19	12	20	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 PED	4 - 4 - 4	16 - 16 - 16	0 - 0 - 0	0 - 0 - 0	20 - 20 - 20	20 - 20 - 20	0	0
2 NBT	4 - 4 - 4	10 - 10 - 10	4 - 4 - 4	1 - 1 - 1	16 - 16 - 16	0 - 0 - 0	4	2
3 EBT	4 - 4 - 4	15 - 15 - 15	7 - 7 - 7	1 - 1 - 1	12 - 12 - 12	33 - 21 - 21	4	2
4 WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	7 - 7 - 7	20 - 12 - 12	4	2
5 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	1 - 1 - 1	20 - 20 - 20	20 - 20 - 20	4	2
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	12345---
External Permit 0	12345---
External Permit 1	12345---
External Permit 2	12345---

Current TOD Schedule	Plan	Cycle	Green Time 1 PED	2 NBT	3 EBT	4 WBT	5 NBL	6 -	7 -	8 -	Ring Offset	Offset
	1	90	23	16	19	14	16	0	0	0	0	15
0600	5	90	21	20	19	12	20	0	0	0	0	73
1600	3	180	24	89	31	18	89	0	0	0	0	83
1900	12	90	20	26	19	7	26	0	0	0	0	60
	2	140	21	75	19	7	75	0	0	0	0	26
	4	180	20	102	30	10	102	0	0	0	0	80
	6	100	21	26	19	16	26	0	0	0	0	23
	13	70	29	9	19	**	9	0	0	0	0	26
	14	90	19	20	19	14	20	0	0	0	0	78

Local TOD Schedule

Time	Plan	DOW
0000	13	Su S
0000	1	M T W Th F
0600	5	M T W Th F
1000	14	Su S
1600	3	M T W Th F
1630	6	Su S
1900	12	M T W Th F

TOD Schedule Report

for 2692: Collins Av&71 St

Print Date: 5/24/2019

Print Time: 10:49 AM

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**

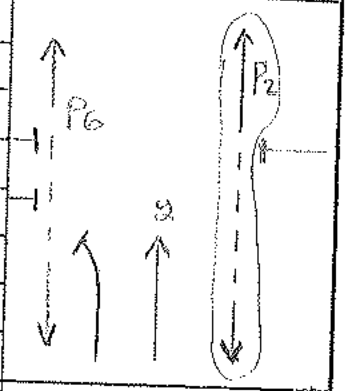
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

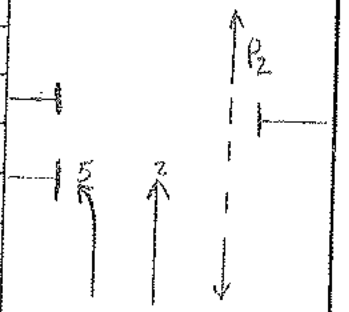
SIGNAL OPERATING PLAN

4 N

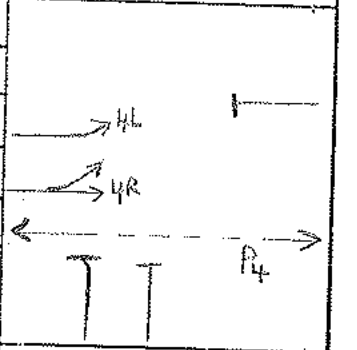
PHASE	INT	SIGNAL HEAD NUMBER								
		2	4L	5	8	4R	P2	P4	P6	
Φ2 1	R/W	G	R	R	R	R	W	DW	W	
	PED CLR	G	R	R	R	R	FDW	DW	FDW	
NBND	Φ2+5	G	R	R	R	R	DW	DW	DW	
RECALL										



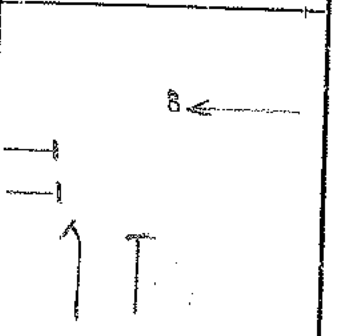
Φ2+5	R/W	G	R	←	R	R	W	DW	DW	
	PED CLR	G	R	←	R	R	FDW	DW	DW	
NBND & NBNDL	Φ4	Y	R	←	R	R	DW	DW	DW	
RECALL										



Φ4 3	R/W	R	←	R	R	G ←	DW	W	DW	
	PED CLR	R	←	R	R	G ←	DW	FDW	DW	
EBND	Φ8	R	Y	R	R	Y	DW	DW	DW	
	Φ2									
RECALL										



Φ8 4	R/W	R	R	R	G	R	DW	DW	DW	
	PED CLR	R	R	R	G	R	DW	DW	DW	
WBND	Φ2	R	R	R	Y	R	DW	DW	DW	
ACTUATED										



Drawn	Date
H FRANCILLON	9/2/94
Check	**Date**
F. BADRAMPOUR	9/2/94
Division Engineer	**Date**

METROPOLITAN DADE COUNTY
DEPARTMENT OF PUBLIC WORKS

ASSET NO: 2692

COLLINS AVE & 71 ST

Placed in Service		Phasing Number
Date: -194	By: MITCHELL	5

TOD Schedule Report

for 2725: Indian Creek Dr&71 St

Print Date: 5/24/2019

Print Time: 10:47 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2725	Indian Creek Dr&71 St	DOW-6	TOD	[04] HEAVY AM PEAK	110	31	N/A	1	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	-	-	-	EBT	NBT	SBT
16	27	0	0	0	49	23	20

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	12 - 12 - 20	20 - 0 - 20	3.7	2
2 WBT	4 - 4 - 4	23 - 23 - 23	4 - 4 - 4	1 - 1 - 1	30 - 30 - 30	0 - 0 - 0	4	2.5
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 EBT	4 - 4 - 4	23 - 23 - 23	4 - 4 - 4	1 - 1 - 1	30 - 30 - 30	0 - 0 - 0	4	2.5
7 NBT	4 - 4 - 4	18 - 18 - 18	7 - 7 - 7	2.5 - 2.5 - 2.5	22 - 20 - 16	45 - 0 - 38	4	2.5
8 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	4 - 2.5 - 4	22 - 25 - 18	45 - 0 - 35	4	2.5

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12---678
External Permit 0	-2---678
External Permit 1	-2---678
External Permit 2	-2---678

TOD Schedule Report

for 2725: Indian Creek Dr&71 St

Print Date: 5/24/2019

Print Time: 10:47 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 -	5 -	6 EBT	7 NBT	8 SBT	Ring Offset	Offset
	Free											
0600	5	100	5	29	0	0	0	41	25	16	0	89
0700	14	120	18	29	0	0	0	53	23	26	0	93
0915	4	110	16	27	0	0	0	49	23	20	0	31
1330	12	120	18	28	0	0	0	52	26	24	0	98
1400	12	120	18	28	0	0	0	52	26	24	0	98
1500	3	140	17	44	0	0	0	67	32	23	0	98
1645	2	140	17	42	0	0	0	65	40	17	0	7
2000	4	110	16	27	0	0	0	49	23	20	0	31
2300	Free											
	15	130	5	58	0	0	0	70	30	12	0	50
	22	140	15	45	0	0	0	66	40	16	0	7

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
0700	14	M T W Th F
0915	4	M T W Th F
1330	12	M T W Th F
1400	12	F
1500	3	M T W Th F
1645	2	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
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
1430	TOD OUTPUTS	--------	M T W ThF
1600	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
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
0700	TOD OUTPUTS	--------	Su S
1430	TOD OUTPUTS	--------	M T W ThF
1600	TOD OUTPUTS	--------	M T W ThF
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

SIGNAL OPERATING PLAN

	Direction		EB			WB	NB		SB		Ped Heads			N
Timing Phases	Head No.		1/6	6	6R	2	7/4	4	3/8	8R	P6	P2	P4	Movements/Display/Actuation
(1+6)	Dwell		G/<G	G	G>	R	R	R	R	R/G>	DW	DW	DW	
EB	Clear to	2+6/6P	G/<Y	G	Y>	R	R	R	R	R/Y>	DW	DW	DW	8R 1/6
		2+6	G/<Y	G	G>	R	R	R	R	R/Y>	DW	DW	DW	
71 STREET														6
(ACTUATED)														6R
(2+6+P6)	Dwell		G	G	R>	G	R	R	R	R	W/F	W/F	DW	
	Clear to	2+6	G	G	R>	G	R	R	R	R	DW	W/F	DW	P2 2
E/WB														
71 STREET														1/6
(ACUATED)														6 P6
(2+6)	Dwell		G	G	G>	G	R	R	R	R	DW	W/F	DW	
	Clear to	7	Y	Y	G>	Y	R	R	R	R	DW	DW	DW	P2 2
E/WB		8	Y	Y	Y>	Y	R	R	R	R	DW	DW	DW	
		2+6/6P	G	G	Y>	Y	R	R	R	R	DW	W/F	DW	1/6
71 STREET														6
(RECALL)														6R
7	Dwell		R	R	G>	R	<G/G	G	R	R	DW	DW	W/F	P4
	Clear to	8	R	R	Y>	R	Y	Y	R	R	DW	DW	DW	4
NB		2+6	R	R	G>	R	Y	Y	R	R	DW	DW	DW	
														7/4
Indian Creek Dr														
(ACTUATED)														6R
8	Dwell		R	R	R>	R	R	R	G/<G	G/G>	DW	DW	DW	
	Clear to	1+6	R	R	R>	R	R	R	Y	Y	DW	DW	DW	
SB		2+6/6P	R	R	R>	R	R	R	Y	Y	DW	DW	DW	
		2+6	R	R	R>	R	R	R	Y	Y	DW	DW	DW	
Dickens Av														8R 3/8
(ACTUATED)														
Flashing Operation			FY	FY	FY	FY	FR	FR	FR	FR				Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	Indian Creek Dr & 71 Street			
William Rivera-Paz	4/9/2014				
Checked	Date	Placed in Service		Phasing No.	Asset Number
H. Hernandez	6/3/14	Date 6/10/14	By Maint	13	2725

TOD Schedule Report

for 3544: Harding Av&71 St

Print Date: 5/24/2019

Print Time: 10:45 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3544	Harding Av&71 St	DOW-6	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	-	NBT	WBL	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 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 12 - 5	12 - 0 - 12	3	0
2 WBT	7 - 7 - 7	9 - 6 - 9	7 - 7 - 7	1 - 2.5 - 1	40 - 50 - 50	0 - 0 - 0	4	2.1
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	1 - 2.5 - 1	21 - 30 - 30	43 - 0 - 0	4	2.3
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 12 - 5	12 - 0 - 12	3	0
6 EBT	7 - 7 - 7	9 - 6 - 9	7 - 7 - 7	1 - 2.5 - 1	40 - 50 - 50	0 - 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 SBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 2.5 - 1	21 - 30 - 30	43 - 0 - 0	4	2.3

Last In Service Date: 03/17/2010 16:48

Permitted Phases

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

TOD Schedule Report

for 3544: Harding Av&71 St

Print Date: 5/24/2019

Print Time: 10:45 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 NBT	5 WBL	6 EBT	7 -	8 SBT	Ring Offset	Offset
	13	70	4	29	0	22	4	29	0	22	0	5
0030	8	70	4	29	0	22	4	29	0	22	0	61
0600	10	70	4	29	0	22	4	29	0	22	0	60
0700	1	90	6	34	0	35	6	34	0	35	0	41
1930	10	70	4	29	0	22	4	29	0	22	0	60
2100	13	70	4	29	0	22	4	29	0	22	0	5
	2	100	6	37	0	42	6	37	0	42	0	48
	3	90	4	31	0	40	4	31	0	40	0	26
	4	80	**	46	0	22	**	46	0	22	0	47
	5	120	4	79	0	22	4	79	0	22	0	6
	6	70	4	29	0	22	4	29	0	22	0	5
	7	70	4	29	0	22	4	29	0	22	0	5
	9	90	4	49	0	22	4	49	0	22	0	12
	11	70	4	29	0	22	4	29	0	22	0	5
	12	100	4	39	0	42	4	39	0	42	0	48
	14	90	4	31	0	40	4	31	0	40	0	81
	20	70	4	29	0	22	4	29	0	22	0	5
	22	80	4	30	0	31	4	30	0	31	0	19
	23	80	4	30	0	31	4	30	0	31	0	19

Local TOD Schedule

Time	Plan	DOW
0000	13	Su M T W Th F S
0030	8	M T W Th F
0100	8	Su S
0600	10	M T W Th F
0700	1	M T W Th F
1000	14	Su S
1830	10	Su S
1930	10	M T W Th F
2100	13	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---5----	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
2100	TOD OUTPUTS	---5----	SuM T W ThF S

Local Time of Day Function

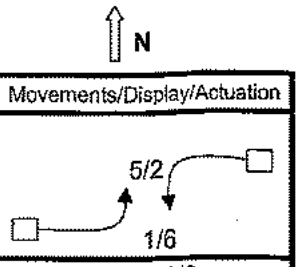
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---5----	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	---4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
1000	TOD OUTPUTS	--------	Su S
2100	TOD OUTPUTS	---5----	SuM T W ThF S

*** 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

SIGNAL OPERATING PLAN

Timing Phases	Direction / Head No.	EB 1/6	EB 6	WB 5/2	WB 2	SB 8	NB 4	Ped Heads P6	P2	P4	P8	Movements/Display/Actuation
(1+5)	Dwell	R/<G	R	R/<G	R	R	R	DW	DW	DW	DW	
E/WLT	start 1+6	R/<G	R	R/<Y	R	R	R	DW	DW	DW	DW	
71 STREET	2+5	R/<Y	R	R/<G	R	R	R	DW	DW	DW	DW	
(ACTUATED)	clear to 2+6	R/<Y	R	R/<Y	R	R	R	DW	DW	DW	DW	
(1+6)	Dwell	G/<G	G	R	R	R	R	W/F	DW	DW	DW	
EB	start 2+6	G/<Y	G	R	R	R	R	W/F	DW	DW	DW	
(ACTUATED)												
(2+5)	Dwell	R	R	G/<G	G	R	R	DW	W/F	DW	DW	
WB	2+6	R	R	G/<Y	G	R	R	DW	W/F	DW	DW	
(ACTUATED)	clear to							DW	DW	DW	DW	
(2+6)	Dwell	G	G	G	G	R	R	W/F	W/F	DW	DW	
E/WB	4+8	Y	Y	Y	Y	R	R	DW	DW	DW	DW	
71 STREET	start											
(RECALL)	clear to											
(4+8)	Dwell	R	R	R	R	G	G	DW	DW	W/F	W/F	
	1+5	R	R	R	R	Y	Y	DW	DW	DW	DW	
N/SB	clear 1+6	R	R	R	R	Y	Y	DW	DW	DW	DW	
	2+5	R	R	R	R	Y	Y	DW	DW	DW	DW	
HARDING AV	2+6	R	R	R	R	Y	Y	DW	DW	DW	DW	
	to											
(ACTUATED)												
		FY	FY	FY	FY	FR	FR					



Miami-Dade County Public Works Department

Drawn	Date	
William Rivera-Paz	10/19/2011	Harding Av & 71 Street

Checked	Date	Placed in Service	Phasing No.	Asset Number
H. Hernandez	10/20/11	Date 11/17/2011 By SGI	4	3544

TOD Schedule Report

for 6573: Harding Av&69 St

Print Date: 5/24/2019

Print Time: 10:44 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6573	Harding Av&69 St	DOW-6	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
XPD	WBT	SBT	NBT	-	EBT	-	-
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 XPD	4 - 4 - 4	20 - 20 - 20	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	4 - 4 - 4	16 - 16 - 16	7 - 7 - 7	3 - 3 - 3	20 - 30 - 30	0 - 0 - 0	4	2
3 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	10 - 30 - 30	0 - 0 - 0	4	2
4 NBT	4 - 4 - 4	20 - 20 - 20	7 - 7 - 7	3 - 3 - 3	24 - 30 - 30	0 - 0 - 0	4	2
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	16 - 16 - 16	7 - 7 - 7	3 - 3 - 3	20 - 30 - 30	0 - 0 - 0	4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	1234-6--
External Permit 0	1234-6--
External Permit 1	1234-6--
External Permit 2	1234-6--

Current TOD Schedule	Plan	Cycle	Green Time 1 XPD	2 WBT	3 SBT	4 NBT	5 -	6 EBT	7 -	8 -	Ring Offset	Offset
	Free											

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

TOD Schedule Report

for 6573: Harding Av&69 St

Print Date: 5/24/2019

Print Time: 10:44 AM

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

SIGNAL OPERATING PLAN

	Direction	EB	WB	SB		NB		Ped Heads				N
Timing Phases	Head No.	6	2	8L	8R	7/4	4	P2	P4	P6	P8	Movements/Display/Actuation
(2+6)	Dwell	G	G	R	R	R	R	W/F	DW	W/F	DW	
E/WB	Clear to 1	Y	Y	R	R	R	R	DW	DW	DW	DW	P2 2
	Clear to 3	Y	Y	R	R	R	R	DW	DW	DW	DW	
69 ST	Clear to 4	Y	Y	R	R	R	R	DW	DW	DW	DW	6 P6
	Clear to											
(ACTUATED)	Clear to											
	Dwell											
	Clear to											
	Clear to											
	Clear to											
	Clear to											
	Clear to											
X-PED	Dwell	R	R	R	R	R	R	W/F	W/F	W/F	W/F	
(1)	Clear to 3	R	R	R	R	R	R	DW	DW	DW	DW	
	Clear to 4	R	R	R	R	R	R	DW	DW	DW	DW	P8
	Clear to 2+6	R	R	R	R	R	R	DW	DW	DW	DW	
	Clear to											
(ACTUATED)	Clear to											
(3)	Dwell	R	R	<G/<G	G>/G>	R	R	DW	DW	DW	DW	
	Clear to 4	R	R	Y	Y	R	R	DW	DW	DW	DW	
SB	Clear to 2+6	R	R	Y	Y	R	R	DW	DW	DW	DW	
	Clear to 1	R	R	Y	Y	R	R	DW	DW	DW	DW	8L 8R
HARDING AV	Clear to											
	Clear to											
(ACTUATED)	Clear to											
(4)	Dwell	R	R	R	R	<G/G	G	DW	W/F	DW	DW	P4
	Clear to 2+6	R	R	R	R	Y	Y	DW	DW	DW	DW	4
NB	Clear to 1	R	R	R	R	Y	Y	DW	DW	DW	DW	
	Clear to 3	R	R	R	R	Y	Y	DW	DW	DW	DW	
HARDING AV	Clear to											
	Clear to											
(ACTUATED)	Clear to											
	Dwell											
	Clear to											
	Clear to											
	Clear to											
	Clear to											
	Clear to											
	Clear to											
Flashing Operation		FR	FR	FR	FR	FR	FR					Page 1 of 1

Miami-Dade County Public Works Department

Designed by:	Date	HARDING AV & 69 ST		
WILLIAM RIVERA-PAZ	8/8/2008			
Checked by:	Date	Placed in Service	Phasing No.	Asset Number
H. HERNANDEZ	8/12/08	Date 11/13/08 By CONST	1	6573

Blank12

TOD Schedule Report

for 6577: Indian Creek Dr&69 St

Print Date: 5/24/2019

Print Time: 10:42 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6577	Indian Creek Dr&69 St	DOW-6	TOD	[17] LATE NIGHT	90	71	N/A	1	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SET	-	WBT	-	NWT	-	EBT
0	50	0	26	0	50	0	26

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 SET	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	16 - 16 - 16	25 - 25 - 25	4	3.1
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 10 - 10	25 - 25 - 25	4	2.9
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 NWT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	16 - 16 - 16	25 - 25 - 25	4	3.1
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 EBT	5 - 5 - 5	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	10 - 10 - 10	25 - 25 - 25	4	2.9

Last In Service Date: unknown

Permitted Phases

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

TOD Schedule Report

for 6577: Indian Creek Dr&69 St

Print Date: 5/24/2019

Print Time: 10:42 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SET	3 -	4 WBT	5 -	6 NWT	7 -	8 EBT	Ring Offset	Offset
	14	90	0	50	0	26	0	50	0	26	0	74
0600	1	90	0	50	0	26	0	50	0	26	0	33
0930	17	90	0	50	0	26	0	50	0	26	0	71
1045	18	90	0	50	0	26	0	50	0	26	0	71
1300	15	90	0	50	0	26	0	50	0	26	0	71
1500	16	90	0	50	0	26	0	50	0	26	0	71
2100	5	60	0	20	0	26	0	20	0	26	0	31
2200	14	90	0	50	0	26	0	50	0	26	0	74
	2	140	0	94	0	32	0	94	0	32	0	66
	3	65	0	25	0	26	0	25	0	26	0	0
	4	80	0	34	0	32	0	34	0	32	0	31
	6	80	0	32	0	34	0	32	0	34	0	46
	7	90	0	24	0	52	0	24	0	52	0	48
	8	80	0	40	0	26	0	40	0	26	0	70
	9	90	0	34	0	42	0	34	0	42	0	49
	10	80	0	40	0	26	0	40	0	26	0	14
	11	80	0	40	0	26	0	40	0	26	0	46
	12	100	0	60	0	26	0	60	0	26	0	72
	13	80	0	40	0	26	0	40	0	26	0	70
	20	80	0	40	0	26	0	40	0	26	0	46
	22	80	0	40	0	26	0	40	0	26	0	9

Local TOD Schedule

Time	Plan	DOW
0000	13	Su S
0000	14	M T W Th F
0100	8	Su S
0600	10	Su S
0600	1	M T W Th F
0800	14	Su S
0900	5	Su S
0930	17	M T W Th F
1045	18	M T W Th F
1300	15	M T W Th F
1500	16	M T W Th F
1630	12	Su S
1830	10	Su S
2100	13	Su S
2100	5	M T W Th F
2200	14	M T W Th F

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

SIGNAL OPERATING PLAN

N

Timing Phases	Direction	EB	WB	SB	NB	Ped Heads				Movements/Display/Actuation
	Head No.	6	2	8	4				P8	
(2+6)	Dwell	G	G	R	R				DW	
	Clear to 4+8	Y	Y	R	R				DW	P2 2
N/SB	Clear to Pre-em	Y	Y	R	R				DW	
	Clear to									6 P6
(RECALL)	Clear to									
	Dwell									
	Clear to									
(4+8)	Dwell	R	R	G	G				W/F	
	Clear to (2+6)	R	R	Y	Y				DW	
E/WB	Clear to Pre-em	R	R	G	Y				DW	4 8 P8
	Clear to									
(ACTUATED)	Clear to									
Pre-Emp	Dwell	R	R	G	R				DW	
	Clear to (2+6)	R	R	Y	R				DW	
	Clear to									
	Dwell									
	Clear to									
	Dwell									
	Clear to									
Flashing Operation		FY	FY	FR	FR					Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date			
William rivera-Paz	9/1/2011	Indian Creek Dr & 69 St		
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. HERNANDEZ	9/6/11	Date 3/19/2012 By AGC	1	6577

Appendix D
Intersection Capacity Analysis Worksheets

Intersection Assignment - 71 NOBE (AM Peak Hour)

INTERSECTION	MOVEMENT	Raw Existing 2019	Peak Season Existing	Background		7140 Collins Hotel	7140 Collins Hotel (Commercial)	FUTURE W/O PROJECT	Project Trips			Pass-by	FUTURE With PROJECT
				Growth rate	*0.86%*				in	out	total		
		PCSF	1.03	*years*	*2*				20	51	71		
1. SR 934/ 71st Street and Indian Creek Drive/ Dickens Avenue	NBL	381	392	399		0	0	399	0%	10%	5	0	404
	NBT	200	206	210		0	0	210	0%	5%	3	0	213
	NBR	11	11	11		0	0	11	0%	0%	0	0	11
	SBL	3	3	3		0	0	3	15%	0%	3	0	6
	SBT	331	341	347		0	0	347	0%	0%	0	0	347
	SBR	443	456	464		0	0	464	0%	0%	0	0	464
	EBL	380	391	398		0	0	398	0%	0%	0	0	398
	EBT	587	605	615		0	0	615	15%	0%	3	0	618
	EBR	695	716	728		0	0	728	0%	0%	0	0	728
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	406	418	425		0	0	425	0%	5%	3	0	428
	WBR	16	16	16		0	0	16	0%	5%	3	0	19
TOTAL		3453	3555	3616		0	0.00	3616	30%	25%	20	0	3636
2. SR 934/71st Street and Byron Avenue	NBL	9	9	9		0	0	9	0%	10%	5	3	14
	NBT	22	23	23		0	0	23	0%	6%	3	0	26
	NBR	9	9	9		0	0	9	0%	32%	16	2	25
	SBL	13	13	13		0	0	13	0%	0%	0	0	13
	SBT	18	19	19		0	0	19	1%	0%	0	0	19
	SBR	26	27	27		0	0	27	0%	0%	0	0	27
	EBL	155	160	163		0	0	163	0%	0%	0	0	163
	EBT	369	380	387		0	0	387	0%	0%	0	0	387
	EBR	49	50	51		0	0	51	30%	0%	6	0	57
	WBL	13	13	13		0	0	13	33%	0%	7	0	20
	WBT	354	365	371		0	0	371	0%	0%	0	0	371
	WBR	16	16	16		0	0	16	0%	0%	0	0	16
TOTAL		1053	1084	1101		0	0.00	1101	64%	48%	37	5	1138
3. SR 934/ 71st Street and SR A1A/ Abbott Avenue	NBL	0	0	0		0	0	0	0%	0%	0	0	0
	NBT	0	0	0		0	0	0	0%	0%	0	0	0
	NBR	0	0	0		0	0	0	0%	0%	0	0	0
	SBL	30	31	32		0	0	32	0%	0%	0	0	32
	SBT	2091	2154	2191		0	0	2191	0%	0%	0	0	2191
	SBR	220	227	231		0	0	231	31%	0%	6	0	237
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	290	299	304		0	0	304	0%	32%	16	0	320
	EBR	70	72	73		0	0	73	0%	0%	0	0	73
	WBL	43	44	45		0	0	45	0%	0%	0	0	45
	WBT	117	121	123		0	0	123	2%	0%	0	0	123
	WBR	0	0	0		0	0	0	0%	0%	0	0	0
TOTAL		2861	2948	2999		0	0.00	2999	33%	32%	22	0	3021
4. SR 934/71st Street and Harding Avenue	NBL	39	40	41		0	0	41	0%	0%	0	0	41
	NBT	108	111	113		0	0	113	0%	0%	0	0	113
	NBR	28	29	30		0	0	30	0%	0%	0	0	30
	SBL	8	8	8		0	0	8	0%	0%	0	0	8
	SBT	37	38	39		0	0	39	0%	0%	0	0	39
	SBR	13	13	13		0	0	13	1%	0%	0	0	13
	EBL	51	53	54		0	0	54	0%	1%	1	0	55
	EBT	228	235	239		0	0	239	0%	31%	16	0	255
	EBR	31	32	33		0	0	33	0%	0%	0	0	33
	WBL	16	16	16		0	0	16	0%	0%	0	0	16
	WBT	135	139	141		0	0	141	1%	0%	0	0	141
	WBR	9	9	9		0	0	9	0%	0%	0	0	9
TOTAL		703	723	736		0	0.00	736.00	2%	32%	17	0	753
5. SR 934/71st Street and SR A1A/Collins Avenue	NBL	127	131	133		0	0	133	1%	0%	0	0	133
	NBT	891	918	934		0	0	934	0%	0%	0	0	934
	NBR	3	3	3		0	0	3	0%	0%	0	0	3
	SBL	0	0	0		0	0	0	0%	0%	0	0	0
	SBT	0	0	0		0	0	0	0%	0%	0	0	0
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	253	261	266		0	0	266	0%	31%	16	0	282
	EBT	8	8	8		0	0	8	0%	0%	0	0	8
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	28	29	30		0	0	30	0%	0%	0	0	30
	WBR	17	18	18		0	0	18	0%	0%	0	0	18
TOTAL		1327	1368	1392		0	0.00	1392.00	1%	31%	16	0	1408
6. 69th Street and Indian Creek Drive	NBL	2	2	2		0	0	2	0%	0%	0	0	2
	NBT	559	576	586		0	0	586	0%	0%	0	0	586
	NBR	3	3	3		0	0	3	0%	0%	0	0	3
	SBL	144	148	151		0	0	151	0%	0%	0	0	151
	SBT	1228	1265	1287		0	0	1287	0%	0%	0	0	1287
	SBR	1	1	1		0	0	1	0%	0%	0	0	1
	EBL	3	3	3		0	0	3	0%	0%	0	0	3
	EBT	0	0	0		0	0	0	0%	0%	0	0	0
	EBR	5	5	5		0	0	5	0%	0%	0	0	5
	WBL	9	9	9		0	0	9	0%	6%	3	0	12
	WBT	0	0	0		0	0	0	0%	0%	0	0	0
	WBR	45	46	47		0	0	47	0%	15%	8	0	55
TOTAL		1999	2058	2094		0	0.00	2094.00	0%	21%	11	0	2105

Intersection Assignment - 71 NOBE (AM Peak Hour)

INTERSECTION	MOVEMENT	Raw Existing 2019	Peak Season Existing	Background		7140 Collins Hotel	7140 Collins Hotel (Commercial)	FUTURE W/O PROJECT	Project Trips			Pass-by	FUTURE With PROJECT
				Growth rate	*0.86%*				in	out	total		
		PCSF	1.03	*years*	*2*				20	51	71		
7. 69th Street and SR A1A/Abbott Avenue	NBL	0	0	0		0	0	0	0%	0%	0	0	0
	NBT	0	0	0		0	0	0	0%	0%	0	0	0
	NBR	0	0	0		0	0	0	0%	0%	0	0	0
	SBL	47	48	49		0	0	49	0%	0%	0	0	49
	SBT	2041	2102	2138		0	0	2138	0%	0%	0	0	2138
	SBR	10	10	10		0	0	10	0%	0%	0	0	10
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	61	63	64		0	0	64	0%	0%	0	0	64
	EBR	163	168	171		0	0	171	0%	31%	16	0	187
	WBL	148	152	155		0	0	155	0%	0%	0	0	155
	WBT	39	40	41		0	0	41	23%	0%	5	0	46
	WBR	0	0	0		0	0	0	0%	0%	0	0	0
TOTAL		2509	2583	2628		0	0.00	2628.00	23%	31%	20	0	2648
8. 69th Street and Harding Avenue	NBL	58	60	61		0	0	61	0%	0%	0	0	61
	NBT	152	157	160		0	0	160	0%	0%	0	0	160
	NBR	23	24	24		0	0	24	0%	0%	0	0	24
	SBL	40	41	42		0	0	42	0%	0%	0	0	42
	SBT	0	0	0		0	0	0	0%	0%	0	0	0
	SBR	34	35	36		0	0	36	0%	0%	0	0	36
	EBL	9	9	9		0	0	9	0%	0%	0	0	9
	EBT	101	104	106		0	0	106	0%	0%	0	0	106
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	93	96	98		0	0	98	23%	0%	5	0	103
	WBR	15	15	15		0	0	15	0%	0%	0	0	15
TOTAL		525	541	551		0	0.00	551.00	23%	0%	5	0	556
9. 69th Street and Byron Avenue	NBL	2	2	2		0	0	2	0%	0%	0	0	2
	NBT	23	24	24		0	0	24	13%	0%	3	0	27
	NBR	18	19	19		0	0	19	0%	0%	0	0	19
	SBL	68	70	71		0	0	71	0%	31%	16	0	87
	SBT	5	5	5		0	0	5	0%	0%	0	0	5
	SBR	13	13	13		0	0	13	0%	21%	11	0	24
	EBL	4	4	4		0	0	4	0%	0%	0	0	4
	EBT	140	144	146		0	0	146	0%	0%	0	0	146
	EBR	1	1	1		0	0	1	0%	0%	0	0	1
	WBL	2	2	2		0	0	2	0%	0%	0	0	2
	WBT	37	38	39		0	0	39	0%	0%	0	0	39
	WBR	10	10	10		0	0	10	23%	0%	5	0	15
TOTAL		323	332	336		0	0.00	336.00	36%	52%	34	0	370
10. 69th Street and SR A1A/Collins Avenue	NBL	60	62	63		0	0	63	23%	0%	5	0	68
	NBT	908	935	951		0	0	951	1%	0%	0	0	951
	NBR	15	15	15		0	0	15	0%	0%	0	0	15
	SBL	0	0	0		0	0	0	0%	0%	0	0	0
	SBT	0	0	0		0	0	0	0%	0%	0	0	0
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	105	108	110		0	0	110	0%	0%	0	0	110
	EBT	33	34	35		0	0	35	0%	0%	0	0	35
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	11	11	11		0	0	11	0%	0%	0	0	11
	WBR	8	8	8		0	0	8	0%	0%	0	0	8
TOTAL		1140	1173	1193		0	0.00	1193.00	24%	0%	5	0	1198
11. Byron Avenue and Project Driveway	NBL	0	0	0		0	0	0	0%	0%	0	0	0
	NBT	40	41	42		0	0	42	0%	0%	0	0	42
	NBR	0	0	0		0	0	0	36%	0%	7	0	7
	SBL	0	0	0		0	0	0	64%	0%	13	0	13
	SBT	80	82	83		0	0	83	0%	0%	0	0	83
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	0	0	0		0	0	0	0%	0%	0	0	0
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	52%	27	0	27
	WBT	0	0	0		0	0	0	0%	0%	0	0	0
	WBR	0	0	0		0	0	0	0%	48%	24	0	24
TOTAL		120	123	125		0	0.00	125.00	100%	100%	71	0	196

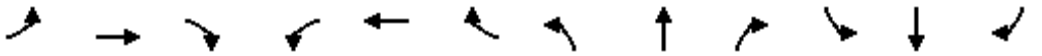
Intersection Assignment - 71 NOBE (PM Peak Hour)

INTERSECTION	MOVEMENT	Raw Existing 2019	Peak Season Existing	Background		7140 Collins Hotel	7140 Collins Hotel (Commercial)	FUTURE W/O PROJECT	Project Trips			Pass-by	FUTURE With PROJECT
				Growth rate	0.86%				in	out	Total		
		PCSF	1.03	years	2				41	29	70		
1. SR 934/ 71st Street and Indian Creek Drive/ Dickens Avenue	NBL	812	836	850		0	0	850	0%	10%	3	0	853
	NBT	234	241	245		2	3	250	0%	5%	1	0	251
	NBR	8	8	8		0	0	8	0%	0%	0	0	8
	SBL	4	4	4		0	0	4	15%	0%	6	0	10
	SBT	112	115	117		0	0	117	0%	0%	0	0	117
	SBR	407	419	426		0	0	426	0%	0%	0	0	426
	EBL	281	289	294		0	0	294	0%	0%	0	0	294
	EBT	514	529	538		13	13	564	15%	0%	6	0	570
	EBR	386	398	405		0	0	405	0%	0%	0	0	405
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	748	770	783		13	16	812	0%	5%	1	-2	811
	WBR	18	19	19		0	0	19	0%	5%	1	0	20
TOTAL		3524	3628	3689		28	32	3749	30%	25%	18	-2	3765
2. SR 934/71st Street and Byron Avenue	NBL	41	42	43		0	0	43	0%	10%	3	2	48
	NBT	54	56	57		0	0	57	0%	6%	2	0	59
	NBR	20	21	21		2	3	26	0%	32%	9	4	39
	SBL	4	4	4		0	0	4	0%	0%	0	0	4
	SBT	7	7	7		0	2	9	1%	0%	0	0	9
	SBR	77	79	80		0	0	80	0%	0%	0	0	80
	EBL	165	170	173		0	0	173	0%	0%	0	0	173
	EBT	346	356	362		13	13	388	0%	0%	0	-3	385
	EBR	23	24	24		0	0	24	30%	0%	12	3	39
	WBL	8	8	8		2	3	13	33%	0%	14	4	31
	WBT	493	508	517		13	16	546	0%	0%	0	-4	542
	WBR	14	14	14		0	0	14	0%	0%	0	0	14
TOTAL		1252	1289	1310		30	37		64%	48%	40	6	1423
3. SR 934/ 71st Street and SR A1A/ Abbott Avenue	NBL	0	0	0		0	0	0	0%	0%	0	0	0
	NBT	0	0	0		0	0	0	0%	0%	0	0	0
	NBR	0	0	0		0	0	0	0%	0%	0	0	0
	SBL	32	33	34		0	0	34	0%	0%	0	0	34
	SBT	1410	1452	1477		0	4	1481	0%	0%	0	0	1481
	SBR	323	333	339		0	0	339	31%	0%	13	0	352
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	300	309	314		15	16	345	0%	32%	9	1	355
	EBR	48	49	50		0	0	50	0%	0%	0	0	50
	WBL	37	38	39		7	3	49	0%	0%	0	0	49
	WBT	212	218	222		15	19	256	2%	0%	1	0	257
	WBR	0	0	0		0	0	0	0%	0%	0	0	0
TOTAL		2362	2432	2475		37	42		33%	32%	23	1	2578
4. SR 934/71st Street and Harding Avenue	NBL	78	80	81		0	0	81	0%	0%	0	0	81
	NBT	292	301	306		6	7	319	0%	0%	0	0	319
	NBR	57	59	60		0	0	60	0%	0%	0	0	60
	SBL	10	10	10		0	0	10	0%	0%	0	0	10
	SBT	21	22	22		6	7	35	0%	0%	0	0	35
	SBR	10	10	10		22	22	54	1%	0%	0	0	54
	EBL	55	57	58		15	16	89	0%	1%	0	0	89
	EBT	260	268	273		0	0	273	0%	31%	9	1	283
	EBR	40	41	42		0	0	42	0%	0%	0	0	42
	WBL	20	21	21		0	0	21	0%	0%	0	0	21
	WBT	152	157	160		0	0	160	1%	0%	0	0	160
	WBR	13	13	13		2	3	18	0%	0%	0	0	18
TOTAL		1008	1039	1056		51	55		2%	32%	10	1	1173
5. SR 934/71st Street and SR A1A/Collins Avenue	NBL	140	144	146		2	3	151	1%	0%	0	0	151
	NBT	2081	2143	2180		2	3	2185	0%	0%	0	0	2185
	NBR	11	11	11		0	0	11	0%	0%	0	0	11
	SBL	0	0	0		0	0	0	0%	0%	0	0	0
	SBT	0	0	0		0	0	0	0%	0%	0	0	0
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	305	314	319		0	0	319	0%	31%	9	1	329
	EBT	9	9	9		0	0	9	0%	0%	0	0	9
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	15	15	15		0	0	15	0%	0%	0	0	15
	WBR	31	32	33		0	0	33	0%	0%	0	0	33
TOTAL		2592	2668	2713		4	6		1%	31%	9	1	2733
6. 69th Street and Indian Creek Drive	NBL	1	1	1		0	0	1	0%	0%	0	0	1
	NBT	874	900	916		2	3	921	0%	0%	0	0	921
	NBR	4	4	4		0	0	4	0%	0%	0	0	4
	SBL	100	103	105		0	0	105	0%	0%	0	0	105
	SBT	563	580	590		0	3	593	0%	0%	0	0	593
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	0	0	0		0	0	0	0%	0%	0	0	0
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	17	18	18		0	0	18	0%	6%	2	0	20
	WBT	4	4	4		0	0	4	0%	0%	0	0	4
	WBR	142	146	149		0	0	149	0%	15%	4	0	153
TOTAL		1705	1756	1787		2	6		0%	21%	6	0	1801

Intersection Assignment - 71 NOBE (PM Peak Hour)

INTERSECTION	MOVEMENT	Raw Existing 2019	Peak Season Existing	Background		7140 Collins Hotel	7140 Collins Hotel (Commercial)	FUTURE W/O PROJECT	Project Trips			Pass-by	FUTURE With PROJECT
				Growth rate	0.86%				in	out	Total		
		PCSF	1.03	years	2				41	29	70		
7. 69th Street and SR A1A/Abbott Avenue	NBL	0	0	0		0	0	0	0%	0%	0	0	0
	NBT	0	0	0		0	0	0	0%	0%	0	0	0
	NBR	0	0	0		0	0	0	0%	0%	0	0	0
	SBL	81	83	84		0	0	84	0%	0%	0	0	84
	SBT	1327	1367	1391		7	7	1405	0%	0%	0	0	1405
	SBR	34	35	36		0	0	36	0%	0%	0	0	36
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	95	98	100		0	0	100	0%	0%	0	0	100
	EBR	28	29	30		0	0	30	0%	31%	9	0	39
	WBL	198	204	208		6	7	221	0%	0%	0	0	221
	WBT	224	231	235		0	0	235	23%	0%	9	0	244
	WBR	0	0	0		0	0	0	0%	0%	0	0	0
TOTAL		1987	2047	2084		13	14		23%	31%	18	0	2129
8. 69th Street and Harding Avenue	NBL	285	294	299		0	0	299	0%	0%	0	0	299
	NBT	324	334	340		0	0	340	0%	0%	0	0	340
	NBR	67	69	70		0	0	70	0%	0%	0	0	70
	SBL	25	26	26		0	0	26	0%	0%	0	0	26
	SBT	0	0	0		0	0	0	0%	0%	0	0	0
	SBR	56	58	59		0	0	59	0%	0%	0	0	59
	EBL	13	13	13		0	0	13	0%	0%	0	0	13
	EBT	153	158	161		0	0	161	0%	0%	0	0	161
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	148	152	155		0	0	155	23%	0%	9	0	164
	WBR	35	36	37		0	0	37	0%	0%	0	0	37
TOTAL		1106	1140	1160		0	0		23%	0%	9	0	1169
9. 69th Street and Byron Avenue	NBL	12	12	12		0	0	12	0%	0%	0	0	12
	NBT	71	73	74		2	3	79	13%	0%	5	0	84
	NBR	23	24	24		0	0	24	0%	0%	0	0	24
	SBL	14	14	14		0	0	14	0%	31%	9	0	23
	SBT	5	5	5		2	5	12	0%	0%	0	0	12
	SBR	10	10	10		0	0	10	0%	21%	6	0	16
	EBL	15	15	15		0	0	15	0%	0%	0	0	15
	EBT	71	73	74		0	0	74	0%	0%	0	0	74
	EBR	7	7	7		0	0	7	0%	0%	0	0	7
	WBL	5	5	5		0	0	5	0%	0%	0	0	5
	WBT	153	158	161		0	0	161	0%	0%	0	0	161
	WBR	134	138	140		0	0	140	23%	0%	9	0	149
TOTAL		520	534	541		4	8		36%	52%	30	0	583
10. 69th Street and SR A1A/Collins Avenue	NBL	100	103	105		0	0	105	23%	0%	9	0	114
	NBT	1994	2054	2089		4	6	2099	1%	0%	0	0	2099
	NBR	7	7	7		0	0	7	0%	0%	0	0	7
	SBL	0	0	0		0	0	0	0%	0%	0	0	0
	SBT	0	0	0		0	0	0	0%	0%	0	0	0
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	174	179	182		0	0	182	0%	0%	0	0	182
	EBT	14	14	14		0	0	14	0%	0%	0	0	14
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	0%	0	0	0
	WBT	26	27	27		0	0	27	0%	0%	0	0	27
	WBR	19	20	20		0	0	20	0%	0%	0	0	20
TOTAL		2334	2404	2444		4	6		24%	0%	10	0	2464
11. Byron Avenue and Project Driveway	NBL	0	0	0		0	0	0	0%	0%	0	0	0
	NBT	115	118	120		0	0	120	0%	0%	0	-19	101
	NBR	0	0	0		0	0	0	36%	0%	15	19	34
	SBL	0	0	0		0	0	0	64%	0%	26	7	33
	SBT	38	39	40		0	0	40	0%	0%	0	-7	33
	SBR	0	0	0		0	0	0	0%	0%	0	0	0
	EBL	0	0	0		0	0	0	0%	0%	0	0	0
	EBT	0	0	0		0	0	0	0%	0%	0	0	0
	EBR	0	0	0		0	0	0	0%	0%	0	0	0
	WBL	0	0	0		0	0	0	0%	52%	15	8	23
	WBT	0	0	0		0	0	0	0%	0%	0	0	0
	WBR	0	0	0		0	0	0	0%	48%	14	22	36
TOTAL		153	157	160		0	0		100%	100%	70	30	260

Existing Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	391	605	716	0	418	16	392	206	11	3	341	456
Future Volume (veh/h)	391	605	716	0	418	16	392	206	11	3	341	456
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.89	1.00		0.84	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.97	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	1683	1683	1683	0	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	403	624	738	0	431	16	404	212	11	3	352	470
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	420	765	864	0	783	29	531	268	14	3	355	496
Arrive On Green	0.20	0.60	0.60	0.00	0.34	0.34	0.17	0.17	0.17	0.21	0.21	0.21
Sat Flow, veh/h	1603	1683	1367	0	3162	114	3110	1569	81	14	1668	1311
Grp Volume(v), veh/h	403	624	738	0	223	224	404	0	223	355	0	470
Grp Sat Flow(s),veh/h/ln	1603	1683	1367	0	1599	1593	1555	0	1651	1683	0	1311
Q Serve(g_s), s	18.3	34.7	54.5	0.0	13.6	13.7	14.9	0.0	15.5	25.3	0.0	25.5
Cycle Q Clear(g_c), s	18.3	34.7	54.5	0.0	13.6	13.7	14.9	0.0	15.5	25.3	0.0	25.5
Prop In Lane	1.00		1.00	0.00		0.07	1.00		0.05	0.01		1.00
Lane Grp Cap(c), veh/h	420	765	864	0	407	405	531	0	282	358	0	496
V/C Ratio(X)	0.96	0.82	0.85	0.00	0.55	0.55	0.76	0.00	0.79	0.99	0.00	0.95
Avail Cap(c_a), veh/h	420	765	864	0	407	405	583	0	310	358	0	496
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.97	0.00	0.97	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.2	19.8	13.5	0.0	34.1	34.2	47.4	0.0	47.7	47.2	0.0	37.4
Incr Delay (d2), s/veh	33.0	9.4	10.5	0.0	5.3	5.3	4.8	0.0	11.1	45.6	0.0	27.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	13.5	24.3	0.0	5.6	5.6	6.1	0.0	7.3	15.0	0.0	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.2	29.2	24.0	0.0	39.4	39.5	52.3	0.0	58.8	92.8	0.0	65.2
LnGrp LOS	E	C	C	A	D	D	D	A	E	F	A	E
Approach Vol, veh/h		1765			447			627			825	
Approach Delay, s/veh		35.0			39.4			54.6			77.1	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	24.0	37.0		27.0		61.0		32.0				
Change Period (Y+Rc), s	* 5.7	6.5		6.5		6.5		6.5				
Max Green Setting (Gmax), s	* 18	28.5		22.5		52.5		25.5				
Max Q Clear Time (g_c+I1), s	20.3	15.7		17.5		56.5		27.5				
Green Ext Time (p_c), s	0.0	0.8		1.1		0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		48.4	
HCM 6th LOS		D	

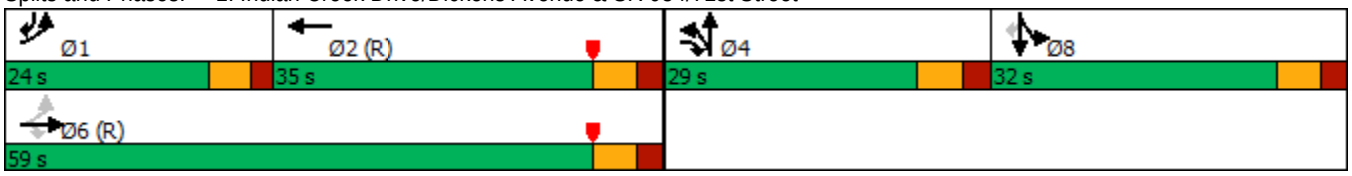
Notes

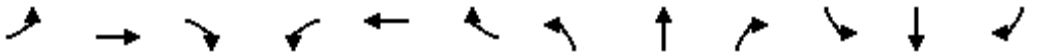
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Phase Number	1	2	4	6	8
Movement	EBL	WBT	NBTL	EBTL	SBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	24	35	29	59	32
Maximum Split (%)	20.0%	29.2%	24.2%	49.2%	26.7%
Minimum Split (s)	10.7	35	29	35.5	24.8
Yellow Time (s)	3.7	4	4	4	4
All-Red Time (s)	2	2.5	2.5	2.5	2.5
Minimum Initial (s)	5	4	7	4	7
Vehicle Extension (s)	2	1	2.5	1	4
Minimum Gap (s)	2	1	2.5	1	4
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	4	4	
Flash Dont Walk (s)		23	18	23	
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	40.5	64.5	99.5	40.5	8.5
End Time (s)	64.5	99.5	8.5	99.5	40.5
Yield/Force Off (s)	58.8	93	2	93	34
Yield/Force Off 170(s)	58.8	70	104	70	34
Local Start Time (s)	67.5	91.5	6.5	67.5	35.5
Local Yield (s)	85.8	0	29	0	61
Local Yield 170(s)	85.8	97	11	97	61

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 93 (78%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	

Splits and Phases: 1: Indian Creek Drive/Dickens Avenue & SR 934/71st Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	529	398	0	770	19	836	241	8	4	115	419
Future Volume (veh/h)	289	529	398	0	770	19	836	241	8	4	115	419
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.83	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.97	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	1683	1683	1683	0	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	292	534	402	0	778	19	844	243	8	4	116	423
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	293	776	1015	0	926	23	877	455	15	7	191	325
Arrive On Green	0.16	0.61	0.61	0.00	0.39	0.39	0.28	0.28	0.28	0.12	0.12	0.12
Sat Flow, veh/h	1603	1683	1329	0	3205	76	3110	1614	53	56	1625	1259
Grp Volume(v), veh/h	292	534	402	0	399	398	844	0	251	120	0	423
Grp Sat Flow(s),veh/h/ln	1603	1683	1329	0	1599	1597	1555	0	1667	1681	0	1259
Q Serve(g_s), s	17.3	29.7	13.1	0.0	31.6	31.6	37.4	0.0	17.8	9.5	0.0	16.5
Cycle Q Clear(g_c), s	17.3	29.7	13.1	0.0	31.6	31.6	37.4	0.0	17.8	9.5	0.0	16.5
Prop In Lane	1.00		1.00	0.00		0.05	1.00		0.03	0.03		1.00
Lane Grp Cap(c), veh/h	293	776	1015	0	474	474	877	0	470	198	0	325
V/C Ratio(X)	1.00	0.69	0.40	0.00	0.84	0.84	0.96	0.00	0.53	0.61	0.00	1.30
Avail Cap(c_a), veh/h	293	776	1015	0	474	474	878	0	470	198	0	325
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.89	0.00	0.89	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.0	20.4	4.5	0.0	39.4	39.4	49.5	0.0	42.5	58.7	0.0	53.6
Incr Delay (d2), s/veh	51.7	4.9	1.2	0.0	16.3	16.3	20.1	0.0	0.8	6.1	0.0	157.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	11.4	7.9	0.0	13.9	13.9	16.9	0.0	7.5	4.4	0.0	25.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.7	25.3	5.7	0.0	55.7	55.7	69.6	0.0	43.3	64.8	0.0	210.6
LnGrp LOS	F	C	A	A	E	E	E	A	D	E	A	F
Approach Vol, veh/h		1228			797			1095			543	
Approach Delay, s/veh		33.0			55.7			63.6			178.4	
Approach LOS		C			E			E			F	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	23.0	48.0		46.0		71.0		23.0				
Change Period (Y+Rc), s	* 5.7	6.5		6.5		6.5		6.5				
Max Green Setting (Gmax), s	* 17	41.5		39.5		64.5		16.5				
Max Q Clear Time (g_c+I1), s	19.3	33.6		39.4		31.7		18.5				
Green Ext Time (p_c), s	0.0	1.3		0.0		1.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		68.6	
HCM 6th LOS		E	

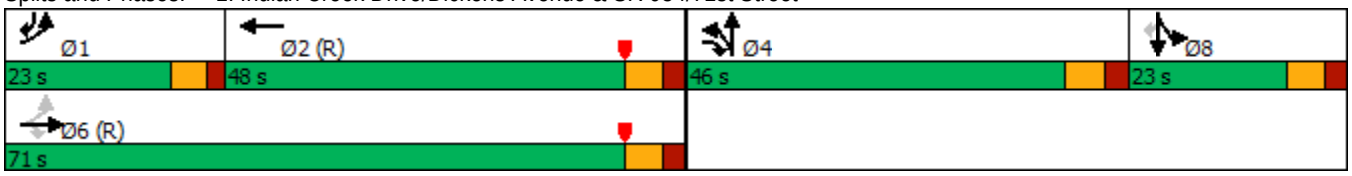
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Phase Number	1	2	4	6	8
Movement	EBL	WBT	NBTL	EBTL	SBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	23	48	46	71	23
Maximum Split (%)	16.4%	34.3%	32.9%	50.7%	16.4%
Minimum Split (s)	10.7	33.5	28.5	33.5	13.5
Yellow Time (s)	3.7	4	4	4	4
All-Red Time (s)	2	2.5	2.5	2.5	2.5
Minimum Initial (s)	5	4	7	4	7
Vehicle Extension (s)	2	1	2.5	1	4
Minimum Gap (s)	2	1	2.5	1	4
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	4	4	
Flash Dont Walk (s)		23	18	23	
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	82.5	105.5	13.5	82.5	59.5
End Time (s)	105.5	13.5	59.5	13.5	82.5
Yield/Force Off (s)	99.8	7	53	7	76
Yield/Force Off 170(s)	99.8	124	35	124	76
Local Start Time (s)	75.5	98.5	6.5	75.5	52.5
Local Yield (s)	92.8	0	46	0	69
Local Yield 170(s)	92.8	117	28	117	69

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	140
Offset: 7 (5%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	

Splits and Phases: 1: Indian Creek Drive/Dickens Avenue & SR 934/71st Street



Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	160	380	50	13	365	16	9	23	9	13	19	27
Future Vol, veh/h	160	380	50	13	365	16	9	23	9	13	19	27
Conflicting Peds, #/hr	24	0	24	24	0	24	9	0	7	7	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	404	53	14	388	17	10	24	10	14	20	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	429	0	0	481	0	0	1253	1252	462	1244	1270	430
Stage 1	-	-	-	-	-	-	795	795	-	449	449	-
Stage 2	-	-	-	-	-	-	458	457	-	795	821	-
Critical Hdwy	4.12	-	-	4.12	-	-	5	5	5	5	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3	3	3	3	3	3
Pot Cap-1 Maneuver	1130	-	-	1082	-	-	339	340	761	342	333	786
Stage 1	-	-	-	-	-	-	425	485	-	671	723	-
Stage 2	-	-	-	-	-	-	663	716	-	425	471	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1104	-	-	1057	-	-	260	271	739	267	265	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	260	271	-	267	265	-
Stage 1	-	-	-	-	-	-	351	401	-	555	697	-
Stage 2	-	-	-	-	-	-	606	690	-	331	390	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.3	18.5	16.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	311	1104	-	-	1057	-	-	379
HCM Lane V/C Ratio	0.14	0.154	-	-	0.013	-	-	0.166
HCM Control Delay (s)	18.5	8.9	-	-	8.5	-	-	16.4
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0.5	-	-	0	-	-	0.6

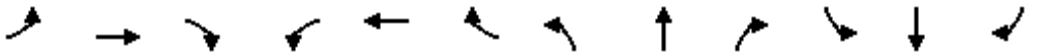
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	170	356	24	8	508	14	42	56	21	4	7	79
Future Vol, veh/h	170	356	24	8	508	14	42	56	21	4	7	79
Conflicting Peds, #/hr	66	0	41	41	0	66	20	0	13	13	0	20
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	181	379	26	9	540	15	45	60	22	4	7	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	621	0	0	446	0	0	1426	1434	446	1440	1440	634
Stage 1	-	-	-	-	-	-	795	795	-	632	632	-
Stage 2	-	-	-	-	-	-	631	639	-	808	808	-
Critical Hdwy	4.12	-	-	4.12	-	-	5	5	5	5	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3	3	3	3	3	3
Pot Cap-1 Maneuver	960	-	-	1114	-	-	283	281	773	279	279	640
Stage 1	-	-	-	-	-	-	425	485	-	527	586	-
Stage 2	-	-	-	-	-	-	528	581	-	418	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	900	-	-	1071	-	-	187	201	734	163	199	588
Mov Cap-2 Maneuver	-	-	-	-	-	-	187	201	-	163	199	-
Stage 1	-	-	-	-	-	-	326	372	-	395	545	-
Stage 2	-	-	-	-	-	-	434	540	-	269	367	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.1	0.1	40.1	14.8
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	224	900	-	-	1071	-	-	464
HCM Lane V/C Ratio	0.565	0.201	-	-	0.008	-	-	0.206
HCM Control Delay (s)	40.1	10	-	-	8.4	-	-	14.8
HCM Lane LOS	E	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	3.1	0.7	-	-	0	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	299	72	44	121	0	0	0	0	31	2154	227
Future Volume (veh/h)	0	299	72	44	121	0	0	0	0	31	2154	227
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.98		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	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	0	1683	1683	1683	1683	0				1683	1683	1683
Adj Flow Rate, veh/h	0	305	73	45	123	0				32	2198	232
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	441	318	167	441	0				38	2800	826
Arrive On Green	0.00	0.26	0.26	0.09	0.09	0.00				0.80	0.80	0.80
Sat Flow, veh/h	0	1683	1216	889	1683	0				64	4680	1381
Grp Volume(v), veh/h	0	305	73	45	123	0				839	1391	232
Grp Sat Flow(s),veh/h/ln	0	1683	1216	889	1683	0				1680	1532	1381
Q Serve(g_s), s	0.0	14.7	4.2	4.5	6.2	0.0				27.3	21.1	4.0
Cycle Q Clear(g_c), s	0.0	14.7	4.2	19.2	6.2	0.0				27.3	21.1	4.0
Prop In Lane	0.00		1.00	1.00		0.00				0.04		1.00
Lane Grp Cap(c), veh/h	0	441	318	167	441	0				1005	1833	826
V/C Ratio(X)	0.00	0.69	0.23	0.27	0.28	0.00				0.83	0.76	0.28
Avail Cap(c_a), veh/h	0	574	415	238	574	0				1005	1833	826
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.99	0.99	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	30.0	26.1	46.3	33.2	0.0				6.5	5.8	4.1
Incr Delay (d2), s/veh	0.0	1.3	0.1	0.3	0.1	0.0				8.2	3.0	0.8
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	0.0	6.0	1.2	1.1	2.6	0.0				6.4	4.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.2	26.2	46.7	33.3	0.0				14.6	8.9	4.9
LnGrp LOS	A	C	C	D	C	A				B	A	A
Approach Vol, veh/h		378			168						2462	
Approach Delay, s/veh		30.2			36.9						10.5	
Approach LOS		C			D						B	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		60.1		29.9				29.9				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 47		* 31				* 31				
Max Q Clear Time (g_c+I1), s		29.3		21.2				16.7				
Green Ext Time (p_c), s		7.3		0.2				0.6				

Intersection Summary		
HCM 6th Ctrl Delay		14.4
HCM 6th LOS		B

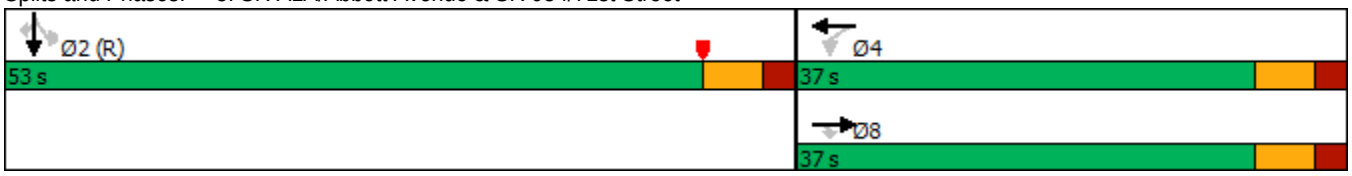
Notes

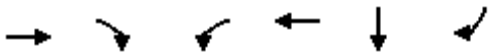
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	53	37	37
Maximum Split (%)	58.9%	41.1%	41.1%
Minimum Split (s)	31.3	31.3	31.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	1	1
Minimum Gap (s)	1	1	1
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	7	7
Flash Dont Walk (s)	18	18	18
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	10.3	63.3	63.3
End Time (s)	63.3	10.3	10.3
Yield/Force Off (s)	57	4	4
Yield/Force Off 170(s)	39	76	76
Local Start Time (s)	43.3	6.3	6.3
Local Yield (s)	0	37	37
Local Yield 170(s)	72	19	19

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 57 (63%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 3: SR A1A/Abbott Avenue & SR 934/71st Street

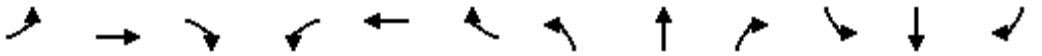




Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	305	73	45	123	2230	232
v/c Ratio	0.81	0.24	0.29	0.33	0.80	0.25
Control Delay	48.4	26.8	39.8	36.9	17.6	2.3
Queue Delay	1.3	0.0	0.0	0.0	0.0	0.0
Total Delay	49.7	26.8	39.8	36.9	17.6	2.3
Queue Length 50th (ft)	157	32	22	61	350	1
Queue Length 95th (ft)	232	62	62	124	#510	35
Internal Link Dist (ft)	238			196	251	
Turn Bay Length (ft)		100	95			215
Base Capacity (vph)	514	415	213	514	2795	928
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	78	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.18	0.21	0.24	0.80	0.25

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	309	49	38	218	0	0	0	0	33	1452	333
Future Volume (veh/h)	0	309	49	38	218	0	0	0	0	33	1452	333
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	0.98		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	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	0	1683	1683	1683	1683	0				1683	1683	1683
Adj Flow Rate, veh/h	0	340	54	42	240	0				36	1596	366
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	460	322	158	460	0				58	2725	814
Arrive On Green	0.00	0.27	0.27	0.09	0.09	0.00				0.78	0.78	0.78
Sat Flow, veh/h	0	1683	1178	870	1683	0				98	4644	1388
Grp Volume(v), veh/h	0	340	54	42	240	0				613	1019	366
Grp Sat Flow(s),veh/h/ln	0	1683	1178	870	1683	0				1678	1532	1388
Q Serve(g_s), s	0.0	16.6	3.1	4.3	12.3	0.0				14.1	11.8	8.0
Cycle Q Clear(g_c), s	0.0	16.6	3.1	20.8	12.3	0.0				14.1	11.8	8.0
Prop In Lane	0.00		1.00	1.00		0.00				0.06		1.00
Lane Grp Cap(c), veh/h	0	460	322	158	460	0				985	1798	814
V/C Ratio(X)	0.00	0.74	0.17	0.27	0.52	0.00				0.62	0.57	0.45
Avail Cap(c_a), veh/h	0	612	428	236	612	0				985	1798	814
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.96	0.96	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	29.8	24.9	47.4	35.3	0.0				5.6	5.4	5.0
Incr Delay (d2), s/veh	0.0	2.0	0.1	0.3	0.3	0.0				3.0	1.3	1.8
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	0.0	6.8	0.9	1.0	5.5	0.0				3.8	2.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.8	25.0	47.7	35.7	0.0				8.6	6.7	6.8
LnGrp LOS	A	C	C	D	D	A				A	A	A
Approach Vol, veh/h		394			282						1998	
Approach Delay, s/veh		30.8			37.5						7.3	
Approach LOS		C			D						A	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		59.1		30.9				30.9				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 45		* 33				* 33				
Max Q Clear Time (g_c+I1), s		16.1		22.8				18.6				
Green Ext Time (p_c), s		5.3		0.4				0.7				

Intersection Summary												
HCM 6th Ctrl Delay			13.9									
HCM 6th LOS			B									

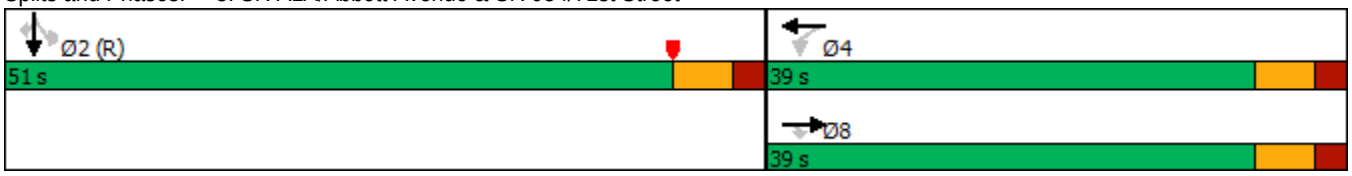
Notes

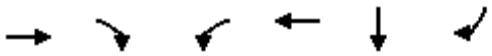
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	51	39	39
Maximum Split (%)	56.7%	43.3%	43.3%
Minimum Split (s)	31.3	31.3	31.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	1	1
Minimum Gap (s)	1	1	1
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	7	7
Flash Dont Walk (s)	18	18	18
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	89.3	50.3	50.3
End Time (s)	50.3	89.3	89.3
Yield/Force Off (s)	44	83	83
Yield/Force Off 170(s)	26	65	65
Local Start Time (s)	45.3	6.3	6.3
Local Yield (s)	0	39	39
Local Yield 170(s)	72	21	21

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 44 (49%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 3: SR A1A/Abbott Avenue & SR 934/71st Street

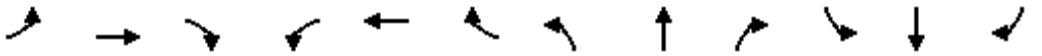




Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	340	54	42	240	1632	366
v/c Ratio	0.84	0.17	0.28	0.59	0.60	0.40
Control Delay	48.8	23.9	29.9	35.5	14.0	3.1
Queue Delay	9.5	0.0	0.0	1.2	0.2	0.0
Total Delay	58.2	23.9	29.9	36.8	14.2	3.1
Queue Length 50th (ft)	180	23	25	154	204	4
Queue Length 95th (ft)	252	47	m39	m186	308	49
Internal Link Dist (ft)	238			196	251	
Turn Bay Length (ft)		100	95			215
Base Capacity (vph)	548	429	205	548	2702	921
Starvation Cap Reductn	0	0	0	148	0	0
Spillback Cap Reductn	173	0	0	0	308	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.13	0.20	0.60	0.68	0.40

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	235	32	16	139	9	40	111	29	8	38	13
Future Volume (veh/h)	53	235	32	16	139	9	40	111	29	8	38	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.95	0.96		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	65	290	40	20	172	11	49	137	36	10	47	16
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	728	775	107	613	809	52	93	192	46	65	210	64
Arrive On Green	0.06	0.80	0.80	0.03	0.77	0.77	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1603	1293	178	1603	1403	90	214	927	221	95	1011	310
Grp Volume(v), veh/h	65	0	330	20	0	183	222	0	0	73	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	1472	1603	0	1493	1361	0	0	1416	0	0
Q Serve(g_s), s	1.4	0.0	5.8	0.5	0.0	3.1	8.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	5.8	0.5	0.0	3.1	13.7	0.0	0.0	3.8	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.06	0.22		0.16	0.14		0.22
Lane Grp Cap(c), veh/h	728	0	882	613	0	861	332	0	0	340	0	0
V/C Ratio(X)	0.09	0.00	0.37	0.03	0.00	0.21	0.67	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	763	0	882	685	0	861	568	0	0	577	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.48	0.99	0.00	0.99	0.84	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.3	0.0	4.2	7.4	0.0	4.8	33.6	0.0	0.0	29.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.0	0.6	0.7	0.0	0.0	0.1	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(50%),veh/ln	0.4	0.0	1.5	0.1	0.0	1.0	4.5	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.3	0.0	4.8	7.4	0.0	5.4	34.3	0.0	0.0	29.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		395			203			222			73	
Approach Delay, s/veh		5.1			5.6			34.3			29.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	58.0		25.0	5.0	60.0		25.0				
Change Period (Y+Rc), s	3.0	6.1		* 6.3	3.0	6.1		* 6.3				
Max Green Setting (Gmax), s	6.0	33.9		* 35	6.0	33.9		* 35				
Max Q Clear Time (g_c+I1), s	3.4	5.1		15.7	2.5	7.8		5.8				
Green Ext Time (p_c), s	0.0	0.4		0.4	0.0	0.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		14.5	
HCM 6th LOS		B	

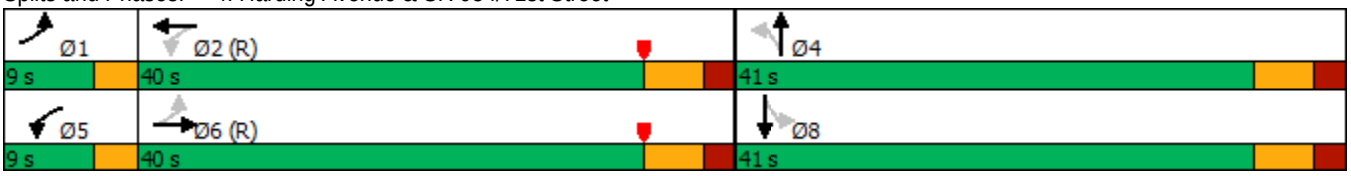
Notes

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

Phase Number	1	2	4	5	6	8
Movement	EBL	WBTL	NBTL	WBL	EBTL	SBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	9	40	41	9	40	41
Maximum Split (%)	10.0%	44.4%	45.6%	10.0%	44.4%	45.6%
Minimum Split (s)	8	23	29.3	8	23	29.3
Yellow Time (s)	3	4	4	3	4	4
All-Red Time (s)	0	2.1	2.3	0	2.1	2.3
Minimum Initial (s)	5	7	7	5	7	7
Vehicle Extension (s)	2	1	1	2	1	1
Minimum Gap (s)	2	1	1	2	1	1
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		9	16		9	16
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	88.1	7.1	47.1	88.1	7.1	47.1
End Time (s)	7.1	47.1	88.1	7.1	47.1	88.1
Yield/Force Off (s)	4.1	41	81.8	4.1	41	81.8
Yield/Force Off 170(s)	4.1	32	65.8	4.1	32	65.8
Local Start Time (s)	47.1	56.1	6.1	47.1	56.1	6.1
Local Yield (s)	53.1	0	40.8	53.1	0	40.8
Local Yield 170(s)	53.1	81	24.8	53.1	81	24.8

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 41 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	

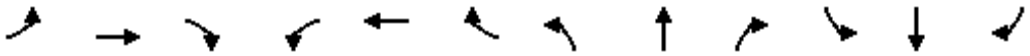
Splits and Phases: 4: Harding Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	65	330	20	183	222	73
v/c Ratio	0.09	0.36	0.03	0.21	0.81	0.25
Control Delay	2.8	10.4	6.6	13.7	53.6	24.4
Queue Delay	0.0	4.3	0.0	0.7	0.0	0.0
Total Delay	2.8	14.8	6.6	14.3	53.6	24.4
Queue Length 50th (ft)	2	12	2	39	114	27
Queue Length 95th (ft)	m17	m238	12	117	152	50
Internal Link Dist (ft)		196		208	595	224
Turn Bay Length (ft)	90		75			
Base Capacity (vph)	711	916	644	866	517	540
Starvation Cap Reductn	0	499	0	417	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.79	0.03	0.41	0.43	0.14

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	268	41	21	157	13	80	301	59	10	22	10
Future Volume (veh/h)	57	268	41	21	157	13	80	301	59	10	22	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.89	0.98		0.89	0.95		0.93	1.00		0.92
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	62	291	45	23	171	14	87	327	64	11	24	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	520	555	86	399	576	47	121	361	67	113	214	87
Arrive On Green	0.06	0.59	0.59	0.03	0.56	0.56	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1603	1257	194	1603	1367	112	202	992	185	174	588	240
Grp Volume(v), veh/h	62	0	336	23	0	185	478	0	0	46	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	1451	1603	0	1478	1378	0	0	1002	0	0
Q Serve(g_s), s	1.9	0.0	12.4	0.7	0.0	5.9	24.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	12.4	0.7	0.0	5.9	30.4	0.0	0.0	1.9	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.08	0.18		0.13	0.24		0.24
Lane Grp Cap(c), veh/h	520	0	640	399	0	623	548	0	0	414	0	0
V/C Ratio(X)	0.12	0.00	0.52	0.06	0.00	0.30	0.87	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	556	0	640	467	0	623	578	0	0	440	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.00	0.43	0.98	0.00	0.98	0.60	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.0	0.0	13.0	14.5	0.0	12.7	27.7	0.0	0.0	18.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.3	0.0	0.0	1.2	8.0	0.0	0.0	0.0	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(50%),veh/ln	0.7	0.0	3.6	0.3	0.0	2.0	10.7	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	0.0	14.3	14.6	0.0	13.9	35.7	0.0	0.0	18.9	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	D	A	A	B	A	A
Approach Vol, veh/h		398			208			478			46	
Approach Delay, s/veh		14.1			14.0			35.7			18.9	
Approach LOS		B			B			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	44.0		39.0	5.2	45.8		39.0				
Change Period (Y+Rc), s	3.0	6.1		* 6.3	3.0	6.1		* 6.3				
Max Green Setting (Gmax), s	6.0	33.9		* 35	6.0	33.9		* 35				
Max Q Clear Time (g_c+I1), s	3.9	7.9		32.4	2.7	14.4		3.9				
Green Ext Time (p_c), s	0.0	0.4		0.3	0.0	0.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		23.4	
HCM 6th LOS		C	

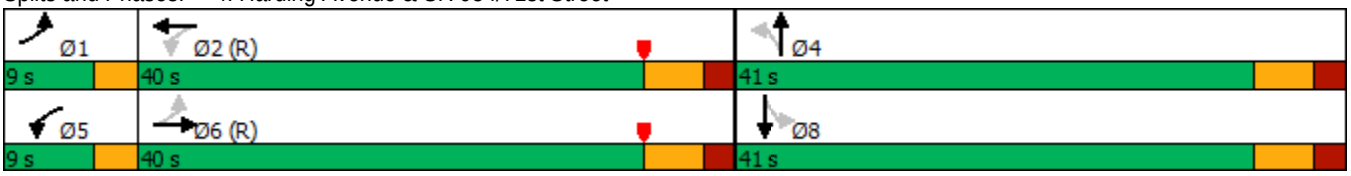
Notes

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

Phase Number	1	2	4	5	6	8
Movement	EBL	WBTL	NBTL	WBL	EBTL	SBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	9	40	41	9	40	41
Maximum Split (%)	10.0%	44.4%	45.6%	10.0%	44.4%	45.6%
Minimum Split (s)	8	23	29.3	8	23	29.3
Yellow Time (s)	3	4	4	3	4	4
All-Red Time (s)	0	2.1	2.3	0	2.1	2.3
Minimum Initial (s)	5	7	7	5	7	7
Vehicle Extension (s)	2	1	1	2	1	1
Minimum Gap (s)	2	1	1	2	1	1
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		9	16		9	16
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	88.1	7.1	47.1	88.1	7.1	47.1
End Time (s)	7.1	47.1	88.1	7.1	47.1	88.1
Yield/Force Off (s)	4.1	41	81.8	4.1	41	81.8
Yield/Force Off 170(s)	4.1	32	65.8	4.1	32	65.8
Local Start Time (s)	47.1	56.1	6.1	47.1	56.1	6.1
Local Yield (s)	53.1	0	40.8	53.1	0	40.8
Local Yield 170(s)	53.1	81	24.8	53.1	81	24.8

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 41 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	

Splits and Phases: 4: Harding Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	62	336	23	185	478	46
v/c Ratio	0.12	0.51	0.05	0.30	0.96	0.10
Control Delay	19.8	33.4	12.9	22.7	59.7	15.1
Queue Delay	0.0	28.4	0.0	0.6	7.9	0.0
Total Delay	19.8	61.8	12.9	23.3	67.6	15.1
Queue Length 50th (ft)	34	195	10	119	248	12
Queue Length 95th (ft)	m55	283	21	165	#444	35
Internal Link Dist (ft)		196		208	595	224
Turn Bay Length (ft)	90		75			
Base Capacity (vph)	515	661	444	619	526	493
Starvation Cap Reductn	0	328	0	196	0	0
Spillback Cap Reductn	0	109	0	10	34	31
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	1.01	0.05	0.44	0.97	0.10

Intersection Summary

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

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

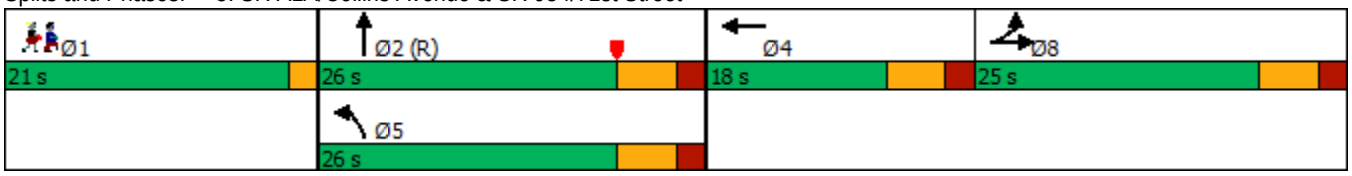
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	8	0	0	29	18	131	916	4	0	0	0
Future Volume (vph)	261	8	0	0	29	18	131	916	4	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.95		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1362	1369			1410		1593	4570				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1362	1369			1410		1593	4570				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	275	8	0	0	31	19	138	964	4	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	0	0
Lane Group Flow (vph)	140	143	0	0	32	0	138	968	0	0	0	0
Confl. Peds. (#/hr)	4		44	44		4	27		59	59		27
Confl. Bikes (#/hr)			1			2			1			1
Parking (#/hr)	0	0			0	0						
Turn Type	Split	NA			NA		Prot	NA				
Protected Phases	8	8			4		5	2				
Permitted Phases												
Actuated Green, G (s)	14.9	14.9			5.2		51.9	51.9				
Effective Green, g (s)	14.9	14.9			5.2		51.9	51.9				
Actuated g/C Ratio	0.17	0.17			0.06		0.58	0.58				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Vehicle Extension (s)	1.0	1.0			2.5		1.0	1.0				
Lane Grp Cap (vph)	225	226			81		918	2635				
v/s Ratio Prot	0.10	c0.10			c0.02		0.09	c0.21				
v/s Ratio Perm												
v/c Ratio	0.62	0.63			0.40		0.15	0.37				
Uniform Delay, d1	34.9	35.0			40.9		8.8	10.2				
Progression Factor	0.54	0.54			1.00		0.58	0.65				
Incremental Delay, d2	3.6	4.0			2.3		0.0	0.4				
Delay (s)	22.4	22.8			43.2		5.2	7.0				
Level of Service	C	C			D		A	A				
Approach Delay (s)		22.6			43.2			6.8			0.0	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	4	5	8
Movement	Ped	NBT	WBT	NBL	EBTL
Lead/Lag					
Lead-Lag Optimize					
Recall Mode	None	C-Max	None	None	None
Maximum Split (s)	21	26	18	26	25
Maximum Split (%)	23.3%	28.9%	20.0%	28.9%	27.8%
Minimum Split (s)	3	20	13	11	25
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	4	7	5	7
Vehicle Extension (s)	0.2	1	2.5	1	1
Minimum Gap (s)	0.2	1	2.5	1	1
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4			4
Flash Dont Walk (s)		10			15
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	32	53	79	53	7
End Time (s)	53	79	7	79	32
Yield/Force Off (s)	51	73	1	73	26
Yield/Force Off 170(s)	51	63	1	73	11
Local Start Time (s)	49	70	6	70	24
Local Yield (s)	68	0	18	0	43
Local Yield 170(s)	68	80	18	0	28

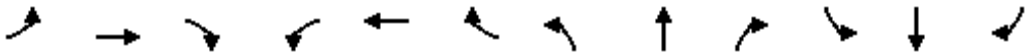
Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 73 (81%), Referenced to phase 2:NBT, Start of Yellow	

Splits and Phases: 5: SR A1A/Collins Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Group Flow (vph)	140	143	50	138	968
v/c Ratio	0.62	0.63	0.35	0.14	0.35
Control Delay	29.8	30.2	33.5	6.8	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	30.2	33.5	6.8	7.7
Queue Length 50th (ft)	85	86	17	32	131
Queue Length 95th (ft)	75	77	51	87	178
Internal Link Dist (ft)		208	156		242
Turn Bay Length (ft)	95			190	
Base Capacity (vph)	287	289	205	962	2760
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	0.49	0.49	0.24	0.14	0.35

Intersection Summary



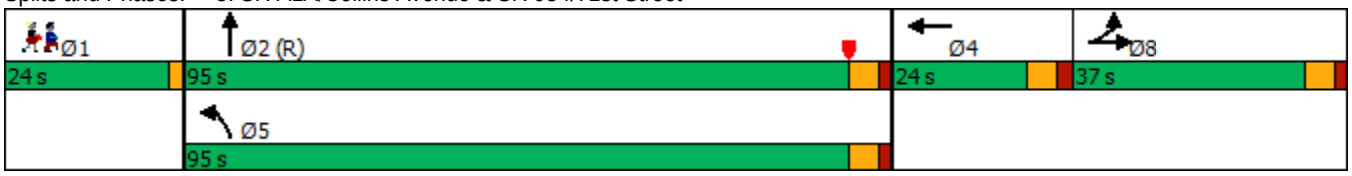
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	9	0	0	15	32	144	2143	11	0	0	0
Future Volume (vph)	314	9	0	0	15	32	144	2143	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frpb, ped/bikes	1.00	1.00			0.92		1.00	1.00				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.91		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1362	1369			1261		1593	4569				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1362	1369			1261		1593	4569				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	324	9	0	0	15	33	148	2209	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	0	0	0	0
Lane Group Flow (vph)	165	168	0	0	16	0	148	2220	0	0	0	0
Confl. Peds. (#/hr)	12		74	74		12	115		29	29		115
Confl. Bikes (#/hr)			1			3			4			3
Parking (#/hr)	0	0			0	0						
Turn Type	Split	NA			NA		Prot	NA				
Protected Phases	8	8			4		5	2				
Permitted Phases												
Actuated Green, G (s)	26.2	26.2			7.2		128.6	128.6				
Effective Green, g (s)	26.2	26.2			7.2		128.6	128.6				
Actuated g/C Ratio	0.15	0.15			0.04		0.71	0.71				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Vehicle Extension (s)	1.0	1.0			2.5		1.0	1.0				
Lane Grp Cap (vph)	198	199			50		1138	3264				
v/s Ratio Prot	0.12	c0.12			c0.01		0.09	c0.49				
v/s Ratio Perm												
v/c Ratio	0.83	0.84			0.33		0.13	0.68				
Uniform Delay, d1	74.8	74.9			84.0		8.1	14.3				
Progression Factor	0.81	0.81			1.00		0.56	0.58				
Incremental Delay, d2	20.6	22.1			2.8		0.0	0.9				
Delay (s)	81.0	82.6			86.8		4.6	9.2				
Level of Service	F	F			F		A	A				
Approach Delay (s)		81.8			86.8			9.0			0.0	
Approach LOS		F			F			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	4	5	8
Movement	Ped	NBT	WBT	NBL	EBTL
Lead/Lag					
Lead-Lag Optimize					
Recall Mode	None	C-Max	None	None	None
Maximum Split (s)	24	95	24	95	37
Maximum Split (%)	13.3%	52.8%	13.3%	52.8%	20.6%
Minimum Split (s)	3	20	13	11	25
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	4	7	5	7
Vehicle Extension (s)	0.2	1	2.5	1	1
Minimum Gap (s)	0.2	1	2.5	1	1
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4			4
Flash Dont Walk (s)		10			15
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	150	174	89	174	113
End Time (s)	174	89	113	89	150
Yield/Force Off (s)	172	83	107	83	144
Yield/Force Off 170(s)	172	73	107	83	129
Local Start Time (s)	67	91	6	91	30
Local Yield (s)	89	0	24	0	61
Local Yield 170(s)	89	170	24	0	46

Intersection Summary	
Cycle Length	180
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 83 (46%), Referenced to phase 2:NBT, Start of Yellow	

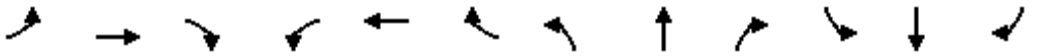
Splits and Phases: 5: SR A1A/Collins Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Group Flow (vph)	165	168	48	148	2220
v/c Ratio	0.83	0.84	0.52	0.13	0.67
Control Delay	87.5	88.8	53.5	5.5	9.9
Queue Delay	5.8	6.5	0.0	0.0	0.0
Total Delay	93.3	95.3	53.5	5.5	9.9
Queue Length 50th (ft)	216	220	18	27	162
Queue Length 95th (ft)	m280	m285	66	m46	760
Internal Link Dist (ft)		208	156		242
Turn Bay Length (ft)	95			190	
Base Capacity (vph)	240	241	161	1148	3294
Starvation Cap Reductn	38	39	0	0	82
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.82	0.83	0.30	0.13	0.69

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	5	9	0	46	2	576	3	148	1265	1
Future Volume (veh/h)	3	0	5	9	0	46	2	576	3	148	1265	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		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	3	0	5	10	0	50	2	626	3	161	1375	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	0	88	56	6	73	41	2356	11	253	2010	1
Arrive On Green	0.07	0.00	0.07	0.07	0.00	0.07	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1216	0	1279	130	82	1063	1	3039	15	264	2592	2
Grp Volume(v), veh/h	3	0	5	60	0	0	347	0	284	745	0	792
Grp Sat Flow(s),veh/h/ln	1216	0	1279	1276	0	0	1679	0	1376	1326	0	1531
Q Serve(g_s), s	0.0	0.0	0.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	0.17		0.83	0.01		0.01	0.22		0.00
Lane Grp Cap(c), veh/h	176	0	88	135	0	0	1342	0	1067	1077	0	1188
V/C Ratio(X)	0.02	0.00	0.06	0.45	0.00	0.00	0.26	0.00	0.27	0.69	0.00	0.67
Avail Cap(c_a), veh/h	445	0	371	412	0	0	1342	0	1067	1077	0	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.29	0.00	0.29
Uniform Delay (d), s/veh	39.1	0.0	39.2	40.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.7	0.0	0.0	0.5	0.0	0.6	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.3	0.0	0.0	0.2	0.0	0.2	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	0.0	39.4	42.6	0.0	0.0	0.5	0.0	0.6	1.1	0.0	0.9
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		8			60			631			1537	
Approach Delay, s/veh		39.3			42.6			0.5			1.0	
Approach LOS		D			D			A			A	

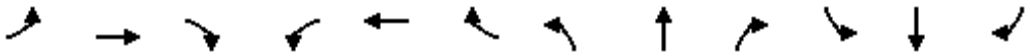
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		76.9		13.1		76.9		13.1				
Change Period (Y+Rc), s		7.1		6.9		7.1		6.9				
Max Green Setting (Gmax), s		49.9		26.1		49.9		26.1				
Max Q Clear Time (g_c+I1), s		2.0		6.1		2.0		2.3				
Green Ext Time (p_c), s		5.3		0.2		1.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			2.1									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	57	33	57	33
Maximum Split (%)	63.3%	36.7%	63.3%	36.7%
Minimum Split (s)	23.8	23.6	23.8	31.9
Yellow Time (s)	4	4	4	4
All-Red Time (s)	3.1	2.9	3.1	2.9
Minimum Initial (s)	16	7	16	7
Vehicle Extension (s)	1	2.5	1	2.5
Minimum Gap (s)	1	2.5	1	2.5
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				5
Flash Dont Walk (s)				20
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	73.1	40.1	73.1	40.1
End Time (s)	40.1	73.1	40.1	73.1
Yield/Force Off (s)	33	66.2	33	66.2
Yield/Force Off 170(s)	33	66.2	33	46.2
Local Start Time (s)	40.1	7.1	40.1	7.1
Local Yield (s)	0	33.2	0	33.2
Local Yield 170(s)	0	33.2	0	13.2

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 33 (37%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	

Splits and Phases: 6: Indian Creek Drive & 69th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	4	146	1	900	4	103	580	0
Future Volume (veh/h)	0	0	0	18	4	146	1	900	4	103	580	0
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	0.99		0.97	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	0.90	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	0	0	0	19	4	154	1	947	4	108	611	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	248	0	56	15	179	40	2073	9	268	1437	0
Arrive On Green	0.00	0.00	0.00	0.16	0.16	0.16	0.91	0.91	0.91	0.91	0.91	0.00
Sat Flow, veh/h	1106	1515	0	73	90	1093	0	3046	13	315	2188	0
Grp Volume(v), veh/h	0	0	0	177	0	0	524	0	428	300	419	0
Grp Sat Flow(s),veh/h/ln	1106	1515	0	1257	0	0	1683	0	1376	971	1455	0
Q Serve(g_s), s	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	4.5	0.7	4.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	12.3	0.0	0.0	4.5	0.0	4.5	5.3	4.0	0.0
Prop In Lane	1.00		0.00	0.11		0.87	0.00		0.01	0.36		0.00
Lane Grp Cap(c), veh/h	80	248	0	250	0	0	1185	0	936	715	990	0
V/C Ratio(X)	0.00	0.00	0.00	0.71	0.00	0.00	0.44	0.00	0.46	0.42	0.42	0.00
Avail Cap(c_a), veh/h	219	439	0	407	0	0	1185	0	936	715	990	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	36.6	0.0	0.0	1.6	0.0	1.6	1.5	1.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	0.0	0.0	1.2	0.0	1.6	1.6	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.9	0.0	0.0	1.3	0.0	1.1	0.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	39.3	0.0	0.0	2.8	0.0	3.2	3.1	2.7	0.0
LnGrp LOS	A	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		0			177			952			719	
Approach Delay, s/veh		0.0			39.3			3.0			2.9	
Approach LOS					D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.3		21.7		68.3		21.7				
Change Period (Y+Rc), s		7.1		6.9		7.1		6.9				
Max Green Setting (Gmax), s		49.9		26.1		49.9		26.1				
Max Q Clear Time (g_c+I1), s		7.3		14.3		6.5		0.0				
Green Ext Time (p_c), s		2.3		0.6		2.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			6.4									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	57	33	57	33
Maximum Split (%)	63.3%	36.7%	63.3%	36.7%
Minimum Split (s)	23.8	23.6	23.8	31.9
Yellow Time (s)	4	4	4	4
All-Red Time (s)	3.1	2.9	3.1	2.9
Minimum Initial (s)	16	7	16	7
Vehicle Extension (s)	1	2.5	1	2.5
Minimum Gap (s)	1	2.5	1	2.5
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				5
Flash Dont Walk (s)				20
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	21.1	78.1	21.1	78.1
End Time (s)	78.1	21.1	78.1	21.1
Yield/Force Off (s)	71	14.2	71	14.2
Yield/Force Off 170(s)	71	14.2	71	84.2
Local Start Time (s)	40.1	7.1	40.1	7.1
Local Yield (s)	0	33.2	0	33.2
Local Yield 170(s)	0	33.2	0	13.2

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 71 (79%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	

Splits and Phases: 6: Indian Creek Drive & 69th Street

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	144	1	2	38	10	2	24	19	70	5	13
Future Vol, veh/h	4	144	1	2	38	10	2	24	19	70	5	13
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	178	1	2	47	12	2	30	23	86	6	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	7.8	7.7	8.4
HCM LOS	A	A	A	A

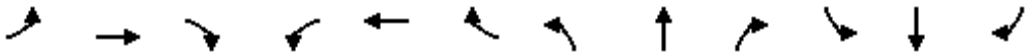
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	3%	4%	80%
Vol Thru, %	53%	97%	76%	6%
Vol Right, %	42%	1%	20%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	149	50	88
LT Vol	2	4	2	70
Through Vol	24	144	38	5
RT Vol	19	1	10	13
Lane Flow Rate	56	184	62	109
Geometry Grp	1	1	1	1
Degree of Util (X)	0.068	0.224	0.076	0.14
Departure Headway (Hd)	4.379	4.389	4.41	4.628
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	819	820	813	776
Service Time	2.402	2.407	2.432	2.648
HCM Lane V/C Ratio	0.068	0.224	0.076	0.14
HCM Control Delay	7.7	8.7	7.8	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.9	0.2	0.5

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	73	7	5	158	138	12	73	24	14	5	10
Future Vol, veh/h	15	73	7	5	158	138	12	73	24	14	5	10
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	80	8	5	174	152	13	80	26	15	5	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	9.7	8.8	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	16%	2%	48%
Vol Thru, %	67%	77%	52%	17%
Vol Right, %	22%	7%	46%	34%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	95	301	29
LT Vol	12	15	5	14
Through Vol	73	73	158	5
RT Vol	24	7	138	10
Lane Flow Rate	120	104	331	32
Geometry Grp	1	1	1	1
Degree of Util (X)	0.16	0.134	0.382	0.044
Departure Headway (Hd)	4.809	4.637	4.156	4.932
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	773	867	724
Service Time	2.848	2.671	2.18	2.976
HCM Lane V/C Ratio	0.161	0.135	0.382	0.044
HCM Control Delay	8.8	8.4	9.7	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.5	1.8	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	63	168	152	40	0	0	0	0	48	2102	10
Future Volume (veh/h)	0	63	168	152	40	0	0	0	0	48	2102	10
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.96
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				0.90	1.00	0.94
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1683	1683	1683	1683	0				1710	1683	1710
Adj Flow Rate, veh/h	0	67	179	162	43	0				51	2236	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	123	329	239	54	0				50	2338	12
Arrive On Green	0.00	0.34	0.34	0.34	0.34	0.00				0.69	0.69	0.69
Sat Flow, veh/h	0	361	963	491	159	0				96	4507	23
Grp Volume(v), veh/h	0	0	246	205	0	0				799	737	762
Grp Sat Flow(s),veh/h/ln	0	0	1324	650	0	0				1510	1532	1584
Q Serve(g_s), s	0.0	0.0	13.5	15.5	0.0	0.0				46.7	37.2	37.3
Cycle Q Clear(g_c), s	0.0	0.0	13.5	29.0	0.0	0.0				46.7	37.2	37.3
Prop In Lane	0.00		0.73	0.79		0.00				0.06		0.01
Lane Grp Cap(c), veh/h	0	0	452	293	0	0				784	795	822
V/C Ratio(X)	0.00	0.00	0.54	0.70	0.00	0.00				1.02	0.93	0.93
Avail Cap(c_a), veh/h	0	0	452	293	0	0				784	795	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	1.00	0.96	0.00	0.00				0.55	0.55	0.55
Uniform Delay (d), s/veh	0.0	0.0	24.0	34.7	0.0	0.0				13.9	12.5	12.5
Incr Delay (d2), s/veh	0.0	0.0	1.1	6.4	0.0	0.0				28.9	11.6	11.4
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(50%),veh/ln	0.0	0.0	4.2	4.8	0.0	0.0				16.1	10.5	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	25.1	41.2	0.0	0.0				42.8	24.1	23.9
LnGrp LOS	A	A	C	D	A	A				F	C	C
Approach Vol, veh/h		246			205						2298	
Approach Delay, s/veh		25.1			41.2						30.6	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		53.0		37.0				37.0				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 47		* 31				* 31				
Max Q Clear Time (g_c+I1), s		48.7		31.0				15.5				
Green Ext Time (p_c), s		0.0		0.0				1.1				

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

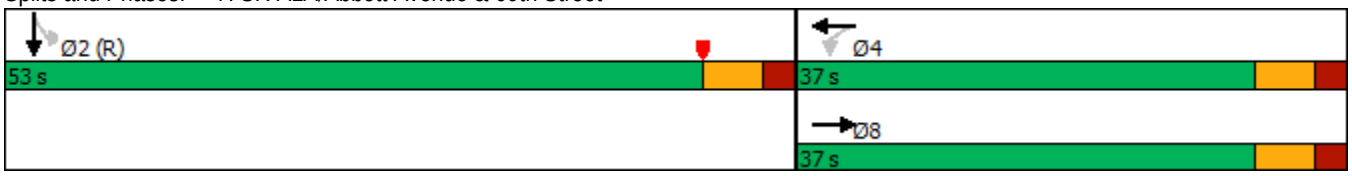
Notes

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

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	53	37	37
Maximum Split (%)	58.9%	41.1%	41.1%
Minimum Split (s)	27.3	29.3	13.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	2.5	2.5
Minimum Gap (s)	1	2.5	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	5	
Flash Dont Walk (s)	14	18	
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	23.3	76.3	76.3
End Time (s)	76.3	23.3	23.3
Yield/Force Off (s)	70	17	17
Yield/Force Off 170(s)	56	89	17
Local Start Time (s)	43.3	6.3	6.3
Local Yield (s)	0	37	37
Local Yield 170(s)	76	19	37

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 70 (78%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 7: SR A1A/Abbott Avenue & 69th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	98	29	204	231	0	0	0	0	83	1367	35
Future Volume (veh/h)	0	98	29	204	231	0	0	0	0	83	1367	35
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		1.00				1.00		0.95
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				0.90	1.00	0.94
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1683	1683	1683	1683	0				1710	1683	1710
Adj Flow Rate, veh/h	0	104	31	217	246	0				88	1454	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	456	136	281	272	0				109	1914	50
Arrive On Green	0.00	0.41	0.41	0.41	0.41	0.00				0.60	0.60	0.60
Sat Flow, veh/h	0	1115	332	544	665	0				241	4245	111
Grp Volume(v), veh/h	0	0	135	463	0	0				550	510	520
Grp Sat Flow(s),veh/h/ln	0	0	1447	1209	0	0				1503	1532	1562
Q Serve(g_s), s	0.0	0.0	5.5	28.2	0.0	0.0				25.7	21.5	21.5
Cycle Q Clear(g_c), s	0.0	0.0	5.5	33.7	0.0	0.0				25.7	21.5	21.5
Prop In Lane	0.00		0.23	0.47		0.00				0.16		0.07
Lane Grp Cap(c), veh/h	0	0	592	553	0	0				678	691	704
V/C Ratio(X)	0.00	0.00	0.23	0.84	0.00	0.00				0.81	0.74	0.74
Avail Cap(c_a), veh/h	0	0	654	612	0	0				678	691	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	1.00	0.64	0.00	0.00				0.79	0.79	0.79
Uniform Delay (d), s/veh	0.0	0.0	17.3	27.5	0.0	0.0				15.0	14.2	14.2
Incr Delay (d2), s/veh	0.0	0.0	0.1	5.8	0.0	0.0				8.2	5.5	5.4
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(50%),veh/ln	0.0	0.0	1.8	10.0	0.0	0.0				8.2	6.7	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	17.5	33.3	0.0	0.0				23.2	19.7	19.6
LnGrp LOS	A	A	B	C	A	A				C	B	B
Approach Vol, veh/h		135			463						1579	
Approach Delay, s/veh		17.5			33.3						20.9	
Approach LOS		B			C						C	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		46.9		43.1				43.1				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 37		* 41				* 41				
Max Q Clear Time (g_c+I1), s		27.7		35.7				7.5				
Green Ext Time (p_c), s		3.0		1.2				0.6				

Intersection Summary												
HCM 6th Ctrl Delay			23.3									
HCM 6th LOS			C									

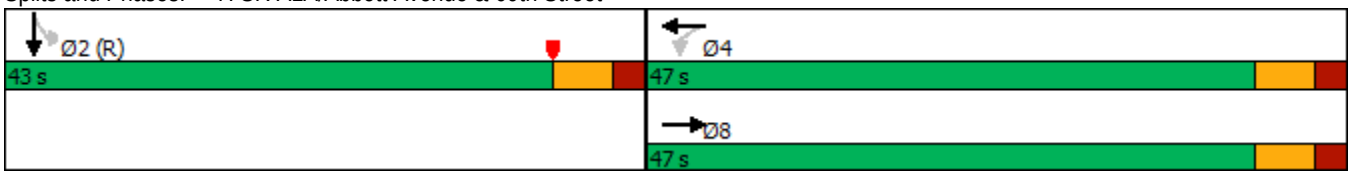
Notes

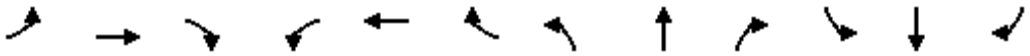
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	43	47	47
Maximum Split (%)	47.8%	52.2%	52.2%
Minimum Split (s)	27.3	29.3	13.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	2.5	2.5
Minimum Gap (s)	1	2.5	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	5	
Flash Dont Walk (s)	14	18	
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	10.3	53.3	53.3
End Time (s)	53.3	10.3	10.3
Yield/Force Off (s)	47	4	4
Yield/Force Off 170(s)	33	76	4
Local Start Time (s)	53.3	6.3	6.3
Local Yield (s)	0	47	47
Local Yield 170(s)	76	29	47

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 47 (52%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 7: SR A1A/Abbott Avenue & 69th Street





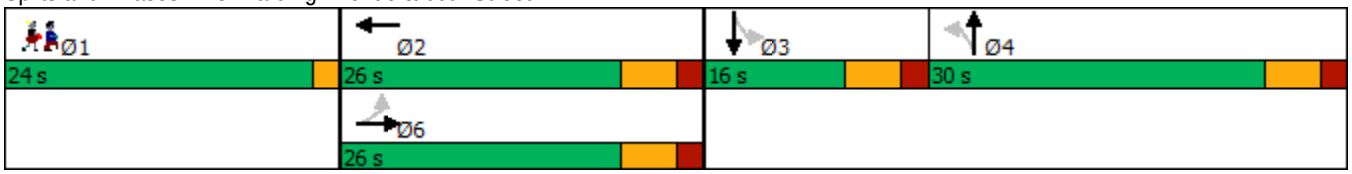
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	104	0	0	96	15	60	157	24	41	0	35
Future Volume (vph)	9	104	0	0	96	15	60	157	24	41	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0			6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00			0.97	
Flpb, ped/bikes		1.00			1.00		0.98	1.00			1.00	
Frt		1.00			0.98		1.00	0.98			0.94	
Flt Protected		1.00			1.00		0.95	1.00			0.97	
Satd. Flow (prot)		1500			1470		1403	1473			1336	
Flt Permitted		0.96			1.00		0.69	1.00			0.53	
Satd. Flow (perm)		1447			1470		1022	1473			729	
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	12	137	0	0	126	20	79	207	32	54	0	46
RTOR Reduction (vph)	0	0	0	0	6	0	0	6	0	0	88	0
Lane Group Flow (vph)	0	149	0	0	140	0	79	233	0	0	12	0
Confl. Peds. (#/hr)	27		41	41		27	10		6	6		10
Confl. Bikes (#/hr)			1			1						
Parking (#/hr)	0	0			0	0	0	0	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6						4			3		
Actuated Green, G (s)		10.0			10.0		15.2	15.2			5.8	
Effective Green, g (s)		10.0			10.0		15.2	15.2			5.8	
Actuated g/C Ratio		0.20			0.20		0.31	0.31			0.12	
Clearance Time (s)		6.0			6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		295			300		317	456			86	
v/s Ratio Prot					0.09			c0.16				
v/s Ratio Perm		c0.10					0.08				c0.02	
v/c Ratio		0.51			0.47		0.25	0.51			0.14	
Uniform Delay, d1		17.3			17.1		12.6	13.9			19.4	
Progression Factor		1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.4			1.1		0.4	1.0			0.7	
Delay (s)		18.7			18.3		13.0	14.8			20.1	
Level of Service		B			B		B	B			C	
Approach Delay (s)		18.7			18.3			14.4			20.1	
Approach LOS		B			B			B			C	

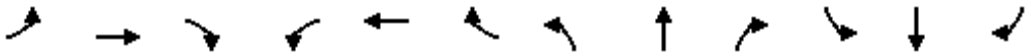
Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	3	4	6
Movement	Ped	WBT	SBTL	NBTL	EBTL
Lead/Lag			Lead	Lag	
Lead-Lag Optimize			Yes	Yes	
Recall Mode	None	None	None	None	None
Maximum Split (s)	24	26	16	30	26
Maximum Split (%)	25.0%	27.1%	16.7%	31.3%	27.1%
Minimum Split (s)	24	26	13	30	26
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	7	7	7	7
Vehicle Extension (s)	0.2	3	3	3	3
Minimum Gap (s)	0.2	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	0	4	4
Flash Dont Walk (s)		16	0	20	16
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24	50	66	24
End Time (s)	24	50	66	0	50
Yield/Force Off (s)	22	44	60	90	44
Yield/Force Off 170(s)	22	28	60	70	28
Local Start Time (s)	72	0	26	42	0
Local Yield (s)	94	20	36	66	20
Local Yield 170(s)	94	4	36	46	4

Intersection Summary	
Cycle Length	96
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 8: Harding Avenue & 69th Street





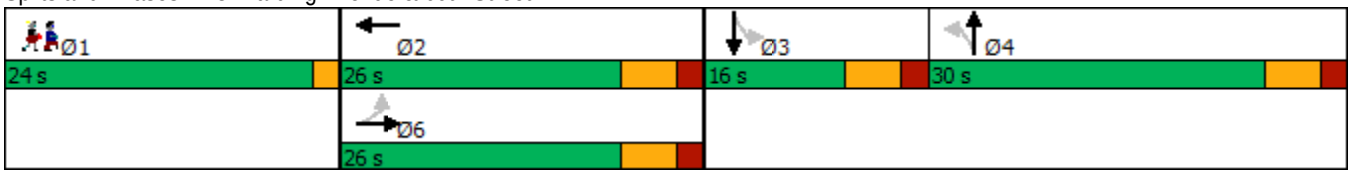
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	158	0	0	152	36	294	334	69	26	0	58
Future Volume (vph)	13	158	0	0	152	36	294	334	69	26	0	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0			6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00			0.98		1.00	0.99			0.93	
Flpb, ped/bikes		0.99			1.00		0.96	1.00			1.00	
Frt		1.00			0.97		1.00	0.97			0.91	
Flt Protected		1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1495			1436		1377	1459			1252	
Flt Permitted		0.96			1.00		0.70	1.00			0.44	
Satd. Flow (perm)		1448			1436		1012	1459			565	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	14	168	0	0	162	38	313	355	73	28	0	62
RTOR Reduction (vph)	0	0	0	0	8	0	0	6	0	0	82	0
Lane Group Flow (vph)	0	182	0	0	192	0	313	422	0	0	8	0
Confl. Peds. (#/hr)	59		58	58		59	14		17	17		14
Confl. Bikes (#/hr)			1			7			1			1
Parking (#/hr)	0	0			0	0	0	0	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6						4			3		
Actuated Green, G (s)		15.4			15.4		24.8	24.8			5.9	
Effective Green, g (s)		15.4			15.4		24.8	24.8			5.9	
Actuated g/C Ratio		0.24			0.24		0.39	0.39			0.09	
Clearance Time (s)		6.0			6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		347			344		391	564			52	
v/s Ratio Prot					c0.13			0.29				
v/s Ratio Perm		0.13					c0.31				c0.01	
v/c Ratio		0.52			0.56		0.80	0.75			0.16	
Uniform Delay, d1		21.2			21.4		17.5	17.0			26.8	
Progression Factor		1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.4			2.0		11.2	5.4			1.4	
Delay (s)		22.6			23.3		28.6	22.3			28.3	
Level of Service		C			C		C	C			C	
Approach Delay (s)		22.6			23.3			25.0			28.3	
Approach LOS		C			C			C			C	

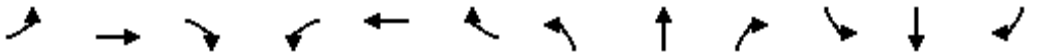
Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	64.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	3	4	6
Movement	Ped	WBT	SBTL	NBTL	EBTL
Lead/Lag			Lead	Lag	
Lead-Lag Optimize			Yes	Yes	
Recall Mode	None	None	None	None	None
Maximum Split (s)	24	26	16	30	26
Maximum Split (%)	25.0%	27.1%	16.7%	31.3%	27.1%
Minimum Split (s)	24	26	13	30	26
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	7	7	7	7
Vehicle Extension (s)	0.2	3	3	3	3
Minimum Gap (s)	0.2	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	0	4	4
Flash Dont Walk (s)		16	0	20	16
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24	50	66	24
End Time (s)	24	50	66	0	50
Yield/Force Off (s)	22	44	60	90	44
Yield/Force Off 170(s)	22	28	60	70	28
Local Start Time (s)	72	0	26	42	0
Local Yield (s)	94	20	36	66	20
Local Yield 170(s)	94	4	36	46	4

Intersection Summary	
Cycle Length	96
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 8: Harding Avenue & 69th Street



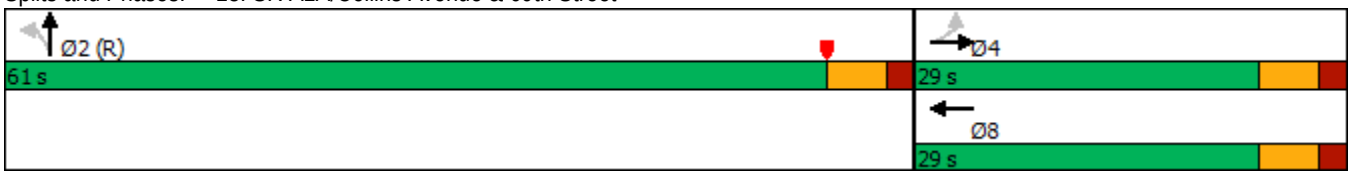


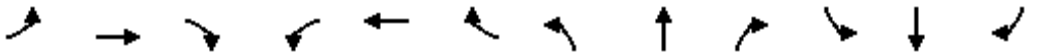
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	34	0	0	11	8	62	935	15	0	0	0
Future Volume (veh/h)	108	34	0	0	11	8	62	935	15	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.98		1.00	1.00		0.97	1.00		0.94			
Parking 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	1683	1683	0	0	1683	1683	1683	1683	1683			
Adj Flow Rate, veh/h	112	35	0	0	11	8	65	974	16			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	219	58	0	0	141	103	1136	3295	54			
Arrive On Green	0.16	0.16	0.00	0.00	0.16	0.16	0.94	0.94	0.94			
Sat Flow, veh/h	936	366	0	0	892	649	1603	4651	76			
Grp Volume(v), veh/h	147	0	0	0	0	19	65	641	349			
Grp Sat Flow(s),veh/h/ln	1302	0	0	0	0	1540	1603	1532	1664			
Q Serve(g_s), s	8.7	0.0	0.0	0.0	0.0	0.9	0.2	1.5	1.5			
Cycle Q Clear(g_c), s	9.7	0.0	0.0	0.0	0.0	0.9	0.2	1.5	1.5			
Prop In Lane	0.76		0.00	0.00		0.42	1.00		0.05			
Lane Grp Cap(c), veh/h	277	0	0	0	0	244	1136	2170	1179			
V/C Ratio(X)	0.53	0.00	0.00	0.00	0.00	0.08	0.06	0.30	0.30			
Avail Cap(c_a), veh/h	405	0	0	0	0	394	1136	2170	1179			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33			
Upstream Filter(I)	0.94	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	36.0	0.0	0.0	0.0	0.0	32.3	0.8	0.8	0.8			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.6			
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	3.1	0.0	0.0	0.0	0.0	0.4	0.1	0.4	0.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	0.0	0.0	0.0	32.4	0.9	1.2	1.4			
LnGrp LOS	D	A	A	A	A	C	A	A	A			
Approach Vol, veh/h		147			19			1055				
Approach Delay, s/veh		36.6			32.4			1.2				
Approach LOS		D			C			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		69.8		20.2				20.2				
Change Period (Y+Rc), s		6.0		6.0				6.0				
Max Green Setting (Gmax), s		55.0		23.0				23.0				
Max Q Clear Time (g_c+I1), s		3.5		11.7				2.9				
Green Ext Time (p_c), s		6.7		0.2				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			6.0									
HCM 6th LOS			A									

Phase Number	2	4	8
Movement	NBTL	EBTL	WBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	61	29	29
Maximum Split (%)	67.8%	32.2%	32.2%
Minimum Split (s)	28	29	28
Yellow Time (s)	4	4	4
All-Red Time (s)	2	2	2
Minimum Initial (s)	7	5	7
Vehicle Extension (s)	2.5	1	2.5
Minimum Gap (s)	2.5	1	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	5	4	5
Flash Dont Walk (s)	17	19	17
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	3	64	64
End Time (s)	64	3	3
Yield/Force Off (s)	58	87	87
Yield/Force Off 170(s)	41	68	70
Local Start Time (s)	35	6	6
Local Yield (s)	0	29	29
Local Yield 170(s)	73	10	12

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 58 (64%), Referenced to phase 2:NBTL, Start of Yellow	

Splits and Phases: 13: SR A1A/Collins Avenue & 69th Street



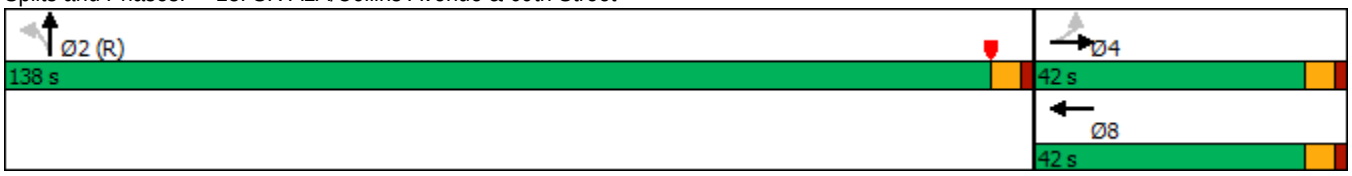


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	14	0	0	27	20	103	2054	7	0	0	0
Future Volume (veh/h)	179	14	0	0	27	20	103	2054	7	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.94	1.00		0.90			
Parking 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	1683	1683	0	0	1683	1683	1683	1683	1683			
Adj Flow Rate, veh/h	183	14	0	0	28	20	105	2096	7			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	232	15	0	0	176	126	1177	3471	12			
Arrive On Green	0.20	0.20	0.00	0.00	0.20	0.20	0.98	0.98	0.98			
Sat Flow, veh/h	973	74	0	0	885	632	1603	4726	16			
Grp Volume(v), veh/h	197	0	0	0	0	48	105	1358	745			
Grp Sat Flow(s),veh/h/ln	1047	0	0	0	0	1518	1603	1532	1678			
Q Serve(g_s), s	29.1	0.0	0.0	0.0	0.0	4.7	0.3	4.5	4.5			
Cycle Q Clear(g_c), s	33.8	0.0	0.0	0.0	0.0	4.7	0.3	4.5	4.5			
Prop In Lane	0.93		0.00	0.00		0.42	1.00		0.01			
Lane Grp Cap(c), veh/h	247	0	0	0	0	302	1177	2250	1233			
V/C Ratio(X)	0.80	0.00	0.00	0.00	0.00	0.16	0.09	0.60	0.60			
Avail Cap(c_a), veh/h	248	0	0	0	0	304	1177	2250	1233			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33			
Upstream Filter(I)	0.84	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	73.6	0.0	0.0	0.0	0.0	59.6	0.6	0.6	0.6			
Incr Delay (d2), s/veh	13.1	0.0	0.0	0.0	0.0	0.2	0.1	1.2	2.2			
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(50%),veh/ln	10.0	0.0	0.0	0.0	0.0	1.9	0.1	1.0	1.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.8	0.0	0.0	0.0	0.0	59.8	0.7	1.8	2.8			
LnGrp LOS	F	A	A	A	A	E	A	A	A			
Approach Vol, veh/h		197			48			2208				
Approach Delay, s/veh		86.8			59.8			2.1				
Approach LOS		F			E			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		138.2		41.8				41.8				
Change Period (Y+Rc), s		6.0		6.0				6.0				
Max Green Setting (Gmax), s		132.0		36.0				36.0				
Max Q Clear Time (g_c+I1), s		6.5		35.8				6.7				
Green Ext Time (p_c), s		27.9		0.0				0.2				
Intersection Summary												
HCM 6th Ctrl Delay			10.0									
HCM 6th LOS			B									

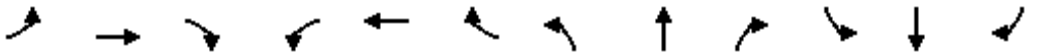
Phase Number	2	4	8
Movement	NBTL	EBTL	WBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	138	42	42
Maximum Split (%)	76.7%	23.3%	23.3%
Minimum Split (s)	28	30	28
Yellow Time (s)	4	4	4
All-Red Time (s)	2	2	2
Minimum Initial (s)	7	5	7
Vehicle Extension (s)	2.5	1	2.5
Minimum Gap (s)	2.5	1	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	5	5	5
Flash Dont Walk (s)	17	19	17
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	130	88	88
End Time (s)	88	130	130
Yield/Force Off (s)	82	124	124
Yield/Force Off 170(s)	65	105	107
Local Start Time (s)	48	6	6
Local Yield (s)	0	42	42
Local Yield 170(s)	163	23	25

Intersection Summary	
Cycle Length	180
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 82 (46%), Referenced to phase 2:NBTL, Start of Yellow	

Splits and Phases: 13: SR A1A/Collins Avenue & 69th Street



Future without Project



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	615	728	0	425	16	399	210	11	3	347	464
Future Volume (veh/h)	398	615	728	0	425	16	399	210	11	3	347	464
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.89	1.00		0.84	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.97	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	1683	1683	1683	0	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	410	634	751	0	438	16	411	216	11	3	358	478
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	417	763	865	0	780	28	534	270	14	3	355	496
Arrive On Green	0.20	0.60	0.60	0.00	0.34	0.34	0.17	0.17	0.17	0.23	0.21	0.21
Sat Flow, veh/h	1603	1683	1367	0	3165	112	3110	1571	80	14	1669	1311
Grp Volume(v), veh/h	410	634	751	0	227	227	411	0	227	361	0	478
Grp Sat Flow(s),veh/h/ln	1603	1683	1367	0	1599	1593	1555	0	1651	1683	0	1311
Q Serve(g_s), s	18.3	36.0	54.4	0.0	13.9	14.0	15.1	0.0	15.8	25.5	0.0	25.5
Cycle Q Clear(g_c), s	18.3	36.0	54.4	0.0	13.9	14.0	15.1	0.0	15.8	25.5	0.0	25.5
Prop In Lane	1.00		1.00	0.00		0.07	1.00		0.05	0.01		1.00
Lane Grp Cap(c), veh/h	417	763	865	0	405	403	534	0	284	358	0	496
V/C Ratio(X)	0.98	0.83	0.87	0.00	0.56	0.56	0.77	0.00	0.80	1.01	0.00	0.96
Avail Cap(c_a), veh/h	417	763	865	0	405	403	583	0	310	358	0	496
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.97	0.00	0.97	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.9	20.2	13.5	0.0	34.3	34.4	47.4	0.0	47.7	47.2	0.0	37.8
Incr Delay (d2), s/veh	39.5	10.2	11.5	0.0	5.5	5.6	5.2	0.0	12.0	50.0	0.0	31.2
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(50%),veh/ln	9.0	14.1	24.9	0.0	5.7	5.7	6.2	0.0	7.4	15.6	0.0	17.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.4	30.4	25.1	0.0	39.8	40.0	52.7	0.0	59.7	97.3	0.0	69.0
LnGrp LOS	E	C	C	A	D	D	D	A	E	F	A	E
Approach Vol, veh/h		1795			454			638			839	
Approach Delay, s/veh		37.5			39.9			55.2			81.2	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	24.0	36.9		27.1		60.9		32.0				
Change Period (Y+Rc), s	* 5.7	6.5		6.5		6.5		6.5				
Max Green Setting (Gmax), s	* 18	28.5		22.5		52.5		25.5				
Max Q Clear Time (g_c+I1), s	20.3	16.0		17.8		56.4		27.5				
Green Ext Time (p_c), s	0.0	0.8		1.1		0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		50.7	
HCM 6th LOS		D	

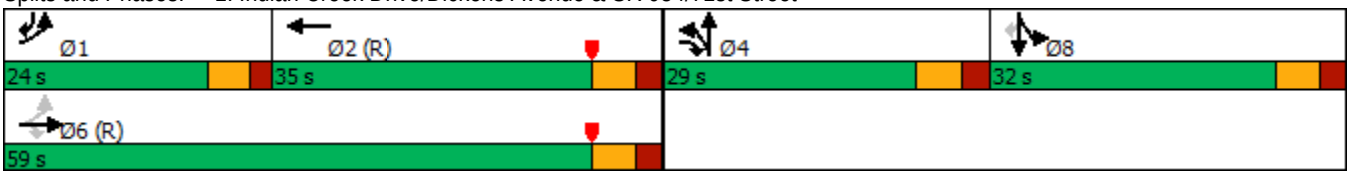
Notes

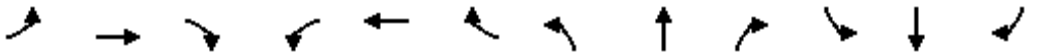
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Phase Number	1	2	4	6	8
Movement	EBL	WBT	NBTL	EBTL	SBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	24	35	29	59	32
Maximum Split (%)	20.0%	29.2%	24.2%	49.2%	26.7%
Minimum Split (s)	10.7	35	29	35.5	24.8
Yellow Time (s)	3.7	4	4	4	4
All-Red Time (s)	2	2.5	2.5	2.5	2.5
Minimum Initial (s)	5	4	7	4	7
Vehicle Extension (s)	2	1	2.5	1	4
Minimum Gap (s)	2	1	2.5	1	4
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	4	4	
Flash Dont Walk (s)		23	18	23	
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	40.5	64.5	99.5	40.5	8.5
End Time (s)	64.5	99.5	8.5	99.5	40.5
Yield/Force Off (s)	58.8	93	2	93	34
Yield/Force Off 170(s)	58.8	70	104	70	34
Local Start Time (s)	67.5	91.5	6.5	67.5	35.5
Local Yield (s)	85.8	0	29	0	61
Local Yield 170(s)	85.8	97	11	97	61

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 93 (78%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	

Splits and Phases: 1: Indian Creek Drive/Dickens Avenue & SR 934/71st Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	294	564	405	0	812	19	850	250	8	4	117	426
Future Volume (veh/h)	294	564	405	0	812	19	850	250	8	4	117	426
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.83	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.97	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	1683	1683	1683	0	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	297	570	409	0	820	19	859	253	8	4	118	430
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	280	776	1015	0	927	21	878	456	14	6	192	325
Arrive On Green	0.16	0.61	0.61	0.00	0.39	0.39	0.28	0.28	0.28	0.12	0.12	0.12
Sat Flow, veh/h	1603	1683	1329	0	3210	72	3110	1617	51	55	1625	1259
Grp Volume(v), veh/h	297	570	409	0	419	420	859	0	261	122	0	430
Grp Sat Flow(s),veh/h/ln	1603	1683	1329	0	1599	1599	1555	0	1668	1681	0	1259
Q Serve(g_s), s	17.3	33.4	13.5	0.0	34.2	34.2	38.3	0.0	18.6	9.7	0.0	16.5
Cycle Q Clear(g_c), s	17.3	33.4	13.5	0.0	34.2	34.2	38.3	0.0	18.6	9.7	0.0	16.5
Prop In Lane	1.00		1.00	0.00		0.05	1.00		0.03	0.03		1.00
Lane Grp Cap(c), veh/h	280	776	1015	0	474	474	878	0	471	198	0	325
V/C Ratio(X)	1.06	0.73	0.40	0.00	0.88	0.89	0.98	0.00	0.55	0.62	0.00	1.32
Avail Cap(c_a), veh/h	280	776	1015	0	474	474	878	0	471	198	0	325
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.88	0.00	0.88	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	21.1	4.6	0.0	40.2	40.2	49.8	0.0	42.8	58.7	0.0	53.6
Incr Delay (d2), s/veh	70.2	6.1	1.2	0.0	20.8	20.9	23.4	0.0	1.1	6.6	0.0	165.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	12.9	8.1	0.0	15.4	15.5	17.7	0.0	7.9	4.5	0.0	26.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.6	27.2	5.8	0.0	61.0	61.0	73.2	0.0	43.8	65.3	0.0	219.5
LnGrp LOS	F	C	A	A	E	E	E	A	D	E	A	F
Approach Vol, veh/h		1276			839			1120			552	
Approach Delay, s/veh		37.9			61.0			66.3			185.4	
Approach LOS		D			E			E			F	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	23.0	48.0		46.0		71.0		23.0				
Change Period (Y+Rc), s	* 5.7	6.5		6.5		6.5		6.5				
Max Green Setting (Gmax), s	* 17	41.5		39.5		64.5		16.5				
Max Q Clear Time (g_c+I1), s	19.3	36.2		40.3		35.4		18.5				
Green Ext Time (p_c), s	0.0	1.1		0.0		1.6		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		72.9	
HCM 6th LOS		E	

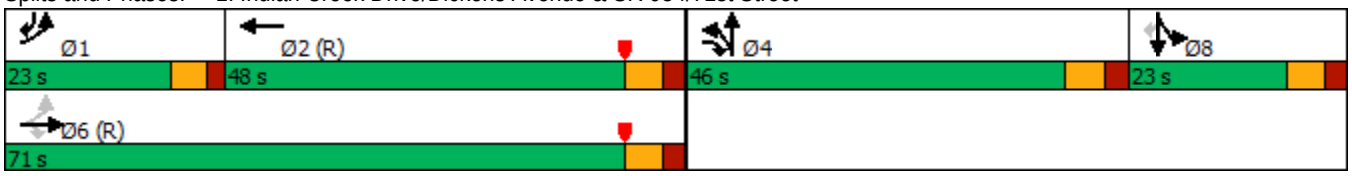
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Phase Number	1	2	4	6	8
Movement	EBL	WBT	NBTL	EBTL	SBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	23	48	46	71	23
Maximum Split (%)	16.4%	34.3%	32.9%	50.7%	16.4%
Minimum Split (s)	10.7	33.5	28.5	33.5	13.5
Yellow Time (s)	3.7	4	4	4	4
All-Red Time (s)	2	2.5	2.5	2.5	2.5
Minimum Initial (s)	5	4	7	4	7
Vehicle Extension (s)	2	1	2.5	1	4
Minimum Gap (s)	2	1	2.5	1	4
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	4	4	
Flash Dont Walk (s)		23	18	23	
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	82.5	105.5	13.5	82.5	59.5
End Time (s)	105.5	13.5	59.5	13.5	82.5
Yield/Force Off (s)	99.8	7	53	7	76
Yield/Force Off 170(s)	99.8	124	35	124	76
Local Start Time (s)	75.5	98.5	6.5	75.5	52.5
Local Yield (s)	92.8	0	46	0	69
Local Yield 170(s)	92.8	117	28	117	69

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	140
Offset: 7 (5%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	

Splits and Phases: 1: Indian Creek Drive/Dickens Avenue & SR 934/71st Street



Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	387	51	13	371	16	9	23	9	13	19	27
Future Vol, veh/h	163	387	51	13	371	16	9	23	9	13	19	27
Conflicting Peds, #/hr	24	0	24	24	0	24	9	0	7	7	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	173	412	54	14	395	17	10	24	10	14	20	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	436	0	0	490	0	0	1274	1273	470	1265	1292	437
Stage 1	-	-	-	-	-	-	809	809	-	456	456	-
Stage 2	-	-	-	-	-	-	465	464	-	809	836	-
Critical Hdwy	4.12	-	-	4.12	-	-	5	5	5	5	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3	3	3	3	3	3
Pot Cap-1 Maneuver	1124	-	-	1073	-	-	332	332	755	335	326	780
Stage 1	-	-	-	-	-	-	417	477	-	664	717	-
Stage 2	-	-	-	-	-	-	657	710	-	417	462	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1098	-	-	1048	-	-	254	263	733	260	259	756
Mov Cap-2 Maneuver	-	-	-	-	-	-	254	263	-	260	259	-
Stage 1	-	-	-	-	-	-	343	393	-	546	691	-
Stage 2	-	-	-	-	-	-	600	684	-	323	380	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.3	18.9	16.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	303	1098	-	-	1048	-	-	371
HCM Lane V/C Ratio	0.144	0.158	-	-	0.013	-	-	0.169
HCM Control Delay (s)	18.9	8.9	-	-	8.5	-	-	16.7
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0.6	-	-	0	-	-	0.6

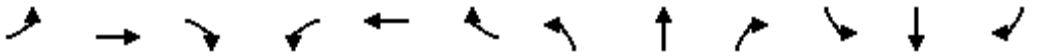
Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	207	448	56	61	631	17	77	72	71	5	12	97
Future Vol, veh/h	207	448	56	61	631	17	77	72	71	5	12	97
Conflicting Peds, #/hr	66	0	41	41	0	66	20	0	13	13	0	20
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	220	477	60	65	671	18	82	77	76	5	13	103

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	755	0	0	578	0	0	1876	1873	561	1913	1894	766
Stage 1	-	-	-	-	-	-	988	988	-	876	876	-
Stage 2	-	-	-	-	-	-	888	885	-	1037	1018	-
Critical Hdwy	4.12	-	-	4.12	-	-	5	5	5	5	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	5	5	-	5	5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5	5	-	5	5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3	3	3	3	3	3
Pot Cap-1 Maneuver	855	-	-	996	-	-	175	176	689	168	172	560
Stage 1	-	-	-	-	-	-	446	446	-	501	501	-
Stage 2	-	-	-	-	-	-	495	496	-	425	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	801	-	-	957	-	-	94	107	654	66	105	515
Mov Cap-2 Maneuver	-	-	-	-	-	-	115	161	-	112	182	-
Stage 1	-	-	-	-	-	-	311	311	-	341	437	-
Stage 2	-	-	-	-	-	-	351	433	-	203	302	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.8	56.2	18.8
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	115	257	801	-	-	957	-	-	381
HCM Lane V/C Ratio	0.712	0.592	0.275	-	-	0.068	-	-	0.318
HCM Control Delay (s)	90.8	37.5	11.2	-	-	9	-	-	18.8
HCM Lane LOS	F	E	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.8	3.4	1.1	-	-	0.2	-	-	1.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	304	73	45	123	0	0	0	0	32	2191	231
Future Volume (veh/h)	0	304	73	45	123	0	0	0	0	32	2191	231
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.98		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	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	0	1683	1683	1683	1683	0				1683	1683	1683
Adj Flow Rate, veh/h	0	310	74	46	126	0				33	2236	236
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	444	320	166	444	0				39	2791	824
Arrive On Green	0.00	0.26	0.26	0.09	0.09	0.00				0.83	0.79	0.79
Sat Flow, veh/h	0	1683	1216	885	1683	0				65	4679	1381
Grp Volume(v), veh/h	0	310	74	46	126	0				854	1415	236
Grp Sat Flow(s),veh/h/ln	0	1683	1216	885	1683	0				1680	1532	1381
Q Serve(g_s), s	0.0	15.0	4.3	4.6	6.3	0.0				29.1	22.3	4.1
Cycle Q Clear(g_c), s	0.0	15.0	4.3	19.6	6.3	0.0				29.1	22.3	4.1
Prop In Lane	0.00		1.00	1.00		0.00				0.04		1.00
Lane Grp Cap(c), veh/h	0	444	320	166	444	0				1002	1827	824
V/C Ratio(X)	0.00	0.70	0.23	0.28	0.28	0.00				0.85	0.77	0.29
Avail Cap(c_a), veh/h	0	574	415	235	574	0				1002	1827	824
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	29.9	26.0	46.6	33.1	0.0				6.7	6.1	4.2
Incr Delay (d2), s/veh	0.0	1.4	0.1	0.3	0.1	0.0				9.1	3.3	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(50%),veh/ln	0.0	6.1	1.2	1.1	2.7	0.0				6.8	4.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.4	26.1	46.9	33.3	0.0				15.8	9.3	5.1
LnGrp LOS	A	C	C	D	C	A				B	A	A
Approach Vol, veh/h		384			172						2505	
Approach Delay, s/veh		30.3			36.9						11.1	
Approach LOS		C			D						B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	60.0	30.0	30.0
Change Period (Y+Rc), s	* 6.3	* 6.3	* 6.3
Max Green Setting (Gmax), s	* 47	* 31	* 31
Max Q Clear Time (g_c+I1), s	31.1	21.6	17.0
Green Ext Time (p_c), s	7.1	0.2	0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

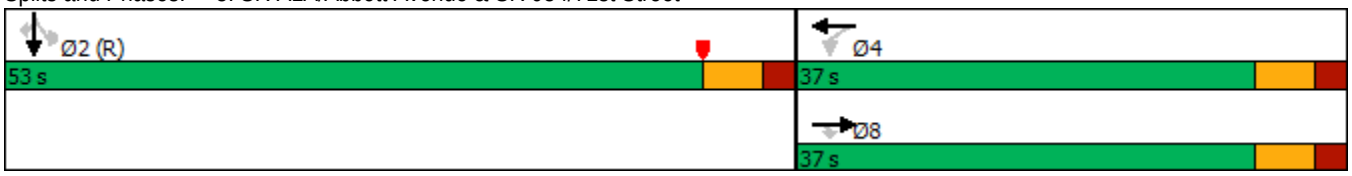
User approved ignoring U-Turning movement.

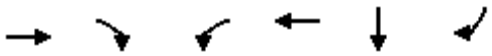
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	53	37	37
Maximum Split (%)	58.9%	41.1%	41.1%
Minimum Split (s)	31.3	31.3	31.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	1	1
Minimum Gap (s)	1	1	1
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	7	7
Flash Dont Walk (s)	18	18	18
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	10.3	63.3	63.3
End Time (s)	63.3	10.3	10.3
Yield/Force Off (s)	57	4	4
Yield/Force Off 170(s)	39	76	76
Local Start Time (s)	43.3	6.3	6.3
Local Yield (s)	0	37	37
Local Yield 170(s)	72	19	19

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 57 (63%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 3: SR A1A/Abbott Avenue & SR 934/71st Street



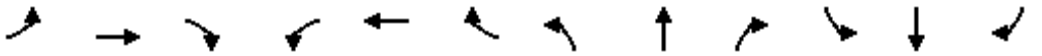


Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	310	74	46	126	2269	236
v/c Ratio	0.82	0.24	0.30	0.33	0.82	0.26
Control Delay	48.6	26.6	41.6	38.3	18.4	2.5
Queue Delay	1.4	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	26.6	41.6	38.3	18.4	2.5
Queue Length 50th (ft)	160	32	25	68	362	2
Queue Length 95th (ft)	234	62	m62	126	#565	37
Internal Link Dist (ft)	238			196	251	
Turn Bay Length (ft)		100	95			215
Base Capacity (vph)	514	415	210	514	2784	925
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	79	0	0	0	7	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.18	0.22	0.25	0.82	0.26

Intersection Summary

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	345	50	49	256	0	0	0	0	34	1481	339
Future Volume (veh/h)	0	345	50	49	256	0	0	0	0	34	1481	339
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	0.98		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	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	0	1683	1683	1683	1683	0				1683	1683	1683
Adj Flow Rate, veh/h	0	379	55	54	281	0				37	1627	373
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	497	350	156	497	0				56	2622	783
Arrive On Green	0.00	0.30	0.30	0.10	0.10	0.00				0.75	0.75	0.75
Sat Flow, veh/h	0	1683	1184	844	1683	0				99	4643	1386
Grp Volume(v), veh/h	0	379	55	54	281	0				625	1039	373
Grp Sat Flow(s),veh/h/ln	0	1683	1184	844	1683	0				1678	1532	1386
Q Serve(g_s), s	0.0	18.4	3.1	5.7	14.4	0.0				16.5	13.8	9.4
Cycle Q Clear(g_c), s	0.0	18.4	3.1	24.1	14.4	0.0				16.5	13.8	9.4
Prop In Lane	0.00		1.00	1.00		0.00				0.06		1.00
Lane Grp Cap(c), veh/h	0	497	350	156	497	0				948	1730	783
V/C Ratio(X)	0.00	0.76	0.16	0.35	0.57	0.00				0.66	0.60	0.48
Avail Cap(c_a), veh/h	0	612	430	214	612	0				948	1730	783
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	28.9	23.4	48.7	35.1	0.0				6.9	6.6	6.0
Incr Delay (d2), s/veh	0.0	3.4	0.1	0.5	0.4	0.0				3.6	1.5	2.1
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(50%),veh/ln	0.0	7.7	0.9	1.3	6.5	0.0				4.6	3.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.2	23.5	49.1	35.5	0.0				10.5	8.1	8.1
LnGrp LOS	A	C	C	D	D	A				B	A	A
Approach Vol, veh/h		434			335						2037	
Approach Delay, s/veh		31.1			37.7						8.9	
Approach LOS		C			D						A	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		57.1		32.9				32.9				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 45		* 33				* 33				
Max Q Clear Time (g_c+I1), s		18.5		26.1				20.4				
Green Ext Time (p_c), s		5.4		0.4				0.7				

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

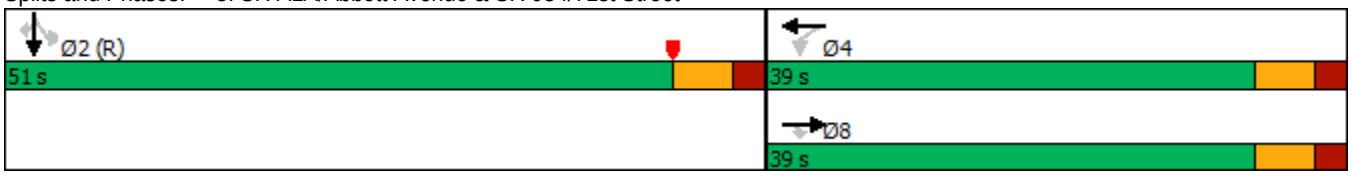
Notes

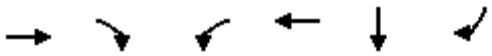
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	51	39	39
Maximum Split (%)	56.7%	43.3%	43.3%
Minimum Split (s)	31.3	31.3	31.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	1	1
Minimum Gap (s)	1	1	1
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	7	7
Flash Dont Walk (s)	18	18	18
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	89.3	50.3	50.3
End Time (s)	50.3	89.3	89.3
Yield/Force Off (s)	44	83	83
Yield/Force Off 170(s)	26	65	65
Local Start Time (s)	45.3	6.3	6.3
Local Yield (s)	0	39	39
Local Yield 170(s)	72	21	21

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 44 (49%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 3: SR A1A/Abbott Avenue & SR 934/71st Street

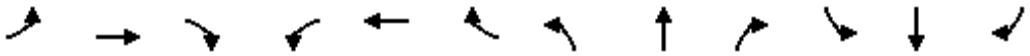




Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	379	55	54	281	1664	373
v/c Ratio	0.88	0.16	0.38	0.65	0.63	0.42
Control Delay	51.7	22.8	31.5	35.0	15.3	4.5
Queue Delay	21.9	0.0	0.0	1.8	0.2	0.0
Total Delay	73.5	22.8	31.5	36.7	15.5	4.5
Queue Length 50th (ft)	204	23	30	180	217	18
Queue Length 95th (ft)	286	47	m48	m211	319	77
Internal Link Dist (ft)	238			196	251	
Turn Bay Length (ft)		100	95			215
Base Capacity (vph)	548	429	183	548	2622	883
Starvation Cap Reductn	0	0	0	137	0	0
Spillback Cap Reductn	167	0	0	0	295	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.13	0.30	0.68	0.72	0.42

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	239	33	16	141	9	41	113	30	8	39	13
Future Volume (veh/h)	54	239	33	16	141	9	41	113	30	8	39	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.86		0.71	0.88		0.70	0.97		0.87	0.95		0.94
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	67	295	41	20	174	11	51	140	37	10	48	16
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	633	717	100	534	766	48	99	202	49	68	224	68
Arrive On Green	0.06	0.78	0.78	0.03	0.74	0.74	0.25	0.22	0.22	0.25	0.22	0.22
Sat Flow, veh/h	1603	1231	171	1603	1369	87	222	899	217	101	998	303
Grp Volume(v), veh/h	67	0	336	20	0	185	228	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	1402	1603	0	1455	1339	0	0	1402	0	0
Q Serve(g_s), s	1.5	0.0	7.1	0.5	0.0	3.5	8.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	7.1	0.5	0.0	3.5	13.8	0.0	0.0	3.8	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.06	0.22		0.16	0.14		0.22
Lane Grp Cap(c), veh/h	633	0	817	534	0	814	383	0	0	396	0	0
V/C Ratio(X)	0.11	0.00	0.41	0.04	0.00	0.23	0.59	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	667	0	817	606	0	814	595	0	0	610	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.47	0.00	0.47	0.99	0.00	0.99	0.73	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.9	0.0	5.0	8.1	0.0	5.5	32.1	0.0	0.0	28.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	0.0	0.6	0.4	0.0	0.0	0.1	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(50%),veh/ln	0.5	0.0	1.8	0.2	0.0	1.1	4.4	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	0.0	5.7	8.1	0.0	6.2	32.5	0.0	0.0	28.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		403			205			228			74	
Approach Delay, s/veh		5.9			6.3			32.5			28.5	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	56.5		26.5	5.0	58.6		26.5				
Change Period (Y+Rc), s	3.0	6.1		* 6.3	3.0	6.1		* 6.3				
Max Green Setting (Gmax), s	6.0	33.9		* 35	6.0	33.9		* 35				
Max Q Clear Time (g_c+I1), s	3.5	5.5		15.8	2.5	9.1		5.8				
Green Ext Time (p_c), s	0.0	0.4		0.5	0.0	0.9		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

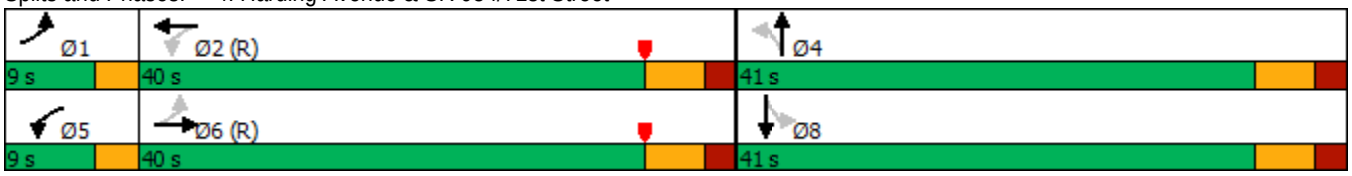
Notes

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

Phase Number	1	2	4	5	6	8
Movement	EBL	WBTL	NBTL	WBL	EBTL	SBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	9	40	41	9	40	41
Maximum Split (%)	10.0%	44.4%	45.6%	10.0%	44.4%	45.6%
Minimum Split (s)	8	23	29.3	8	23	29.3
Yellow Time (s)	3	4	4	3	4	4
All-Red Time (s)	0	2.1	2.3	0	2.1	2.3
Minimum Initial (s)	5	7	7	5	7	7
Vehicle Extension (s)	2	1	1	2	1	1
Minimum Gap (s)	2	1	1	2	1	1
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		9	16		9	16
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	88.1	7.1	47.1	88.1	7.1	47.1
End Time (s)	7.1	47.1	88.1	7.1	47.1	88.1
Yield/Force Off (s)	4.1	41	81.8	4.1	41	81.8
Yield/Force Off 170(s)	4.1	32	65.8	4.1	32	65.8
Local Start Time (s)	47.1	56.1	6.1	47.1	56.1	6.1
Local Yield (s)	53.1	0	40.8	53.1	0	40.8
Local Yield 170(s)	53.1	81	24.8	53.1	81	24.8

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 41 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	

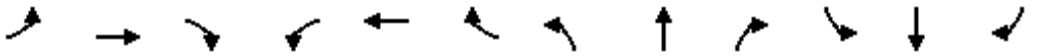
Splits and Phases: 4: Harding Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	67	336	20	185	228	74
v/c Ratio	0.22	0.41	0.05	0.23	0.81	0.25
Control Delay	4.4	11.7	8.5	17.4	53.2	23.8
Queue Delay	0.0	6.0	0.0	0.7	0.0	0.0
Total Delay	4.4	17.8	8.5	18.1	53.2	23.8
Queue Length 50th (ft)	2	14	3	40	117	27
Queue Length 95th (ft)	m17	m245	15	136	154	50
Internal Link Dist (ft)		196		208	595	224
Turn Bay Length (ft)	90		75			
Base Capacity (vph)	307	816	413	811	508	541
Starvation Cap Reductn	0	416	0	372	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.84	0.05	0.42	0.45	0.14

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	273	42	21	160	18	81	319	60	10	35	54
Future Volume (veh/h)	89	273	42	21	160	18	81	319	60	10	35	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.89	0.98		0.88	0.96		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	97	297	46	23	174	20	88	347	65	11	38	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	497	534	83	372	523	60	120	379	68	71	190	261
Arrive On Green	0.07	0.57	0.57	0.03	0.53	0.53	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1603	1256	195	1603	1313	151	194	999	178	70	502	688
Grp Volume(v), veh/h	97	0	343	23	0	194	500	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	1450	1603	0	1464	1371	0	0	1260	0	0
Q Serve(g_s), s	3.1	0.0	13.5	0.8	0.0	6.8	25.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	13.5	0.8	0.0	6.8	32.0	0.0	0.0	5.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.10	0.18		0.13	0.10		0.55
Lane Grp Cap(c), veh/h	497	0	617	372	0	583	567	0	0	522	0	0
V/C Ratio(X)	0.20	0.00	0.56	0.06	0.00	0.33	0.88	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	521	0	617	440	0	583	576	0	0	530	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.00	0.36	0.98	0.00	0.98	0.57	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.8	0.0	14.2	15.8	0.0	14.4	27.1	0.0	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.3	0.0	0.0	1.5	8.8	0.0	0.0	0.1	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(50%),veh/ln	1.1	0.0	3.9	0.3	0.0	2.3	11.3	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	15.5	15.8	0.0	15.9	35.8	0.0	0.0	19.0	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	D	A	A	B	A	A
Approach Vol, veh/h		440			217			500			108	
Approach Delay, s/veh		15.1			15.9			35.8			19.0	
Approach LOS		B			B			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	41.9		40.4	5.2	44.4		40.4				
Change Period (Y+Rc), s	3.0	6.1		* 6.3	3.0	6.1		* 6.3				
Max Green Setting (Gmax), s	6.0	33.9		* 35	6.0	33.9		* 35				
Max Q Clear Time (g_c+I1), s	5.1	8.8		34.0	2.8	15.5		7.0				
Green Ext Time (p_c), s	0.0	0.4		0.1	0.0	0.7		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.8	
HCM 6th LOS		C	

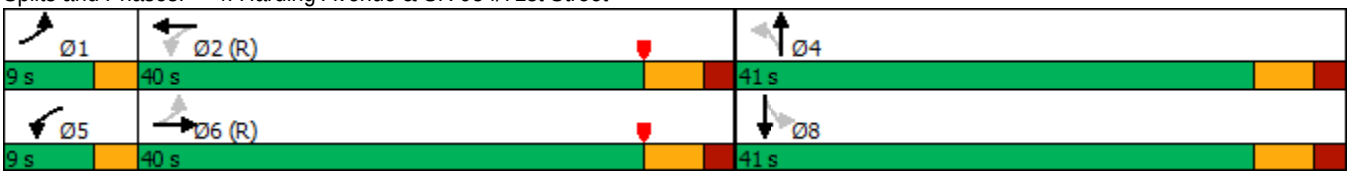
Notes

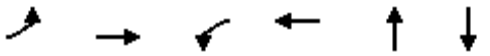
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	4	5	6	8
Movement	EBL	WBTL	NBTL	WBL	EBTL	SBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	9	40	41	9	40	41
Maximum Split (%)	10.0%	44.4%	45.6%	10.0%	44.4%	45.6%
Minimum Split (s)	8	23	29.3	8	23	29.3
Yellow Time (s)	3	4	4	3	4	4
All-Red Time (s)	0	2.1	2.3	0	2.1	2.3
Minimum Initial (s)	5	7	7	5	7	7
Vehicle Extension (s)	2	1	1	2	1	1
Minimum Gap (s)	2	1	1	2	1	1
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		9	16		9	16
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	88.1	7.1	47.1	88.1	7.1	47.1
End Time (s)	7.1	47.1	88.1	7.1	47.1	88.1
Yield/Force Off (s)	4.1	41	81.8	4.1	41	81.8
Yield/Force Off 170(s)	4.1	32	65.8	4.1	32	65.8
Local Start Time (s)	47.1	56.1	6.1	47.1	56.1	6.1
Local Yield (s)	53.1	0	40.8	53.1	0	40.8
Local Yield 170(s)	53.1	81	24.8	53.1	81	24.8

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	75
Offset: 41 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	

Splits and Phases: 4: Harding Avenue & SR 934/71st Street





Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	97	343	23	194	500	108
v/c Ratio	0.20	0.53	0.06	0.33	0.98	0.21
Control Delay	20.8	33.5	12.9	23.3	64.0	10.5
Queue Delay	0.0	55.6	0.0	0.8	41.5	0.1
Total Delay	20.8	89.1	12.9	24.1	105.5	10.6
Queue Length 50th (ft)	54	199	10	124	268	17
Queue Length 95th (ft)	m81	289	21	169	#478	52
Internal Link Dist (ft)		196		208	595	224
Turn Bay Length (ft)	90		75			
Base Capacity (vph)	494	643	425	595	520	523
Starvation Cap Reductn	0	329	0	190	0	0
Spillback Cap Reductn	0	113	0	19	73	71
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	1.09	0.05	0.48	1.12	0.24

Intersection Summary

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

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

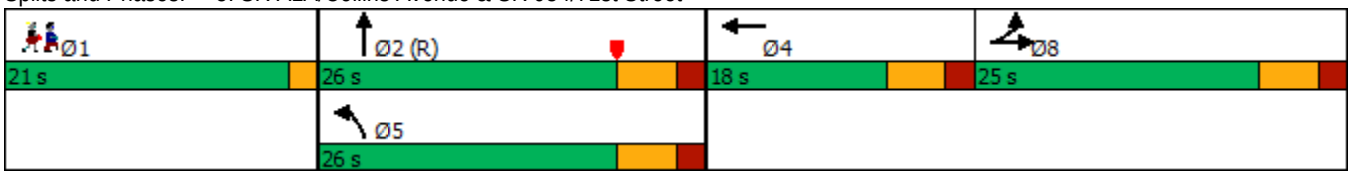
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	10	0	0	30	18	133	934	3	0	0	0
Future Volume (vph)	266	10	0	0	30	18	133	934	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.95		1.00	1.00				
Flt Protected	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (prot)	1362	1370			1412		1593	4572				
Flt Permitted	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (perm)	1362	1370			1412		1593	4572				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	280	11	0	0	32	19	140	983	3	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	0	0
Lane Group Flow (vph)	146	145	0	0	33	0	140	986	0	0	0	0
Confl. Peds. (#/hr)	4		44	44		4	27		59	59		27
Confl. Bikes (#/hr)			1			2			1			1
Parking (#/hr)	0	0			0	0						
Turn Type	Split	NA			NA		Prot	NA				
Protected Phases	8	8			4		5	2				
Permitted Phases												
Actuated Green, G (s)	15.0	15.0			5.2		51.8	51.8				
Effective Green, g (s)	15.0	15.0			5.2		51.8	51.8				
Actuated g/C Ratio	0.17	0.17			0.06		0.58	0.58				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Vehicle Extension (s)	1.0	1.0			2.5		1.0	1.0				
Lane Grp Cap (vph)	227	228			81		916	2631				
v/s Ratio Prot	c0.11	0.11			c0.02		0.09	c0.22				
v/s Ratio Perm												
v/c Ratio	0.64	0.64			0.41		0.15	0.37				
Uniform Delay, d1	35.0	35.0			40.9		8.9	10.3				
Progression Factor	0.65	0.65			1.00		0.65	0.71				
Incremental Delay, d2	4.3	3.9			2.4		0.0	0.4				
Delay (s)	27.0	26.6			43.4		5.8	7.8				
Level of Service	C	C			D		A	A				
Approach Delay (s)		26.8			43.4			7.5			0.0	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	4	5	8
Movement	Ped	NBT	WBT	NBL	EBTL
Lead/Lag					
Lead-Lag Optimize					
Recall Mode	None	C-Max	None	None	None
Maximum Split (s)	21	26	18	26	25
Maximum Split (%)	23.3%	28.9%	20.0%	28.9%	27.8%
Minimum Split (s)	3	20	13	11	25
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	4	7	5	7
Vehicle Extension (s)	0.2	1	2.5	1	1
Minimum Gap (s)	0.2	1	2.5	1	1
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4			4
Flash Dont Walk (s)		10			15
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	32	53	79	53	7
End Time (s)	53	79	7	79	32
Yield/Force Off (s)	51	73	1	73	26
Yield/Force Off 170(s)	51	63	1	73	11
Local Start Time (s)	49	70	6	70	24
Local Yield (s)	68	0	18	0	43
Local Yield 170(s)	68	80	18	0	28

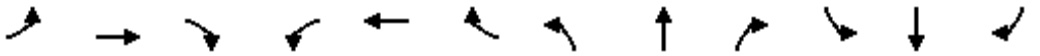
Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 73 (81%), Referenced to phase 2:NBT, Start of Yellow	

Splits and Phases: 5: SR A1A/Collins Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Group Flow (vph)	146	145	51	140	986
v/c Ratio	0.65	0.64	0.35	0.15	0.36
Control Delay	34.6	34.1	33.7	7.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	34.1	33.7	7.7	8.5
Queue Length 50th (ft)	75	74	18	34	135
Queue Length 95th (ft)	94	92	51	89	183
Internal Link Dist (ft)		208	156		242
Turn Bay Length (ft)	95			190	
Base Capacity (vph)	288	290	205	959	2755
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	0.50	0.25	0.15	0.36

Intersection Summary



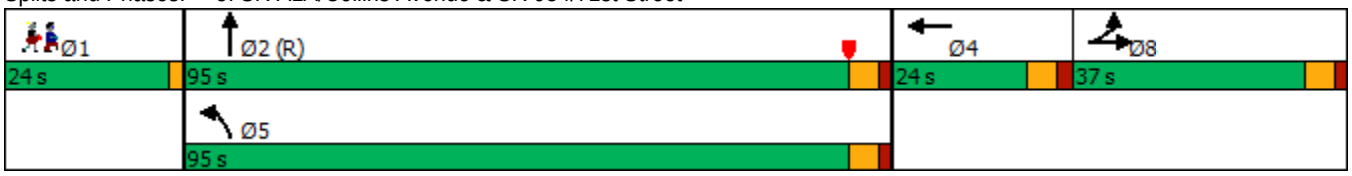
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	319	9	0	0	15	33	151	2185	11	0	0	0
Future Volume (vph)	319	9	0	0	15	33	151	2185	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frpb, ped/bikes	1.00	1.00			0.92		1.00	1.00				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.91		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1362	1369			1259		1593	4569				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1362	1369			1259		1593	4569				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	329	9	0	0	15	34	156	2253	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	0	0	0	0
Lane Group Flow (vph)	168	170	0	0	16	0	156	2264	0	0	0	0
Confl. Peds. (#/hr)	12		74	74		12	115		29	29		115
Confl. Bikes (#/hr)			1			3			4			3
Parking (#/hr)	0	0			0	0						
Turn Type	Split	NA			NA		Prot	NA				
Protected Phases	8	8			4		5	2				
Permitted Phases												
Actuated Green, G (s)	26.5	26.5			7.2		128.3	128.3				
Effective Green, g (s)	26.5	26.5			7.2		128.3	128.3				
Actuated g/C Ratio	0.15	0.15			0.04		0.71	0.71				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Vehicle Extension (s)	1.0	1.0			2.5		1.0	1.0				
Lane Grp Cap (vph)	200	201			50		1135	3256				
v/s Ratio Prot	0.12	c0.12			c0.01		0.10	c0.50				
v/s Ratio Perm												
v/c Ratio	0.84	0.85			0.33		0.14	0.70				
Uniform Delay, d1	74.7	74.8			84.0		8.2	14.7				
Progression Factor	0.80	0.80			1.00		0.56	0.59				
Incremental Delay, d2	20.5	21.5			2.8		0.0	1.0				
Delay (s)	80.0	81.0			86.8		4.6	9.6				
Level of Service	F	F			F		A	A				
Approach Delay (s)		80.5			86.8			9.3			0.0	
Approach LOS		F			F			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	4	5	8
Movement	Ped	NBT	WBT	NBL	EBTL
Lead/Lag					
Lead-Lag Optimize					
Recall Mode	None	C-Max	None	None	None
Maximum Split (s)	24	95	24	95	37
Maximum Split (%)	13.3%	52.8%	13.3%	52.8%	20.6%
Minimum Split (s)	3	20	13	11	25
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	4	7	5	7
Vehicle Extension (s)	0.2	1	2.5	1	1
Minimum Gap (s)	0.2	1	2.5	1	1
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4			4
Flash Dont Walk (s)		10			15
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	150	174	89	174	113
End Time (s)	174	89	113	89	150
Yield/Force Off (s)	172	83	107	83	144
Yield/Force Off 170(s)	172	73	107	83	129
Local Start Time (s)	67	91	6	91	30
Local Yield (s)	89	0	24	0	61
Local Yield 170(s)	89	170	24	0	46

Intersection Summary	
Cycle Length	180
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 83 (46%), Referenced to phase 2:NBT, Start of Yellow	

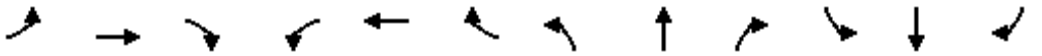
Splits and Phases: 5: SR A1A/Collins Avenue & SR 934/71st Street



Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Group Flow (vph)	168	170	49	156	2264
v/c Ratio	0.84	0.85	0.52	0.14	0.69
Control Delay	86.3	86.9	52.9	5.6	10.3
Queue Delay	6.8	7.1	0.0	0.0	0.0
Total Delay	93.1	93.9	52.9	5.6	10.3
Queue Length 50th (ft)	220	222	18	28	165
Queue Length 95th (ft)	m283	m284	66	m49	790
Internal Link Dist (ft)		208	156		242
Turn Bay Length (ft)	95			190	
Base Capacity (vph)	241	242	162	1146	3287
Starvation Cap Reductn	40	40	0	0	83
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.84	0.84	0.30	0.14	0.71

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	5	9	0	47	2	586	3	151	1287	1
Future Volume (veh/h)	3	0	5	9	0	47	2	586	3	151	1287	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.96		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	3	0	5	10	0	51	2	637	3	164	1399	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	0	139	61	10	121	41	2218	10	251	1976	1
Arrive On Green	0.11	0.00	0.11	0.15	0.00	0.11	1.00	0.97	0.97	1.00	1.00	0.97
Sat Flow, veh/h	1216	0	1216	124	85	1064	2	3037	14	265	2584	2
Grp Volume(v), veh/h	3	0	5	61	0	0	353	0	289	760	0	804
Grp Sat Flow(s),veh/h/ln	1216	0	1216	1273	0	0	1677	0	1376	1319	0	1531
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.3	3.8	0.0	0.0	0.7	0.0	0.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00	0.16		0.84	0.01		0.01	0.22		0.00
Lane Grp Cap(c), veh/h	235	0	139	233	0	0	1323	0	1005	1057	0	1171
V/C Ratio(X)	0.01	0.00	0.04	0.26	0.00	0.00	0.27	0.00	0.29	0.72	0.00	0.69
Avail Cap(c_a), veh/h	449	0	353	452	0	0	1323	0	1005	1057	0	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.26	0.00	0.26
Uniform Delay (d), s/veh	35.4	0.0	35.5	36.8	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.4	0.0	0.0	0.5	0.0	0.7	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.2	0.0	0.0	0.3	0.0	0.3	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	35.5	37.2	0.0	0.0	0.9	0.0	1.1	1.1	0.0	0.9
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		8			61			642			1564	
Approach Delay, s/veh		35.5			37.2			1.0			1.0	
Approach LOS		D			D			A			A	

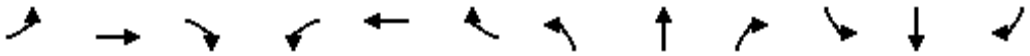
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.8		17.2		72.8		17.2				
Change Period (Y+Rc), s		7.1		6.9		7.1		6.9				
Max Green Setting (Gmax), s		49.9		26.1		49.9		26.1				
Max Q Clear Time (g_c+I1), s		2.0		5.8		2.8		2.3				
Green Ext Time (p_c), s		5.5		0.2		1.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			2.1									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	57	33	57	33
Maximum Split (%)	63.3%	36.7%	63.3%	36.7%
Minimum Split (s)	23.8	23.6	23.8	31.9
Yellow Time (s)	4	4	4	4
All-Red Time (s)	3.1	2.9	3.1	2.9
Minimum Initial (s)	16	7	16	7
Vehicle Extension (s)	1	2.5	1	2.5
Minimum Gap (s)	1	2.5	1	2.5
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				5
Flash Dont Walk (s)				20
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	73.1	40.1	73.1	40.1
End Time (s)	40.1	73.1	40.1	73.1
Yield/Force Off (s)	33	66.2	33	66.2
Yield/Force Off 170(s)	33	66.2	33	46.2
Local Start Time (s)	40.1	7.1	40.1	7.1
Local Yield (s)	0	33.2	0	33.2
Local Yield 170(s)	0	33.2	0	13.2

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 33 (37%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	

Splits and Phases: 6: Indian Creek Drive & 69th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	4	149	1	921	4	105	593	0
Future Volume (veh/h)	0	0	0	18	4	149	1	921	4	105	593	0
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	0.99		0.97	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	0.90	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	0	0	0	19	4	157	1	969	4	111	624	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	252	0	56	15	182	40	2065	9	266	1416	0
Arrive On Green	0.00	0.00	0.00	0.17	0.17	0.17	0.90	0.90	0.90	0.90	0.90	0.00
Sat Flow, veh/h	1103	1515	0	72	89	1096	0	3046	13	312	2165	0
Grp Volume(v), veh/h	0	0	0	180	0	0	536	0	438	303	432	0
Grp Sat Flow(s),veh/h/ln	1103	1515	0	1257	0	0	1683	0	1376	945	1455	0
Q Serve(g_s), s	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0	4.9	1.1	4.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	12.5	0.0	0.0	4.9	0.0	4.9	6.0	4.3	0.0
Prop In Lane	1.00		0.00	0.11		0.87	0.00		0.01	0.37		0.00
Lane Grp Cap(c), veh/h	80	252	0	253	0	0	1181	0	933	695	987	0
V/C Ratio(X)	0.00	0.00	0.00	0.71	0.00	0.00	0.45	0.00	0.47	0.44	0.44	0.00
Avail Cap(c_a), veh/h	216	439	0	407	0	0	1181	0	933	695	987	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	36.4	0.0	0.0	1.7	0.0	1.7	1.6	1.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	0.0	0.0	1.3	0.0	1.7	1.7	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.0	0.0	0.0	1.3	0.0	1.2	0.8	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	39.2	0.0	0.0	2.9	0.0	3.4	3.3	2.9	0.0
LnGrp LOS	A	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		0			180			974			735	
Approach Delay, s/veh		0.0			39.2			3.1			3.1	
Approach LOS					D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.1		21.9		68.1		21.9				
Change Period (Y+Rc), s		7.1		6.9		7.1		6.9				
Max Green Setting (Gmax), s		49.9		26.1		49.9		26.1				
Max Q Clear Time (g_c+I1), s		8.0		14.5		6.9		0.0				
Green Ext Time (p_c), s		2.4		0.6		2.3		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			6.5									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	57	33	57	33
Maximum Split (%)	63.3%	36.7%	63.3%	36.7%
Minimum Split (s)	23.8	23.6	23.8	31.9
Yellow Time (s)	4	4	4	4
All-Red Time (s)	3.1	2.9	3.1	2.9
Minimum Initial (s)	16	7	16	7
Vehicle Extension (s)	1	2.5	1	2.5
Minimum Gap (s)	1	2.5	1	2.5
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				5
Flash Dont Walk (s)				20
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	21.1	78.1	21.1	78.1
End Time (s)	78.1	21.1	78.1	21.1
Yield/Force Off (s)	71	14.2	71	14.2
Yield/Force Off 170(s)	71	14.2	71	84.2
Local Start Time (s)	40.1	7.1	40.1	7.1
Local Yield (s)	0	33.2	0	33.2
Local Yield 170(s)	0	33.2	0	13.2

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 71 (79%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	

Splits and Phases: 6: Indian Creek Drive & 69th Street

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	146	1	2	39	10	2	24	19	71	5	13
Future Vol, veh/h	4	146	1	2	39	10	2	24	19	71	5	13
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	180	1	2	48	12	2	30	23	88	6	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	7.8	7.7	8.4
HCM LOS	A	A	A	A

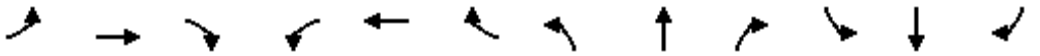
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	3%	4%	80%
Vol Thru, %	53%	97%	76%	6%
Vol Right, %	42%	1%	20%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	151	51	89
LT Vol	2	4	2	71
Through Vol	24	146	39	5
RT Vol	19	1	10	13
Lane Flow Rate	56	186	63	110
Geometry Grp	1	1	1	1
Degree of Util (X)	0.068	0.228	0.077	0.142
Departure Headway (Hd)	4.389	4.394	4.419	4.637
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	817	818	812	775
Service Time	2.413	2.412	2.441	2.659
HCM Lane V/C Ratio	0.069	0.227	0.078	0.142
HCM Control Delay	7.7	8.7	7.8	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.9	0.2	0.5

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	74	7	5	161	140	12	79	24	14	12	10
Future Vol, veh/h	15	74	7	5	161	140	12	79	24	14	12	10
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	81	8	5	177	154	13	87	26	15	13	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	9.9	8.9	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	16%	2%	39%
Vol Thru, %	69%	77%	53%	33%
Vol Right, %	21%	7%	46%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	96	306	36
LT Vol	12	15	5	14
Through Vol	79	74	161	12
RT Vol	24	7	140	10
Lane Flow Rate	126	105	336	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.17	0.137	0.392	0.055
Departure Headway (Hd)	4.848	4.687	4.198	4.985
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	738	764	857	716
Service Time	2.89	2.725	2.225	3.034
HCM Lane V/C Ratio	0.171	0.137	0.392	0.056
HCM Control Delay	8.9	8.5	9.9	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.5	1.9	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	64	171	155	41	0	0	0	0	49	2138	10
Future Volume (veh/h)	0	64	171	155	41	0	0	0	0	49	2138	10
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.96
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				0.90	1.00	0.94
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1683	1683	1683	1683	0				1710	1683	1710
Adj Flow Rate, veh/h	0	68	182	165	44	0				52	2274	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	123	329	236	54	0				50	2339	12
Arrive On Green	0.00	0.34	0.34	0.34	0.34	0.00				0.72	0.69	0.69
Sat Flow, veh/h	0	360	964	481	158	0				97	4507	22
Grp Volume(v), veh/h	0	0	250	209	0	0				812	749	775
Grp Sat Flow(s),veh/h/ln	0	0	1324	639	0	0				1510	1532	1584
Q Serve(g_s), s	0.0	0.0	13.8	16.0	0.0	0.0				46.7	39.0	39.1
Cycle Q Clear(g_c), s	0.0	0.0	13.8	29.8	0.0	0.0				46.7	39.0	39.1
Prop In Lane	0.00		0.73	0.79		0.00				0.06		0.01
Lane Grp Cap(c), veh/h	0	0	452	290	0	0				784	795	822
V/C Ratio(X)	0.00	0.00	0.55	0.72	0.00	0.00				1.04	0.94	0.94
Avail Cap(c_a), veh/h	0	0	452	290	0	0				784	795	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	1.00	0.96	0.00	0.00				0.52	0.52	0.52
Uniform Delay (d), s/veh	0.0	0.0	24.1	35.2	0.0	0.0				13.8	12.8	12.8
Incr Delay (d2), s/veh	0.0	0.0	1.2	7.8	0.0	0.0				33.3	12.9	12.7
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(50%),veh/ln	0.0	0.0	4.3	5.1	0.0	0.0				17.0	11.2	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	25.3	42.9	0.0	0.0				47.1	25.6	25.5
LnGrp LOS	A	A	C	D	A	A				F	C	C
Approach Vol, veh/h		250			209						2337	
Approach Delay, s/veh		25.3			42.9						33.1	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		53.0		37.0				37.0				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 47		* 31				* 31				
Max Q Clear Time (g_c+I1), s		48.7		31.8				15.8				
Green Ext Time (p_c), s		0.0		0.0				1.1				

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

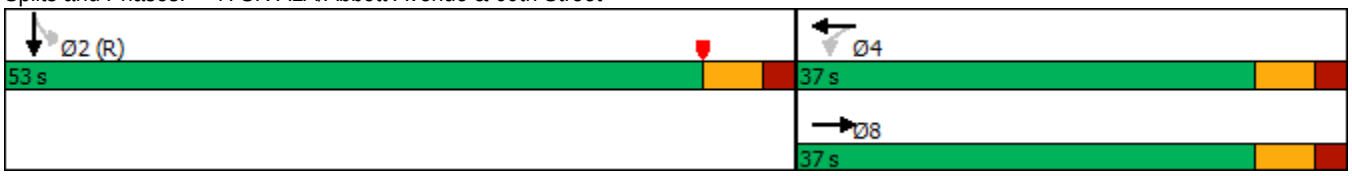
User approved pedestrian interval to be less than phase max green.

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

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	53	37	37
Maximum Split (%)	58.9%	41.1%	41.1%
Minimum Split (s)	27.3	29.3	13.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	2.5	2.5
Minimum Gap (s)	1	2.5	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	5	
Flash Dont Walk (s)	14	18	
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	23.3	76.3	76.3
End Time (s)	76.3	23.3	23.3
Yield/Force Off (s)	70	17	17
Yield/Force Off 170(s)	56	89	17
Local Start Time (s)	43.3	6.3	6.3
Local Yield (s)	0	37	37
Local Yield 170(s)	76	19	37

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 70 (78%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 7: SR A1A/Abbott Avenue & 69th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	100	30	221	235	0	0	0	0	84	1405	36
Future Volume (veh/h)	0	100	30	221	235	0	0	0	0	84	1405	36
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		1.00				1.00		0.95
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				0.90	1.00	0.94
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1683	1683	1683	1683	0				1710	1683	1710
Adj Flow Rate, veh/h	0	106	32	235	250	0				89	1495	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	404	122	253	214	0				118	2110	55
Arrive On Green	0.00	0.36	0.36	0.36	0.36	0.00				0.66	0.66	0.66
Sat Flow, veh/h	0	1111	335	534	588	0				237	4249	111
Grp Volume(v), veh/h	0	0	138	485	0	0				565	523	534
Grp Sat Flow(s),veh/h/ln	0	0	1446	1122	0	0				1503	1532	1562
Q Serve(g_s), s	0.0	0.0	6.0	26.7	0.0	0.0				22.9	19.1	19.1
Cycle Q Clear(g_c), s	0.0	0.0	6.0	32.7	0.0	0.0				22.9	19.1	19.1
Prop In Lane	0.00		0.23	0.48		0.00				0.16		0.07
Lane Grp Cap(c), veh/h	0	0	525	467	0	0				747	761	776
V/C Ratio(X)	0.00	0.00	0.26	1.04	0.00	0.00				0.76	0.69	0.69
Avail Cap(c_a), veh/h	0	0	525	467	0	0				747	761	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	1.00	0.62	0.00	0.00				0.76	0.76	0.76
Uniform Delay (d), s/veh	0.0	0.0	20.2	33.1	0.0	0.0				11.6	10.9	10.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	43.2	0.0	0.0				5.4	3.9	3.8
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	0.0	0.0	2.0	15.9	0.0	0.0				6.4	5.3	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	20.4	76.3	0.0	0.0				17.0	14.8	14.7
LnGrp LOS	A	A	C	F	A	A				B	B	B
Approach Vol, veh/h		138			485						1622	
Approach Delay, s/veh		20.4			76.3						15.5	
Approach LOS		C			E						B	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		51.0		39.0				39.0				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 45		* 33				* 33				
Max Q Clear Time (g_c+I1), s		24.9		34.7				8.0				
Green Ext Time (p_c), s		4.0		0.0				0.6				

Intersection Summary		
HCM 6th Ctrl Delay		29.0
HCM 6th LOS		C

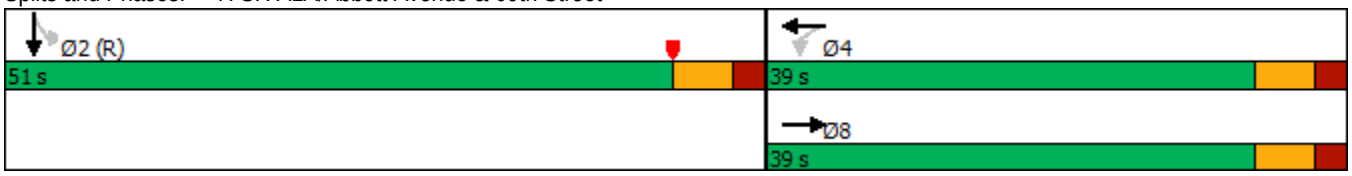
Notes

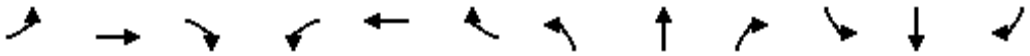
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	8
Movement	SBTL	WBTL	EBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	51	39	39
Maximum Split (%)	56.7%	43.3%	43.3%
Minimum Split (s)	27.3	29.3	13.3
Yellow Time (s)	4	4	4
All-Red Time (s)	2.3	2.3	2.3
Minimum Initial (s)	7	7	7
Vehicle Extension (s)	1	2.5	2.5
Minimum Gap (s)	1	2.5	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	7	5	
Flash Dont Walk (s)	14	18	
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	2.3	53.3	53.3
End Time (s)	53.3	2.3	2.3
Yield/Force Off (s)	47	86	86
Yield/Force Off 170(s)	33	68	86
Local Start Time (s)	45.3	6.3	6.3
Local Yield (s)	0	39	39
Local Yield 170(s)	76	21	39

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 47 (52%), Referenced to phase 2:SBTL, Start of Yellow	

Splits and Phases: 7: SR A1A/Abbott Avenue & 69th Street





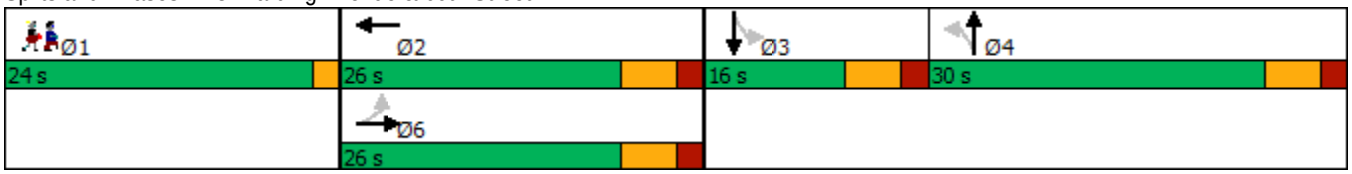
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	106	0	0	98	15	61	160	24	42	0	36
Future Volume (vph)	9	106	0	0	98	15	61	160	24	42	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			4.0		6.0	6.0			4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00			0.91		1.00	1.00			0.98	
Flpb, ped/bikes		0.96			1.00		0.98	1.00			1.00	
Frt		1.00			0.98		1.00	0.98			0.94	
Flt Protected		1.00			1.00		0.95	1.00			0.97	
Satd. Flow (prot)		1440			1350		1402	1474			1344	
Flt Permitted		0.96			1.00		0.69	1.00			0.37	
Satd. Flow (perm)		1390			1350		1020	1474			512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	12	139	0	0	129	20	80	211	32	55	0	47
RTOR Reduction (vph)	0	0	0	0	6	0	0	5	0	0	85	0
Lane Group Flow (vph)	0	151	0	0	143	0	80	238	0	0	17	0
Confl. Peds. (#/hr)	1000		100	1000		1000	10		6	6		10
Confl. Bikes (#/hr)			1			1						
Parking (#/hr)	0	0			0	0	0	0	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6						4			3		
Actuated Green, G (s)		10.2			10.2		15.9	15.9			6.3	
Effective Green, g (s)		10.2			12.2		15.9	15.9			8.3	
Actuated g/C Ratio		0.20			0.24		0.32	0.32			0.16	
Clearance Time (s)		6.0			6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		281			326		321	465			84	
v/s Ratio Prot					0.11			c0.16				
v/s Ratio Perm		c0.11					0.08				c0.03	
v/c Ratio		0.54			0.44		0.25	0.51			0.20	
Uniform Delay, d1		18.0			16.2		12.8	14.1			18.2	
Progression Factor		1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2		2.0			0.9		0.4	0.9			1.2	
Delay (s)		20.0			17.1		13.2	15.0			19.4	
Level of Service		B			B		B	B			B	
Approach Delay (s)		20.0			17.1			14.6			19.4	
Approach LOS		B			B			B			B	

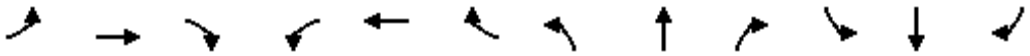
Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	3	4	6
Movement	Ped	WBT	SBTL	NBTL	EBTL
Lead/Lag			Lead	Lag	
Lead-Lag Optimize			Yes	Yes	
Recall Mode	None	None	None	None	None
Maximum Split (s)	24	26	16	30	26
Maximum Split (%)	25.0%	27.1%	16.7%	31.3%	27.1%
Minimum Split (s)	24	26	13	30	26
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	7	7	7	7
Vehicle Extension (s)	0.2	3	3	3	3
Minimum Gap (s)	0.2	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	0	4	4
Flash Dont Walk (s)		16	0	20	16
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24	50	66	24
End Time (s)	24	50	66	0	50
Yield/Force Off (s)	22	44	60	90	44
Yield/Force Off 170(s)	22	28	60	70	28
Local Start Time (s)	72	0	26	42	0
Local Yield (s)	94	20	36	66	20
Local Yield 170(s)	94	4	36	46	4

Intersection Summary	
Cycle Length	96
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 8: Harding Avenue & 69th Street





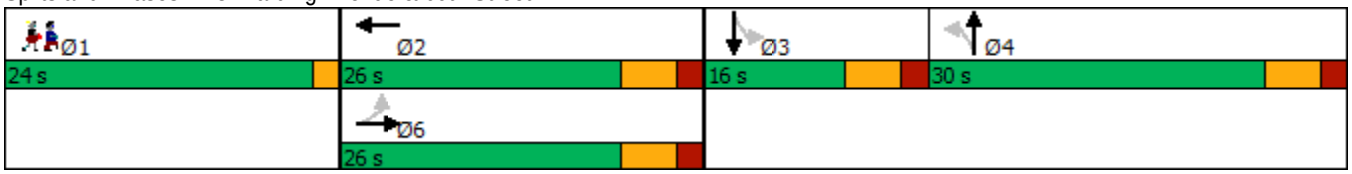
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	161	0	0	156	37	299	340	70	26	0	59
Future Volume (vph)	13	161	0	0	156	37	299	340	70	26	0	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0			6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00			0.98		1.00	0.99			0.93	
Flpb, ped/bikes		0.99			1.00		0.96	1.00			1.00	
Frt		1.00			0.97		1.00	0.97			0.91	
Flt Protected		1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1495			1436		1376	1460			1252	
Flt Permitted		0.97			1.00		0.70	1.00			0.44	
Satd. Flow (perm)		1448			1436		1011	1460			554	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	14	171	0	0	166	39	318	362	74	28	0	63
RTOR Reduction (vph)	0	0	0	0	8	0	0	6	0	0	83	0
Lane Group Flow (vph)	0	185	0	0	197	0	318	430	0	0	8	0
Confl. Peds. (#/hr)	59		58	58		59	14		17	17		14
Confl. Bikes (#/hr)			1			7			1			1
Parking (#/hr)	0	0			0	0	0	0	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6						4			3		
Actuated Green, G (s)		15.6			15.6		24.8	24.8			6.0	
Effective Green, g (s)		15.6			15.6		24.8	24.8			6.0	
Actuated g/C Ratio		0.24			0.24		0.39	0.39			0.09	
Clearance Time (s)		6.0			6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		350			347		389	562			51	
v/s Ratio Prot					c0.14			0.29				
v/s Ratio Perm		0.13					c0.31				c0.02	
v/c Ratio		0.53			0.57		0.82	0.76			0.17	
Uniform Delay, d1		21.2			21.4		17.8	17.3			26.9	
Progression Factor		1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.4			2.1		12.5	6.1			1.5	
Delay (s)		22.6			23.6		30.3	23.4			28.4	
Level of Service		C			C		C	C			C	
Approach Delay (s)		22.6			23.6			26.3			28.4	
Approach LOS		C			C			C			C	

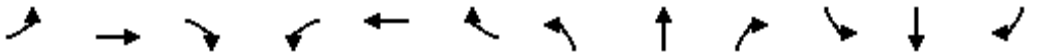
Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	20.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Phase Number	1	2	3	4	6
Movement	Ped	WBT	SBTL	NBTL	EBTL
Lead/Lag			Lead	Lag	
Lead-Lag Optimize			Yes	Yes	
Recall Mode	None	None	None	None	None
Maximum Split (s)	24	26	16	30	26
Maximum Split (%)	25.0%	27.1%	16.7%	31.3%	27.1%
Minimum Split (s)	24	26	13	30	26
Yellow Time (s)	2	4	4	4	4
All-Red Time (s)	0	2	2	2	2
Minimum Initial (s)	1	7	7	7	7
Vehicle Extension (s)	0.2	3	3	3	3
Minimum Gap (s)	0.2	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		4	0	4	4
Flash Dont Walk (s)		16	0	20	16
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24	50	66	24
End Time (s)	24	50	66	0	50
Yield/Force Off (s)	22	44	60	90	44
Yield/Force Off 170(s)	22	28	60	70	28
Local Start Time (s)	72	0	26	42	0
Local Yield (s)	94	20	36	66	20
Local Yield 170(s)	94	4	36	46	4

Intersection Summary	
Cycle Length	96
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 8: Harding Avenue & 69th Street



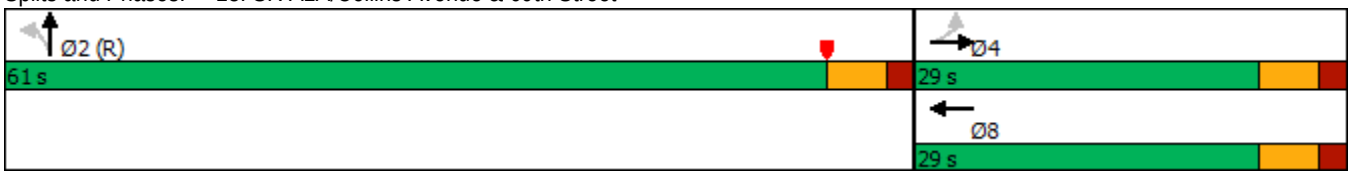


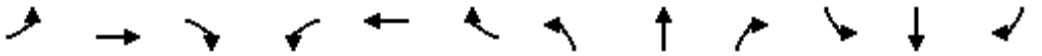
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	35	0	0	11	8	63	951	15	0	0	0
Future Volume (veh/h)	110	35	0	0	11	8	63	951	15	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.94		1.00	1.00		0.92	1.00		0.94			
Parking 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	1683	1683	0	0	1683	1683	1683	1683	1683			
Adj Flow Rate, veh/h	115	36	0	0	11	8	66	991	16			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	274	74	0	0	191	139	1038	3115	50			
Arrive On Green	0.24	0.22	0.00	0.00	0.22	0.22	0.86	0.89	0.86			
Sat Flow, veh/h	928	339	0	0	871	633	1603	4653	75			
Grp Volume(v), veh/h	151	0	0	0	0	19	66	652	355			
Grp Sat Flow(s),veh/h/ln	1266	0	0	0	0	1504	1603	1532	1664			
Q Serve(g_s), s	8.4	0.0	0.0	0.0	0.0	0.9	0.5	2.9	3.0			
Cycle Q Clear(g_c), s	9.3	0.0	0.0	0.0	0.0	0.9	0.5	2.9	3.0			
Prop In Lane	0.76		0.00	0.00		0.42	1.00		0.05			
Lane Grp Cap(c), veh/h	377	0	0	0	0	330	1038	2051	1114			
V/C Ratio(X)	0.40	0.00	0.00	0.00	0.00	0.06	0.06	0.32	0.32			
Avail Cap(c_a), veh/h	422	0	0	0	0	384	1038	2051	1114			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33			
Upstream Filter(I)	0.09	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	30.4	0.0	0.0	0.0	0.0	27.8	2.2	1.8	1.8			
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.8			
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	2.7	0.0	0.0	0.0	0.0	0.3	0.2	0.7	0.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	0.0	0.0	0.0	0.0	27.8	2.4	2.2	2.6			
LnGrp LOS	C	A	A	A	A	C	A	A	A			
Approach Vol, veh/h		151			19			1073				
Approach Delay, s/veh		30.4			27.8			2.3				
Approach LOS		C			C			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		64.2		25.8				25.8				
Change Period (Y+Rc), s		6.0		6.0				6.0				
Max Green Setting (Gmax), s		55.0		23.0				23.0				
Max Q Clear Time (g_c+I1), s		5.0		11.3				2.9				
Green Ext Time (p_c), s		6.9		0.2				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			6.1									
HCM 6th LOS			A									

Phase Number	2	4	8
Movement	NBTL	EBTL	WBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	61	29	29
Maximum Split (%)	67.8%	32.2%	32.2%
Minimum Split (s)	28	29	28
Yellow Time (s)	4	4	4
All-Red Time (s)	2	2	2
Minimum Initial (s)	7	5	7
Vehicle Extension (s)	2.5	1	2.5
Minimum Gap (s)	2.5	1	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	5	4	5
Flash Dont Walk (s)	17	19	17
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	3	64	64
End Time (s)	64	3	3
Yield/Force Off (s)	58	87	87
Yield/Force Off 170(s)	41	68	70
Local Start Time (s)	35	6	6
Local Yield (s)	0	29	29
Local Yield 170(s)	73	10	12

Intersection Summary	
Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 58 (64%), Referenced to phase 2:NBTL, Start of Yellow	

Splits and Phases: 13: SR A1A/Collins Avenue & 69th Street



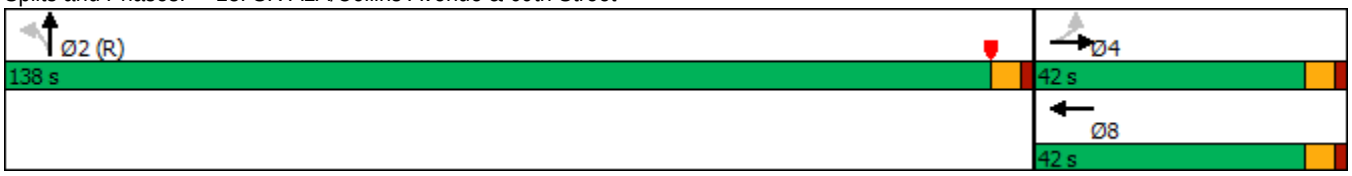


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	14	0	0	27	20	105	2099	7	0	0	0
Future Volume (veh/h)	182	14	0	0	27	20	105	2099	7	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.94	1.00		0.90			
Parking 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	1683	1683	0	0	1683	1683	1683	1683	1683			
Adj Flow Rate, veh/h	186	14	0	0	28	20	107	2142	7			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	234	15	0	0	177	127	1176	3466	11			
Arrive On Green	0.20	0.20	0.00	0.00	0.20	0.20	0.98	0.98	0.98			
Sat Flow, veh/h	975	73	0	0	886	633	1603	4727	15			
Grp Volume(v), veh/h	200	0	0	0	0	48	107	1388	761			
Grp Sat Flow(s),veh/h/ln	1048	0	0	0	0	1518	1603	1532	1678			
Q Serve(g_s), s	29.6	0.0	0.0	0.0	0.0	4.7	0.3	5.1	5.1			
Cycle Q Clear(g_c), s	34.3	0.0	0.0	0.0	0.0	4.7	0.3	5.1	5.1			
Prop In Lane	0.93		0.00	0.00		0.42	1.00		0.01			
Lane Grp Cap(c), veh/h	248	0	0	0	0	304	1176	2247	1231			
V/C Ratio(X)	0.81	0.00	0.00	0.00	0.00	0.16	0.09	0.62	0.62			
Avail Cap(c_a), veh/h	248	0	0	0	0	304	1176	2247	1231			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33			
Upstream Filter(I)	0.84	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	73.6	0.0	0.0	0.0	0.0	59.5	0.6	0.7	0.7			
Incr Delay (d2), s/veh	14.0	0.0	0.0	0.0	0.0	0.2	0.2	1.3	2.3			
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(50%),veh/ln	10.2	0.0	0.0	0.0	0.0	1.9	0.2	1.1	1.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.7	0.0	0.0	0.0	0.0	59.7	0.7	1.9	3.0			
LnGrp LOS	F	A	A	A	A	E	A	A	A			
Approach Vol, veh/h		200			48			2256				
Approach Delay, s/veh		87.7			59.7			2.2				
Approach LOS		F			E			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		138.0		42.0				42.0				
Change Period (Y+Rc), s		6.0		6.0				6.0				
Max Green Setting (Gmax), s		132.0		36.0				36.0				
Max Q Clear Time (g_c+I1), s		7.1		36.3				6.7				
Green Ext Time (p_c), s		29.5		0.0				0.2				
Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									

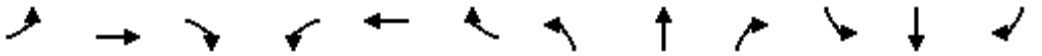
Phase Number	2	4	8
Movement	NBTL	EBTL	WBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	None
Maximum Split (s)	138	42	42
Maximum Split (%)	76.7%	23.3%	23.3%
Minimum Split (s)	28	30	28
Yellow Time (s)	4	4	4
All-Red Time (s)	2	2	2
Minimum Initial (s)	7	5	7
Vehicle Extension (s)	2.5	1	2.5
Minimum Gap (s)	2.5	1	2.5
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)	5	5	5
Flash Dont Walk (s)	17	19	17
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	130	88	88
End Time (s)	88	130	130
Yield/Force Off (s)	82	124	124
Yield/Force Off 170(s)	65	105	107
Local Start Time (s)	48	6	6
Local Yield (s)	0	42	42
Local Yield 170(s)	163	23	25

Intersection Summary	
Cycle Length	180
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 82 (46%), Referenced to phase 2:NBTL, Start of Yellow	

Splits and Phases: 13: SR A1A/Collins Avenue & 69th Street



Future with Project



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	620	728	0	428	19	405	213	11	8	347	464
Future Volume (veh/h)	398	620	728	0	428	19	405	213	11	8	347	464
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.89	1.00		0.84	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.97	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	1683	1683	1683	0	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	410	639	751	0	441	20	418	220	11	8	358	478
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	413	761	865	0	768	35	537	272	14	8	350	496
Arrive On Green	0.20	0.60	0.60	0.00	0.34	0.34	0.17	0.17	0.17	0.21	0.21	0.21
Sat Flow, veh/h	1603	1683	1367	0	3131	138	3110	1573	79	37	1645	1311
Grp Volume(v), veh/h	410	639	751	0	231	230	418	0	231	366	0	478
Grp Sat Flow(s),veh/h/ln	1603	1683	1367	0	1599	1585	1555	0	1652	1681	0	1311
Q Serve(g_s), s	18.3	36.7	54.3	0.0	14.2	14.4	15.4	0.0	16.1	25.5	0.0	25.5
Cycle Q Clear(g_c), s	18.3	36.7	54.3	0.0	14.2	14.4	15.4	0.0	16.1	25.5	0.0	25.5
Prop In Lane	1.00		1.00	0.00		0.09	1.00		0.05	0.02		1.00
Lane Grp Cap(c), veh/h	413	761	865	0	403	400	537	0	285	357	0	496
V/C Ratio(X)	0.99	0.84	0.87	0.00	0.57	0.58	0.78	0.00	0.81	1.02	0.00	0.96
Avail Cap(c_a), veh/h	413	761	865	0	403	400	583	0	310	357	0	496
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.97	0.00	0.97	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.1	20.4	13.5	0.0	34.5	34.6	47.4	0.0	47.7	47.3	0.0	37.8
Incr Delay (d2), s/veh	42.2	10.8	11.5	0.0	5.8	5.9	5.6	0.0	12.9	54.0	0.0	31.2
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(50%),veh/ln	9.3	14.5	24.9	0.0	5.9	5.9	6.4	0.0	7.7	15.9	0.0	17.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.3	31.2	25.1	0.0	40.3	40.5	53.1	0.0	60.6	101.2	0.0	69.0
LnGrp LOS	E	C	C	A	D	D	D	A	E	F	A	E
Approach Vol, veh/h		1800			461			649			844	
Approach Delay, s/veh		38.5			40.4			55.8			83.0	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	24.0	36.8		27.2		60.8		32.0				
Change Period (Y+Rc), s	* 5.7	6.5		6.5		6.5		6.5				
Max Green Setting (Gmax), s	* 18	28.5		22.5		52.5		25.5				
Max Q Clear Time (g_c+I1), s	20.3	16.4		18.1		56.3		27.5				
Green Ext Time (p_c), s	0.0	0.8		1.1		0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		51.7	
HCM 6th LOS		D	

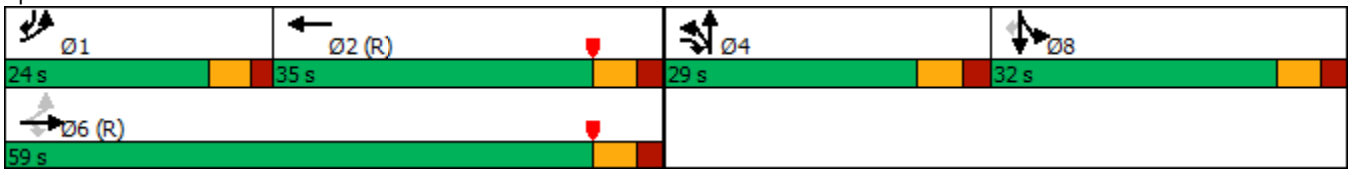
Notes

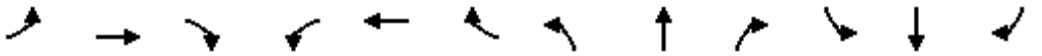
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	398	620	728	428	405	213	347	464
Future Volume (vph)	398	620	728	428	405	213	347	464
Turn Type	pm+pt	NA	pm+ov	NA	Split	NA	NA	pm+ov
Protected Phases	1	6	4	2	4	4	8	1
Permitted Phases	6		6					8
Detector Phase	1	6	6 4	2	4	4	8	1 8
Switch Phase								
Minimum Initial (s)	5.0	4.0	7.0	4.0	7.0	7.0	7.0	5.0
Minimum Split (s)	10.7	35.5	29.0	35.0	29.0	29.0	24.8	10.7
Total Split (s)	24.0	59.0	29.0	35.0	29.0	29.0	32.0	24.0
Total Split (%)	20.0%	49.2%	24.2%	29.2%	24.2%	24.2%	26.7%	20.0%
Yellow Time (s)	3.7	4.0	4.0	4.0	4.0	4.0	4.0	3.7
All-Red Time (s)	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	6.5	6.5	6.5	6.5	6.5	6.5	5.7
Lead/Lag	Lead			Lag				Lead
Lead-Lag Optimize?	Yes			Yes				Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	53.3	52.5	74.1	28.5	21.6	21.6	26.4	45.5
Actuated g/C Ratio	0.44	0.44	0.62	0.24	0.18	0.18	0.22	0.38
v/c Ratio	1.07	0.87	0.90	0.62	0.75	0.77	1.00	0.90
Control Delay	94.5	45.2	31.6	44.9	55.8	64.3	93.5	53.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.5	45.2	31.6	44.9	55.8	64.3	93.5	53.0
LOS	F	D	C	D	E	E	F	D
Approach Delay		50.8		44.9		58.8	70.6	
Approach LOS		D		D		E	E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93 (78%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 55.9	Intersection LOS: E
Intersection Capacity Utilization 106.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: Indian Creek Drive/Dickens Avenue & SR 934/71st Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	294	573	405	0	811	21	855	252	8	13	117	426
Future Volume (veh/h)	294	573	405	0	811	21	855	252	8	13	117	426
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.83	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.97	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	1683	1683	1683	0	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	297	579	409	0	819	21	864	255	8	13	118	430
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	280	776	1015	0	923	24	878	456	14	20	178	325
Arrive On Green	0.16	0.61	0.61	0.00	0.39	0.39	0.28	0.28	0.28	0.12	0.12	0.12
Sat Flow, veh/h	1603	1683	1329	0	3199	80	3110	1617	51	166	1509	1259
Grp Volume(v), veh/h	297	579	409	0	420	420	864	0	263	131	0	430
Grp Sat Flow(s),veh/h/ln	1603	1683	1329	0	1599	1596	1555	0	1668	1675	0	1259
Q Serve(g_s), s	17.3	34.4	13.5	0.0	34.3	34.3	38.7	0.0	18.8	10.5	0.0	16.5
Cycle Q Clear(g_c), s	17.3	34.4	13.5	0.0	34.3	34.3	38.7	0.0	18.8	10.5	0.0	16.5
Prop In Lane	1.00		1.00	0.00		0.05	1.00		0.03	0.10		1.00
Lane Grp Cap(c), veh/h	280	776	1015	0	474	473	878	0	471	197	0	325
V/C Ratio(X)	1.06	0.75	0.40	0.00	0.89	0.89	0.98	0.00	0.56	0.66	0.00	1.32
Avail Cap(c_a), veh/h	280	776	1015	0	474	473	878	0	471	197	0	325
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.87	0.00	0.87	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	21.3	4.6	0.0	40.2	40.2	49.9	0.0	42.8	59.1	0.0	53.6
Incr Delay (d2), s/veh	70.9	6.5	1.2	0.0	21.0	21.1	24.5	0.0	1.1	9.1	0.0	165.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	13.4	8.1	0.0	15.5	15.5	18.0	0.0	8.0	5.0	0.0	26.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	103.3	27.7	5.8	0.0	61.3	61.3	74.5	0.0	43.9	68.2	0.0	219.5
LnGrp LOS	F	C	A	A	E	E	E	A	D	E	A	F
Approach Vol, veh/h		1285			840			1127			561	
Approach Delay, s/veh		38.2			61.3			67.3			184.2	
Approach LOS		D			E			E			F	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	23.0	48.0		46.0		71.0		23.0				
Change Period (Y+Rc), s	* 5.7	6.5		6.5		6.5		6.5				
Max Green Setting (Gmax), s	* 17	41.5		39.5		64.5		16.5				
Max Q Clear Time (g_c+I1), s	19.3	36.3		40.7		36.4		18.5				
Green Ext Time (p_c), s	0.0	1.1		0.0		1.6		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		73.4	
HCM 6th LOS		E	

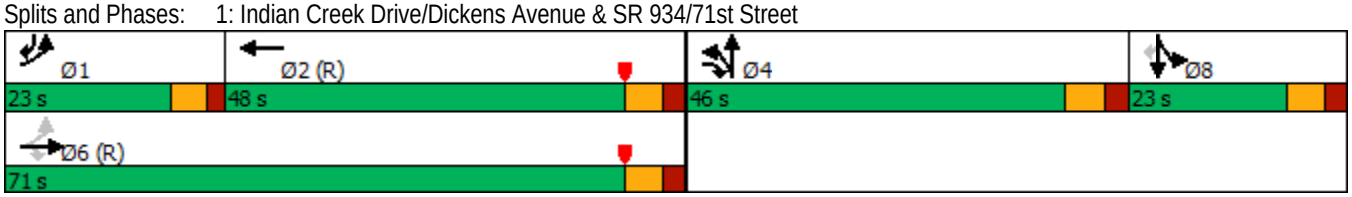
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	294	573	405	811	855	252	117	426
Future Volume (vph)	294	573	405	811	855	252	117	426
Turn Type	pm+pt	NA	pm+ov	NA	Split	NA	NA	pm+ov
Protected Phases	1	6	4	2	4	4	8	1
Permitted Phases	6		6					8
Detector Phase	1	6	6 4	2	4	4	8	1 8
Switch Phase								
Minimum Initial (s)	5.0	4.0	7.0	4.0	7.0	7.0	7.0	5.0
Minimum Split (s)	10.7	33.5	28.5	33.5	28.5	28.5	13.5	10.7
Total Split (s)	23.0	71.0	46.0	48.0	46.0	46.0	23.0	23.0
Total Split (%)	16.4%	50.7%	32.9%	34.3%	32.9%	32.9%	16.4%	16.4%
Yellow Time (s)	3.7	4.0	4.0	4.0	4.0	4.0	4.0	3.7
All-Red Time (s)	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	6.5	6.5	6.5	6.5	6.5	6.5	5.7
Lead/Lag	Lead			Lag				Lead
Lead-Lag Optimize?	Yes			Yes				Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	65.3	64.5	104.0	41.5	39.5	39.5	16.5	34.6
Actuated g/C Ratio	0.47	0.46	0.74	0.30	0.28	0.28	0.12	0.25
v/c Ratio	1.14	0.75	0.42	0.91	0.99	0.56	0.67	1.23
Control Delay	131.0	38.6	6.3	62.3	78.4	48.2	76.4	168.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	131.0	38.6	6.3	62.3	78.4	48.2	76.4	168.9
LOS	F	D	A	E	E	D	E	F
Approach Delay		49.7		62.3		71.3	147.3	
Approach LOS		D		E		E	F	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 7 (5%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.23	
Intersection Signal Delay: 73.2	Intersection LOS: E
Intersection Capacity Utilization 97.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Indian Creek Drive/Dickens Avenue & SR 934/71st Street



Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	387	60	23	371	16	15	26	27	13	19	27
Future Vol, veh/h	163	387	60	23	371	16	15	26	27	13	19	27
Conflicting Peds, #/hr	24	0	24	24	0	24	9	0	7	7	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	173	412	64	24	395	17	16	28	29	14	20	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	436	0	0	500	0	0	1299	1298	475	1302	1322	437
Stage 1	-	-	-	-	-	-	814	814	-	476	476	-
Stage 2	-	-	-	-	-	-	485	484	-	826	846	-
Critical Hdwy	4.12	-	-	4.12	-	-	5	5	5	5	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3	3	3	3	3	3
Pot Cap-1 Maneuver	1124	-	-	1064	-	-	323	324	751	322	316	780
Stage 1	-	-	-	-	-	-	414	474	-	647	701	-
Stage 2	-	-	-	-	-	-	640	694	-	408	457	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1098	-	-	1040	-	-	247	254	729	242	248	756
Mov Cap-2 Maneuver	-	-	-	-	-	-	279	311	-	252	302	-
Stage 1	-	-	-	-	-	-	341	390	-	532	669	-
Stage 2	-	-	-	-	-	-	578	663	-	305	376	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.5	16.3	15.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	390	1098	-	-	1040	-	-	393
HCM Lane V/C Ratio	0.185	0.158	-	-	0.024	-	-	0.16
HCM Control Delay (s)	16.3	8.9	-	-	8.5	-	-	15.9
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	0.6	-	-	0.1	-	-	0.6

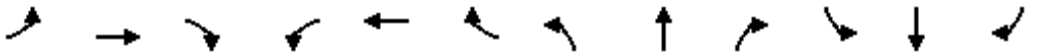
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	173	382	47	40	538	14	53	60	48	4	10	80
Future Vol, veh/h	173	382	47	40	538	14	53	60	48	4	10	80
Conflicting Peds, #/hr	66	0	41	41	0	66	20	0	13	13	0	20
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	184	406	50	43	572	15	56	64	51	4	11	85

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	653	0	0	497	0	0	1574	1579	485	1602	1597	666
Stage 1	-	-	-	-	-	-	840	840	-	732	732	-
Stage 2	-	-	-	-	-	-	734	739	-	870	865	-
Critical Hdwy	4.12	-	-	4.12	-	-	5	5	5	5	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	5	5	-	5	5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5	5	-	5	5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3	3	3	3	3	3
Pot Cap-1 Maneuver	934	-	-	1067	-	-	242	241	744	235	236	620
Stage 1	-	-	-	-	-	-	520	520	-	580	580	-
Stage 2	-	-	-	-	-	-	579	576	-	504	507	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	875	-	-	1025	-	-	153	164	706	131	161	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	211	239	-	203	257	-
Stage 1	-	-	-	-	-	-	395	395	-	429	521	-
Stage 2	-	-	-	-	-	-	453	517	-	306	385	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0.6	35.7	14.7
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	282	875	-	-	1025	-	-	472
HCM Lane V/C Ratio	0.607	0.21	-	-	0.042	-	-	0.212
HCM Control Delay (s)	35.7	10.2	-	-	8.7	-	-	14.7
HCM Lane LOS	E	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	3.7	0.8	-	-	0.1	-	-	0.8



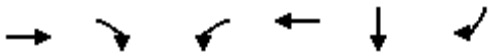
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	322	73	45	124	0	0	0	0	32	2191	241
Future Volume (veh/h)	0	322	73	45	124	0	0	0	0	32	2191	241
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.98		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	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	0	1683	1683	1683	1683	0				1683	1683	1683
Adj Flow Rate, veh/h	0	329	74	46	127	0				33	2236	246
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	452	327	159	452	0				38	2768	817
Arrive On Green	0.00	0.27	0.27	0.09	0.09	0.00				0.79	0.79	0.79
Sat Flow, veh/h	0	1683	1217	870	1683	0				65	4679	1381
Grp Volume(v), veh/h	0	329	74	46	127	0				854	1415	246
Grp Sat Flow(s),veh/h/ln	0	1683	1217	870	1683	0				1680	1532	1381
Q Serve(g_s), s	0.0	16.0	4.3	4.7	6.3	0.0				30.1	23.0	4.5
Cycle Q Clear(g_c), s	0.0	16.0	4.3	20.7	6.3	0.0				30.1	23.0	4.5
Prop In Lane	0.00		1.00	1.00		0.00				0.04		1.00
Lane Grp Cap(c), veh/h	0	452	327	159	452	0				994	1812	817
V/C Ratio(X)	0.00	0.73	0.23	0.29	0.28	0.00				0.86	0.78	0.30
Avail Cap(c_a), veh/h	0	574	415	222	574	0				994	1812	817
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	29.9	25.6	47.3	32.9	0.0				7.1	6.4	4.4
Incr Delay (d2), s/veh	0.0	2.2	0.1	0.4	0.1	0.0				9.6	3.4	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(50%),veh/ln	0.0	6.6	1.2	1.1	2.7	0.0				7.1	4.4	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.2	25.8	47.7	33.0	0.0				16.7	9.8	5.3
LnGrp LOS	A	C	C	D	C	A				B	A	A
Approach Vol, veh/h		403			173						2515	
Approach Delay, s/veh		31.0			36.9						11.7	
Approach LOS		C			D						B	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		59.5		30.5				30.5				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 47		* 31				* 31				
Max Q Clear Time (g_c+I1), s		32.1		22.7				18.0				
Green Ext Time (p_c), s		6.9		0.2				0.6				

Intersection Summary												
HCM 6th Ctrl Delay			15.6									
HCM 6th LOS			B									

Notes

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



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	329	74	46	127	2269	246
v/c Ratio	0.84	0.23	0.30	0.32	0.83	0.27
Control Delay	49.7	25.8	40.9	36.8	19.3	2.6
Queue Delay	4.6	0.0	0.0	0.0	0.0	0.0
Total Delay	54.4	25.8	40.9	36.8	19.3	2.6
Queue Length 50th (ft)	172	32	24	67	362	2
Queue Length 95th (ft)	250	62	m63	128	#570	38
Internal Link Dist (ft)	238			196	251	
Turn Bay Length (ft)		100	95			215
Base Capacity (vph)	514	415	199	514	2742	918
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	121	0	0	0	8	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.18	0.23	0.25	0.83	0.27

Intersection Summary

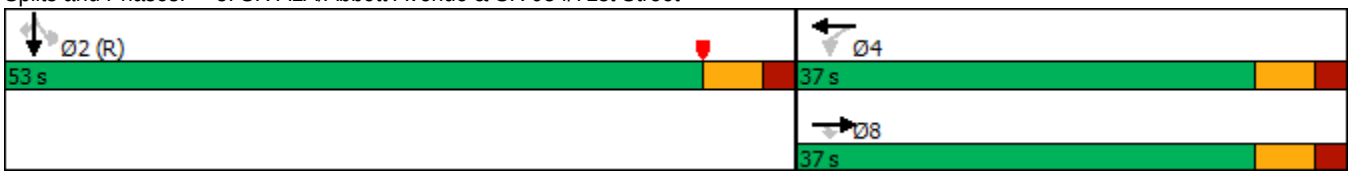
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

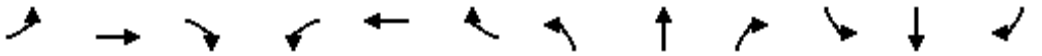
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	322	73	45	124	2191	241
Future Volume (vph)	322	73	45	124	2191	241
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	8			4	2	
Permitted Phases		8	4			2
Detector Phase	8	8	4	4	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.3	31.3	31.3	31.3	31.3	31.3
Total Split (s)	37.0	37.0	37.0	37.0	53.0	53.0
Total Split (%)	41.1%	41.1%	41.1%	41.1%	58.9%	58.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	C-Max	C-Max
Act Effct Green (s)	23.4	23.4	23.4	23.4	54.0	54.0
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.60	0.60
v/c Ratio	0.84	0.23	0.30	0.32	0.83	0.27
Control Delay	49.7	25.8	40.9	36.8	19.3	2.6
Queue Delay	4.6	0.0	0.0	0.0	0.0	0.0
Total Delay	54.4	25.8	40.9	36.8	19.3	2.6
LOS	D	C	D	D	B	A
Approach Delay	49.1			37.9	17.7	
Approach LOS	D			D	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 57 (63%), Referenced to phase 2:SBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 91.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 3: SR A1A/Abbott Avenue & SR 934/71st Street





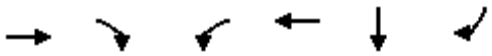
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	361	50	49	257	0	0	0	0	34	1481	357
Future Volume (veh/h)	0	361	50	49	257	0	0	0	0	34	1481	357
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	0.99		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	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	0	1683	1683	1683	1683	0				1683	1683	1683
Adj Flow Rate, veh/h	0	397	55	54	282	0				37	1627	392
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	514	362	156	514	0				55	2576	769
Arrive On Green	0.00	0.31	0.31	0.10	0.10	0.00				0.74	0.74	0.74
Sat Flow, veh/h	0	1683	1187	833	1683	0				99	4643	1385
Grp Volume(v), veh/h	0	397	55	54	282	0				625	1039	392
Grp Sat Flow(s),veh/h/ln	0	1683	1187	833	1683	0				1678	1532	1385
Q Serve(g_s), s	0.0	19.3	3.0	5.8	14.4	0.0				17.4	14.6	10.7
Cycle Q Clear(g_c), s	0.0	19.3	3.0	25.1	14.4	0.0				17.4	14.6	10.7
Prop In Lane	0.00		1.00	1.00		0.00				0.06		1.00
Lane Grp Cap(c), veh/h	0	514	362	156	514	0				931	1700	769
V/C Ratio(X)	0.00	0.77	0.15	0.35	0.55	0.00				0.67	0.61	0.51
Avail Cap(c_a), veh/h	0	612	431	204	612	0				931	1700	769
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	28.4	22.8	49.0	34.6	0.0				7.5	7.2	6.7
Incr Delay (d2), s/veh	0.0	4.1	0.1	0.5	0.3	0.0				3.9	1.6	2.4
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(50%),veh/ln	0.0	8.1	0.8	1.3	6.5	0.0				4.9	3.5	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.5	22.8	49.4	34.9	0.0				11.4	8.8	9.1
LnGrp LOS	A	C	C	D	C	A				B	A	A
Approach Vol, veh/h		452			336						2056	
Approach Delay, s/veh		31.3			37.2						9.6	
Approach LOS		C			D						A	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		56.2		33.8				33.8				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 45		* 33				* 33				
Max Q Clear Time (g_c+I1), s		19.4		27.1				21.3				
Green Ext Time (p_c), s		5.4		0.4				0.7				

Intersection Summary		
HCM 6th Ctrl Delay		16.3
HCM 6th LOS		B

Notes

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



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	397	55	54	282	1664	392
v/c Ratio	0.89	0.16	0.38	0.63	0.65	0.45
Control Delay	51.7	22.2	31.0	33.4	16.0	5.3
Queue Delay	51.7	0.0	0.0	2.2	0.3	0.0
Total Delay	103.4	22.2	31.0	35.5	16.3	5.3
Queue Length 50th (ft)	211	23	29	177	229	24
Queue Length 95th (ft)	304	47	m49	m212	319	90
Internal Link Dist (ft)	238			196	251	
Turn Bay Length (ft)		100	95			215
Base Capacity (vph)	548	429	176	548	2572	871
Starvation Cap Reductn	0	0	0	150	0	0
Spillback Cap Reductn	184	0	0	0	293	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.13	0.31	0.71	0.73	0.45

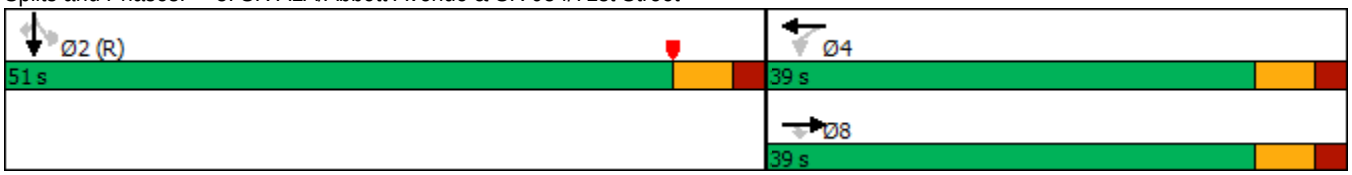
Intersection Summary

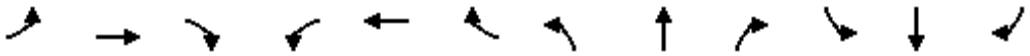
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	361	50	49	257	1481	357
Future Volume (vph)	361	50	49	257	1481	357
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	8			4	2	
Permitted Phases		8	4			2
Detector Phase	8	8	4	4	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.3	31.3	31.3	31.3	31.3	31.3
Total Split (s)	39.0	39.0	39.0	39.0	51.0	51.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	56.7%	56.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	C-Max	C-Max
Act Effct Green (s)	26.7	26.7	26.7	26.7	50.7	50.7
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.56	0.56
v/c Ratio	0.89	0.16	0.38	0.63	0.65	0.45
Control Delay	51.7	22.2	31.0	33.4	16.0	5.3
Queue Delay	51.7	0.0	0.0	2.2	0.3	0.0
Total Delay	103.4	22.2	31.0	35.5	16.3	5.3
LOS	F	C	C	D	B	A
Approach Delay	93.5			34.8	14.2	
Approach LOS	F			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 44 (49%), Referenced to phase 2:SBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 29.2	Intersection LOS: C
Intersection Capacity Utilization 77.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: SR A1A/Abbott Avenue & SR 934/71st Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	256	33	16	141	9	41	113	30	8	39	13
Future Volume (veh/h)	55	256	33	16	141	9	41	113	30	8	39	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.86		0.72	0.89		0.70	0.96		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	68	316	41	20	174	11	51	140	37	10	48	16
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	648	744	97	540	785	50	95	194	46	65	214	65
Arrive On Green	0.06	0.79	0.79	0.03	0.76	0.76	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1603	1248	162	1603	1370	87	219	920	221	94	1016	306
Grp Volume(v), veh/h	68	0	357	20	0	185	228	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	1410	1603	0	1457	1359	0	0	1416	0	0
Q Serve(g_s), s	1.5	0.0	7.1	0.5	0.0	3.3	9.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	7.1	0.5	0.0	3.3	14.2	0.0	0.0	3.9	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.06	0.22		0.16	0.14		0.22
Lane Grp Cap(c), veh/h	648	0	841	540	0	834	335	0	0	344	0	0
V/C Ratio(X)	0.10	0.00	0.42	0.04	0.00	0.22	0.68	0.00	0.00	0.22	0.00	0.00
Avail Cap(c_a), veh/h	682	0	841	612	0	834	567	0	0	577	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.00	0.43	0.99	0.00	0.99	0.85	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	4.5	7.6	0.0	5.0	33.5	0.0	0.0	29.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	0.0	0.6	0.8	0.0	0.0	0.1	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(50%),veh/ln	0.4	0.0	1.7	0.1	0.0	1.0	4.7	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	0.0	5.2	7.6	0.0	5.6	34.3	0.0	0.0	29.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		425			205			228			74	
Approach Delay, s/veh		5.4			5.8			34.3			29.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	57.6		25.3	5.0	59.8		25.3				
Change Period (Y+Rc), s	3.0	6.1		* 6.3	3.0	6.1		* 6.3				
Max Green Setting (Gmax), s	6.0	33.9		* 35	6.0	33.9		* 35				
Max Q Clear Time (g_c+I1), s	3.5	5.3		16.2	2.5	9.1		5.9				
Green Ext Time (p_c), s	0.0	0.4		0.5	0.0	0.8		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

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

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	68	357	20	185	228	74
v/c Ratio	0.23	0.43	0.05	0.23	0.81	0.25
Control Delay	4.4	12.3	7.9	15.5	53.1	24.0
Queue Delay	0.0	9.9	0.0	0.7	0.0	0.0
Total Delay	4.4	22.1	7.9	16.2	53.1	24.0
Queue Length 50th (ft)	2	14	2	40	118	28
Queue Length 95th (ft)	m17	m260	14	129	155	50
Internal Link Dist (ft)		196		208	595	224
Turn Bay Length (ft)	90		75			
Base Capacity (vph)	308	826	426	815	516	541
Starvation Cap Reductn	0	431	0	371	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.90	0.05	0.42	0.44	0.14

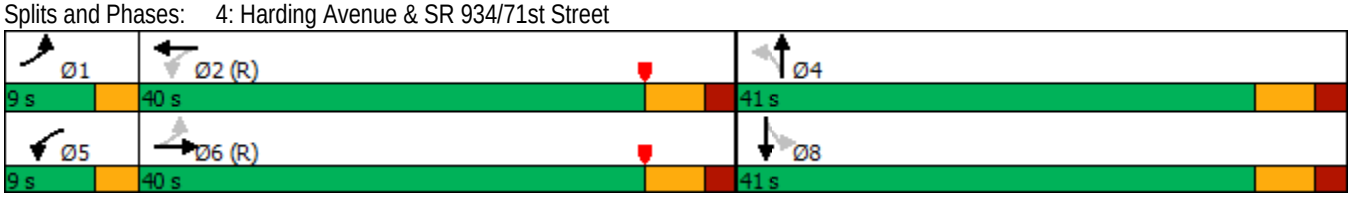
Intersection Summary

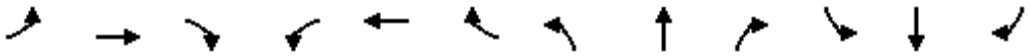
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	256	16	141	41	113	8	39
Future Volume (vph)	55	256	16	141	41	113	8	39
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)	8.0	23.0	8.0	23.0	29.3	29.3	29.3	29.3
Total Split (s)	9.0	40.0	9.0	40.0	41.0	41.0	41.0	41.0
Total Split (%)	10.0%	44.4%	10.0%	44.4%	45.6%	45.6%	45.6%	45.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.1	0.0	2.1	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	3.0	6.1	3.0	6.1		6.3		6.3
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	61.7	55.7	59.0	51.7		18.5		18.5
Actuated g/C Ratio	0.69	0.62	0.66	0.57		0.21		0.21
v/c Ratio	0.23	0.43	0.05	0.23		0.81		0.25
Control Delay	4.4	12.3	7.9	15.5		53.1		24.0
Queue Delay	0.0	9.9	0.0	0.7		0.0		0.0
Total Delay	4.4	22.1	7.9	16.2		53.1		24.0
LOS	A	C	A	B		D		C
Approach Delay		19.3		15.4		53.1		24.0
Approach LOS		B		B		D		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 41 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 27.1	Intersection LOS: C
Intersection Capacity Utilization 55.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Harding Avenue & SR 934/71st Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	289	42	21	161	18	81	319	60	10	35	55
Future Volume (veh/h)	89	289	42	21	161	18	81	319	60	10	35	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.69	0.97		0.88	0.96		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	97	314	46	23	175	20	88	347	65	11	38	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	496	516	76	345	523	60	120	379	68	70	189	263
Arrive On Green	0.07	0.57	0.57	0.03	0.53	0.53	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1603	1213	178	1603	1314	150	194	999	178	69	498	694
Grp Volume(v), veh/h	97	0	360	23	0	195	500	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	1391	1603	0	1465	1371	0	0	1261	0	0
Q Serve(g_s), s	3.1	0.0	15.4	0.8	0.0	6.9	25.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	15.4	0.8	0.0	6.9	32.0	0.0	0.0	5.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.10	0.18		0.13	0.10		0.55
Lane Grp Cap(c), veh/h	496	0	591	345	0	583	567	0	0	523	0	0
V/C Ratio(X)	0.20	0.00	0.61	0.07	0.00	0.33	0.88	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	520	0	591	413	0	583	575	0	0	530	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.34	0.00	0.34	0.98	0.00	0.98	0.56	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.8	0.0	14.6	16.1	0.0	14.4	27.1	0.0	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.6	0.0	0.0	1.5	8.6	0.0	0.0	0.1	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(50%),veh/ln	1.1	0.0	4.1	0.3	0.0	2.3	11.3	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	16.2	16.1	0.0	15.9	35.7	0.0	0.0	19.0	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	D	A	A	B	A	A
Approach Vol, veh/h		457			218			500			109	
Approach Delay, s/veh		15.7			15.9			35.7			19.0	
Approach LOS		B			B			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	41.9		40.4	5.2	44.4		40.4				
Change Period (Y+Rc), s	3.0	6.1		* 6.3	3.0	6.1		* 6.3				
Max Green Setting (Gmax), s	6.0	33.9		* 35	6.0	33.9		* 35				
Max Q Clear Time (g_c+I1), s	5.1	8.9		34.0	2.8	17.4		7.0				
Green Ext Time (p_c), s	0.0	0.4		0.1	0.0	0.8		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.8	
HCM 6th LOS		C	

Notes

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

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	97	360	23	195	500	109
v/c Ratio	0.20	0.60	0.06	0.33	0.98	0.21
Control Delay	20.4	35.2	12.7	23.3	64.0	10.5
Queue Delay	0.0	58.1	0.0	0.8	41.4	0.1
Total Delay	20.4	93.4	12.7	24.0	105.4	10.6
Queue Length 50th (ft)	55	211	10	126	268	17
Queue Length 95th (ft)	m76	m301	21	172	#478	52
Internal Link Dist (ft)		196		208	595	224
Turn Bay Length (ft)	90		75			
Base Capacity (vph)	494	604	415	595	520	524
Starvation Cap Reductn	0	293	0	190	0	0
Spillback Cap Reductn	0	112	0	20	67	64
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	1.16	0.06	0.48	1.10	0.24

Intersection Summary

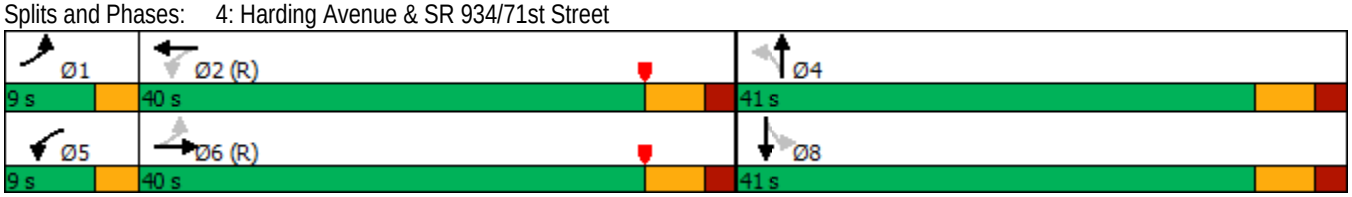
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	289	21	161	81	319	10	35
Future Volume (vph)	89	289	21	161	81	319	10	35
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)	8.0	23.0	8.0	23.0	29.3	29.3	29.3	29.3
Total Split (s)	9.0	40.0	9.0	40.0	41.0	41.0	41.0	41.0
Total Split (%)	10.0%	44.4%	10.0%	44.4%	45.6%	45.6%	45.6%	45.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.1	0.0	2.1	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	3.0	6.1	3.0	6.1		6.3		6.3
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	45.5	40.0	43.8	36.4		34.0		34.0
Actuated g/C Ratio	0.51	0.44	0.49	0.40		0.38		0.38
v/c Ratio	0.20	0.60	0.06	0.33		0.98		0.21
Control Delay	20.4	35.2	12.7	23.3		64.0		10.5
Queue Delay	0.0	58.1	0.0	0.8		41.4		0.1
Total Delay	20.4	93.4	12.7	24.0		105.4		10.6
LOS	C	F	B	C		F		B
Approach Delay		77.9		22.8		105.4		10.6
Approach LOS		E		C		F		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 41 (46%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 73.5	Intersection LOS: E
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Harding Avenue & SR 934/71st Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	283	8	0	0	30	18	133	934	3	0	0	0
Future Volume (vph)	283	8	0	0	30	18	133	934	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.95		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1362	1369			1412		1593	4572				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1362	1369			1412		1593	4572				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	298	8	0	0	32	19	140	983	3	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	0	0
Lane Group Flow (vph)	152	154	0	0	33	0	140	986	0	0	0	0
Confl. Peds. (#/hr)	4		44	44		4	27		59	59		27
Confl. Bikes (#/hr)			1			2			1			1
Parking (#/hr)	0	0			0	0						
Turn Type	Split	NA			NA		Prot	NA				
Protected Phases	8	8			4		5	2				
Permitted Phases												
Actuated Green, G (s)	15.2	15.2			5.2		51.6	51.6				
Effective Green, g (s)	15.2	15.2			5.2		51.6	51.6				
Actuated g/C Ratio	0.17	0.17			0.06		0.57	0.57				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Vehicle Extension (s)	1.0	1.0			2.5		1.0	1.0				
Lane Grp Cap (vph)	230	231			81		913	2621				
v/s Ratio Prot	0.11	c0.11			c0.02		0.09	c0.22				
v/s Ratio Perm												
v/c Ratio	0.66	0.67			0.41		0.15	0.38				
Uniform Delay, d1	35.0	35.0			40.9		9.0	10.4				
Progression Factor	0.64	0.64			1.00		0.59	0.66				
Incremental Delay, d2	5.0	5.1			2.4		0.0	0.4				
Delay (s)	27.4	27.5			43.4		5.3	7.3				
Level of Service	C	C			D		A	A				
Approach Delay (s)		27.5			43.4			7.0			0.0	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

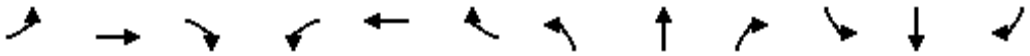
Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Group Flow (vph)	152	154	51	140	986
v/c Ratio	0.66	0.67	0.35	0.15	0.36
Control Delay	34.9	35.0	33.7	7.0	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	35.0	33.7	7.0	8.0
Queue Length 50th (ft)	75	77	18	32	134
Queue Length 95th (ft)	98	100	51	90	185
Internal Link Dist (ft)		208	156		242
Turn Bay Length (ft)	95			190	
Base Capacity (vph)	290	292	205	955	2744
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	0.52	0.53	0.25	0.15	0.36

Intersection Summary

Lane Group	EBL	EBT	WBT	NBL	NBT	Ø1
Lane Configurations						
Traffic Volume (vph)	335	9	15	152	2185	
Future Volume (vph)	335	9	15	152	2185	
Turn Type	Split	NA	NA	Prot	NA	
Protected Phases	8	8	4	5	2	1
Permitted Phases						
Detector Phase	8	8	4	5	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	5.0	4.0	1.0
Minimum Split (s)	25.0	25.0	13.0	11.0	20.0	3.0
Total Split (s)	37.0	37.0	24.0	95.0	95.0	24.0
Total Split (%)	20.6%	20.6%	13.3%	52.8%	52.8%	13%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	C-Max	None
Act Effct Green (s)	27.5	27.5	8.6	128.5	128.5	
Actuated g/C Ratio	0.15	0.15	0.05	0.71	0.71	
v/c Ratio	0.85	0.85	0.52	0.14	0.69	
Control Delay	84.3	85.0	52.9	5.8	10.9	
Queue Delay	12.6	13.0	0.0	0.0	0.0	
Total Delay	96.8	98.0	52.9	5.8	11.0	
LOS	F	F	D	A	B	
Approach Delay		97.4	52.9		10.7	
Approach LOS		F	D		B	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 83 (46%), Referenced to phase 2:NBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 22.3	Intersection LOS: C
Intersection Capacity Utilization 74.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: SR A1A/Collins Avenue & SR 934/71st Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	335	9	0	0	15	33	152	2185	11	0	0	0
Future Volume (vph)	335	9	0	0	15	33	152	2185	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frpb, ped/bikes	1.00	1.00			0.92		1.00	1.00				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.91		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1362	1368			1259		1593	4569				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1362	1368			1259		1593	4569				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	345	9	0	0	15	34	157	2253	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	0	0	0	0
Lane Group Flow (vph)	176	178	0	0	16	0	157	2264	0	0	0	0
Confl. Peds. (#/hr)	12		74	74		12	115		29	29		115
Confl. Bikes (#/hr)			1			3			4			3
Parking (#/hr)	0	0			0	0						
Turn Type	Split	NA			NA		Prot	NA				
Protected Phases	8	8			4		5	2				
Permitted Phases												
Actuated Green, G (s)	27.5	27.5			7.2		127.3	127.3				
Effective Green, g (s)	27.5	27.5			7.2		127.3	127.3				
Actuated g/C Ratio	0.15	0.15			0.04		0.71	0.71				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Vehicle Extension (s)	1.0	1.0			2.5		1.0	1.0				
Lane Grp Cap (vph)	208	209			50		1126	3231				
v/s Ratio Prot	0.13	c0.13			c0.01		0.10	c0.50				
v/s Ratio Perm												
v/c Ratio	0.85	0.85			0.33		0.14	0.70				
Uniform Delay, d1	74.2	74.3			84.0		8.6	15.3				
Progression Factor	0.79	0.79			1.00		0.56	0.60				
Incremental Delay, d2	20.0	20.9			2.8		0.0	1.0				
Delay (s)	78.5	79.4			86.8		4.8	10.2				
Level of Service	E	E			F		A	B				
Approach Delay (s)		79.0			86.8			9.8			0.0	
Approach LOS		E			F			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Group Flow (vph)	176	178	49	157	2264
v/c Ratio	0.85	0.85	0.52	0.14	0.69
Control Delay	84.3	85.0	52.9	5.8	10.9
Queue Delay	12.6	13.0	0.0	0.0	0.0
Total Delay	96.8	98.0	52.9	5.8	11.0
Queue Length 50th (ft)	230	233	18	29	166
Queue Length 95th (ft)	m284	m285	66	m53	801
Internal Link Dist (ft)		208	156		242
Turn Bay Length (ft)	95			190	
Base Capacity (vph)	243	244	162	1137	3261
Starvation Cap Reductn	48	48	0	0	82
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.90	0.91	0.30	0.14	0.71

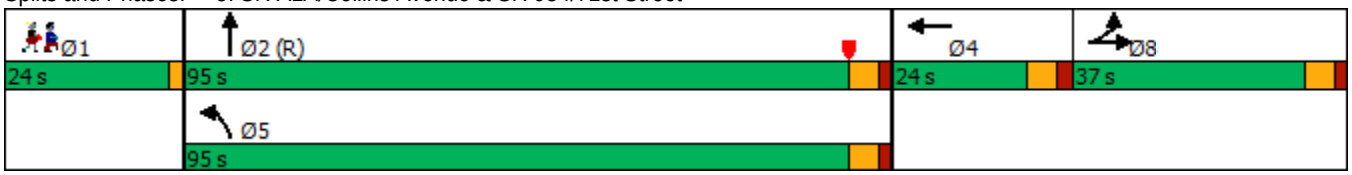
Intersection Summary

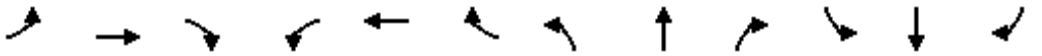
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	NBL	NBT	Ø1
Lane Configurations						
Traffic Volume (vph)	335	9	15	152	2185	
Future Volume (vph)	335	9	15	152	2185	
Turn Type	Split	NA	NA	Prot	NA	
Protected Phases	8	8	4	5	2	1
Permitted Phases						
Detector Phase	8	8	4	5	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	5.0	4.0	1.0
Minimum Split (s)	25.0	25.0	13.0	11.0	20.0	3.0
Total Split (s)	37.0	37.0	24.0	95.0	95.0	24.0
Total Split (%)	20.6%	20.6%	13.3%	52.8%	52.8%	13%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	C-Max	None
Act Effct Green (s)	27.5	27.5	8.6	128.5	128.5	
Actuated g/C Ratio	0.15	0.15	0.05	0.71	0.71	
v/c Ratio	0.85	0.85	0.52	0.14	0.69	
Control Delay	84.3	85.0	52.9	5.8	10.9	
Queue Delay	12.6	13.0	0.0	0.0	0.0	
Total Delay	96.8	98.0	52.9	5.8	11.0	
LOS	F	F	D	A	B	
Approach Delay		97.4	52.9		10.7	
Approach LOS		F	D		B	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 83 (46%), Referenced to phase 2:NBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 22.3	Intersection LOS: C
Intersection Capacity Utilization 74.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: SR A1A/Collins Avenue & SR 934/71st Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	5	12	0	55	2	586	3	151	1287	1
Future Volume (veh/h)	3	0	5	12	0	55	2	586	3	151	1287	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		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	3	0	5	13	0	60	2	637	3	164	1399	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	0	93	58	6	76	41	2345	11	252	1996	1
Arrive On Green	0.07	0.00	0.07	0.07	0.00	0.07	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1206	0	1279	145	82	1047	1	3039	14	263	2587	2
Grp Volume(v), veh/h	3	0	5	73	0	0	353	0	289	760	0	804
Grp Sat Flow(s),veh/h/ln	1206	0	1279	1274	0	0	1679	0	1376	1321	0	1531
Q Serve(g_s), s	0.0	0.0	0.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.3	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	0.18		0.82	0.01		0.01	0.22		0.00
Lane Grp Cap(c), veh/h	170	0	93	140	0	0	1336	0	1061	1068	0	1182
V/C Ratio(X)	0.02	0.00	0.05	0.52	0.00	0.00	0.26	0.00	0.27	0.71	0.00	0.68
Avail Cap(c_a), veh/h	432	0	371	412	0	0	1336	0	1061	1068	0	1182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.25	0.00	0.25
Uniform Delay (d), s/veh	38.8	0.0	38.8	41.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	2.2	0.0	0.0	0.5	0.0	0.6	1.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.7	0.0	0.0	0.2	0.0	0.2	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	0.0	39.0	43.2	0.0	0.0	0.5	0.0	0.6	1.0	0.0	0.8
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		8			73			642			1564	
Approach Delay, s/veh		38.9			43.2			0.6			0.9	
Approach LOS		D			D			A			A	

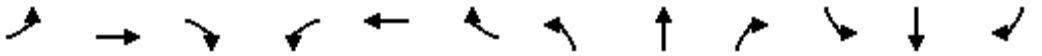
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		76.5		13.5		76.5		13.5				
Change Period (Y+Rc), s		7.1		6.9		7.1		6.9				
Max Green Setting (Gmax), s		49.9		26.1		49.9		26.1				
Max Q Clear Time (g_c+I1), s		2.0		7.0		2.0		2.3				
Green Ext Time (p_c), s		5.5		0.2		1.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			2.3									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	3	0	12	0	2	586	151	1287
Future Volume (vph)	3	0	12	0	2	586	151	1287
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	6	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	16.0	16.0	16.0	16.0
Minimum Split (s)	31.9	31.9	23.6	23.6	23.8	23.8	23.8	23.8
Total Split (s)	33.0	33.0	33.0	33.0	57.0	57.0	57.0	57.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	63.3%	63.3%	63.3%	63.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	3.1	3.1	3.1	3.1
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.9	6.9		6.9		7.1		7.1
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	8.0	8.0		8.0		72.2		72.2
Actuated g/C Ratio	0.09	0.09		0.09		0.80		0.80
v/c Ratio	0.02	0.03		0.44		0.28		0.80
Control Delay	36.7	0.4		22.5		3.5		11.6
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	36.7	0.4		22.5		3.5		11.6
LOS	D	A		C		A		B
Approach Delay		14.0		22.5		3.5		11.6
Approach LOS		B		C		A		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 33 (37%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 9.7	Intersection LOS: A
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 6: Indian Creek Drive & 69th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	21	4	156	1	921	4	105	593	0
Future Volume (veh/h)	0	0	0	21	4	156	1	921	4	105	593	0
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	0.99		0.97	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	0.90	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	0	0	0	22	4	164	1	969	4	111	624	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	265	0	59	16	189	40	2040	8	261	1396	0
Arrive On Green	0.00	0.00	0.00	0.17	0.17	0.17	0.89	0.89	0.89	0.89	0.89	0.00
Sat Flow, veh/h	1096	1515	0	82	90	1085	0	3046	13	308	2160	0
Grp Volume(v), veh/h	0	0	0	190	0	0	536	0	438	303	432	0
Grp Sat Flow(s),veh/h/ln	1096	1515	0	1257	0	0	1683	0	1376	937	1455	0
Q Serve(g_s), s	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	5.4	1.5	4.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	13.2	0.0	0.0	5.4	0.0	5.4	6.9	4.8	0.0
Prop In Lane	1.00		0.00	0.12		0.86	0.00		0.01	0.37		0.00
Lane Grp Cap(c), veh/h	80	265	0	264	0	0	1167	0	922	682	975	0
V/C Ratio(X)	0.00	0.00	0.00	0.72	0.00	0.00	0.46	0.00	0.48	0.44	0.44	0.00
Avail Cap(c_a), veh/h	206	439	0	407	0	0	1167	0	922	682	975	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.87	0.87	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	36.0	0.0	0.0	1.9	0.0	1.9	1.8	1.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	0.0	0.0	1.3	0.0	1.8	1.8	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.2	0.0	0.0	1.5	0.0	1.3	0.9	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	38.8	0.0	0.0	3.2	0.0	3.7	3.6	3.2	0.0
LnGrp LOS	A	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		0			190			974			735	
Approach Delay, s/veh		0.0			38.8			3.4			3.3	
Approach LOS					D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.4		22.6		67.4		22.6				
Change Period (Y+Rc), s		7.1		6.9		7.1		6.9				
Max Green Setting (Gmax), s		49.9		26.1		49.9		26.1				
Max Q Clear Time (g_c+I1), s		8.9		15.2		7.4		0.0				
Green Ext Time (p_c), s		2.4		0.7		2.3		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			6.9									
HCM 6th LOS			A									

Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	Ø8
Lane Configurations							
Traffic Volume (vph)	21	4	1	921	105	593	
Future Volume (vph)	21	4	1	921	105	593	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		4		6		2	8
Permitted Phases	4		6		2		
Detector Phase	4	4	6	6	2	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	16.0	16.0	16.0	16.0	7.0
Minimum Split (s)	23.6	23.6	23.8	23.8	23.8	23.8	31.9
Total Split (s)	33.0	33.0	57.0	57.0	57.0	57.0	33.0
Total Split (%)	36.7%	36.7%	63.3%	63.3%	63.3%	63.3%	37%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	3.1	3.1	3.1	3.1	2.9
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		6.9		7.1		7.1	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		12.4		63.6		63.6	
Actuated g/C Ratio		0.14		0.71		0.71	
v/c Ratio		0.73		0.48		0.49	
Control Delay		33.2		7.5		8.2	
Queue Delay		0.0		0.0		0.0	
Total Delay		33.2		7.5		8.2	
LOS		C		A		A	
Approach Delay		33.2		7.5		8.2	
Approach LOS		C		A		A	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 71 (79%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 10.4	Intersection LOS: B
Intersection Capacity Utilization 87.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Indian Creek Drive & 69th Street

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	146	1	2	39	17	2	28	19	88	5	25
Future Vol, veh/h	54	146	1	2	39	17	2	28	19	88	5	25
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	180	1	2	48	21	2	35	23	109	6	31
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.7	8	8.1	9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	27%	3%	75%
Vol Thru, %	57%	73%	67%	4%
Vol Right, %	39%	0%	29%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	201	58	118
LT Vol	2	54	2	88
Through Vol	28	146	39	5
RT Vol	19	1	17	25
Lane Flow Rate	60	248	72	146
Geometry Grp	1	1	1	1
Degree of Util (X)	0.078	0.315	0.091	0.193
Departure Headway (Hd)	4.641	4.564	4.551	4.777
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	769	787	786	750
Service Time	2.684	2.594	2.589	2.813
HCM Lane V/C Ratio	0.078	0.315	0.092	0.195
HCM Control Delay	8.1	9.7	8	9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1.4	0.3	0.7

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	74	7	5	161	153	12	86	24	29	12	20
Future Vol, veh/h	15	74	7	5	161	153	12	86	24	29	12	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	81	8	5	177	168	13	95	26	32	13	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	10.4	9.1	8.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	16%	2%	48%
Vol Thru, %	70%	77%	50%	20%
Vol Right, %	20%	7%	48%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	122	96	319	61
LT Vol	12	15	5	29
Through Vol	86	74	161	12
RT Vol	24	7	153	20
Lane Flow Rate	134	105	351	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.184	0.141	0.417	0.094
Departure Headway (Hd)	4.935	4.806	4.279	5.028
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	723	743	838	708
Service Time	2.994	2.859	2.318	3.093
HCM Lane V/C Ratio	0.185	0.141	0.419	0.095
HCM Control Delay	9.1	8.7	10.4	8.6
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.7	0.5	2.1	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	64	188	155	48	0	0	0	0	49	2138	10
Future Volume (veh/h)	0	64	188	155	48	0	0	0	0	49	2138	10
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.96
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				0.90	1.00	0.94
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1683	1683	1683	1683	0				1710	1683	1710
Adj Flow Rate, veh/h	0	68	200	165	51	0				52	2274	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	114	336	217	57	0				50	2339	12
Arrive On Green	0.00	0.34	0.34	0.34	0.34	0.00				0.69	0.69	0.69
Sat Flow, veh/h	0	335	985	429	166	0				97	4507	22
Grp Volume(v), veh/h	0	0	268	216	0	0				812	749	775
Grp Sat Flow(s),veh/h/ln	0	0	1320	595	0	0				1510	1532	1584
Q Serve(g_s), s	0.0	0.0	15.1	15.6	0.0	0.0				46.7	39.0	39.1
Cycle Q Clear(g_c), s	0.0	0.0	15.1	30.7	0.0	0.0				46.7	39.0	39.1
Prop In Lane	0.00		0.75	0.76		0.00				0.06		0.01
Lane Grp Cap(c), veh/h	0	0	450	273	0	0				784	795	822
V/C Ratio(X)	0.00	0.00	0.60	0.79	0.00	0.00				1.04	0.94	0.94
Avail Cap(c_a), veh/h	0	0	450	273	0	0				784	795	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	1.00	0.95	0.00	0.00				0.50	0.50	0.50
Uniform Delay (d), s/veh	0.0	0.0	24.5	36.5	0.0	0.0				13.9	12.8	12.8
Incr Delay (d2), s/veh	0.0	0.0	1.9	13.3	0.0	0.0				32.9	12.5	12.3
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(50%),veh/ln	0.0	0.0	4.8	5.7	0.0	0.0				17.0	11.1	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	26.4	49.8	0.0	0.0				46.8	25.3	25.1
LnGrp LOS	A	A	C	D	A	A				F	C	C
Approach Vol, veh/h		268			216						2337	
Approach Delay, s/veh		26.4			49.8						32.7	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		53.0		37.0				37.0				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 47		* 31				* 31				
Max Q Clear Time (g_c+I1), s		48.7		32.7				17.1				
Green Ext Time (p_c), s		0.0		0.0				1.1				

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

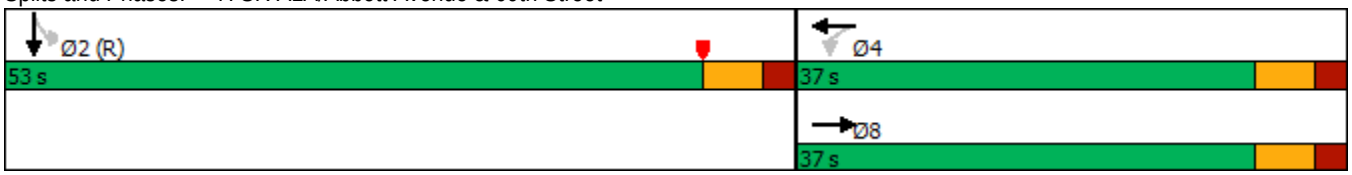
Notes

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

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	64	155	48	2138
Future Volume (vph)	64	155	48	2138
Turn Type	NA	Perm	NA	NA
Protected Phases	8		4	2
Permitted Phases		4		
Detector Phase	8	4	4	2
Switch Phase				
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	37.0	37.0	37.0	27.3
Total Split (s)	37.0	37.0	37.0	53.0
Total Split (%)	41.1%	41.1%	41.1%	58.9%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	6.3		6.3	6.3
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	C-Max
Act Effct Green (s)	27.1		27.1	50.3
Actuated g/C Ratio	0.30		0.30	0.56
v/c Ratio	0.66		0.94	0.97
Control Delay	35.1		77.7	29.6
Queue Delay	0.0		0.0	0.0
Total Delay	35.1		77.7	29.6
LOS	D		E	C
Approach Delay	35.1		77.7	29.6
Approach LOS	D		E	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 99.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 7: SR A1A/Abbott Avenue & 69th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	100	45	221	248	0	0	0	0	84	1405	36
Future Volume (veh/h)	0	100	45	221	248	0	0	0	0	84	1405	36
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		1.00				1.00		0.95
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				0.90	1.00	0.94
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1683	1683	1683	1683	0				1710	1683	1710
Adj Flow Rate, veh/h	0	106	48	235	264	0				89	1495	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	356	161	241	211	0				118	2110	55
Arrive On Green	0.00	0.36	0.36	0.36	0.36	0.00				0.66	0.66	0.66
Sat Flow, veh/h	0	980	444	500	582	0				237	4249	111
Grp Volume(v), veh/h	0	0	154	499	0	0				565	523	534
Grp Sat Flow(s),veh/h/ln	0	0	1424	1082	0	0				1503	1532	1562
Q Serve(g_s), s	0.0	0.0	7.0	25.7	0.0	0.0				22.9	19.1	19.1
Cycle Q Clear(g_c), s	0.0	0.0	7.0	32.7	0.0	0.0				22.9	19.1	19.1
Prop In Lane	0.00		0.31	0.47		0.00				0.16		0.07
Lane Grp Cap(c), veh/h	0	0	517	452	0	0				747	761	776
V/C Ratio(X)	0.00	0.00	0.30	1.10	0.00	0.00				0.76	0.69	0.69
Avail Cap(c_a), veh/h	0	0	517	452	0	0				747	761	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.33	1.33	1.33
Upstream Filter(I)	0.00	0.00	1.00	0.61	0.00	0.00				0.74	0.74	0.74
Uniform Delay (d), s/veh	0.0	0.0	20.5	33.5	0.0	0.0				11.6	10.9	10.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	65.4	0.0	0.0				5.3	3.8	3.7
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(50%),veh/ln	0.0	0.0	2.3	18.2	0.0	0.0				6.3	5.2	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	20.7	98.9	0.0	0.0				16.9	14.7	14.6
LnGrp LOS	A	A	C	F	A	A				B	B	B
Approach Vol, veh/h		154			499						1622	
Approach Delay, s/veh		20.7			98.9						15.4	
Approach LOS		C			F						B	

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		51.0		39.0				39.0				
Change Period (Y+Rc), s		* 6.3		* 6.3				* 6.3				
Max Green Setting (Gmax), s		* 45		* 33				* 33				
Max Q Clear Time (g_c+I1), s		24.9		34.7				9.0				
Green Ext Time (p_c), s		4.0		0.0				0.7				

Intersection Summary		
HCM 6th Ctrl Delay		34.1
HCM 6th LOS		C

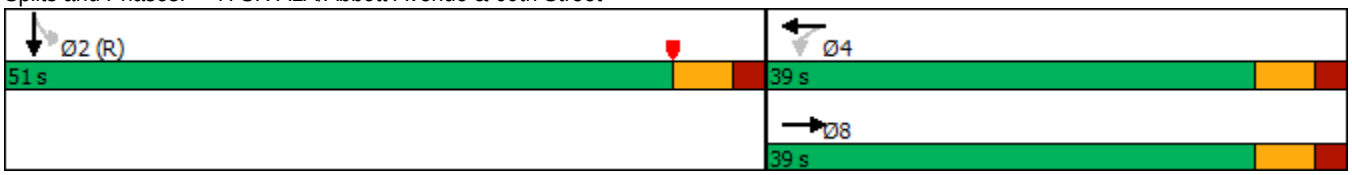
Notes

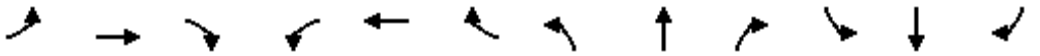
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	100	221	248	1405
Future Volume (vph)	100	221	248	1405
Turn Type	NA	Perm	NA	NA
Protected Phases	8		4	2
Permitted Phases		4		
Detector Phase	8	4	4	2
Switch Phase				
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	29.3	29.3	27.3
Total Split (s)	39.0	39.0	39.0	51.0
Total Split (%)	43.3%	43.3%	43.3%	56.7%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	6.3		6.3	6.3
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	C-Max
Act Effct Green (s)	32.7		32.7	44.7
Actuated g/C Ratio	0.36		0.36	0.50
v/c Ratio	0.29		1.18	0.76
Control Delay	20.0		133.0	10.2
Queue Delay	0.0		1.9	0.0
Total Delay	20.0		134.9	10.2
LOS	C		F	B
Approach Delay	20.0		134.9	10.2
Approach LOS	C		F	B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 47 (52%), Referenced to phase 2:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 38.2	Intersection LOS: D
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 7: SR A1A/Abbott Avenue & 69th Street





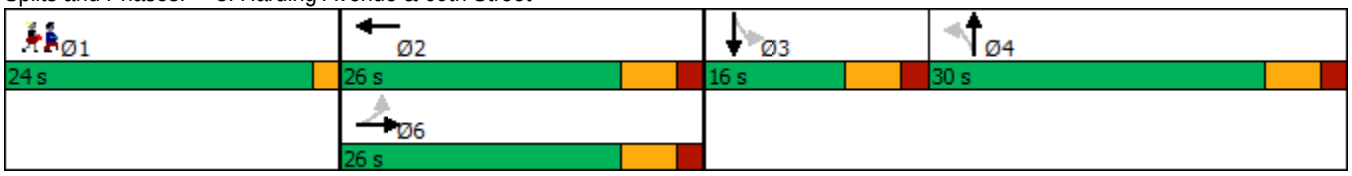
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	106	0	0	105	15	61	160	24	42	0	36
Future Volume (vph)	9	106	0	0	105	15	61	160	24	42	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0			6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00			0.97	
Flpb, ped/bikes		1.00			1.00		0.98	1.00			1.00	
Frt		1.00			0.98		1.00	0.98			0.94	
Flt Protected		1.00			1.00		0.95	1.00			0.97	
Satd. Flow (prot)		1500			1473		1402	1474			1336	
Flt Permitted		0.96			1.00		0.69	1.00			0.52	
Satd. Flow (perm)		1446			1473		1020	1474			716	
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	12	139	0	0	138	20	80	211	32	55	0	47
RTOR Reduction (vph)	0	0	0	0	6	0	0	5	0	0	90	0
Lane Group Flow (vph)	0	151	0	0	152	0	80	238	0	0	12	0
Confl. Peds. (#/hr)	27		41	41		27	10		6	6		10
Confl. Bikes (#/hr)			1			1						
Parking (#/hr)	0	0			0	0	0	0	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6						4			3		
Actuated Green, G (s)		10.1			10.1		15.9	15.9			5.9	
Effective Green, g (s)		10.1			10.1		15.9	15.9			5.9	
Actuated g/C Ratio		0.20			0.20		0.32	0.32			0.12	
Clearance Time (s)		6.0			6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		292			298		325	469			84	
v/s Ratio Prot					0.10			c0.16				
v/s Ratio Perm		c0.10					0.08				c0.02	
v/c Ratio		0.52			0.51		0.25	0.51			0.14	
Uniform Delay, d1		17.7			17.7		12.6	13.8			19.7	
Progression Factor		1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.5			1.5		0.4	0.9			0.8	
Delay (s)		19.3			19.2		13.0	14.7			20.5	
Level of Service		B			B		B	B			C	
Approach Delay (s)		19.3			19.2			14.3			20.5	
Approach LOS		B			B			B			C	

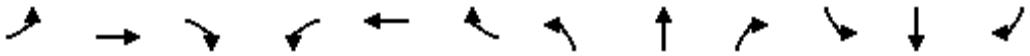
Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	49.9	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	Ø1
Lane Configurations								
Traffic Volume (vph)	9	106	105	61	160	42	0	
Future Volume (vph)	9	106	105	61	160	42	0	
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	
Protected Phases		6	2		4		3	1
Permitted Phases	6			4		3		
Detector Phase	6	6	2	4	4	3	3	
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	1.0
Minimum Split (s)	26.0	26.0	26.0	30.0	30.0	13.0	13.0	24.0
Total Split (s)	26.0	26.0	26.0	30.0	30.0	16.0	16.0	24.0
Total Split (%)	27.1%	27.1%	27.1%	31.3%	31.3%	16.7%	16.7%	25%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		6.0	
Lead/Lag				Lag	Lag	Lead	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.9	13.9	15.9	15.9		9.7	
Actuated g/C Ratio		0.28	0.28	0.32	0.32		0.19	
v/c Ratio		0.38	0.39	0.25	0.52		0.43	
Control Delay		21.9	21.1	19.7	22.0		10.4	
Queue Delay		0.0	0.0	0.0	0.0		0.0	
Total Delay		21.9	21.1	19.7	22.0		10.4	
LOS		C	C	B	C		B	
Approach Delay		21.9	21.1		21.5		10.4	
Approach LOS		C	C		C		B	

Intersection Summary	
Cycle Length: 96	
Actuated Cycle Length: 50.2	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 19.9	Intersection LOS: B
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Harding Avenue & 69th Street





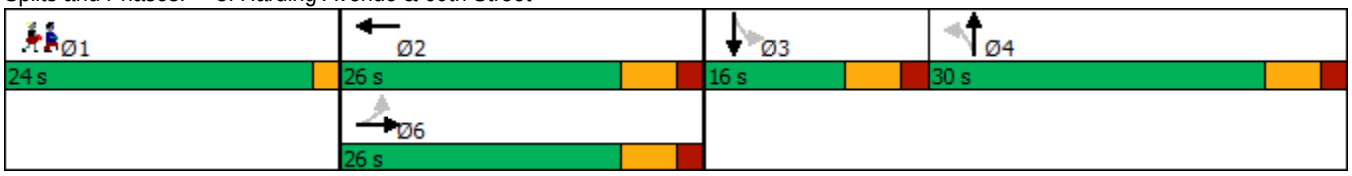
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	161	0	0	168	37	299	340	70	26	0	59
Future Volume (vph)	13	161	0	0	168	37	299	340	70	26	0	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0			6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00			0.98		1.00	0.99			0.93	
Flpb, ped/bikes		0.99			1.00		0.96	1.00			1.00	
Frt		1.00			0.98		1.00	0.97			0.91	
Flt Protected		1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1495			1440		1376	1460			1252	
Flt Permitted		0.96			1.00		0.70	1.00			0.44	
Satd. Flow (perm)		1447			1440		1011	1460			554	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	14	171	0	0	179	39	318	362	74	28	0	63
RTOR Reduction (vph)	0	0	0	0	8	0	0	6	0	0	83	0
Lane Group Flow (vph)	0	185	0	0	210	0	318	430	0	0	8	0
Confl. Peds. (#/hr)	59		58	58		59	14		17	17		14
Confl. Bikes (#/hr)			1			7			1			1
Parking (#/hr)	0	0			0	0	0	0	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6						4			3		
Actuated Green, G (s)		15.9			15.9		24.8	24.8			6.0	
Effective Green, g (s)		15.9			15.9		24.8	24.8			6.0	
Actuated g/C Ratio		0.25			0.25		0.38	0.38			0.09	
Clearance Time (s)		6.0			6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		355			353		387	559			51	
v/s Ratio Prot					c0.15			0.29				
v/s Ratio Perm		0.13					c0.31				c0.02	
v/c Ratio		0.52			0.60		0.82	0.77			0.17	
Uniform Delay, d1		21.1			21.6		18.0	17.4			27.0	
Progression Factor		1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.4			2.7		13.1	6.3			1.5	
Delay (s)		22.5			24.3		31.1	23.7			28.6	
Level of Service		C			C		C	C			C	
Approach Delay (s)		22.5			24.3			26.8			28.6	
Approach LOS		C			C			C			C	

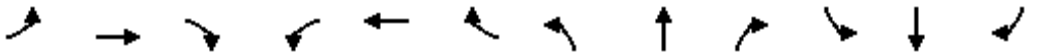
Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	Ø1
Lane Configurations								
Traffic Volume (vph)	13	161	168	299	340	26	0	
Future Volume (vph)	13	161	168	299	340	26	0	
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	
Protected Phases		6	2		4		3	1
Permitted Phases	6			4		3		
Detector Phase	6	6	2	4	4	3	3	
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	1.0
Minimum Split (s)	26.0	26.0	26.0	30.0	30.0	13.0	13.0	24.0
Total Split (s)	26.0	26.0	26.0	30.0	30.0	16.0	16.0	24.0
Total Split (%)	27.1%	27.1%	27.1%	31.3%	31.3%	16.7%	16.7%	25%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		6.0	
Lead/Lag				Lag	Lag	Lead	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		15.9	15.9	24.8	24.8		8.0	
Actuated g/C Ratio		0.25	0.25	0.39	0.39		0.13	
v/c Ratio		0.51	0.60	0.82	0.76		0.51	
Control Delay		26.9	28.3	42.9	31.0		13.6	
Queue Delay		0.2	0.0	0.0	0.0		0.0	
Total Delay		27.1	28.3	42.9	31.0		13.6	
LOS		C	C	D	C		B	
Approach Delay		27.1	28.3		36.0		13.6	
Approach LOS		C	C		D		B	

Intersection Summary	
Cycle Length: 96	
Actuated Cycle Length: 63.5	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 31.7	Intersection LOS: C
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Harding Avenue & 69th Street



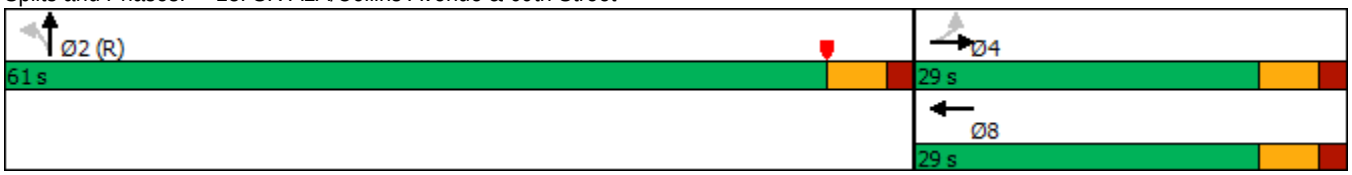


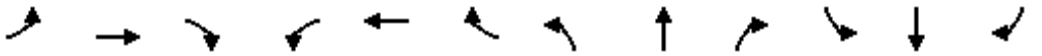
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	35	0	0	11	8	70	951	15	0	0	0
Future Volume (veh/h)	110	35	0	0	11	8	70	951	15	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.98		1.00	1.00		0.97	1.00		0.94			
Parking 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	1683	1683	0	0	1683	1683	1683	1683	1683			
Adj Flow Rate, veh/h	115	36	0	0	11	8	73	991	16			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	221	59	0	0	143	104	1132	3285	53			
Arrive On Green	0.16	0.16	0.00	0.00	0.16	0.16	0.94	0.94	0.94			
Sat Flow, veh/h	937	366	0	0	892	649	1603	4653	75			
Grp Volume(v), veh/h	151	0	0	0	0	19	73	652	355			
Grp Sat Flow(s),veh/h/ln	1303	0	0	0	0	1540	1603	1532	1664			
Q Serve(g_s), s	9.0	0.0	0.0	0.0	0.0	0.9	0.3	1.6	1.6			
Cycle Q Clear(g_c), s	10.0	0.0	0.0	0.0	0.0	0.9	0.3	1.6	1.6			
Prop In Lane	0.76		0.00	0.00		0.42	1.00		0.05			
Lane Grp Cap(c), veh/h	280	0	0	0	0	248	1132	2163	1175			
V/C Ratio(X)	0.54	0.00	0.00	0.00	0.00	0.08	0.06	0.30	0.30			
Avail Cap(c_a), veh/h	405	0	0	0	0	394	1132	2163	1175			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33			
Upstream Filter(I)	0.93	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	35.9	0.0	0.0	0.0	0.0	32.1	0.8	0.9	0.9			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.7			
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(50%),veh/ln	3.1	0.0	0.0	0.0	0.0	0.4	0.1	0.4	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	0.0	0.0	0.0	32.2	0.9	1.2	1.5			
LnGrp LOS	D	A	A	A	A	C	A	A	A			
Approach Vol, veh/h		151			19			1080				
Approach Delay, s/veh		36.5			32.2			1.3				
Approach LOS		D			C			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		69.5		20.5				20.5				
Change Period (Y+Rc), s		6.0		6.0				6.0				
Max Green Setting (Gmax), s		55.0		23.0				23.0				
Max Q Clear Time (g_c+I1), s		3.6		12.0				2.9				
Green Ext Time (p_c), s		6.9		0.2				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			6.0									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	110	35	11	70	951
Future Volume (vph)	110	35	11	70	951
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		4	8		2
Permitted Phases	4			2	
Detector Phase	4	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	29.0	29.0	28.0	28.0	28.0
Total Split (s)	29.0	29.0	29.0	61.0	61.0
Total Split (%)	32.2%	32.2%	32.2%	67.8%	67.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	6.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	C-Max	C-Max
Act Effct Green (s)		17.5	17.5	60.5	60.5
Actuated g/C Ratio		0.19	0.19	0.67	0.67
v/c Ratio		0.61	0.06	0.08	0.33
Control Delay		42.6	19.2	6.9	7.4
Queue Delay		0.0	0.0	0.0	0.0
Total Delay		42.6	19.2	6.9	7.4
LOS		D	B	A	A
Approach Delay		42.6	19.2		7.3
Approach LOS		D	B		A

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 58 (64%), Referenced to phase 2:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 48.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 13: SR A1A/Collins Avenue & 69th Street



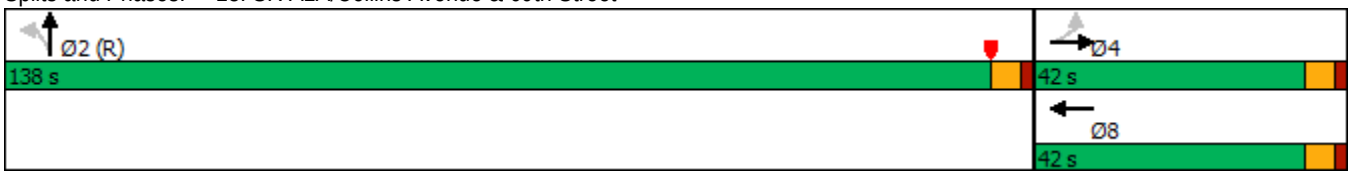


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	14	0	0	27	20	118	2100	7	0	0	0
Future Volume (veh/h)	182	14	0	0	27	20	118	2100	7	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.94	1.00		0.90			
Parking 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	1683	1683	0	0	1683	1683	1683	1683	1683			
Adj Flow Rate, veh/h	186	14	0	0	28	20	120	2143	7			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	234	15	0	0	177	127	1176	3466	11			
Arrive On Green	0.20	0.20	0.00	0.00	0.20	0.20	0.98	0.98	0.98			
Sat Flow, veh/h	975	73	0	0	886	633	1603	4727	15			
Grp Volume(v), veh/h	200	0	0	0	0	48	120	1389	761			
Grp Sat Flow(s),veh/h/ln	1048	0	0	0	0	1518	1603	1532	1678			
Q Serve(g_s), s	29.6	0.0	0.0	0.0	0.0	4.7	0.4	5.1	5.1			
Cycle Q Clear(g_c), s	34.3	0.0	0.0	0.0	0.0	4.7	0.4	5.1	5.1			
Prop In Lane	0.93		0.00	0.00		0.42	1.00		0.01			
Lane Grp Cap(c), veh/h	248	0	0	0	0	304	1176	2247	1231			
V/C Ratio(X)	0.81	0.00	0.00	0.00	0.00	0.16	0.10	0.62	0.62			
Avail Cap(c_a), veh/h	248	0	0	0	0	304	1176	2247	1231			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33			
Upstream Filter(I)	0.85	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	73.6	0.0	0.0	0.0	0.0	59.5	0.6	0.7	0.7			
Incr Delay (d2), s/veh	14.2	0.0	0.0	0.0	0.0	0.2	0.2	1.3	2.3			
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(50%),veh/ln	10.2	0.0	0.0	0.0	0.0	1.9	0.2	1.1	1.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.8	0.0	0.0	0.0	0.0	59.7	0.8	1.9	3.0			
LnGrp LOS	F	A	A	A	A	E	A	A	A			
Approach Vol, veh/h		200			48			2270				
Approach Delay, s/veh		87.8			59.7			2.2				
Approach LOS		F			E			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		138.0		42.0				42.0				
Change Period (Y+Rc), s		6.0		6.0				6.0				
Max Green Setting (Gmax), s		132.0		36.0				36.0				
Max Q Clear Time (g_c+I1), s		7.1		36.3				6.7				
Green Ext Time (p_c), s		29.7		0.0				0.2				
Intersection Summary												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	182	14	27	118	2100
Future Volume (vph)	182	14	27	118	2100
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		4	8		2
Permitted Phases	4			2	
Detector Phase	4	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	42.0	42.0	28.0	28.0	28.0
Total Split (s)	42.0	42.0	42.0	138.0	138.0
Total Split (%)	23.3%	23.3%	23.3%	76.7%	76.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	6.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	C-Max	C-Max
Act Effct Green (s)		33.9	33.9	134.1	134.1
Actuated g/C Ratio		0.19	0.19	0.74	0.74
v/c Ratio		0.96	0.16	0.21	0.63
Control Delay		123.3	40.9	8.3	12.3
Queue Delay		51.1	0.0	0.0	0.1
Total Delay		174.4	40.9	8.3	12.4
LOS		F	D	A	B
Approach Delay		174.4	40.9		12.2
Approach LOS		F	D		B

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 82 (46%), Referenced to phase 2:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 25.6	Intersection LOS: C
Intersection Capacity Utilization 75.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: SR A1A/Collins Avenue & 69th Street



Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	26	42	11	20	83
Future Vol, veh/h	29	26	42	11	20	83
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	32	28	46	12	22	90

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	186	52	0	0	58	0
Stage 1	52	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	5	5	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218	-
Pot Cap-1 Maneuver	1000	1141	-	-	1546	-
Stage 1	1134	-	-	-	-	-
Stage 2	1037	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	985	1141	-	-	1546	-
Mov Cap-2 Maneuver	985	-	-	-	-	-
Stage 1	1134	-	-	-	-	-
Stage 2	1021	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1053	1546	-
HCM Lane V/C Ratio	-	-	0.057	0.014	-
HCM Control Delay (s)	-	-	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	45	101	40	43	33
Future Vol, veh/h	32	45	101	40	43	33
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	35	49	110	43	47	36

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	262	132	0	0	153	0
Stage 1	132	-	-	-	-	-
Stage 2	130	-	-	-	-	-
Critical Hdwy	5	5	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218	-
Pot Cap-1 Maneuver	928	1055	-	-	1428	-
Stage 1	1039	-	-	-	-	-
Stage 2	1041	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	896	1055	-	-	1428	-
Mov Cap-2 Maneuver	896	-	-	-	-	-
Stage 1	1039	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	4.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	983	1428	-
HCM Lane V/C Ratio	-	-	0.085	0.033	-
HCM Control Delay (s)	-	-	9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Appendix E
Historic Growth and Committed Development

Historic Growth Trend

Station	2013	2014	2015	2016	2017	2018
5189	11,600	12,000	11,700	11,100	10,800	10,500
2541	21,000	21,500	20,000	21,000	18,000	19,000
5191	20,500	16,500	19,000	18,500	17,000	17,500
115	18,500	17,500	18,000	19,500	21,000	14,500
Total	**71,600**	**67,500**	**68,700**	**70,100**	**66,800**	**61,500**
Yearly		***-5.7%***	***1.8%***	***2.0%***	***-4.7%***	***-7.9%***
Overall						***-2.9%***

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5189 - SR 934/71 ST, 200' W SR A1A/HARDING AV

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	10500 C	E 5400	W 5100	9.00	54.30	4.30
2017	10800 C	E 5300	W 5500	9.00	55.00	4.30
2016	11100 C	E 5600	W 5500	9.00	54.50	4.30
2015	11700 C	E 5900	W 5800	9.00	54.70	3.80
2014	12000 C	E 6100	W 5900	9.00	54.50	3.80
2013	11600 C	E 5900	W 5700	9.00	52.40	3.70
2012	16600 C	E 7100	W 9500	9.00	55.70	10.50
2011	12000 C	E 5900	W 6100	9.00	55.10	10.50
2010	13800 C	E 5900	W 7900	8.98	54.08	9.50
2009	14400 C	E 6500	W 7900	8.99	53.24	8.40
2008	13800 C	E 6200	W 7600	9.09	55.75	9.60
2007	13800 C	E 5900	W 7900	8.01	54.34	6.60
2006	12700 C	E 5800	W 6900	7.97	54.22	8.80
2005	15800 C	E 8100	W 7700	8.80	53.80	5.50
2004	21000 C	E 9500	W 11500	9.00	53.30	12.00
2003	17200 C	E 8000	W 9200	8.80	53.40	7.50

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

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 2541 - SR A1A/COLLINS AVE, 500' S OF 63 ST (MIAMI BEACH)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	19000 C	N 19000	0	9.00	99.90	5.60
2017	18000 C	N 18000	0	9.00	99.90	5.30
2016	21000 C	N 21000	0	9.00	99.90	7.80
2015	20000 C	N 20000	0	9.00	99.90	4.60
2014	21500 C	N 21500		9.00	99.90	5.10
2013	21000 C	N 21000	0	9.00	99.90	6.10
2012	19000 C	N 19000	0	9.00	99.90	8.40
2011	17000 C	N 17000	0	9.00	99.90	7.50
2010	15000 C	N 15000	0	8.98	99.99	8.80
2009	21000 C	N 21000	0	8.99	99.99	8.40
2008	18000 C	N 18000	0	9.09	99.99	5.30
2007	16000 S	0	0	8.01	99.99	4.90
2006	16000 F			7.97	99.99	2.20
2005	16000 C	N 16000		8.80	99.90	5.50
2004	17000 C	N 17000		9.00	99.90	8.20
2003	18000 C	N 18000		8.80	99.90	4.90

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

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5191 - SR934/NE 79TH ST/NORTH BAY CSWY/71ST ST, 100' W OF RUE VERSAILLES

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	17500 C	E 17500	0	9.00	99.90	8.50
2017	17000 C	E 17000	0	9.00	99.90	6.90
2016	18500 C	E 18500	0	9.00	99.90	7.20
2015	19000 C	E 19000	0	9.00	99.90	11.80
2014	16500 C	E 16500		9.00	99.90	10.40
2013	20500 C	E 20500	0	9.00	99.90	9.00
2012	19500 C	E 19500	0	9.00	99.90	10.50
2011	18500 C	E 18500	0	9.00	99.90	10.50
2010	16500 C	E 16500	0	8.98	99.99	9.50
2009	17500 C	E 17500	0	8.99	99.99	8.40

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

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 0115 - SR 934/NORMANDY DR. WB. 100' W RUE VERSAILLES.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	14500 C	W 14500	0	9.00	99.90	8.50
2017	21000 C	W 21000	0	9.00	99.90	6.90
2016	19500 C	W 19500	0	9.00	99.90	7.20
2015	18000 C	W 18000	0	9.00	99.90	11.80
2014	17500 C	W 17500		9.00	99.90	10.40
2013	18500 C	W 18500	0	9.00	99.90	9.00
2012	21500 C	W 21500	0	9.00	99.90	10.50
2011	18000 C	W 18000	0	9.00	99.90	10.50
2010	18000 C	W 18000	0	8.98	99.99	9.50
2009	16000 C	W 16000	0	8.99	99.99	8.40
2008	16500 C	W 16500	0	9.09	99.99	9.60
2007	18000 C	W 18000	0	8.01	99.99	6.60
2006	17000 C	W 17000	0	7.97	99.99	8.80

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

Appendix F
Trip Generation

Scenario - 1

Scenario Name: Proposed
Dev. phase: 1
User Group:
No. of Years to Project
Traffic :
Analyst Note:

Warning: The time periods among the land uses do not appear to match.

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method / Rate/Equation	Entry / Split%	Exit / Split%	Total
815 - Free-Standing Discount Store	General	1000 Sq. Ft. GFA	30.09	Weekday, Peak Hour of	Average	24	11	35
Data Source: Trip Generation Manual, 10th Ed	Urban/Suburban			Adjacent Street Traffic,	1.17	69%	31%	
815(1) - Free-Standing Discount Store	General	1000 Sq. Ft. GFA	30.09	Weekday, Peak Hour of	Average	73	73	146
Data Source: Trip Generation Manual, 10th Ed	Urban/Suburban			Adjacent Street Traffic,	4.83	50%	50%	
222 - Multifamily Housing (High-Rise)	General	Dwelling Units	170	Weekday, Peak Hour of	Best Fit (LIN)	15	46	61
Data Source: Trip Generation Manual, 10th Ed	Urban/Suburban			Adjacent Street Traffic,	T = 0.28(X) + 12.86	24%	76%	
222(1) - Multifamily Housing (High-Rise)	General	Dwelling Units	170	Weekday, Peak Hour of	Best Fit (LIN)	40	26	66
Data Source: Trip Generation Manual, 10th Ed	Urban/Suburban			Adjacent Street Traffic,	T = 0.34(X) + 8.56	61%	39%	

U.S. Census Bureau

AMERICAN FactFinder

S0801

COMMUTING CHARACTERISTICS BY SEX

2013-2017 American Community Survey 5-Year Estimates

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

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

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

Subject	Census Tract 39.13, Miami-Dade County, Florida				
	Total		Male		Female
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Workers 16 years and over	3,235	+/-387	1,807	+/-309	1,428
MEANS OF TRANSPORTATION TO WORK					
Car, truck, or van	59.6%	+/-9.0	71.8%	+/-10.7	44.1%
Drove alone	53.9%	+/-7.0	67.4%	+/-10.1	36.8%
Carpooled	5.7%	+/-4.7	4.4%	+/-5.9	7.3%
In 2-person carpool	3.2%	+/-3.2	0.0%	+/-2.2	7.3%
In 3-person carpool	2.4%	+/-3.3	4.4%	+/-5.9	0.0%
In 4-or-more person carpool	0.0%	+/-1.2	0.0%	+/-2.2	0.0%
Workers per car, truck, or van	1.06	+/-0.05	1.04	+/-0.06	1.09
Public transportation (excluding taxicab)	17.9%	+/-6.4	6.9%	+/-5.4	31.9%
Walked	7.0%	+/-5.2	3.8%	+/-3.5	11.1%
Bicycle	1.7%	+/-2.1	2.3%	+/-3.5	1.1%
Taxicab, motorcycle, or other means	7.2%	+/-4.6	7.6%	+/-6.7	6.7%
Worked at home	6.6%	+/-3.8	7.6%	+/-5.3	5.2%
PLACE OF WORK					
Worked in state of residence	98.3%	+/-2.1	97.7%	+/-3.6	99.1%
Worked in county of residence	92.5%	+/-4.8	88.1%	+/-8.4	98.1%
Worked outside county of residence	5.8%	+/-4.1	9.6%	+/-7.3	1.0%
Worked outside state of residence	1.7%	+/-2.1	2.3%	+/-3.6	0.9%

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	71 NOBE	**Organization:**	
Project Location:		**Performed By:**	DPA
Scenario Description:		**Date:**	Nov-19
Analysis Year:	Buildout	**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	813	30,089		35	24	11
Restaurant				0		
Cinema/Entertainment				0		
Residential	220	170		61	15	46
Hotel				0		
All Other Land Uses[2]				0		
Total				96	39	57

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		20%			20%	
Restaurant						
Cinema/Entertainment						
Residential		20%				
Hotel					20%	
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	96	39	57
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips[3]	86	31	55
External Transit-Trips[4]	10	8	2
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:	71 NOBE
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	24	24	1.00	11	11
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	15	15	1.00	46	46
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	3		1	0	2	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		8	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	2		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	0	0		0
Hotel	0	1	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	24	24	19	5	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	15	15	12	3	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	11	11	9	2	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	46	46	46	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:	71 NOBE	**Organization:**	
Project Location:		**Performed By:**	DPA
Scenario Description:		**Date:**	Nov-19
Analysis Year:	Buildout	**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	813	30,089		146	73	73
Restaurant				0		
Cinema/Entertainment				0		
Residential	220	170		66	40	26
Hotel				0		
All Other Land Uses[2]				0		
Total				212	113	99

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		0%			0%	
Restaurant						
Cinema/Entertainment						
Residential		0%			0%	
Hotel						
All Other Land Uses[2]						

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	18	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	7	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	212	113	99
Internal Capture Percentage	24%	22%	25%
External Vehicle-Trips[3]	162	88	74
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	10%	25%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	45%	27%
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:	71 NOBE
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	73	73	1.00	73	73
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	40	40	1.00	26	26
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		21	3	19	4
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	11	5	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		6	0	0	2	0
Retail	0		0	0	18	0
Restaurant	0	37		0	6	0
Cinema/Entertainment	0	3	0		2	0
Residential	0	7	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	7	66	73	66	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	18	22	40	22	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	18	55	73	55	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	7	19	26	19	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.

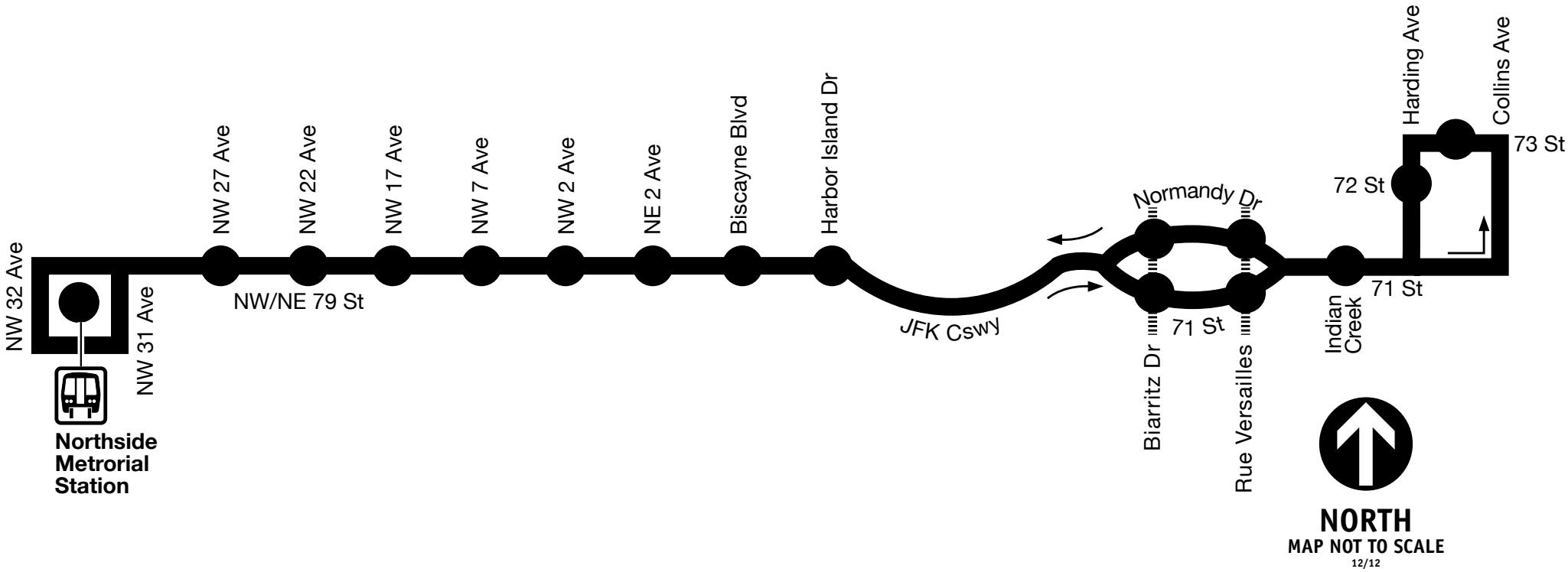
Appendix G
Cardinal Distribution

Miami-Dade 2010 Directional Distribution Summary											
Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
616	3516	TRIPS	703	540	0	1,630	1,842	1,537	1,127	1,812	9,191
616	3516	PERCENT	7.7	5.9	0.0	17.7	20.0	16.7	12.3	19.7	
617	3517	TRIPS	0	10	0	0	10	0	0	20	40
617	3517	PERCENT	0.0	25.0	0.0	0.0	25.0	0.0	0.0	50.0	
618	3518	TRIPS	330	165	0	322	542	490	234	755	2,838
618	3518	PERCENT	11.6	5.8	0.0	11.4	19.1	17.3	8.3	26.6	
619	3519	TRIPS	158	0	0	588	1,822	1,431	915	2,017	6,931
619	3519	PERCENT	2.3	0.0	0.0	8.5	26.3	20.7	13.2	29.1	
620	3520	TRIPS	173	0	0	481	2,563	2,285	1,185	2,715	9,402
620	3520	PERCENT	1.8	0.0	0.0	5.1	27.3	24.3	12.6	28.9	
621	3521	TRIPS	750	0	271	730	1,325	1,008	570	1,178	5,832
621	3521	PERCENT	12.9	0.0	4.7	12.5	22.7	17.3	9.8	20.2	
622	3522	TRIPS	846	0	0	547	1,669	2,238	881	1,779	7,960
622	3522	PERCENT	10.6	0.0	0.0	6.9	21.0	28.1	11.1	22.4	
623	3523	TRIPS	865	314	362	1,036	918	2,053	953	915	7,416
623	3523	PERCENT	11.7	4.2	4.9	14.0	12.4	27.7	12.9	12.3	
624	3524	TRIPS	1,510	1,185	279	1,139	2,348	3,798	2,999	2,480	15,738
624	3524	PERCENT	9.6	7.5	1.8	7.2	14.9	24.1	19.1	15.8	
625	3525	TRIPS	904	151	0	713	469	1,573	902	1,029	5,741
625	3525	PERCENT	15.8	2.6	0.0	12.4	8.2	27.4	15.7	17.9	
626	3526	TRIPS	86	0	0	0	2,128	2,780	1,523	2,730	9,247
626	3526	PERCENT	0.9	0.0	0.0	0.0	23.0	30.1	16.5	29.5	
627	3527	TRIPS	268	0	0	0	2,782	2,384	1,028	1,982	8,444
627	3527	PERCENT	3.2	0.0	0.0	0.0	33.0	28.2	12.2	23.5	
628	3528	TRIPS	572	0	107	174	1,417	1,412	675	755	5,112
628	3528	PERCENT	11.2	0.0	2.1	3.4	27.7	27.6	13.2	14.8	
629	3529	TRIPS	2,040	549	224	1,939	1,885	5,257	2,755	2,552	17,201
629	3529	PERCENT	11.9	3.2	1.3	11.3	11.0	30.6	16.0	14.8	
630	3530	TRIPS	1,018	0	101	231	1,694	2,664	1,198	1,047	7,953
630	3530	PERCENT	12.8	0.0	1.3	2.9	21.3	33.5	15.1	13.2	
631	3531	TRIPS	422	0	0	0	1,119	1,636	433	741	4,351
631	3531	PERCENT	9.7	0.0	0.0	0.0	25.7	37.6	10.0	17.0	
632	3532	TRIPS	250	0	0	0	528	1,486	568	688	3,520
632	3532	PERCENT	7.1	0.0	0.0	0.0	15.0	42.2	16.1	19.6	
633	3533	TRIPS	330	0	0	0	1,045	1,375	758	776	4,284
633	3533	PERCENT	7.7	0.0	0.0	0.0	24.4	32.1	17.7	18.1	
634	3534	TRIPS	1,649	138	246	667	1,620	2,236	1,335	1,553	9,444
634	3534	PERCENT	17.5	1.5	2.6	7.1	17.2	23.7	14.1	16.4	
635	3535	TRIPS	768	0	0	0	1,106	1,912	1,284	1,253	6,323
635	3535	PERCENT	12.2	0.0	0.0	0.0	17.5	30.2	20.3	19.8	
636	3536	TRIPS	775	0	0	320	731	2,473	1,515	1,466	7,280

Miami-Dade 2040 Directional Distribution Summary											
Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
616	3516	TRIPS	887	556	0	1,876	1,859	1,836	1,423	2,112	10,549
616	3516	PERCENT	8.4	5.3	0.0	17.8	17.6	17.4	13.5	20.0	
617	3517	TRIPS	81	36	8	61	50	65	48	56	405
617	3517	PERCENT	20.0	8.9	2.0	15.1	12.4	16.1	11.9	13.8	
618	3518	TRIPS	245	194	0	283	618	438	292	527	2,597
618	3518	PERCENT	9.4	7.5	0.0	10.9	23.8	16.9	11.2	20.3	
619	3519	TRIPS	297	0	0	1,202	2,738	1,949	1,188	3,411	10,785
619	3519	PERCENT	2.8	0.0	0.0	11.2	25.4	18.1	11.0	31.6	
620	3520	TRIPS	59	0	0	691	2,586	2,659	1,388	3,229	10,612
620	3520	PERCENT	0.6	0.0	0.0	6.5	24.4	25.1	13.1	30.4	
621	3521	TRIPS	641	0	207	652	1,069	897	507	931	4,904
621	3521	PERCENT	13.1	0.0	4.2	13.3	21.8	18.3	10.3	19.0	
622	3522	TRIPS	1,041	0	0	1,013	1,705	2,290	939	1,768	8,756
622	3522	PERCENT	11.9	0.0	0.0	11.6	19.5	26.2	10.7	20.2	
623	3523	TRIPS	660	379	254	1,131	910	1,892	857	961	7,044
623	3523	PERCENT	9.4	5.4	3.6	16.1	12.9	26.9	12.2	13.6	
624	3524	TRIPS	1,731	1,417	382	1,244	2,520	3,891	3,312	2,764	17,261
624	3524	PERCENT	10.0	8.2	2.2	7.2	14.6	22.5	19.2	16.0	
625	3525	TRIPS	919	266	0	846	669	1,872	1,085	1,165	6,822
625	3525	PERCENT	13.5	3.9	0.0	12.4	9.8	27.4	15.9	17.1	
626	3526	TRIPS	108	0	0	0	3,832	3,818	1,879	4,428	14,065
626	3526	PERCENT	0.8	0.0	0.0	0.0	27.2	27.2	13.4	31.5	
627	3527	TRIPS	667	0	0	0	4,525	3,711	1,836	3,520	14,259
627	3527	PERCENT	4.7	0.0	0.0	0.0	31.7	26.0	12.9	24.7	
628	3528	TRIPS	555	0	175	168	1,097	1,212	405	514	4,126
628	3528	PERCENT	13.5	0.0	4.2	4.1	26.6	29.4	9.8	12.5	
629	3529	TRIPS	1,948	557	335	1,556	1,577	4,662	2,347	1,892	14,874
629	3529	PERCENT	13.1	3.7	2.3	10.5	10.6	31.3	15.8	12.7	
630	3530	TRIPS	1,398	0	223	373	1,797	2,860	1,105	1,164	8,920
630	3530	PERCENT	15.7	0.0	2.5	4.2	20.2	32.1	12.4	13.1	
631	3531	TRIPS	802	0	0	0	2,347	2,348	855	1,454	7,806
631	3531	PERCENT	10.3	0.0	0.0	0.0	30.1	30.1	11.0	18.6	
632	3532	TRIPS	603	0	0	0	1,583	2,022	1,057	919	6,184
632	3532	PERCENT	9.8	0.0	0.0	0.0	25.6	32.7	17.1	14.9	
633	3533	TRIPS	573	0	0	0	1,534	1,830	876	1,027	5,840
633	3533	PERCENT	9.8	0.0	0.0	0.0	26.3	31.3	15.0	17.6	
634	3534	TRIPS	1,445	71	167	680	1,389	1,930	1,212	1,265	8,159
634	3534	PERCENT	17.7	0.9	2.1	8.3	17.0	23.7	14.9	15.5	
635	3535	TRIPS	1,380	0	0	0	1,833	2,491	1,518	1,720	8,942
635	3535	PERCENT	15.4	0.0	0.0	0.0	20.5	27.9	17.0	19.2	
636	3536	TRIPS	1,729	0	0	727	1,308	2,610	1,308	1,181	8,863

Appendix H
Transit Information

Route 79 Street MAX



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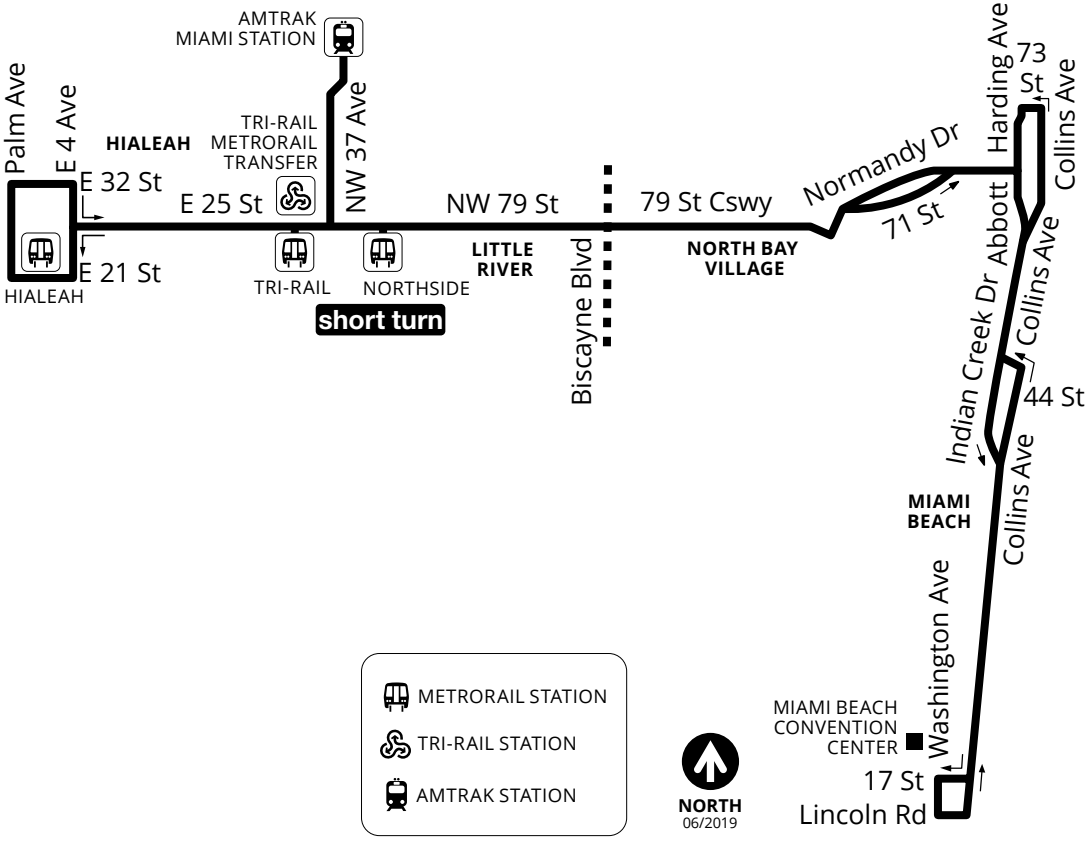
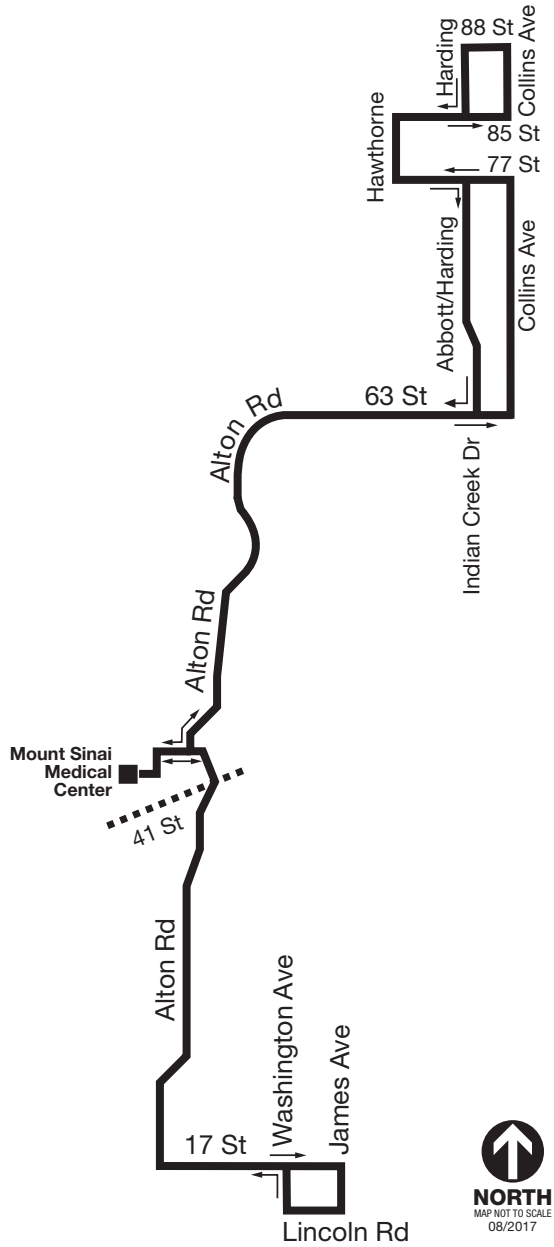

AMTRAK
MIAMI STATION
Palm Ave
E 4 Ave
HIALEAH
TRI-RAIL
METRORAIL
TRANSFER
NW 37 Ave
E 32 St
E 25 St
E 21 St
HIALEAH
TRI-RAIL
NORTHSIDE
short turn
NW 79 St
LITTLE
RIVER
Biscayne Blvd
79 St Cswy
NORTH BAY
VILLAGE
Normandy Dr
71 St
Harding Ave
73
St
Collins Ave
Abbott
Indian Creek Dr
Collins Ave
44 St
MIAMI
BEACH
Collins Ave
Washington Ave
MIAMI BEACH
CONVENTION
CENTER
17 St
Lincoln Rd
METRORAIL STATION
TRI-RAIL STATION
AMTRAK STATION
NORTH
06/2019

115

MID-NORTH BEACH CONNECTION



NORTH
MAP NOT TO SCALE
08/2017

@GoMiamiDade

MDT TRACKER
EASY PAY MIAMI
MDT TRANSIT WATCH

WEEKDAYS | *ENTRE SEMANA* | *LASEMÈN*

SOUTHBOUND *RUMBO SUR DIREKSYON SID*	MORNING *MAÑANA / MATIN* AM						AFTERNOON *TARDE / APREMIDI* PM								
Collins Ave & 87 St	7:20	8:10	9:00	9:50	10:40	11:30	12:20	1:10	2:00	2:50	3:40	4:30	5:20	6:10	7:00
Abbott Ave & 69 St	7:34	8:24	9:12	10:02	10:52	11:42	12:32	1:22	2:12	3:02	3:52	4:42	5:32	6:22	7:12
Mt Sinai Hospital	7:47	8:37	9:25	10:15	11:05	11:55	12:45	1:35	2:25	3:15	4:05	4:55	5:45	6:35	7:22
Lincoln & Washington	8:04	8:54	9:44	10:34	11:24	12:14	1:04	1:54	2:44	3:34	4:24	5:14	6:04	6:54	7:37

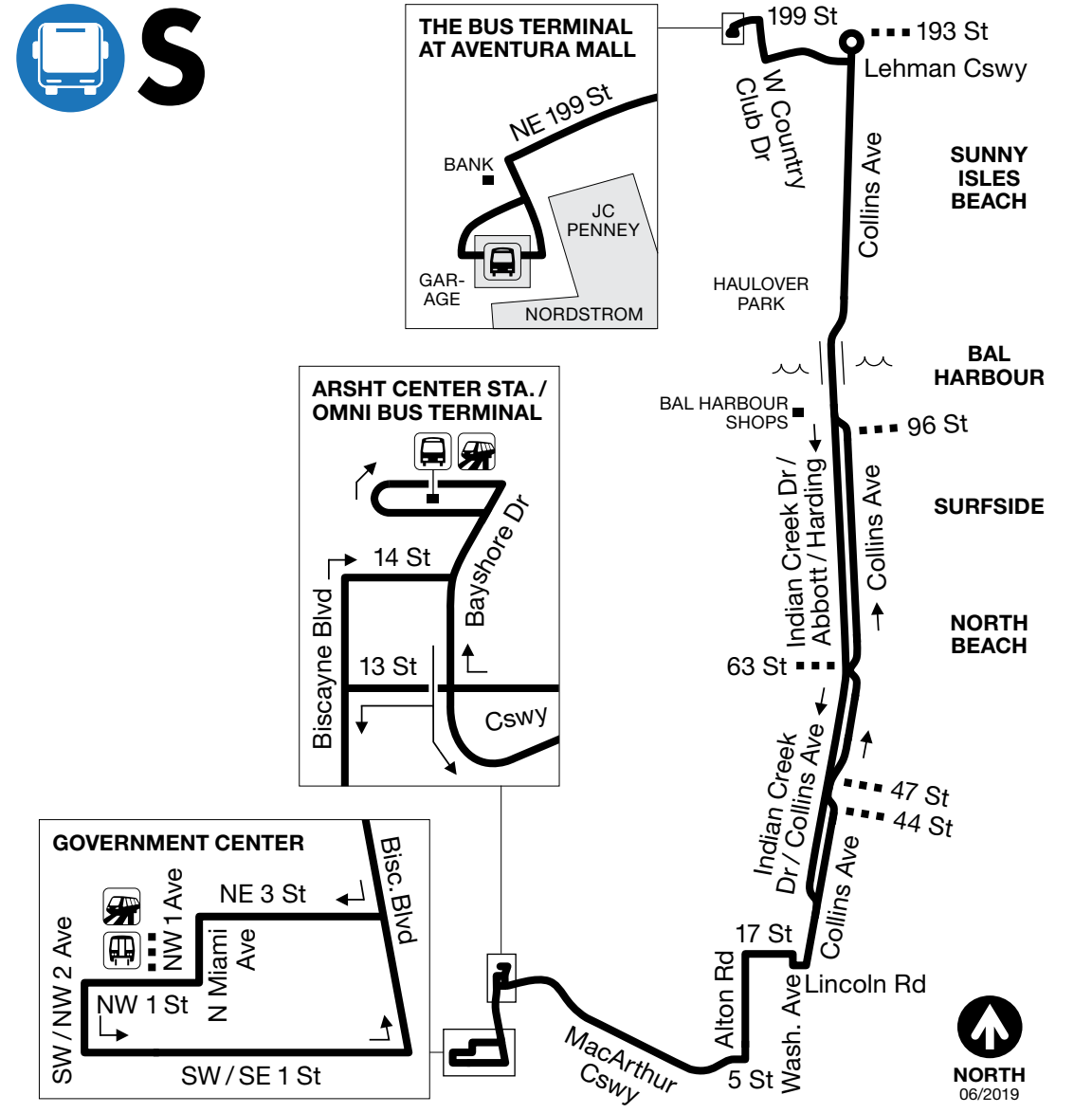
NORTHBOUND *RUMBO NORTE DIREKSYON NÒ*	MORNING *MAÑANA / MATIN* AM					AFTERNOON *TARDE / APREMIDI* PM								
Lincoln & Washington	8:06	8:56	9:46	10:36	11:26	12:16	1:06	1:56	2:46	3:36	4:26	5:16	6:06	6:56
Mt Sinai Hospital	8:21	9:11	10:00	10:50	11:40	12:30	1:20	2:10	3:00	3:50	4:40	5:30	6:20	7:10
Collins Ave & 69 St	8:35	9:25	10:14	11:04	11:54	12:44	1:34	2:24	3:14	4:04	4:54	5:44	6:34	7:22
Collins Ave & 87 St	8:51	9:41	10:30	11:20	12:10	1:00	1:50	2:40	3:30	4:19	5:09	5:59	6:49	7:37

WEEKENDS | *FINES DE SEMANA* | *WIKENN*

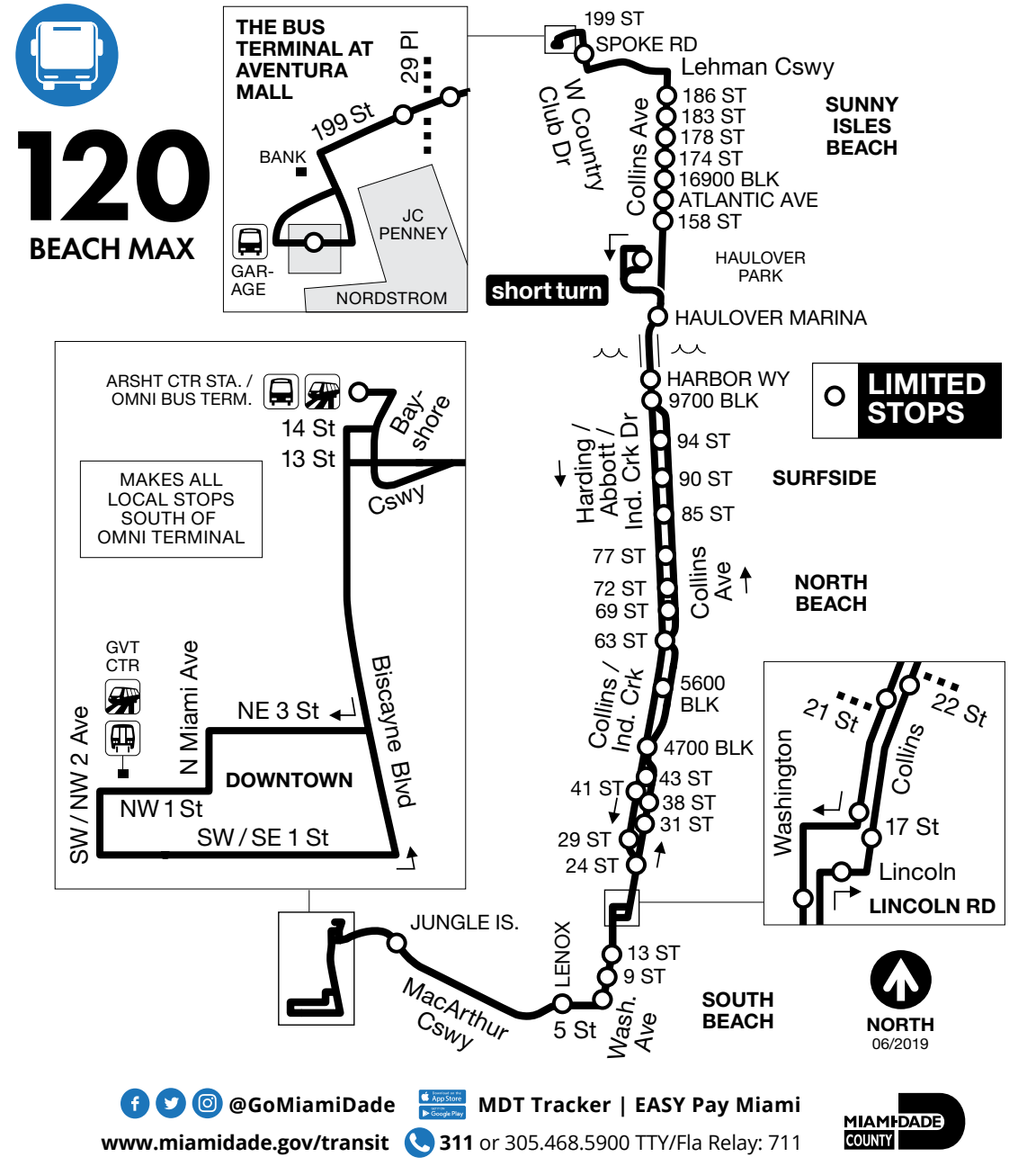
SOUTHBOUND *RUMBO SUR DIREKSYON SID*	MORNING *MAÑANA / MATIN* AM						AFTERNOON *TARDE / APREMIDI* PM								
Collins Ave & 87 St	7:20	8:10	9:00	9:50	10:40	11:30	12:20	1:10	2:00	2:50	3:40	4:30	5:20	6:10	7:00
Abbott Ave & 69 St	7:30	8:20	9:11	10:01	10:51	11:41	12:31	1:21	2:11	3:01	3:51	4:41	5:31	6:21	7:10
Mt Sinai Hospital	7:40	8:30	9:22	10:12	11:02	11:52	12:42	1:32	2:22	3:12	4:02	4:52	5:42	6:32	7:20
Lincoln & Washington	7:54	8:44	9:38	10:28	11:18	12:08	12:58	1:48	2:38	3:28	4:18	5:08	5:58	6:48	7:33

NORTHBOUND *RUMBO NORTE DIREKSYON NÒ*	MORNING *MAÑANA / MATIN* AM					AFTERNOON *TARDE / APREMIDI* PM								
Lincoln & Washington	7:56	8:46	9:40	10:30	11:20	12:10	1:00	1:50	2:40	3:30	4:20	5:10	6:00	6:50
Mt Sinai Hospital	8:08	8:58	9:52	10:42	11:32	12:22	1:12	2:02	2:52	3:42	4:32	5:22	6:12	7:02
Collins Ave & 69 St	8:20	9:11	10:05	10:55	11:49	12:35	1:25	2:15	3:05	3:55	4:46	5:36	6:26	7:13
Collins Ave & 87 St	8:34	9:25	10:19	11:09	11:59	12:49	1:39	2:29	3:19	4:09	5:00	5:50	6:40	7:25

S


THE BUS TERMINAL AT AVENTURA MALL
NE 199 St
BANK
JC PENNEY
GAR-AGE
NORDSTROM
199 St
193 St
Lehman Cswy
N Country Club Dr
Collins Ave
SUNNY ISLES BEACH
HAULOVER PARK
BAL HARBOUR
BAL HARBOUR SHOPS
96 St
SURFSIDE
Indian Creek Dr / Abbott / Harding
Collins Ave
NORTH BEACH
63 St
ARSHT CENTER STA. / OMNI BUS TERMINAL
Bayshore Dr
14 St
Biscayne Blvd
13 St
Cswy
Indian Creek Dr / Collins Ave
47 St
44 St
Collins Ave
GOVERNMENT CENTER
Bisc. Blvd
NE 3 St
NW 1 Ave
N Miami Ave
NW 1 St
SW / NW 2 Ave
SW / SE 1 St
17 St
Alton Rd
Wash. Ave
Lincoln Rd
MacArthur Cswy
5 St
NORTH
06/2019

120
BEACH MAX



SOUTHBOUND / RUMBO SUR / DIREKSYON SID

WEEKDAYS / DIAS LABORABLES / LASEMÈN

MORNING / MAÑANA / MATIN — AM | PM — **AFTERNOON & EVENING** / TARDE Y NOCHE / APREMIDI, CHAK ASWÈ

Bus Terminal at Aventura Mall	–	6:00	–	6:30	–	6:54	–	7:21	7:33	7:45	8:00	–	8:27	–	8:59	–	9:31	–	10:05	–	–	10:31	–	10:56	–	11:20	–	11:44	–	12:08	–	12:32	–	12:56	–	1:20	–	1:44	–	2:08	–	2:31	–	2:51	–	3:15	–	3:38	–	3:58	–	4:24	–	4:59	–	5:33	–	6:12	6:37	7:07	7:47	8:27	9:07	9:49	10:31
Collins Ave & Atlantic Ave	–	6:13	–	6:43	–	7:09	–	7:36	7:48	8:02	8:17	–	8:44	–	9:16	–	9:48	–	10:22	–	–	10:48	–	11:13	–	11:37	–	12:01	–	12:25	–	12:49	–	1:13	–	1:37	–	2:01	–	2:25	–	2:48	–	3:08	–	3:32	–	3:55	–	4:17	–	4:43	–	5:18	–	5:52	–	6:28	6:53	7:23	8:03	8:43	9:23	10:05	10:45
Haulover Club Parking Lot	6:00	–	6:30	–	6:55	–	7:23	–	–	–	–	8:29	–	9:02	–	9:32	–	10:00	–	10:11	10:35	–	11:01	–	11:25	–	11:49	–	12:13	–	12:37	–	1:01	–	1:25	–	1:49	–	2:13	–	2:37	–	2:56	–	3:20	–	3:44	–	4:07	–	4:31	–	4:59	–	5:34	–	6:06	–	–	–	–	–	–	–	–
Bal Harbour Shops	6:05	6:19	6:35	6:49	7:02	7:16	7:30	7:43	7:55	8:09	8:24	8:36	8:51	9:09	9:23	9:39	9:55	10:07	10:29	10:18	10:42	10:55	11:08	11:20	11:32	11:44	11:56	12:08	12:20	12:32	12:44	12:56	1:08	1:20	1:32	1:44	1:56	2:08	2:20	2:32	2:44	2:55	3:03	3:15	3:27	3:39	3:51	4:03	4:14	4:25	4:38	4:51	5:06	5:26	5:41	6:00	6:15	6:35	7:00	7:30	8:10	8:50	9:30	10:11	10:51
Abbott Ave & 69 St	6:14	6:28	6:44	6:58	7:14	7:28	7:42	7:55	8:10	8:24	8:39	8:51	9:06	9:20	9:34	9:50	10:06	10:18	10:40	10:29	10:53	11:06	11:19	11:31	11:43	11:55	12:07	12:19	12:31	12:43	12:55	1:07	1:19	1:31	1:43	1:55	2:07	2:19	2:31	2:43	2:55	3:06	3:14	3:26	3:38	3:50	4:02	4:14	4:25	4:36	4:49	5:02	5:17	5:37	5:52	6:10	6:25	6:45	7:10	7:40	8:20	9:00	9:40	10:20	11:00
Indian Creek Dr & 40 St	6:23	6:37	6:53	7:08	7:24	7:38	7:52	8:06	8:21	8:35	8:50	9:04	9:19	9:33	9:47	10:03	10:19	10:31	10:53	10:42	11:06	11:19	11:32	11:44	11:56	12:08	12:20	12:32	12:44	12:56	1:08	1:20	1:32	1:44	1:56	2:08	2:20	2:32	2:44	2:56	3:08	3:19	3:27	3:39	3:51	4:03	4:15	4:27	4:38	4:49	5:02	5:15	5:30	5:50	6:05	6:20	6:35	6:55	7:20	7:50	8:30	9:10	9:50	10:29	11:09
Washington Ave & Lincoln Rd	6:31	6:45	7:02	7:17	7:33	7:47	8:01	8:15	8:30	8:44	8:59	9:14	9:29	9:43	9:57	10:13	10:29	10:41	11:03	10:52	11:16	11:29	11:42	11:54	12:06	12:18	12:30	12:42	12:54	1:06	1:18	1:30	1:42	1:54	2:06	2:18	2:30	2:42	2:54	3:06	3:18	3:29	3:37	3:49	4:01	4:13	4:25	4:37	4:48	4:59	5:12	5:25	5:40	6:00	6:15	6:30	6:45	7:05	7:30	8:00	8:40	9:20	10:00	10:38	11:18
Omni Term. Arsht Metromover	6:46	7:02	7:19	7:34	7:50	8:06	8:20	8:34	8:49	9:04	9:19	9:34	9:49	10:03	10:17	10:33	10:49	11:01	11:23	11:12	11:36	11:49	12:02	12:14	12:26	12:38	12:50	1:02	1:14	1:26	1:38	1:50	2:02	2:14	2:26	2:38	2:50	3:02	3:14	3:26	3:38	3:49	4:01	4:13	4:25	4:37	4:49	5:01	5:12	5:23	5:36	5:49	6:04	6:19	6:34	6:49	7:04	7:24	7:49	8:19	8:59	9:39	10:17	10:55	11:35
Stephen P. Clark Center	6:56	7:13	7:30	7:45	8:01	8:17	8:31	8:45	9:01	9:16	9:31	9:46	10:01	10:15	10:29	10:45	11:01	11:13	11:35	11:24	11:48	12:01	12:14	12:26	12:38	12:50	1:02	1:14	1:26	1:38	1:50	2:02	2:14	2:26	2:38	2:50	3:02	3:14	3:26	3:38	3:50	4:02	4:14	4:26	4:38	4:50	5:02	5:14	5:25	5:36	5:49	6:02	6:15	6:30	6:45	7:00	7:15	7:35	8:00	8:30	9:10	9:50	10:27	11:05	11:45

NORTHBOUND / RUMBO NORTE / DIREKSYON NO

WEEKDAYS / DIAS LABORABLES / LASEMÈN

MORNING / MAÑANA / MATIN — AM | PM — **AFTERNOON & EVENING** / TARDE Y NOCHE / APREMIDI, CHAK ASWÈ

Stephen P. Clark Center	5:00	5:45	6:15	6:45	7:00	7:13	7:24	7:35	7:45	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:12	10:25	10:37	10:48	11:00	11:12	11:24	11:35	11:48	12:00	12:12	12:24	12:36	12:48	1:00	1:12	1:24	1:36	1:48	2:00	2:12	2:24	2:36	2:48	3:00	3:12	3:24	3:36	3:48	4:00	4:12	4:24	4:36	4:48	5:00	5:15	5:30	5:46	6:02	6:20	6:40	7:05	7:35	8:15	8:55	9:30
Omni Term. Arsht Metromover	5:10	5:55	6:26	6:56	7:15	7:28	7:39	7:50	8:03	8:18	8:33	8:48	9:03	9:18	9:33	9:48	10:03	10:18	10:30	10:43	10:55	11:06	11:18	11:30	11:42	11:53	12:06	12:18	12:30	12:42	12:54	1:06	1:18	1:30	1:42	1:54	2:06	2:18	2:30	2:42	2:54	3:07	3:19	3:31	3:43	3:55	4:07	4:19	4:31	4:43	4:55	5:07	5:19	5:34	5:49	6:05	6:21	6:39	6:59	7:18	7:48	8:28	9:08	9:43
Lincoln Rd & James Ave	5:26	6:12	6:43	7:14	7:33	7:46	7:57	8:10	8:23	8:38	8:53	9:10	9:25	9:40	9:55	10:10	10:25	10:40	10:52	11:05	11:17	11:28	11:40	11:52	12:04	12:15	12:28	12:40	12:52	1:04	1:16	1:28	1:40	1:52	2:04	2:16	2:28	2:40	2:52	3:04	3:16	3:29	3:41	3:53	4:05	4:17	4:29	4:41	4:53	5:05	5:17	5:29	5:41	5:56	6:11	6:27	6:43	7:01	7:21	7:38	8:08	8:48	9:28	10:03
Collins Av & 43 St	5:33	6:20	6:51	7:22	7:41	7:54	8:06	8:19	8:32	8:47	9:03	9:20	9:35	9:50	10:05	10:20	10:35	10:50	11:02	11:15	11:27	11:38	11:50	12:02	12:14	12:25	12:38	12:50	1:02	1:14	1:26	1:38	1:50	2:02	2:14	2:26	2:38	2:50	3:02	3:14	3:26	3:39	3:51	4:03	4:15	4:27	4:39	4:51	5:03	5:15	5:27	5:39	5:51	6:06	6:21	6:37	6:53	7:11	7:31	7:48	8:18	8:58	9:38	10:12
Collins Ave & 69 St	5:40	6:28	6:59	7:31	7:50	8:04	8:16	8:29	8:42	8:57	9:13	9:30	9:45	10:00	10:15	10:30	10:45	11:00	11:12	11:25	11:37	11:48	12:00	12:12	12:24	12:35	12:48	1:00	1:12	1:24	1:36	1:48	2:00	2:12	2:24	2:36	2:48	3:01	3:13	3:25	3:37	3:50	4:02	4:14	4:26	4:38	4:50	5:02	5:14	5:26	5:38	5:50	6:02	6:17	6:32	6:48	7:04	7:20	7:40	7:57	8:27	9:07	9:47	10:20
Collins Ave 9700 Block	5:47	6:36	7:08	7:40	7:59	8:13	8:25	8:38	8:52	9:07	9:23	9:40	9:55	10:10	10:25	10:40	10:55	11:10	11:22	11:35	11:47	11:58	12:10	12:22	12:34	12:45	12:58	1:10	1:22	1:34	1:46	1:58	2:10	2:22	2:34	2:46	2:58	3:11	3:23	3:35	3:47	4:00	4:12	4:24	4:36	4:48	5:00	5:12	5:24	5:36	5:48	6:00	6:12	6:27	6:42	6:58	7:12	7:28	7:48	8:05	8:35	9:15	9:55	10:28
Haulover Club Parking Lot	–	–	7:13	–	8:04	–	–	–	8:57	–	9:28	–	10:00	–	10:30	–	11:00	–	11:27	–	11:52	–	12:15	–	12:39	–	1:03	–	1:27	–	1:51	–	2:15	–	2:39	–	3:03	–	3:28	–	3:52	–	4:17	–	4:41	–	5:05	–	5:29	–	5:53	–	6:17	–	6:47	–	7:17	–	–	–	–	–	–	10:32
Collins Ave & Atlantic Ave	5:53	6:42	–	7:47	–	8:21	8:33	8:46	–	9:15	–	9:48	–	10:18	–	10:48	–	11:18	–	11:43	–	12:06	–	12:30	–	12:53	–	1:18	–	1:42	–	2:06	–	2:30	–	2:54	–	3:19	–	3:43	–	4:08	–	4:32	–	4:56	–	5:20	–	5:44	–	6:08	–	6:35	–	7:06	–	7:35	7:55	8:12	8:42	9:22	10:02	–
Bus Terminal at Aventura Mall	5:59	6:50	–	7:59	–	8:33	8:45	8:58	–	9:27	–	10:00	–	10:30	–	11:00	–	11:30	–	11:55	–	12:18	–	12:42	–	1:05	–	1:30	–	1:54	–	2:18	–	2:42	–	3:07	–	3:32	–	3:56	–	4:21	–	4:45	–	5:09	–	5:33	–	5:57	–	6:21	–	6:48	–	7:17	–	7:46	8:06	8:23	8:53	9:33	10:12	–

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