## Tree Fifty-Eight



Ligustrum (Ligustrum japonicum), facing south. Note poor structure, deadwood and shaping.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Fifty-Nine


Coconut Palm (Cocos nucifera), facing north.


Note nutrient deficiencies and large trunk wounds (red arrow).

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Sixty


Coconut Palm (Cocos nucifera), facing south.


Note minor trunk wound.
Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Sixty-One


Ligustrum (Liqustrum japonicum), facing east.


Note poor structure, deadwood and shaping.
Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Sixty-Two A


Ligustrum (Ligustrum japonicum), facing west.


Note poor structure, deadwood and shaping.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Sixty-Four


Brazilian Beautyleaf (Calophyllum brasiliense), facing south.


Note poor structure, over lifting, flush and stub cuts (red arrows).

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Sixty-Five


Brazilian Beautyleaf (Calophyllum brasiliense), facing west.


Note poor structure, over lifting and trunk lean (east).

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

## Tree Sixty-Six



Brazilian Beautyleaf (Calophyllum brasiliense), facing south.


Note poor structure, over lifting and trunk girdling (bracing strap) (red arrow).

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Sixty-Seven


Black Olive (Bucida buceras), facing south.


Note poor structure, large diameter deadwood (red arrow), vertical trunk cracks (blue arrow) and girdling roots.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

## Tree Sixty-Nine



Black Olive (Bucida buceras), facing south.


Note poor structure, deadwood (red arrow), over lifting and flush cuts.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

## Tree Seventy



Brazilian Beautyleaf (Calophyllum brasiliense), facing east. Note poor structure, trunk girdling (bracing tape) (red arrow) and canopy crowding.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

## Tree Seventy-One



Brazilian Beautyleaf (Calophyllum brasiliense), facing west.


Note poor structure and canopy crowding.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

Tree Seventy-Two


Brazilian Pepper (Schinus terebinthifolia), facing west.


Category 1 Exotic Invasive.

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

## End Report

Nah C William e
ASCA Registered Consulting Arborist \#580
ASCA Tree Plant Appraisal Qualified
ISA Certified Arborist Municipal Specialist FL 5221-AM
ISA Tree Risk Assessment Qualified
LIAF Certified Landscape Inspector \#2007-0083

Jeremy T Chancey, Consulting Arborist
2500 Southwest $21^{\text {st }}$ Street
Fort Lauderdale, Florida 33312
c 9546122500
jeremytchancey@gmail.com

BOUNTDARY STURUEY


4360 \& 4370 COLLINS AVENUE,MIAMI BEACH FL
TEM 2 If








Tre 4 fiss land area for this properry is:
$\frac{\text { EAST OF COLLNS AVENE }}{1.026}$ ACRES ( (44,712 SOUARE
west of coluns avenver more or less

(5) THE DANE OF THI ALAAACSM LAND TTLE SUVVE:












) Date or mit fel on Critication:




D) All Mprovemens A show hreg that
. Were located using comventonal surverng methoos and procedures are
E) MEALSURERENTIS.
the scale of some mpouvenuts uny have ben exacgeratep for claritr ano represenitaion

IMPRovements within the nteror of the bulomes were not located are are not shown.




## SheEt index

```
M,
```


## 

## 


 ano




J) Bearings and distances are calcuateo uness otherwie noteo.





0) WE HEREE CEETIF THAT THELEGAL DESERRTION IS THE SAME AS SET FORTH IN THE VESTMG
(P) Bounoary Ano topographl informun
(R) oricinal surver Nnoonation was prepareo by c.S.A. groume




SURVEYOR'S CERTITCATION




$D R A A^{\prime} N$


parcal E:



 мо














February 27, 2020

Firat Akcay, M.S.C.E. MBA
Transportation Analyst
Transportation and Mobility Department
1688 Meridian Avenue, Suite 801
Miami Beach, FL 33139
305-673-7000, ext 6839
FiratAkcay@miamibeachfl.gov

## RE: The Fontainebleau Hotel Ballroom and Parking Garage Traffic Statement \#19185

Dear Firat,

The proposed project is located at 4441 Collins Avenue in Miami Beach, Florida. The project is proposing to develop an existing Fontainebleau Hotel surface parking lot (at the southeast corner of the Collins Avenue / W $44^{\text {th }}$ Street intersection) into a hotel ballroom and parking garage with approximately 278 parking spaces. The existing surface parking lot is currently used for employees. The proposed parking garage will also be restricted to employees. Additionally the proposed project will include a pedestrian bridge that connects the ballroom / garage building to the main campus, providing access to all guests. There is no guest drop-off/pick-up at the proposed building. Guests will use the existing arrival and departure valet areas at the main campus, keeping valet operations internal within the current operations. See Attachment A for the proposed site plan. Exhibit 1 shows the location of the project.

This traffic statement documents project location / background, trip generation analysis, intersection capacity analysis, valet operations / queuing, AutoTurn and circulation analysis.


## Traffic Analysis Methodology

The intersection analysis was conducted for the AM and PM peak hours of a regular weekday, and was based on the typical requirements for the City of Miami Beach. The methodology used in the analysis is outlined below:

- Traffic Counts - Two-hour turning movement counts for the AM (7-9 AM) and PM (4-6 PM) peak hours were collected on January 22, 2020 at the Indian Creek Drive $/ 44^{\text {th }}$ Street intersection, and are provided in Attachment B.
- Signal Location and Timing - Existing signal phasing and timing for the signalized intersection were obtained from Miami-Dade County (see Attachment B).
- Background Traffic - Available Florida Department of Transportation (FDOT) and MiamiDade County (MDC) 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.
- Future Transportation Projects - The 2020 TIP and the 2045 LRTP were reviewed and considered in the analysis at project build-out.
- Analysis - Intersection analysis was done using the Synchro software based on Highway Capacity Manual (HCM $6^{\text {th }}$ Edition).


## Traffic Data Collection

Signal timing data was obtained from Miami-Dade County for the analyzed signalized intersection in this study. This information was used for the signal phasing and timing required for the intersection capacity analysis. A field survey was conducted to obtain the lane configurations used in the intersection analysis. Exhibit 2 shows the existing lane configurations. Signal timings are also provided in Attachment B.

Vehicle turning movement counts were collected on January 22, 2020 at the study intersection during the AM (7-9 AM) and PM (4-6 PM) peak periods. The counts were adjusted to reflect average annual daily traffic conditions using the latest weekly volume adjustment factors obtained from FDOT. A weekly volume adjustment factor of 1.04 (Miami-Dade County North) corresponding to the dates of the counts was used. Traffic counts are provided in Attachment B. Traffic volumes used in the analyses are shown in Exhibit 2.



00 AM
(00) PM

## Exhibit 2

## Existing Conditions Intersection Capacity Analysis

The Synchro software was used to perform intersection capacity analysis. Synchro is a macroscopic analysis and optimization software application that implements the Intersection Capacity Utilization method for determining intersection capacity. Synchro also supports the Highway Capacity Manual's methodology for signalized intersections. Exhibit 3 shows the resulting Level of Service (LOS) for AM and PM peak hour conditions. The analysis shows that the Indian creek Drive/ $44^{\text {th }}$ Street intersection currently operates at LOS B and C during the AM and PM peak hours respectively. Capacity worksheets are included in Attachment C.

Exhibit 3
Existing Conditions Intersection Capacity Analysis
Weekday AM and PM Peak Hour Conditions

| Intersection | Signalized/ <br> Un-signalized | Direction | AM Peak |  | PM Peak |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LOS | Delay | LOS | Delay |
| Indian Creek Drive / <br> 44th Street | S | NB | A | 5.4 | B | 13.4 |
|  |  | SB | A | 3.1 | A | 4.8 |
|  |  | WB | E | 57.3 | D | 54.9 |
|  |  | Overall | B | 11.9 | C | 23.1 |

## Future Conditions

Average Daily Traffic counts published by the Miami-Dade Public Works Department and the FDOT were reviewed to determine historic growth in the area. This analysis indicated that the growth rate is $0.3 \%$ in the past years. However, a conservative $0.5 \%$ annual growth rate was used for the analysis. Historic growth rate documentation is included in Attachment B. In order to obtain future conditions for the year 2022, two years of background growth were applied to the existing traffic counts.

## Trip Generation and Distribution Analysis

A trip generation analysis was conducted for the proposed ballroom facilities. Trip generation for the project was based on the number of attendees expected at each type of space (ballroom, Jr. ballroom, and meeting space. In order to quantify daily and peak hour vehicle trips, percentages and rates were applied based on data provided by the Fontainebleau Development and engineering judgement. (See Attachment D for trip generation documentation). Percentages and rates include ballroom square footage per attendee, percent of attendees that are internal (hotel guests), vehicle occupancy, and percent of trips arriving during the peak hour. Similarly, trips associated with event employees were also calculated. The calculations for the peak hours assumed that not all of the ballroom space will be in operation simultaneously. Exhibit 4 shows the calculations for the proposed ballroom spaces and Exhibit 5 show the trip generation summary.

## EXHIBIT 4

| Proposed Ballroom Trip Generation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Calculations | Balliroom | Jr. Ballrom | Meeting Space | Percentages / Rates Applied |
| Area | 16,247 SF | 9,038 SF | 6,249 SF |  |
| Number of Attendees | 464 | 258 | 178 | $35 \mathrm{SF} / \mathrm{person}^{1}$ |
| Attendees - Internal | 450 | 250 | 173 97\% | 97\% internal ${ }^{1}$ |
| Attendees - External | 14 | 8 | 5 | 3\% |
| External Vehicles Trips | 7 | 4 | 2 | 2 persons/auto ${ }^{2}$ |
| Peak Hour Trips | 5 | 3 | 2 75 | 75\% arrive/depart during the peak hour |
| Number of Employees | 32 | 18 | 11 | 7\% of attendees ${ }^{3}$ |
| Employees arriving by car | 25 | 14 | $9 \quad 78$ | 78\% (Other modes of transportation at 22\%) ${ }^{4}$ |
| Employees Vehicles Trips | 23 | 13 | 8 | 1.1 persons/auto ${ }^{5}$ |
| Employees Peak Hour Trips | 8 | 4 | 3 35 | 35\% arrive/depart during the peak hour |
| Total Daily Vehicle Trips | 30 | 17 | 10 |  |
| Total Peak Hour Vehicle Trips | 13 | 7 | 4 |  |

(1) Based on data provided by Fontainebleau Development
(2) Based on data provided by Miami Beach
(3) Based on information provided by Fontainebleau Development
(4) Based on survey data provided by Fontainebleau Development
(5) Calculated based on survey data provided by Fontainebleau Development

Since 1978

## EXHIBIT 5

Proposed Trip Generation Summary

| Peak Hour |  |
| :---: | :---: |
| Ballroom Trips | 13 |
| Jr. Ballroom Trips | 7 |
| Meeting Space Trips | 5 |
| Subtotal Trips (All Venues) | 25 |
| Average \% of Rented Events Space | 60\% |
| Total Vehicle Trips | 15 |


| AM Peak Hour |  |  |
| :---: | :---: | :---: |
| IN | $80 \%$ | 12 |
| OUT | $20 \%$ | 3 |


| PM Peak Hour |  |  |
| :---: | :---: | :---: |
| IN | $30 \%$ | 5 |
| OUT | $70 \%$ | 10 |


| Daily |  |
| :--- | :---: |
| Ballroom Trips | 30 |
| Jr. Ballroom Trips | 17 |
| Meeting Space Trips | 10 |
| Total Vehicle Trips | 57 |

Ballroom event guest will be using the existing valet arrival and departure area at the Fontainebleau Hotel. Valet trips will remain internal to the main property. Employees will be accessing the proposed parking garage via the inbound driveway on Indian Creek Drive and the two-way driveway on Collins Avenue. 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. Project trip distribution for both guest and employees of the proposed project are shown on Exhibits 6 and 7. Furthermore existing employees currently using the north parking lot located east of Collins Avenue at the 4600 block, will now be using the proposed parking garage. These trips were redistributed on the roadway network to access the proposed parking garage.

The project trip assignments and background growth were combined to obtain future with project traffic volumes at the analyzed intersection. Future with project volumes for the AM and PM peak hour are shown in Exhibit 8.


In
Out
Project Location

## Exhibit 6



Inbound \%
Outbound \%
Project Location

## Exhibit 7



## Exhibit 8

Future With Project AM \& PM Peak Hour Traffic Volumes

## Future with Project Conditions Intersection Capacity Analysis

The intersection of Indian Creek Drive / $44^{\text {th }}$ Street was analyzed for future with project conditions. Exhibit 9 shows the resulting LOS for the AM and PM peak hours. The minor change in approach delays and overall delay is considered not significant. This intersection continues to and is projected to operate at LOS B and C during the AM and PM peak hours respectively. Capacity worksheets are included in Attachment C.

## Exhibit 9

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

| Intersection | Signalized/ <br> Un-signalized | Direction | AM Peak |  | PM Peak |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Delay | LOS | Delay |  |
| Indian Creek Drive / |  |  |  |  |  |  |
|  |  | NB | A | 5.5 | B | 14.8 |
|  |  | WB | E | 57.2 | D | 53.3 |
|  |  | Overall | $\boldsymbol{B}$ | $\mathbf{1 1 . 9}$ | $\boldsymbol{C}$ | $\mathbf{2 3 . 5}$ |

## Circulation Plan

The proposed project is located at 4441 Collins Avenue in Miami Beach, Florida. The project is proposing to develop an existing Fontainebleau Hotel surface parking lot (at the southeast corner of the Collins Avenue / W 44th Street intersection) into a hotel ballroom and parking garage with approximately 278 parking spaces. The existing surface parking lot is currently used for employees and provides 148 parking spaces. The proposed parking garage will also be restricted to employees. Additionally the proposed project will include a pedestrian bridge that connects the ballroom / garage building to the main campus, providing the access for all guests. This keeps pedestrian traffic overhead reducing pedestrian conflicts with vehicles at grade crossings. There is no guest drop-off/pick-up at the proposed building. Guests will use the existing arrival and departure valet areas at the main campus, keeping valet operations internal. A mobility and circulation plan was prepared for the project. The plan discussed driveways, delivery areas, crosswalks, sidewalks, bike facilities, on-street parking, and the location of available transit in the vicinity of the project.

There are six (6) on-street parking spaces adjacent to the property along Collins Avenue currently designated as a taxi loading zone. Along Indian Creek Drive there are two (2) on-street parking spaces. The project will be removing the on-street parking adjacent to the property along both Collins Avenue and Indian Creek Drive (see Exhibit 10).

Loading and trash pick-up will be available on the southwest side of the parking garage. Loading / trash vehicles will enter the garage via a one-way driveway located on Indian Creek Drive and exit the garage via a driveway on Collins Avenue. An AutoTurn analysis was completed to evaluate the maneuverability of loading vehicles through the garage driveway. The design vehicle used was WB-50. The AutoTurn analysis is included in Attachment E.

The project is located in an urban area that is conducive for pedestrian and bicycle activities. The development is located approximately 0.3 miles from Indian Beach Park and directly adjacent to the Miami Beach Boardwalk. Indian Beach Park is a public park that provides public parking, Citi Bike Station 221, public beach access, and marks the start of the Miami Beach Boardwalk. All of the surrounding streets provide sidewalks on both sides of the road. All intersections adjacent to the site, have clearly marked crosswalks and most signalized intersections provide pedestrian signals. The project is providing bicycle racks on the first floor. Indian Creek Drive is a shared roadway with an exclusive bike lane south of $41^{\text {st }}$ Street. There are three Citi Bike stations north and south of the project. The northern Citi Bike station is located within Indian Beach Park. The closest station is located across from the project on the west side of the Collins Avenue $/ 44^{\text {th }}$ Street intersection. The most southern station is located on the southwest corner of the Collins Avenue / $40^{\text {th }}$ Street intersection. A mobility plan was prepared for the site (see Exhibit 11). The plan shows the project location, bike lanes, shared bike lanes, sidewalk connections, and pedestrian crosswalks.


- Project Location

Exhibit 10
Circulation Plan - Pedestrians
-I On-Street Parking
(3) Citi Bike Station


The area surrounding the project is served by transit. Two trolleys, the Middle Beach Loop and the Collins Express, are provided by the City of Miami Beach with stops close to the project site. There are also six MDT bus routes that traverse this area of Miami Beach (Routes: 103, 112, 110, 113, 119, and 150). Descriptions for each of the Miami-Dade Transit Routes providing service to the project area are provided below:

## Route C (103)

Route C (103) operates on Collins Avenue / SR A1A and Indian Creek Drive within the vicinity of the project. This route serves the Adrienne Arsht Center Metromover Station / Bus Terminal, Jungle Island, Lincoln Road Mall area, and Mt. Sinai Hospital. This route operates with 20-minute headways throughout the day and provides connecting service to 23 additional Miami-Dade Transit bus routes, as well as the Metrorail via the Metromover.

## Route J (110)

Route J (110) operates on Collins Avenue / SR A1A, Indian Creek Drive, and the Julia Tuttle Causeway ( $41^{\text {st }}$ Street) within the vicinity of the project. This route serves the Allapattah Metrorail Station, Miami International Airport (MIA), MIA Metrorail Station, Tri-Rail Metrorail Station, and the MIA Metromover Station.

## Route L (112)

Route L (112) operates on Collins Avenue / SR A1A and Indian Creek Drive within the vicinity of the project. This route serves the Miami Beach Convention Center, Normandy Drive, Northside Metrorail Station, Tri-Rail Metrorail Station, Hialeah Metrorail Station, and Amtrak Passenger Terminal. This route operates with 15 -minute headways and provides connecting service to 24 additional Miami-Dade Transit bus routes, as well as the Metrorail and Tri-Rail.

## Route M (113)

Route M (113) operates on Collins Avenue / SR A1A, Indian Creek Drive, and the Julia Tuttle Causeway ( $41^{\text {st }}$ Street) within the vicinity of the project. This route serves the Adrienne Arsht Center Metromover Station / Bus Terminal, Civic Center Metrorail Station, and Mt. Sinai Hospital. This route operates with 40-minute headways and provides connecting service to 20 additional Miami-Dade Transit bus routes, as well as the Metrorail via the Metromover.

## Route S (119)

Route S (119) operates on Collins Avenue / SR A1A and Indian Creek Drive / SR A1A within the vicinity of the project. This route serves the Adrienne Arsht Center Metromover Station / Bus Terminal, Downtown Bus Terminal, Alton Road, and Aventura Mall. This route operates with 12minute headways.

## Route 150

Route 150 (Airport Express) operates on Collins Avenue / SR A1A, Indian Creek Drive, and the Julia Tuttle Causeway ( $41^{\text {st }}$ Street) within the vicinity of the project. This route operates with 20minute headways through the day and provides connection to Lincoln Road, Earlington Heights Metrorail Station, and Miami International Airport.

The closest bus and trolley stop to the project site is located on Collins Avenue at the Collins Avenue / 4441 Exit driveway intersection directly in front of The Fontainebleau Hotel. Exhibit 11 shows the available bus routes and bus stops in the area. Transit information is available in Attachment F.

## Queuing Analysis

There is no guest drop-off/pick-up areas at the proposed site. All guest access to the proposed ballroom will be through the pedestrian bridge from the existing main campus. Ballroom event guests will be using the existing valet arrival and departure area at the Fontainebleau Hotel. Valet trips will remain internal to the main property. The proposed garage will be for employees only and will provide a total of 278 parking spaces. The ground level will provide 17 self-park temporary short term spaces. Parking level one (B1) will be self-park and valet assisted parking and will provide 83 parking spaces consisting of 13 standard spaces and 70 tandem spaces. Parking level two (B2) will be valet assisted parking and will provide 178 parking spaces consisting of 12 single vertical stackers and 76 tandem spaces with vertical stackers. Both parking level one (B1) and parking level two (B2) will have valet attendants to assist employees with parking vehicles in tandem / mechanical stackers. Access to the employee parking garage levels will be provided via a two-way ramp with mechanical arm gates. It's should be noted that access to this garage is limited to pre-authorized employees only with gate access.

Queuing analyses based on the methodology outlined in the Institute of Transportation Engineers (ITE) Transportation and Land Development were performed for the follow:

- Employee self-park with valet assist parking garage level one (B1)
- Employee valet assist parking garage level two (B2)
- Employee parking entrance gate
- Guest valet (Operations at the existing Fontainebleau Hotel)


## Employee Valet Assist Queuing Analysis

The potential demand was calculated based on employee shift information provided by Fontainebleau Hotel. Based on the employee shift breakdown, the peak valet demand will be 85 vehicles for arrival and departure of the 8:00 am - 4:30 pm shift. The peak demand was used for the purpose of calculating the number of valet attendants required to service each level and to ensure the expected queues at the entrance to the employee parking level does not spill into the public right-of-way or interfere with internal circulation of the parking garage.

The number of vehicles trips distributed to each parking level was done proportionate to the number of parking spaces per level. Therefore, $32 \%$ trips were assigned to level one (B1) and $68 \%$ to level two (B2). Since parking level one (B1) will mostly be self- park, not all of the demand will be processed by the valet attendants. During the arrival of a shift, employees will self-park their vehicles in tandem spaces. Employees that park on the second tandem space will leave their keys with the valet attendant. During the departure of a shift, valet attendants will assist by maneuvering vehicles parked on the second tandem space as needed. Based on the proposed operations on this level, it was assumed that $25 \%$ of the demand on level one will be processed by the valet attendants. On level two (B2) the upper stacked spaces will be partially used for long term guest vehicles and partially for employee vehicles on demand. Based on the parking spaces distribution ( 45 upper spaces / 133 valet spaces), it was assumed that $75 \%$ of the demand on level two (B2) will be processed by the valet attendants. When employees arrive or depart work at set times, their vehicle trips do not spread evenly throughout an hour. Employee's vehicle trips tend to peak in the last 30 to 15 minutes of their start time and first 15 to 30 minutes of their departure time. To account for this condition, a factor of 1.4 was applied to the calculated vehicle volume. Based on these assumptions, the expected volume at each queuing area was calculated as followed:

- Entrance Gate: $85 \mathrm{veh} / \mathrm{hr} x 1.4=119 \mathrm{veh} / \mathrm{hr}$
- Level one (B1): $85 \mathrm{veh} / \mathrm{hr} \times 1.4 \times 32 \%$ (assigned to B1) $\times 25 \%$ (valet volume) $=10 \mathrm{veh} / \mathrm{hr}$
- Level two (B2): 85 veh/hr x $1.4 \times 68 \%$ (assigned to B2) $\times 75 \%$ (valet volume) $=61 \mathrm{veh} / \mathrm{hr}$

The queuing analyses for the valet areas were performed based on the methodology outlined in the Institute of Transportation Engineers (ITE) Transportation and Land Development. A queuing analysis was performed at each parking level to determine the number of valet parking attendants required for each station during the peak period so that the expected queue fits within the provided storage area ( $95 \%$ confidence level analysis).

The queuing analysis used the single-channel waiting line model with Poisson arrivals and exponential service times. The analysis is based on the coefficient of utilization ( $\rho$ ) which is the ratio of the average arrival rate of vehicles to the average service rate.

$$
\rho=\frac{\text { Average Demand Rate }}{\text { Average Sevice Rate }}
$$

The average service rate corresponds to the time it will take a valet parking attendant to park or retrieve a vehicle. If the coefficient of utilization is greater than 1 , then the calculation will yield an infinite queue length.

The required queue storage $(\mathrm{M})$ is determined using the following equation:

$$
M=\left[\frac{\ln P(x>M)-\ln Q_{M}}{\ln \rho}\right]-1
$$

In this equation, $P(x>M)$ is set at $5 \%$ to yield a $95 \%$ confidence that the queue will not back-up onto the adjacent street.

The processing rates were calculated by adding the time it will take a valet attendant to process the vehicles (processing time), the time it will take the valet attendant to circulate to the parking space (driving time), the time it will take him to park or retrieve a vehicle (mechanical lift processing time and tandem space processing time), and the time it will take the valet attendant to walk to/from the parking area (walking time). A processing time of 51 seconds per vehicle was used in the analysis. This information is based on data collected from a hotel on Miami Beach (see Attachment G). The driving time for the valet attendant was calculated on a conservative speed of 15 mph , and the walking time for the valet attendant was calculated on a jogging speed of $8 \mathrm{ft} / \mathrm{sec}$. The valet processing rate for parking level one (B1) can be seen in Exhibit 12.

## Parking Level One (B1) Valet:

Exhibit 12<br>Parking Level One (B1)<br>Valet Processing Rate

| Processing time: | $51 \mathrm{sec} / 60 \mathrm{sec} / 1 \mathrm{~min}=\mathbf{0 . 8 5} \mathbf{~ m i n}$ |
| :---: | :---: |
| Driving time: | $250 \mathrm{ft} * 1$ mile $/ 5280 \mathrm{ft} * 1 \mathrm{hr} / 15 \mathrm{miles} * 60 \mathrm{~min} / \mathrm{hr}=0.19$ min |
| Tandem Park Processing Time: | $0.15 \mathrm{~min} /$ movement * 2 movements $=0.30 \mathbf{~ m i n}$ |
| Walking time: | $250 \mathrm{ft} / 8 \mathrm{ft} / \mathrm{sec} / 60 \mathrm{sec} / \mathrm{min}=\mathbf{0 . 5 2} \mathbf{~ m i n}$ |
| Total | $=\underline{1.86 ~ m i n}$ |

An iterative approach was used to determine the minimum number of valet attendants required during the peak hour to serve both the entering and/or exiting vehicles that will ensure that the average queue at parking level one (B1) will not interfere with internal circulation. Exhibit 13 shows the calculations for the valet during both the am peak hour (inbound) and pm peak hour (outbound).

## Exhibit 13

## Parking Level One (B1)

Valet Queuing Calculations

$$
\begin{aligned}
& \mathrm{Q}=\text { Processing Rate }=\frac{60 \mathrm{~min} / \mathrm{hr}}{1.86 \mathrm{~min} / \text { process }}=32.25 \text { process } / \mathrm{hr} \\
& \mathrm{q}=\text { Demand Rate }=85 \frac{\mathrm{veh}}{\mathrm{hr}} \times 1.4 \times 32 \% \times 25 \%=10 \frac{\mathrm{veh}}{\mathrm{hr}} \\
& \mathrm{~N}=\text { Service Positions }=1 \text { Attendant } \\
& \rho=\text { Utilization factor }=\frac{q}{(\mathrm{NQ})}=\frac{10 \text { veh } / \mathrm{hr}}{1 \times 32 \text { process } / \mathrm{hr}}=0.3100 \\
& \mathrm{Q}_{\mathrm{m}}=\text { Table Value }=0.3100 \\
& \mathrm{M}=\text { queue length which is exceeded } 5 \% \text { of the time }[\mathrm{P}(\mathrm{x}>\mathrm{M})] \\
& M=\frac{\ln P(x>M)-\ln \left(Q_{m}\right)}{\ln (\rho)}-1=\frac{\ln (0.05)-\ln (0.3100)}{\ln (0.3100)}-1=0.59, \text { say } 1 \text { Vehicle on queue }
\end{aligned}
$$

The results of the analysis show that 1 valet attendant would be able to handle the demand during peak shift at parking level one with an average queue of approximately one vehicle or less.

## Parking Level Two (B2) Valet:

As with parking level one, a processing time of 51 seconds per vehicle was used in the analysis. The driving time for the valet attendant was calculated based on a speed of 15 mph , and the walking time for the valet attendant was calculated on a jogging speed of $8 \mathrm{ft} / \mathrm{sec}$. In addition, parking level two (B2) will have vertical stackers. The mechanical lift time has a process time of 30 seconds per platform lift. The valet processing rate for parking level two (B2) can be seen in Exhibit 14.

## Exhibit 14 <br> Parking Level Two (B2) <br> Valet Processing Rate

## Valet Time (Inbound/Outbound)

| Processing time: | $51 \mathrm{sec} / 60 \mathrm{sec} / 1 \mathrm{~min}=\mathbf{0 . 8 5} \mathbf{~ m i n}$ |
| :---: | :---: |
| Driving time: | $250 \mathrm{ft} * 1$ mile $/ 5280 \mathrm{ft} * 1 \mathrm{hr} / 15 \mathrm{miles} * 60 \mathrm{~min} / \mathrm{hr}=\mathbf{0 . 1 9 ~ m i n}$ |
| Mechanical Lift Processing Time: | $30 \mathrm{sec} / \mathrm{lift} * 2 \mathrm{lift} * 1 \mathrm{~min} / 60 \mathrm{sec}=\mathbf{1 . 5 0} \mathbf{~ m i n}$ |
| Tandem Park Processing Time: | $0.15 \mathrm{~min} /$ movement * 2 movements $=\mathbf{0 . 3 0} \mathbf{~ m i n}$ |
| Walking time: | $250 \mathrm{ft} / 8 \mathrm{ft} / \mathrm{sec} / 60 \mathrm{sec} / \mathrm{min}=\mathbf{0 . 5 2} \boldsymbol{\operatorname { m i n }}$ |
| Total | $=\underline{\mathbf{2 . 8 6} \mathrm{min}}$ |

An iterative approach was used to determine the minimum number of valet attendants required during the peak hour to serve both the entering and/or exiting vehicles that will ensure that the average queue at parking level two (B2) will not interfere with internal circulation. Exhibit 15 shows the calculations for the valet during both the am peak hour (inbound) and pm peak hour (outbound).

## Exhibit 15

## Parking Level Two (B2)

 Valet Queuing Calculations$$
\begin{aligned}
& \mathrm{Q}=\text { Processing Rate }=\frac{60 \mathrm{~min} / \mathrm{hr}}{2.86 \min / \text { process }}=20.97 \text { process } / \mathrm{hr} \\
& \mathrm{q}=\text { Demand Rate }=85 \frac{\text { veh }}{h r} \times 1.4 \times 68 \% \times 75 \%=61 \frac{\text { veh }}{\mathrm{hr}} \\
& \mathrm{~N}=\text { Service Positions }=4 \text { Attendants } \\
& \rho=\text { Utilization factor }=\frac{q}{(N Q)}=\frac{61 \text { veh } / \mathrm{hr}}{4 \times 21 \text { process } / \mathrm{hr}}=0.7269 \\
& \mathrm{Q}_{\mathrm{m}}=\text { Table Value }=0.4739 \\
& \mathrm{M}=\text { queue length which is exceeded } 5 \% \text { of the time }[\mathrm{P}(\mathrm{x}>\mathrm{M})] \\
& M=\frac{\ln P(x>M)-\ln \left(Q_{m}\right)}{\ln (\rho)}-1=\frac{\ln (0.05)-\ln (0.4739)}{\ln (0.7269)}-1=6.05, \quad \text { say } 7 \text { vehicles on queue }
\end{aligned}
$$

The results of the analysis show that a total of 4 valet attendants would be able to handle the demand during peak shift at parking level two with an average queue of approximately seven vehicles or less.

## Emplovee Parking Entrance Gate Oueuing Analysis

The project is proposing a ramp that will provided employees direct access to the employee parking level of the parking garage. Access to the employee parking will be restricted via a mechanical arm gate. A queuing analysis was performed to determine the anticipated queue at the mechanical arm gate for the employee parking during the peak inbound demand. Based on the employee shift breakdown, the peak inbound valet demand will be 85 vehicles (shift beginning at 8:00 am).

The queuing analysis used the single-channel waiting line model with Poisson arrivals and exponential service times. The analysis is based on the coefficient of utilization ( $\rho$ ) which is the ratio of the average arrival rate of vehicles to the average service rate.

$$
\rho=\frac{\text { Average Demand Rate }}{\text { Average Sevice Rate }}
$$

The average service rate corresponds to the time it will take an employee to conservatively pass through the mechanical arm gate. If the coefficient of utilization is greater than 1 , then the calculation will yield an infinite queue length.

The required queue storage $(\mathrm{M})$ is determined using the following equation:

$$
M=\left[\frac{\ln P(x>M)-\ln Q_{M}}{\ln \rho}\right]-1
$$

In this equation, $P(x>M)$ is set at $5 \%$ to yield a $95 \%$ confidence that the queue will not back-up onto the adjacent street.

The time for an employee to conservatively pass through the mechanical arm gate with a card reader is 4.25 seconds per vehicle ( 0.07 minutes per vehicle). This data was collected at a similar parking garage with a mechanical arm gate and card reader (see Attachment G). Exhibit 16 shows the calculations for the gate entrance.

## Exhibit 16

## Employee Parking Entrance Queue Calculations

$$
\begin{aligned}
& \mathrm{Q}=\text { Processing Rate }=\frac{60 \mathrm{~min} / \mathrm{hr}}{0.07 \mathrm{~min} / \text { process }}=847.06 \text { process } / \mathrm{hr} \\
& \mathrm{q}=\text { Demand Rate }=85 \frac{\text { veh }}{h r} \times 1.4=119 \frac{\mathrm{veh}}{\mathrm{hr}} \\
& \mathrm{~N}=\text { Service Positions }=1 \text { lane } \\
& \rho=\text { Utilization factor }=\frac{q}{(N Q)}=\frac{119 \text { veh } / \mathrm{hr}}{1 \times 847.06 \text { process } / \mathrm{hr}}=0.1405 \\
& \mathrm{Q}_{\mathrm{m}}=\text { Table Value }=0.1405 \\
& \mathrm{M}=\text { queue length which is exceeded } 5 \% \text { of the time }[\mathrm{P}(\mathrm{x}>\mathrm{M})]
\end{aligned}
$$

$$
M=\frac{\ln P(x>M)-\ln \left(Q_{m}\right)}{\ln (\rho)}-1=\frac{\ln (0.05)-\ln (0.1405)}{\ln (0.1405)}-1=-0.47 \text { say no vehicles on queue }
$$

The result of the analysis shows that during peak arrival hour (inbound) there will be no vehicle queue expected at the employee gate entrance.

The results of the queuing analysis shows that one valet attendant at parking level one (B1) and four valet attendants at parking level two (B2) is sufficient to handle the expected demand. The
results of the queuing analysis also shows no vehicles queue at employee parking mechanical gate entrances. It should be noted that the queuing analysis considers the worst case scenario during the peak hours to make sure that the queue never spills onto the public right-of-way or interferes with site operations. Once operational, the development can assess the actual need for valet attendants at different times of day and make adjustments as needed.

## Guest Valet Oueuing (Operations at the Existing Fontainebleau Hotel)

The existing valet service at the Fontainebleau Hotel provides two separate valet areas, one for arrivals and one for departures. Since ballroom event guests will be using the existing valet arrival and departure areas at the Fontainebleau Hotel a comparison of existing and with project conditions was completed. It should be noted that as with existing operations, valet trips will remain internal to the main property. Data showing peak hourly valet demand (average of the three peak months) at arrivals and departures was provided by the Fontainebleau Development. Peak hour vehicle trips (see Exhibit 3 and 4) associated with the proposed ballrooms were added to the AM and PM peak hour of the valet demand.

The queuing analysis for the existing valet areas were performed based on the methodology outlined in the Institute of Transportation Engineers (ITE) Transportation and Land Development. In order to calculate the valet processing time, several assumptions were taken. A processing time of 51 seconds per vehicle was used in the analysis. This information is based on data collected from a hotel on Miami Beach (see Attachment G). The driving time for the valet attendant was calculated on a conservative speed of 15 mph , and the walking time for the valet attendant was calculated on a jogging speed of $8 \mathrm{ft} / \mathrm{sec}$. An average distance of 1,000 feet from the arrival area to the existing parking garage and an average distance of 750 feet from the existing parking garage to the departure area was assumed. The valet processing rate and queuing calculations for the arrival and departure area were included in Attachment G. Exhibit 17 provided a comparison of existing and with project condition based on the assumption made for purpose of this analysis. The comparison shows that the additional demand associated with the proposed ballroom space represent approximately one new vehicle or less to the queues at the arrival and departure areas. Therefore, the impact of the addition of the ballroom space to the existing valet operations at the Fontainebleau Hotel can be considered de minimis.

## Exhibit 17

Guest Valet at the Fontainebleau Hotel Queuing Comparison

| AM Peak Hour | Arrival |  |  | Departure |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valet <br> Demand | Number of Valet <br> Attendants | Expected <br> Queue (veh) | Valet <br> Demand | Number of Valet <br> Attendants | Expected <br> Queue (veh) |
|  | 8 | 2 | -0.51 | 18 | 2 | 1.13 |
| With Project | 13 | 2 | 0.65 | 19 | 2 | 1.4 |
| Difference | 5 | 0 | 1.16 | 1 | 0 | 0.27 |


| PM Peak Hour | Arrival |  |  | Departure |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valet <br> Demand | Number of Valet <br> Attendants | Expected <br> Queue (veh) | Valet <br> Demand | Number of Valet <br> Attendants | Expected <br> Queue (veh) |
|  | 33 | 4 | 0.91 | 35 | 4 | 0.04 |
| With Project | 35 | 4 | 1.37 | 39 | 4 | 0.61 |
| Difference | 2 | 0 | 0.46 | 4 | 0 | 0.57 |

## Conclusions

A trip generation analysis was completed for the proposed project. The results of the trip generation analysis indicate that the proposed development represents 15 vehicle trips during both the AM and PM peak hours. An intersection capacity analysis was completed for the Indian Creek Drive / $44^{\text {th }}$ Street intersection. The results of the analysis for existing and future with project conditions shows that this intersection operates at LOS B and C during the AM and PM peak hours respectively. Therefore, the impact of the addition of the ballroom space and parking garage on the adjacent roadway network can be considered de minimis.

A mobility and circulation plan was also completed. The plan shows that the project area is currently served by six Miami-Dade Transit bus routes and two Miami Beach Trolley routes. The project is located in an urban area that is conducive for pedestrian and bicycle activities providing shared bike lanes, bike rental stations, ample sidewalks, and crosswalks. These conditions encourage the use other modes of transportation and reduce the vehicular impact on the roadway network.

Queuing analyses for the proposed valet assist parking garage levels and the employee entrance gate were performed. The results of the queuing analysis shows that one valet attendant at parking level one (B1) and four valet attendants at parking level two (B2) is sufficient to handle the
expected demand. The results of the queuing analysis also show no vehicles queue at employee parking mechanical gate entrances. As previously noted the queuing analysis considers the worst case scenario during the peak hours to make sure that the queue never spills onto the public right-of-way or interferes with site operations. Once operational, the development can assess the actual need for valet attendants at different times of day and adjustments as needed.

The queuing analysis for the guest valet at the existing valet areas and a comparison of existing and with project condition were performed. The comparison shows that the additional demand associated with the proposed ballroom space represent approximately one new vehicle or less to the queues at the arrival and departure areas. Therefore, the impact of the addition of the ballroom space to the existing valet operations at the Fontainebleau Hotel can be considered de minimis.

We stand ready to provide any support needed for this project. Should you have any questions or comments, please call me at (305) 447-0900.


Vice President - Transportation
cc: File
Attachments

W:\19\19185\Traffic Statement FEB 2020\The Fontainebleau Hotel Traffic Statement_Feb 2020.docx

## ATTACHMENT A

Site Plan


GROUND LEVEL - FLOOR PLAN

## ATTACHMENT B

Traffic Counts
Signal Timings
FDOT Adjustment Factors
Historical Growth
LRTP / TIP

Traffic Counts

## National Data \& Surveying Services


Project ID: 20-03028-00 contro: $\quad$ Total

| NS/EW Streets: | Totar |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indian Creek Dr/A1A/Collins Ave |  |  |  | Indian Creek Dr/A1A/Collins Ave |  |  |  | 44th St/Collins Ave |  |  |  | 44th St/Collins Ave |  |  |  |  |
| AM | NORTHBOUND |  |  |  | SOUTHBOUND |  |  |  | EASTBOUND |  |  |  | WESTBOUND |  |  |  |  |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 114 | 0 | 0 | 0 | 404 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 53 | 0 | 603 |
| 7:15 AM | 0 | 172 | 0 | 0 | 0 | 332 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 52 | 0 | 588 |
| 7:30 AM | 0 | 132 | 0 | 0 | 0 | 399 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 53 | 0 | 614 |
| 7:45 AM | 0 | 158 | 0 | 0 | 0 | 423 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 79 | 0 | 691 |
| 8:00 AM | 0 | 138 | 0 | 0 | 0 | 458 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 66 | 0 | 698 |
| 8:15 AM | 0 | 154 | 0 | 0 | 0 | 495 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 76 | 0 | 760 |
| 8:30 AM | 0 | 148 | 0 | 0 | 0 | 407 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 64 | 0 | 658 |
| 8:45 AM | 0 | 178 | 0 | 0 | 0 | 440 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 74 | 0 | 731 |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| TOTAL VOLUMES : | 0 | 1194 | 0 | 0 | 0 | 3358 | 0 | 0 | 0 | 0 | 0 | 0 | 274 | 0 | 517 | 0 | 5343 |
| APPROACH \%'s : | 0.00\% | $100.00 \%$ | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% |  |  |  |  | 34.64\% | 0.00\% | 65.36\% | 0.00\% |  |
| PEAK HR : | 08:00 AM - 09:00 AM |  |  |  | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | 1800 | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{aligned} & 149 \\ & 0.955 \end{aligned}$ | 0 | 280 | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | TOTAL |
| PEAK HR VOL : | 0 | 618 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  | 2847 |
| PEAK HR FACTOR : | 0.000 | 0.868 | 0.000 | 0.000 |  | 0.909 |  |  |  |  |  |  |  | 0.000 | 0.921 |  |  |
|  | 0.868 |  |  |  |  | 0.909 |  |  |  |  |  |  |  | $0.949$ |  |  | 0.937 |


| PM | NORTHBOUND |  |  |  | SOUTHBOUND |  |  |  | EASTBOUND |  |  |  | WESTBOUND |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 0 | 0 | 0 | $\begin{gathered} 0 \\ \mathrm{SL} \end{gathered}$ | $\begin{gathered} 0 \\ \text { ST } \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ \text { SR } \end{gathered}$ | $\begin{gathered} 0 \\ \text { SU } \end{gathered}$ | $\begin{gathered} 0 \\ \text { EL } \end{gathered}$ | $\begin{gathered} 0 \\ \text { ET } \end{gathered}$ | $\begin{gathered} 0 \\ \text { ER } \end{gathered}$ | $\begin{gathered} 0 \\ \text { EU } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WL } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WT } \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ \text { WR } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WU } \end{gathered}$ |  |
|  | NL | NT | NR | NU |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00 PM | 0 |  | 0 | 0 | 0 | 332 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 188 | 0 | 792 |
| 4:15 PM | 0 | 247 | 0 | 0 | 0 | 273 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 0 | 167 | 0 | 735 |
| 4:30 PM | 0 | 219 | 0 | 1 | 0 | 345 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 188 | 0 | 818 |
| 4:45 PM | 0 | 258 | 0 | 0 | 0 | 288 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 166 | 0 | 764 |
| 5:00 PM | 0 | 258 | 0 | 0 | 0 | 289 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 219 | 0 | 826 |
| 5:15 PM | 0 | 278 | 0 | 0 | 0 | 263 | 0 | 1 | 0 | 0 | 0 | 0 | 40 | 0 | 158 | 0 | 740 |
| 5:30 PM | 0 | 292 | 0 | 0 | 0 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 0 | 212 | 0 | 895 |
| 5:45 PM | 0 | 288 | 0 | 0 | 0 | 271 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 192 | 0 | 792 |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| TOTAL VOLUMES : | 0 | 2059 | 0 | 1 | 0 | 2391 | 0 | 1 | 0 | 0 | 0 | 0 | 420 | 0 | 1490 | 0 | 6362 |
| APPROACH \%'s : | 0.00\% | 99.95\% | 0.00\% | 0.05\% | 0.00\% | 99.96\% | 0.00\% | 0.04\% |  |  |  |  | 21.99\% | 0.00\% | 78.01\% | 0.00\% |  |
| PEAK HR : |  | 5:00 PM - | 6:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  | TOTAL |
| PEAK HR VOL : | 0 | 1116 | 0 | 0 | 0 | 1153 | 0 | 1 | 0 | 0 | 0 | 0 | 202 | 0 | 781 | 0 | 3253 |
| PEAK HR FACTOR : | 0.000 | 0.955 | 0.000 | 0.000 | 0.000 | 0.873 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.828 | 0.000 | 0.892 | 0.000 |  |
|  |  | 0.9 |  |  |  | 0.8 |  |  |  |  |  |  |  | 0.8 |  |  | 0.909 |

## National Data \& Surveying Services

Intersection Turning Movement Count
Location: Indian Creek Dr/A1A/Collins Ave \& 44th St/Collins Ave City: Miami Beach

Project ID: 20-03028-001 Control: 0 Date: 1/22/2020

| NS/EW Streets: | Cars |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indian Creek Dr/A1A/Collins Ave |  |  |  | Indian Creek Dr/A1A/Collins Ave |  |  |  | 44th St/Collins Ave |  |  |  | 44th St/Collins Ave |  |  |  |  |
| AM | NORTHBOUND |  |  |  | SOUTHBOUND |  |  |  | EASTBOUND |  |  |  | WESTBOUND |  |  |  | TOTAL |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU |  |
| 7:00 AM | 0 | 111 | 0 | 0 | 0 | 392 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 47 | 0 | 578 |
| 7:15 AM | 0 | 169 | 0 | 0 | 0 | 326 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 48 | 0 | 572 |
| 7:30 AM | 0 | 125 | 0 | 0 | 0 | 388 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 49 | 0 | 588 |
| 7:45 AM | 0 | 155 | 0 | 0 | 0 | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 69 | 0 | 670 |
| 8:00 AM | 0 | 134 | 0 | 0 | 0 | 444 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 58 | 0 | 665 |
| 8:15 AM | 0 | 149 | 0 | 0 | 0 | 489 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 68 | 0 | 739 |
| 8:30 AM | 0 | 146 | 0 | 0 | 0 | 398 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 59 | 0 | 638 |
| 8:45 AM | 0 | 169 | 0 | 0 | 0 | 426 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 70 | 0 | 698 |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| TOTAL VOLUMES : | 0 | 1158 | 0 | 0 | 0 | 3280 | 0 | 0 | 0 | 0 | 0 | 0 | 242 | 0 | 468 | 0 | 5148 |
| APPROACH \%'s : | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% |  |  |  |  | 34.08\% | 0.00\% | 65.92\% | 0.00\% |  |
| PEAK HR : |  | 08:00 AM - | 9:00 AM |  |  |  |  |  |  |  |  |  |  |  |  |  | TOTAL |
| PEAK HR VOL: | 0 | 598 | 0 | 0 | 0 | 1757 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 0 | 255 | 0 | 2740 |
| PEAK HR FACTOR : | 0.00 | 0.885 | 0.000 | 0.000 | 0.000 | 0.898 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.929 | 0.000 | 0.911 | 0.000 |  |
|  |  | 0.8 |  |  |  | 0.8 |  |  |  |  |  |  |  | 0.93 |  |  | 0.927 |



## National Data \& Surveying Services

Intersection Turning Movement Count
Location: Indian Creek Dr/A1A/Collins Ave \& 44th St/Collins Ave City: Miami Beach

Project ID: 20-03028-001 Control: 0

Project ID: 20-03028-001

| HT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NS/EW Streets: | Indian Creek Dr/A1A/Collins Ave |  |  |  | Indian Creek Dr/A1A/Collins Ave |  |  |  | 44th St/Collins Ave |  |  |  | 44th St/Collins Ave |  |  |  |  |
| AM | NORTHBOUND |  |  |  | SOUTHBOUND |  |  |  | EASTBOUND |  |  |  | WESTBOUND |  |  |  |  |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 3 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 0 | 25 |
| 7:15 AM | 0 | 3 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 16 |
| 7:30 AM | 0 | 7 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 26 |
| 7:45 AM | 0 | 3 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 10 | 0 | 21 |
| 8:00 AM | 0 | 4 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 8 | 0 | 33 |
| 8:15 AM | 0 | 5 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 8 | 0 | 21 |
| 8:30 AM | 0 | 2 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 5 | 0 | 20 |
| 8:45 AM | 0 | 9 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 0 | 33 |
| TOTAL VOLUMES : <br> APPROACH \%'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
|  | 0 | 36 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 49 | 0 | 195 |
|  | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% |  |  |  |  | 39.51\% | 0.00\% | 60.49\% | 0.00\% |  |
| PEAK HR : | 08:00 AM - 09:00 AM |  |  |  | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | 43 | 0 | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 0 \\ 0.000 \end{gathered}$ | $\begin{gathered} 19 \\ 0.679 \end{gathered}$ | 0 | 25 | 0 | $\begin{gathered} \hline \text { TOTAL } \\ 107 \end{gathered}$ |
| PEAK HR VOL : | 0 | 20 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PEAK HR FACTOR : | 0.000 | 0.556 | 0.000 | 0.000 |  | 0.768 | 0.000 |  |  |  |  |  |  | 0.000 | 0.781 | 0.000 |  |
|  | 0.556 |  |  |  |  | 0.768 |  |  |  |  |  |  |  | 0.733 |  |  | 0.811 |


| PM | NORTHBOUND |  |  |  | SOUTHBOUND |  |  |  | EASTBOUND |  |  |  | WESTBOUND |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0NL | 0NT | $\begin{gathered} 0 \\ \text { NR } \end{gathered}$ | $\begin{gathered} 0 \\ \mathrm{NU} \\ \hline \end{gathered}$ | 0SL | $\begin{gathered} 0 \\ \text { ST } \end{gathered}$ | $\begin{gathered} 0 \\ \text { SR } \end{gathered}$ | $\begin{gathered} 0 \\ \text { SU } \end{gathered}$ | $\begin{gathered} 0 \\ \text { EL } \end{gathered}$ | $\begin{gathered} 0 \\ \text { ET } \end{gathered}$ | $\begin{gathered} 0 \\ \text { ER } \end{gathered}$ | $\begin{gathered} 0 \\ \text { EU } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WL } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WT } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WR } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WU } \end{gathered}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00 PM | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 10 | 0 | 26 |
| 4:15 PM | 0 | 3 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 26 |
| 4:30 PM | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 9 | 0 | 19 |
| 4:45 PM | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 18 |
| 5:00 PM | 0 | 1 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 7 | 0 | 20 |
| 5:15 PM | 0 | 1 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 0 | 18 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 10 | 0 | 22 |
| 5:45 PM | 0 | 3 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 0 | 17 |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| TOTAL VOLUMES : | 0 | 15 | 0 | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 56 | 0 | 166 |
| APPROACH \%'s : | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% |  |  |  |  | 36.36\% | 0.00\% | 63.64\% | 0.00\% |  |
| PEAK HR : |  | 05:00 PM | 6:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  | TOTAL |
| PEAK HR VOL : | 0 | 5 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 26 | 0 | 77 |
| PEAK HR FACTOR : | 0.00 | 0.417 | 0.000 | 0.000 | 0.000 | 0.825 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.650 | 0.000 | 0.650 | 0.000 |  |
|  |  | 0.4 |  |  |  | 0.8 |  |  |  |  |  |  |  | 0.6 |  |  | 0.875 |

## National Data \& Surveying Services

Intersection Turning Movement Count
Location: Indian Creek Dr/A1A/Collins Ave \& 44th St/Collins Ave
City: Miami Beach


| PM | NORTHBOUND |  |  |  | SOUTHBOUND |  |  |  | EASTBOUND |  |  |  | WESTBOUND |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0$N L$ | $\begin{gathered} 0 \\ \text { NT } \end{gathered}$ | $\begin{gathered} 0 \\ \text { NR } \end{gathered}$ | $\begin{gathered} 0 \\ \mathrm{NU} \end{gathered}$ | 0SL | $\begin{gathered} 0 \\ \text { ST } \end{gathered}$ | $\begin{gathered} 0 \\ 0 \\ \text { SR } \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ \text { SU } \end{gathered}$ | $\begin{gathered} 0 \\ \mathrm{EL} \end{gathered}$ | $\begin{gathered} 0 \\ \text { ET } \end{gathered}$ | $\begin{gathered} 0 \\ \text { ER } \end{gathered}$ | $\begin{gathered} 0 \\ \text { EU } \end{gathered}$ | $\begin{gathered} 0 \\ \text { WL } \end{gathered}$ | 0WT | 0WR | $\begin{gathered} 0 \\ \text { wu } \end{gathered}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 4 |
| 4:15 PM | 0 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 4:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 |
| 4:45 PM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:15 PM | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 12 |
| 5:30 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 5 |
|  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| TOTAL VOLUMES : | 0 | 10 | 2 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 14 | 0 | 37 |
| APPROACH \%'s : | 0.00\% | 83.33\% | 16.67\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% |  |  |  |  | 6.67\% | 0.00\% | 93.33\% | 0.00\% |  |
| PEAK HR : |  | 5:00 PM | 6:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  | TOTAL |
| PEAK HR VOL: | 0 | 4 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 21 |
| PEAK HR FACTOR : | 0.00 | 0.250 | 0.250 | 0.000 | 0.000 | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.417 | 0.000 |  |
|  |  | 0.3 |  |  |  | 0.5 |  |  |  |  |  |  |  | 0.4 |  |  | 0.438 |

National Data \& Surveying Services

## loationtersection Turning Moyement Count <br> City: Miami Beach <br> Date: 1/22/2020

Pedestrians (Crosswalks)

| NS/EW Streets: | Indian Creek Dr/A1A/Collins Ave |  | Indian Creek Dr/A1A/Collins Ave |  | 44th St/Collins Ave |  | 44th St/Collins Ave |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AM | NORTH LEG |  | SOUTH LEG |  | EAST LEG |  | WEST LEG |  |  |
|  | EB | WB | EB | WB | NB | SB | NB | SB | TOTAL |
| 7:00 AM | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 7:15 AM | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 4 |
| 7:30 AM | 1 | 0 | 5 | 1 | 7 | 1 | 0 | 0 | 15 |
| 7:45 AM | 7 | 0 | 1 | 1 | 7 | 0 | 0 | 0 | 16 |
| 8:00 AM | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 4 |
| 8:15 AM | 0 | 0 | 1 | 3 | 5 | 5 | 0 | 0 | 14 |
| 8:30 AM | 1 | 0 | 4 | 0 | 6 | 1 | 0 | 0 | 12 |
| 8:45 AM | 6 | 0 | 4 | 1 | 21 | 4 | 0 | 0 | 36 |
| TOTAL VOLUMES : <br> APPROACH \%'s : | EB | WB | EB | WB | NB | SB | NB | SB | TOTAL |
|  | 17 | 0 | 18 | 7 | 49 | 12 | 0 | 0 | 103 |
|  | 100.00\% | 0.00\% | 72.00\% | 28.00\% | 80.33\% | 19.67\% |  |  |  |
| PEAK HR : | 08:00 AM - 09:00 AM |  | $\begin{gathered} 10 \\ 0.625 \end{gathered}$ |  |  |  |  |  | TOTAL |
| PEAK HR VOL : | 8 | 0 |  | 4 | 34 | 10 | 0 | 0 | 66 |
| PEAK HR FACTOR : | 0.333 |  |  | 0.333 | 0.405 | 0.500 |  |  |  |
|  | 0.333 |  |  |  | 0.440 |  |  |  | 0.458 |


| $P M$ | NORTH LEG |  | SOUTH LEG |  | EAST LEG |  | WEST LEG |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EB | WB | EB | WB | NB | SB | NB | SB |  |
| 4:00 PM | 0 | 0 | 6 | 1 | 10 | 10 | 0 | 0 | 27 |
| 4:15 PM | 1 | 1 | 0 | 0 | 2 | 19 | 0 | 0 | 23 |
| 4:30 PM | 1 | 0 | 2 | 2 | 14 | 9 | 0 | 0 | 28 |
| 4:45 PM | 0 | 0 | 3 | 11 | 16 | 18 | 0 | 0 | 48 |
| 5:00 PM | 0 | 0 | 0 | 0 | 12 | 9 | 0 | 0 | 21 |
| 5:15 PM | 0 | 0 | 0 | 0 | 19 | 18 | 0 | 0 | 37 |
| 5:30 PM | 0 | 1 | 0 | 0 | 13 | 24 | 0 | 0 | 38 |
| 5:45 PM | 0 | 0 | 0 | 0 | 12 | 17 | 0 | 0 | 29 |
|  | EB | WB | EB | WB | NB | SB | NB | SB | TOTAL |
| TOTAL VOLUMES : | 2 | 2 | 11 | 14 | 98 | 124 | 0 | 0 | 251 |
| APPROACH \%'S : | 50.00\% | 50.00\% | 44.00\% | 56.00\% | 44.14\% | 55.86\% |  |  |  |
| PEAK HR : | 05:00 PM | 6:00 PM | 0 | 0 | 560.737 | $\begin{gathered} 68 \\ 0.708 \end{gathered}$ | 0 | 0 | TOTAL |
| PEAK HR VOL : | 0 | 1 |  |  |  |  |  |  | 125 |
| PEAK HR FACTOR : |  | 0.250 |  |  |  |  |  |  | 822 |
|  | 0.250 |  |  |  | 0.838 |  |  |  | 0.822 |

Indian Creek Dr/A1A/Collins Ave \& 44th St/Collins Ave




| Site Code: | 20-3028-001 |
| :--- | :--- |
| Date: | 01/22/2020 |
| Weather: | Sunny |
| City: | Miami Beach |
| County: | Miami - Dade |
| Count Times: | $\mathbf{0 7 : 0 0 - 0 9 : 0 0}$ |
|  | $\mathbf{1 6 : 0 0 - 1 8 : 0 0}$ |
| Control: | Signalized |

SIGNAL TIMING

| PHASES | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: |
| ST | 01:25 | 01:25 | 01:25 |
| NT | 00:25 | 00:25 | 00:25 |
| WL | 00:30 | 00:31 | 00:29 |



## Signal Timings

## TOD Schedule Report

| Asset | Intersection | $\xrightarrow[\text { Schedule }]{\text { TOD }}$ | Op Mode | Plan \# | Cycle | Offset | $\underline{\underline{\text { TODD }}}$ | Active PhaseBank | Active Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2679 | Collins Av\&Indian Creek Dr\&44 St | DOW-3 |  | [19] WKND-MORN | 140 | 87 | N/A | 1 | Max 2 |

## Splits

| PH 1 | PH 2 | PH 3 | PH 4 | PH 5 | PH 6 | PH 7 | PH 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | SBT | - | - | WBR | NBT | WBL | PED |
| 0 | 83 | 0 | 0 | 9 | 68 | 20 | 19 |
|  |  |  |  | - |  |  | N/R |



Last In Service Date: unknown
Permitted Phases
$\begin{array}{ll}\text { Default } & -2--5678 \\ \text { External Permit 0 } & -2--5678 \\ \text { External Permit 1 } & -2--5678\end{array}$
External Permit $2 \quad-2--5678$

## TOD Schedule Report

| Current <br> TOD Schedule | Cycle | Green Time |  |  |  |  |  |  |  | Ring Offset | Offset |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | $\begin{gathered} \mathbf{2} \\ \text { SBT } \end{gathered}$ |  |  | $\begin{gathered} \mathbf{5} \\ W B R \end{gathered}$ | $\begin{gathered} 6 \\ \text { NBT } \end{gathered}$ | $\begin{gathered} 7 \\ \text { WBL } \end{gathered}$ | $\begin{gathered} \mathbf{8} \\ \text { PED } \end{gathered}$ |  |  |
| 1 | 90 | 0 | 41 | 0 | 0 | 7 | 28 | 12 | 19 | 0 | 66 |
| 2 | 100 | 0 | 47 | 0 | 0 | 13 | 28 | 16 | 19 | 0 | 15 |
| 3 | 100 | 0 | 47 | 0 | 0 | 13 | 28 | 16 | 19 | 0 | 53 |
| 4 | 140 | 0 | 87 | 0 | 0 | 11 | 70 | 16 | 19 | 0 | 108 |
| 5 | 100 | 0 | 47 | 0 | 0 | 13 | 28 | 16 | 19 | 0 | 53 |
| 6 | 100 | 0 | 47 | 0 | 0 | 13 | 28 | 16 | 19 | 0 | 53 |
| 8 | 105 | 0 | 52 | 0 | 0 | 7 | 39 | 16 | 19 | 0 | 75 |
| 9 | 105 | 0 | 48 | 0 | 0 | 14 | 28 | 20 | 19 | 0 | 75 |
| 10 | 120 | 0 | 63 | 0 | 0 | 9 | 48 | 20 | 19 | 0 | 22 |
| 11 | 140 | 0 | 83 | 0 | 0 | 12 | 65 | 20 | 19 | 0 | 45 |
| 12 | 120 | 0 | 63 | 0 | 0 | 22 | 35 | 20 | 19 | 0 | 70 |
| 13 | 100 | 0 | 48 | 0 | 0 | 13 | 29 | 15 | 19 | 0 | 53 |
| 14 | 105 | 0 | 53 | 0 | 0 | 18 | 29 | 15 | 19 | 0 | 75 |
| 15 | 120 | 0 | 68 | 0 | 0 | 18 | 44 | 15 | 19 | 0 | 70 |
| 16 | 100 | 0 | 48 | 0 | 0 | 14 | 28 | 15 | 19 | 0 | 30 |
| 17 | 100 | 0 | 48 | 0 | 0 | 14 | 28 | 15 | 19 | 0 | 61 |
| 18 | 140 | 0 | 83 | 0 | 0 | 9 | 68 | 20 | 19 | 0 | 131 |
| 19 | 140 | 0 | 83 | 0 | 0 | 9 | 68 | 20 | 19 | 0 | 87 |
| 20 | 120 | 0 | 68 | 0 | 0 | 14 | 48 | 15 | 19 | 0 | 22 |
| 21 | 120 | 0 | 68 | 0 | 0 | 14 | 48 | 15 | 19 | 0 | 22 |
| 22 | 90 | 0 | 41 | 0 | 0 | 7 | 28 | 12 | 19 | 0 | 66 |
| 23 | 90 | 0 | 41 | 0 | 0 | 7 | 28 | 12 | 19 | 0 | 66 |


| Local TOD Schedule |  |  |  |
| :---: | :---: | :---: | :---: |
| Time | Plan | DOW |  |
| 0000 | 1 | Su | S |
| 0000 | 2 | M T W Th F |  |
| 0700 | 18 | M T W Th F |  |
| 0930 | 2 | M T W Th F |  |
| 1000 | 2 | Su | S |
| 1400 | 19 | M T W Th F |  |
| 2000 | 1 | Su | S |
| 2200 | 2 | M T W Th F |  |


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


| （ $\times$（ $)(\pi)$ | ［2］［6］ | Head |  |
| :---: | :---: | :---: | :---: |
|  |  | ［6］6］［5］ |  |
|  |  | － | － |
| $\begin{aligned} & \text { 3-SECT,., } 1-\mathrm{VAAY} \\ & \text { Z AS } \end{aligned}$ |  | （（1）N＝ |  |
| 650－1－311］ |  |  | 15 |
| ［ㄱ］ | ［4］${ }^{3}$ |  | － |
|  | ［吕］${ }^{\text {a }}$ |  | し－s， |
|  | $\underset{\substack{\text { EXIST．TO } \\ \text { BE REMOVED }}}{ }$ |  |  |

$[48$
趿正西
BE EXIST．TO TOD
$\frac{650-4}{2 \mathrm{AS}}$

S．O．P．

（2）+ （6）+ （26） （4R）+ （7）（4R + （78）（2）+ （4R
SIGNAL OPERATION
1．MAJOR STREET：SR－AIA／COLLINS AVE．／ IMDIAR CREEK DR
MINOR STREET： 44 TH ST．
2．S．O．P．AS SHOWN
3．Phase 1 IS RECALL AND PHASE 2

NOTES
1．SIGNAL IMIMG TO BE PROUIDEE BY $\&$ WASTE MANAGEMENT，TRAFFIC
SIGNALS \＆SIGNS DIVISION．
2．DIMENSIONS FOR PROPOSED TRAFFIC


|  |  | REVISIONS |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| OATE |  |  |  |  |  |
|  |  |  | OESCRIPTION |  |  |
|  |  |  |  |  |  |



| STATE OF FLORID．ADEPARTMENT OF TRANSPORTATION |  |  | $S I I G N A L I Z A T I O N ~ P L A N ~$ | SHEET NO． |
| :---: | :---: | :---: | :---: | :---: |
| ROAD NO． | Countr | FINANCIAL PROIECT IO |  |  |
| AIA | MIAMI－DADE | 250629－3－32－01 |  | 6 |

SIGNAL OPERATING PLAN


## FDOT Adjustment Factors

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: COUNTY
CATEGORY: 8700 MIAMI-DADE NORTH

| WEEK | DATES | SF | $\begin{aligned} & \text { MOCF: } 0.98 \\ & \text { PSCF } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 1 | 01/01/2018-01/06/2018 | 1.03 | 1.05 |
| 2 | 01/07/2018-01/13/2018 | 1.03 | 1.05 |
| 3 | 01/14/2018-01/20/2018 | 1.04 | 1.06 |
| 4 | 01/21/2018-01/27/2018 | 1.02 | 1.04 |
| 5 | 01/28/2018-02/03/2018 | 1.01 | 1.03 |
| * 6 | 02/04/2018-02/10/2018 | 0.99 | 1.01 |
| * 7 | 02/11/2018-02/17/2018 | 0.98 | 1.00 |
| * 8 | 02/18/2018-02/24/2018 | 0.98 | 1.00 |
| * 9 | 02/25/2018-03/03/2018 | 0.98 | 1.00 |
| *10 | 03/04/2018-03/10/2018 | 0.97 | 0.99 |
| *11 | 03/11/2018-03/17/2018 | 0.97 | 0.99 |
| *12 | 03/18/2018-03/24/2018 | 0.97 | 0.99 |
| *13 | 03/25/2018-03/31/2018 | 0.97 | 0.99 |
| *14 | 04/01/2018-04/07/2018 | 0.97 | 0.99 |
| *15 | 04/08/2018-04/14/2018 | 0.97 | 0.99 |
| *16 | 04/15/2018-04/21/2018 | 0.97 | 0.99 |
| *17 | 04/22/2018-04/28/2018 | 0.98 | 1.00 |
| *18 | 04/29/2018-05/05/2018 | 0.99 | 1.01 |
| 19 | 05/06/2018-05/12/2018 | 1.00 | 1.02 |
| 20 | 05/13/2018-05/19/2018 | 1.01 | 1.03 |
| 21 | 05/20/2018-05/26/2018 | 1.01 | 1.03 |
| 22 | 05/27/2018-06/02/2018 | 1.01 | 1.03 |
| 23 | 06/03/2018-06/09/2018 | 1.01 | 1.03 |
| 24 | 06/10/2018-06/16/2018 | 1.01 | 1.03 |
| 25 | 06/17/2018-06/23/2018 | 1.01 | 1.03 |
| 26 | 06/24/2018-06/30/2018 | 1.02 | 1.04 |
| 27 | 07/01/2018-07/07/2018 | 1.02 | 1.04 |
| 28 | 07/08/2018-07/14/2018 | 1.02 | 1.04 |
| 29 | 07/15/2018-07/21/2018 | 1.02 | 1.04 |
| 30 | 07/22/2018-07/28/2018 | 1.02 | 1.04 |
| 31 | 07/29/2018-08/04/2018 | 1.01 | 1.03 |
| 32 | 08/05/2018-08/11/2018 | 1.01 | 1.03 |
| 33 | 08/12/2018-08/18/2018 | 1.00 | 1.02 |
| 34 | 08/19/2018-08/25/2018 | 1.00 | 1.02 |
| 35 | 08/26/2018-09/01/2018 | 1.00 | 1.02 |
| 36 | 09/02/2018-09/08/2018 | 1.01 | 1.03 |
| 37 | 09/09/2018-09/15/2018 | 1.01 | 1.03 |
| 38 | 09/16/2018-09/22/2018 | 1.00 | 1.02 |
| 39 | 09/23/2018-09/29/2018 | 1.00 | 1.02 |
| 40 | 09/30/2018-10/06/2018 | 1.00 | 1.02 |
| 41 | 10/07/2018-10/13/2018 | 0.99 | 1.01 |
| 42 | 10/14/2018-10/20/2018 | 0.99 | 1.01 |
| 43 | 10/21/2018-10/27/2018 | 1.00 | 1.02 |
| 44 | 10/28/2018-11/03/2018 | 1.00 | 1.02 |
| 45 | 11/04/2018-11/10/2018 | 1.01 | 1.03 |
| 46 | 11/11/2018-11/17/2018 | 1.01 | 1.03 |
| 47 | 11/18/2018-11/24/2018 | 1.02 | 1.04 |
| 48 | 11/25/2018-12/01/2018 | 1.02 | 1.04 |
| 49 | 12/02/2018-12/08/2018 | 1.02 | 1.04 |
| 50 | 12/09/2018-12/15/2018 | 1.03 | 1.05 |
| 51 | 12/16/2018-12/22/2018 | 1.03 | 1.05 |
| 52 | 12/23/2018-12/29/2018 | 1.03 | 1.05 |
| 53 | 12/30/2018-12/31/2018 | 1.04 | 1.06 |

* PEAK SEASON


## Historical Growth

Fontainebleau Hotel Ballroom \& Parking Garage
Background Growth Rate

| Station | Location | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0011 | SR A1A/ Collins Ave, 200' S of 4700 BIk | 36,500 | 44,000 | 40,500 | 40,000 | 39,000 |
| 2646 | Indian Creek Dr. 200' South of 38 Street | 19,000 | 16,000 | 16,000 | $\mathbf{1 4 , 0 0 0}$ | 15,000 |
| 5171 | 200' N 35 St (Miami Beach) | 12,500 | 15,000 | 13,000 | 12,000 | 14,000 |
| 5388 | SR 112/Arthur Godfrey Rd, 200' W Indian Creek Dr | 34,000 | 39,000 | 36,000 | 41,000 | 34,000 |
| Total | $\mathbf{1 0 2 , 0 0 0}$ | $\mathbf{1 1 4 , 0 0 0}$ | $\mathbf{1 0 5 , 5 0 0}$ | $\mathbf{1 0 7 , 0 0 0}$ | $\mathbf{1 0 2 , 0 0 0}$ |  |
|  | Yearly Growth |  | $\mathbf{1 1 . 8 \%}$ | $\mathbf{- 7 . 5 \%}$ | $\mathbf{1 . 4 \%}$ | $\mathbf{- 4 . 7 \%}$ |
|  | Growth Trend |  |  | $\mathbf{0 . 3 \%}$ |  |  |

```
COUNTY: 87 - MIAMI-DADE
```

SITE: 0011 - SR A1A/COLLINS AVE, 200' S OF 4700 BLK

| YEAR | AADT |  | DIRECTION 1 |  |  | RECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 39000 | C | N | 19500 | S | 19500 | 9.00 | 54.30 | 5.50 |
| 2017 | 40000 | C | N | 20000 | S | 20000 | 9.00 | 55.00 | 5.30 |
| 2016 | 40500 | C | N | 21500 | S | 19000 | 9.00 | 54.50 | 2.80 |
| 2015 | 44000 | C | N | 20500 | S | 23500 | 9.00 | 54.70 | 5.20 |
| 2014 | 36500 | C | N | 15500 | S | 21000 | 9.00 | 54.50 | 6.10 |
| 2013 | 35500 | C | N | 16000 | S | 19500 | 9.00 | 52.40 | 8.30 |
| 2012 | 45000 | C | N | 23000 | S | 22000 | 9.00 | 55.70 | 3.70 |
| 2011 | 38500 | C | N | 19000 | S | 19500 | 9.00 | 55.10 | 3.30 |
| 2010 | 36500 | C | N | 18000 | S | 18500 | 8.98 | 54.08 | 3.30 |
| 2009 | 32500 | C | N | 16000 | S | 16500 | 8.99 | 53.24 | 3.30 |
| 2008 | 34000 | C | N | 17000 | S | 17000 | 9.09 | 55.75 | 3.60 |
| 2007 | 35000 | C | N | 17500 | S | 17500 | 8.01 | 54.34 | 3.00 |
| 2006 | 34500 | C | N | 17500 | S | 17000 | 7.97 | 54.22 | 1.70 |
| 2005 | 44000 | C | N | 22000 | S | 22000 | 8.80 | 53.80 | 5.90 |
| 2004 | 45000 | C | N | 24000 | S | 21000 | 9.00 | 53.30 | 5.90 |
| 2003 | 37500 | C | N | 18500 | S | 19000 | 8.80 | 53.40 | 4.70 |

[^0] $S=$ SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES
COUNTY: 87 - MIAMI-DADE
SITE: 2646 - INDIAN CREEK DR. 200' SOUTH OF 38 STREET

| YEAR | AADT | DIRECTION 1 |  | DIRECTION 2 |  | *K FACTOR | D FACTOR | T FACTOR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 15000 C | S | 15000 |  | 0 | 9.00 | 99.90 | 5.60 |
| 2017 | 14000 C | S | 14000 |  | 0 | 9.00 | 99.90 | 5.30 |
| 2016 | 16000 C | S | 16000 |  | 0 | 9.00 | 99.90 | 7.80 |
| 2015 | 16000 C | S | 16000 |  | 0 | 9.00 | 99.90 | 4.60 |
| 2014 | 19000 C | S | 19000 |  |  | 9.00 | 99.90 | 5.10 |
| 2013 | 16000 C | S | 16000 |  | 0 | 9.00 | 99.90 | 6.10 |
| 2012 | 15000 C | S | 15000 |  | 0 | 9.00 | 99.90 | 8.40 |
| 2011 | 10500 C | S | 10500 |  | 0 | 9.00 | 99.90 | 7.50 |
| 2010 | 12000 C | S | 12000 |  | 0 | 8.98 | 99.99 | 8.80 |
| 2009 | 14000 C | S | 14000 |  | 0 | 8.99 | 99.99 | 8.40 |
| 2008 | 13500 C | S | 13500 |  | 0 | 9.09 | 99.99 | 5.30 |
| 2007 | 16500 C | S | 16500 |  | 0 | 8.01 | 99.99 | 4.90 |
| 2006 | 12500 C | S | 12500 | B | 0 | 7.97 | 99.99 | 2.20 |
| 2005 | 25500 F | S |  |  |  | 8.80 | 99.90 | 5.50 |
| 2004 | 25500 C | S | 25500 |  | 0 | 9.00 | 99.90 | 8.20 |
| 2003 | 18500 C | S | 18500 |  | 0 | 8.80 | 99.90 | 4.90 |



AADT FLAGS: $\mathrm{C}=$ COMPUTED; $\mathrm{E}=$ MANUAL ESTIMATE; $\mathrm{F}=\mathrm{FIRST}$ YEAR ESTIMATE $S=$ SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; X = UNKNOWN *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES
COUNTY: 87 - MIAMI-DADE
SITE: 5388 - SR 112/ARTHUR GODFREY RD, 200' W INDIAN CREEK DR

| YEAR | AADT |  | DIRECTION 1 |  |  | ECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 34000 | C | E | 16500 | W | 17500 | 9.00 | 54.30 | 4.50 |
| 2017 | 41000 | C | E | 18000 | W | 23000 | 9.00 | 55.00 | 4.00 |
| 2016 | 36000 | C | E | 18500 | W | 17500 | 9.00 | 54.50 | 3.30 |
| 2015 | 39000 | C | E | 19000 | W | 20000 | 9.00 | 54.70 | 4.40 |
| 2014 | 34000 | C | E | 17000 | W | 17000 | 9.00 | 54.50 | 4.40 |
| 2013 | 41000 | C | E | 20500 | W | 20500 | 9.00 | 52.40 | 5.20 |
| 2012 | 42500 | C | E | 23000 | W | 19500 | 9.00 | 55.70 | 4.90 |
| 2011 | 44000 | C | E | 23000 | W | 21000 | 9.00 | 55.10 | 5.00 |
| 2010 | 38500 | C | E | 20500 | W | 18000 | 8.98 | 54.08 | 6.20 |
| 2009 | 37500 | C | E | 19000 | W | 18500 | 8.99 | 53.24 | 6.00 |
| 2008 | 36500 | C | E | 19000 | W | 17500 | 9.09 | 55.75 | 5.90 |
| 2007 | 39000 | C | E | 22000 | W | 17000 | 8.36 | 54.73 | 5.70 |
| 2006 | 36500 | C | E | 21000 | W | 15500 | 8.70 | 56.15 | 13.70 |
| 2005 | 32000 | C | E | 17000 | W | 15000 | 8.50 | 53.00 | 5.50 |
| 2004 | 34500 | C | E | 18000 | W | 16500 | 8.70 | 54.00 | 7.00 |
| 2003 | 38500 | C | E | 20500 | W | 18000 | 8.50 | 53.40 | 4.20 |

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

## LRTP / TIP

## SR A1A/COLLINS AVE SIGNALIZED INTERSECTION LIGHTING

## 2020 Transportation Improvement Program

| Project Type: | Arterial/Collector Road |
| :--- | :--- |
| MPO Project No.: | DT4401701 |
| Type of Work: | LIGHTING |
| TIP Year: | 2020 |
| Construction Year: | 2020 |
| From: | FROM 18 ST |
| To: | TO 65TH ST |
| Agency: | FL Dept. of Transportation |
| Management Agency: | FDOT |
| Agency Project No: | 4401701 |
| Status: |  |
| Contact Person: |  |
| Contact Email: |  |
| Contact Phone: |  |
| Description: |  |

## Funding Information \$(thousands)

| Project Phase | Funding | $2019-2020$ | $2020-2021$ | $2021-2022$ | $2022-2023$ | $2023-2024$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| PRELIMINARY <br> ENGINEERING | DIH | $\$ 10$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
| PRELIMINARY <br> ENGINEERING | DS | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
| CONSTRUCTION | ACSS | $\$ 10$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
| CONSTRUCTION | SA | $\$ 5$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
| CONSTRUCTION | DIH | $\$ 16$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
| PRELIMINARY | HSP | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
| ENGINEERING |  | ACSA | $\$ 27$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| CONSTRUCTION | ACSA |  |  |  |  |  |  |
| CONSTRUCTION | ACSS | $\$ 304$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |  | Planning Organization

## SR A1A/COLLINS AVE SIGNALIZED INTERSECTION LIGHTING

2020 Transportation Improvement Program

## Funding Chart \$(thousands)



## ATTACHMENT C

## Capacity Analysis Worksheets

Existing


1: Indian Creek Drive \& 44th Street

|  | $\checkmark$ |  |  |  |  | $\downarrow$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT | $\varnothing 5$ | Ø8 | 8 |
| Lane Configurations | ${ }^{7} 1$ | 「" | ¢ $\uparrow$ |  |  | 个4* |  |  |  |
| Traffic Volume (vph) | 155 | 291 | 643 | 0 | 0 | 1872 |  |  |  |
| Future Volume (vph) | 155 | 291 | 643 | 0 | 0 | 1872 |  |  |  |
| Confl. Peds. (\#/hr) | 14 |  |  |  |  |  |  |  |  |
| Confl. Bikes (\#/hr) |  |  |  |  |  |  |  |  |  |
| Peak Hour Factor | 0.94 | 0.94 | 1.00 | 0.94 | 0.94 | 0.94 |  |  |  |
| Growth Factor | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |  |  |  |
| Heavy Vehicles (\%) | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |  |  |  |
| Bus Blockages (\#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Parking (\#/hr) |  |  |  |  |  |  |  |  |  |
| Mid-Block Traffic (\%) | 0\% |  | 0\% |  |  | 0\% |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Turn Type | Prot | custom | NA |  |  | NA |  |  |  |
| Protected Phases | 7 | 57 | 6 |  |  | 2 | 5 |  | 8 |
| Permitted Phases |  |  |  |  |  |  |  |  |  |
| Detector Phase | 7 | 57 | 6 |  |  | 2 |  |  |  |
| Switch Phase |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 7.0 |  | 5.0 |  |  | 5.0 | 7.0 | 1.0 | 0 |
| Minimum Split (s) | 24.0 |  | 34.0 |  |  | 34.0 | 13.0 | 25.0 |  |
| Total Split (s) | 26.0 |  | 74.0 |  |  | 89.0 | 15.0 | 25.0 |  |
| Total Split (\%) | 18.6\% |  | 52.9\% |  |  | 63.6\% | 11\% | 18\% |  |
| Yellow Time (s) | 2.0 |  | 4.0 |  |  | 4.0 | 4.0 | 4.0 | 0 |
| All-Red Time (s) | 2.0 |  | 2.0 |  |  | 2.0 | 2.0 | 2.0 | 0 |
| Lost Time Adjust (s) | 0.0 |  | 0.0 |  |  | 0.0 |  |  |  |
| Total Lost Time (s) | 4.0 |  | 6.0 |  |  | 6.0 |  |  |  |
| Lead/Lag | Lead |  | Lag |  |  |  | Lead | Lag |  |
| Lead-Lag Optimize? | Yes |  | Yes |  |  |  | Yes | Yes |  |
| Recall Mode | None |  | C-Max |  |  | C-Max | None | None |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |
| Cycle Length: 140 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length: 140 |  |  |  |  |  |  |  |  |  |
| Offset: 131 (94\%), Referenced to phase 2:SBT and 6:NBT, Start of Green |  |  |  |  |  |  |  |  |  |
| Natural Cycle: 100 |  |  |  |  |  |  |  |  |  |
| Control Type: Actuated-Coordinated |  |  |  |  |  |  |  |  |  |

Splits and Phases: 1: Indian Creek Drive \& 44th Street


c Critical Lane Group

1: Indian Creek Drive \& 44th Street


Splits and Phases: 1: Indian Creek Drive \& 44th Street


Future with Project



Splits and Phases: 1: Indian Creek Drive \& 44th Street


c Critical Lane Group


Splits and Phases: 1: Indian Creek Drive \& 44th Street


ATTACHMENT D Trip Generation

Glimmer Usage Report for 2018

| Function Room | Start Date | Event Name | Gtd Attn. | Event Classification |
| :---: | :---: | :---: | :---: | :---: |
| Glimmer Ballroom | 01/04/18 | Textron Global Leadership Meeting | 325 | Plated Dinner |
| Glimmer Ballroom | 01/05/18 | Textron Global Leadership Meeting | 300 | General Session |
| Glimmer Ballroom | 01/09/18 | 2018 WinField United Ultimate Field Trip | 1200 | Lunch Buffet |
| Glimmer Ballroom | 01/10/18 | 2018 WinField United Ultimate Field Trip | 1200 | Lunch Buffet |
| Glimmer Ballroom | 01/11/18 | 2018 WinField United Ultimate Field Trip | 1150 | Lunch Buffet |
| Glimmer Ballroom | 01/12/18 | 2018 WinField United Ultimate Field Trip | 1000 | Breakfast Buffet |
| Glimmer Ballroom | 01/17/18 | NATPE Market \& Conference 2018 | 350 | General Session |
| Glimmer Ballroom | 01/26/18 | 2018 WinField United Catalyst Conference | 400 | Reception |
| Glimmer Ballroom | 02/01/18 | Context Summits Miami 2018 | 1200 | Lunch Buffet |
| Glimmer Ballroom | 02/02/18 | Context Summits Miami 2018 | 850 | Breakfast Buffet |
| Glimmer Ballroom | 02/03/18 | USGA 2018 Annual Meeting | 430 | Plated Dinner |
| Glimmer Ballroom | 02/09/18 | Aptiv Retreat | 215 | General Session |
| Glimmer Ballroom | 02/21/18 | AppDynamics 2018 SKO | 775 | Lunch Buffet |
| Glimmer Ballroom | 02/23/18 | 2018 McDermott Partners' Meeting | 555 | Plated Lunch |
| Glimmer Ballroom | 02/27/18 | Staffing Industry Analysts Executive Forum | 1000 | General Session |
| Glimmer Ballroom | 02/28/18 | Staffing Industry Analysts Executive Forum | 1000 | General Session |
| Glimmer Ballroom | 03/01/18 | Staffing Industry Analysts Executive Forum | 700 | General Session |
| Glimmer Ballroom | 03/03/18 | 2018 LoanDepot | 260 | Meeting/Session |
| Glimmer Ballroom | 03/05/18 | McDermott Will \& Emery 2018 HPE Symposium | 400 | Meeting |
| Glimmer Ballroom | 03/06/18 | McDermott Will \& Emery 2018 HPE Symposium | 400 | Meeting |
| Glimmer Ballroom | 03/08/18 | Credit Suisse Equity Trading Forum 2018 | 375 | Plated Dinner |
| Glimmer Ballroom | 03/09/18 | Credit Suisse Equity Trading Forum 2018 | 315 | General Session |
| Glimmer Ballroom | 03/16/18 | Big Smoke | 700 | General Session |
| Glimmer Ballroom | 03/26/18 | Spring Alliance POA | 375 | General Session |
| Glimmer Ballroom | 04/03/18 | VOLVO - Customer Service Program | 610 | Lunch Buffet |
| Glimmer Ballroom | 04/04/18 | VOLVO - Customer Service Program | 685 | Breakfast Buffet |
| Glimmer Ballroom | 04/17/18 | FICO World 2018 | 1100 | Lunch Buffet |
| Glimmer Ballroom | 04/18/18 | FICO World 2018 | 1100 | Lunch Buffet |
| Glimmer Ballroom | 04/19/18 | FICO World 2018 | 900 | Continental Breakfast |
| Glimmer Ballroom | 04/21/18 | The Cushman School Gala | 375 | Plated Dinner |
| Glimmer Ballroom | 04/28/18 | Performance Excellence Awards | 750 | Cocktail Reception |
| Glimmer Ballroom | 04/30/18 | LAC | 180 | Lunch Buffet |
| Glimmer Ballroom | 05/01/18 | 2018 Global Sales Conference | 640 | Lunch Buffet |
| Glimmer Ballroom | 05/02/18 | 2018 Global Sales Conference | 660 | Lunch Buffet |
| Glimmer Ballroom | 05/10/18 | International Factoring Association | 600 | Meeting |
| Glimmer Ballroom | 05/11/18 | International Factoring Association | 400 | Meeting |
| Glimmer Ballroom | 05/22/18 | 2018 Chairman's Circle | 570 | Heavy Reception |
| Glimmer Ballroom | 05/23/18 | 2018 Chairman's Circle | 570 | Lunch Buffet |
| Glimmer Ballroom | 05/24/18 | 2018 Chairman's Circle | 525 | Lunch Buffet |
| Glimmer Ballroom | 06/19/18 | Vista Consulting Group - 2018 BPSS Product \& Tech Leadership | 400 | General Session |
| Glimmer Ballroom | 06/20/18 | Vista Consulting Group - 2018 BPSS Product \& Tech Leadership | 375 | General Session |
| Glimmer Ballroom | 06/21/18 | Jackson Family Wines Kickoff | 290 | General Session |
| Glimmer Ballroom | 06/25/18 | CFMA 2018 Annual Conference | 950 | Plated Lunch |
| Glimmer Ballroom | 06/26/18 | CFMA 2018 Annual Conference | 950 | General Session |
| Glimmer Ballroom | 06/27/18 | CFMA 2018 Annual Conference | 900 | General Session |
| Glimmer Ballroom | 06/28/18 | Irie Weekend | 400 | Plated Dinner |
| Glimmer Ballroom | 06/30/18 | National Association of Chapter 13 Trustees | 500 | Heavy Reception |
| Glimmer Ballroom | 07/15/18 | South Atlantic \& Gulf District ILA | 650 | Heavy Reception |
| Glimmer Ballroom | 07/16/18 | South Atlantic \& Gulf District ILA | 600 | Beverage Service |
| Glimmer Ballroom | 07/17/18 | South Atlantic \& Gulf District ILA | 600 | General Session |
| Glimmer Ballroom | 07/18/18 | South Atlantic \& Gulf District ILA | 1000 | Plated Dinner |
| Glimmer Ballroom | 07/19/18 | South Atlantic \& Gulf District ILA | 600 | Beverage Service |
| Glimmer Ballroom | 07/24/18 | ONC Regional Mtg East/Central | 200 | General Session |
| Glimmer Ballroom | 07/25/18 | ONC Regional Mtg East/Central | 200 | General Session |
| Glimmer Ballroom | 07/26/18 | ONC Regional Mtg East/Central | 200 | General Session |
| Glimmer Ballroom | 08/04/18 | GGT 2018 | 300 | Beverage Service |
| Glimmer Ballroom | 09/18/18 | CrowdStrike 2018 FalCon | 700 | Lunch Buffet |
| Glimmer Ballroom | 09/19/18 | CrowdStrike 2018 FalCon | 650 | Lunch Buffet |
| Glimmer Ballroom | 10/01/18 | TeamMate User Forum 2018 | 740 | Heavy Reception |
| Glimmer Ballroom | 10/02/18 | TeamMate User Forum 2018 | 675 | Lunch Buffet |
| Glimmer Ballroom | 10/03/18 | TeamMate User Forum 2018 | 650 | Breakfast Buffet |
| Glimmer Ballroom | 10/04/18 | Cushman \& Wakefield 2018 TAG Conference | 300 | General Session |
| Glimmer Ballroom | 10/08/18 | TITLE Boxing Club 2018 Convention | 320 | General Session |
| Glimmer Ballroom | 10/09/18 | TITLE Boxing Club 2018 Convention | 320 | General Session |
| Glimmer Ballroom | 10/16/18 | CITI National Expo 2018 | 300 | General Session |
| Glimmer Ballroom | 10/17/18 | CITI National Expo 2018 | 300 | General Session |
| Glimmer Ballroom | 10/18/18 | CITI National Expo 2018 | 300 | General Session |
| Glimmer Ballroom | 10/23/18 | CCH Connections | 925 | Lunch Buffet |
| Glimmer Ballroom | 10/24/18 | CCH Connections | 900 | Breakfast Buffet |
| Glimmer Ballroom | 10/25/18 | Bauer World 2018 | 425 | Heavy Reception |
| Glimmer Ballroom | 10/29/18 | Guy Carpenter | 250 | Continuous Beverage Service |

Glimmer Usage Report for 2018

| Function Room | Start Date | Event Name | Gtd Attn. | Event Classification |
| :---: | :---: | :---: | :---: | :---: |
| Glimmer Ballroom | 10/30/18 | Guy Carpenter | 250 | Breakfast Buffet |
| Glimmer Ballroom | 11/01/18 | SPECTRUM 2018 | 240 | General Session |
| Glimmer Ballroom | 11/02/18 | SPECTRUM 2018 | 240 | General Session |
| Glimmer Ballroom | 11/03/18 | SPECTRUM 2018 | 240 | General Session |
| Glimmer Ballroom | 11/04/18 | SPECTRUM 2018 | 240 | General Session |
| Glimmer Ballroom | 11/06/18 | Hewlett Packard Enterprise FastStart 2019 | 381 | Beverage Service |
| Glimmer Ballroom | 11/07/18 | Hewlett Packard Enterprise FastStart 2019 | 381 | General Session |
| Glimmer Ballroom | 11/09/18 | 2018 Phonak Marvel Launch Event | 500 | Lunch Buffet |
| Glimmer Ballroom | 11/10/18 | 2018 Phonak Marvel Launch Event | 500 | Breakfast Buffet |
| Glimmer Ballroom | 11/12/18 | Clinique North America Regional Meeting | 160 | Reception |
| Glimmer Ballroom | 11/13/18 | Clinique North America Regional Meeting | 200 | Dinner Buffet |
| Glimmer Ballroom | 11/14/18 | Clinique North America Regional Meeting | 200 | Breakfast Buffet |
| Glimmer Ballroom | 11/26/18 | Limitless Mastercard LAC Innovation Forum 2018 | 150 | Meeting |
| Glimmer Ballroom | 12/03/18 | Distech Connect 2018 | 450 | Beverage Service |
| Glimmer Ballroom | 12/04/18 | Distech Connect 2018 | 425 | Plated Dinner |
| Glimmer Ballroom | 12/05/18 | Distech Connect 2018 | 450 | General Session |
| Glimmer Ballroom | 12/07/18 | ALTS Capital Publishing, Inc. | 215 | Meeting |
| Glimmer Ballroom | 12/10/18 | Global Financial Reporting and Valuation Conference 2018 | 325 | General Session |
| Glimmer Ballroom | 12/11/18 | Global Financial Reporting and Valuation Conference 2018 | 325 | General Session |
| Glimmer Ballroom | 12/14/18 | Alcora Corporation Holiday Party | 450 | Dinner Buffet |
| Glimmer Ballroom | 12/16/18 | 2018 IEEE Conference of Decision and Control (CDC) | 950 | Reception |
| Glimmer Ballroom | 12/18/18 | 2018 IEEE Conference of Decision and Control (CDC) | 288 | Cocktail Reception |
|  |  |  | 49570 | total attendees/year for Glimmer |
|  |  |  | 533 | avg.\# attendess/event (93) |

## Fontainebleau Banquet Summary 2016-2018



## FONTAINEBLEAU MIAMI BEACH

F\&B Summary 2018
Time: December

| F\&B BY OUTLET |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month to Date |  |  |  |  | Year to Date |  |  |  |  |
| Actual | Budget | Prior Year | Var $+(-)$ | \% | Actual | Budget | Prior Year | Var $+(-)$ | \% |

F\&B SUMMARY
Food Revenue
Beverage Revenue
Other F\&B Revenue
Total Revenue

## Covers/Checks

Avg. Food Cvr/Chk
Avg. Beverage Cvr/Chk
Avg. Total Cvr/Chk
Cost of Sales - Food
Cost of Sales - Beverage
Cost of Sales - Other
Cost of Sales
Cost of Food \%
Cost of Beverage \%
Cost of Other \%
Total Payroll, Taxes \& Benefits
Other Operating Expenses
Total Expenses
Profit
Margin

## StripSteak

Food Revenue
Beverage Revenue
Other F\&B Revenue
Total Revenue

## Covers

## Avg. Food Cover

Avg. Beverage Cover
Avg. Total Cover
Cost of Sales - Food
Cost of Sales - Beverage
Cost of Sales - Other
Cost of Sales
Cost of Food \%
Cost of Beverage \%
Cost of Other \%
Total Payroll, Taxes \& Benefit
Other Operating Expenses
Total Expenses
Profit
Margin

$15.9 \%$
$9.4 \%$
$28.3 \%$
$13.5 \%$
$-2.7 \%$
$19.2 \%$
$12.4 \%$
$16.6 \%$

$3.8 \%$
$6.9 \%$
$-40.6 \%$
$3.6 \%$
$-10.5 \%$
$-2.3 \%$
$-53.7 \%$
22.0 \%
$36.0 \%$
22.2 \%
-3.8 \%



$$
\begin{array}{r}
-16.9 \% \\
-17.8 \% \\
87.8 \% \\
-16.3 \% \\
-21.1 \%
\end{array}
$$



| 73,551 | 80,003 | 71,085 | $-6,452$ |
| :--- | :--- | :--- | :--- |

Hakkasan
Food Revenue
Beverage Revenue
Other F\&B Revenue
Total Revenue

## Covers

Avg. Food Cover
Avg. Beverage Cover


$5.5 \%$
-3.1\%
$2.6 \%$
-5.4 \%
-11.7 \%
$-23.8 \%$
$-7.2 \%$
-2.5 \%
-0.9 \%
-23.3 \%
-7.4 \%
$1.0 \%$
-5.5 \%
-6.5 \%
-3.0 \%
$-10.9 \%$
-0.6 \%
-5.7 \%
8.1 \%
. $\%$
3.7 \%
\%
.3 \%


[^0]:    AADT FLAGS: $C=$ COMPUTED; $E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE

