

TECHNICAL MEMORANDUM

To: Josiel Ferrer-Diaz, P.E.
Deputy Director – Chief Project Delivery Officer
Miami-Dade County Department of Transportation and Public Works

From: City of Miami Beach Transportation & Mobility Department

Date: November 1, 2024

Subject: Ocean Drive at 5th Street Bicycle Lane Extension

Contents

1. PROJECT OVERVIEW	2
A. Introduction	2
B. Existing Conditions	3
D. Data Collection and Analysis	5
F. Project Initiation and Duration	5
G. Community Outreach Process	5
2. PROJECT DESIGN FEATURES DOCUMENTATION	5
A. Design Feature 1: Flexible Delineator Post.....	6
B. Design Feature 2: Ziela Zebra low-profile cycle lane separator	7
C. Design Feature 3: Turn-Lane Elimination at Ocean Drive and 5th Street	9
4. APPENDIX: Data Collected.....	10

1. PROJECT OVERVIEW

A. Introduction

The City of Miami Beach (City) is proposing a bicycle lane extension at the intersection of Ocean Drive and 5th Street. The primary purpose of the project is to connect two existing bike lane segments along a small stretch in the northbound direction. There is an existing northbound bicycle lane that terminates 130 feet south of the stop bar and starts again on the north side of the intersection. The bicycle lane extension project will extend the bicycle lane so that it is continuous through the intersection without any gaps.

The improvements will be implemented by striping new lines, pavement markings, and conflict zones. Additionally, low-profile delineators will be installed, utilizing bolt anchoring systems provided by the manufacturer. The delineators will serve as an added layer of protection for the bike lane. The project will not involve any modifications to the existing curbs.

Throughout the project's duration, the City of Miami Beach will be responsible for monitoring and maintaining all materials used, unless otherwise agreed upon by the Miami-Dade County Department of Transportation and Public Works. This project will improve bicycle mobility by providing a continuous, protected bicycle lane through the intersection.

Figure 1. Project Limits



B. Existing Conditions

Ocean Drive is a north/south local road that is two-way south of 5th Street, and one-way north of the intersection. Parking is allowed on both sides of the street south of the intersection, and only valet is allowed on the west side of the street north of the intersection. South of 5th Street, there is a bike lane on each side of the street, and north of 5th Street, the bike lanes merge into a combined, two-way bike lane. 5th Street is a multi-lane, two-way road to the west of the intersection, and terminates into a parking lot and roundabout to the east of the intersection.

Figure 2: Current Conditions at Ocean Drive & 5th Street (Looking North)



Figure 3: Current Conditions at Ocean Drive & 5th Street (Looking South)



Figure 4: Cyclists along Ocean Drive



D. Data Collection and Analysis

Turning movement counts and queue counts were measured at the Ocean Drive and 5th Street intersection to evaluate the overall usage of the intersection by vehicles, pedestrians, and bicyclists, as well as to evaluate the usage of the northbound right turn lane. Vehicular queues were measured in order to evaluate potential congestion during peak period times. The traffic counts and queues were collected between Thursday, August 22, 2024, and Saturday, August 24, 2024, during a four-hour peak AM period and a four-hour peak PM period.

The volume of vehicles making a northbound right turn is around five vehicles per hour on average during peak AM and PM periods. Compared to the average hourly northbound left turn volume of 95 vehicles per hour, the right turn volume is minimal. The maximum northbound left turn queue observed during the data collection period was nine vehicles while the maximum northbound right turn queue observed was two vehicles. With a storage length of approximately 400' for the northbound approach, there is space available to accommodate the resulting queue from combining the northbound left turn lane with the northbound right turn lane.

Given the low turning volume of the right turn lane, the short queue in the right turn lane, and the availability of storage length in the left lane for accommodating the right turning vehicles, there is low risk to converting the right turn lane from a vehicular travel lane into a bicycle lane.

F. Project Initiation and Duration

The City of Miami Beach anticipates beginning the installation of the project in Q2 2025.

G. Community Outreach Process

This project is supported by an official resolution of the mayor and the city commission, passed and adopted on May 15th, 2024. It directs the city to evaluate the feasibility of eliminating the dedicated northbound right-turn lane at the intersection of Ocean Drive and 5th Street to establish bicycle lane connectivity going northbound through the intersection. Additionally, if feasible, the city should proceed with the design, permitting, and implementation of the recommended bicycle lane improvement. Given the scale of the project, no further community outreach is envisioned.

2. PROJECT DESIGN FEATURES DOCUMENTATION

The proposed Ocean Drive bicycle lane extension design adheres to design standards currently being implemented in Miami Beach. Below is a summary of the project design features as it relates to Federal Highway Administration (FHWA) and Florida Department of Transportation (FDOT) design standards.

Any non-standard roadway design elements are documented in the pages that follow with proper justification. Specifications for each design feature can be found on the Technical Permit Drawings attached as part of this submission.

A. Design Feature 1: Flexible Delineator Post

The hatched area at the northeast corner of the intersection will be delineated by flexible delineator posts to provide protection for pedestrians and cyclists from vehicular traffic. These will be installed per manufacturer specifications, with both mechanical and chemical installation methods (anchor bolts and epoxy).

As per the 2023 FDOT Design manual, tubular markers, islands, rigid barriers, or on-street parking may be used as forms of separation for bicycle lanes on roads with design speeds of 35 MPH or less.

Justification of non-standard design items, if applicable:

Not Applicable, Design Feature 1 is in compliance with FDOT Design Standards.

B. Design Feature 2: Zicla Zebra low-profile cycle lane separator

Zicla Zebra cycle lane separators will be used to delineate the northbound bicycle lane along the east side of the intersection. These will be installed per manufacturer specifications, with either mechanical or chemical installation methods (anchor bolts or epoxy).

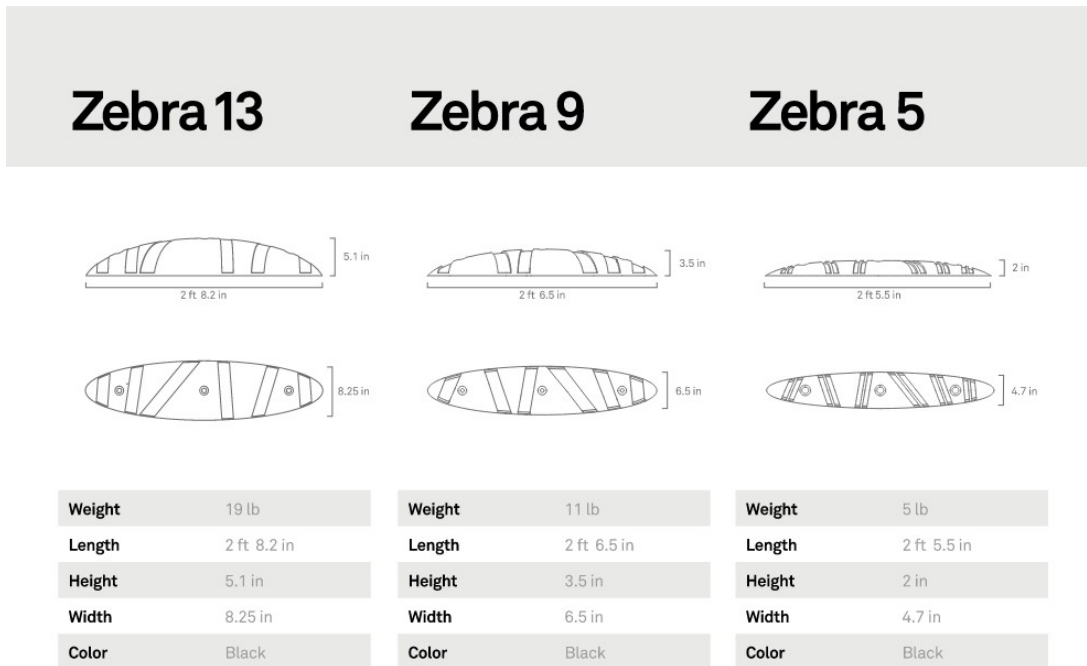
The Zicla Zebra separators provide a visual and physical separation of the bicycle lane from the vehicular travel lane. They offer high impact resistance and retro-reflectivity for high visibility.

Justification of non-standard design items, if applicable:

The Zicla Zebra cycle lane separators are being used to provide physical separation between the bicycle lane and the vehicular travel lane.

While the FDOT Approved Products List includes delineators that meet these specifications and are functionally sufficient for the purpose of delineating the bicycle lane, the Zicla Zebra separators are already being used on Ocean Drive north of 5th Street and using them at the intersection of Ocean Drive and 5th Street provides visual continuity for drivers and bicyclists.

Figure 5. Zicla Zebra Cycle Lane Separator Specifications



Spacing between elements

Recommended spacing

4.3 ft

Maximum spacing allowed

8.6 ft

Spacing of over 8.6 feet between the separators poses a great risk for both cyclists and other road users.

Testing

Properties	Unit	Regulation	Value
Hardness	ShD	ASTM D2240	41
Tensile strength	MPa	ASTM D638	10.2
Elongation at break	%	ASTM D638	101
Tear resistance	kN/m	ASTM D624	27.2
Taber abrasion loss	mg/1,000 cycles	ASTM D4060	262
Lightfastness		ASTM G154	Excellent
Resistance to acids		ASTM D471	Excellent
Resistance to bases		ASTM D471	Excellent
Reaction to fire		UL94	V-0
Density	g/cm ³	ASTM D792	1.25

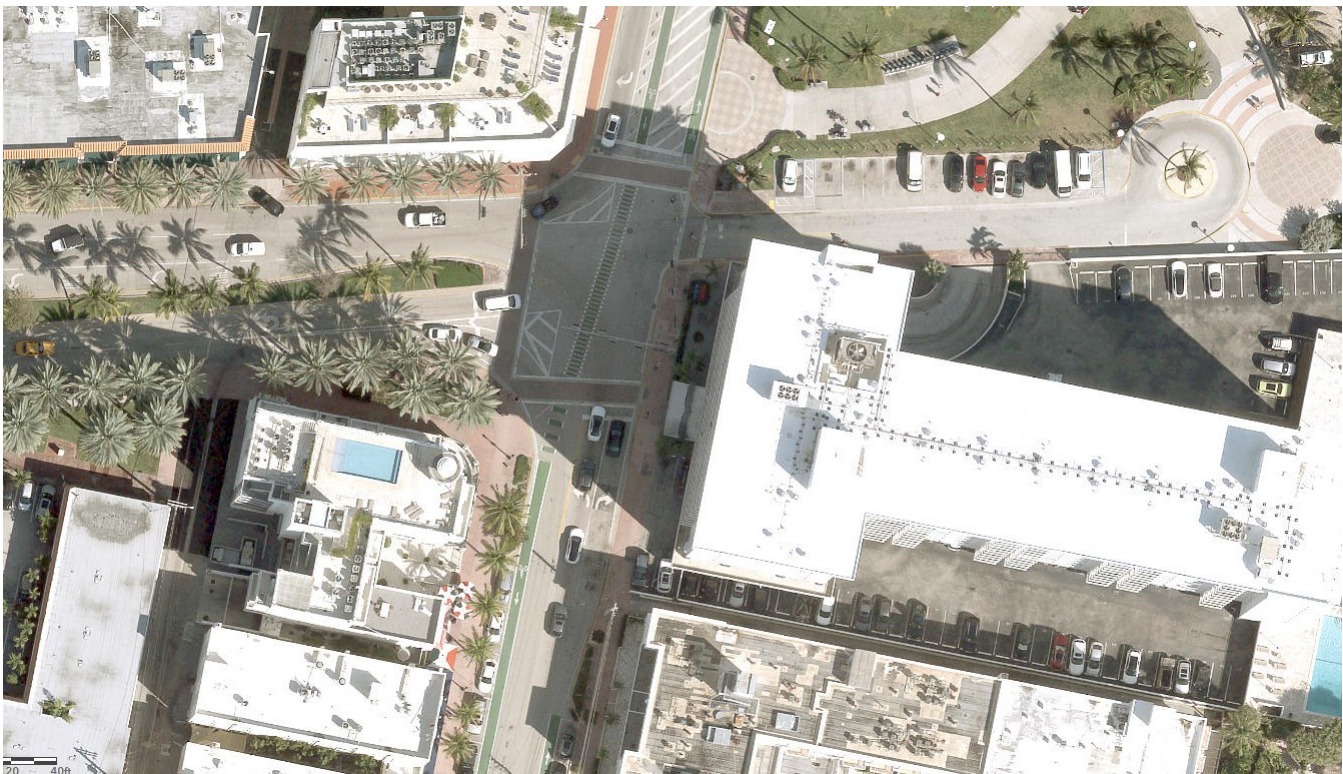


C. Design Feature 3: Turn-Lane Elimination at Ocean Drive and 5th Street

As part of the Ocean Drive bicycle lane extension project, the northbound right turn lane at Ocean Drive and 5th Street will be converted from a vehicular travel lane to a bicycle lane. As seen below, the northbound approach to the intersection has a northbound left turn lane and a northbound right turn lane.

The proposed design for the project involves consolidating the travel lanes into a combined left and right turn lane on the northbound approach to allow the northbound bicycle lane to continue through the intersection. As noted in the data analysis (section 1D above) the volume of cars using the turn lanes is minor and can be accommodated within the existing lane.

Figure 6. Current Conditions at the Ocean Drive and 5th Street Intersection



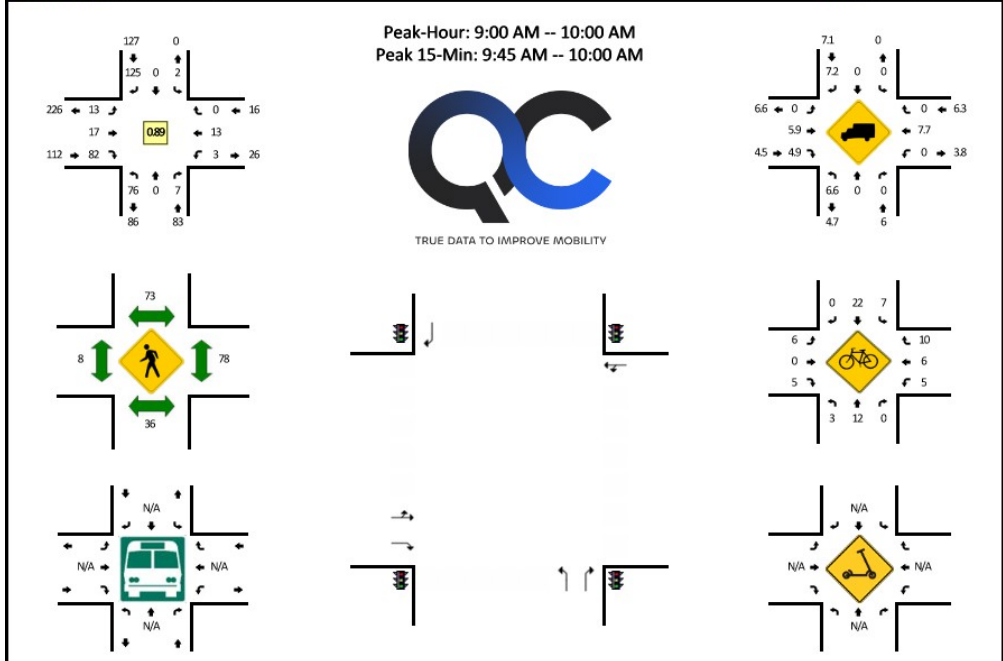
4. APPENDIX: Data Collected

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Ocean Dr -- 5th St
CITY/STATE: Miami Beach, FL

QC JOB #: 16635101
DATE: Thu, Aug 22 2024



15-Min Count Period Beginning At	Ocean Dr (Northbound)				Ocean Dr (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	7	0	0	0	0	0	8	0	0	0	2	1	0	4	0	0	22	
6:15 AM	5	0	1	0	0	0	5	0	0	3	6	2	0	1	0	0	23	
6:30 AM	12	0	1	0	0	0	11	0	0	4	6	3	0	3	0	0	40	
6:45 AM	14	0	1	1	0	0	11	1	0	2	7	0	0	0	0	0	37	122
7:00 AM	12	0	0	0	0	1	13	1	0	3	8	0	1	3	0	0	42	142
7:15 AM	8	0	0	0	1	0	12	0	0	6	12	1	0	2	0	0	42	161
7:30 AM	12	0	0	1	0	0	17	0	0	1	9	0	0	0	0	0	40	161
7:45 AM	10	0	0	0	1	0	17	0	0	2	8	3	1	1	0	0	43	167
8:00 AM	11	0	2	0	1	0	16	0	0	4	15	2	1	2	0	0	54	179
8:15 AM	16	0	1	0	0	1	12	0	0	4	18	2	1	2	0	0	57	194
8:30 AM	16	0	1	0	0	0	14	0	0	8	11	3	1	1	0	0	55	209
8:45 AM	14	0	2	0	1	0	26	0	0	7	17	2	1	4	0	0	74	240
9:00 AM	18	0	2	0	1	0	26	0	0	3	20	5	0	2	0	0	77	263
9:15 AM	19	0	1	0	0	0	29	0	0	4	28	3	1	1	0	0	86	292
9:30 AM	15	0	2	0	0	0	34	0	0	3	17	3	0	6	0	0	80	317
9:45 AM	23	0	2	1	1	0	36	0	0	7	17	2	2	4	0	0	95	338

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	92	0	8	4	4	0	144	0	0	28	68	8	8	16	0	0	380	
Heavy Trucks	8	0	0	0	0	0	8	0	0	0	8	0	0	4	0	0	28	
Buses																		
Pedestrians		28				100				0				72			200	
Bicyclers	4	16	0		4	8	0		8	0	8		4	8	0		60	
Scoters																		

Comments: EBThru/Left lane is actually an EBThru/U-Turn lane, as EBL are illegal

Report generated on 9/4/2024 1:56 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

MIAMI BEACH

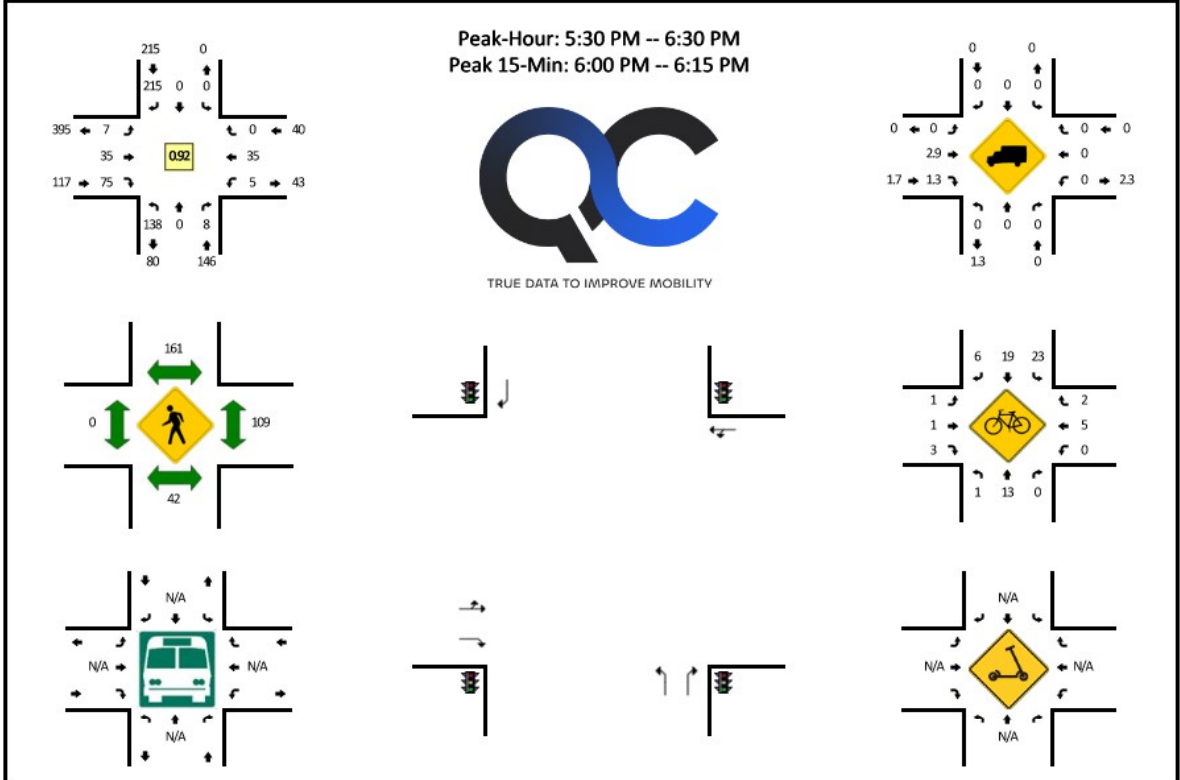
Transportation & Mobility Department

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Ocean Dr -- 5th St
CITY/STATE: Miami Beach, FL

QC JOB #: 16635102
DATE: Thu, Aug 22 2024



15-Min Count Period Beginning At	Ocean Dr (Northbound)				Ocean Dr (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	24	0	1	2	0	0	47	0	0	9	19	11	3	13	0	0	129	
3:15 PM	42	0	6	0	0	0	42	0	4	13	4	1	7	0	1	120		
3:30 PM	33	0	1	0	0	0	42	0	0	11	13	7	3	10	0	0	120	
3:45 PM	23	0	1	0	0	0	38	0	0	7	20	5	2	9	0	0	105	474
4:00 PM	37	0	0	0	0	1	33	0	0	6	16	4	1	4	0	0	102	447
4:15 PM	28	0	1	0	0	0	41	0	0	7	14	8	0	9	0	1	109	436
4:30 PM	43	0	4	0	0	0	53	0	0	7	16	8	1	10	0	0	142	458
4:45 PM	27	0	1	1	1	0	42	0	0	10	10	2	2	8	0	0	104	457
5:00 PM	30	0	2	0	0	0	50	0	0	13	17	1	2	9	0	0	124	479
5:15 PM	25	0	1	0	0	0	52	0	0	3	10	6	2	7	0	0	106	476
5:30 PM	38	0	1	0	0	0	56	0	0	7	19	2	1	8	0	0	132	466
5:45 PM	47	0	0	0	0	0	49	0	0	6	14	3	2	4	0	0	125	487
6:00 PM	31	0	2	0	0	0	54	0	0	13	25	2	1	13	0	0	141	504
6:15 PM	22	0	5	0	0	0	56	0	0	9	17	0	1	10	0	0	120	518
6:30 PM	28	0	0	0	1	0	56	0	0	3	18	6	1	6	0	0	119	505
6:45 PM	29	0	0	0	1	0	61	0	0	8	19	0	1	7	0	0	126	506
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	124	0	8	0	0	0	216	0	0	52	100	8	4	52	0	0	564	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	4	8	0	0	0	0	4	
Buses																		
Pedestrians		28				132				0				124			284	
Bicycles	4	4	0		16	4	0			0	4	4		4	0		40	
Scoters																		

Comments: EBThru/Left lane is actually an EBThru/U-Turn lane, as EBL are illegal

Report generated on 9/4/2024 1:56 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

MIAMI BEACH

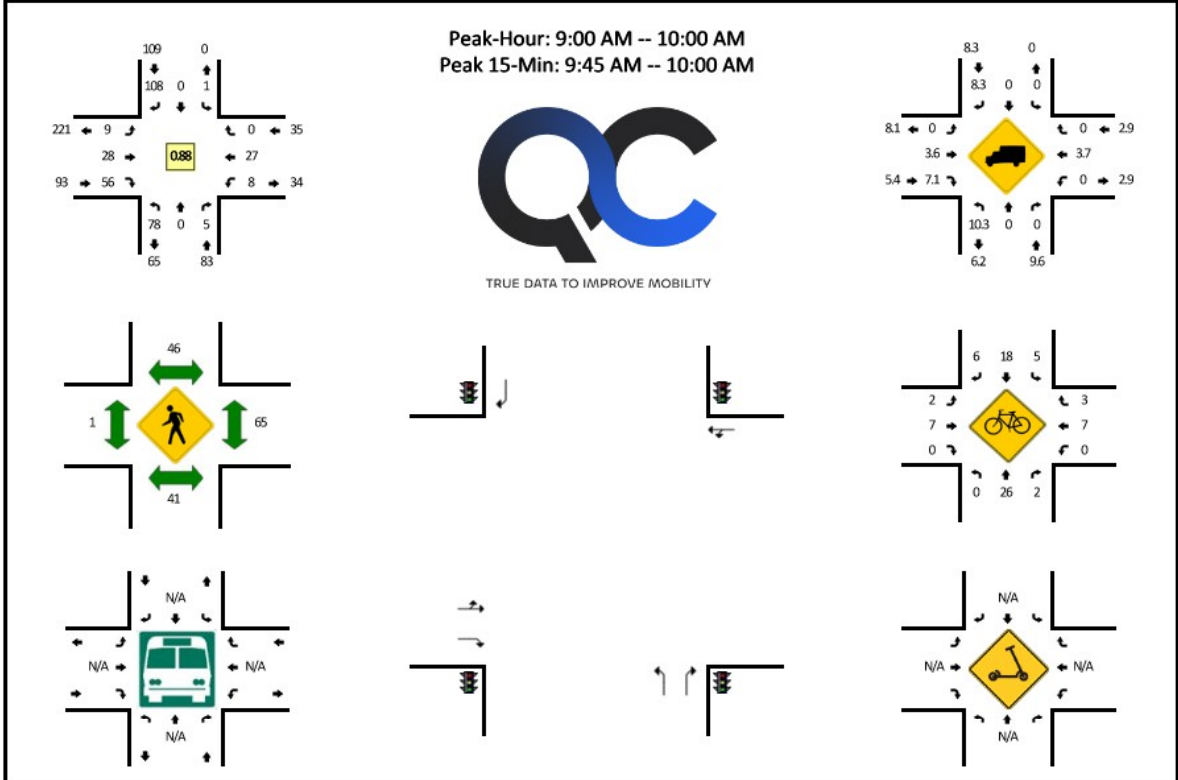
Transportation & Mobility Department

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Ocean Dr -- 5th St
CITY/STATE: Miami Beach, FL

QC JOB #: 16635103
DATE: Fri, Aug 23 2024



15-Min Count Period Beginning At	Ocean Dr (Northbound)				Ocean Dr (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	6	0	0	0	0	0	8	0	0	2	3	2	1	2	0	0	24	
6:15 AM	10	0	0	0	0	2	7	0	0	1	6	4	0	1	0	0	31	
6:30 AM	11	0	1	1	0	0	9	0	0	2	5	0	0	0	0	0	29	
6:45 AM	7	0	1	1	0	0	16	0	1	7	8	3	1	0	0	0	45	129
7:00 AM	11	0	0	0	0	0	12	2	0	2	13	8	0	3	0	0	51	156
7:15 AM	8	0	0	0	0	1	12	0	0	2	7	4	1	2	0	0	37	162
7:30 AM	14	0	1	1	1	0	7	0	0	1	11	1	0	2	0	0	39	172
7:45 AM	12	0	1	0	1	0	12	0	0	2	15	3	1	6	0	0	53	180
8:00 AM	15	0	0	0	0	1	13	0	0	9	9	2	0	6	0	0	55	184
8:15 AM	21	0	1	0	1	0	20	0	0	1	15	1	0	2	0	0	62	209
8:30 AM	21	0	1	0	0	0	12	0	0	5	14	2	1	1	0	0	57	227
8:45 AM	23	1	0	0	0	0	17	0	0	5	18	4	0	3	0	0	71	245
9:00 AM	20	0	0	0	0	0	22	0	0	13	7	2	2	4	0	0	70	260
9:15 AM	15	0	3	0	0	0	24	0	0	5	15	1	3	11	0	0	77	275
9:30 AM	19	0	1	0	0	0	26	0	0	5	17	5	2	7	0	0	82	300
9:45 AM	23	0	1	1	1	0	36	0	0	5	17	1	1	5	0	0	91	320

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	92	0	4	4	4	0	144	0	0	20	68	4	4	20	0	0	364	
Heavy Trucks	8	0	0	4	0	0	12	0	0	0	4	4	0	0	0	0	24	
Buses																		
Pedestrians	0	32	0			36				0				48			116	
Bicycles		20	0		4	8	8			0	4	0	0	4	0		48	
Scoters																		

Comments: EBThru/Left lane is actually an EBThru/U-Turn lane, as EBL are illegal

Report generated on 9/4/2024 1:56 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

MIAMI BEACH

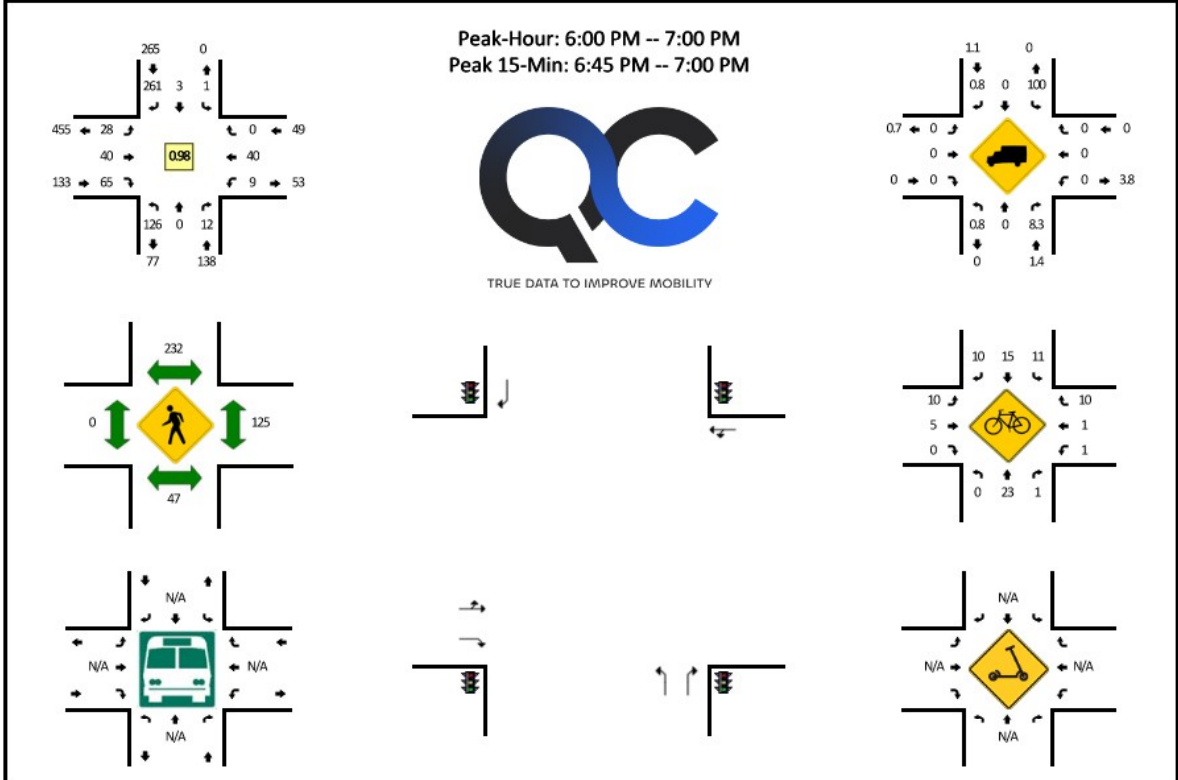
Transportation & Mobility Department

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Ocean Dr -- 5th St
CITY/STATE: Miami Beach, FL

QC JOB #: 16635104
DATE: Fri, Aug 23 2024



15-Min Count Period Beginning At	Ocean Dr (Northbound)				Ocean Dr (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	33	0	2	0	0	1	50	0	0	9	21	13	2	11	0	0	142	
3:15 PM	20	0	1	0	1	0	53	0	0	7	13	9	2	10	0	1	117	
3:30 PM	43	0	1	1	0	1	48	0	0	11	19	9	0	11	0	0	144	
3:45 PM	30	0	2	0	0	0	55	0	0	8	9	5	2	7	0	0	118	521
4:00 PM	22	0	0	1	0	0	54	0	0	12	24	6	1	10	0	0	130	509
4:15 PM	28	0	1	0	0	1	60	0	0	13	13	5	3	9	0	0	133	525
4:30 PM	34	0	0	0	1	0	53	0	0	11	19	6	2	12	0	0	138	519
4:45 PM	37	0	3	1	2	0	57	0	0	15	13	1	4	15	0	0	148	549
5:00 PM	33	0	3	0	0	0	46	0	0	10	18	12	2	12	1	0	137	556
5:15 PM	34	0	0	1	0	1	64	0	0	13	18	5	6	8	0	0	150	573
5:30 PM	37	0	0	0	0	0	56	0	0	8	24	3	2	4	0	0	134	569
5:45 PM	29	0	1	0	0	1	52	0	0	2	13	7	0	12	0	0	117	538
6:00 PM	39	0	7	0	0	0	64	0	0	7	14	6	0	4	0	0	141	542
6:15 PM	24	0	2	0	0	1	67	0	0	10	20	7	5	12	0	0	148	540
6:30 PM	33	0	2	0	0	1	60	0	0	13	16	7	1	14	0	0	147	553
6:45 PM	30	0	1	0	1	1	70	0	0	10	15	8	3	10	0	0	149	585

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	120	0	4	0	4	4	280	0	0	40	60	32	12	40	0	0	596	
Heavy Trucks	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	8	
Buses																		
Pedestrians		12				268				0				144			424	
Bicycles	0	28	0		12	4	28		8	8	0		4	0	8		100	
Scoters																		

Comments: EBThru/Left lane is actually an EBThru/U-Turn lane, as EBL are illegal

Report generated on 9/4/2024 1:56 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

MIAMI BEACH

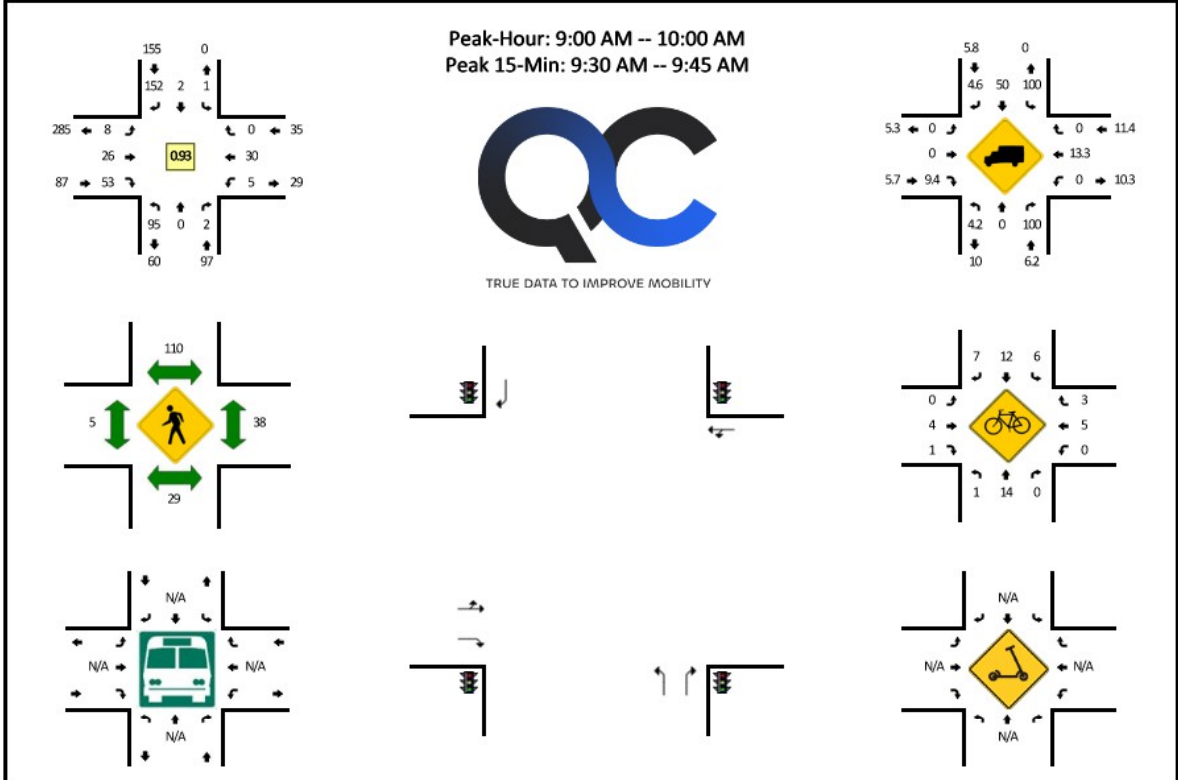
Transportation & Mobility Department

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Ocean Dr -- 5th St
CITY/STATE: Miami Beach, FL

QC JOB #: 16635105
DATE: Sat, Aug 24 2024



15-Min Count Period Beginning At	Ocean Dr (Northbound)				Ocean Dr (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	4	0	0	0	0	1	6	0	0	4	7	1	0	4	1	0	28	
6:15 AM	5	0	0	0	0	0	5	0	0	5	6	2	1	0	0	0	24	
6:30 AM	4	0	0	0	0	0	11	0	0	6	12	1	2	0	0	0	36	
6:45 AM	12	0	2	0	0	1	10	0	0	3	12	4	3	4	0	0	51	139
7:00 AM	12	0	2	0	0	0	18	1	1	3	18	2	1	5	1	0	64	175
7:15 AM	13	0	0	0	0	0	20	0	0	1	9	1	0	3	0	0	47	198
7:30 AM	11	0	2	0	0	0	13	0	0	4	5	4	1	3	0	0	43	205
7:45 AM	13	0	5	0	0	0	11	0	0	4	8	2	3	3	0	0	49	203
8:00 AM	11	0	0	0	1	0	12	0	0	4	10	1	0	6	0	0	45	184
8:15 AM	13	0	1	0	1	0	16	0	0	8	14	3	1	2	0	0	59	196
8:30 AM	20	0	3	0	1	1	32	0	0	5	11	2	2	5	0	0	82	235
8:45 AM	19	0	1	0	0	0	25	0	0	5	17	2	2	3	0	0	74	260
9:00 AM	24	0	1	0	1	2	36	0	0	8	9	2	2	10	0	0	95	310
9:15 AM	24	0	0	0	0	0	38	0	0	6	15	2	2	6	0	0	93	344
9:30 AM	27	0	0	0	0	0	42	0	0	7	13	1	0	11	0	0	101	363
9:45 AM	20	0	1	0	0	0	36	0	0	5	16	3	1	3	0	0	85	374

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	108	0	0	0	0	0	168	0	0	28	52	4	0	44	0	0	404	
Heavy Trucks	12	0	0	0	0	0	8	0	0	0	0	0	0	4	0	0	24	
Buses																		
Pedestrians		32				64				16				24			136	
Bicycles	0	4	0		4	12	4			0	0	0	0	4	0		28	
Scoters																		

Comments: EBThru/Left lane is actually an EBThru/U-Turn lane, as EBL are illegal

Report generated on 9/4/2024 1:56 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

MIAMI BEACH

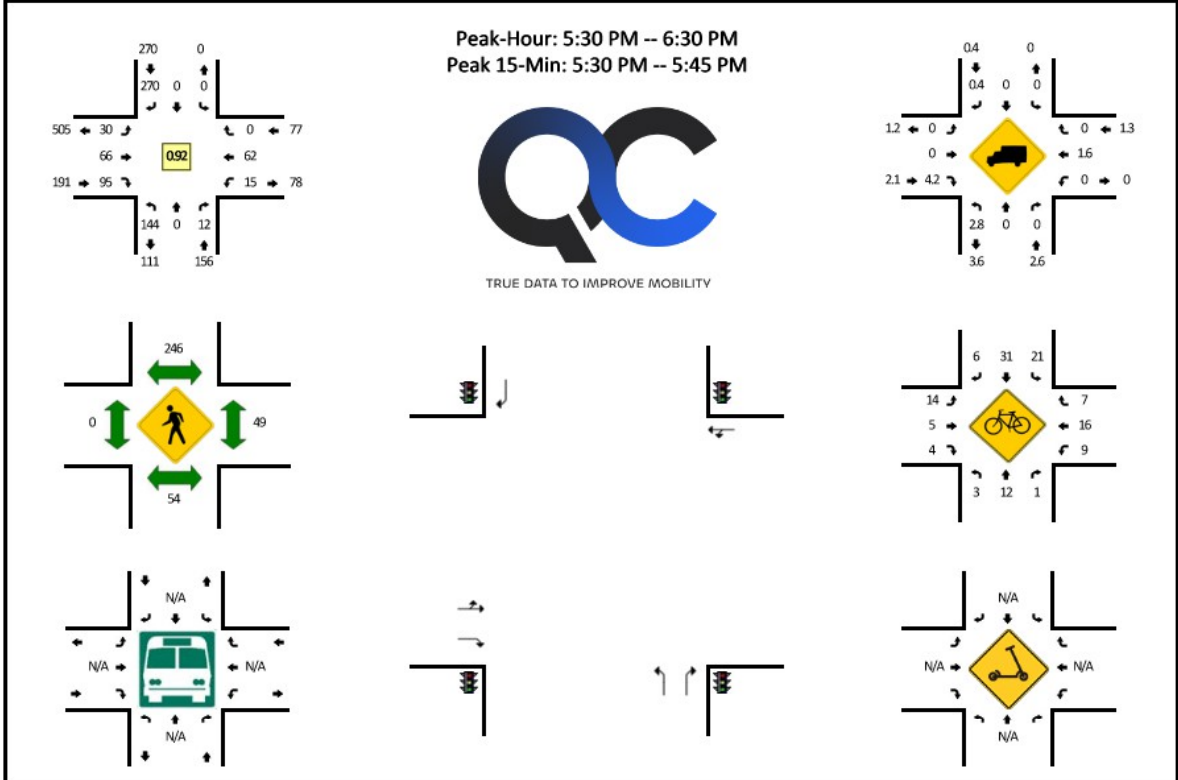
Transportation & Mobility Department

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Ocean Dr -- 5th St
CITY/STATE: Miami Beach, FL

QC JOB #: 16635106
DATE: Sat, Aug 24 2024



15-Min Count Period Beginning At	Ocean Dr (Northbound)				Ocean Dr (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	36	0	2	0	0	0	52	0	0	13	16	6	1	10	0	0	136	
3:15 PM	39	0	5	0	0	0	61	0	0	12	21	3	3	17	0	0	161	
3:30 PM	39	0	1	0	0	0	52	0	0	4	15	7	1	7	0	0	126	
3:45 PM	30	0	1	0	0	0	76	0	0	10	17	5	1	10	0	0	150	573
4:00 PM	33	0	0	1	1	0	59	0	0	12	17	7	2	12	0	0	144	581
4:15 PM	25	0	1	0	0	0	65	0	0	9	9	10	1	12	0	0	132	552
4:30 PM	30	0	2	0	0	0	57	0	0	16	20	5	4	13	0	0	147	573
4:45 PM	42	0	0	0	0	1	59	0	0	19	20	7	1	16	0	0	165	588
5:00 PM	38	0	0	0	0	1	56	0	0	5	21	8	2	8	0	0	139	583
5:15 PM	34	0	3	1	0	0	80	0	0	10	22	13	3	9	0	0	175	626
5:30 PM	34	0	3	0	0	0	81	0	0	19	25	12	4	11	0	0	189	668
5:45 PM	34	0	4	1	0	0	66	0	0	16	27	4	6	21	0	0	179	682
6:00 PM	35	0	1	0	0	0	56	0	0	13	16	7	1	11	0	0	140	683
6:15 PM	40	0	4	0	0	0	67	0	0	18	27	7	4	19	0	0	186	694
6:30 PM	38	0	2	2	1	0	75	0	0	11	21	10	4	11	0	0	175	680
6:45 PM	43	0	1	0	0	0	66	0	0	14	27	9	4	11	0	0	175	676
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	136	0	12	0	0	0	324	0	0	76	100	48	16	44	0	0	756	
Heavy Trucks	4	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	12	
Buses																		
Pedestrians		96				252				0				48			396	
Bicycles	4	0	4		36	24	8		0	4	4		0	28	0		112	
Scoters																		

Comments: EBThru/Left lane is actually an EBThru/U-Turn lane, as EBL are illegal

Report generated on 9/4/2024 1:56 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212



Location: Ocean Dr & 5th St
Date: 8/22/2024

AM (0600-1000)	Lane				
	SBR	EBT/U	EBR	NBR	NBL
Max Queue	5	4	2	1	5
Average Queue	2	2	1	0	2

PM (1500-1900)	Lane				
	SBR	EBT/U	EBR	NBR	NBL
Max Queue	12	6	5	2	7
Average Queue	5	4	2	1	5

Queues are measured in number of vehicles.



Location: Ocean Dr & 5th St
Date: 8/23/2024

AM (0600-1000)	Lane				
	SBR	EBT/U	EBR	NBR	NBL
Max Queue	4	4	2	1	5
Average Queue	2	2	1	2	3

PM (1500-1900)	Lane				
	SBR	EBT/U	EBR	NBR	NBL
Max Queue	12	7	3	2	9
Average Queue	7	4	2	1	5

Queues are measured in number of vehicles.



Location: Ocean Dr & 5th St
Date: 8/24/2024

AM (0600-1000)	Lane				
	SBR	EBT/U	EBR	NBR	NBL
Max Queue	4	3	3	1	4
Average Queue	2	2	1	1	2

PM (1500-1900)	Lane				
	SBR	EBT/U	EBR	NBR	NBL
Max Queue	10	8	5	2	8
Average Queue	7	5	2	1	6

Queues are measured in number of vehicles.