

Marin Boulevard

Thank you for joining the meeting! At this time, we respectfully request the following:

- Please mute your microphones.
- Please enter your question(s) in the chat box or wait until the end of the presentation to ask your question.
- Please note that this session will be recorded

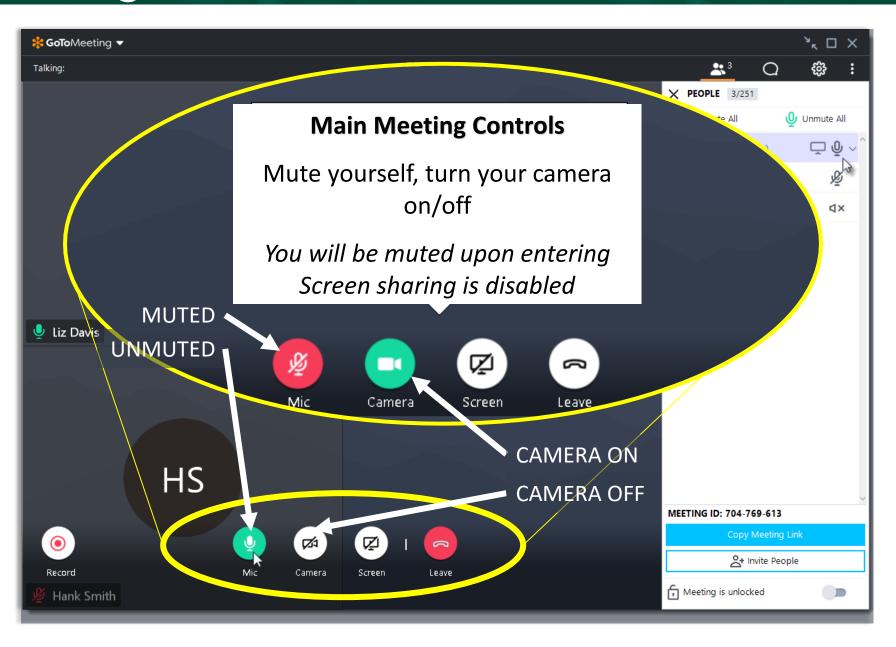


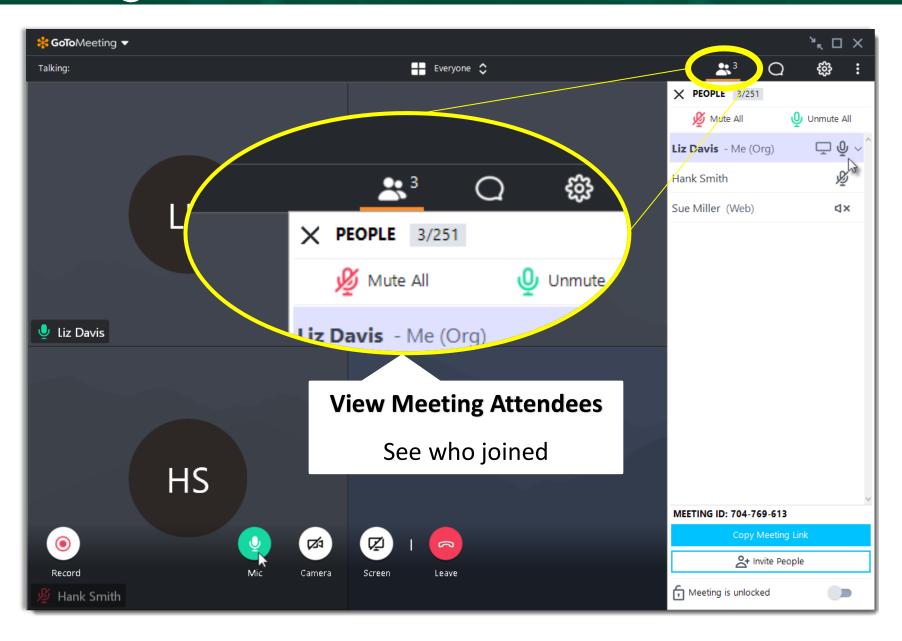


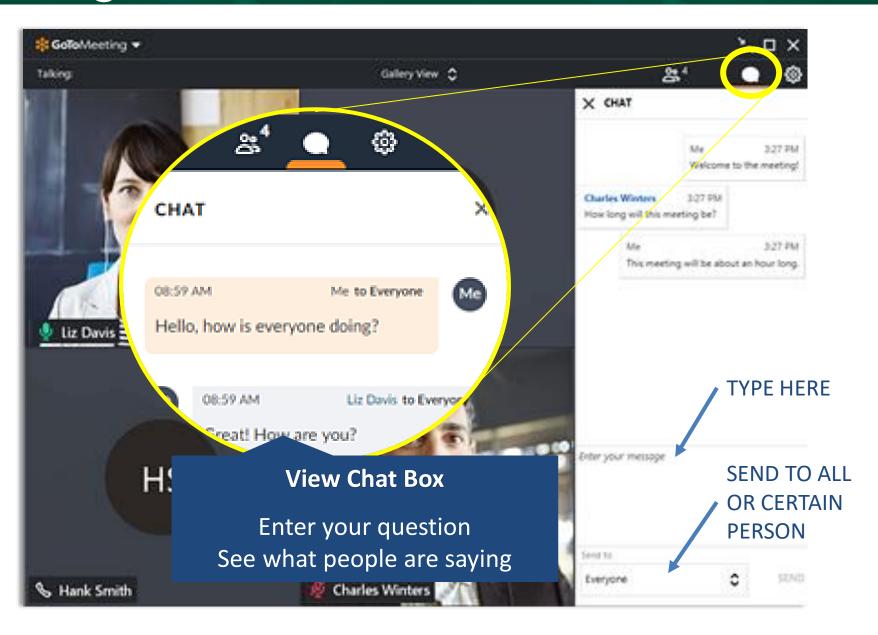






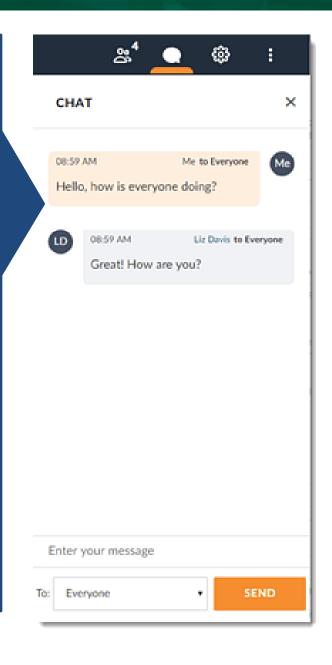


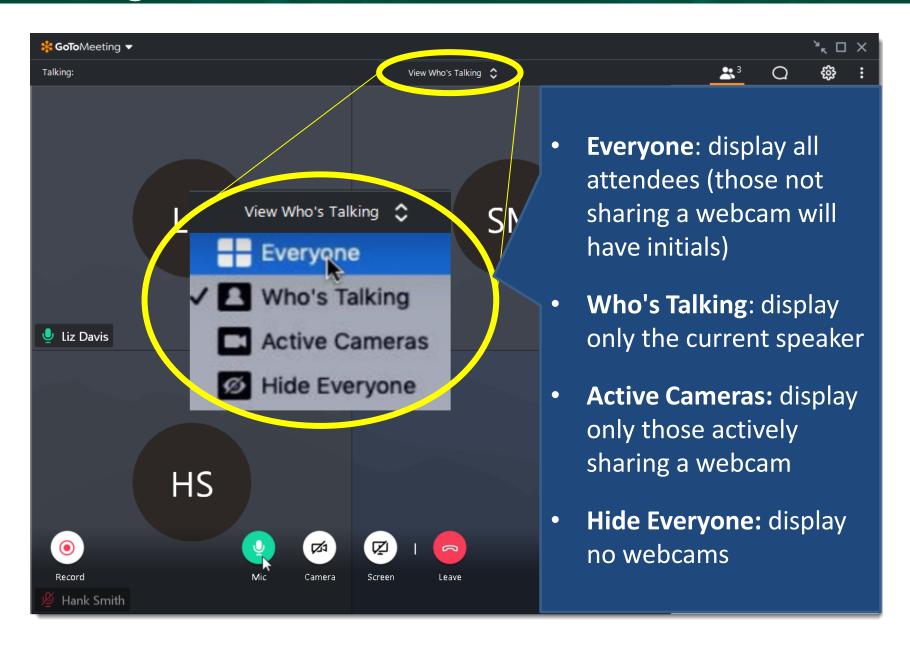




Chat Box Instructions

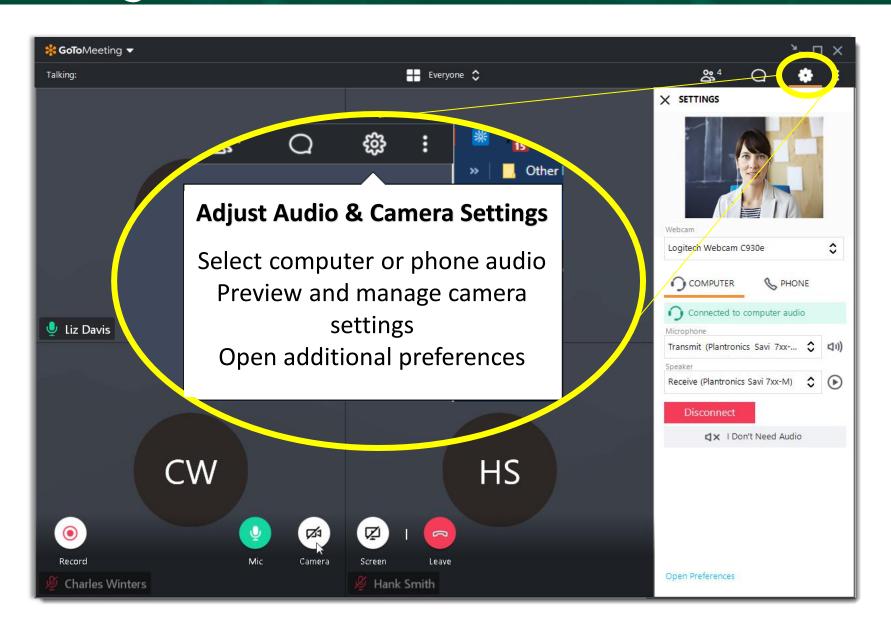
- Submit your questions as the meeting is going on
- If you would like to ask verbally, please write "Unmute"
- After all written questions are addressed, verbal questions will be taken
- Chat box is for unofficial questions only
- Official comments MUST be made in writing (comment survey form, email, letter, etc.)
- Chat logs are saved

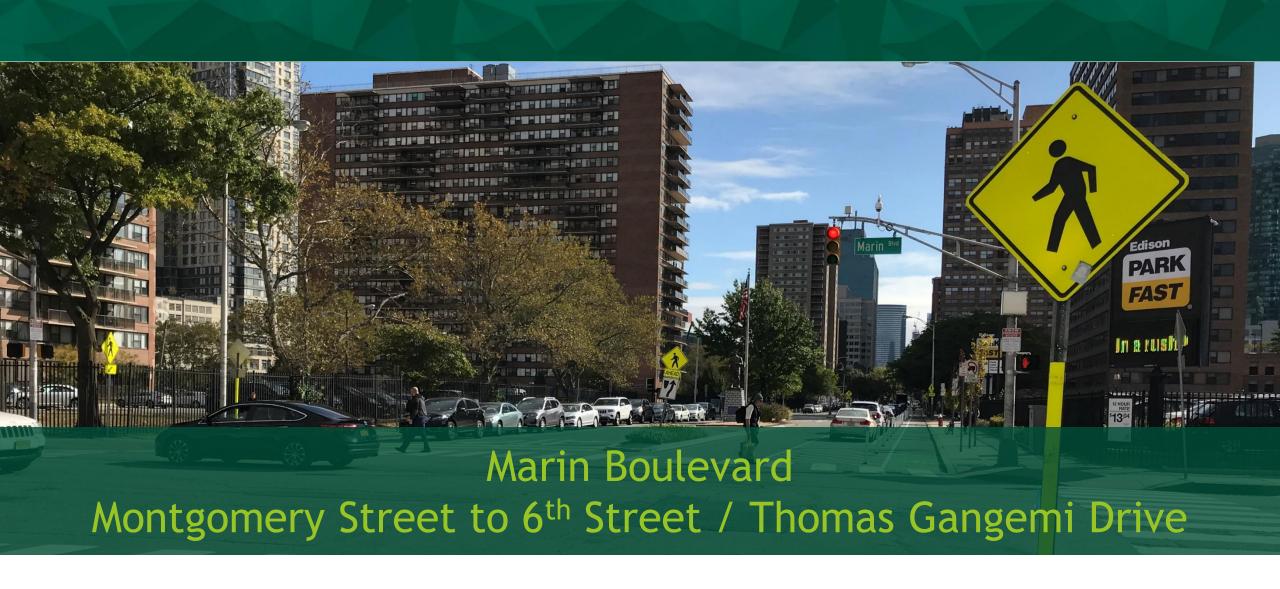




Example of everyone view with presentation





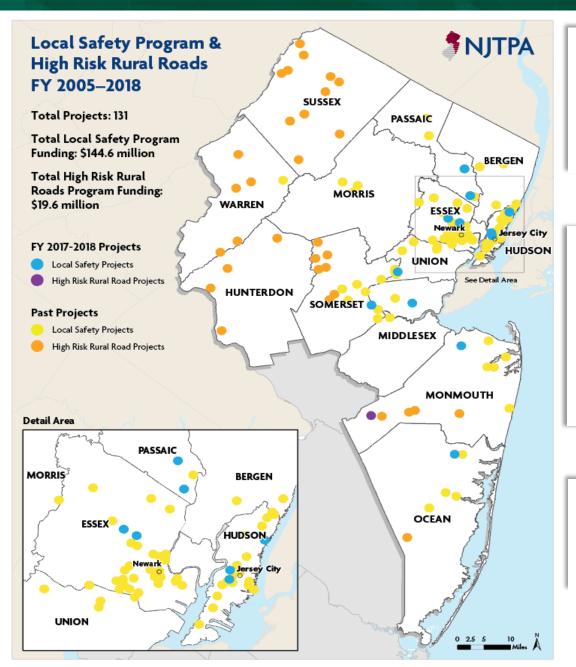


Public Information Center

February 9, 2021 | 6:00 pm



Federal Transportation Funding through the North Jersey Transportation Planning Authority



Highway Safety Improvement Program (HSIP) funds

Emphasizes a data-driven, strategic approach to improving highway safety

Network Screening

Identifies locations experiencing:

High crash frequencies

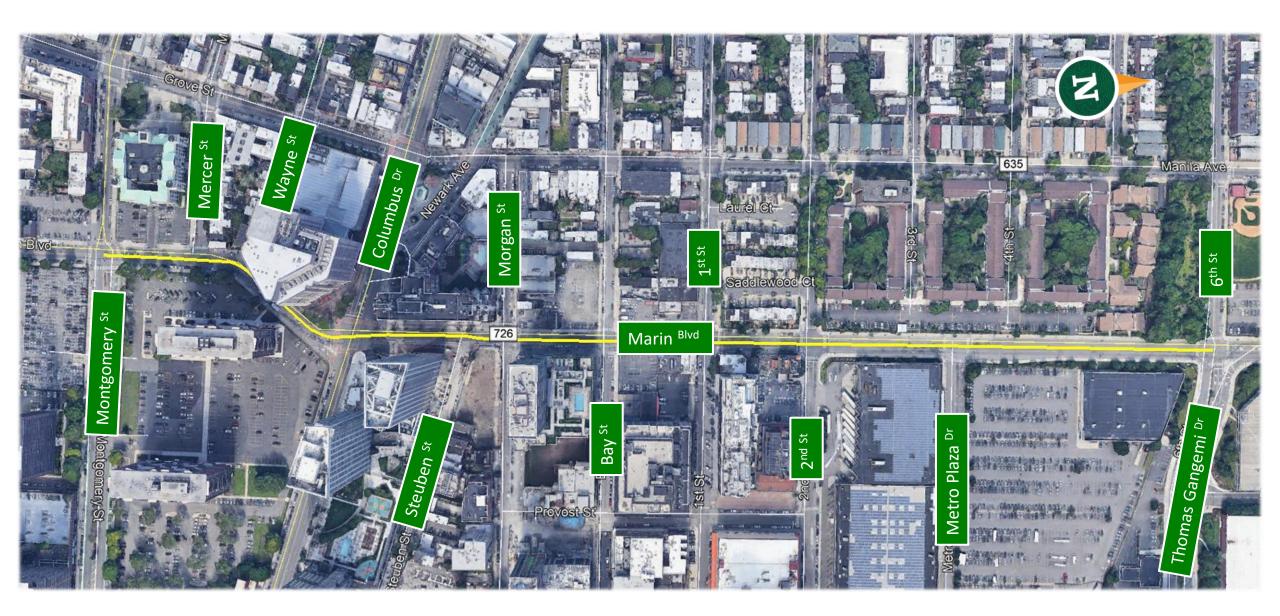
Severe crash injuries

Specific crash types such as right-angle or roadway departures

Community Outreach

Provides the public, local stakeholders and officials with an opportunities for provide comments and ask questions

Project Location



Purpose and Need

Purpose:

To provide safety improvements along Marin Boulevard with a focus on safety for all road users.

Need:

The Network Screening identified Marin Boulevard and 6th Street / Thomas Gangemi Drive as the highest ranked intersection for crashes in Hudson County.

The December 2014 Road Safety Audit conducted along Marin Boulevard from Montgomery Street to 6th Street / Thomas Gangemi Drive, provided an assessment of roadway issues based on a data driven analysis of crashes.

Existing Conditions

Marin Boulevard

- ▶ Urban minor arterial
- ▶ Posted speed limit: 25 mph
- ► Undivided 2-lane roadway south of 2nd Street
- ► Undivided 4-lane roadway north of 2nd Street
- ► Key Pedestrian Generators:
 - ► City Hall near Montgomery Street
 - ► PATH Station at Columbus Drive
 - ► Newark Pedestrian Mall
 - ► Shoprite at Metro Plaza Drive
 - ► Newport Centre Mall near 6th Street.



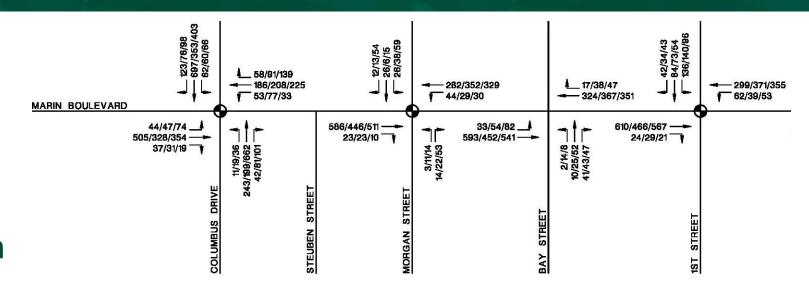
Buffered bike lane and bike box at Montgomery Street, looking west



Property development near Bay Street, looking north

Traffic Analysis

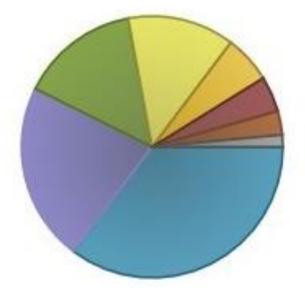
- ► Manual turning movement counts performed in April and June of 2018
- ► Volumes balanced between intersections and projected to the design year 2045
- Existing and projected No-Build traffic conditions analyzed using existing signal timings and geometrics



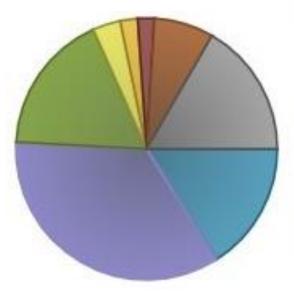
Intersection		2018 Existing								
		М	MD		PM					
Intersection	LOS	Delay	LOS	Delay	LOS	Delay				
		(sec.)	103	(sec.)	103	(sec.)				
1 - Marin Boulevard & Montgomery Street	D	40.4	В	15.6	Ε	74.6				
2 - Marin Boulevard & Oviedo Way	Α	1.0	Α	1.0	Α	1.0				
3 - Marin Boulevard & Wayne Street	Α	1.0	Α	1.0	Α	1.0				
4 - Marin Boulevard & Christopher Columbus Drive	С	33.7	С	27.4	С	29.9				
5 - Marin Boulevard & Morgan Street	Α	6.5	Α	5.6	Α	8.4				
6 - Marin Boulevard & Bay Street	Α	1.3	Α	1.3	Α	1.3				
7 - Marin Boulevard & 1st Street	В	13.1	В	13.2	В	11.1				
8 - Marin Boulevard & 2nd Street	Α	8.4	Α	9.7	В	14.6				
9 - Marin Boulevard & Metro Plaza Drive	В	14.6	В	14.4	С	21.2				
10 - Marin Boulevard & 6th Street / Thomas Gangemi Drive	В	18.9	В	14.7	С	22.5				

Crash Analysis

Marin Boulevard



State Breakdown



	Marin B	State		
	Crashes	Percentage	Percentage	
Same Direction – Side Swipe	24	35.3%	16.0%	
Same Direction - Rear End	15	22.1%	34.8%	
Right Angle	10	14.7%	17.5%	
Left Turn / U-Turn	9	13.2%	3.5%	
Pedestrian	4	5.9%	2.1%	
Opposite Direction (Head On / Angular)	3	4.4%	2.0%	
Backing	2	2.9%	7.4%	
Struck Parked Vehicle	1	1.5%	16.7%	

Safety Voyager

- **2017 2019**
- 68 Total Crashes
- Overrepresentations
 - Side Swipe
 - Left Turn
 - Pedestrian
 - Opposite Direction

Road Safety Audit (December 2014)

General Recommendations:

- ► Replace faded pavement markings
- ► Enforce Title 39 parking restrictions
- ► ADA compliant pedestrian facilities
- ▶ Reduce pedestrian crossing distances via islands or curb extensions
- ► MUTCD compliant signals, signs, and striping
- ▶ Bike lanes (shared, separated, buffered, and/or protected)
- ► Investigate lighting throughout corridor



Sidewalk, curb ramp, and pushbuttons do not meet

ADA compliance



Skewed crosswalk increases pedestrian crossing distance

► Pedestrian Safety and Accessibility Upgrades

- Pedestrian curb extensions where feasible
- High-visibility crosswalks with improved alignment for shorter crossing distance
- ADA and MUTCD compliant curb ramps, pushbuttons, and countdown pedestrian signal heads

▶ Bicycle Accommodations

- Northbound protected bicycle lane
- Striped buffer with flexible delineators
- Locate bike lane between curb and parking where applicable



2017 NJ Complete Streets Design Guide - Pedestrian curb extensions



Protected bicycle lane with on-street parking along
Montgomery Street

► Traffic Signal Upgrades

- 12" LED traffic signal heads with retroreflective backplates
- Image detection for side streets
- Improved signal head layout for better visibility & roadway alignment
- Optimized traffic signal timings with MUTCD compliant vehicle and pedestrian clearances which accommodate bicyclists

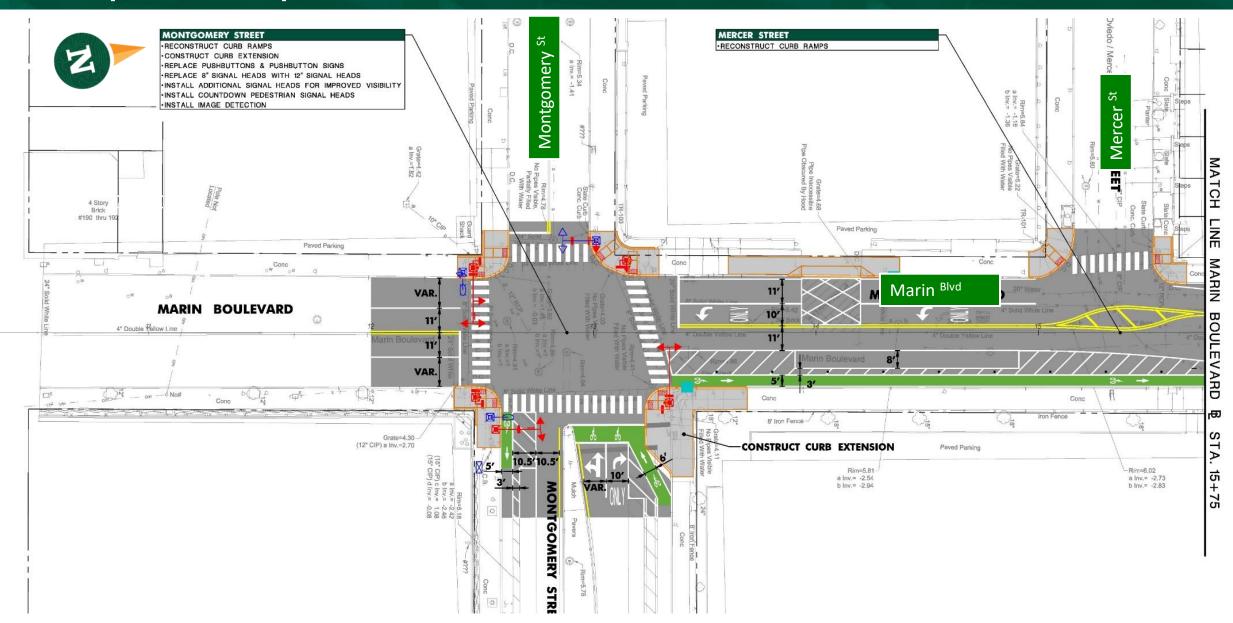
► Roadway and Geometric Upgrades

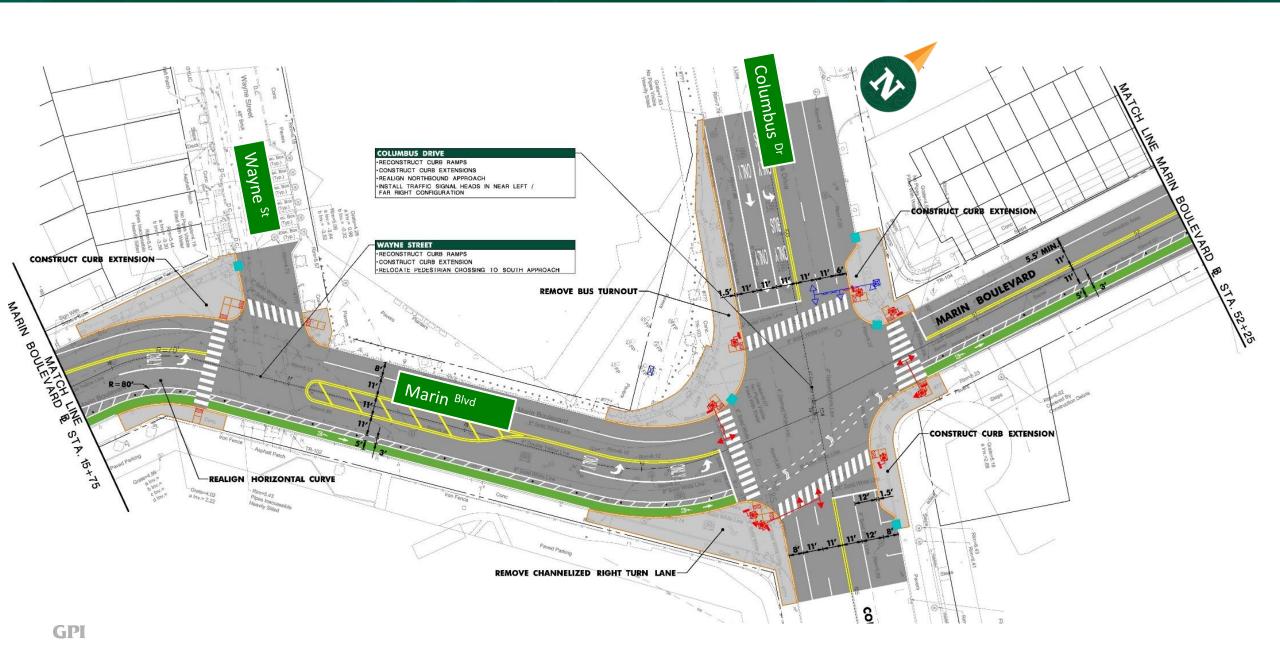
- Mill and resurface Marin Boulevard within the project limits
- Corner radii designed using appropriate AASHTO design vehicles
- Title 39 parking restrictions enforced via signage or curb extensions
- Reset or relocate inlets to provide positive drainage at locations with proposed curb extensions or grading modifications

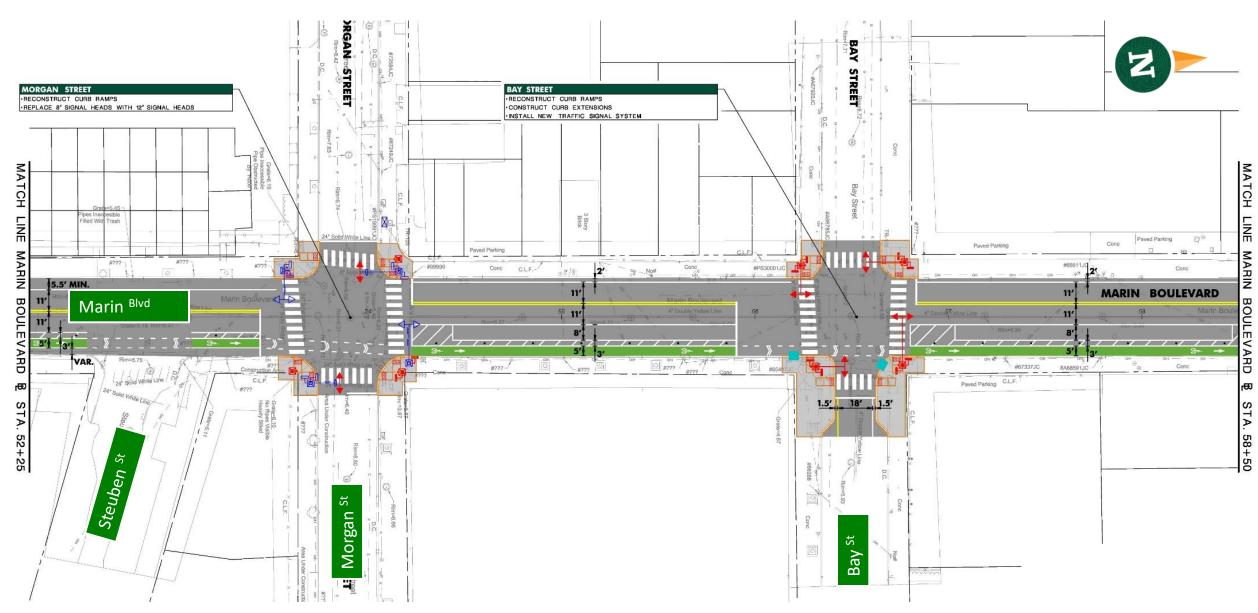
► Traffic Analysis

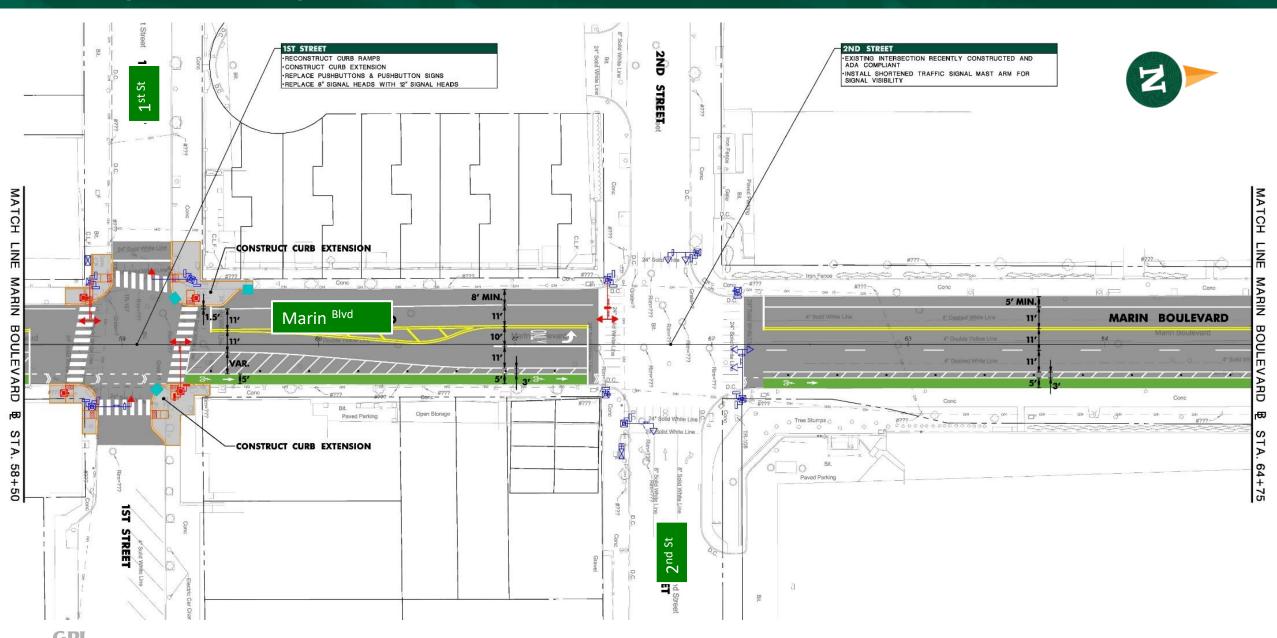
- Coordinate traffic signals for improved traffic flow
- Maintain existing 90 second cycle to reduce pedestrian delay
- MUTCD compliant vehicle and pedestrian clearances
- Yellow and all-red clearance intervals accommodate bicyclists

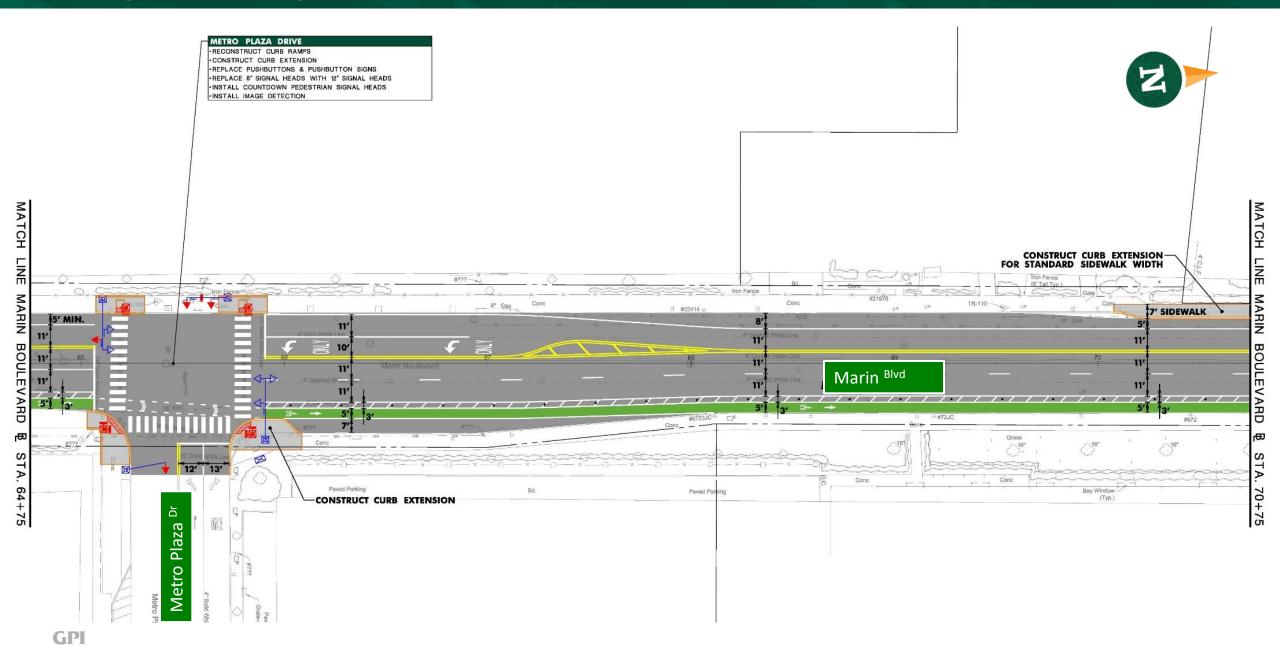
	2045 No-Build					2045 Build - 90 second cycle						
Intersection	AM		MD		PM		AM		MD		PM	
	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)
1 - Marin Boulevard & Montgomery Street	F	86.2	В	16.6	F	168.8	D	47.4	В	19.3	С	32.8
2 - Marin Boulevard & Oviedo Way	Α	1.0	Α	1.0	Α	1.0	Α	1.0	Α	1.0	Α	1.0
3 - Marin Boulevard & Wayne Street	Α	1.0	Α	1.0	Α	1.0	Α	1.0	Α	1.0	Α	1.0
4 - Marin Boulevard & Christopher Columbus Drive	F	92.4	D	53.6	D	42.0	E	66.3	С	29.9	D	52.5
5 - Marin Boulevard & Morgan Street	Α	8.5	Α	5.9	В	10.5	Α	6.5	Α	6.7	Α	8.4
6 - Marin Boulevard & Bay Street	Α	1.6	Α	1.6	Α	1.6	Α	5.6	Α	6.6	Α	8.4
7 - Marin Boulevard & 1st Street	В	17.1	В	14.2	В	13.0	В	15.1	В	11.9	В	13.7
8 - Marin Boulevard & 2nd Street	В	12.6	В	10.9	С	27.7	В	13.3	В	12.2	С	26.2
9 - Marin Boulevard & Metro Plaza Drive	D	35.6	В	16.6	D	49.5	С	20.6	В	15.3	D	41.0
10 - Marin Boulevard & 6th Street / Thomas Gangemi Drive	С	27.3	В	19.1	D	42.0	В	18.4	В	16.3	D	41.9

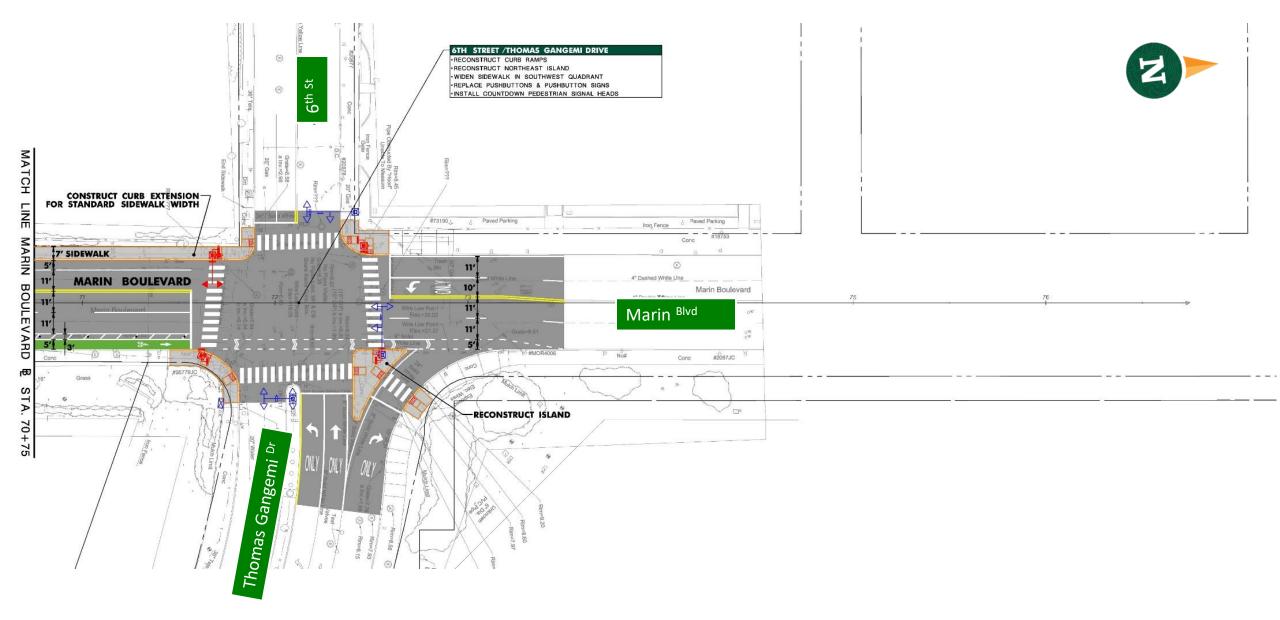












Next Steps

- Begin Final Design (Spring 2021)
 - Revise concept plan based on stakeholder input
 - Prepare final plans, specifications, and engineer's estimate
 - Submit to NJDOT Local Aid for Federal Authorization
- Project Advertisement, Award, & Construction (Summer 2023)



