THE CITY OF NORFOLK

Ocean View Avenue Comprehensive Transportation Study

Community Workshop #1

March 14, 2022

Welcome and Introductions

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Agenda

- Welcome and Introductions
- Project Overview and Background
- Existing Conditions Analysis
  - Safety Analysis
  - Speed Analysis
  - Traffic Operations Analysis
- BREAKOUT ROOMS
- Project Timeline and Next Steps
- Input Opportunities
- Q&A and Closing

Housekeeping

- Please keep your microphone muted.
- Questions will be addressed in the breakout rooms and at the end of the meeting.
- If you have a question, you may enter it using the Chat feature or raise your hand to be called on verbally.

Project Overview and Background

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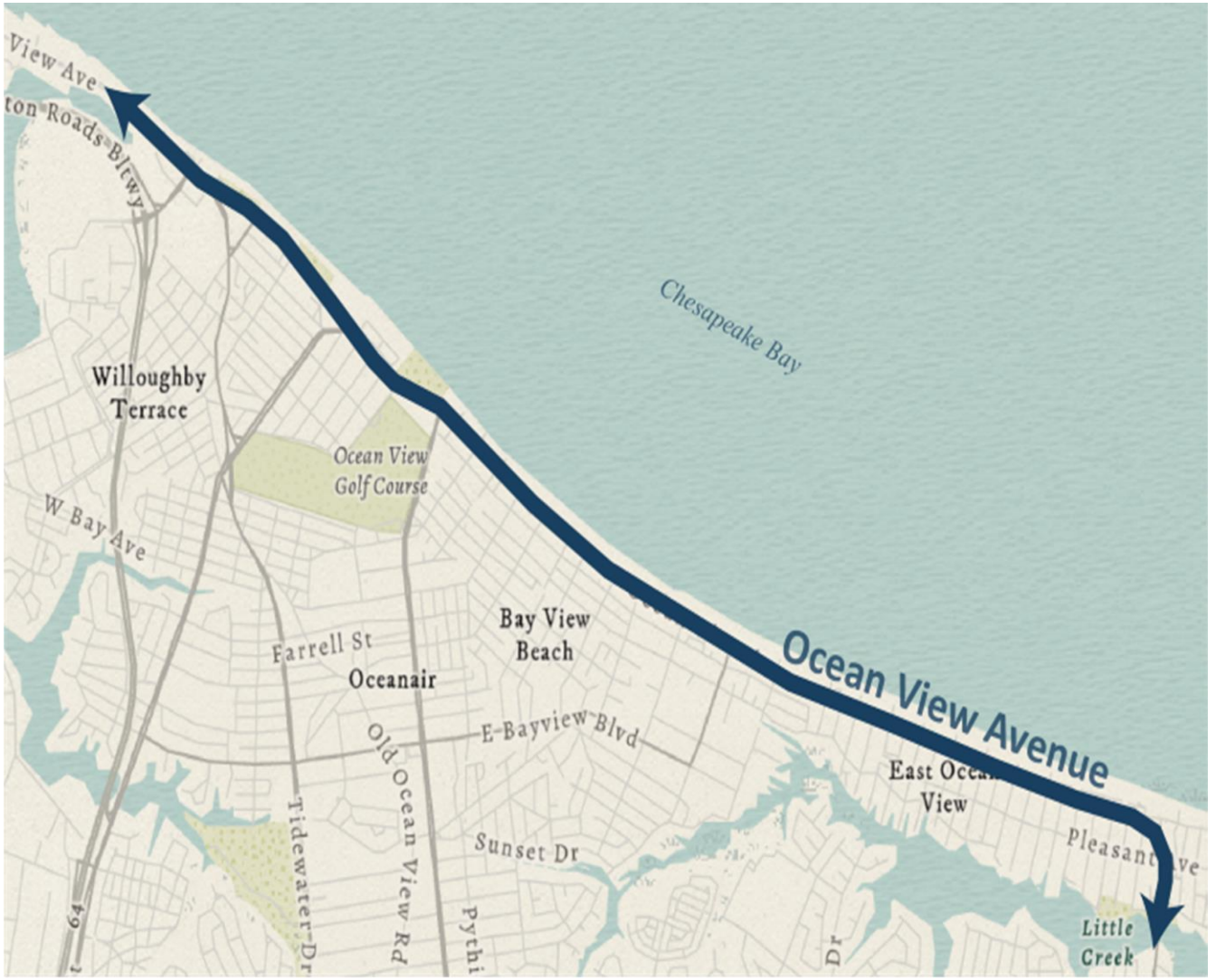
Project Overview

- Study Area – Ocean View Avenue
  - From Willoughby Spit to East Beach
- This study came from requests from communities along Ocean View Ave
- Evaluate feasibility of potential changes to improve transportation and safety along the corridor
- Not just a bike lanes project!



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Project Scope

- Evaluate feasibility of:
  - Incorporating golf carts into bike lanes
  - Expanding bike lanes along Ocean View Avenue between 1st View Street 19th Bay Street
  - Reducing the speed limit
  - Improving pedestrian crossings and beach access
- Scope items:
  - Safety analysis
  - Speed analysis
  - Traffic operations analysis
  - Conceptual alternatives development and assessment

What's Not Included?

- Detailed traffic analysis west of 1st View Street is not part of scope
  - Lane repurposing not currently being studied through Willoughby
  - This area has recently been studied as part of VDOT's HRBT and HREL studies
- Transit not a focus of this study
  - Transit routes and service were studied as part of Multimodal Transportation Master Plan
  - Improvements to bus stop facilities may be considered

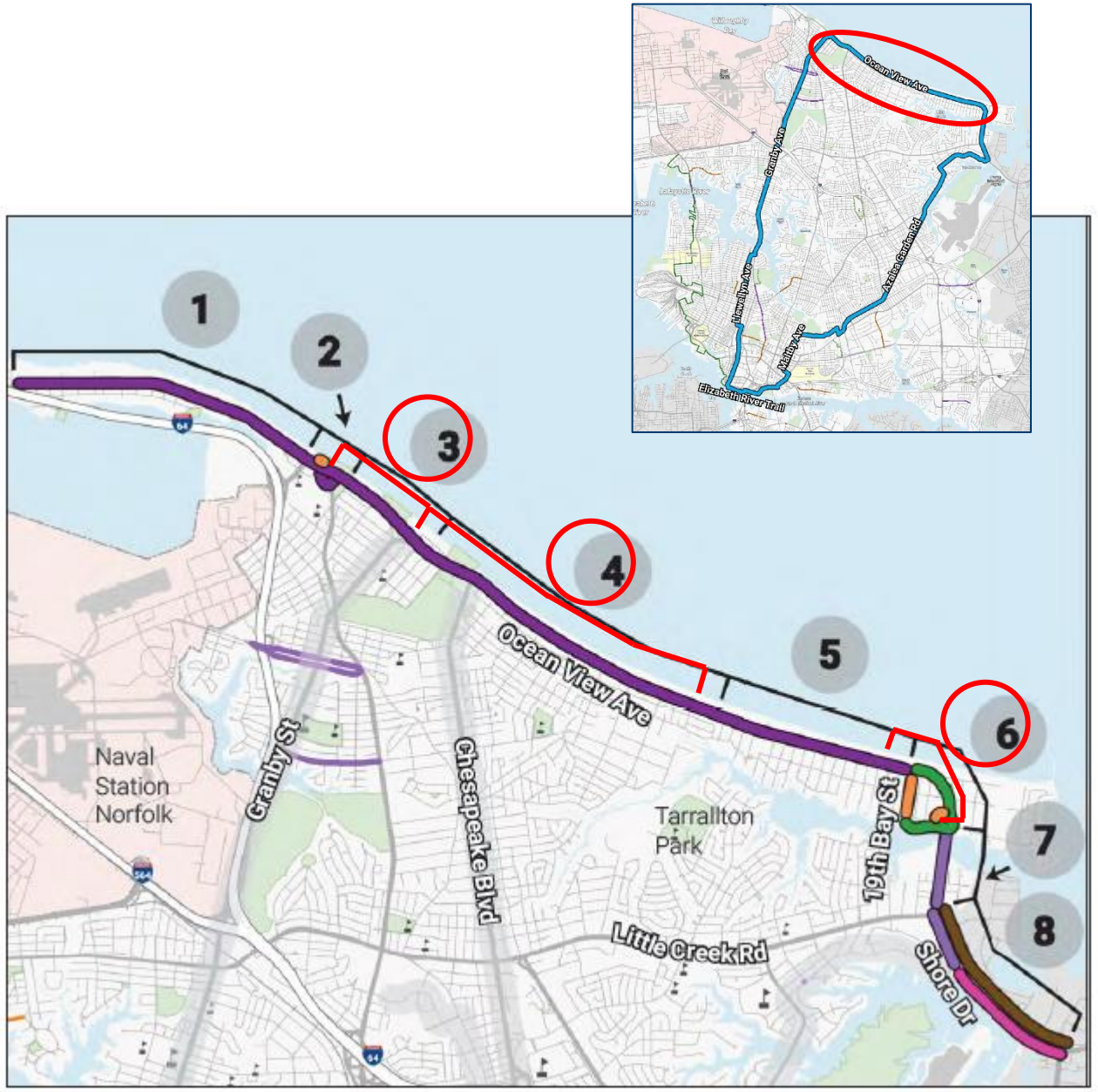
Project Background
Golf Cart Accommodations

- Inquiries from residential communities
- Potential use of golf carts to cross and/or travel along Ocean View Ave
- Speed limit reduction would be required based on code
- Evaluate feasibility of speed limit reduction and assess alternatives for accommodating golf carts with bike lanes

Project Background

Recommendations from Other Plans

- *Bicycle & Pedestrian Strategic Plan*
  - Corridor 10, Segments 3,4 & 6
  - Part of the 22.5-mile citywide loop
- *Multimodal Transportation Master Plan (Draft)*
  - Bicycle/scooter, pedestrian, and transit modal emphasis



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Project Background
Supporting Vision Zero

- Vision Zero policy adopted in 2019
- Strategy to eliminate all crash fatalities and severe injuries
- Slower speeds save lives
- Lane repurposing is a proven safety and traffic calming countermeasure

POLL QUESTIONS

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Existing Conditions Analysis

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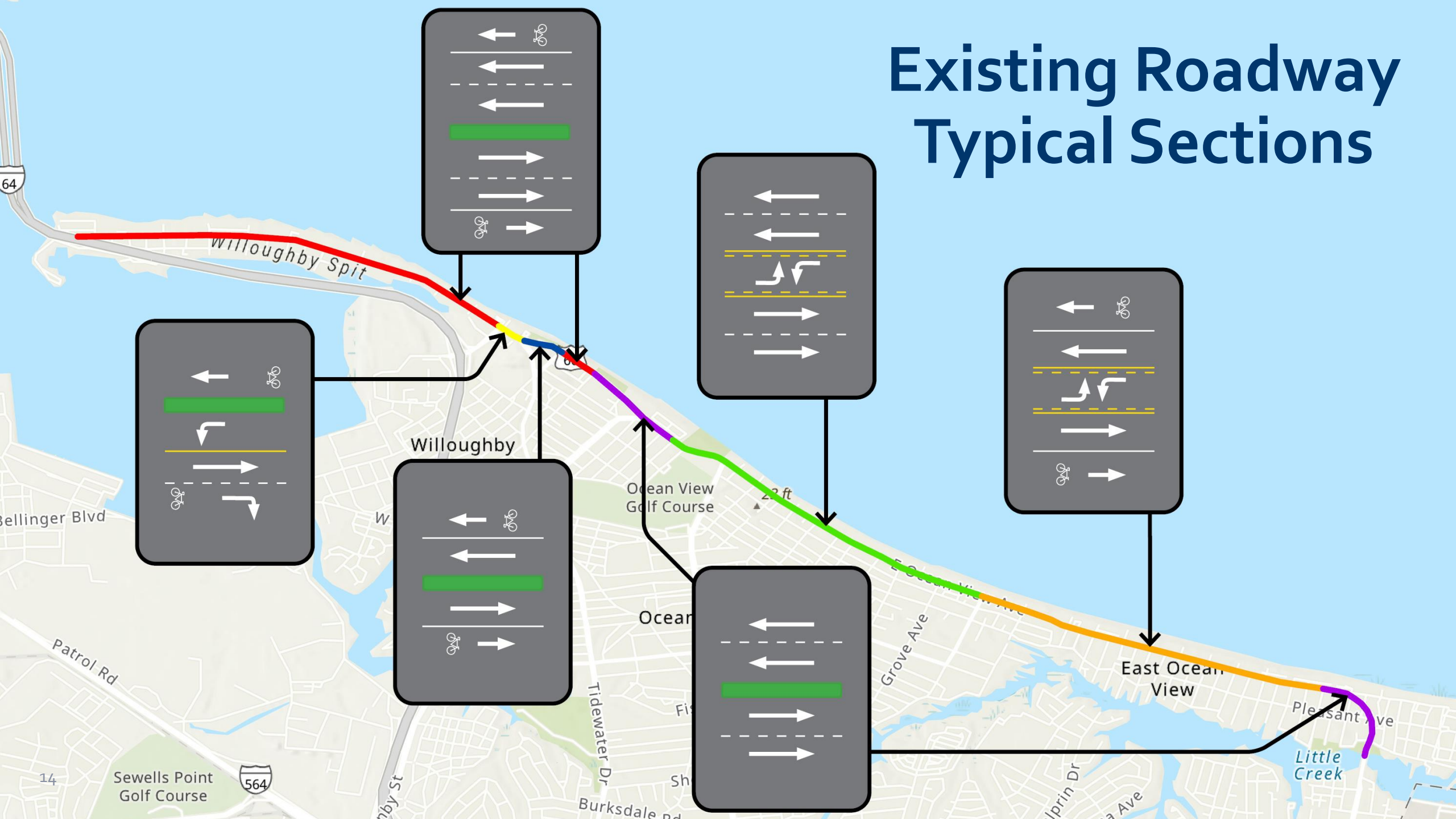
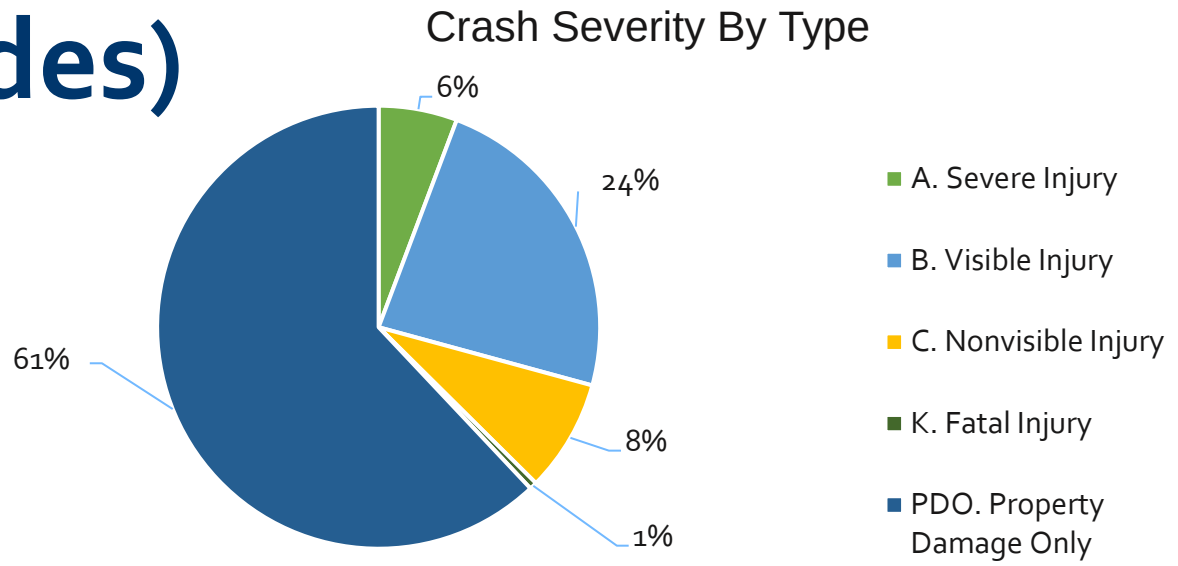
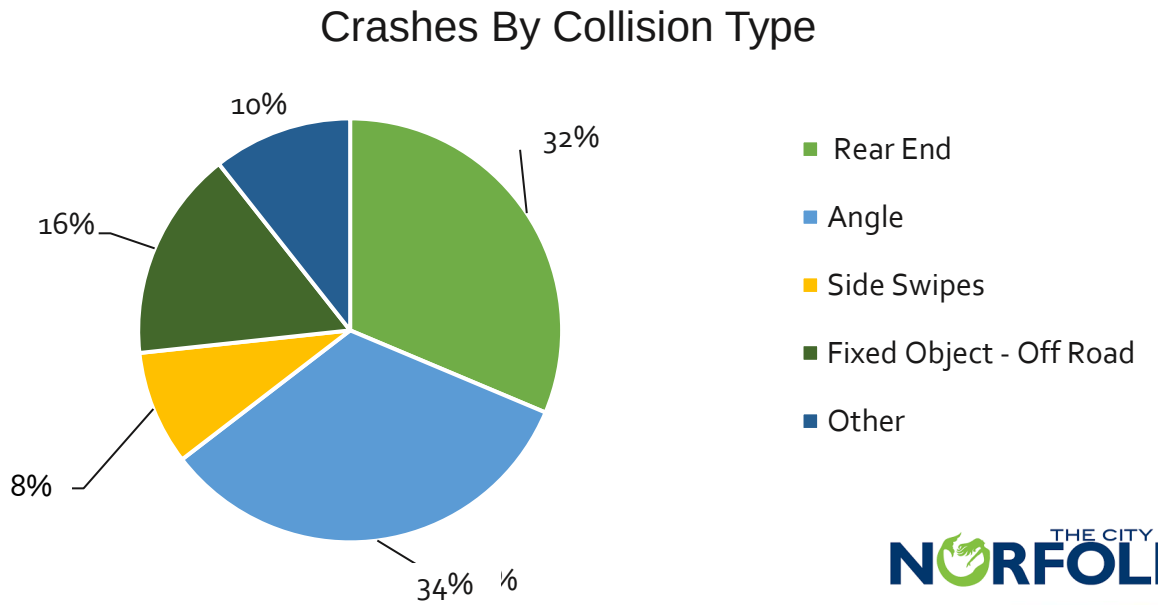
Existing Roadway Typical Sections



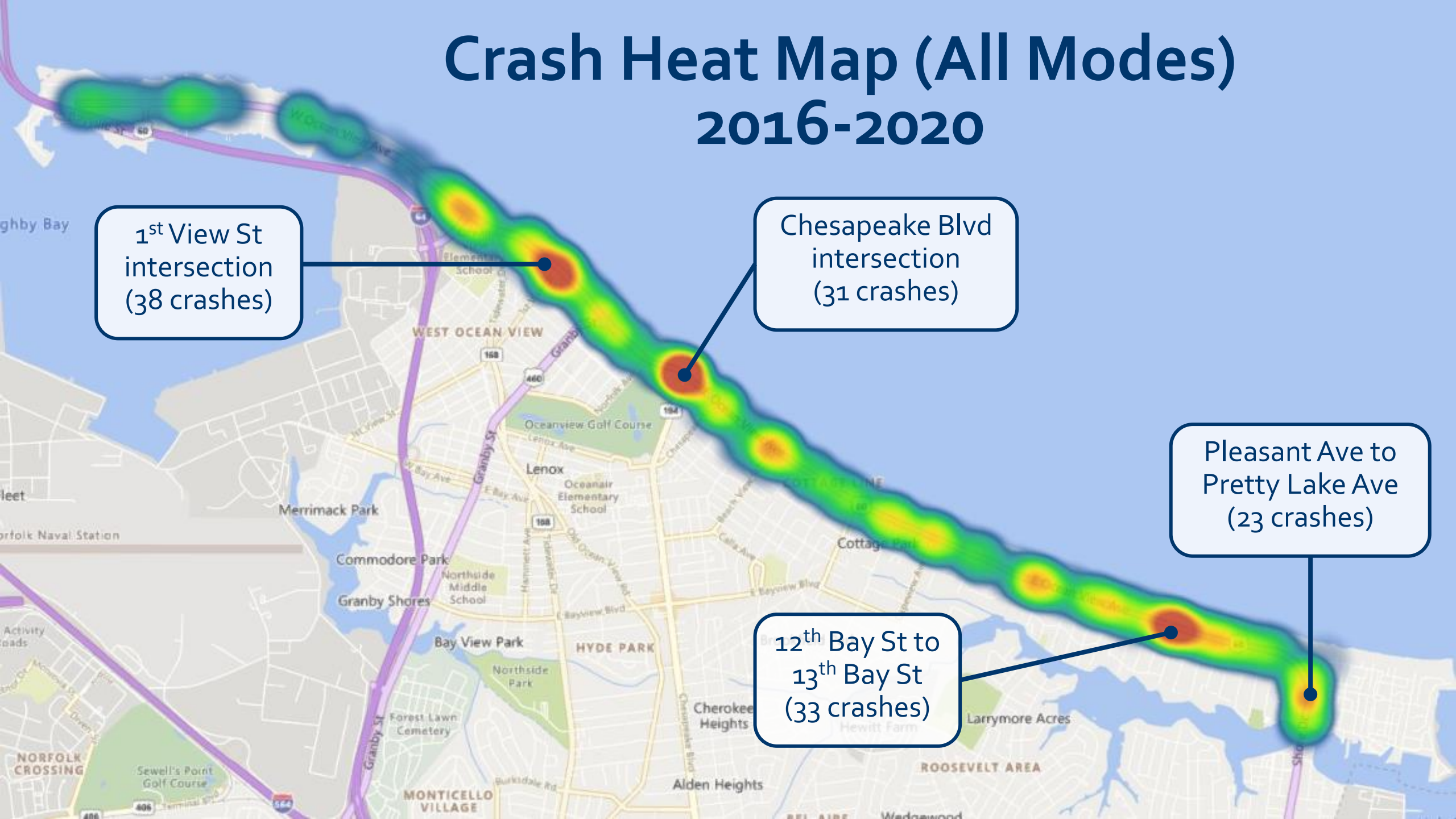
Crash Analysis (All Modes)

- 387 total crashes from 2016 to 2020
- 2 fatalities reported in 2017
- 39% of all crashes result in injury
- Rear end and angle type crashes account for 66% of total crashes

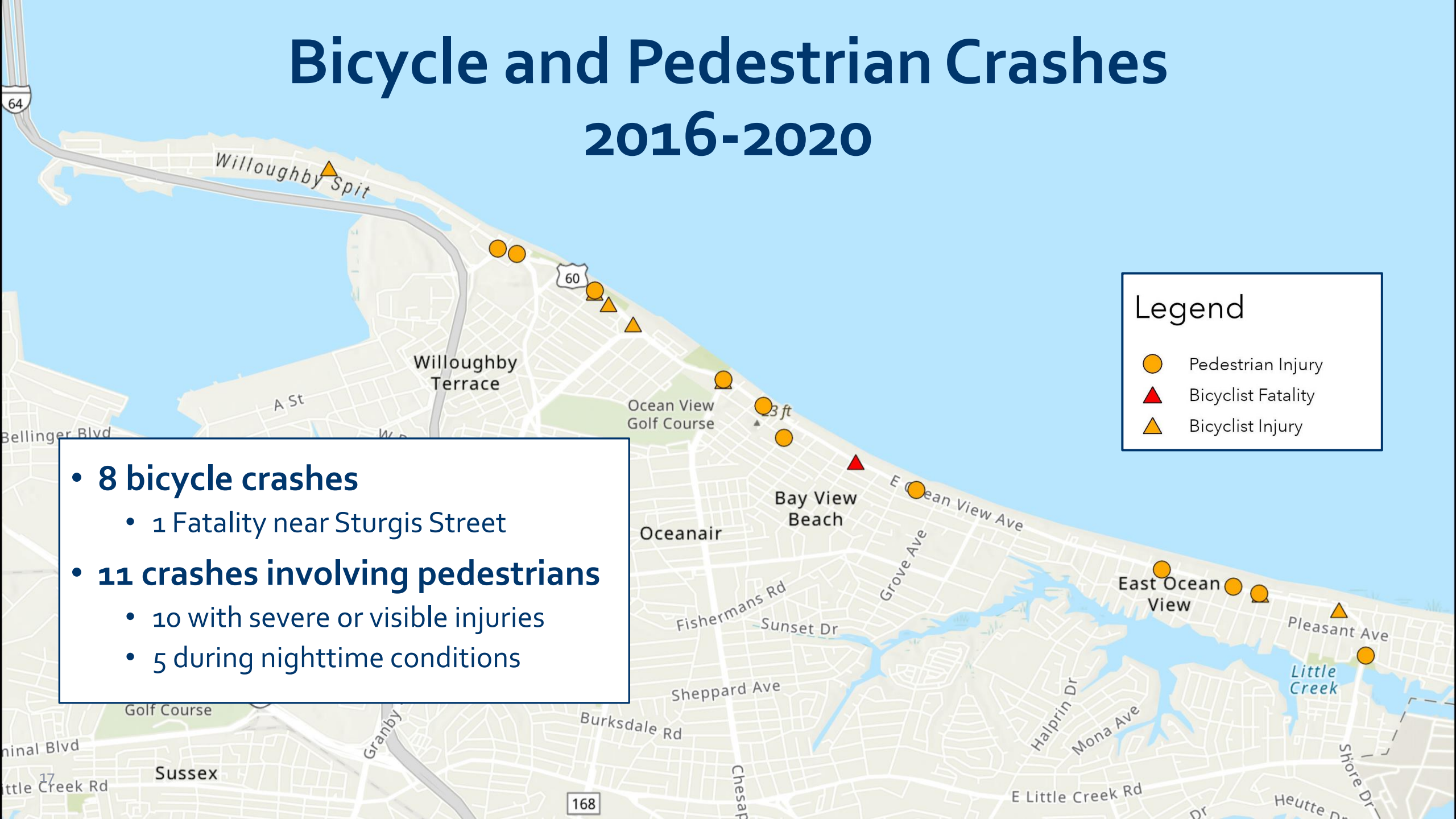




Crash Heat Map (All Modes) 2016-2020



Bicycle and Pedestrian Crashes 2016-2020



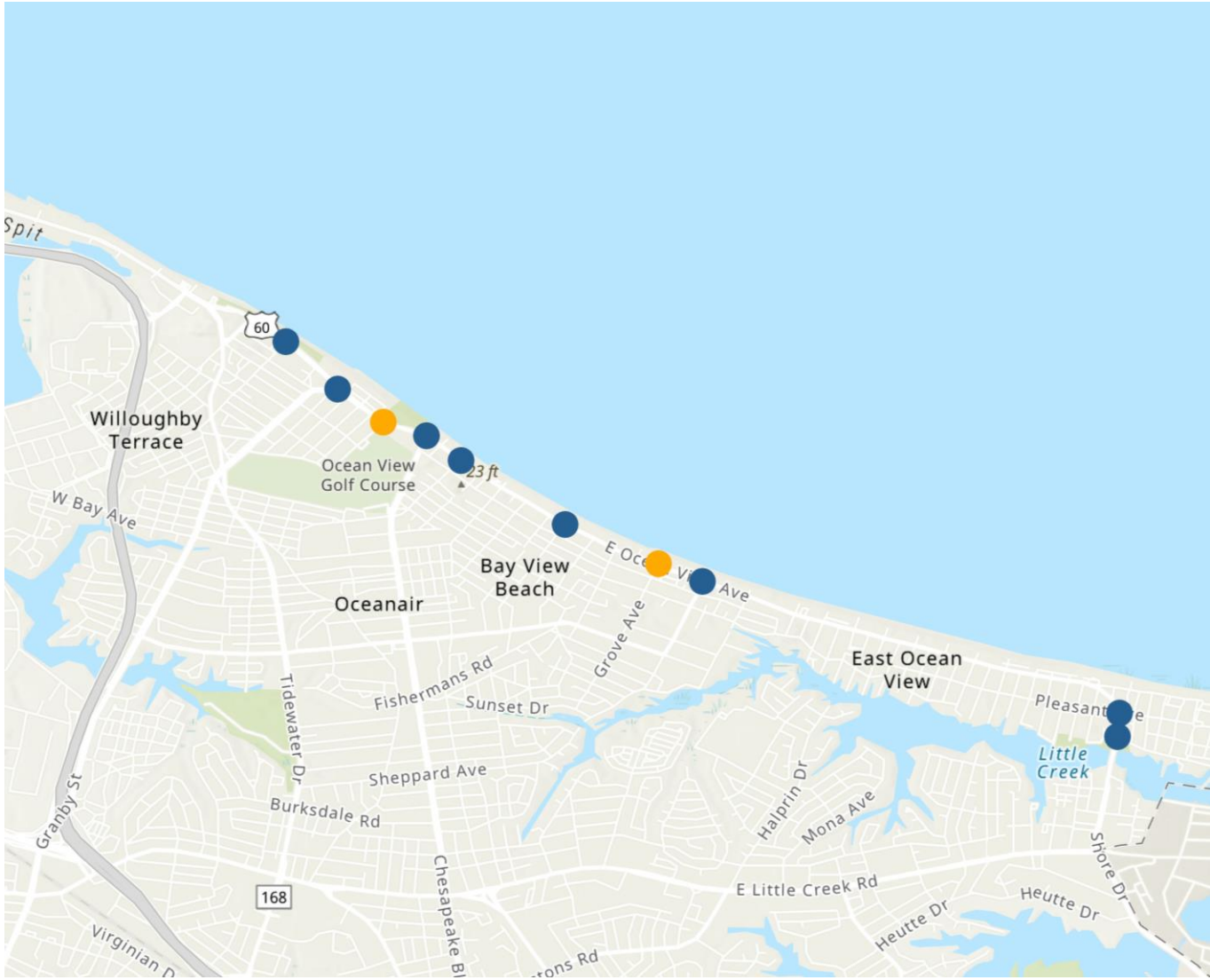
Legend

- Pedestrian Injury
- Bicyclist Fatality
- Bicyclist Injury

- **8 bicycle crashes**
  - 1 Fatality near Sturgis Street
- **11 crashes involving pedestrians**
  - 10 with severe or visible injuries
  - 5 during nighttime conditions

Data Collection

- 12-hour intersection turning movement counts
  - 8 signalized and 2 unsignalized intersections
  - Conducted on weekday in July 2021
- 24-hour roadway speed and volume counts
  - 6 locations along corridor
  - Conducted for 7-day period in July 2021



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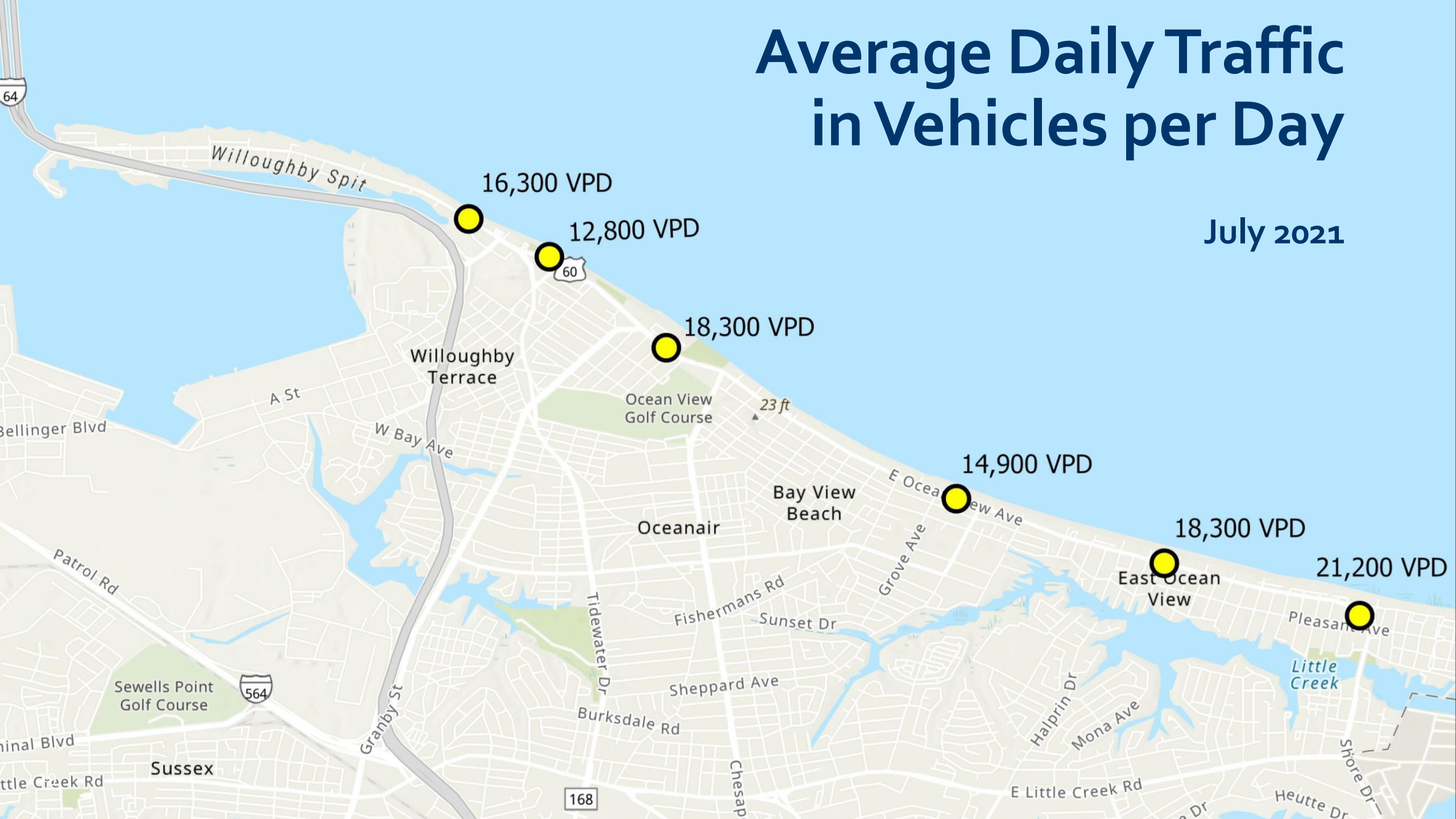
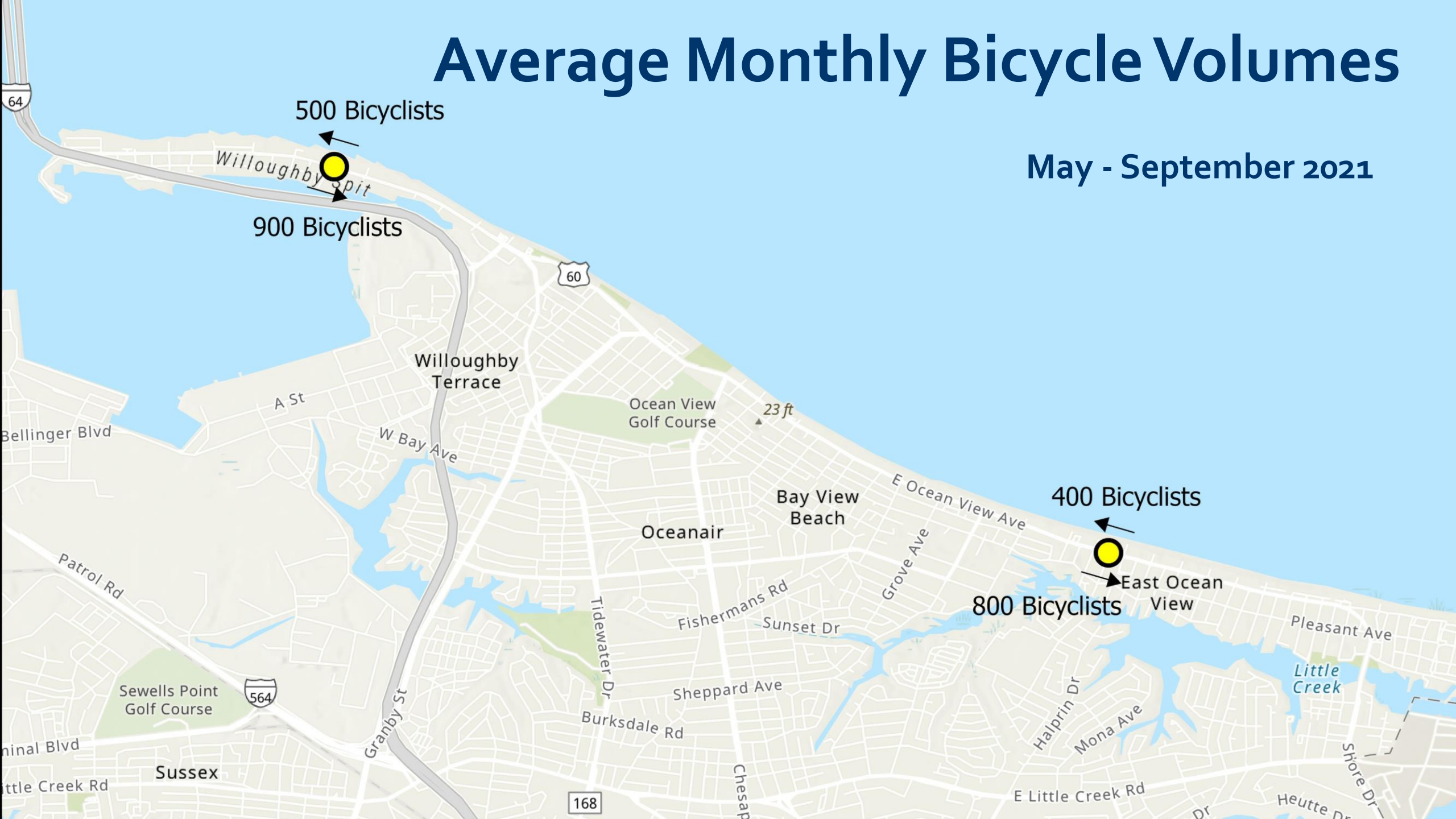
Average Daily Traffic in Vehicles per Day

July 2021



Average Monthly Bicycle Volumes

May - September 2021

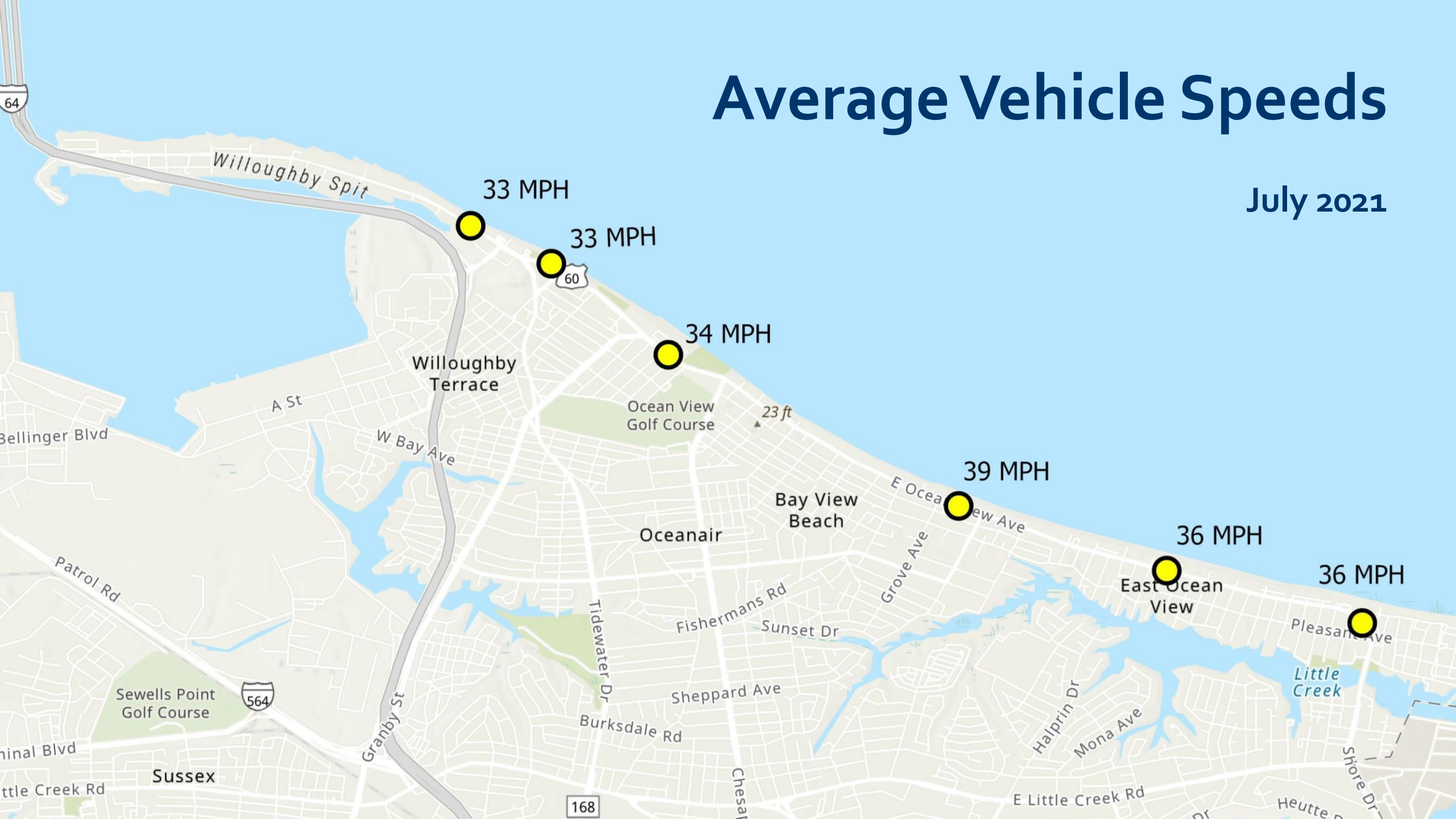


Speed Analysis

- Average Speed – statistical average of individual speeds of all vehicles observed to travel past collection point
- 85th Percentile Speed – speed at or below which 85% of all vehicles are observed to travel past collection point
- Although the speed limit is posted at 35 MPH, 85th percentile speeds along the corridor range between 39 MPH and 43 MPH
- Travel speeds are generally observed to be lower in sections where bicycle lanes exist

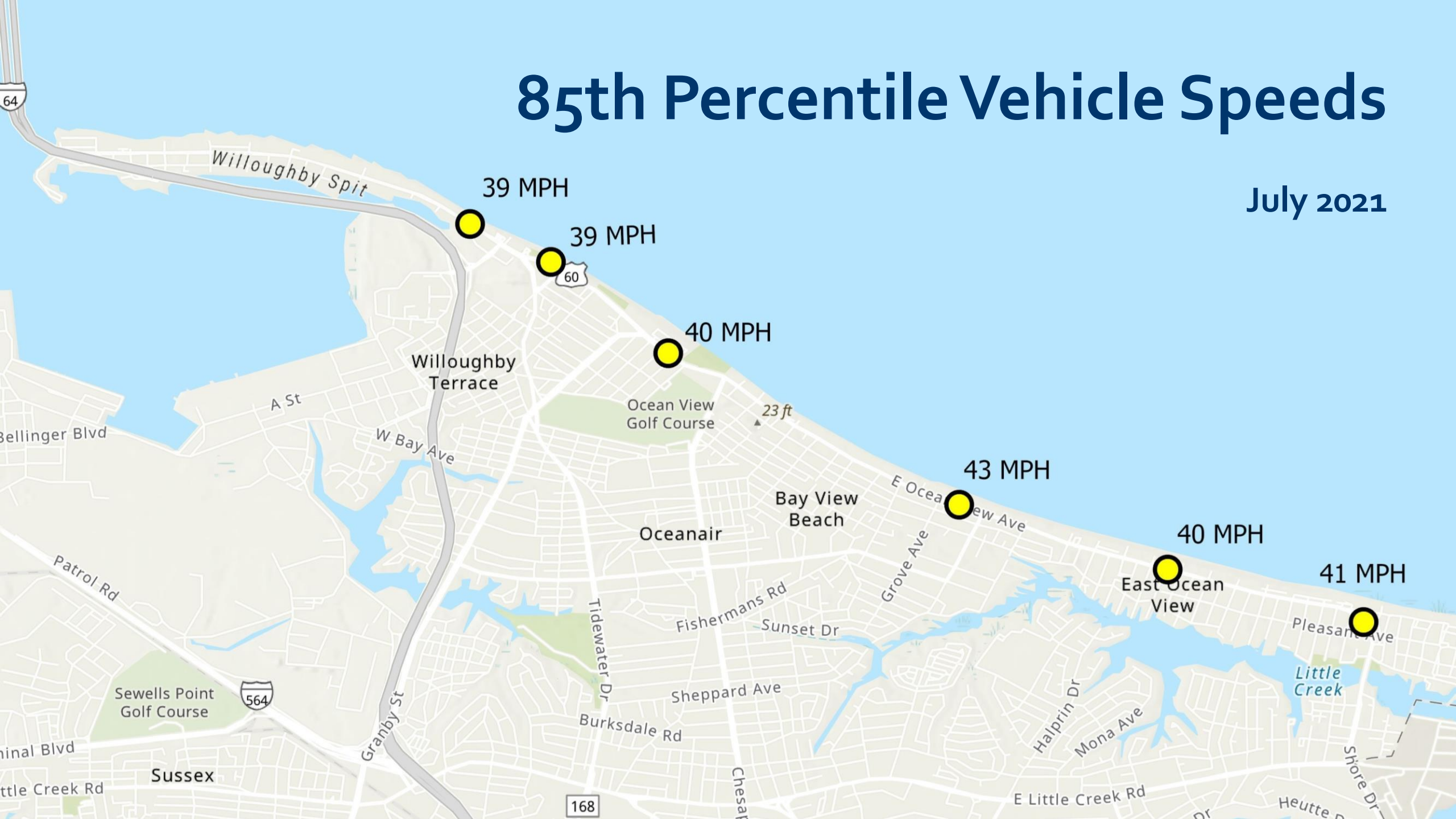
Average Vehicle Speeds

July 2021



85th Percentile Vehicle Speeds

July 2021



Traffic Operations Analysis

- Existing conditions (2021) analysis
- Typical weekday AM and PM peak hour conditions
- Traffic volumes collected in July 2021 were increased by **10%** to account for COVID-19 impacts
- Traffic analysis measures:
  - Average vehicle delay and associated level of service (LOS)
  - Corridor travel time

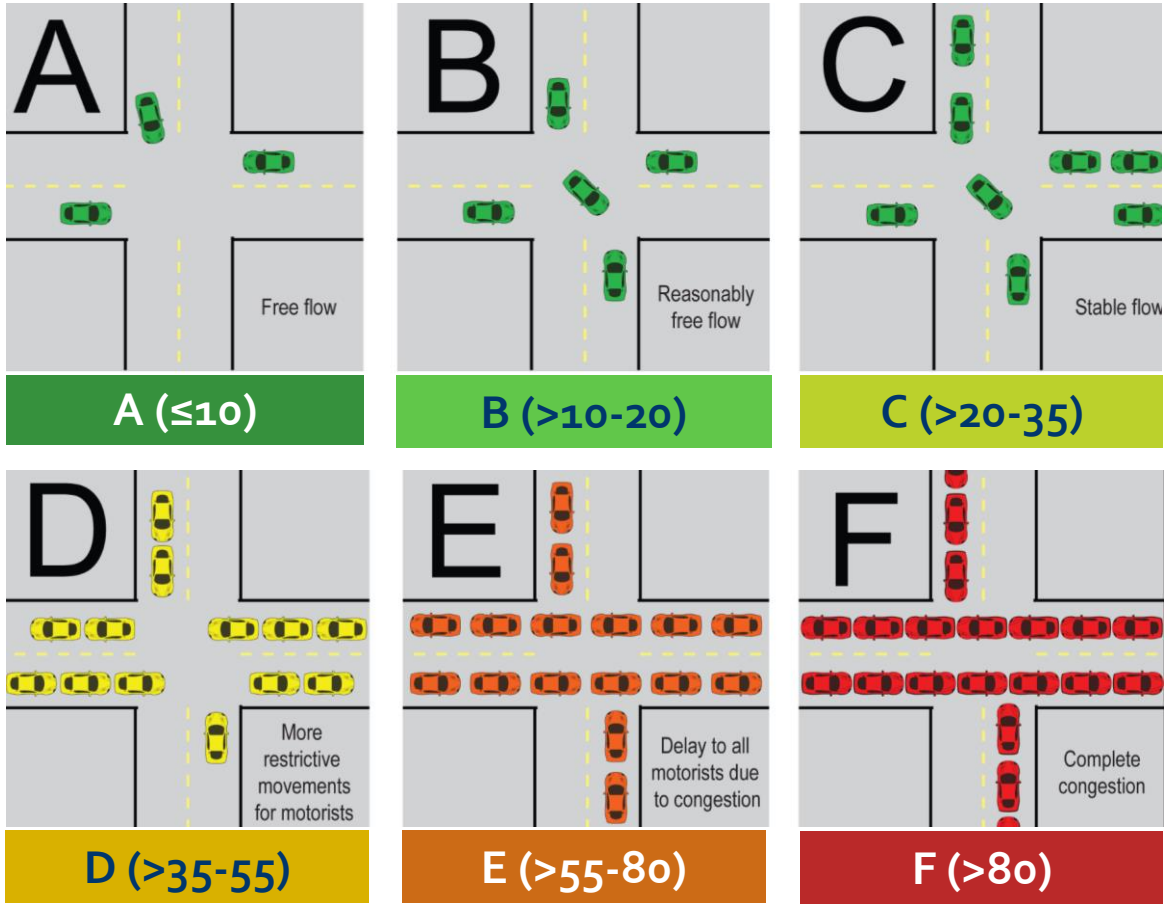
Traffic Analysis Measures

Level of Service (LOS)

The amount of traffic congestion and delay experienced by a driver at an intersection.

- Letter grade range **A** to **F**
  - **LOS A** – little to no congestion and delay
  - **LOS F** – severe congestion and long delay
  - **LOS A – LOS D** = Considered acceptable during peak hours for overall intersection
    - *Standard practice for urban areas*

Overall Signalized Intersection LOS Depiction



LOS (average delay in seconds per vehicle)

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Existing (2021) Traffic Analysis Results

Intersection	Intersection Level of Service (Delay)	
	AM	PM
First View St & Ocean View Ave	A (7.7s)	B (15.4s)
Granby St & Ocean View Ave	B (10.3s)	B (19.0s)
Norfolk Ave & Ocean View Ave	A (0.2s)	A (0.5s)
Chesapeake Blvd and Ocean View Ave	A (9.5s)	C (26.2s)
Chesapeake St & Ocean View Ave	B (10.7s)	B (11.8s)
Sturgis St & Ocean View Ave	A (7.2s)	A (6.5s)
Grove Ave and Ocean View Ave	A (0.2s)	A (0.2s)
Cape View Ave and Ocean View Ave	B (11.2s)	B (16.7s)
Pleasant Ave and Shore Dr	B (16.5s)	B (15.0s)
Pretty Lake Ave and Shore Dr	B (10.8s)	B (11.9s)

Level of Service Grade
(average delay in seconds per vehicle)

- A (≤10)
- B (>10–20)
- C (>20–35)
- D (>35–55)
- E (>55–80)
- F (>80)

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Existing Corridor Travel Times

- First View Street to Pretty Lake Avenue

Peak Hour	Eastbound	Westbound
AM	9:00 mins	8:11 mins
PM	9:14 mins	8:34 mins

Project Timeline Overview

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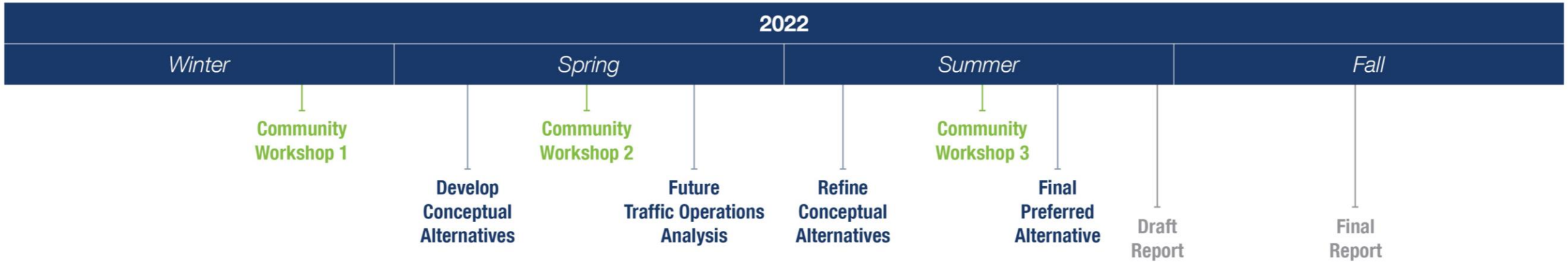
Project Timeline



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BREAKOUT ROOMS

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Contribute to Online Comment Map and Survey

Online Comment Map

Online Survey

Project Timeline and Next Steps

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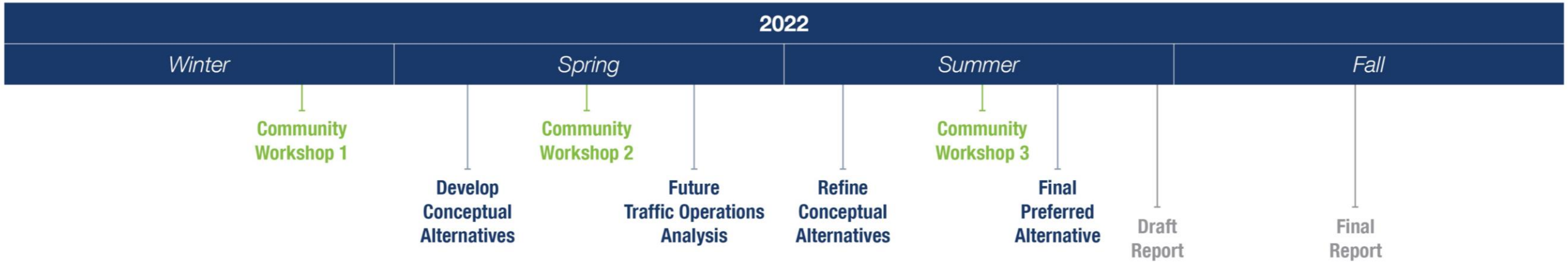
Project Timeline



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Next Steps

- Review public comments and input from this workshop, the online survey, and online comment map
- Develop conceptual alternatives for assessment
  - Potential alternative typical sections along Ocean View Avenue
  - Potential alternative intersection crossings
- Conduct second community workshop to solicit feedback on each alternative

Input Opportunities

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We Need Your Input!

- **Breakout Rooms**
- **Online Community Survey**
  - Deadline April 3, 2022
- **Interactive Comment Map**
  - Deadline April 3, 2022
- **Online Comment Form**

Project webpage:
www.norfolk.gov/oceanviewstudy

Contribute to Online Comment Map and Survey

Online Comment Map

Online Survey

Q&A and Closing Remarks

THANK YOU!