



Ocean View Avenue Comprehensive Transportation Study

Community Workshop #3
October 17, 2022





Welcome and Introductions

Agenda

- Welcome and Introductions
- Summary of Public Engagement Round #2
- Lane Repurposing Recommendations
- Traffic Operations Analysis
- Pedestrian Crossing Treatment Recommendations
- Preliminary Study Recommendations
- Project Timeline and Next Steps
- INFORMATION STATIONS



Summary of Public Engagement

Round #2

June to July 2022

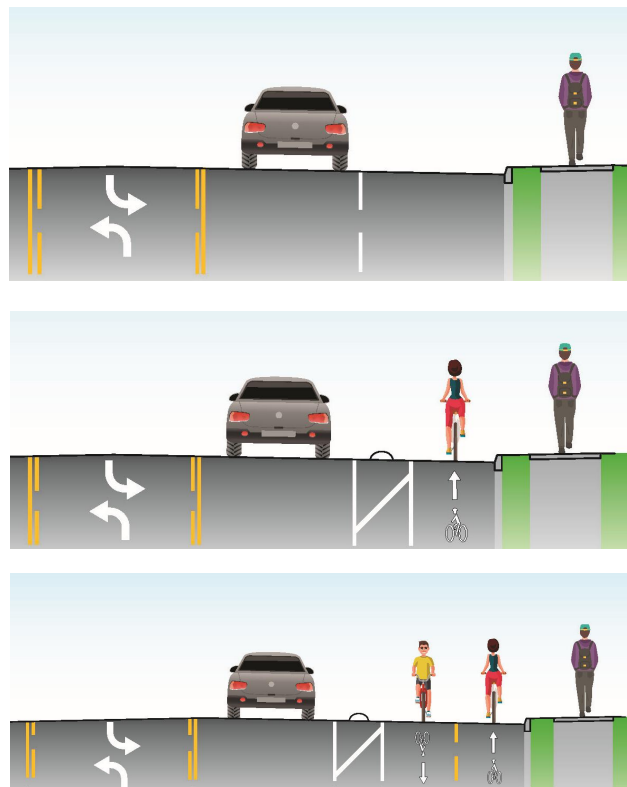
Community Workshop and Survey #2

- Workshop held June 27, 2022
 - Total of 63 attendees (not including project team)
 - Presentation followed by table breakouts
- Online survey open for 4 weeks
 - 702 individuals responded
 - 90% of those who provided zip code live in vicinity of Ocean View Avenue



Preliminary Conceptual Alternatives

Average Ratings from Workshop and Survey



Typical Section

Alternative 1A/1B:
Existing/No Build

1.72

2.81

Alternative 2A/2B:
Directional Bike Lanes

3.83

2.91

Alternative 3A/3B:
Two-Way Cycle Track

3.18

2.36

■ Workshop Ratings

■ Survey Ratings

Community Feedback: Preliminary Conceptual Alternatives

- Widen sidewalks and add more trees to provide shade and protect pedestrians
- Provide boardwalk or side path for biking and walking
- Provide taller barriers between cyclists and motor vehicles
- Provide consistent geometry and striping, and continue bike lanes around the curve to Pretty Lake Avenue
- The two-way cycle track (Alternatives 3A and 3B) seems like it would make access to/from the residential driveways more difficult and could confuse drivers

Online Survey Comments: Bike Lanes



- 392 of 702 survey respondents provided comments on the preliminary conceptual alternatives
- 175 respondents (45% of those leaving comments) commented in favor of bike lanes.
 - Desire to improve safety for cyclists
 - Need to combat excessive speeding
- 168 respondents (43% of those leaving comments) commented against bike lanes
 - Concerns about traffic congestion with the reduction to one travel lane in each direction

Additional Community Feedback

- Need for better maintenance of existing sidewalks and bike lanes
- Need to combat excessive speeding and implement stricter speed enforcement
 - 76 survey respondents (19% of those leaving comments)
- Provide additional on-street parking and public parking at beach access locations





Lane Repurposing Recommendations

Conceptual Alternatives Evaluation

Alternative	Typical Section	Community Ratings (1 to 5 Scale)		Traffic Analysis Results	Reduces Speeds	Improves Bicycle Travel	Corridor Cost
		Workshop	Survey				
1A / 1B	Existing / No Build	1.72	2.81	Excess capacity available	No	No	\$0
2A / 2B	Directional Bike Lanes	3.83	2.91	LOS C or better (Build 2)	Yes	Yes	\$2-4M
3A / 3B	Two-Way Cycle Track	3.18	2.36	LOS C or better (Build 2)	Yes	Yes	\$10-11M

Recommended Preferred Alternative

- Alternative 2 – repurpose one travel lane in each direction to provide buffered bike lanes
- “Build 2” Option – implement between 1st View St and 19th Bay St
- Provide physical separation for bike lanes where feasible based on driveway spacing
- Provide on-street parking where feasible based on available pavement width and driveway spacing (similar to existing conditions); parking will be located against the curb, to the outside of the bike lane
- Provide alternative bicycle connection from 19th Bay St to Pretty Lake Ave as identified in Bike and Ped Strategic Plan

Alternative 2A: Directional Bike Lanes Without Parking (54' Pavement Width)



Alternative 2B: Directional Bike Lanes With Parking (64' Pavement Width)



Protected Bike Lanes

- Bike lanes recommended to have physical protection based on traffic volumes and speeds
- Most significant challenge is high density of driveways
- Recommendations:
 - Curbed islands at beginning and end of each block
 - “Armadillo” style separators along each block where feasible based on driveway spacing





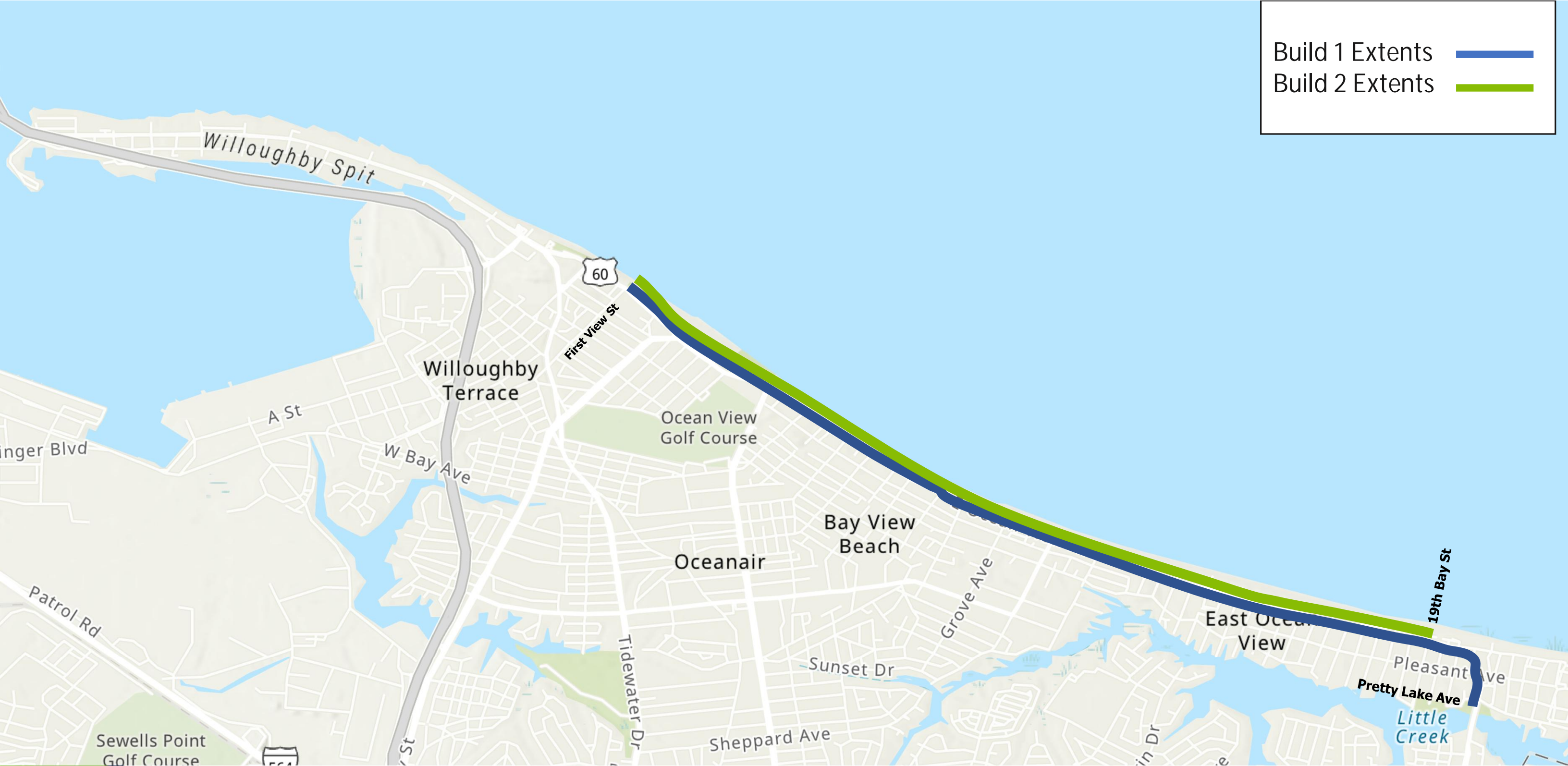


Traffic Operations Analysis

Traffic Analysis Scenarios

Analysis Scenario	Roadway Geometry*	Traffic Volumes	Peak Hours
Existing (2021)	Existing	2021	AM and PM
No Build (2031)	Existing	2031	
Build 1 (2031)	Repurposed lane in each direction on Ocean View Ave/Shore Dr from 1 st View St to Pretty Lake Ave	2031	
Build 2 (2031)	Repurposed lane in each direction on Ocean View Ave From 1 st View St to 19 th Bay St	2031	
*The 2031 No Build and Build scenarios include a speed limit reduction on Ocean View Ave/Shore Dr from 35 to 30 mph			

Build 1 Extents 
Build 2 Extents 



Traffic Analysis Measures

- Reviewed and compared traffic measures to characterize traffic conditions
 - Average vehicle delay and associated level of service (LOS)
 - Corridor travel time
- *Standard practice of Federal Highway Administration (FHWA) and Virginia Department of Transportation (VDOT)*

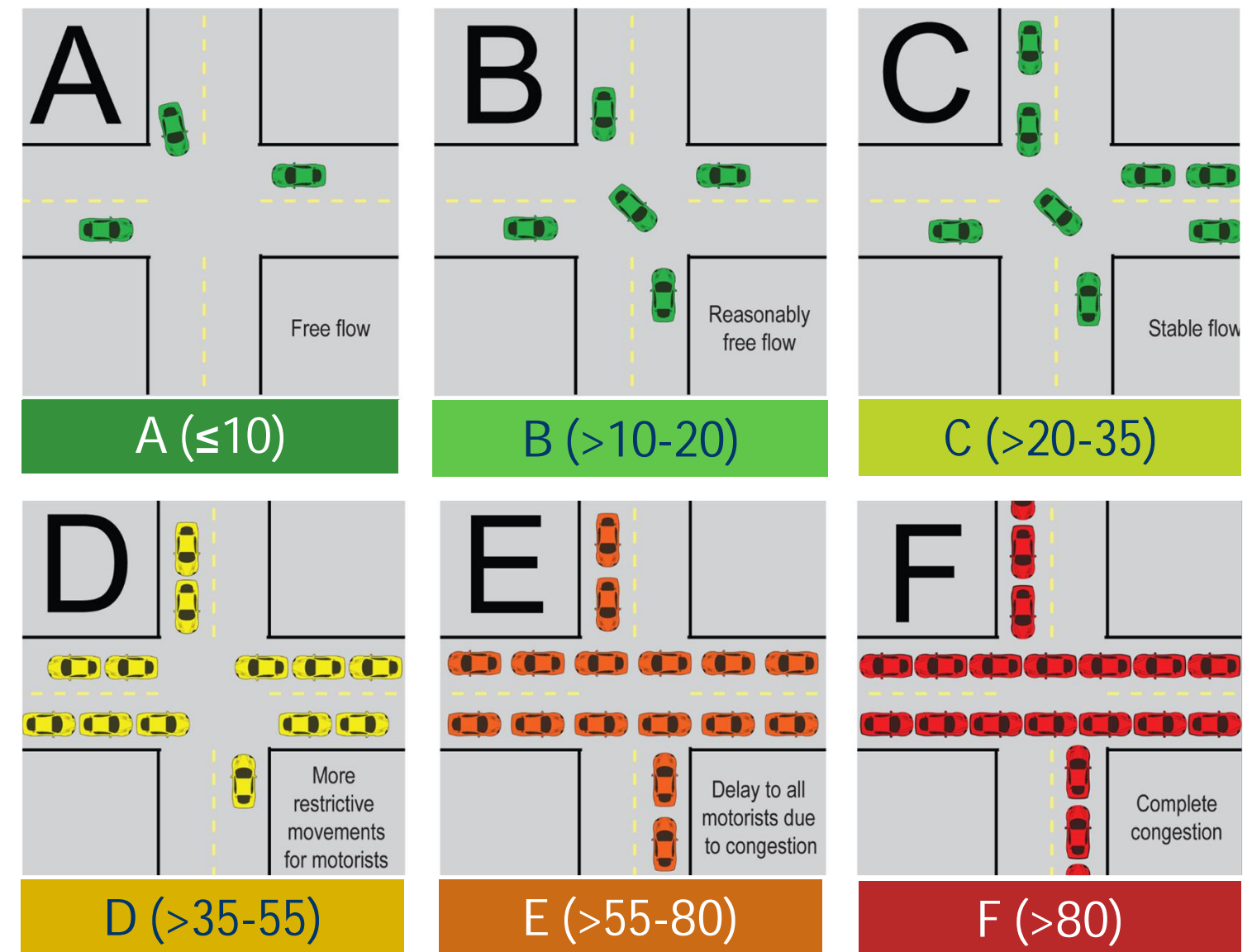
Traffic Analysis Measures

Level of Service (LOS)

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

- Letter grade range A to E
 - 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)

Traffic Analysis Results (PM Peak Hour)

Intersection	Intersection Level of Service (Delay)			
	2021 Existing	2031 No Build	2031 Build 1	2031 Build 2
First View St & Ocean View Ave	B (15.4s)	B (17.6s)	C (21.9s)	C (21.9s)
Granby St & Ocean View Ave	B (19.0s)	C (24.6s)	C (32.7s)	C (32.7s)
Norfolk Ave & Ocean View Ave	A (0.5s)	A (0.5s)	A (0.6s)	A (0.6s)
Chesapeake Blvd and Ocean View Ave	C (26.2s)	C (24.1s)	C (30.8s)	C (31.1s)
Chesapeake St & Ocean View Ave	B (11.8s)	A (3.8s)	A (6.3s)	A (6.3s)
Sturgis St & Ocean View Ave	A (6.5s)	A (6.3s)	A (8.4s)	A (8.6s)
Grove Ave and Ocean View Ave	A (0.2s)	A (0.2s)	A (0.2s)	A (0.2s)
Cape View Ave and Ocean View Ave	B (16.7s)	C (22.0s)	C (21.4s)	C (23.0s)
Pleasant Ave and Shore Dr	B (14.9s)	B (16.7s)	C (23.7s)	B (12.9s)
Pretty Lake Ave and Shore Dr	B (11.9s)	B (14.0s)	D (43.8s)	B (12.6s)

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)

Traffic Analysis Measures

- Corridor Travel Time
 - Duration of total travel time between two points
 - Includes stops and delays
 - Used to compare traffic operations on westbound and eastbound Ocean View Avenue



Corridor Travel Time Results in Minutes (PM Peak Hour)



Traffic Analysis Results Summary

- Existing & No Build Conditions
 - Available capacity in both directions of Ocean View Avenue
- Build 1 Conditions
 - All intersections operate at overall LOS D or better
 - Some movements at Pleasant Avenue and Pretty Lake Avenue intersections exceed capacity (LOS E/F)
 - Adds > 60 seconds of travel time compared to No Build
 - Congestion along Shore Drive section could encourage additional traffic on Pleasant Avenue
- Build 2 Conditions
 - All intersections operate at overall LOS C or better
 - Compared to Build 1, improves operations at Pleasant Avenue and Pretty Lake Avenue intersections
 - Adds ~30 seconds of travel time compared to No Build



Pedestrian Crossing Treatment Recommendations

Community Feedback: Top Locations for New Pedestrian Crossings or Enhanced Crossing Treatments

1. 21st Bay Street (85 mentions)
2. Cape View Avenue (53 mentions)
3. 1st View Street (52 mentions)
4. Sturgis Street (37 mentions)
5. 5th Bay Street (32 mentions)
6. Beach View Avenue (32 mentions)
7. Beaumont Street (32 mentions)
8. Norfolk Avenue (30 mentions)
9. 3rd Bay Street (30 mentions)
10. 11th View Street (30 mentions)



Crossing Treatment: RRFB at Unsignalized Intersection

Existing Locations:

- Ocean View Beach Park
- Duffy's Lane
- Pretlow Library
- Community Beach Park

Recommended Locations:

- 5th Bay Street
- 19th Bay Street

Cost: ~\$200k



Crossing Treatment: Pedestrian Refuge Island at Unsignalized Intersection

Existing Locations:

- Warwick Avenue – recommended to reconstruct on west side of road
- Beach View Street – recommended to reconstruct on west side of road
- Grove Avenue – recommended to adjust placement on west side of road
- Inlet Road

Recommended Locations:

- 12 locations – see maps at ped station



Cost: ~\$700k



Preliminary Study Recommendations

<1 year

Near-Term Recommendations

- Install new pedestrian crossings with high visibility crosswalks
- Install advanced yield lines (shark teeth) at all marked crosswalks
- Conduct comprehensive maintenance of existing sidewalks
- Conduct comprehensive maintenance of existing bike lanes
- Install planned bicycle parking and scooter corrals
- Reduce speed limit to 30 MPH and provide targeted speed enforcement
- Initiate higher fines for speeding

1-2 years

Short-Term Recommendations

- Install enhanced pedestrian crossing treatments
- Consider installing overhead “State Law Yield to Pedestrians” signs at select locations
- Identify opportunities for additional parking at beach access points
- Identify potential locations for golf cart parking to allow golf carts to cross Ocean View Ave at designated signalized intersections

2-5 years

Intermediate-Term Recommendations

- Install new traffic signal at 21st Bay St intersection
- Implement lane repurposing to provide bike lanes from 1st View St to 19th Bay St
- Provide alternative bike connection from 19th Bay St to Pretty Lake Ave as identified in Bike and Ped Strategic Plan
- Perform before/after evaluation of corridor



Project Timeline and Next Steps

Project Timeline



Next Steps

This Study:

- Review public comments and input from this workshop and the associated online survey
- Develop final preferred alternative and study recommendations
- Develop draft and final report

Beyond This Study:

- Identify potential funding sources for improvements
- Implement near-term recommendations

We Need Your Input!

- Information Stations Tonight
- Online Community Survey
 - Deadline November 6, 2022
- Online Comment Form

Project webpage:
www.norfolk.gov/oceanviewstudy



Information Stations – 60 Minutes

Rules of Engagement

1. Please allow everyone a chance to speak.
2. There are no bad questions or ideas. Please share them all.
3. Respect opinions and ideas.
4. Stay focused on the specific topic at each station.

Complete Paper Survey
Tonight or Online Survey Later

