



Public Advisory Committee Meeting

Seabrook-Hampton Bridge Project
Project No. 15904

November 13, 2018



Agenda



- Welcome and Introductions
- Project Update
 - ▶ Public Meeting September 26, 2018
 - ▶ Alternatives Analysis Update
 - ▶ Vessel Users Meeting October 25, 2018
- Traffic Study Results
- Typical Roadway and Bridge Cross-Sections
- Next Steps
 - ▶ Alignment and Bridge Replacement Study
 - ▶ PAC, Abutters, Cultural Resources & Public Information Meetings in December & January

Project Update



- Public Informational Meeting Held on September 26, 2018
- Vessel Users Meeting Held on October 25, 2018
- Data Gathering and Collection – Existing conditions, environmental, cultural
- Development of Cultural and Environmental Documentation
- Investigated Rehabilitation Alternative
- Conducted Traffic Analysis
- Initiated Bridge Studies Phase
- Preparing for Alignment and Roadway Study

Public Informational Meeting



- Mixed opinions about rehabilitation vs replacement
- Abutters want to meet with the team before the next public meetings
- Questions about historical review process...will it limit options?
- Is there funding for the project?
- Bridge must accommodate traffic & emergency vehicles



About 75 people attended the meeting

Study of Rehabilitation Alternative



- Assessed rehabilitation for current capabilities, long term viability and for serving the purpose/need of project
- Requires significant modifications to carry current design loads, even without widening
- Insufficient capacity for widened roadway
- Providing widened roadway to meet needs of travelling public requires replacement the entire superstructure (all steel girders) and widening of piers
- Geometry of bascule pier restricts ability to update mechanical systems



Typical Bridge Underside

Vessel Users Meeting

- Met on October 25
- Discussed current usage
 - ▶ Over 800 lifts per year
 - ▶ 15 Vessels account for ~92% of lifts
 - ▶ Continuing to gather additional user information
- Solicited feedback from vessel users. Key concerns provided:
 - ▶ Width and height of channel important
 - ▶ Users have removed rigging from vessels to avoid requiring lifts
 - ▶ Staging construction to allow mobility for channel users
 - ▶ Allowing for future dredging equipment



Stated Navigational Clearances per Coast Surveys at MHW

Questions

- Before moving to the next section, please ask any questions you may have regarding
 - ▶ Public Informational Meeting
 - ▶ Rehabilitation Alternative
 - ▶ Vessel Users Meeting



Roadway Context

- Community Link and a Gateway into Downtown Hampton Beach
 - ▶ Roadway Transition
 - ▶ Appropriate Bicycle and Pedestrian Accommodations
 - ▶ Traffic Flow and safety
 - ▶ Emergency Response Considerations
 - ▶ Allows for future connectivity improvements at Dover Avenue Intersection



Looking North Into Hampton

Roadway Cross-Section

- Roadway Element Assessment:
 - ▶ Travel Lane
 - ▶ Shoulders
 - ▶ Sidewalk
- Methodology
 - ▶ Scope of Study
 - ▶ Evaluation of Existing Conditions
 - ▶ Projected Growth and Future Volumes
 - ▶ Proposed Conditions - Rehabilitation, New Bascule, & New Fixed Bridge
 - ▶ Multi-modal Cross-Section Considerations



Looking downward at bascule span

Data Gathering



- ▶ NHDOT Automated Traffic Recorder
- ▶ Multi-modal Video Turning Movement Counts
- ▶ Hampton Beach Master Plan (HBMP) Traffic Data
- ▶ Town of Hampton and Rockingham Planning Commission Growth Rates
- ▶ Harbor Master and Bridge Lift Logs

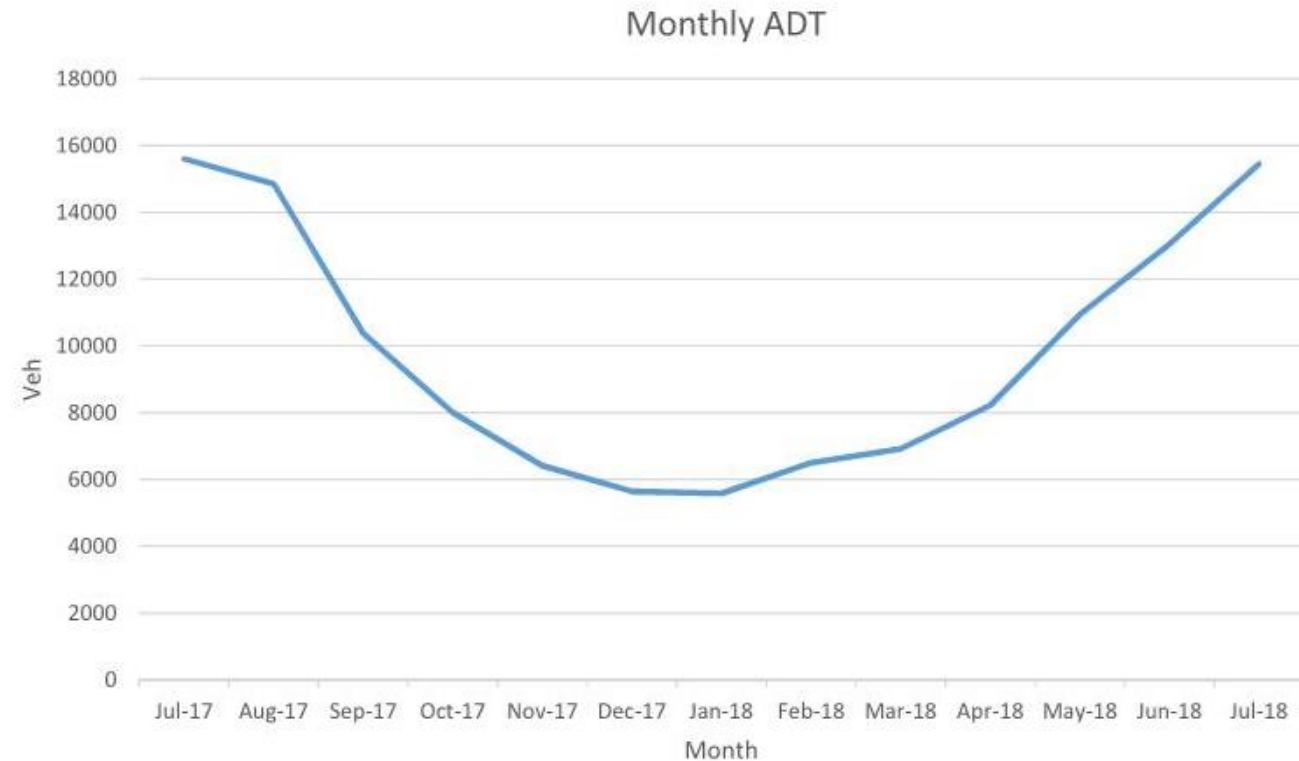
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Date	Type	Name of vessel	Direction	# of Vessels
5/3/18	Party	Audrey Mae	IN	1
5/3/18	Party	Yellow Bird	IN	1
5/3/18	Party	Merrilee III	IN	1
5/4/18	Party	Yellow Bird/Audrey Mae/Merrilee III	out	3
5/4/18	Party	White Star/Audrey Mae/Merrilee III	IN	3
5/4/18	Party	Yellow Bird	IN	1
5/5/18	Party	Yellowbird	Out	1
5/5/18	Party	Merrilee III	Out	1
5/5/18	Party	Merrilee III	In	1
5/5/18	Sport	Sea Castle	In	1
5/5/18	Party	Audrey Mae	In	1
5/5/18	Party	Tracy Anne	In	1
5/5/18	Party	Yellowbird	In	1
5/5/18	Party	North Star/White Star	In	2
5/6/18	Party	Yellowbird	out	1
5/6/18	Party	Audrey Mae/Merrilee III	Out	2
5/6/18	Party	Tracy Anne	Out	1
5/6/18	Party	Audrey Mae	In	1
5/6/18	Party	Merrilee III	In	1
5/6/18	Party	Tracy Anne	In	1
5/6/18	Party	White Star	In	1
5/6/18	Party	Yellowbird	In	1
5/7/18	Party	YELLOW BIRD + MERRILEE III	OUT	2

Existing Conditions

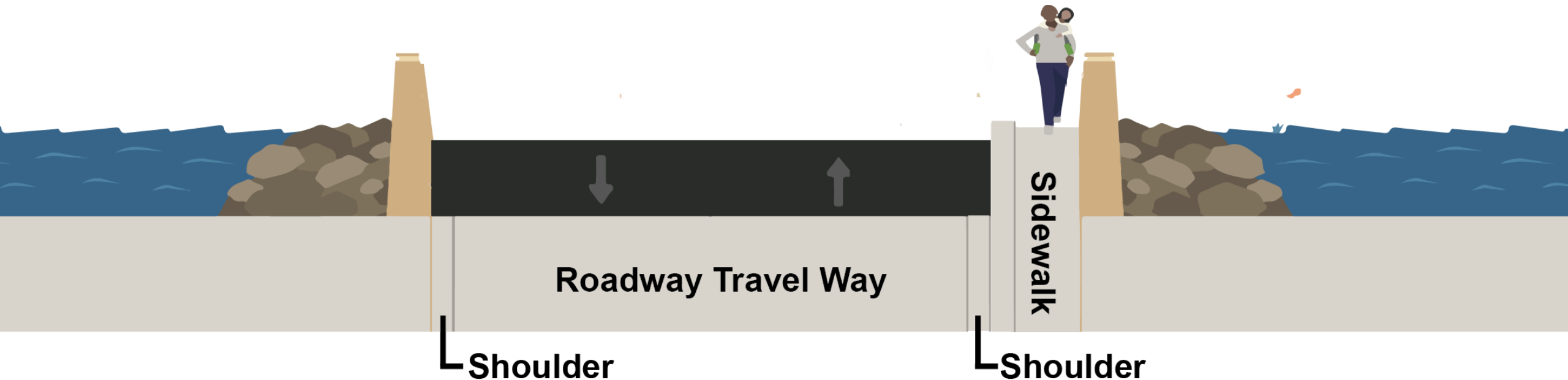


- 15,800 Average Daily Traffic (peak)
- 9,800 Annual Average Daily Traffic
- 700-800 Vehicles Per Hour
- 30 Bicycles during Peak Hour
- 50 Pedestrians during Peak Hour
- 5 Minute Bridge Lift
 - ▶ Lifts occur on average 8-10 times per day during summer months



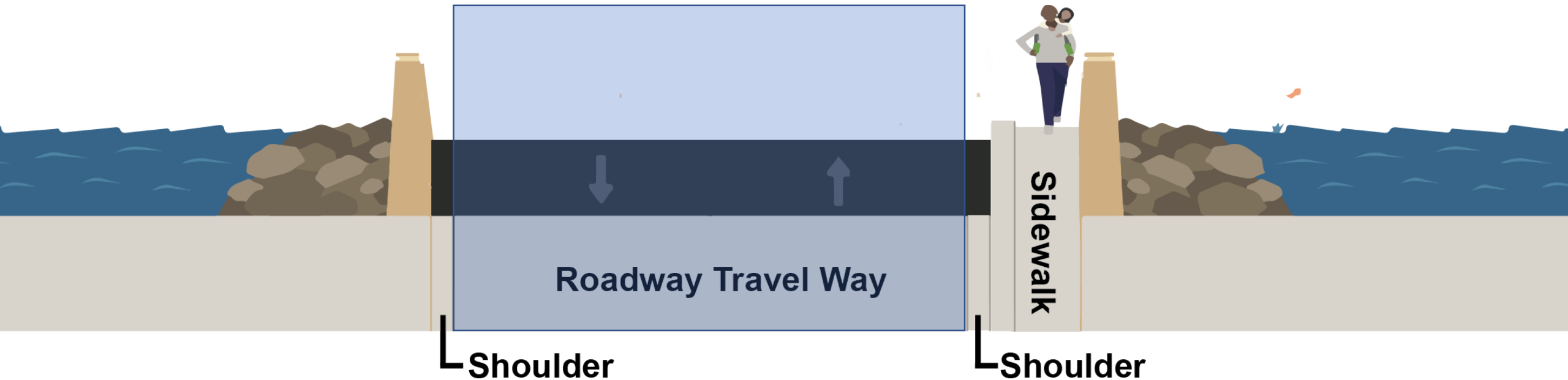
Typical Cross Sections

- Elements of Design – Roadway Cross Section
- Existing conditions shown



Typical Cross Sections

- Elements of Design – Roadway Cross Section



Roadway Cross Sections



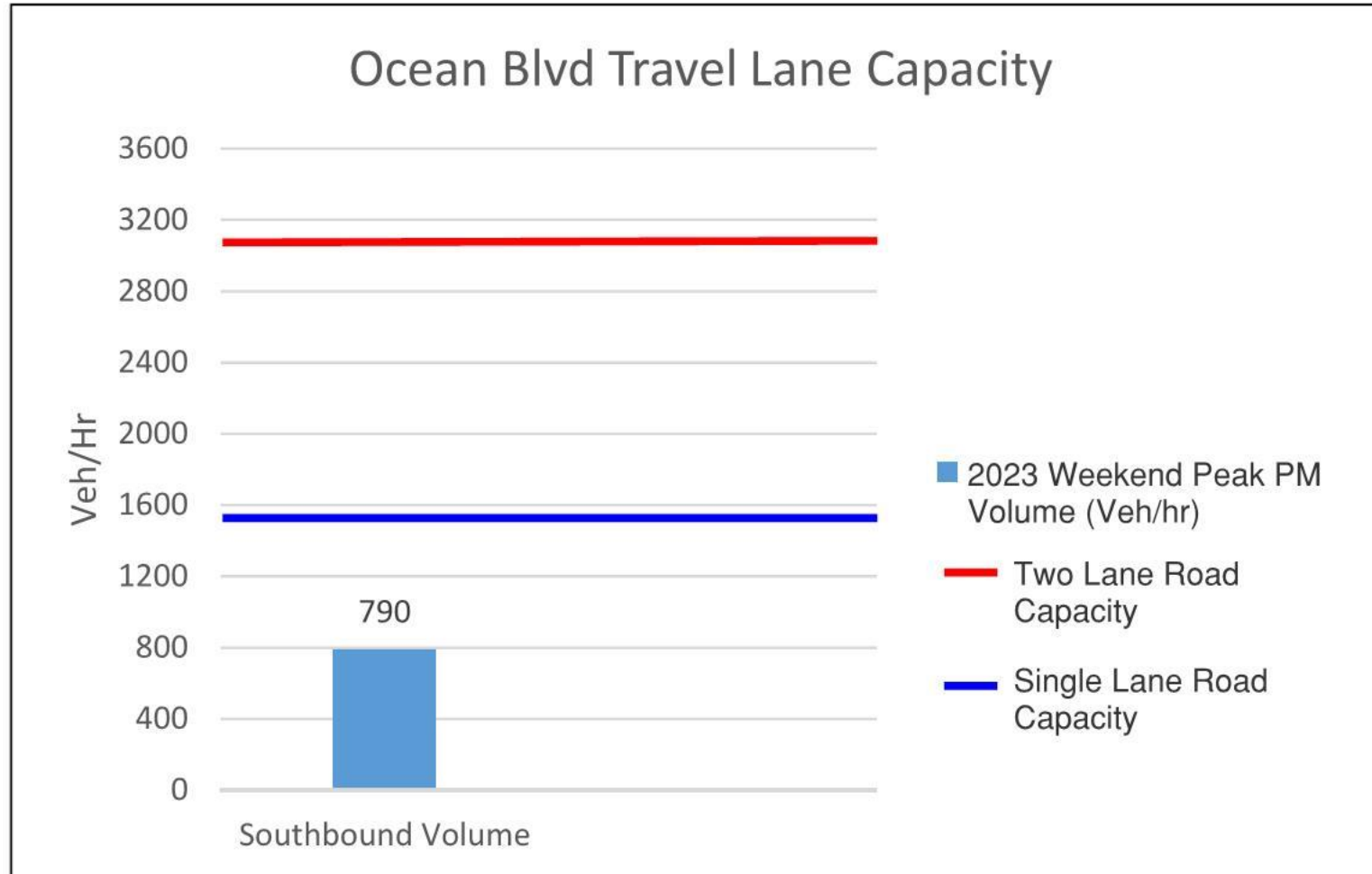
- Preferred Lane Width = 11'
 - ▶ Meets Design Vehicles
 - ▶ Goal for Calmer Traffic Speeds

- Lane Number Determination
 - ▶ Traffic Design Considerations
 - ▶ 1,500 Vehicles Per Hour Lane Capacity
 - ▶ 2, 3, & 4 Lane Options

Existing Conditions



Roadway Cross Sections



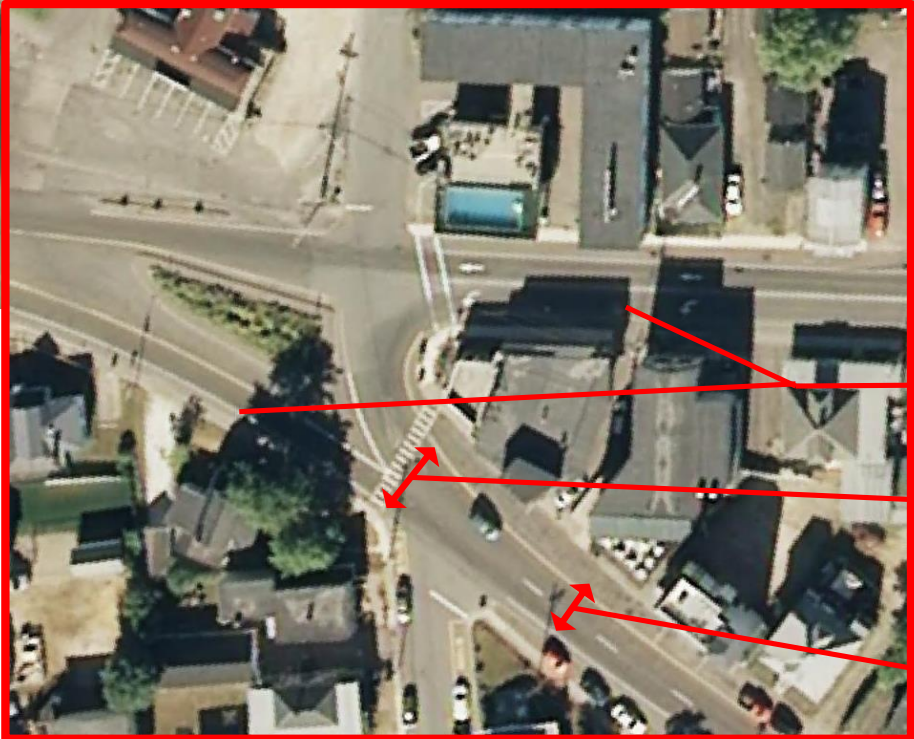
Existing Conditions



- Average bridge lift cycle approximately 5 minutes
- Queue duration 9-10 minutes

Roadway Cross Sections

- Lane Determination – Additional Roadway & Traffic Consideration



380-600 Vehicles Turn Left from Ashworth
450-750 Vehicles Heading North from bridge

Existing Intersection Geometry

- 1 Lane from Ashworth Avenue and
- 1 Lane from Ocean Boulevard

Receiving Condition - Ocean Boulevard - 2 Lanes

Roadway Cross Section



- Considerations
 - ▶ Traffic Distribution Does Not Support 3-Lane Cross Section
 - ▶ Lane Balance and Heavy U-Turn at Ashworth Avenue and Ocean Boulevard
 - ▶ 4-Lane Cross Section Provides Minimal Benefit in Overall Traffic Operations
 - ▶ 4-Lane Cross Section has Potential for Higher Travel Speeds and Reduced Safety
 - ▶ 3-Lane and 4-Lane Cross Sections Create More Challenging Pedestrian Crossing
 - ▶ Future Bridge Configuration has Potential to Reduce Bridge Lifts by 80% or more
 - ▶ Future Peak Hour Volume Can Easily be Accommodated with 2-Lane Cross Section
 - ▶ Access for Emergency Vehicles Improved by Improved Shoulders, Not Additional Lanes

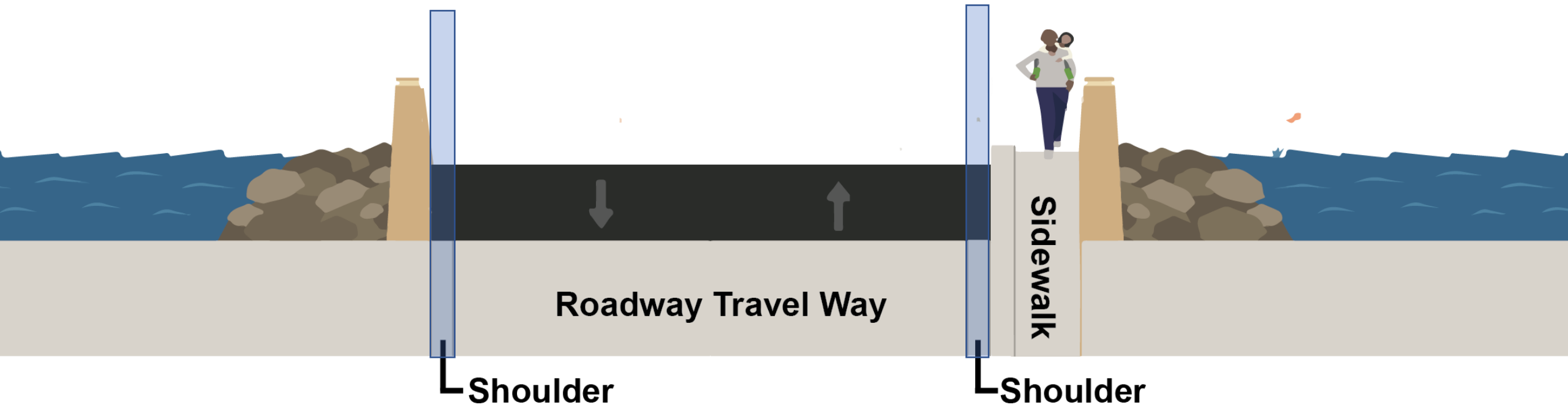
Questions

- Before moving to the next section, please ask any questions you may have regarding
 - ▶ Traffic Analysis
 - ▶ Roadway Travel Way

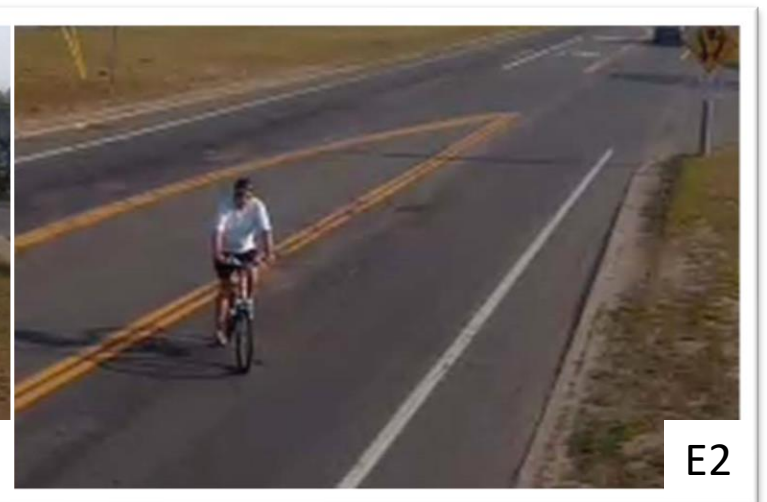
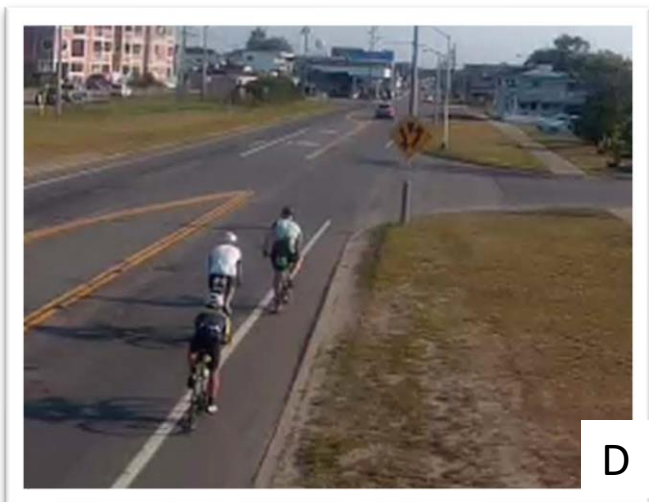
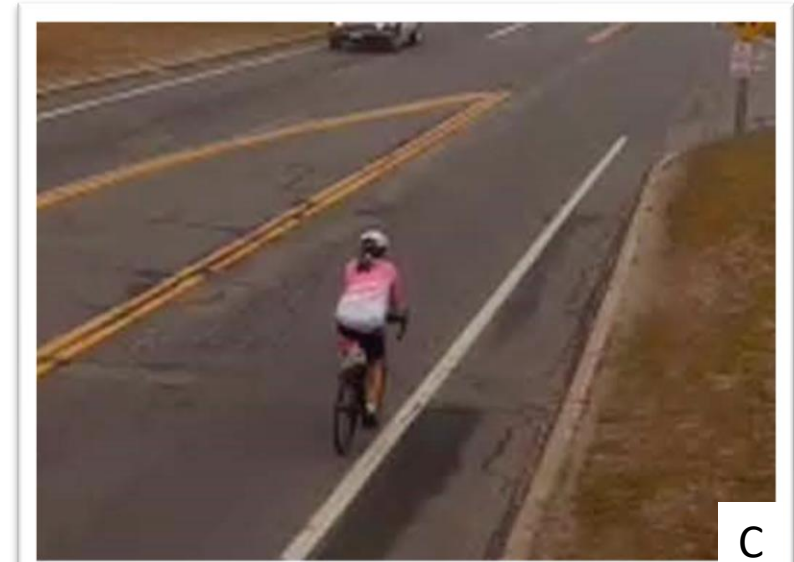
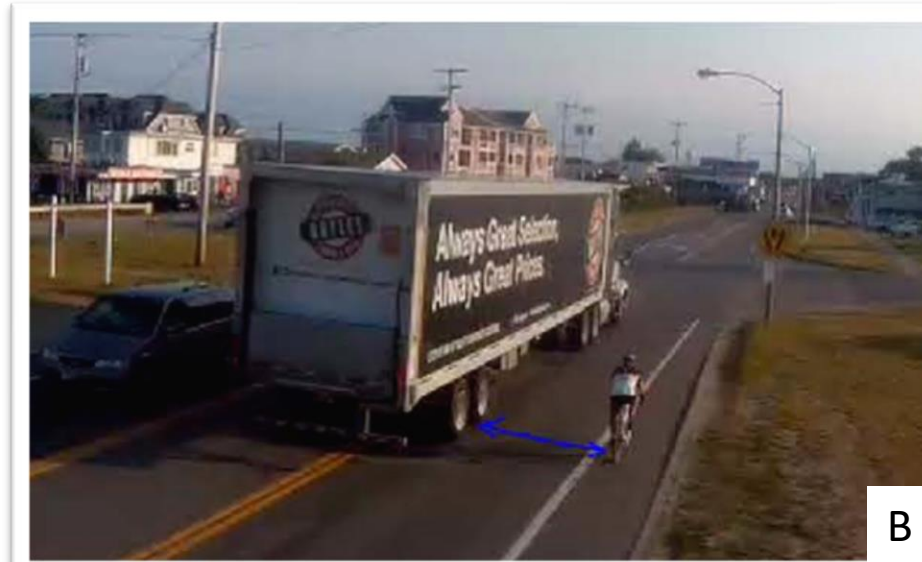
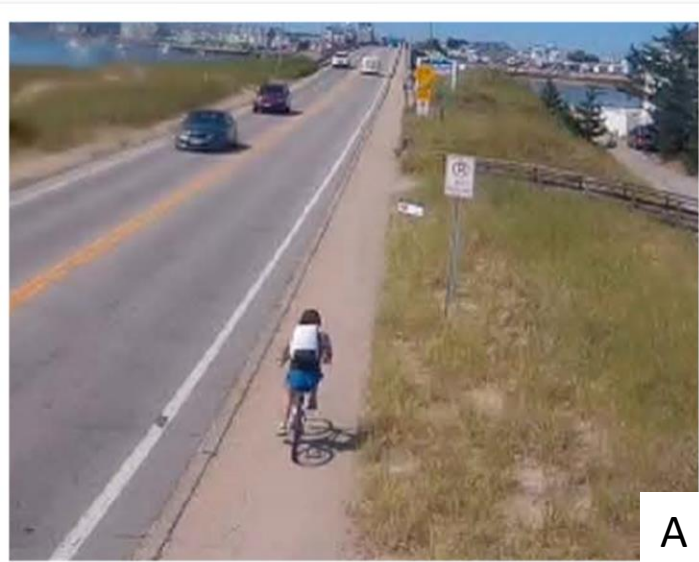


Shoulder Cross Sections

- Shoulder Width Considerations



Existing Conditions

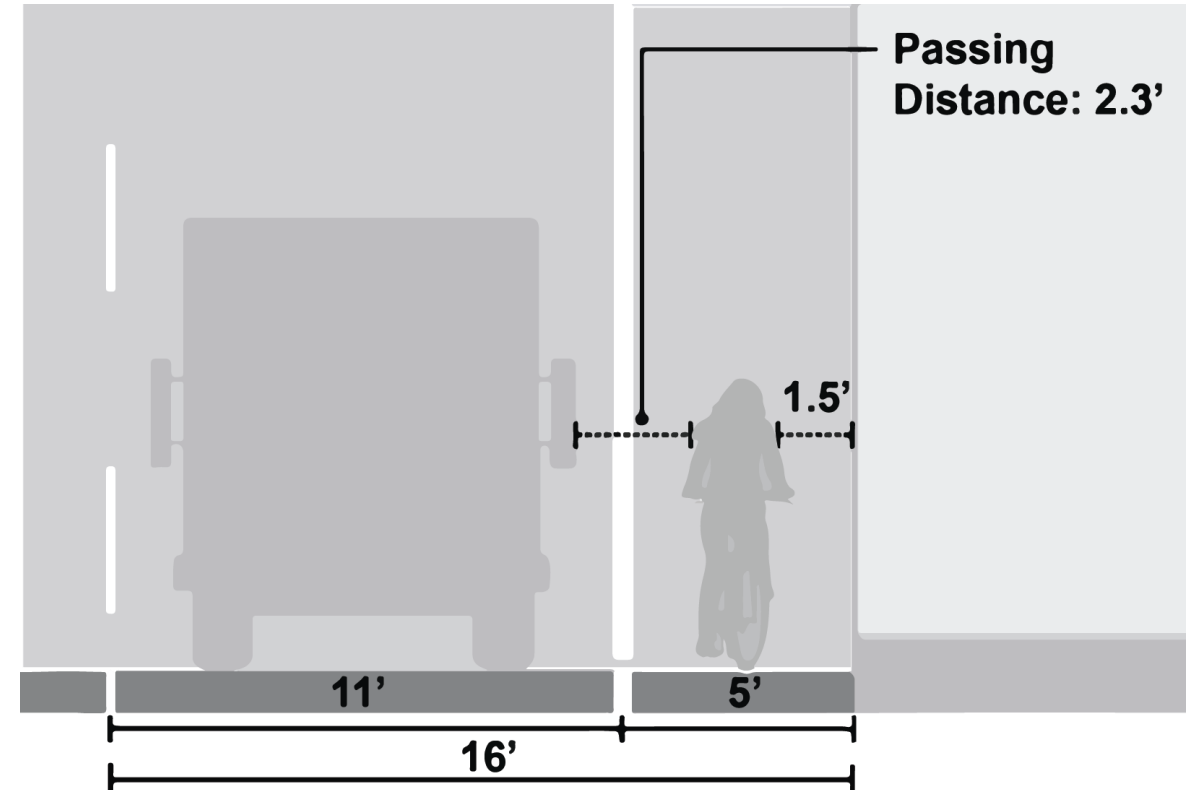
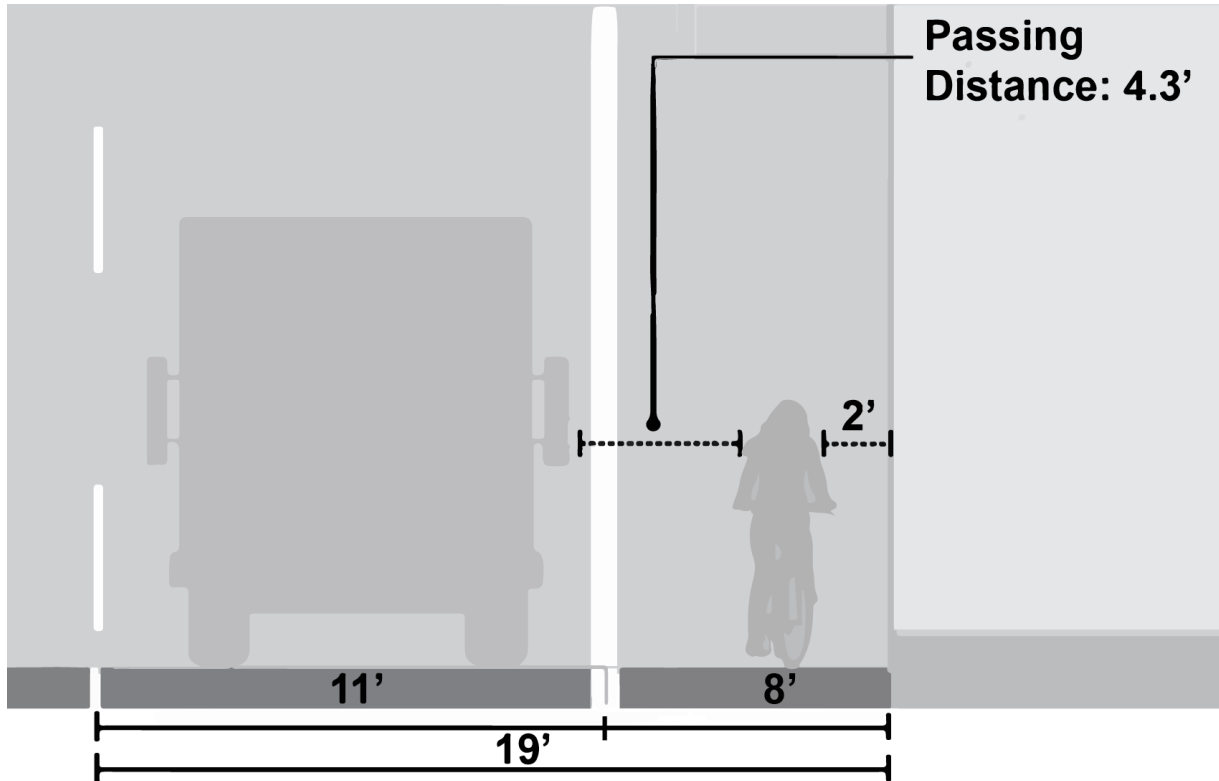


Shoulder Cross Sections

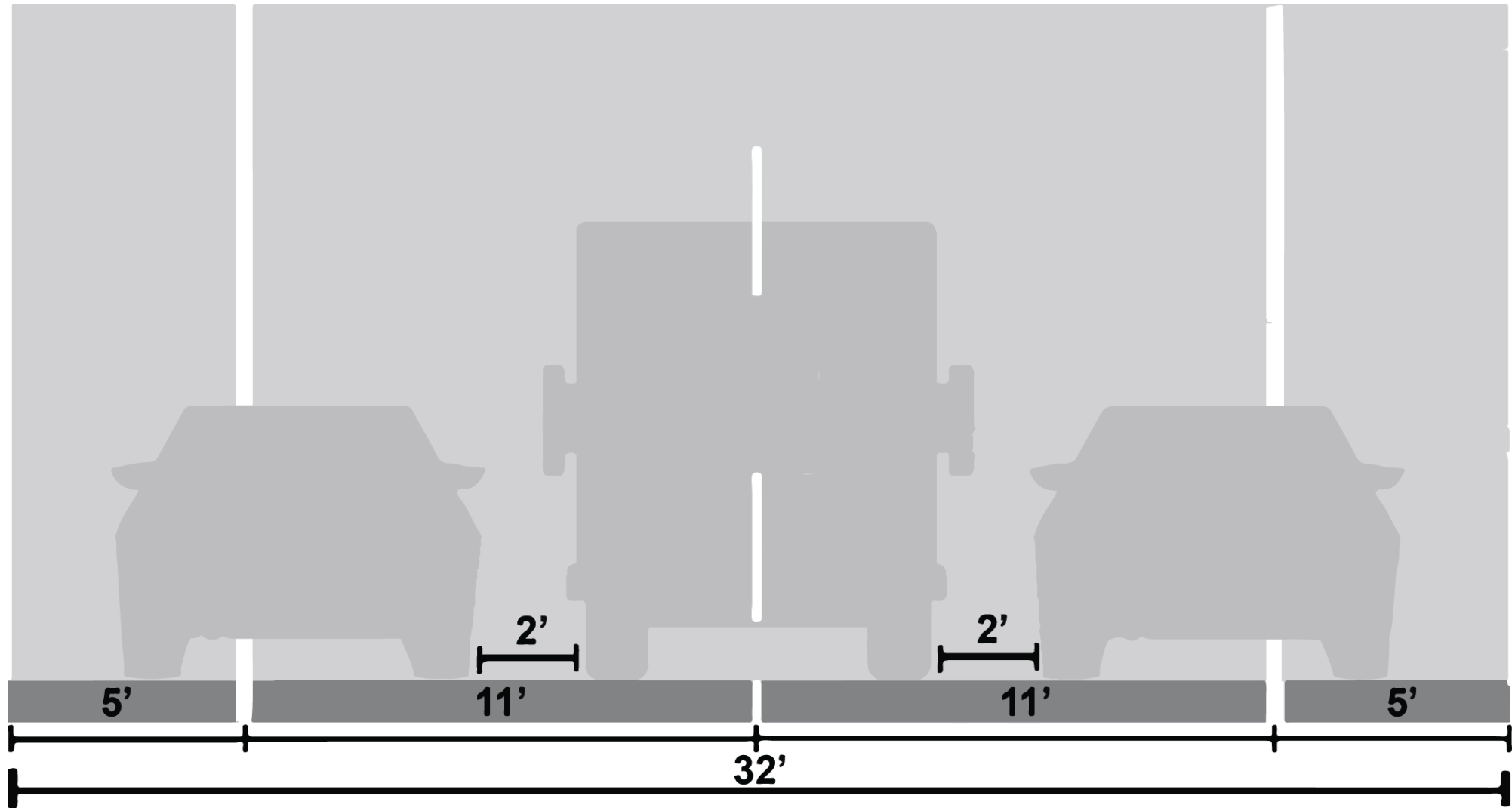


- Shoulder Width Considerations
 - ▶ Bicycles require 5' minimum when adjacent to curb, based on State and National Guidelines
 - ▶ National Guidelines based on Traffic Volumes Require 6'-8'
 - ▶ 2' Cyclists Shy Distance Away from Vertical Elements
 - ▶ Debris and Bridge Scuppers Limit Useable Shoulder Width
 - ▶ Guidelines recommend 18' Required from Centerline to Curb to allow Emergency/Disabled Vehicles to Pass

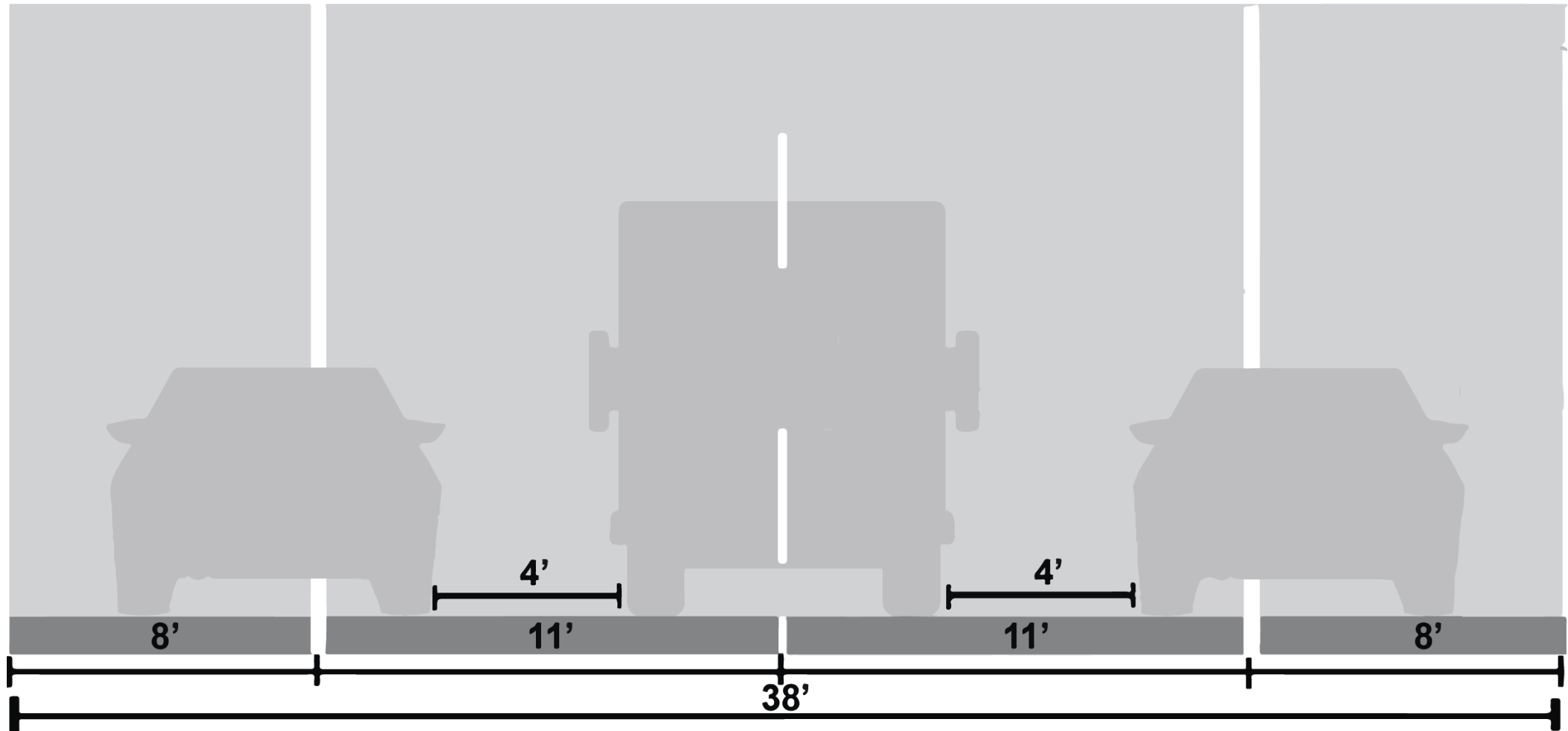
Shoulder Cross Sections



Shoulder Cross Sections

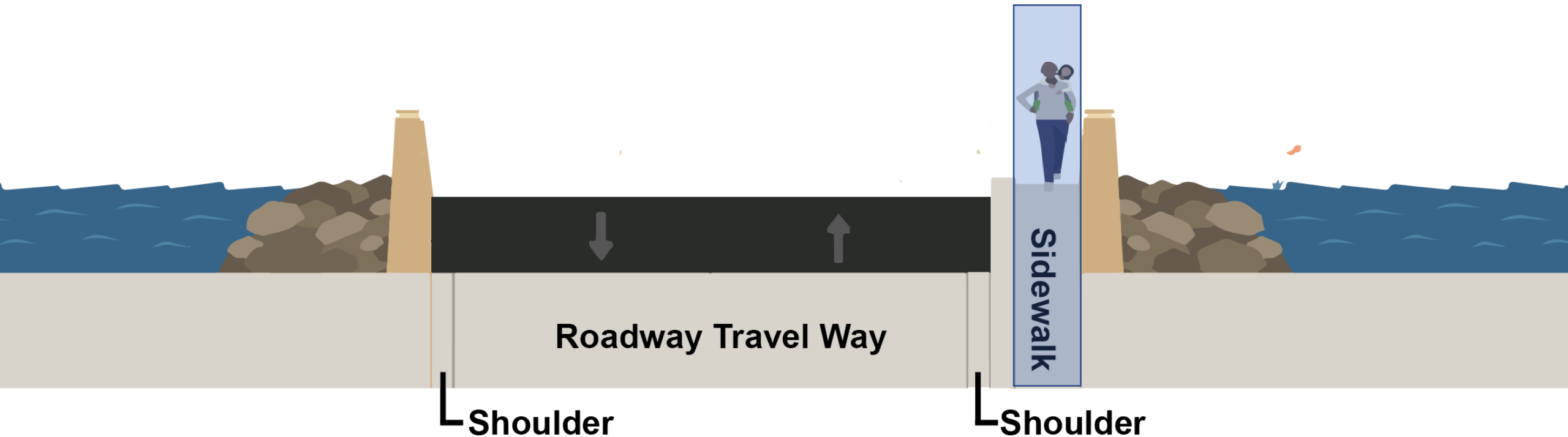


Shoulder Cross Sections

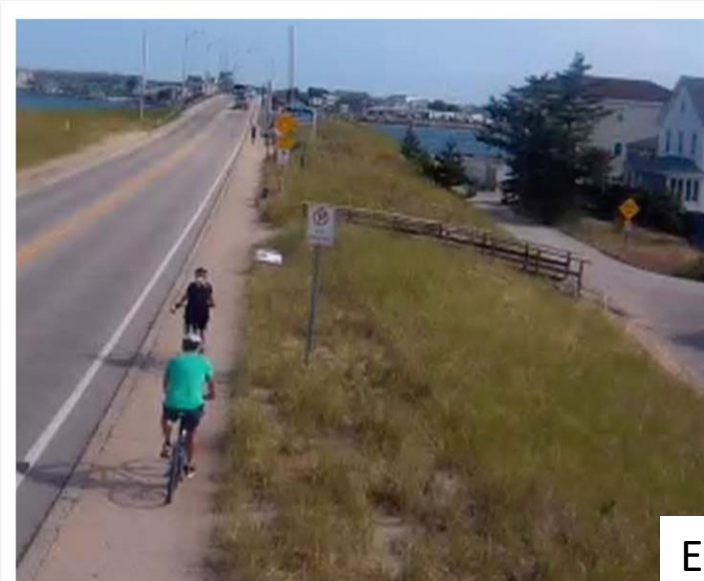
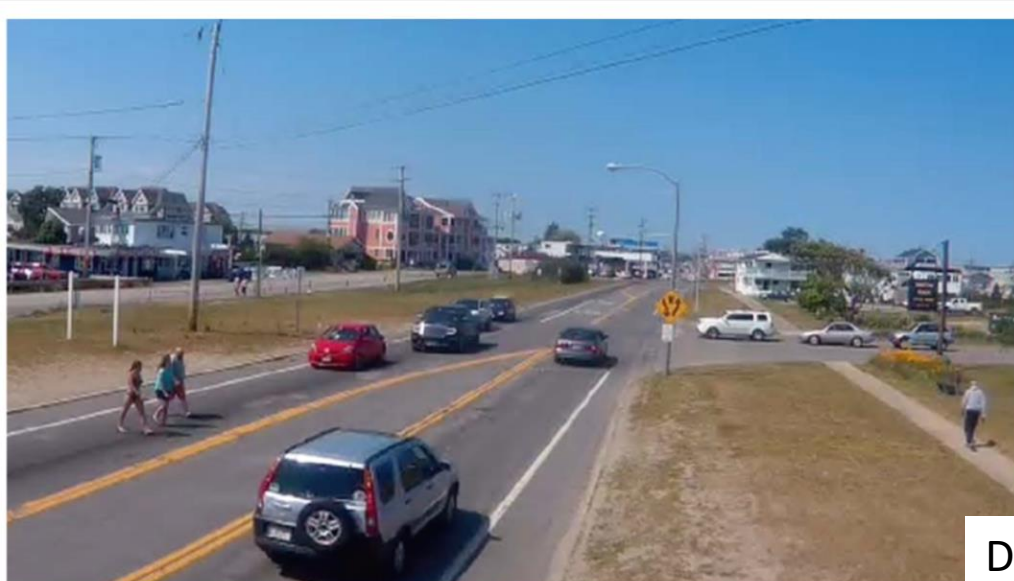
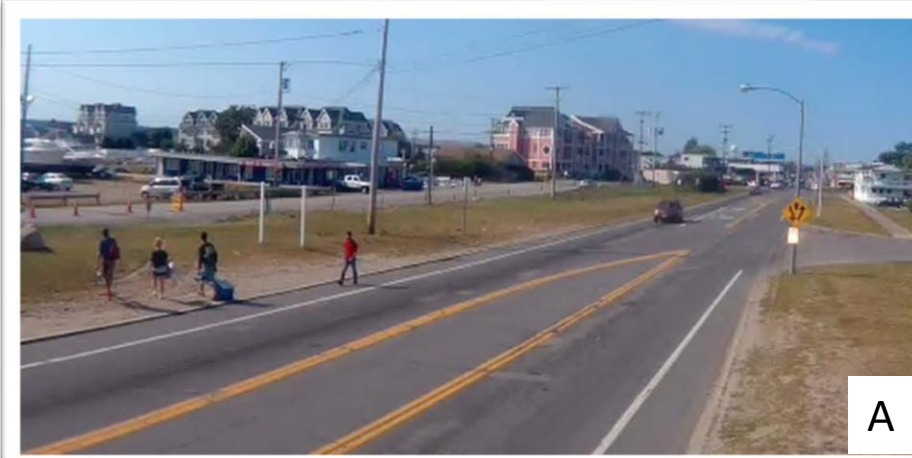


Sidewalk Cross Sections

- Sidewalk Width Considerations



Existing Conditions

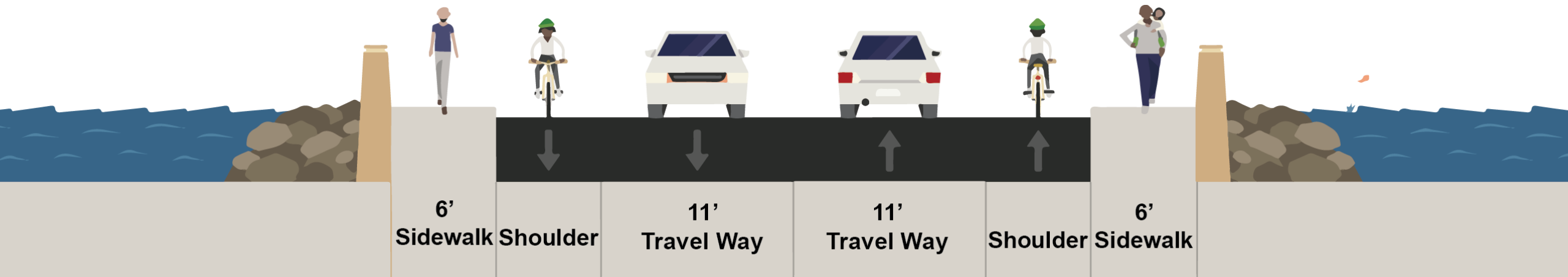
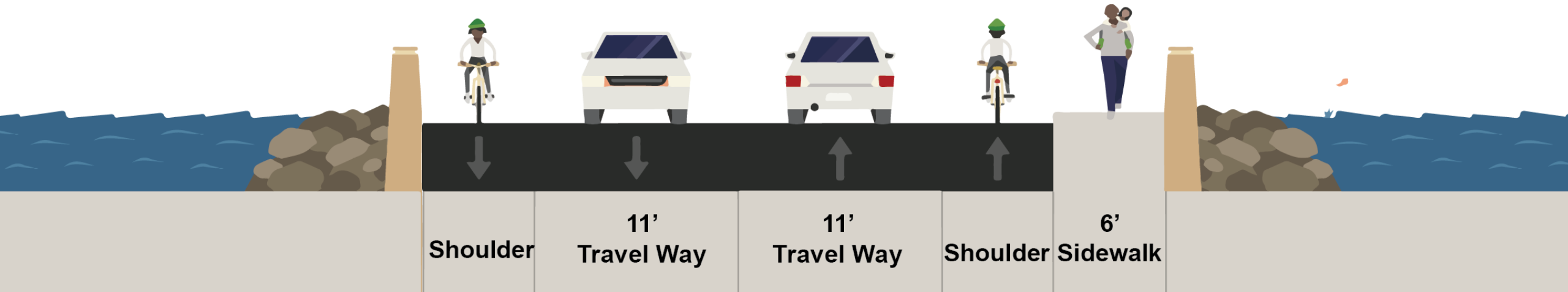


Sidewalk Cross Sections



- Sidewalk Width Considerations
 - ▶ Hampton Beach Master Plan (HBMP) Goals to Improve Pedestrian and Bicycle Safety & Provide Greater Connectivity to Resources North and South of Bridge
 - ▶ Pedestrian Desire Lines on East and West Sides of Bridge
 - ▶ Existing At-Grade Pedestrian Crossings of NH Route 1A
 - ▶ Opportunities for Mix of Travel Speeds and Activities (Fishing, Biking, Walking)
 - ▶ Potential Objects Impact on Accessible Route (Lighting, Signs, Furniture)

Sidewalk Cross Sections Options



Questions

- This concludes our presentation, please ask any questions you may have regarding
 - ▶ Bicycle and Pedestrian Analysis
 - ▶ Roadway Shoulders and Sidewalks
 - ▶ Project process and next steps



Next Steps

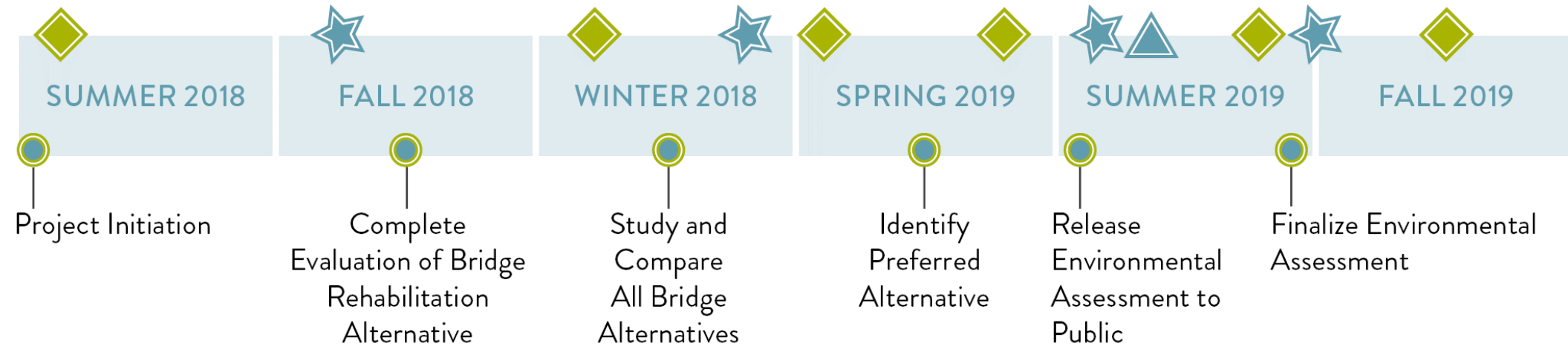



- Continue Development of Alignment and Profile Study
- PAC Meeting December 4, 2018
 - ▶ Review alignments and profiles for Replacement Alternatives
 - ▶ Further assessment of Rehabilitation Alternative
- Next Public Involvement Meeting in January 2019.
Meeting moved to accommodate additional Meetings with PAC , Vessel Owners and Abutters. Will provide updates on:
 - ▶ Provide updates on Historic Review process
 - ▶ Update on Rehabilitation Alternative
 - ▶ Update on alignments and profiles for Replacement Alternatives

Project Development Process



PRELIMINARY DESIGN PROJECT SCHEDULE



 Project Milestone

 Public Advisory Committee Meeting

 Public Meeting

 Public Hearing



Project Development Process



- Complete study of all alternatives and select a Preferred Alternative 2019
 - ▶ Followed by Public Meeting to get input from Towns and Users
- Final Design of Preferred Alternative
 - ▶ Detailed design plans
 - ▶ Environmental Permitting
 - ▶ Secure necessary property rights
- Project is scheduled at Advertise in FFY 2023
- Current programmed construction cost of \$28 M
 - ▶ (Assumes a fixed structure replacement)
- Construction anticipated to span over several years beginning in 2024