

Public Meetings - Phase I

November/December 2024



VISION*ZERO ACTION PLAN CAPE COD



Introductions



Colleen Medeiros, PE

Transportation Program Manager

Cape Cod Commission



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Project Manager

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Transportation Engineer

Kimley-Horn



Agenda

Project Overview

Project Purpose

Safety Background and Trends

Countermeasure Toolbox

Public Engagement

Collaborative Sessions

Closing Remarks



Stakeholders Involved

Colton Atkinson

Bike / Community Mashpee

Rob Elfer

Bike / Safety Barnstable

Kevin Galligan

Cape Cod MPO Orleans

Latoya Green

Public Works / Transportation Planning

Katherine Jansen

Bike / Pedestrian Falmouth

Colleen Pekrul

MassDOT Safe Routes to School - Cape Cod Region Liaison

Sean Polay

Cape Cod Joint Transportation Committee / Bike Sandwich

Thaddeus Soule

Municipal Planning Provincetown

Rich Waldo

Public Works Orleans

Dave Paananen

Fire Barnstable

Leo Blandford

Equity / Public Health

Don Emerson

Safety / Transportation Planning Eastham

Brad Goodwin

Planning / Community

Lieutenant Aram Goshgarian

Safety Harwich

Eva Orman

Older Adult

Sergeant Troy Perry

Barnstable

Deb Shores

Transit / Cape Cod Regional Transit Authority

Alice Thomason Van Oot

Bike / Complete Streets Orleans

Jane Ward

Public Heath / Bike / Safe Routes to School Barnstable



What is the Safe Streets and Roads for All (SS4A) Program?

- Federal grant program U.S. Department of Transportation – Federal Highway Administration (FHWA)
- **Goal:** Create a transportation system and mindset of users and its designers that eliminates all traffic related fatalities and substantially reduces serious crashes
- Includes: Funding Action Plans (up to \$10M) and Implementation (up to \$25M) grants
- Allows counties and municipalities to apply directly FHWA and not go through DOT and regional agencies





The Safe System Approach



Source: Federal Highway Administration



What is the Vision Zero Action Plan?

- Include a **systematic crash analysis**.
- Set of solutions to tackle the root cause of all crashes, emphasizing those involving bicyclists, pedestrians, and other non-motorists.
- Consider a range of **low-cost**, **high-impact regional strategies** such as bike light distribution, updated pedestrian signal equipment, and major infrastructure improvements at key locations.
- Pathway to a safer future.



What does this Vision Zero Plan Include?

Leadership Commitment & Goal Setting



Planning Structure



Safety Analysis



Engagement and Collaboration



Equity Considerations



Policy and Process Changes



Strategy and Project Selections

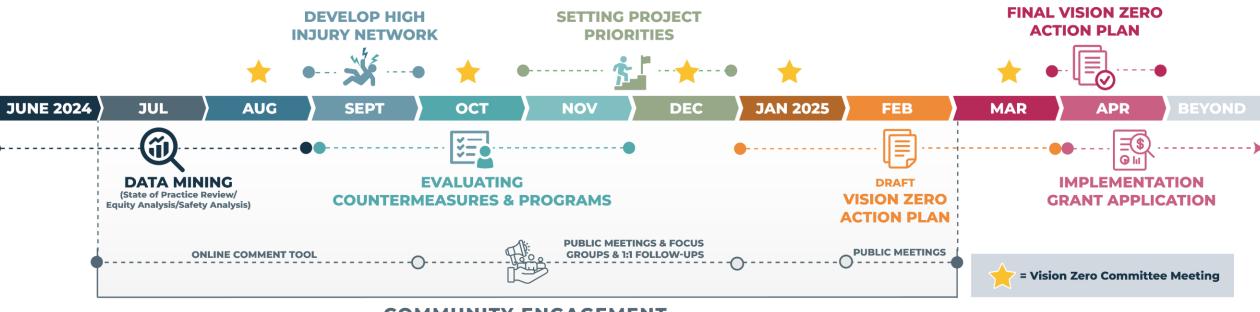


Progress and Transparency





Project Schedule

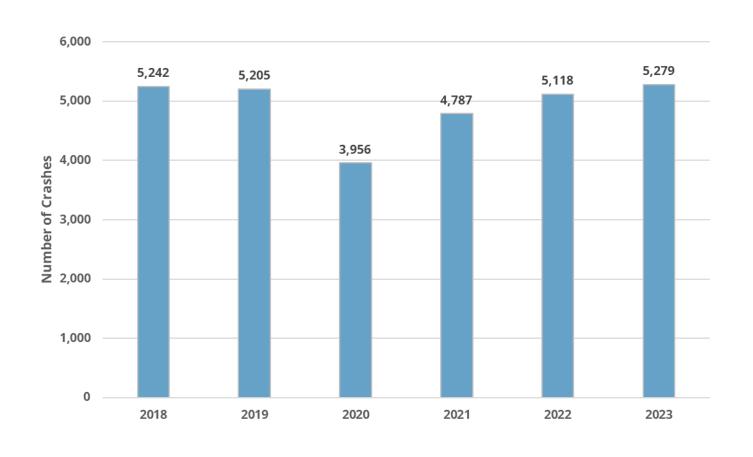


COMMUNITY ENGAGEMENT

Why is this Important?

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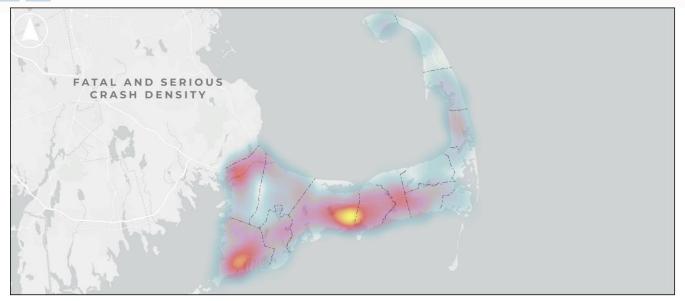


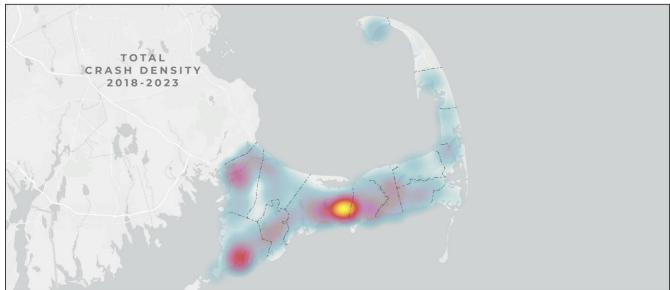


29,587 crashes were reported on Cape Cod

Source: MassDOT: Crash Data Portal (2018-2023). Vulnerable user crashes related to infrastructure may not be included in the total crashes.







VISION ZERO ACTION PLAN

CRASH DENSITY



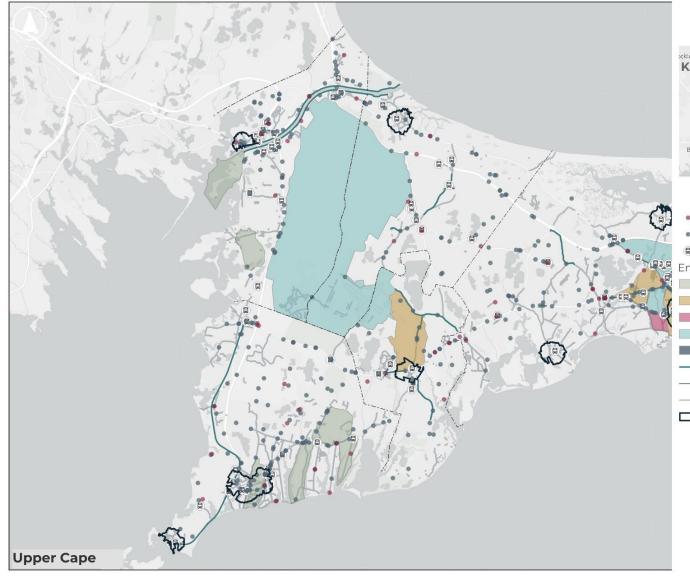






26% of all crashes occurred within an EJ area





VISION ZERO ACTION PLAN



- Fatal Crashes
- Serious Injuries
- CCRTA Bus Stops

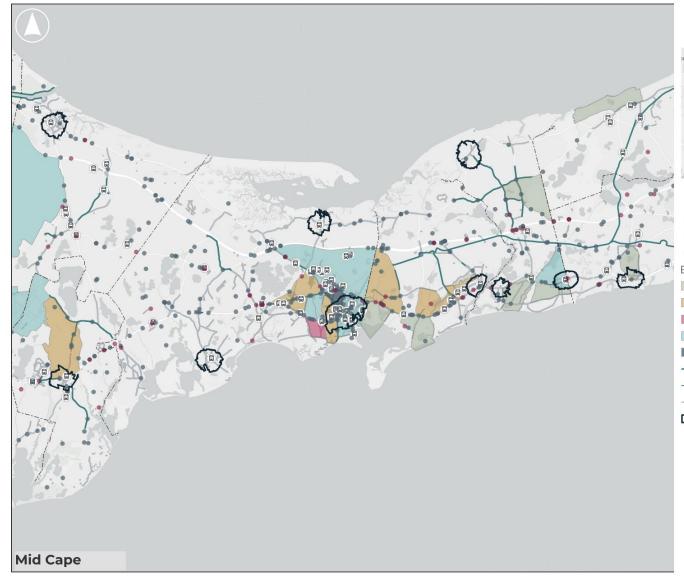
Environmental Justice Areas

- Income
- Minority
- Minority and English Isolation
- Minority and Income
- Minority, Income, and English Isolation
- Existing Bike Path
- Existing Bike Lane
- Sidewalks
- Activity Center

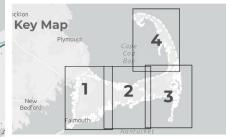
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VISION ZERO ACTION PLAN



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CAPE COD

Safety Background and Trends

MassDOT: Crash Data Portal, 2018 to 2023. Vulnerable user crashes related to infrastructure may not be included in the total crashes.

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Top five first harmful event that occurred (All Crashes)

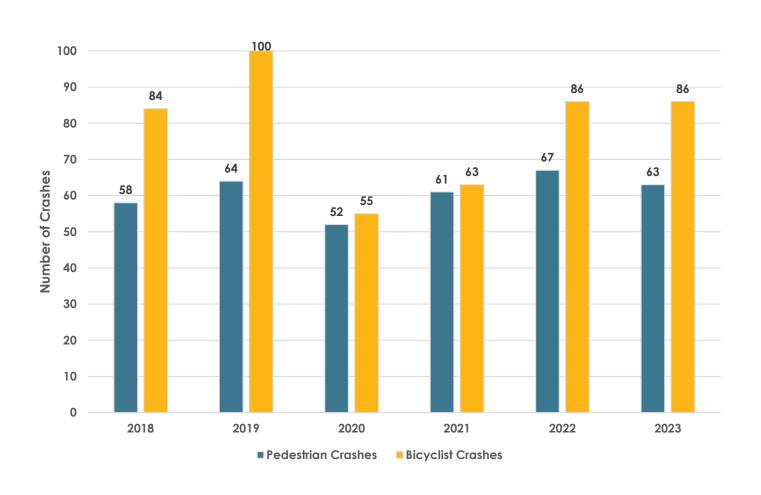
- 1. Collision with motor vehicle in traffic (65%)
- 2. Collision with parked motor vehicle (6.8%)
- 3. Collision with tree (4.5%)
- 4. Collision with animal (3.6%)
- 5. Collisions with unknown fixed object (3.6%)



Top five primary contributing factors (All Crashes)

- 1. Failed to Yield ROW
- 2. Distracted
- 3. Reckless
- 4. Followed too Closely
- 5. Impaired



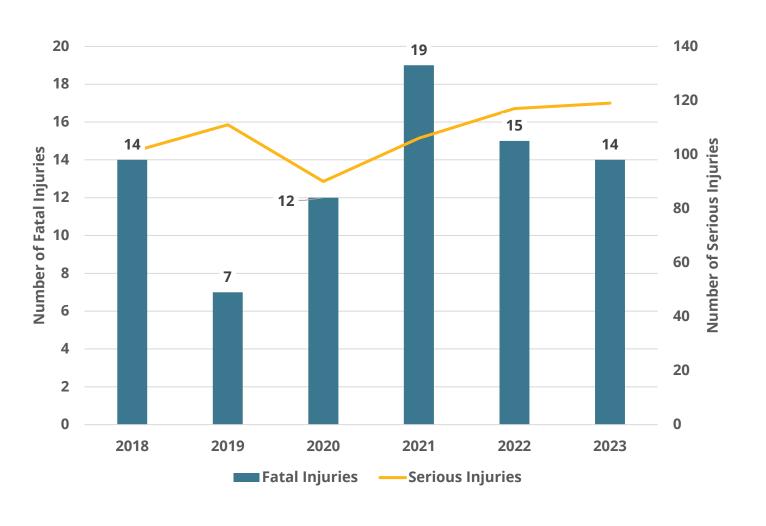


365 pedestrian crashes and 474 bicyclist crashes

13 pedestrian fatal crashes and 1 bicyclist fatal crash

74 pedestrian serious injuries and 52 bicyclist serious injuries



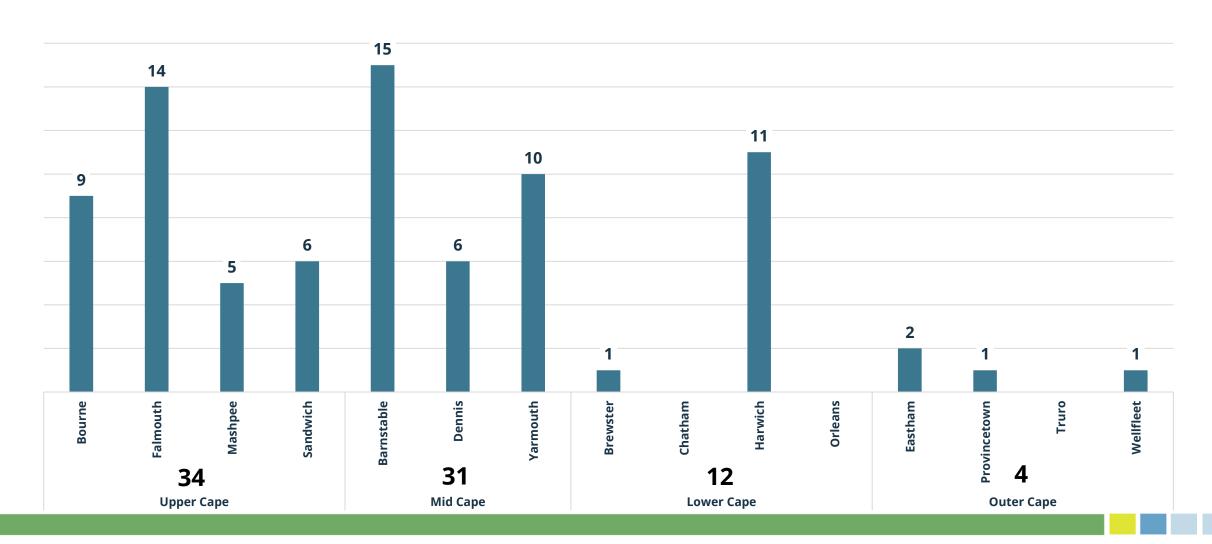


81 fatal crashes and 644 serious injuries

Source: MassDOT: Crash Data Portal (2018-2023). Vulnerable user crashes related to infrastructure may not be included in the total crashes.

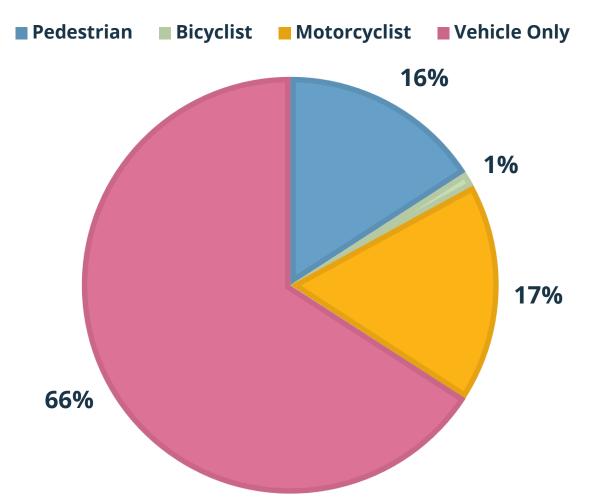


Fatal Crashes per Town 2018-2023





Road User (Fatal Crashes)



more than 1/3 of the fatal crashes are either pedestrians, bicyclists, or motorcyclists.



Top Five First Harmful Event That Occurred (Fatal Crashes)

- 1. Collision with motor vehicle in traffic 30 crashes (37%)
- 2. Collision with tree 16 crashes (20%)
- 3. Collision with pedestrian 13 crashes (16%)
- 4. Collision with guardrail 4 crashes (5%)
- 5. Collisions with unknown fixed object 4 crashes (5%)



Top five primary contributing factors (Fatal Crashes)

- 1. Reckless
- 2. Speeding
- 3. Failed to Yield ROW
- 4. Roadway Departure
- 5. Illness

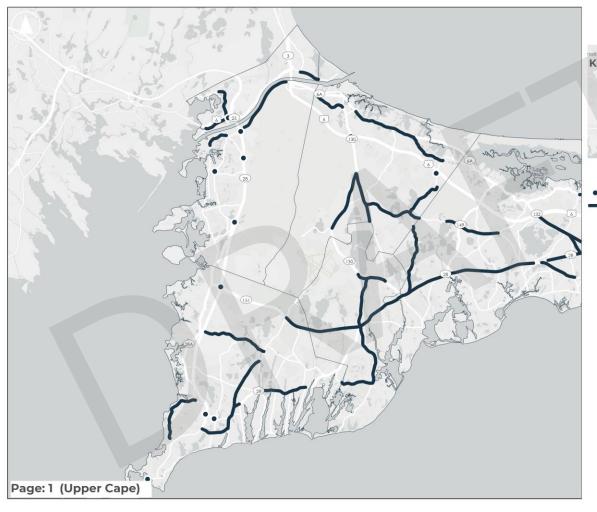


HIN/HRN

High Injury Network
(HIN) – identifies stretches
of roadways where the
highest concentrations of
collisions resulting in fatal
or serious injuries

High Risk Network
(HRN) – examines the characteristics of roadways, such as lane configuration and traffic flow





VISION ZERO ACTION PLAN (ckton Key Map Plymouth 4



High Injury Network



Bourne

- Sandwich Road
- Head of the Bay Road
- County Road at Clay Pond Road

Sandwich

- Forestdale Road (Route 130)
- Old King's Highway (Route 6A)
- Cotuit Road

Mashpee

- Falmouth Road (Route 28)
- Nathan Ellis Highway (Route 151)
- Great Neck Road North

Falmouth

- Main Street
- Davis Street (Route 28)
- Palmer Ave (Route 28) at Jones Road







VISION ZERO ACTION PLAN Tockton Key Map Plymouth Cape 4 Bedford 1 2 3

High Injury Network



Barnstable

- Iyannough Road (Route 132)
- Main Street
- Race Lane
- Falmouth Road (Route 28)

Yarmouth

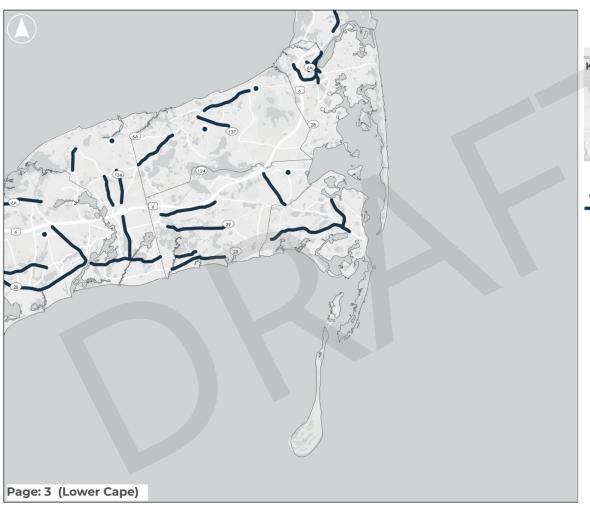
- Station Avenue
- Buck Island Road
- Main Street (Route 6A)

Dennis

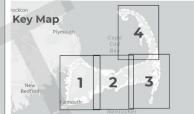
- East-West Dennis Road (Route 134)
- Main Street (Route 28)
- Old King's Highway (Route 6A)
- Old King's Highway (Route 6A) at East-West Dennis Road (Route 134)







VISION ZERO ACTION PLAN



High Injury Network



Brewster

- Long Pond Road
- Old King's Highway (Route 6A)
- Harwich Road at Tubman Road

Chatham

- Crowell Road
- Main Street (Route 28)

Harwich

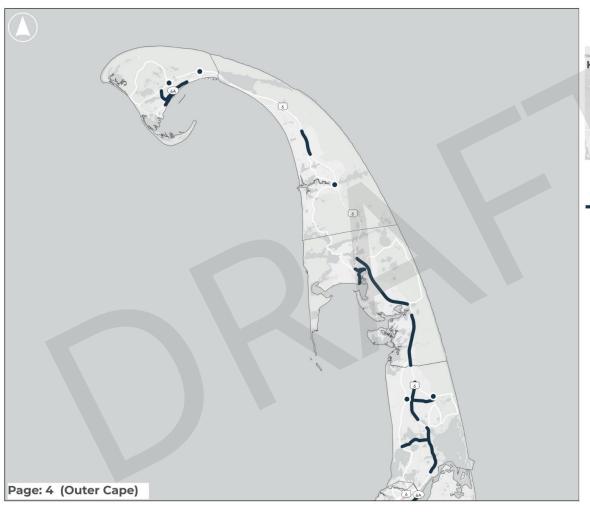
- Great Western Road/Main Street
- · Brewster-Chatham Road
- Queen Anne Road

Orleans

- Old King's Highway (Route 6A)
- South Orleans Road (Route 28)
- Eldredge Park Way







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High Injury Network



Eastham

- Route 6
- Brackett Road
- Cable Road at Nauset Regional High School

Truro

- Route 6
- Truro Center Road at Depot Road/South Pamet Road

Provincetown

- Bradford Street (Route 6A)
- Commercial Street
- Shank Painter Road



Countermeasure Toolbox

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FHWA Proven Countermeasures

Speed Management Treatments

- Appropriate Speed Limits for All Road Users
- Speed Safety Cameras
- Variable Speed Limits
- Speed Table

Crosscutting Treatments

- Lighting
- Road Safety Audit

Roadway Departures Treatments

- Longitudinal Rumble
 Strips and Stripes Edge
 line and Centerline
- Enhanced Delineation for Horizontal Curves
- Median Barriers
- Wider Edge Lines

Intersections and Driveway Treatments

- Bump Outs
- Dynamic No-Turn on Red (NTOR) Signage with Pedestrian Signal Activation
- Dedicated Left- and Right-Turn Lanes at Intersections
- Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections
- Reduced Left-Turn
 Conflict Intersections

Pedestrian/Bicycle Treatments

- Walkways
- Crosswalk Visibility Enhancements
- Rectangular Rapid Flashing Beacons (RRFB)
- Medians and Pedestrian Refuge Islands
- Bicycle Lanes/Shared Use Path

Source: FHWA Proven Safety Countermeasures

Public Engagement

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Public Engagement



TARGETED OUTREACH



VISION ZERO
ACTION
COMMITTEE (VZAC)
MEETINGS



PUBLIC MEETINGS



HIGH-TECH STRATEGIES



What Have We Been Hearing?

- Several intersections have shrubbery or ornamental vegetation that affects visibility.
- The intersection of Pleasant Bay Road and Route 39 is uncomfortable because of high speeds and poor visibility.
- Connections from neighborhoods to the Cape Cod Rail Trail are poor and there are many uncomfortable trail crossings.
- Beach access routes have concerns with illegal parking, congestion, and unsafe crossings for pedestrians and bicyclists.
- Many sidewalks are in poor condition or nonexistent.

"Many people (pedestrians) walk on Route 28 from Chatham towards East Harwich to get to the very popular Jackknife beach. However, there is not a shoulder on Route 28 creating a very dangerous situation for walking pedestrians. Recommend that a sidewalk be built along the golf course side of Route 28 from Fox Hill Road down to the beach access points on both sides of the "new bridge" that was built over the Muddy Creek."

"Warning lights need to be installed on Lothrop
Ave. where the Cape Cod Rail Trail crosses the
roadway. Also warning signs about a dangerous
crossing should be added to the rail trail to warn
bicyclists. Because there is such a short distance
between the rail trail and Great Western Rd., a car
turning onto Lothrop or crossing Great Western
cannot stop quickly if bicyclists are crossing the
road, nor does a driver have good sight lines.
Many tourists in the area are not aware of this
rail trail crossing. I have seen quite a few near
misses. It is a place where sooner or later a
serious accident will occur."



What Have We Been Hearing?

- Route 6 and Nauset Road have poor speed limit compliance with very few safe crossings. Residents expressed a wish for more signals and signage.
- Many major roads have no sidewalks, and some existing ones are not wide enough for wheelchair/mobility device users.
- Trailheads and beach accesses are not well connected to residential areas for non-motorists.

"Nauset Rd. is a tragedy waiting to happen.

CRAZY EXTREME speeding is a constant, daily occurrence. Students, large construction vehicles, etc., FLY every day. The curves and rolling topology of the road make it impossible to predict oncoming vehicles, pedestrians, pets, bicycles, etc. This is a year-round issue — not limited to summer..."

"I was close to being hit by a new looking black SUV while I was walking on a crosswalk. It was on Main St just before Rock Harbor Road. I looked up Main St. no traffic to the left, looked right a car was barely seen so I thought it was safe. I took 2 steps and the SUV raced up the street. It was racing so fast I couldn't see the license plate. There is elderly housing where I was crossing. Anyone who could not react like I did quickly could have killed."

Outer Cape



What Have We Been Hearing?

- Motorists commonly exceed speed limits on Routes 28A & 151, and S. Great Neck Road.
- Existing bicyclist facilities on Route 130 and Sandwich Road are uncomfortable.
- The ferry access vicinity is highly congested with no pedestrian infrastructure. Resultant traffic also conflicts with those attempting to reach the Shining Sea Bikeway.
- The open grate surface on the Pocasset River Bridge is not safe for bicyclists.
- Intersection geometries are confusing and lack guiding signage.

"Sandwich Road is possibly the most dangerous road on Cape Cod, yet is shown as a "bicycle route" on the Cape Cod Regional Transit Authority's Cape Cod Bicycle Map... Sandwich Road has one lane in each direction, vehicle speeds of 40 to 50 mph, little or no shoulder and broken pavement edge with sand and rubble beyond the pavement... In this dangerous setting, motor vehicles swerving to avoid pedestrians or cyclists are a recipe for disaster... Instead, the roadway should be improved with the addition of a shared use path. A shared-use path would improve motor vehicle safety as well as pedestrian and bicycle safety."

"Bicycle facilities should be where I shop. **Bicycle** and pedestrian access should start at the stores and businesses."

Upper Cape



What Have We Been Hearing?

- Attempting to cross or turn from Buck Island Road and Routes 6, 28, 132, and 134 is dangerous due to high speeds and lack of crossings. Drivers also tend not to obey stop signs and red lights.
- Rotaries, such as the one adjacent to the airport, do not have pedestrian or bicyclist infrastructure.
- Major points of interest, such as Main Street in Barnstable, require pedestrians and bicyclists to take long detours because of a lack of facilities.

"Speed is a serious issue on Buck Island Road. This signal is very busy and is the major cut-through from Yarmouth to Hyannis. This intersection is constantly having near-misses and a red-light running crash is bound to happen and have serious repercussions."

"High School Rd does not align here and pedestrians cannot see cars coming from South Street entering this intersection. The crossing button is so long 90% of the people crossing here don't wait for the signal and walk around cars. Please remove these lights and put in stop signs. Signalization is terrible in a village as are one ways. It seems traffic engineers think signalization is the key to everything. Definitely out on Routes 28 and 132 by the Mall but not in the village of Hyannis. Pedestrians are second class citizens to pick up trucks and racing road rage types."

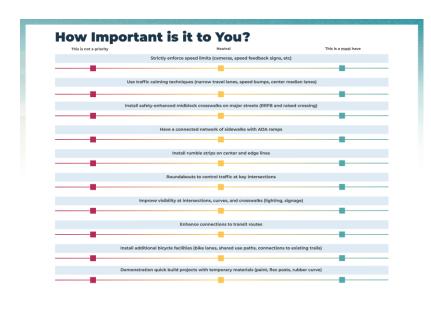
Collaborative Sessions

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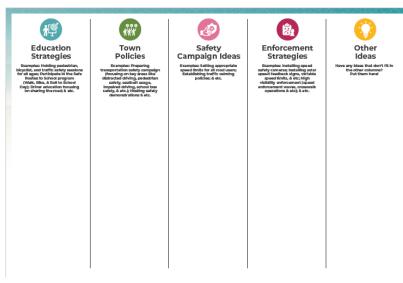


Activities

How Important is it to You?



Share your thoughts on Strategies, Policies, Ideas



Identify locations with Safety Concerns/Crashes or Near Crashes/Safety Improvements.



Closing Remarks

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Visit our **Project Website** to stay
up to date



Thank you!

