

# Pedestrian Safety Mitigation Plan

*Town of Topsham*



September 2018



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# Heads Up! Project Overview

The Maine Department of Transportation (MaineDOT) has partnered with the Bicycle Coalition of Maine (BCM) and 21 communities across Maine to facilitate a series of public meetings addressing pedestrian safety. As part of the *Heads Up! Pedestrian Safety Initiative*, these meetings:

- collected information on locations the residents felt were unsafe;
- identified possible infrastructure changes to improve pedestrian safety; and
- discussed specific educational and law enforcement interventions that might improve driver and pedestrian behavior.

The aim of the project is to explore potential short-, medium-, and long-term mitigation strategies to improve pedestrian safety and reduce crashes.

## Purpose and Need

From 2003 to 2014, the number of persons killed while walking on Maine’s roadways hovered between 7 and 13 per year. Beginning in 2015, and extending through 2016 and 2017, Maine experienced a sharp increase in pedestrian fatalities, reaching a high of 20 in 2017.

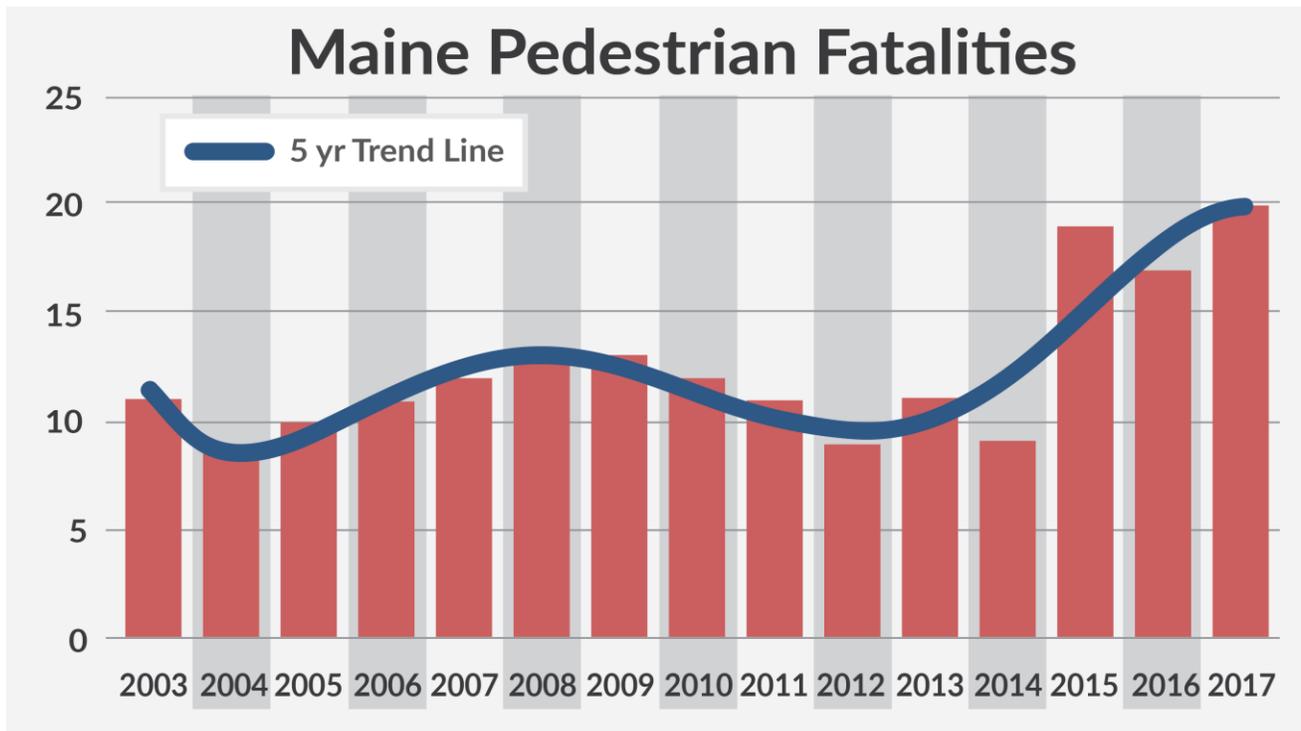


Figure 1: Maine Pedestrian Fatalities

Maine’s crash data indicates this increase in pedestrian fatalities has no clear single cause, but is the result of a combination of factors that include roadway design and risky behaviors by both drivers and pedestrians.

In late 2016, MaineDOT initiated a process to engage the public in efforts to improve pedestrian safety. MaineDOT’s Safety Office identified 21 communities that experienced the highest number of pedestrian crashes between 2011 and 2015, often representing the state’s most densely populated and “urbanized” areas. The identified 21 Focus Communities are:

1. Auburn	8. Camden	15. Saco
2. Augusta	9. Hallowell	16. Sanford
3. Bangor	10. Lewiston	17. South Portland
4. Bath	11. Old Town	18. Topsham
5. Biddeford	12. Orono	19. Waterville
6. Brewer	13. Portland	20. Westbrook
7. Brunswick	14. Rockland	21. Winslow

The project was launched in 2017 and is anticipated to run at least through 2019.

The *Heads Up! Pedestrian Safety Project* includes the following activities for each of the 21 focus communities:

1. Convene and facilitate Community Pedestrian Safety Forums with community leadership, residents, and interested stakeholder groups to define local issues, review the community’s pedestrian crash data, and identify/prioritize the locations of primary risk and need.
2. Facilitate an infrastructure Site Safety Review with municipal staff and other interested parties, in which the top 5 (and in some cases, more) problem locations identified by the community at the Safety Forum are analyzed for possible infrastructure changes (e.g. painting crosswalks, changing curb lines, adding refuge islands, adding signs, etc.).
3. Convene and facilitate a Safer Walking Behavioral Forum for community leadership, residents, and interested stakeholder groups that focuses on identifying priority problem behaviors, and then brainstorming educational and law enforcement interventions to improve safety for pedestrians.

4. Collaboratively develop with each municipality, a community specific Pedestrian Safety Mitigation Plan (strategy) that incorporates both long-term and short-term alternatives for reducing the number of pedestrian crashes. The possible mitigation recommendations are organized according to the classic Safe Routes to School “5 E’s” model: Engineering, Education, Encouragement, Enforcement, and Evaluation. These strategies will address policy, growth, infrastructure, education, outreach, and law enforcement.
5. Collaborate with local law enforcement to implement a Pedestrian Safety Enforcement Program that supports officers proactively interacting with individuals engaged in behaviors that may put pedestrians at risk. Program supports include technical assistance, education, outreach, handouts, and high-visibility safety items for distribution.

# Topsham’s Process and Results

## Community Pedestrian Safety Forum

The Community Pedestrian Safety Forum held in Topsham on September 20, 2017, was attended by 32 people, including municipal officials, MaineDOT staff, BCM staff, and the general public. Participants used TurningPoint® real-time polling technology to gather key information from participants, which showed that:

- 70% of participants were from the general public;
- 65% described their walking habits as “for exercise and errands;” and
- 55% said that roadway safety was the combined result of drivers, persons walking, and road design.

At this forum, the following locations were identified as “priority” problem locations needing attention. Locations were identified as the places ranked as “highest” or “high” priority for attention by a majority of the participants.

Priority Locations	% High Priority	Rank	Participant Comments
The Intersection of Rt. 196 / Rt. 201	83%	1	Roads seem too wide, signals not present or not working well, no crosswalks, poor design for school students to get there
Topsham Fair Mall Rd	76%	2	Speeding traffic, no sidewalks, no crosswalks, signals not present or not working well
The Intersection of Elm St / Main St	58%	3	Speeding traffic, signals not present or not working well
The Intersection of Main St / Summer St	45%	4	Speeding traffic, no crosswalk
Chad Drive	38%	5	Speeding traffic, crosswalks blend into road, drivers are going too fast and they do not stop for pedestrians

Figure 2: Topsham’s Priority Locations

**Please Note:** Public perceptions may differ from the actual conditions.

## Site Safety Review

A site visit in Topsham occurred on March 28, 2018, during which priority locations were discussed using satellite photos, in person visitation, and local expertise. The site visit included staff from the MaineDOT, BCM and the municipality. Measurements and observations were made during the visit, and conversations regarding problems and possible solutions were held.

Notes from the meeting and recommendations are included in the Engineering Section of this report.

## Safer Walking Behavioral Forum

On April 9, 2018, twelve residents of Topsham joined MaineDOT, BCM, and Topsham town staff for a Safer Walking Behavioral Forum. At this forum, participants reviewed the priority locations identified in the Community Pedestrian Safety Forum, and the behavioral issues (speeding, failure to yield, pedestrian actions) that were associated with each. The group was asked to prioritize the behaviors they identified as most problematic on the part of drivers, bicycle riders (who often came up as problems) and pedestrians. Focused discussions explored potential education strategies and law enforcement efforts to improve behavior. The forum included a call for local champions to advocate and help implement proposed interventions.

The most problematic behaviors identified by Topsham residents at this forum were as follows:

- Pedestrian Behavior: Walking in Dark Colors after Dark
- Bicycle Behavior: Ignoring Traffic Signs and Signals
- Motorist Behavior: Distracted Driving

Recommendations from the Safer Walking Forum to address pedestrian and motorist behaviors are included in the Education and Enforcement sections of this report. Recommendations to address bicyclist behaviors were not discussed during the forum and therefore no recommendations have been included within this report. The problem behaviors of cyclists is only provided as a forum observation and could be useful for future mitigation efforts

# Topsham's Recommendations

This report provides a series of recommendations based on the forums, site visits, examinations of aerial photos, reviews of existing plans and conversations with stakeholders to improve pedestrian safety in Topsham.

The recommendations are organized according to the classic Safe Routes to School “5 E’s” model: Engineering, Education, Encouragement, Enforcement, and Evaluation. Sound engineering is essential to promote encouragement, must align with education, and is necessary to support enforcement efforts.

Recommendations are further organized into timeframes, with “Short Term” meaning <1+ year implementation window, “Medium Term” meaning 1-5+ year implementation window, and “Long Term” meaning a >5 year implementation window. Note that Short Term and Medium Term mitigations should not necessarily be abandoned after the implementation windows proposed here. Consideration of their continued or periodic use should be a routine and on-going community conversation.

## Engineering

The built environment is an important factor affecting roadway safety, as conditions on the ground will influence the behavior of all users. Historically, many roadways were designed for higher vehicle speeds and shorter travel times. Complete Streets policies implemented by MaineDOT and many other communities attempt to address the needs of all roadway users by redesigning infrastructure where feasible to reduce vehicle speeds, accommodate bicyclists, and improve pedestrian safety and access.

### General Considerations for All Locations in Topsham

*Implementation must be based upon engineering judgement.*

#### Short Term

- Refresh crosswalk paint; use high visibility “piano key” or other highly visible style of crossings.
- Install pedestrian signage alerting drivers of the presence of crosswalks.
- Check signal function and timing.
- To help ensure that pedestrian safety needs throughout the municipality are identified and considered, the town of Topsham would benefit from the establishment of a formal BikePed Committee

- Implement a municipal policy which stipulates that all alterations to roadways and pedestrian ways will require that the impacted facilities must be made ADA compliant to the maximum extent feasible and should comply with MaineDOT's *ADA Design Guidance for Pedestrian Facilities* found here:  
[http://www.maine.gov/mdot/civilrights/docs/ada/ADA\\_Design\\_Guidance\\_1-24-18.pdf](http://www.maine.gov/mdot/civilrights/docs/ada/ADA_Design_Guidance_1-24-18.pdf)

## Medium Term

- The town of Topsham should develop and approve a local Complete Streets Policy to help guide and govern transportation planning decisions in the town.
- Upgrade all crossings to ensure Americans with Disabilities Act of 1990 (ADA) compliance.
- As appropriate, narrow travel lanes to 10 feet on roadways with posted speed limits of 30 mph or less to improve driver speed compliance.
- Install Rectangular Rapid Flashing Beacons (RRFBs) at critical crossings.

## Long Term

- Consider raised crosswalks to slow and calm traffic at pedestrian crossings.
- Ensure traffic volumes and turning movements warrant channelized right turn lanes. Where warranted, ensure channelized right turn lanes are designed to draw attention to pedestrians in crosswalks.
- Consider lane reductions of 4 lane roads to 3 lanes with center turns (Road Diets); where appropriate, add bike lanes, pedestrian space, medians, or esplanades to the newly freed space.
- In general, retrofit in-town roadways with fewer, narrower travel lanes to slow traffic and shorten pedestrian crossings.
- Incorporate a pedestrian safety needs analysis into all projects where you also evaluate and incorporate (where appropriate) the pedestrian needs of the area surrounding the proposed project.

This report also provides specific recommendations that may improve pedestrian safety at the 5 priority locations identified at the Topsham’s Community Pedestrian Safety Forum on September 20, 2017. Those locations are:

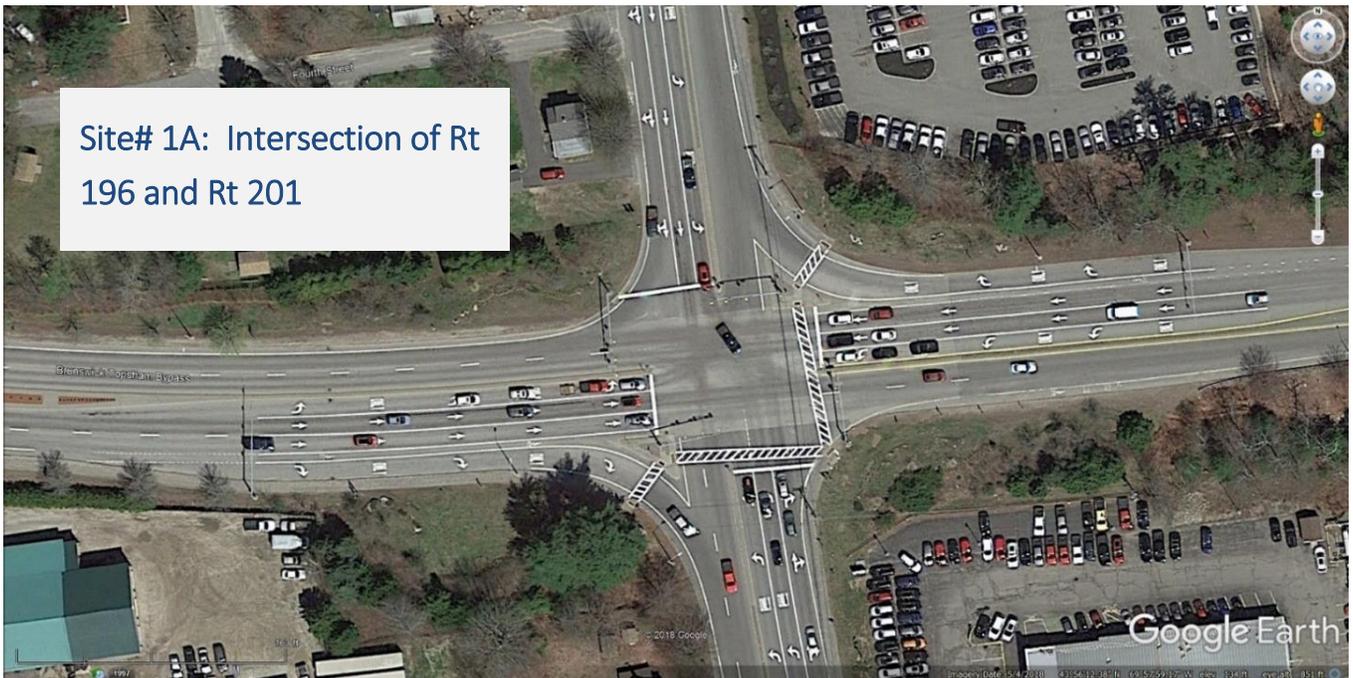
1. Intersection of Route 196 / Route 201
2. Topsham Fair Mall Road
3. Intersection of Elm Street / Main Street
4. Intersection of Main Street / Summer Street
5. Chad Drive

Engineering recommendations were developed from information gathered during the Pedestrian Site Safety Review and are supplemented by recommendations for the common and ongoing maintenance and construction efforts essential to maintain pedestrian safety.

All mitigation recommendations are based on the Federal Highway Administration’s (FHWA) *Pedestrian Safety Guide and Countermeasure Selection System* at [pedbikesafe.org/PEDSAFE/](http://pedbikesafe.org/PEDSAFE/), comply with the Manual on Uniform Traffic Control Devices (MUTCD), and have been reviewed by both MaineDOT and the Federal Highway Administration.

### *Engineering Recommendations for the Intersection of Route 196 and Route 201*

Figure 3: Route 196 / Route 201 (Site 1A)



Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Increase visibility of crosswalks	<ul style="list-style-type: none"> <li>➤ Complete a field review and a safety assessment to determine appropriate ped safety alternatives (signage, locations, sight distance, Accessible Pedestrian Signal, lighting, etc.)</li> <li>➤ Ensure that crosswalks are painted at least annually as early as possible in the spring</li> <li>➤ Upgrade all crosswalks to have high visibility crosswalk markings</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Short	MaineDOT  Town of Topsham	
Lane Reconfiguration / Narrowing to improve pedestrian safety	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Determine if turning movements warrant existing lane configuration</li> <li>➤ Determine if lane widths can be narrowed</li> <li>➤ Consider dropping or redesigning the right-turn slip lane from Rt 196 eastbound onto Rt 201</li> </ul>		Medium	MaineDOT	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>As part of the construction of the new high school, evaluate pedestrian traffic flow and needs between the high school, middle school, and this intersection</p>	<ul style="list-style-type: none"> <li>➤ Complete an analysis and assessment of the intersection and how pedestrians and bicyclists can best navigate the area between the intersection and the schools</li> <li>➤ Determine if the town needs to continue its prohibition of riding bikes on sidewalks</li> <li>➤ Consider updating the town ordinance prohibiting riding bikes on sidewalks to permit and encourage young riders to use the sidewalks</li> <li>➤ Apply to MaineDOT for BikePed Funding to help construct new sidewalks and pedestrian crossings between the schools and this intersection</li> </ul>		<p>Medium</p>	<p>MaineDOT  Town of Topsham</p>	
<p>Pedestrian Refuge Island / Shorter Pedestrian Crossing</p>	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Evaluate applicability of installing a pedestrian refuge island on Rt 196</li> <li>➤ Evaluate ability to shorten crossings by making perpendicular</li> <li>➤ Evaluate appropriateness of installing curb extensions</li> </ul>		<p>Long</p>	<p>MaineDOT  Town of Topsham</p>	

*Objectives\* are concepts generated through public process*



Figure 4: Route 196 / Community Way / Village Drive (Site 1B)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Pedestrian Crossing at Rt 196 and Village Drive	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection to consider the appropriateness of a pedestrian crossing</li> <li>➤ If appropriate, install a pedestrian crossing across Rt. 196</li> <li>➤ Evaluate applicability of installing a pedestrian refuge island on Rt 196</li> </ul>		Long	MaineDOT  Town of Topsham	

*Objectives\* are concepts generated through public process*



Figure 5: Maine Street / Monument Drive (Site 1C)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Improve pedestrian safety in the crosswalk at Monument Drive	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Review need for additional signage</li> <li>➤ Consider RRFB installation</li> <li>➤ Evaluate ability to shorten crossing by making perpendicular</li> <li>➤ Evaluate appropriateness of installing curb extensions</li> </ul>		Medium	Town of Topsham	

*Objectives\* are concepts generated through public process*

## Engineering Recommendations for the Intersection of Route 196 and Topsham Fair Mall Rd



Figure 6: Route 196 / Topsham Fair Mall Road (Site 2A)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Increase visibility of crosswalks	<ul style="list-style-type: none"> <li>➤ Complete a field review and a safety assessment to determine appropriate ped safety alternatives (signage, locations, sight distance, Accessible Pedestrian Signal, lighting, etc.)</li> <li>➤ Ensure that crosswalks are painted at least annually as early as possible in the spring</li> <li>➤ Upgrade all crosswalks to have high visibility crosswalk markings</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Short	MaineDOT  Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Improve pedestrian connectivity at Route 196 and Topsham Fair Mall Road	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Survey local residents and area businesses to gauge interest and need for additional pedestrian facilities</li> <li>➤ Determine if additional sidewalks are needed for connectivity</li> <li>➤ Repair sidewalk's pedestrian connectivity in SE quadrant of intersection</li> </ul>		Medium	MaineDOT  Town of Topsham	

*Objectives\* are concepts generated through public process*



Figure 7: Topsham Fair Mall Road – Northern Most Segment (Site 2B)

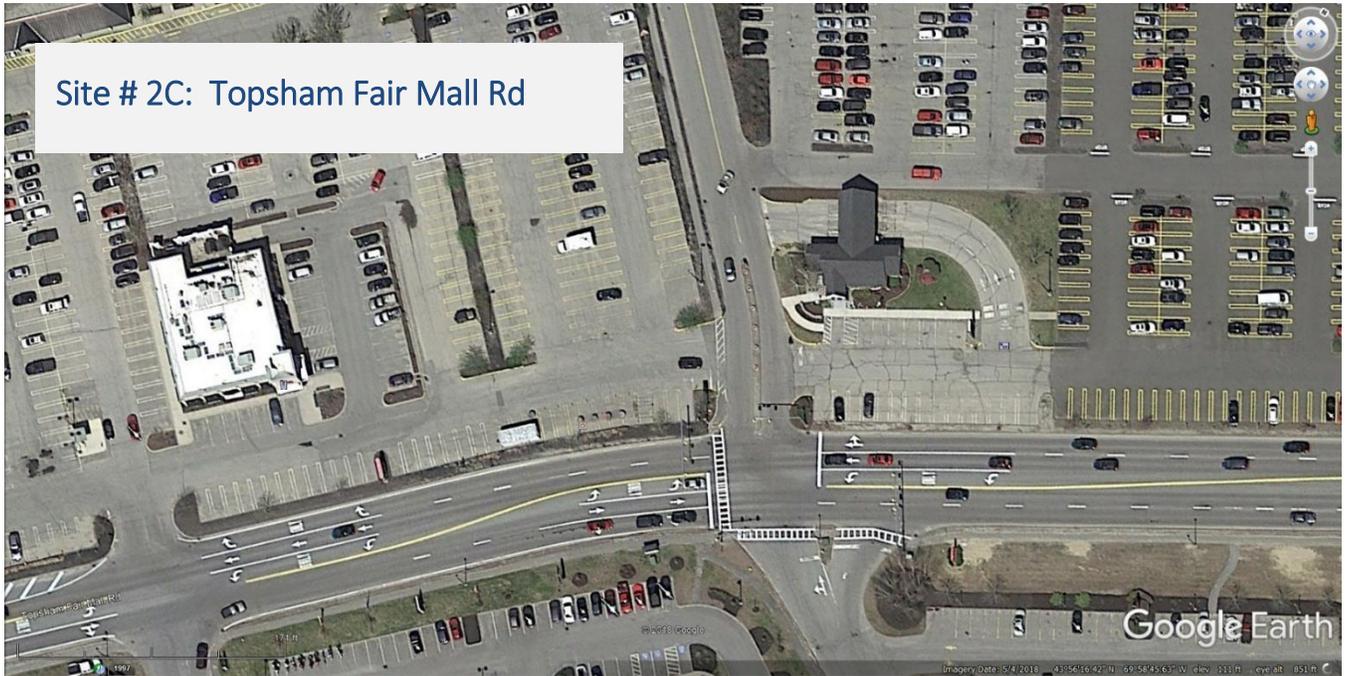


Figure 8: Topsham Fair Mall Road – Middle Segment (Site 2C)

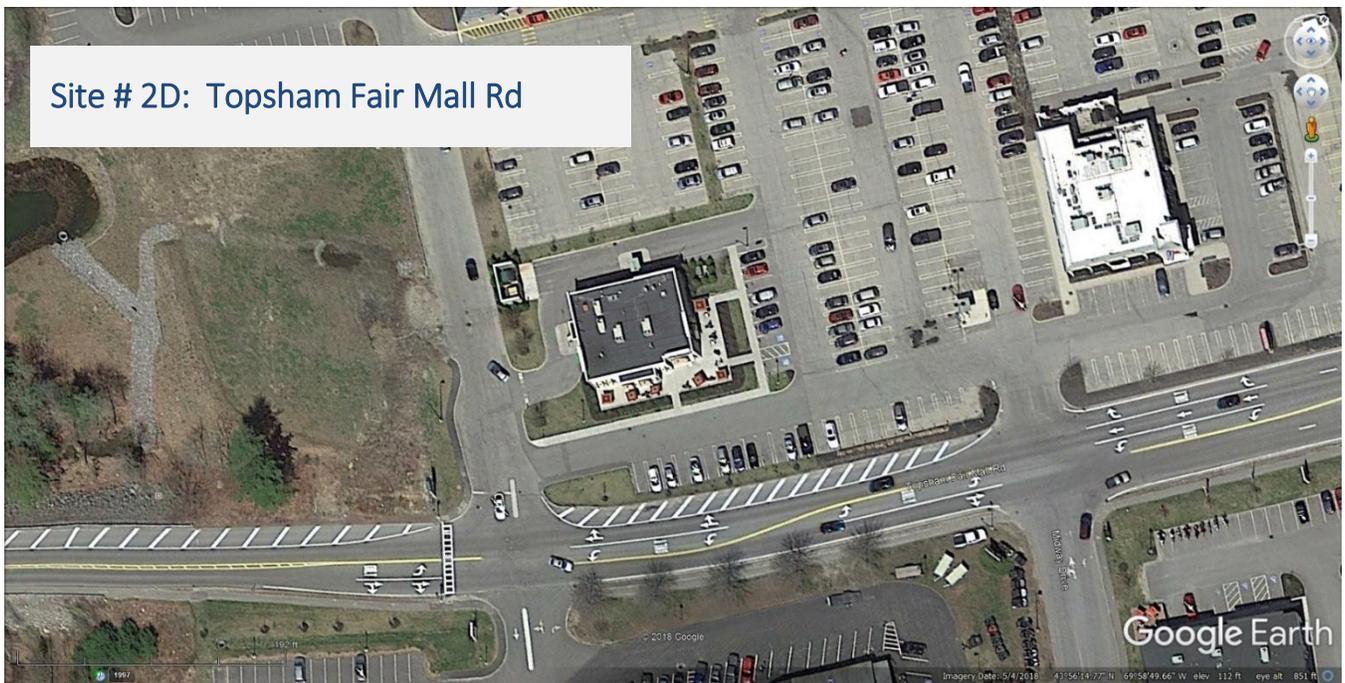


Figure 9: Topsham Fair Mall Road – Southern Most Segment (Site 2D)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Increase visibility of crosswalks	<ul style="list-style-type: none"> <li>➤ Complete a field review and a safety assessment to determine appropriate ped safety alternatives (signage, locations, sight distance, Accessible Pedestrian Signal, lighting, etc.)</li> <li>➤ Ensure that crosswalks are painted at least annually as early as possible in the spring</li> <li>➤ Upgrade all crosswalks to have high visibility crosswalk markings</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Short	MaineDOT  Town of Topsham	
Install additional pedestrian crossings along Topsham Fair Mall Road	<ul style="list-style-type: none"> <li>➤ Review the town’s Topsham Fair Mall Road Master Plan to identify and prioritize recommendations to implement.</li> <li>➤ Complete a traffic analysis of this area</li> <li>➤ Survey local residents and area businesses to gauge interest and need for additional pedestrian crossings</li> <li>➤ Determine if additional pedestrian crossings are warranted for connectivity</li> </ul>		Medium	Town of Topsham	
Road Diet	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of Topsham Fair Mall Road</li> <li>➤ Determine if turning movements warrant existing lane configuration</li> <li>➤ Determine if lane widths can be narrowed</li> <li>➤ Consider eliminating one right-turn lane onto Rt 196</li> </ul>		Medium	Town of Topsham  MaineDOT	

*Objectives\* are concepts generated through public process*

### Engineering Recommendations for the Intersection of Elm St. and Main St.

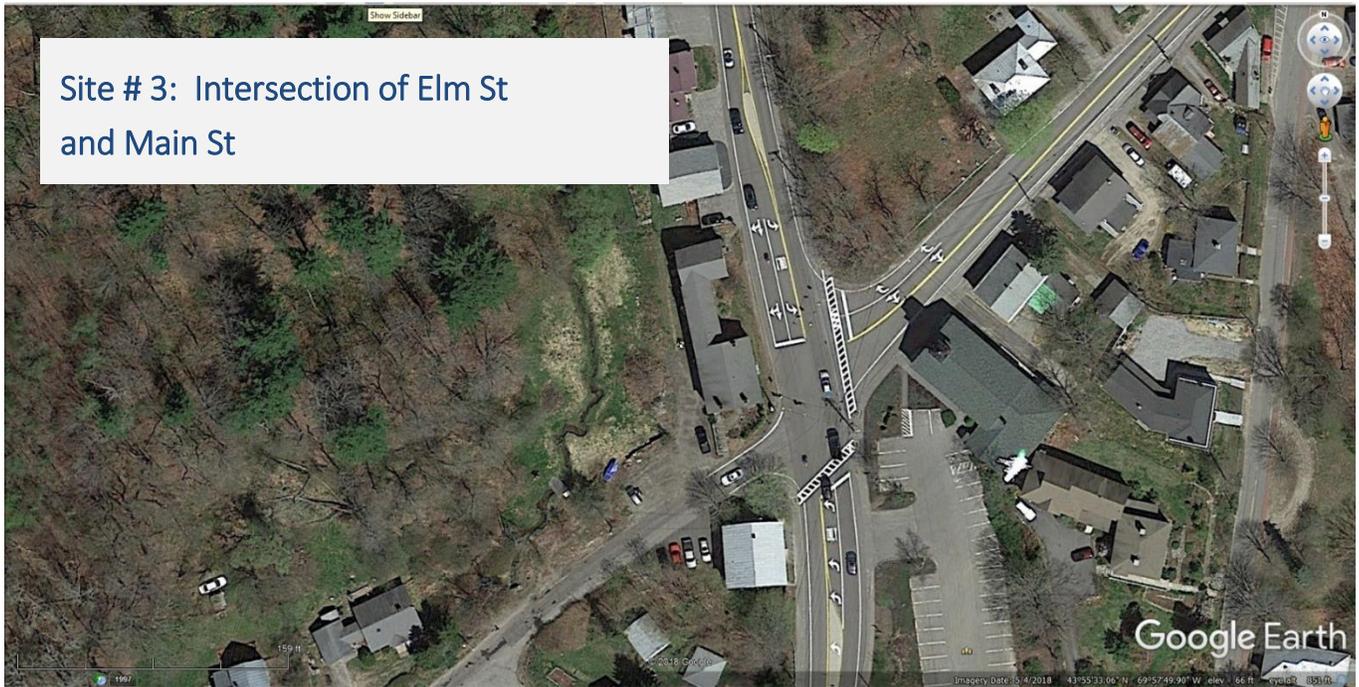


Figure 10: Elm Street / Main Street (Site 3)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Increase visibility of crosswalks	<ul style="list-style-type: none"> <li>➤ Complete a field review and a safety assessment to determine appropriate ped safety alternatives (signage, locations, sight distance, Accessible Pedestrian Signal, lighting, etc.)</li> <li>➤ Ensure that crosswalks are painted at least annually as early as possible in the spring</li> <li>➤ Upgrade all crosswalks to have high visibility crosswalk markings</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Short	MaineDOT  Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Shorten pedestrian crossing distance	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Evaluate ability to shorten crossing by making perpendicular</li> <li>➤ Evaluate appropriateness of installing curb extensions</li> <li>➤ Evaluate appropriateness of a pedestrian refuge island.</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Medium	<p>MaineDOT</p> <p>Town of Topsham</p>	

*Objectives\* are concepts generated through public process*

**Engineering Recommendations for the Intersection of Main St. and Summer St.**



Figure 11: Summer Street / Main Street (Site 4)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Increase visibility of crosswalks	<ul style="list-style-type: none"> <li>➤ Complete a field review and a safety assessment to determine appropriate ped safety alternatives (signage, locations, sight distance, Accessible Pedestrian Signal, lighting, etc.)</li> <li>➤ Ensure that crosswalks are painted at least annually as early as possible in the spring</li> <li>➤ Upgrade all crosswalks to have high visibility crosswalk markings</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Short	MaineDOT  Town of Topsham	
Add a crosswalk at northern outlet of Bowdoin Mill Island Road	<ul style="list-style-type: none"> <li>➤ Review MaineDOT's guidelines on crosswalks (<i>MaineDOT Crosswalk Policy</i>) to determine appropriateness for a crossing at this location</li> <li>➤ Survey local residents and area businesses to gauge interest and need for additional pedestrian facilities</li> <li>➤ Using the crosswalk guidelines, evaluate appropriateness of this crossing</li> </ul>		Medium	Town of Topsham	
Add a crosswalk north of the south entrance to Bowdoin Mill Island	<ul style="list-style-type: none"> <li>➤ Review MaineDOT's guidelines on crosswalks (<i>MaineDOT Crosswalk Policy</i>) to determine appropriateness for a crossing at this location</li> <li>➤ Survey local residents and area businesses to gauge interest and need for additional pedestrian facilities</li> <li>➤ Using the crosswalk guidelines, evaluate appropriateness of the crossing</li> <li>➤ Determine the appropriateness of installing an RRFB at this crossing</li> </ul>		Medium	MaineDOT  Town of Topsham	
Make the entire Bowdoin Mill Island Driveway One-Way	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of these intersections</li> <li>➤ Work with property owners to minimize traffic conflicts by implementing one-way traffic</li> </ul>		Medium	MaineDOT  Town of Topsham	

*Objectives\* are concepts generated through public process*

## Engineering Recommendations for the Intersection of Chad Dr. and Anthony Ave.



Figure 12: Chad Drive (Site 5)

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Increase visibility of crosswalks	<ul style="list-style-type: none"> <li>➤ Complete a field review and a safety assessment to determine appropriate pedestrian safety alternatives (signage, locations, sight distance, Accessible Pedestrian Signal, lighting, etc.)</li> <li>➤ Ensure that crosswalks are painted at least annually as early as possible in the spring</li> <li>➤ Upgrade all crosswalks to have high visibility crosswalk markings</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Short	Town of Topsham	
Install stop or yield sign on Anthony Ave, south of crosswalk	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Determine appropriateness for a traffic control device (either a stop or yield)</li> </ul>		Short	Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Shorten pedestrian crossing distance	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Evaluate ability to shorten crossing by making perpendicular</li> <li>➤ Evaluate appropriateness of installing curb extensions</li> <li>➤ Evaluate the appropriateness of utilizing bollards on the white line for some crosswalks in this area</li> </ul>		Medium	Town of Topsham	
Install a crosswalk across Anthony Ave.	<ul style="list-style-type: none"> <li>➤ Review MaineDOT's guidelines on crosswalks (<i>MaineDOT Crosswalk Policy</i>) to determine appropriateness for a crossing at this location</li> <li>➤ Using the crosswalk guidelines, evaluate appropriateness of the crossing</li> <li>➤ Determine the appropriateness of installing an RRFB at this crossing</li> </ul>		Medium	Town of Topsham	
Install speed table midblock on Chad Drive	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Review speed table information available from FHWA</li> <li>➤ Determine appropriateness for a speed table by completing a benefits analysis</li> </ul>		Medium	Town of Topsham	
Install a mini-roundabout or create a T-Intersection at Anthony Ave and Chad Drive	<ul style="list-style-type: none"> <li>➤ Complete a traffic analysis of this intersection</li> <li>➤ Review mini roundabout information available from FHWA</li> <li>➤ Determine if a T-Intersection would be appropriate</li> <li>➤ Evaluate the appropriateness for a three-way stop at this intersection</li> <li>➤ Complete a benefits analysis to determine appropriateness for a mini-roundabout</li> </ul>		Long	Town of Topsham	

*Objectives\* are concepts generated through public process*

## Education

Education is an essential component of pedestrian safety. According to *Countermeasures that Work*, consistency and repetition in traffic safety educational efforts, coupled with real world practice, are critical for moving people from knowledge changes to behavioral changes, particularly with school-age populations. A need to better educate pedestrians and drivers on how to safely use the roads has been identified as a need for all ages in all 21 Focus Communities, including Topsham.

The most problematic behaviors (by type) identified by Topsham residents at the Safer Walking forum held on April 9, 2018, were as follows:

- Pedestrian Behavior: Walking in Dark Colors after Dark
- Bicycle Behavior: Ignoring Traffic Signs and Signals
- Motorist Behavior: Distracted Driving

Because driver and pedestrian safety education is a statewide need, we have also provided general education recommendations to address these common needs. Specific education recommendations to address problem behaviors were suggestions from community members participating in the Safer Walking Forum.

### Education Recommendations for all 21 Focus Communities

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Get local schools more involved in free Safe Routes to School (SRTS) education programming offered by MaineDOT / BCM	<ul style="list-style-type: none"> <li>➤ Request information from the Bicycle Coalition of Maine (BCM) on the SRTS Program</li> <li>➤ Municipal and school leadership meet to discuss the benefits of participation</li> <li>➤ Request a BCM site visit to discuss participation in the program</li> <li>➤ Schedule an introductory SRTS event at a local school</li> </ul>		Short	Town of Topsham  BCM	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Provide <i>Lunch and Learns</i> to businesses, community organizations, and at public events to emphasize safe behavior</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging</li> <li>➤ Develop a presentation outline for each priority message</li> <li>➤ Identify and train potential facilitators</li> <li>➤ Send informational materials on the Lunch and Learn Program to area businesses and community groups</li> <li>➤ Contact potential groups to schedule an event</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Consider “point of use” educational resources that would help people follow best practices for pedestrian behavior (e.g., midblock stencils reading “Use the Crosswalk!” or signs for drivers saying “Respect our Neighborhood, Slow Down” etc.)</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Create walking school buses or “safety clubs” that also teach best practices to school children</p>	<ul style="list-style-type: none"> <li>➤ Request information from the Bicycle Coalition of Maine (BCM) on the <i>Walking School Bus Program</i></li> <li>➤ Municipal and school leadership meet to discuss the benefits of participation</li> <li>➤ Request a BCM site visit to discuss participation in the program</li> <li>➤ Schedule an introductory Walking School Bus event at a local school</li> </ul>		Medium	<p>BCM</p> <p>Town of Topsham</p>	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Create an educational campaign directed toward adults</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		<p>Medium</p>	<p>MaineDOT BCM Town of Topsham</p>	
<p>Create a local social marketing campaign using fliers, conventional media, and social media to educate the community about driving safely around vulnerable users</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		<p>Medium</p>	<p>MaineDOT BCM Town of Topsham</p>	
<p>Because 48% of all nationally reported pedestrian crashes in 2016 involve drug and/or alcohol impairment of either the driver or the pedestrian, develop outreach materials and programs on the safety risks of impairment from drugs and alcohol use.</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		<p>Medium</p>	<p>MaineDOT BCM Town of Topsham</p>	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Create a local social marketing campaign using fliers, conventional media, and social media to educate the community on strategies for biking and walking safely	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	MaineDOT  BCM  Town of Topsham	
Develop and coordinate a “Walk & Bike Brightly” campaign	<ul style="list-style-type: none"> <li>➤ Research existing <i>Walk &amp; Bike Brightly Campaigns</i> including their strategies and content</li> <li>➤ Meet with BCM to learn about what they are doing in other Maine communities</li> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	MaineDOT  BCM  Town of Topsham	
Create a “Push the Button” campaign for the use of Rectangular Rapid Flashing Beacons	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify the target audience, how the content should be delivered, and the distribution strategy</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	MaineDOT  BCM  Town of Topsham	

*Objectives\* are concepts generated through public process in multiple communities*

## Education Recommendations for Walking in Dark Colors after Dark

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Get schools more involved in free SRTS education programming offered by MaineDOT / BCM</p>	<ul style="list-style-type: none"> <li>➤ Identify which K-8 Schools in the municipality are not currently participating in SRTS Programming</li> <li>➤ Request SRTS information from the Bicycle Coalition of Maine (BCM)</li> <li>➤ Work with BCM and MaineDOT to identify prioritized program areas</li> <li>➤ Share information and resources developed for the municipality during MaineDOT's Heads Up! Project</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Convene a meeting between town staff and key school staff (principal, resource officer, physical education, school board, etc.) for all schools serving children in grades K-8 to discuss the benefits of participation</li> <li>➤ Invite BCM to provide a program overview and potential program activities during the meeting</li> <li>➤ Schedule an introductory SRTS event at a local school</li> <li>➤ Schedule at least one SRTS event per elementary/middle school annually</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Distribute safety information along with highly reflective and actively lit materials at Lunch and Learns, community events, in schools, etc.</p>	<ul style="list-style-type: none"> <li>➤ Obtain highly reflective and actively lit pedestrian safety materials from MaineDOT and BCM</li> <li>➤ Distribute safety information and materials at community events as appropriate</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Develop and provide presentations and resources to teach people about the safety benefits of being highly visible.</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Use dynamic messaging boards to remind walkers to use reflective materials, and remind drivers to slow down and watch out for pedestrians and other vulnerable users</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify various high-visibility locations within the municipality where the signs can be safely located</li> <li>➤ Consider “event based” targeted messaging such as for holidays and when school resumes</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Create a local social marketing campaign using dynamic messaging boards, fliers, conventional media, and social media to educate about pedestrians being visible and motorists slowing down and watching out for other users</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, who the target audience will be, and which social media platform(s) to use to reach this audience</li> <li>➤ Explore the benefits and added value of utilizing a social media consultant</li> </ul>		Medium	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Have police officers during warning stops distribute educational materials developed by the <i>Head's Up Pedestrian Safety Project</i></p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, who the target audience will be, and under what situations the materials would be distributed</li> <li>➤ Obtain highly reflective and actively lit pedestrian safety materials from MaineDOT and BCM</li> <li>➤ Distribute select information and safety materials as appropriate</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Provide ongoing education on the importance of being highly visible.</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify which messages should be developed first and under what situations the materials would be distributed</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Long	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	

*Objectives\* are concepts generated through public process*

## Education Recommendations for Distracted Driving

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Teach people about the dangers of distracted driving at Lunch and Learns, community events, in schools, etc.	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging</li> <li>➤ Develop a presentation outline for each priority message</li> <li>➤ Identify and train potential facilitators</li> <li>➤ Send informational materials on the Lunch and Learn Program to area businesses and community groups</li> <li>➤ Contact potential groups to schedule an event</li> </ul>		Short	MaineDOT BCM Town of Topsham	
Use dynamic messaging boards to remind drivers to put down their phones, slow down, and watch out for pedestrians and other vulnerable users	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify various high-visibility locations within the municipality where the signs can be safely located</li> <li>➤ Consider “event based” targeted messaging such as for holidays and when school resumes</li> </ul>		Short	MaineDOT BCM Town of Topsham	
Create a local social marketing campaign using dynamic messaging boards, fliers, conventional media, and social media on the dangers of distracted driving	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	MaineDOT BCM Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Create a “Topsham Waves” campaign encouraging peds and drivers to acknowledge seeing each other with a wave before crossing	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	MaineDOT  BCM  Town of Topsham	
Create a “Phones Down - Heads Up” campaign to encourage people not to use phones while driving or walking	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Medium	MaineDOT  BCM  Town of Topsham	
Provide ongoing education around distracted driving via road signs, ongoing educational campaigns at schools and worksites, etc.	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify which messages should be developed first and under what situations the materials would be distributed</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		Long	MaineDOT  BCM  Town of Topsham	

*Objectives\* are concepts generated through public process*

## Encouragement

The PL Jacobsen study published in the *Journal of Injury and Prevention* in 2003 concludes that where there are more people walking or bicycling, there are fewer crashes. This study, sometimes referred to as the “Safety in Numbers” study, suggests that encouragement activities to get more people walking (and biking) are important to promoting overall community safety, because the more people who are walking, the safer conditions become.

Encouragement activities can take many forms, and may include not only programmatic efforts (e.g. Walking School Buses), but also activities in the realms of policy and the built environment. Indeed they must go together - efforts to encourage people to walk in a built environment that is not supportive of pedestrian mobility are unlikely to change behavior.

### Encouragement Recommendations for all 21 Focus Communities

Objectives	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Sponsor Walk to School and Walk to Work Days	<ul style="list-style-type: none"> <li>➤ Request <i>Walk to School / Walk to Work</i> information from the Bicycle Coalition of Maine (BCM)</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Share information and resources developed for the municipality during MaineDOT’s Heads Up! Project</li> <li>➤ Convene a meeting of municipal staff and local champions to plan, schedule and deliver the event</li> <li>➤ Schedule at least one event annually</li> </ul>		Short	Town of Topsham	
To engage businesses celebrating the benefits of more foot and bike traffic, develop an outreach campaign with presentations and resources	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> <li>➤ Deliver the program</li> </ul>		Short	MaineDOT  BCM  Town of Topsham	

Objectives	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Get local schools more involved with MaineDOT's / BCM's free Safe Routes to School Program and its encouragement activities</p>	<ul style="list-style-type: none"> <li>➤ Identify which K-8 Schools in the municipality are not currently participating in SRTS Programming</li> <li>➤ Request SRTS information from the Bicycle Coalition of Maine (BCM)</li> <li>➤ Work with BCM and MaineDOT to identify prioritized program areas</li> <li>➤ Share information and resources developed for the municipality during MaineDOT's Heads Up! Project</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Convene a meeting between town staff and key school staff (principal, resource officer, physical education, school board, etc.) for all schools serving children in grades K-8 to discuss the benefits of participation</li> <li>➤ Invite BCM to provide a program overview and potential program activities during the meeting</li> <li>➤ Schedule an introductory SRTS event at a local school</li> <li>➤ Schedule at least one SRTS event per elementary/middle school annually</li> </ul>		Short	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Sponsor "People in the Streets" events where a local street is open only to pedestrians</p>	<ul style="list-style-type: none"> <li>➤ Request <i>People in the Streets</i> event information from the Bicycle Coalition of Maine (BCM)</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Share information and resources developed for the municipality during <i>MaineDOT's Heads Up! Project</i></li> <li>➤ Convene a meeting of municipal staff and local champions to plan, schedule and deliver the event</li> <li>➤ Schedule at least one event annually</li> </ul>		Medium	<p>Town of Topsham</p>	

Objectives	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Create streetscapes that are more attractive and supportive of pedestrian use</p>	<ul style="list-style-type: none"> <li>➤ Budget for a streetscape improvement planning project</li> <li>➤ Work with MaineDOT and BCM to identify potential locations and strategies to improve local streetscapes</li> <li>➤ Hire a consultant to develop streetscape improvement plan</li> <li>➤ Budget for the implementation of the recommendations developed during the streetscape improvement planning project</li> <li>➤ Implement at least one of the recommendation developed during the streetscape improvement planning process.</li> </ul>		<p>Long</p>	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	

*Objectives\* are concepts generated through public process in several communities*

## Enforcement

Consistent and expanded enforcement of the laws governing the legal use of roads on the part of pedestrians and drivers has been identified in all 21 Focus Communities including Topsham.

According to the 2014 National Highway Transportation Safety Administration’s (NHTSA) publication *Pedestrian Safety Enforcement Operations: A How To Guide*, “Enforcement of pedestrian safety laws has typically been minimal, even though compliance with these laws is low.” Increased enforcement activity may improve the behavior of both drivers and pedestrians.

Education recommendations address common enforcement opportunities in all communities. Specific enforcement recommendations are community suggestions that address problem behaviors identified at the Safer Walking Forum.

### Enforcement Recommendations for all 21 Focus Communities

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Utilize Maine Bureau of Highway Safety (BHS) grant funding to enhance enforcement of distracted driving laws in support of vulnerable user safety	<ul style="list-style-type: none"> <li>➤ Fully define the Distracted Driving problem within the local community and develop a local intervention strategy to address the issues</li> <li>➤ Refine and clarify the program’s goals and objectives</li> <li>➤ Develop an implementation timeline</li> <li>➤ Determine the municipality’s strategy for evaluating the effectiveness of this intervention strategy</li> <li>➤ Develop a budget for strategy implementation</li> <li>➤ Apply annually for Maine Bureau of Highway Safety’s (BHS) Distracted Driving Grant Funding</li> <li>➤ Update information as needed, but at least annually</li> </ul>		Short	Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Use dynamic messaging boards to remind drivers to put down their phones, slow down and watch out for pedestrians and other vulnerable users</p>	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify potential target audiences and the potential delivery methods</li> <li>➤ Identify local champions to help develop, implement, and promote the program</li> <li>➤ Build local energy and support for the program</li> </ul>		<p>Short</p>	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Utilize Maine Bureau of Highway Safety grant funding to enhance enforcement of pedestrian crossing laws</p>	<ul style="list-style-type: none"> <li>➤ Identify the problems/challenges and define why pedestrian crossing laws need additional enforcement within the local community</li> <li>➤ Develop a local intervention strategy to address the issues</li> <li>➤ Refine and clarify the program’s goals and objectives</li> <li>➤ Develop an implementation timeline</li> <li>➤ Determine the municipality’s strategy for evaluating the effectiveness of this intervention strategy</li> <li>➤ Develop a budget for strategy implementation</li> <li>➤ Apply annually for Maine Bureau of Highway Safety’s (BHS) Pedestrian Safety Grant Funding</li> <li>➤ Update information as needed, but at least annually</li> </ul>		<p>Short</p>	<p>Town of Topsham</p>	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Utilize Maine Bureau of Highway Safety grant funding to enhance enforcement of pedestrian and bicycle laws	<ul style="list-style-type: none"> <li>➤ Identify the problems/challenges and define why pedestrian and bicycle laws need additional enforcement within the local community</li> <li>➤ Develop a local intervention strategy to address the issues</li> <li>➤ Refine and clarify the program’s goals and objectives</li> <li>➤ Develop an implementation timeline</li> <li>➤ Determine the municipality’s strategy for evaluating the effectiveness of this intervention strategy</li> <li>➤ Develop a budget for strategy implementation</li> <li>➤ Apply annually for Maine Bureau of Highway Safety’s (BHS) Pedestrian Safety Grant Funding</li> <li>➤ Update information as needed, but at least annually</li> </ul>		Short	Town of Topsham	
Law enforcement will distribute appropriate state-wide resources developed by the <i>Heads Up! Pedestrian Safety Project</i>	<ul style="list-style-type: none"> <li>➤ Identify which resources developed by the community, MaineDOT, and/or BCM would be appropriate for law enforcement to distribute and under what circumstances</li> <li>➤ Identify if the municipality would like to implement a seasonal or thematic calendar where specific issues are highlighted at different times of the year and develop if appropriate</li> <li>➤ Develop a local policy that outlines the appropriate times and circumstances when it would be appropriate for an officer to distribute each resource item</li> <li>➤ Ensure that adequate materials and resources are printed and available to every officer</li> </ul>		Short	Town of Topsham	
Investigate all reports of aggressive or negligent motor vehicle operation	<ul style="list-style-type: none"> <li>➤ Create and promote a process for community members to report concerns on motor vehicle operation</li> <li>➤ Validate and prioritize all reports received</li> <li>➤ Investigate all reports</li> </ul>		Short	Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Develop and distribute ongoing community specific resources appropriate for distribution by law enforcement</p>	<ul style="list-style-type: none"> <li>➤ Identify which community specific resources would be appropriate for law enforcement to distribute and under what circumstances</li> <li>➤ Work with BCM and MaineDOT to identify community specific priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify if the municipality would like to implement a seasonal or thematic calendar where specific issues are highlighted at different times of the year and develop if appropriate</li> <li>➤ Develop a local policy that outlines the appropriate times and circumstances when it would be appropriate for an officer to distribute each resource item</li> <li>➤ Ensure that adequate materials and resources are printed and available to every officer</li> </ul>		<p>Medium</p>	<p>MaineDOT</p> <p>BCM</p> <p>Town of Topsham</p>	
<p>Make enforcement of laws protecting vulnerable users a departmental / municipal priority</p>	<ul style="list-style-type: none"> <li>➤ Provide vulnerable user in-service training to every member of the municipal police department</li> <li>➤ Encourage officers to enforce vulnerable user laws through stops, citations, and warnings</li> <li>➤ Ensure that all crashes involving pedestrians include detailed and specific crash information</li> <li>➤ Ensure that vulnerable user laws are enforced across all user groups (bicyclists, pedestrians, drivers)</li> <li>➤ Raise local awareness of the municipality’s enhanced enforcement strategy through the local media, print, and social media outreach efforts</li> </ul>		<p>Medium</p>	<p>Town of Topsham</p> <p>BCM</p>	

*Objectives\* are concepts generated through public process in several communities*

## Enforcement Recommendations for Walking in Dark Colors after Dark

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Use dynamic messaging boards to remind walkers to use reflective materials, and to remind drivers to slow down and watch out for pedestrians and other vulnerable users	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging content</li> <li>➤ Identify which messages should be developed first, how they should be delivered, and who the target audience will be</li> <li>➤ Identify various high-visibility locations within the municipality where the signs can be safely located</li> <li>➤ Consider “event based” targeted messaging such as for holidays and when school resumes</li> </ul>		Short	MaineDOT BCM Town of Topsham	
Have police officers provide reflective materials provided by the <i>Heads Up! Pedestrian Safety Project</i> to persons walking after dark	<ul style="list-style-type: none"> <li>➤ Identify which resources (reflective strips or slap-bands) would be appropriate for law enforcement to distribute and under what circumstances</li> <li>➤ Develop a local policy that outlines the appropriate times and circumstances when it would be appropriate for an officer to distribute each resource item</li> <li>➤ Request highly-reflective materials from MaineDOT</li> <li>➤ Ensure that adequate materials and resources are available to every officer</li> </ul>		Short	Town of Topsham MaineDOT	
Have police officers conduct community education sessions at schools and worksites on pedestrian safety, emphasizing visibility	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to identify priority messaging</li> <li>➤ Develop a presentation outline for each priority message</li> <li>➤ Identify and train officers to be potential facilitators</li> <li>➤ Send informational materials on the program to area businesses, schools, and community groups</li> <li>➤ Contact potential groups to schedule an event</li> </ul>		Medium	MaineDOT BCM Town of Topsham	

*Objectives\* are concepts generated through public process*

## Enforcement Recommendations for Distracted Driving

Objectives	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Track all warnings and citations issued during traffic stops to identify chronic offenders	<ul style="list-style-type: none"> <li>➤ Develop a local policy guiding the process for collecting and tracking all warnings and citations for distracted driving</li> <li>➤ Determine the local threshold for determining when a driver is classified as a “chronic offender” and what local actions will be taken</li> <li>➤ Raise local awareness of the municipality’s enhanced enforcement strategy through the local media, print, and social media outreach efforts</li> </ul>		Medium	Town of Topsham	
Conduct high visibility enforcement operations for drivers using devices	<ul style="list-style-type: none"> <li>➤ Fully define the Distracted Driving problem within the local community and develop a local intervention strategy to address the issues</li> <li>➤ Develop a local policy guiding distracted driving high visibility enforcement operations</li> <li>➤ Refine and clarify the program’s goals and objectives</li> <li>➤ Develop an implementation strategy and timeline</li> <li>➤ Determine the municipality’s strategy for evaluating the effectiveness of this intervention strategy</li> <li>➤ Develop a budget for strategy implementation</li> <li>➤ Apply annually for the Maine Bureau of Highway Safety’s (BHS) Distracted Driving Grant Funding</li> <li>➤ Update information as needed, but at least annually</li> <li>➤ Raise local awareness of the municipality’s enhanced enforcement strategy through the local media, print, and social media outreach efforts</li> </ul>		Medium	Town of Topsham  Bureau of Highway Safety	

*Objectives\* are concepts generated through public process*

## Evaluation

Evaluation of the impact of the mitigation recommendations above can be measured most tangibly in reductions in the frequency and severity of pedestrian crashes.

### Evaluation Recommendations for all 21 Focus Communities

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Track the frequency, severity, and causal factors of pedestrian crashes town wide	<ul style="list-style-type: none"> <li>➤ Utilize existing pedestrian crash data (MaineDOT and local) to identify locations, frequency, severity, and causal factors of all pedestrian crashes for the previous 5 years (2013-2018)</li> <li>➤ Track the number, severity, and causal factors of all pedestrian crashes within the municipality</li> <li>➤ Compare and evaluate all pedestrian crashes within the community with those experienced during the 2013-2018 5-year period</li> <li>➤ Evaluate the frequency, severity and causal factors of pedestrian crashes at all locations prioritized by the community during the <i>Heads Up! Pedestrian Safety Forums</i></li> <li>➤ Evaluate the frequency, severity and causal factors of pedestrian crashes at all locations with more than one pedestrian crash after January 1, 2018</li> <li>➤ Request MaineDOT and the Bicycle Coalition of Maine complete an updated Site Safety Review of all locations with multiple pedestrian crashes or recurrent causal factors</li> </ul>		Short	MaineDOT  BCM  Town of Topsham	
Regularly administer Pedestrian Safety Surveys to community members to track safety knowledge and behaviors over time	<ul style="list-style-type: none"> <li>➤ Work with BCM and MaineDOT to create an appropriate Pedestrian Safety Survey Instrument that will remain valid over time</li> <li>➤ Determine desired survey delivery method, sample population, and survey frequency</li> <li>➤ Administer survey</li> <li>➤ Track responses and changes over time</li> <li>➤ Based on survey results, determine what additional efforts may be needed</li> </ul>		Short	MaineDOT  BCM  Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Count the number of short-term measures implemented	<ul style="list-style-type: none"> <li>➤ The municipality will have partially met standard expectation by implementing (within 1 year of receiving this report) at least 1 short-term measure in at least half of all sections</li> <li>➤ The municipality will have met the minimum standard expectation by implementing (within 1 year of receiving this report) at least 1 short-term measure per section</li> <li>➤ The municipality will have exceeded the standard expectation by implementing (within 1 year of receiving this report) at least 2 short-term measures per section</li> </ul>		Short	Town of Topsham	
Count number of medium-term measures implemented	<ul style="list-style-type: none"> <li>➤ The municipality will have partially met standard expectation by implementing (within 5 years of receiving this report) at least 1 medium-term measure in at least half of all sections</li> <li>➤ The municipality will have met the minimum standard expectation by implementing (within 5 years of receiving this report) at least 1 medium-term measure per section</li> <li>➤ The municipality will have exceeded the standard expectation by implementing (within 5 years of receiving this report) at least 2 medium-term measures per section</li> </ul>		Medium	Town of Topsham	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
<p>Trend line reduction for the frequency and severity of pedestrian crashes town wide and at the locations prioritized by the community</p>	<ul style="list-style-type: none"> <li>➤ Utilize existing pedestrian crash data (MaineDOT and local) to identify locations, frequency, severity, and causal factors of all pedestrian crashes for the previous 5 years (2013-2018)</li> <li>➤ Track the number, severity, and causal factors of all pedestrian cashes within the municipality</li> <li>➤ Compare and evaluate all pedestrian crashes within the community with those experienced during the 2013-2018 5-year period</li> <li>➤ Evaluate the frequency, severity and causal factors of pedestrian crashes at all locations prioritized by the community during the <i>Heads Up! Pedestrian Safety Forums</i></li> <li>➤ Determine annually the community's 5-year trend line for all pedestrian crashes and for those at the locations prioritized by the community</li> </ul>		<p>Medium</p>	<p>MaineDOT  Town of Topsham</p>	
<p>Count number of long-term measures implemented</p>	<ul style="list-style-type: none"> <li>➤ The municipality will have partially met standard expectation by implementing (within 10 years of receiving this report) at least 1 long-term measure in at least half of all sections</li> <li>➤ The municipality will have met the minimum standard expectation by implementing (within 10 years of receiving this report) at least 1 long-term measure per section</li> <li>➤ The municipality will have exceeded the standard expectation by implementing (within 10 years of receiving this report) at least 2 long-term measures per section</li> </ul>		<p>Long</p>	<p>Town of Topsham</p>	

Objectives*	Potential Actions	Priority	Time Frame	Responsible Party	Current Status
Trend line reduction for the frequency and severity of pedestrian crashes town wide and at the locations prioritized by the community	<ul style="list-style-type: none"> <li>➤ Utilize existing pedestrian crash data (MaineDOT and local) to identify locations, frequency, severity, and causal factors of all pedestrian crashes for the previous 5 years (2013-2018)</li> <li>➤ Track the number, severity, and causal factors of all pedestrian crashes within the municipality</li> <li>➤ Compare and evaluate all pedestrian crashes within the community with those experienced during the 2013-2018 5-year period</li> <li>➤ Evaluate the frequency, severity and causal factors of pedestrian crashes at all locations prioritized by the community during the <i>Heads Up! Pedestrian Safety Forums</i></li> <li>➤ Determine annually the community's 10-year trend line for all pedestrian crashes and for those at the locations prioritized by the community</li> </ul>		Long	Town of Topsham	

*Objectives\* are concepts generated through public process in several communities*

## Works Cited

Goodwin, A., Thomas, L., Kirley, B., Hall, W., O'Brien, N., & Hill, K. *Countermeasures that Work: A Highway Safety Countermeasures Guide For State Highway Safety Offices*, Eighth Edition 2015. (Report No. DOT HS 812 202). Washington, DC: National Highway Traffic Safety Administration.

PL Jacobsen. *Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling*, Journal of Injury Prevention 2003;9:205–209.

NHTSA. *Pedestrian Safety Enforcement Operations: A How To Guide* (DOT HS 812 059 November 2014).

