



August 2011

# **Oak Hill Pedestrian Plan**

Scarborough, Maine

## **EXECUTIVE SUMMARY**

Prepared for:



And:

**PACTS**

Portland Area Comprehensive Transportation System

Prepared by:



With:



Richardson & Associates  
Landscape Architects

## **ACKNOWLEDGEMENTS**

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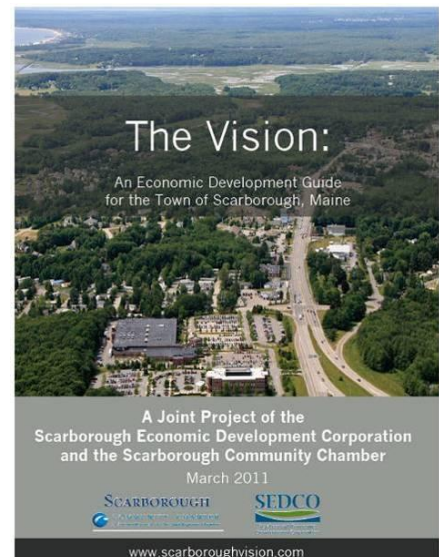


## Introduction

In 2010, the Town of Scarborough matched a grant awarded by the Portland Area Comprehensive Transportation System (PACTS) and the Maine Department of Transportation (MaineDOT) to develop the Oak Hill Pedestrian Plan. This Plan combines past planning efforts with new analysis and design ideas, and includes public input. The result is a complete, up-to-date framework for moving forward with tangible pedestrian improvements in the Oak Hill area of Scarborough.

The Town of Scarborough is clearly committed to becoming more pedestrian-friendly, especially in the Oak Hill commercial district and with connections to surrounding residential areas. Also critical are the walking links to affordable housing areas, bus stops and the grocery store. Development regulations in Oak Hill require future projects to provide the necessary infrastructure to promote walking. The recent Walgreens project is a good example as is the multi-phased effort to create the Eastern Village Development project. Developing in a more walkable manner is also consistent with the Green Development, Quality-of-Life and Transportation and Infrastructure goals set forth in the Scarborough Economic Development Corporation and Scarborough Community Chamber's report, *The Vision: An Economic Development Guide for the Town of Scarborough* (March 2011). The *Vision* also spelled out the Town's desire to improve other forms of more sustainable transportation and to become a more transit-oriented and bike-friendly community.

Current pedestrian conditions within the Oak Hill area are not adequate to serve the needs of its users. Sidewalks are not always continuous and don't exist on some critical streets in the area. Marked crosswalks are missing from some signalized intersections or across roadways where a clear pedestrian desire line exists. The PACTS 2009 Bicycle and Pedestrian Plan ranks the Oak Hill area as "poor" and in need of improvement.



*Creating a more walkable environment in Oak Hill will require pedestrian improvements at the US Route 1/Black Point Road/Gorham Road intersection.*

## “Complete Streets” Design

Developing Complete Streets policies and programs are important elements in creating a high quality of life for a community. Many factors go into determining the quality of life for the citizens of a community: the local education system, prevalence of quality employment opportunities, and affordability of housing are all items that are commonly cited in surveys. Increasingly though, citizens claim that access to alternative means of transportation and access to quality recreational opportunities, such as parks and greenways, are important factors for them in determining their overall pleasure within their community. Communities with such amenities can attract new businesses, industries, and in turn, new residents. Furthermore, quality of life is positively impacted by walking through the increased social connections that take place by residents being active, talking to one another and spending more time outdoors and in their communities. Providing a safe and well-connected sidewalk system is key to creating this quality of life.

Several facility types comprise a well-connected and safe pedestrian system. The combination of these elements serves to create what are known as “Complete Streets”. Complete Streets are streets for everyone – allowing students to walk to school, seniors to bike to the Senior W.O.W. programs, and neighbors and visitors to access local shopping centers and retail establishments, as well as community destinations such as the library, parks and residential areas. This model of a transportation network creates an environment where all users are provided safe access – pedestrians, bicyclists, motorists and public transit users alike.

Complete Streets can offer many benefits in all types of communities. These benefits cover a wide range, including:

- **Economic** – Complete Streets can encourage economic growth by providing viable connections between places where people live and where they work, play and shop.
- **Safety** – Complete Streets reduce crashes for people using all modes of transportation.
- **Transportation** – Complete Streets encourage walking and bicycling, increase travel choices, which can reduce congestion, and increase the overall capacity of the transportation network.
- **Health/Fitness** – Complete Streets create an environment where people can more easily meet their recommended activity levels. Physical activity and a sense of independence are particularly important for children.
- **Air Quality** – Complete Streets allow people to replace car trips with trips that do not generate carbon dioxide and other emissions.

## Pedestrian-friendly Street Design Characteristics

One could argue that the highest priority in the development of Complete Streets is to prioritize walking. To do so, requires the need to develop pedestrian-friendly streetscapes in Oak Hill. Characteristics of such streetscapes include:

- Enhanced Sidewalks and Crossings
  - ADA Compliant Curb Ramps
  - Accommodating Pedestrians at Intersections with Traffic Signals
    - No Right on Red
    - Leading Pedestrian Interval (LPI)
    - Pedestrian Push Buttons
    - Audible Pedestrian Traffic Signals
    - Pedestrian Signal Indication (“Ped Head”) and Countdowns
- Signs and Road Markings
- Shared-use Paths
- Traffic Calming Facilities
  - Curb Extensions
  - Refuge Islands
- Lighting
- Pedestrian Amenities and Gateways
  - Benches
  - Bicycle Parking
  - Interpretive Signs
  - Art Installations
  - Landscaping and Stormwater Features



*Continental/ladder crosswalk designs are highly visible to passing motorists.*



*Medians provide ideal opportunities for refuge islands at critical crosswalk locations.*



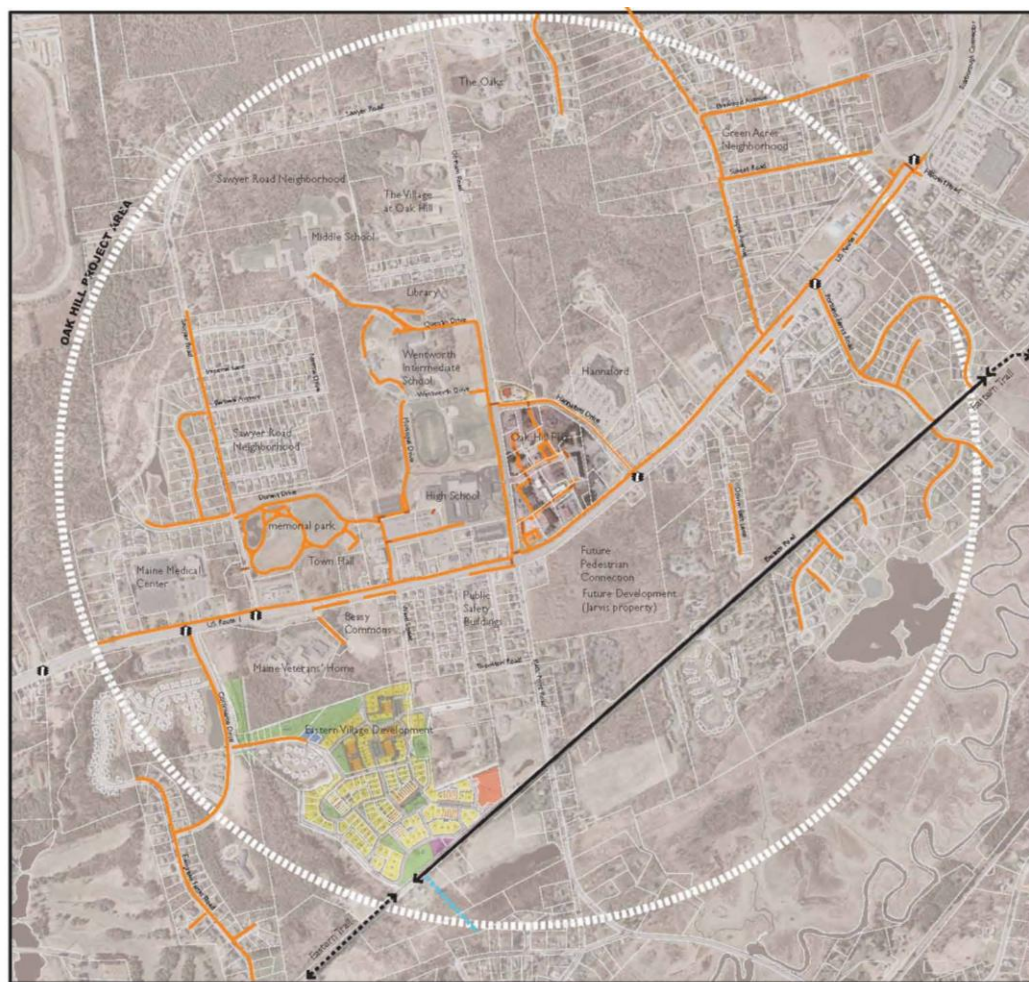
*Benches provide a place for walkers to take a break.*

## Existing Conditions

### Study Area

The Oak Hill Study Area is an area of approximate one mile radius from Scarborough High School. As part of this study, the existing conditions of the study area were documented and analyzed using both GIS maps provided by the Town of Scarborough, on-site field work and site walks with Town staff and the Advisory Committee. The documentation included, but was not limited to, the extent and condition of sidewalks, the presence of crosswalks, road widths, quality of traffic intersections, circulation routes, pedestrian desire lines, potential location of transit shelters and current and future development patterns that could influence walking patterns.

The conditions and extent of the pedestrian infrastructure varies widely in the Oak Hill Area. The majority of sidewalks shown in orange in the GIS map below are concentrated in the Cultural Core and along US Route 1, though primarily along one side. The sidewalks in the neighborhood districts are sporadic to none at all and do not really constitute a network. Fragments of the Eastern Trail sit at the far southwest and northeast edges of Oak Hill. The gap contains Eastern Road which features a low volume of traffic that travels occasionally at high speeds. Currently, there is no sidewalk, path or bike lanes along Eastern. All users share the same roadway space.



## Strengths of Existing Pedestrian System

- Due to development regulations, sidewalks and other pedestrian connectivity requirements are expected to be part of any new development project in the Oak Hill area. The new Walgreens project at the corner of US Route 1 and Gorham Road is a recent example of these regulations.
- A relatively well connected system of sidewalks and crosswalks within the civic area of Oak Hill helps to connect the Town Hall, schools, play fields and Scarborough Public Library.

## Weaknesses of Existing Pedestrian System

- There are sidewalk gaps along major roadway corridors such as Black Point Road, sections of both Gorham Road and US Route 1, and nearly all of the side streets in Oak Hill. The majority of students are unable to walk to school safely.

Sidewalks gaps exist at driveways where the driveways intersect the adjacent arterial. The pedestrian is not given priority via a well-marked crosswalk, stop line or speed table to encourage motorists to yield to pedestrians.

**Lack of Crosswalks.** Crossing any of the state routes in Oak Hill is difficult due to the lack of well-located and safe marked crosswalks. On US Route 1, there are currently no marked crosswalks at the Sawyer Road or Hannaford Drive signalized intersections. Additionally, there are no mid-block marked crossings along US Route 1 and only a single marked crosswalk across Gorham Road at the Hannaford Drive intersection. Most intersections in Oak Hill lack:

- High-visibility, marked crosswalks
  - Pedestrian signalization and count downs
  - Curb extensions or refuge islands
  - Sufficient curb ramps
- **Critical Desire Lines** – there are a number of locations where students are currently walking and crossing the street despite the lack of facilities and infrastructure.
- **The Oak Hill area is designed almost exclusively for automobiles.** The missing pedestrian infrastructure encourages driving from one location to another adjacent location when shopping in the area, despite the proximity of the businesses to each other.
- According to Maine DOT, there were 19 reported crashes involving pedestrians or bicyclists in Scarborough between 2006-2010 and only one of these occurred in Oak Hill. While this might imply that Oak Hill is a safe area for pedestrians, more realistically, it might also be an indication of how few people are walking and bicycling in the area.

## Infrastructure Recommendations

Recommended changes to Oak Hill's physical environment are intended to create a safe, accessible, and connected pedestrian network throughout Oak Hill. The projects are based on a *qualitative* assessment of Oak Hill, though some data was reviewed by the planning team when making recommendations.

### Methodology

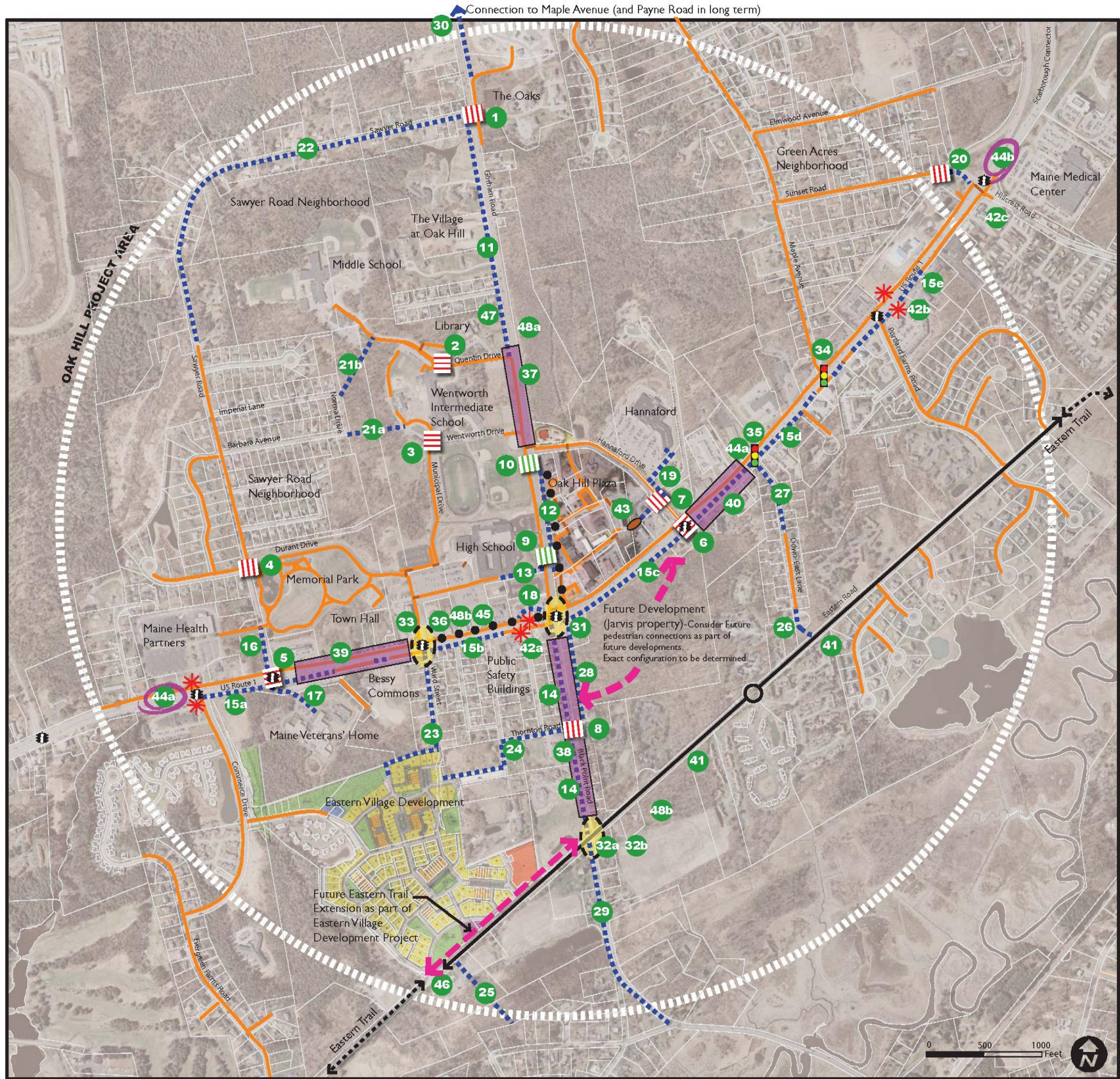
A variety of sources were consulted during the development of these recommendations: input from the Town staff and Pedestrian Plan Advisory Committee, previous plans and studies, maps of existing pedestrian conditions, consultant's fieldwork and public input from the community meeting on June 7, 2011. Fieldwork included an examination of conditions at key roadway crossings, primary roadway corridors, and a consideration of trail opportunities. Map discussion and analysis was conducted at the Advisory Committee meetings and during the public meeting.

### The Pedestrian Network

Numerous types of pedestrian improvement projects have been identified for Oak Hill and are shown on the Recommendations Diagram on the following page. They include crosswalks, median refuge islands, sidewalks/paths, bus shelters, a small pedestrian bridge, grading and drainage, intersection improvements, traffic signals, parking, and school zone signs. All of these projects are also intended to make the Oak Hill area ADA-compliant. A pedestrian network that is fully accessible for those with disabilities will be a network that is safe and user-friendly for the entire able-bodied community as well.



*Scarborough residents gather around the large-scale map of Oak Hill at the June 7 community meeting.*



Oak Hill Recommendations Diagram



July 2011

Richardson & Associates, Landscape Architects

PROPOSED RECOMMENDATIONS LEGEND



Crosswalks

1-8. Provide high-visibility painted crosswalks to encourage connectivity and safe crossings at key intersections.



Refuge Islands

9-10. Provide Refuge Islands to allow safe passage across Gorham Road between the High School and Oak Hill Plaza.

Sidewalks/Path Ways

Note: All existing sidewalks should be maintained and repaired to keep them in good condition.



Sidewalk/Path Improvements

11. Provide a sidewalk and/or esplanade on the west side of Gorham Road to connect Quentin Drive and Sawyer Road. Future improvement should consider existing culverts and shoulder widths and include discussion with adjacent property owners when developing the sidewalks or esplanade
12. Provide a sidewalk on the east side of Gorham Road to connect between the Refuge Islands (#9-10).
13. Provide a sidewalk along the side of the drive/road to the High School to encourage a safe pedestrian / student circulation.
14. Provide a sidewalk on the west side of Black Point Road to establish a pedestrian circulation route between Eastern Road and Route 1.
15. Provide sidewalk improvements along the entire length of Route 1 that consider adding new sidewalks where needed to provide a continuous walking experience. Where possible, provide a separation between the road and the sidewalk.
16. Provide a sidewalk on the west side of Sawyer Road from Route 1 to the entry drive and crosswalk at Maine Medical Center.
17. Provide a sidewalk connection from Maine Veterans' Home to Route 1.
18. As part of removing the dying Elm tree incorporate a new sidewalk into a small memorial plaza with a bus stop, interpretive sign, and new landscape material including a new tree(s).
19. Establish a sidewalk connection to Hannaford Supermarket by creating a sidewalk along Hannaford Drive.
20. Continue the existing sidewalk along Sunset Road to Route 1.
- 21A/B. Institutionalize the existing dirt path from Norma Drive to Wentworth Drive by paving it as a multi-use path, and potentially add lighting. Add a new multi-use path from the North end of Norma Drive to Quentin Drive.
22. Continue the existing sidewalk along the entire length of Sawyer Road.
23. Provide a sidewalk connection between the Eastern Village Development and Route 1 along Ward Street.
24. Provide a sidewalk connection between the Eastern Village Development and Black Point Road along Thornton Road and Westwood Avenue.
25. Institutionalize the existing path from Eastern Road and the neighborhoods south of this road by paving it as a multi-use path.
26. Institutionalize the existing path from Eastern Road and Down East Lane by paving it as a multi-use path.
27. Continue the existing sidewalk on Down East Lane to Route 1.
28. Develop new sidewalk along the east side of Black Point Road as part of any future Jarvis Property Development.
29. Extend sidewalks along west side of Black Point Road to the intersection of Winnocks Neck Road and Old County Road
30. Establish a sidewalk connection between Gorham Road and Maple Avenue, and in the long term, to Payne Road. In the short term, establish wayfinding signs to guide pedestrians through The Oaks apartment complex.



Intersection Improvements

31. Establish intersection improvements to the Route 1 and Black Point Road intersection that may include new and wider sidewalks, reduced encroachments, bump-outs, enhanced crosswalks, pedestrian-activated crossing beacon signs, and lighting.
- 32a. (near term) - Repaint existing crosswalks, clear vegetation for enhanced visibility, and install signs as needed at the Black Point Road and Eastern Road Intersection.
- 32b. (long term) - Establish new intersection improvements at Black Point Road and Eastern Road Intersection as part of the Eastern Village Development.
33. Establish intersection improvements at Route 1 and Ward Street.



Traffic Signals

- 34-35. Explore the possibility of a pedestrian-activated traffic signal and crosswalk, or a pedestrian-activated flashing beacon with median Refuge Island and crosswalk.
36. Explore the possibility of traffic signal enhancements for the existing traffic signal to allow more pedestrian crossing time.



Traffic Calming Measures

- 37 - 40. Establish traffic-calming measures along Route 1, Black Point Road, and Gorham Road to slow traffic, enhance pedestrian safety, and brand the Oak Hill Area.
41. Explore traffic calming to improve pedestrian/bicyclist access and include features that calm traffic.



Transit Shelters

- 42a,b,c. Establish visible bus shelters along Route 1 that include shelters, benches, trash cans, signs, schedules, and maps.



Pedestrian Bridge

43. Develop an accessible pedestrian bridge over the brook behind Oak Hill Plaza.



Gateways

- 44a. Oak Hill gateway. Improvements may include signs, landscaping, public art and lighting.
- 44b. Scarborough gateway. Improvements may include signs, landscaping, public art and lighting.



Lighting

45. Establish improved decorative or pedestrian-scale lighting along portions of Route 1 and Gorham Road.



Parking

46. Establish a legitimate parking configuration along Eastern Road to alleviate vehicular and pedestrian conflicts. Provide clear signs marking the parking areas and the Eastern Trail.



Grading and Drainage

47. Mitigate the drainage issues causing ponding and icing at the Library entrance and Quentin Drive causing interruptions to pedestrian circulation.



Signs

- 46a. Provide additional Speed Limit School Zone signs along Gorham Road and Rt. 1 between Ward and Black Point.
- 46b. Provide wayfinding and bike route signs along Eastern Ave to better define the on-road connection of Eastern Trail.

EXISTING CONDITIONS LEGEND



Existing Traffic Signal



Existing Sidewalk Locations



Existing Crosswalks

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## Prioritization of Recommendations

The various projects shown on the Recommendations Diagram are intended to serve as a compendium of improvements to ultimately make the Oak Hill area a more pedestrian-friendly district. Each project differs significantly in how much it provides enhanced safety and connectivity, whether it helps to provide a better connection to the schools or bus stops and whether cost, engineering or permitting challenges preclude an expedited implementation. Because of this, each of the project recommendations was evaluated using a weighted criteria that was developed in consultation with the Town and the Advisory Committee. The criteria include:

- Improves safety (weighted 3x)
- Improves safe routes to schools (weighted 3x)
- Provides access to destinations (weighted 2x)
- “Completes” the street (weighted 2x)
- Impact on traffic safety and circulation (weighted 2x)
- Increases regional/local connectivity (weighted 2x)
- Provides access to transit (weighted 1x)
- Public input provided (weighted 1x)

Ease of Implementation, Order-of-Magnitude Cost and a Timeline are included separately in the evaluation so as not to throw off the scoring based on the safety and accessibility criteria listed above. The matrix on the following pages includes all projects ranked in order of how they scored in the evaluation process, from high to low (with high scores going to the prioritized projects). Regardless, even after prioritization, these projects do not have to be built in that order. In fact, when opportunity arises, any portion of the comprehensive pedestrian network should be addressed immediately, regardless of priority order.

**Prioritization Matrix Legend**

|                                       |  |
|---------------------------------------|--|
| <b>Improves Safety</b>                | major improvement = 3  |
|                                       | significant improvement = 2  |
|                                       | modest improvement = 1   |
|                                       | Pedestrian-car collisions in the past three years = up to 2 additional points  |
| <b>Provides Safe Routes to School</b> | Within .25 miles of school = 3   |
|                                       | Within .5 miles of school = 2  |
|                                       | Within 1 mile of school = 1  |
| <b>Community Destinations</b>         | Within .25 miles of destinations = 3   |
|                                       | Within .5 miles of destinations = 2  |
|                                       | Within 1 mile of destinations = 1  |
| <b>"Completes" the Street</b>         | "Completing the street" for a significant length of an arterial or collector roadway = 3                                 |
|                                       | "Completing the street" for a short length of an arterial or collector roadway = 2                                       |
|                                       | "Completing the street" for a short length of a local street = 1   |
| <b>Impact on Traffic</b>              | No impact = 3  |
|                                       | Some perceived impact (e.g.: longer queues) = 2  |
|                                       | Significant impact (e.g.: signal operations, intersection capacity) = 1  |
| <b>Increased Connectivity</b>         | Within a quarter mile of an existing facility or trail = 3   |
|                                       | Within a half mile of an existing facility or trail = 2  |
|                                       | Within a half mile of a planned facility = 1   |
| <b>Access to Transit:</b>             | Within direct access of a bus stop = 3   |
|                                       | Within a quarter mile of a bus stop = 2  |
|                                       | Within a half mile of a bus stop = 1   |
| <b>Public Input:</b>                  | Identified by the public as a desirable future facility multiple times = 2 -3 (varies)                                   |
|                                       | Identified by the public as a desirable future facility once = 1   |
|                                       | Not identified = 0   |
| <b>Ease of Implementation</b>         | Exclusively in the public right-of-way with few cost complications or changes to traffic patterns = 3                    |
|                                       | Some modifications to curbs/traffic lanes required, use of private property and/or modest engineering challenges = 1 - 2 |
|                                       | ROW negotiation/acquisition and sidewalks along multiple private properties required; expensive engineering required = 0 |
| <b>Order-of-Magnitude Cost</b>        | \$ = <\$5,000 / \$\$ = \$5,000-25,000 / \$\$\$ = \$25,000-100,000 / \$\$\$\$ = >\$100,000                                |
| <b>Improves Safety:</b>               | major improvement = 3  |
|                                       | significant improvement = 2  |
|                                       | modest improvement = 1   |
|                                       | Pedestrian-car collisions in the past three years = up to 2 additional points  |

| ID  | Project Type                       | Project Location  | Improves Safety | Safe Routes to School | Access to Destinations | "Completes" the Street | Safety and Circulation | Connectivity | Access to Transit | Public Input | Total (max. of 48) | Implementation Ease | Order-of-magnitude Cost | Time-line    |
|-----|------------------------------------|---|-----------------|-----------------------|------------------------|------------------------|------------------------|--------------|-------------------|--------------|--------------------|---------------------|-------------------------|--------------|
| 15b | Sidewalk/Pathway                   | US Route 1 (south) - Sidewalk infill from Ward St to Black Point Rd             | 3               | 3                     | 3                      | 3                      | 3                      | 3            | 3                 | 2            | 47                 | 2                   | \$\$\$                  | near         |
| 14  | Sidewalk/Pathway                   | Black Point Rd - New sidewalk, west side  | 3               | 3                     | 3                      | 3                      | 2                      | 3            | 1                 | 2            | 43                 | 1                   | \$\$\$\$                | med          |
| 39  | Traffic Calming                    | Route 1 from Sawyer Rd to Ward St   | 3               | 3                     | 3                      | 3                      | 2                      | 2            | 2                 | 3            | 43                 | 1                   | \$\$\$\$                | med          |
| 31a | Intersection (near)                | US Route 1 and Gorham/Black Point Rd (crosswalks and signage)                   | 3               | 3                     | 3                      | 3                      | 1                      | 3            | 2                 | 3            | 43                 | 2                   | \$\$                    | near/<br>med |
| 31b | II (long term)                     | US Route 1 and Gorham/Black Point Rd (bump outs, crossing island, geometry)     | 3               | 3                     | 3                      | 3                      | 1                      | 3            | 2                 | 3            | 43                 | 2                   | \$\$\$\$                | long         |
| 12  | Sidewalk/Pathway                   | Gorham Rd - Sidewalk cast side connecting proposed Refuge Island 9 and 10       | 3               | 3                     | 2                      | 3                      | 3                      | 2            | 1                 | 2            | 41                 | 2                   | \$\$\$                  | med          |
| 11  | Sidewalk/Pathway                   | Gorham Rd - Sidewalk west side between Quentin Dr and Sawyer Rd                 | 2               | 3                     | 2                      | 3                      | 3                      | 3            | 0                 | 3            | 40                 | 1                   | \$\$\$\$                | med          |
| 9   | Refuge Island                      | Gorham Rd - between the High School and Oak Hill Plaza                          | 3               | 3                     | 3                      | 2                      | 2                      | 2            | 0                 | 3            | 39                 | 1                   | \$\$                    | med          |
| 15a | Sidewalk/Pathway                   | US Route 1, south side - Sidewalk infill from Commerce Dr to Ward St            | 3               | 1                     | 3                      | 3                      | 3                      | 2            | 3                 | 2            | 39                 | 1                   | \$\$\$\$                | med          |
| 15d | Sidewalk/Pathway                   | US Route 1, south side - Sidewalk infill from Hannaford Dr to Portland Farms Rd | 3               | 2                     | 2                      | 3                      | 3                      | 2            | 2                 | 1            | 38                 | 1                   | \$\$\$\$                | med          |
| 42b | Transit Shelter                    | Just west of Gorham Rd and Route 1 intersection                                 | 2               | 1                     | 3                      | 3                      | 3                      | 3            | 3                 | 2            | 38                 | 3                   | \$\$                    | near         |
| 15c | Sidewalk/Pathway                   | US Route 1, south side - Sidewalk infill from Black Point Rd to Hannaford Dr    | 3               | 1                     | 2                      | 3                      | 3                      | 3            | 2                 | 1            | 37                 | 2                   | \$\$\$                  | long         |
| 10  | Refuge Island                      | Gorham Rd just south of Hannaford Dr  | 3               | 3                     | 3                      | 2                      | 2                      | 1            | 0                 | 2            | 36                 | 1                   | \$\$                    | med          |
| 37  | Traffic Calming                    | Gorham Rd from Quentin Dr to Hannaford Dr                                       | 3               | 3                     | 1                      | 3                      | 2                      | 2            | 0                 | 2            | 36                 | 1                   | \$\$\$(\$)              | med          |
| 3   | Traffic Calming & Sidewalk/Pathway | Wentworth Dr and Municipal Dr (includes sidewalk extension)                     | 3               | 3                     | 2                      | 2                      | 2                      | 2            | 0                 | 1            | 35                 | 3                   | \$\$                    | near         |
| 36  | Traffic Signal                     | Route 1 and Ward St (potential for longer pedestrian crossing time)             | 3               | 3                     | 2                      | 2                      | 1                      | 2            | 1                 | 2            | 35                 | 2                   | \$                      | near         |
| 38  | Traffic Calming                    | Gorham Rd from Route 1 to Eastern Rd  | 3               | 3                     | 2                      | 3                      | 2                      | 1            | 0                 | 1            | 35                 | 1                   | \$\$\$(\$)              | med          |
| 40  | Traffic Calming                    | Route 1 from Hannaford Dr to Down East Lane                                     | 3               | 1                     | 3                      | 3                      | 2                      | 2            | 1                 | 2            | 35                 | 1                   | \$\$\$(\$)              | med          |
| 48a | Signs/ markings                    | Gorham Rd - school zone signs and pavement markings                             | 2               | 3                     | 2                      | 3                      | 2                      | 2            | 0                 | 2            | 35                 | 3                   | \$                      | near         |
| 15e | Sidewalk/Pathway                   | US Route 1, south side - Sidewalk infill from Portland Farms Rd to Hillcrest Rd | 3               | 1                     | 1                      | 3                      | 3                      | 2            | 3                 | 1            | 34                 | 2                   | \$\$                    | med          |
| 13  | Sidewalk/Pathway                   | High School- Extend existing sidewalk along driveway/entry road                 | 2               | 2                     | 3                      | 3                      | 3                      | 2            | 0                 | 0            | 34                 | 2                   | \$\$                    | long         |
| 45  | Lighting                           | Route 1 from Municipal Dr to Gorham Rd and Gorham Rd along Oakhill Plaza        | 2               | 2                     | 2                      | 3                      | 3                      | 2            | 1                 | 1            | 34                 | 1                   | \$\$\$                  | long         |
| 21a | Sidewalk/Pathway                   | Multi-Use Path: Barbara Ave/Norma Dr to Wentworth Dr                            | 1               | 3                     | 3                      | 1                      | 3                      | 2            | 0                 | 2            | 32                 | 2                   | \$\$\$                  | med          |
| 21b | Sidewalk/Pathway                   | Multi-Use Path: Imperial Lane/Norma Dr to Quentin Dr, adjacent to Middle School | 1               | 3                     | 3                      | 1                      | 3                      | 2            | 0                 | 2            | 32                 | 2                   | \$\$\$                  | med          |
| 23  | Sidewalk/Pathway                   | Ward St sidewalk between US Route 1 and Eastern Village Development             | 1               | 2                     | 2                      | 3                      | 3                      | 2            | 2                 | 1            | 32                 | 1                   | \$\$\$                  | long         |
| 28  | Sidewalk/Pathway                   | Black Point Rd - New sidewalk east side, future Jarvis Property Development     | 2               | 2                     | 2                      | 3                      | 3                      | 1            | 1                 | 0            | 31                 | 1                   | \$\$\$                  | long         |
| 30  | Sidewalk/Pathway                   | Gorham Rd - Extend east sidewalk to Maple Ave (Payne Rd in long term)           | 2               | 2                     | 1                      | 3                      | 3                      | 2            | 0                 | 1            | 31                 | 1                   | \$\$\$                  | long         |
| 47  | Grading/Drainage                   | Library Entrance area at Quentin Dr   | 3               | 1                     | 2                      | 3                      | 3                      | 1            | 0                 | 1            | 31                 | 2                   | \$\$                    | med          |
| 35  | Traffic Signal                     | Route 1 and Down East Lane (signal or flashing beacon with refuge option)       | 3               | 1                     | 2                      | 3                      | 1                      | 2            | 1                 | 1            | 30                 | 1                   | \$\$\$                  | long         |
| 42c | Transit Shelter                    | Just north of Route 1 and Portland Farms Rd intersection                        | 2               | 0                     | 2                      | 3                      | 3                      | 2            | 3                 | 1            | 30                 | 3                   | \$\$                    | near         |

| ID  | Project Type             | Project Location  | Improves Safety | Safe Routes to School | Access to Destinations | "Completes" the Street | Safety and Circulation | Connectivity | Access to Transit | Public Input | Total (max. of 48) | Implementation Ease | Order-of-magnitude Cost | Time-line |
|-----|--------------------------|---|-----------------|-----------------------|------------------------|------------------------|------------------------|--------------|-------------------|--------------|--------------------|---------------------|-------------------------|-----------|
| 48b | Signage                  | Eastern Rd - Eastern Trail signs  | 1               | 1                     | 3                      | 2                      | 3                      | 3            | 0                 | 2            | 30                 | 3                   | \$                      | near      |
| 25  | Sidewalk/Pathway         | Shared-Use Path between Eastern Rd and Old County Rd  | 3               | 1                     | 2                      | 1                      | 3                      | 2            | 0                 | 1            | 29                 | 2                   | \$\$\$                  | med       |
| 16  | Sidewalk/Pathway         | Sawyer- Sidewalk west side between US Route 1 and Maine Medical Center  | 2               | 1                     | 2                      | 2                      | 3                      | 2            | 1                 | 1            | 29                 | 2                   | \$\$                    | med       |
| 33  | Intersection             | Route 1 and Ward St   | 1               | 3                     | 3                      | 2                      | 1                      | 1            | 1                 | 2            | 29                 | 3                   | \$\$\$                  | med       |
| 1   | Crosswalk                | Corner of Sawyer Rd/Pinoak Dr and Gorham Rd   | 2               | 2                     | 1                      | 1                      | 3                      | 2            | 0                 | 2            | 28                 | 3                   | \$                      | med       |
| 4   | Crosswalk                | Durant Dr/Juneberry Lane and Sawyer Dr  | 2               | 2                     | 2                      | 1                      | 3                      | 2            | 0                 | 0            | 28                 | 3                   | \$                      | med       |
| 18  | Sidewalk/Pathway         | New sidewalk and memorial plaza to replace dying historic Elm tree  | 1               | 1                     | 2                      | 2                      | 3                      | 1            | 3                 | 3            | 28                 | 2                   | \$\$                    | near      |
| 22  | Sidewalk/Pathway         | Sawyer Rd - Extend existing sidewalk improvements to Gorham Rd  | 2               | 1                     | 1                      | 3                      | 3                      | 2            | 0                 | 1            | 28                 | 0                   | \$\$\$\$                | long      |
| 27  | Sidewalk/Pathway         | Down East Lane - Extend existing sidewalk to US Route 1   | 1               | 1                     | 2                      | 3                      | 3                      | 2            | 1                 | 1            | 28                 | 2                   | \$\$\$                  | long      |
| 42a | Transit Shelter          | At Commerce Dr intersection   | 2               | 0                     | 1                      | 3                      | 3                      | 2            | 3                 | 1            | 28                 | 3                   | \$\$                    | near      |
| 2   | Crosswalk                | Quentin Dr at Wentworth Intermediate School   | 2               | 2                     | 2                      | 1                      | 3                      | 1            | 0                 | 1            | 27                 | 3                   | \$                      | near      |
| 34  | Traffic Signal           | Route 1 and Maple Avenue(signal or flashing beacon with refuge option)  | 3               | 0                     | 2                      | 3                      | 1                      | 2            | 2                 | 0            | 27                 | 1                   | \$\$\$                  | long      |
| 41  | Traffic Calming          | Eastern Rd  | 3               | 0                     | 1                      | 2                      | 2                      | 3            | 0                 | 2            | 27                 | 3                   | \$\$\$(\$)              | near      |
| 43  | Pedestrian Bridge        | Pedestrian Bridge over brook behind Oak Hill Plaza  | 2               | 1                     | 2                      | 2                      | 3                      | 2            | 0                 | 0            | 27                 | 2                   | \$\$\$                  | long      |
| 29  | Sidewalk/Pathway         | Black Point Rd - Extend sidewalk west side to Winnocks Neck Rd/Old Country Rd                                       | 2               | 1                     | 1                      | 3                      | 2                      | 2            | 0                 | 1            | 26                 | 0                   | \$\$\$                  | long      |
| 24  | Sidewalk/Pathway         | New sidewalks from Eastern Village Development Project (EVDP) and Black Point Rd along Thornton Rd and Westwood Ave | 1               | 1                     | 1                      | 3                      | 3                      | 2            | 1                 | 1            | 26                 | 1                   | \$\$\$                  | long      |
| 26  | Sidewalk/Pathway         | Shared-use Path between Eastern Rd and Down East Lane   | 1               | 1                     | 2                      | 2                      | 3                      | 2            | 1                 | 1            | 26                 | 2                   | \$\$                    | long      |
| 32a | Intersection (near)      | Black Point and Eastern Rds - Repaint crosswalks, improved lighting and signs                                       | 2               | 1                     | 1                      | 2                      | 2                      | 2            | 0                 | 3            | 26                 | 2                   | \$\$\$                  | near      |
| 32b | Intersection (long)      | Black Point and Eastern Rds - new x-walk and crossing beacon per EVDP   | 2               | 1                     | 1                      | 2                      | 2                      | 2            | 0                 | 3            | 26                 | 2                   | NA                      | long      |
| 17  | Sidewalk/Pathway         | Maine Veteran's Home- Sidewalk to US Route 1  | 2               | 0                     | 2                      | 2                      | 3                      | 2            | 1                 | 0            | 25                 | 1                   | \$\$                    | long      |
| 5   | Crosswalk                | Sawyer Dr and US Route 1  | 2               | 1                     | 2                      | 2                      | 2                      | 1            | 0                 | 1            | 24                 | 2                   | \$                      | med       |
| 6   | Crosswalk                | Hannaford Dr and US Route 1   | 2               | 1                     | 2                      | 2                      | 2                      | 1            | 0                 | 1            | 24                 | 2                   | \$                      | med       |
| 7   | Crosswalk                | Crossing at Hannaford Dr  | 2               | 1                     | 2                      | 1                      | 3                      | 1            | 0                 | 1            | 24                 | 3                   | \$                      | med       |
| 19  | Sidewalk/Pathway         | Hannaford - New sidewalk from Hannaford Dr to Hannaford Supermarket   | 2               | 1                     | 1                      | 2                      | 3                      | 1            | 0                 | 0            | 23                 | 2                   | \$\$                    | med       |
| 8   | Crosswalk                | Black Point Rd and Thornton Rd  | 2               | 0                     | 1                      | 1                      | 3                      | 2            | 0                 | 1            | 21                 | 3                   | \$                      | long      |
| 20  | Sidewalk/Pathway         | Sunset Rd - Extend sidewalk to Route 1 (includes new crosswalk)   | 1               | 0                     | 1                      | 2                      | 3                      | 2            | 2                 | 0            | 21                 | 2                   | \$\$\$                  | med       |
| 44a | Oak Hill Area Gateways   | Route 1, south of Commerce Dr and at Down East Lane   | 1               | 0                     | 0                      | 1                      | 3                      | 1            | 0                 | 2            | 15                 | 1-2                 | \$\$\$                  | med       |
| 44b | Scarborough Town Gateway | Route 1, north of Hillcrest Rd  | 1               | 0                     | 0                      | 1                      | 3                      | 1            | 0                 | 2            | 15                 | 1-2                 | \$\$\$                  | med       |
| 46  | Parking                  | Expanded parking area at the Eastern Trail trailhead  | 1               | 0                     | 1                      | 1                      | 2                      | 1            | 0                 | 1            | 14                 | 1                   | \$\$\$                  | long      |