1.0 Introduction
The City of Saco and the Town of Scarborough began collaborating in 2018 to develop recommendations that will improve conditions of Route 1 for pedestrians, bicyclists, buses, trucks and passenger vehicles. This concept, known as Complete Streets, is based on the understanding that streets are used not just for vehicles, but for ALL modes of transportation and should be safe and accommodating to all users.

1.1 Project Approach

**DOCUMENT REVIEW, FIELD WORK AND ASSESSMENT**

A. Documentation of existing zoning and land use context for the corridor was performed.
B. All MaineDOT and PACTS data was assembled and included
   a. Intersection Turning Movement Counts
   b. Automatic Traffic Recorder Counts
   c. Bicycle and Pedestrian Volumes
   d. Truck Volumes and Patterns
   e. Transit Data
   f. Crash Data for the most recent 3-year period
   g. As-built plans and traffic signal timing plans
   h. Seasonal traffic volume information
   i. Right-of-way information
   j. Speed Data
   k. Current design projects
C. Information from each community that is relevant to the study including comprehensive plans, development proposals, transportation plans, traffic impact studies, etc. were obtained and reviewed.
D. A field inventory to update the data collected to document information in the MaineDOT/PACTS database was performed.
E. Supplemental intersection turning movement counts were performed.
F. A transit system inventory was performed and included amenities (signs, shelters, benches) at bus stops, location and length of the bus stop, and a general determination of accessibility at the pedestrian path of travel to and from bus stops.

**PUBLIC OUTREACH**

Public involvement is an important part of developing consensus-based recommendations. To ensure an interactive and comprehensive program, public surveys were conducted and two sets (in each community) of public meetings were held. The first set of meetings included a general overview of the study with the key objective to obtain concerns and suggested recommendations. The second set of meetings was to present Draft recommendations. Refer to Section 12.0 for specific details on the public outreach process.

**CONCEPT PLANS AND RECOMMENDATIONS PROCESS**

Based upon the analysis performed, as well as public meeting input, the project team developed a menu of possible recommendations for consideration. Recommendations included the following:

- A review of existing facilities and gaps in the system that present opportunities. These include sidewalks, crosswalks, bicycle facilities, bus stops, etc.
- A level of service (LOS) analysis was conducted at traffic signals to understand mobility constraints before and after recommendations are implemented. The analysis was based upon the Highway Capacity Manual.
- Access management improvements were considered and included as appropriate
- Right-of-way information was reviewed to gain an understanding of available cross-sectional space.
- Cross-section graphics are included for illustrating various options.
- Identification of locations for conceptual improvements for transit, with a focus on connectivity of transit to other modes of transportation along the corridor and efficiency of bus operations was performed.
- Final concept plans for key improvement locations.
- Optimized Traffic Signal Timing and Coordination plans.

1.2 Study Area

Figure 1.1 shows the study area from North Street in Saco to the South Portland town line. The study area is divided into seven segments according to land use and area context.

1.3 Advisory Committee

The following Advisory Committee was formed to help guide the study.

- Jay Chace, Town of Scarborough
- Angela Blanchette, Town of Scarborough
- Jamel Torres, Town of Scarborough
- Emily Prescott, City of Saco
- Pat Fox, City of Saco
- Denise Clavette, City of Saco
- Chris Mann, MaineDOT
- Jennifer Brickett, MaineDOT
- Jessa Berna, PACTS
- Tom Errico, T.Y. Lin International
- Todd Serbent, T.Y. Lin International
- Carol Morris, Morris Communications

1.4 Related Studies

The following studies were used in this report:

- Main Street Access Study (2005)
- Dunstan Village Traffic Movement Permit (2016)
- Town Wide Transportation Study (2005)
- Oak Hill Pedestrian Plan (2011)
- MMC Expansion Traffic Study (2019)
- Scarborough Downs TMP Materials (2019)

1.5 Traffic Analysis

All traffic analysis was performed assuming a 2043 design year based upon growth factors developed by Kevin Hooper Associates utilizing the PACTS Travel Demand Model. The growth factors can be found in Appendix 3. All modeling was performed using the SimTraffic modeling software. A level of service (LOS) analysis according to the Highway Capacity Manual was performed using vehicle delay per second according to the criteria in Table 1.1.

<table>
<thead>
<tr>
<th>Table 1.1</th>
<th>LOS Delay Criteria (Seconds/Vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signaled Intersection</td>
</tr>
<tr>
<td>A</td>
<td>&lt;10</td>
</tr>
<tr>
<td>B</td>
<td>10-20</td>
</tr>
<tr>
<td>C</td>
<td>20-35</td>
</tr>
<tr>
<td>D</td>
<td>35-55</td>
</tr>
<tr>
<td>E</td>
<td>55-80</td>
</tr>
<tr>
<td>F</td>
<td>&gt;80</td>
</tr>
</tbody>
</table>

A LOS of E or F is considered unacceptable delay.

1.6 Transit Services

**Bus Routes**

Transit service is currently provided by ShuttleBus Zoom (SBZ), also known as Biddeford Saco Old Orchard Beach (BSOOB), along Route 1 within the study area. Table 1.2 shows the frequency and span of service for transit routes in the study area.

### Table 1.2

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>SBZ</td>
</tr>
<tr>
<td>Saturday</td>
<td>SBZ</td>
</tr>
<tr>
<td>Sunday</td>
<td>SBZ</td>
</tr>
<tr>
<td>Weekends</td>
<td>SBZ</td>
</tr>
</tbody>
</table>

[Note: The actual data values would be filled in here.]
Table 1.2
<table>
<thead>
<tr>
<th>Route</th>
<th>Frequency</th>
<th>Span of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterCity</td>
<td>1 Hour – Peak; 2-3 Hours Off-peak (after 4:00 PM)</td>
<td>7 days a week 6:30 AM – 10:05 PM</td>
</tr>
<tr>
<td>Tri-Town Local</td>
<td>1 Hour</td>
<td>7 days a week 7:00 AM – 11:00 PM</td>
</tr>
</tbody>
</table>

Stop Ridership

Table 1.3 shows the total boarding passengers at select stops in 2018. Additional stop level ridership data is not available.

Table 1.3
<table>
<thead>
<tr>
<th>Stop Name</th>
<th>Total Ridership – FY 2018 Northbound</th>
<th>Total Ridership – FY 2018 Southbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dunstan Scarborough/Dunstan Corner</td>
<td>1,284</td>
<td>255</td>
</tr>
<tr>
<td>Route 1 Hannaford Drive Cheese Iron/Hannaford-Jordan Florist</td>
<td>1,515</td>
<td>971</td>
</tr>
<tr>
<td>100 Campus Drive</td>
<td>846</td>
<td>917</td>
</tr>
</tbody>
</table>

SBZ Vehicle Summary

SBZ has 10 different vehicles that currently operate the InterCity and Tri-Town Local services and buses are generally 35 feet long. InterCity buses only have one door at the front of the bus, while Local buses have access to two doors (the center line between the front and rear door is about 10 feet apart). Buses with lift systems for American’s with Disabilities Act (ADA) accessible boarding have a higher ground to floor height (about 35”), than lower floor buses that have ramps that deploy at the front door (the floor height on these buses can be as low as 12”). The floor height is relevant because it represents how quickly riders are likely to be able to board and alight the bus and how quickly a mobility device can be loaded or unloaded. The lower the vehicle floor, the more level the boarding is, so it’s easier for riders to step on and off the bus without a significant step height or requiring the bus to “kneel” towards the curb. Also, ramps are generally deployed more quickly than lifts. The quicker the boarding and alighting process, the minimal dwell time and delay experienced. Because of the varying height of buses in operation altering the sidewalk height to provide more level boarding is not possible in the short-term but could be considered in the long-term if the bus fleet becomes more standardized.