

**Town of Rockport**  
**Traffic Infrastructure Study**  
**Sample Scope of Work**  
**(Date)**

**Commented [OT1]:** Name can change if anyone has a better suggestion.

## Introduction

The small village of Rockport, Maine is located on the steep banks of Rockport Harbor, where the Goose River empties into the harbor. Over 127 of its stately Greek Revival, Italianate and other historic houses and buildings located on 12 picturesque streets that hug the head of the Harbor, were designated as the Rockport Historic District by the National Register of Historic Places in 1976. In 1990, the Maine State Planning Office nominated Rockport's Harbor and viewshed for designation as a "critical area", characterizing it as, "One of Maine's most visually cohesive villages with a strong orientation to its deep, well-defined harbor."

Rockport's small "downtown" is located between the public library at the northeastern end of Central St and the Goose River bridge at the beginning of Pascal Ave. In between are multiple restaurants, parks, a hotel, gallery, and business offices. This revitalization of the downtown district has occurred over the past 10 years, but the infrastructure to support parking, vehicular, bike, and pedestrian flow have not kept pace with this growth. The village is centered on the bridge that crosses the river and which has seen multiple revisions over its long history resulting in some unusual and awkward situations for vehicular, pedestrian, and cyclist traffic. Compounding the current awkward arrangement is the pending repair/replacement of the bridge by the MDOT for the 4<sup>th</sup> time in its history, which presents both complexities as well as opportunities for the improvement of our downtown district. The opportunity to participate in the PPI program will enable us to make improvements to our village infrastructure that will benefit local businesses and residents, as well as the tourism industry on which our village depends.

The municipality of Rockport in collaboration with the Maine Department of Transportation (MaineDOT) pursuant to a Planning Partnership Initiative (PPI) agreement is soliciting proposals to **improve the infrastructure of the downtown** in the study area depicted below:

## Scope of proposed Study



## Description of Problematic areas

### Pascal Avenue

As this avenue approaches and crosses the bridge from the southwest, it encounters a number of confusing crosswalks, pedestrian pathways, parking, tight curves and intersections that contribute to poor sightlines. The safety issues posed for pedestrians, cyclists and motorists by these poor sight lines are compounded by a speed limit of 30 mph on Pascal Avenue. Although Pascal is residential, its speed limit is inexplicably 5 miles higher than a similar stretch on Elm Street, just beyond Camden's downtown, which is actually Route 1. Many local residents feel that 30 mph is too fast for both the residential area as well as the complex of intersections at the bridge. The Town believes a PPI study for this area is vital.

The pedestrian pathways to and from the harbor allow access to the bridge and the business district, avoiding having to walk on the steep narrow Marine Park access road where there are no sidewalks. The pathways, however, are in need of improvement and deliver the pedestrians to the side of the bridge where there is no sidewalk to guide them to the business district. Rather, they need to use 3 crosswalks and go up a short flight of stairs that are not ADA compliant which can be quite daunting in view of the traffic on Pascal Avenue.

### Bike Lanes

Pascal Avenue does not have a bike lane as it approaches the bridge. At the bridge, the biker has to negotiate a sweeping uphill turn to the right with an Armco barrier on their immediate right-hand side which creates a blind corner due to the steep hill up from the Harbor.

The parking problem in the central village has been examined on an ad-hoc basis for the purpose of previous Planning Board applications. This data needs to be collectively analyzed to look for possible solutions and identify any areas that need to be studied further.

### **Goose River Bridge**

Rockport is in the unique position of being scheduled to have its bridge renovated or possibly replaced, at the same time that the town is exploring possibilities for participation in the VPI/PPI program. As noted above the bridge is located in the middle of the area designated as encompassing the VPI/PPI project. In addition to any structural deficiencies the bridge may have, it also has many functional obsolescence deficiencies from vehicular, pedestrian, bicyclist, safety, lighting, and aesthetic viewpoints. The town's Task Force envisions a sidewalk/bike path along the side of Main Street as it curves uphill from the bridge to join Central Street at the main business district. For this to be accomplished however, the new bridge will need to accommodate the bike lane/sidewalk on its southern side. Shoulders for bikes and sidewalks for pedestrians should be considered on both sides of a new bridge. Conversations with the MDOT Bridge section are currently underway but there is some concern about the ability to coordinate the bridge and the VPI/PPI projects.

### **ADA Compliance**

Due to the steep nature of the Goose River banks several sidewalks need to have stairs incorporated into them which pose obstacles to those with mobility handicaps.

### **Stop sign on Rte. 1 at intersection with Union St.**

This unique situation encourages traffic to use Pascal Avenue, Union Street, and Russell Avenue as a bypass to the Route 1 traffic that backs up from the stop sign on Route 1.

### **Task 1 – Project Kick-Off Meeting**

The consultant will meet with representatives from the municipality of **Rockport** and MaineDOT under a collaborative planning process. At a minimum, the kick-off meeting should accomplish the following:

- Identify and understand local issues
- Identify and understand relevant state and federal regulatory requirements
- Finalize the scope of work
- Identify previous related study efforts
- Identify available traffic data and the additional data that will need to be collected.
- Identify baseline environmental data to be collected
- Draft a preliminary study purpose and need

### **Task 2 – Review Available Data**

The consultant team will review available information provided by the municipality of Rockport and MaineDOT. These will include, but not be limited to, the following:

- Local Comprehensive Plan,
- Recent MaineDOT traffic counts and crash summaries for the Study Area
- Available land use and economic development information that could affect transportation in the study area provided by the municipality Rockport.
- Other relevant reports, studies, and policies.
- desktop screening of environmental conditions to identify known environmental resources in the study area

#### **Task 3 – Collect Additional Data if necessary, based on Task 1**

As part of Task 1 and Task 2, the Consultant Team and the Project Manager will identify additional data to be collected. At a minimum, the data need collection tasks are anticipated:

- Collect traffic volume and turning movement counts as required including
- Conduct a parking study to review local parking policies, inventory parking supply, identify shortages or surpluses, and estimate future parking demand.
- Coordinate a Road Safety Audit
- Conduct a Speed Study or Speed-Delay Study

#### **Task 4 – Assessment of Current Conditions**

The consultant team will evaluate the existing and recent historic performance of traffic in the study area based on traditional forecasting and growth models. The assessment will include but not be limited to:

- Transportation Operation Analysis. Existing safety and transportation deficiencies as well as the impacts on traffic associated with growth and future year traffic will be assessed.
- Safety Assessment. The consultant will analyze the three most recent years of crash records to identify High Crash Locations and other locations that have high crash frequencies.
- Bicycle, pedestrian, and ADA Analysis. The consultant will analyze the bicycle and pedestrian infrastructure within the study area to identify gaps in the infrastructure and barriers to person with disabilities
- Review analyses with team members and discuss possible recommendations and additional alternatives to be considered.

#### **Task 5 – Assessment of Future Conditions**

The consultant team will evaluate future traffic volume based on traditional growth forecasts and considering anticipated development and land use changes underway. It will include:

- A 2045 forecast of traffic volumes in the study area, based on historical traffic data and available MaineDOT traffic forecasts
- Analysis of future traffic volume conditions of the study area. Analysis of alternatives under future existing conditions to prevent or minimize loss of service. The analysis will include predicted changes in mobility and safety.
- Analysis of existing and recommended access management
- Review of possible changes to the lane configuration without widening the roadway
- Review of possible traffic signal modifications and implementation of traffic demand management
- Analysis of impacts to bicycle and pedestrian facilities
- Review analyses with team members and discuss possible recommendations and additional alternatives to be considered

#### **Task 6 Develop Preliminary Recommendations**

Based on the analysis of alternatives determined in Task 5, the consultants will develop recommendations based on effectiveness of meeting the study area transportation needs. These recommendations may include low-cost improvements, a recommended roadway cross-section or cross-sections to improve the consistency of the study area corridor for its users, and other roadside or off-road improvement recommendations.

- Develop recommendations based on effectiveness and viability from a regulatory perspective. In some efforts based on budget, prior studies, municipal priorities, a consultant may be asked to consider a set number of recommendations, including a specific alternative and low cost/ non-capital alternatives.
- Measurements for effectiveness will include benefits to mobility and safety, cost and practicality of implementation, and ability to meet the purpose and need.
- The recommendations will include a discussion of the potential and degree of effort associated with environmental analysis, secondary, cumulative impacts, etc., including anticipated future costs of remaining planning, design and construction phases.
- Develop cost estimates for recommendations (including construction and potential right-of-way costs).
- Develop a recommendation for phasing of implementation.
- Develop a draft report containing the analysis of existing and future conditions, alternatives analysis, and recommendations, including a matrix summarizing recommendations along with an appendix of traffic and crash data.
- Develop basic conceptual renderings of recommended alternatives on aerial photography.

#### **Task 6 Public and Agency Feedback**

The consultant team should expect to meet with the study team including representatives from the municipality of Rockport and MaineDOT up to 10 times including Task 1. The consultant team's proposal should include an approach to effectively inform and solicit feedback from the public and other stakeholders. Most PPI's include 3-5 study team meetings and at least 2-3 public meetings one of which may be a standing Board of Selectman or Council Meeting.

**Task 7 – Final Report**

The Tasks discussed above will be combined into a final narrative report documenting the project. At a minimum the report will include a narrative of the study process, a description of the various alternatives considered, documentation of the evaluation criteria, and illustrations of conceptual designs and cross sections for the preferred alternative. The final report will incorporate all applicable technical memorandums.

### **Standards to be used in Rockport's Proposed Transportation Study**

Any Transportation improvements in (Town Name) would need to meet the following conditions:

1. All design features must reflect MaineDOT design guidance for Highway Corridor Priorities (HCPs) and must be consistent with the MaineDOT Highway Design Guide and the MaineDOT Bridge Design Guide.
2. All capacity, queuing, and level-of-service analyses will be done in accordance with the 2010 Highway Capacity Manual (HCM) methodologies.
3. Signalized and stop sign controlled intersections will be modeled using the latest version of Synchro/SimTraffic. Computer modeling showing impacts of queuing and level of service will be provided to MaineDOT. The design hour volumes will be based on estimated 30th highest hourly volumes for the design year.
4. Design year traffic estimates will be 2045.
5. Design speed – match existing posted speed,
6. Safety analysis of any proposed design will include an inventory of existing crashes, a prediction of crashes with the proposed design, and a comparative evaluation. Crash analysis will be based on the most recent five years of data available from MaineDOT. Safety analysis will generally follow Highway Safety Manual methodologies.
7. Drainage – needs to match into surrounding drainage structures.
8. Signing shall be in accordance with MUTCD (including potential changes to existing overhead signage in the area)
9. Any proposed lighting shall meet minimum AASHTO light levels
10. The Design Vehicle for the major intersections shall be a WB-67, all other intersection shall be for a bus/fire truck unless otherwise specified.
11. Any new traffic signal recommendations must be accompanied by a warrant analysis justifying the recommendation.