SCOPE OF SERVICES

The Town has identified the following Scope of Services to be used for the preparation of the Route 100 Vision Plan. We have expanded on these scope of services items in further detail where appropriate to provide additional information as to how we intend to address these tasks. We would anticipate further detailed discussions with the Town to fine-tune these services as the project commences:

Task I - Infrastructure Inventory and Condition Assessment

1. Compile all GIS data and other readily available mapping, and develop comprehensive base maps.

2. Evaluation, and incorporation where appropriate, of the following documents:
    a) MDOT construction plans prepared by FST, 2009, Project STP9188(00)X 1
    b) Falmouth Bicycle and Pedestrian Master Plan (2003),
    c) Falmouth Transportation Master Plan (2009),
    d) West Falmouth Sewer Master Plan (to be developed concurrently by Wright-Pierce),
    e) Falmouth Wayfinding Signage Program (currently being developed by LandWorks),
    f) Maine Department of Transportation Planned Capital and Maintenance Work (2014-2016).
    g) The Town of Falmouth 2013 Comprehensive Plan
    h) Land Use Ordinances
    i) Regional PACTS plans.

3. Perform field investigations to document the presence (and lack) of the following components within the project area. In general, these will be photo-documented:
    a) Sidewalks (including width, surface & condition)
    b) Bicycle Facilities (including width and condition)
    c) Pedestrian Crossings (including width, surface and condition, as well as presence of signals/actuators)
    d) Street and intersection lighting (including style and type)
    e) Directional and Regulatory Signage
    f) Develop and review aerial photography of the project area to confirm the locations, size and potential build out of residential areas in proximity (.7 miles +) to the Route 100

study area. Assess connectivity from a pedestrian/bicycle perspective.

4. Conduct a "kick-off" meeting with town staff and Committee to confirm project goals, constraints and schedule, and to establish a clear means of project communications. The goals of this first meeting will be to:
    a) Review proposed project work tasks & public participation plan
    b) Discuss level of project involvement by town staff
    c) Review mapping & preliminary inventory, identify additional inventory/ research needs
    d) Identify key stakeholders to involve in the process
    e) Present and brainstorm local issues, strengths & weaknesses
    f) Discuss goals and format for first public workshop

Task II – Develop a Series of GIS Maps and Illustrations

As discussed in our approach in Section 2, and using our GIS capabilities, we have already begun to assess the available developable land within the study area. We are proposing to develop a series of maps that illustrate the unbuildable areas as a series of figure/ground overlays. The unbuildable areas can be thought of as "out of play" and not included in any future build out scenario. Out of play lands would include water bodies, wetlands, resource protection areas, state imposed buffers, protected conservation lands, athletic fields, cemeteries and utility corridors. Additionally, out of play areas would include existing built areas or parcels currently developed to zoning limits, such as subdivisions, small residential lots, and large development complexes like West Falmouth Crossing and TD Bank. In the end what we are left with are the current "undeveloped" areas within the study area, which could be considered in a maximum build-out scenario, or worse case. Once we know how much, what type and where development could happen, we can begin to analyze this information based on other factors, e.g. traffic, and the infrastructure element of the Vision Plan.

Working with the Committee and Town staff, we would come up with growth or development scenarios, such as the following:

- **Base amount of growth**, with patterns following current zoning, or the "Do Nothing" scenario, which attempts to model the results of a growth and development pattern following the same course the Town is currently on.

- **Reduced growth following current trends** uses primarily additional open space acquisitions to limit the number of new dwelling units. Where future open space should exist would be based on a number of factors like infrastructure and utility extension costs, aesthetics, public and landowner desire, etc. We know that the Town's historic natural resource based uses are shrinking as the community becomes more subdivided and this pressure is likely to continue or increase.

- **Reduced growth directed toward service centers** as recommended in the 2013 Comprehensive Plan. This might include a combination of open space acquisition and development densification in and around the existing service centers, utilizing infilling small lots and building vertically to reach build-out limits.

Throughout the process, our team will prepare additional illustrative graphics to articulate the Vision Plan, e.g., roadway cross-sections, before and after roadway photosimulations, and conceptual site plans to show preferred patterns of development.

Task III - Traffic Data Collection and Analysis

The following details the traffic data collection and analysis to be performed and is based upon attachment E contained in the original RFP as well as the Update #1 dated October 14, 2014.

1. Inventory/Data Collection

a) **Turning Movements Counts** will be obtained at the major intersections within the study area with specifics noted as follows:

- Route 100/Maine Turnpike Exit 53/Falmouth Crossing – It is suggested that updated 12-hour turning movements volumes be collected at this location. We will conduct a video-based traffic count at this location.
- Route 100/Leighton Road – MaineDOT will be conducting traffic counts at this location and no further data collection is assumed.
- Route 100/Mountain Road/Falmouth Road – MaineDOT will be conducting traffic counts at this location and no further data collection is assumed.

b) **Tube Counts** (24 hour) will be collected in conjunction with the MaineDOT counts noted above. Because a video traffic count

is being conducted at the Route 100/Maine Turnpike Exit 53/Falmouth Crossing intersection, tube counts are not required per MaineDOT collection methods. We will obtain detailed traffic information for the Maine Turnpike Authority for present daily traffic volumes entering and exiting the Turnpike.

c) We will conduct two AM, Noon, and PM peak period **travel-time speed/delay surveys** within the project corridor. This survey will be based on the floating vehicle method.

d) **Vehicle headway** information will be visually obtained during the AM and PM peak periods.

e) **Historical Traffic Data** will be gathered throughout the corridor study area and will be analyzed for trends and for future projections. We will review available data from MaineDOT, Maine Turnpike PACTS, and the Town and identify traffic growth patterns for use is projecting future traffic volumes.

f) **Historical Crash Data** will be compiled and analyzed for the latest available three year period. MaineDOT computer summaries and reports will be obtained for locations that either are characterized as High Crash Locations or have high crash frequency rates.

g) **As-Built Roadway Plans** for the corridor will be obtained from MaineDOT and/or the Town of Falmouth.

h) **Signal Phasing and Timing** for the signals throughout the corridor area will be collected from design plan sources and field verified.

Deliverable: A Traffic Data Collection *Technical Memorandum will be prepared that summarizes traffic data collection information.*

2. Existing Condition Analysis

The analysis of existing conditions will provide a detailed description of the current physical and operating characteristics of the corridor. The evaluation will be a comprehensive inventory of existing conditions regarding traffic volumes and composition, level of service, physical conditions, roadway geometrics, and crash history. The existing conditions analysis will also serve as a benchmark for analyzing future conditions and potential improvements. An important product of the existing conditions analysis is the identification of physical and operational deficiencies in the corridor which adversely affect its ability to serve safely and efficiently.

A. Traffic Volume (i.e. all modes, where applicable)
   1. Daily Traffic Flows
   2. Hourly Traffic Variation
   3. Intersection Turning Movement Volumes
   4. Traffic Composition
   5. Historical Traffic Growth

B. A field inventory and analysis of existing characteristics will be performed and will include but not limited to the following:
   1. Roadway Geometrics
   2. Roadway Characteristics (width, pavement markings, etc.)
   3. Roadway System
   4. Stopping Sight Distance
   5. Pedestrian facilities (sidewalks, crosswalks, signals)
   6. Regulatory Signs
   7. Traffic Control
   8. Lane Assignment
   9. ADA Compliance
   10. Driveway Characteristics
   11. Bicycle Facilities
   12. Access Management will be included to determine if there are opportunities for adjusting (radii, width), consolidating, or eliminating driveways.
   13. Street Lighting
   14. Safety Analysis of crash data will identify areas that currently have safety problems. High Crash Locations (HCLs) will be identified, and collision diagrams will be drafted and examined to determine safety problems.
   15. Traffic Calming/Multi-Modal Analysis/ Complete Street Analysis Assessment of roadway cross-section must be considerate of all users (e.g., pedestrians, bicyclists, transit riders, and handicapped people). TYLI is a leader in the Complete Streets movement. Nationally, TYLI is a Silver partner with the National Complete Streets Coalition. Tom Errico is a member of the Speakers Bureau of the Coalition and was TYLI's Project

Manager for providing Complete Streets workshops in Massachusetts.

C. Mobility and Operating Conditions
   1. Corridor Travel Speeds
   2. Hourly Speed Variation
   3. Hourly Headway Variation
   4. Percent Time Delay
   5. Peak Hour Speeds
   6. Level of Service (AM and PM peak) – we will develop a Synchro/SimTraffic model as part of estimating level of service conclusions.
      a. Roadway
      b. Unsignalized Intersection
      c. Signalized Intersection

Deliverable: An Existing Conditions Technical Memorandum will be prepared that summarizes existing condition analysis information.

3. Future Condition Analysis

The future analysis should be based on historical traffic growth trends and projected to twenty years into the future. The future evaluation of operating conditions should be based on the same methodology as existing conditions. In addition to general historic/trends analysis, we will consult with the PACTS model and Maine Turnpike growth assumptions for forecasting future traffic volumes.

A. Mobility and Operating Conditions – The Synchro/SimTraffic model developed for the Existing Conditions analysis will be used to estimate future level for service conclusions.

   1. Roadway
   2. Unsignalized Intersections
   3. Signalized Intersections

Deliverable: A Future Condition Technical Memorandum will be prepared that summarizes future condition analysis information.

B. Concept Improvement Development – Traffic Analysis

The following traffic analyses will be conducted in conjunction with development of recommended improvements.

- A multi-modal analysis will be conducted and evaluation of pedestrian and bicycle facility needs will be identified. The traffic analysis will review the need and provision of safe facilities, such as bicycle lanes, sidewalks, crosswalks, etc.
- A level of service analysis will be performed for concept improvement scenarios. This effort will focus on providing information on the implication of corridor improvements on mobility and level of service. For example, what capacity enhancements are required, or can intersection configurations be changed for improved multi-modal users.
- We will make specific recommendations on existing driveways servicing land use and provide suggestions for future build-out conditions.
- Existing traffic signals will be reviewed for suggestions on improving efficiency and safety as well as incorporating pedestrian considerations.
- We will review the need for turn lanes and documented unsafe locations or because of heavy turning traffic.

Task IV – Meetings

We understand the Committee meets monthly. We will attend bi-monthly meetings with the Route 100 Vision Committee and staff to provide updates and to seek feedback. Our proposed fee includes attendance by the project manager for up to 14 meetings, with dual attendance by either the traffic consultant or another wright-pierce representative for 7 of those 14 meetings.

Additionally, our team will attend and help facilitate three public hearings to:

a) Seek public / stakeholder input at the beginning of the Vision Plan.
b) Present preliminary findings and recommendations.
c) Present final plan recommendations.

We understand that Town staff / Committee are prepared to play a significant role in this process as well and may take the lead on some or all of these meetings. We feel the first meeting should be conducted as a **Public Workshop.** Our team will attend and facilitate, with the help of Town Staff and Committee a Public Workshop based on the following guidelines:

- The workshop begins with a brief introduction and project background, and then provides a presentation with visuals to describe the project objectives, issues, and the questions on the table. The presentation should be partially educational and partially focused on raising

questions and soliciting input, and would reflect all that has been learned from the project inventorying and initial committee meeting(s).

- Following this presentation, the meeting attendees are broken into small groups (5-10 people) for discussion. Small group sessions are typically quite productive for public meetings with more than 10-15 attendees and encourage greater participation by individuals. The small group session discussion will be guided by a list of discussion items or short questionnaire, and mapping and other exercises. While group consensus is the goal for discussions, opportunities will be provided for individuals to give their input and be heard (especially if they're not comfortable in sharing in group settings). The facilitated discussions, mapping and other exercises would focus on exploring where community members stand on the community's values, character, and quality of life (or quality of place), and the "picture" of what they would like to see for the town's future.

- The small group session typically wraps up with regrouping to hear briefly what the different groups discussed. As an option, the workshop could be structured for multiple, shorter small group sessions instead of one longer breakout session.

The consultant team will summarize public feedback results from the initial public meeting and identify where the public workshop participants appear to have reached (or not reached) consensus. The consultant team will begin to pull all of this together into draft public survey materials as necessary, identifying outstanding public feedback that still needs to be addressed.

Follow-up meeting with Town staff will follow to assess the effectiveness of public workshop and discuss the goals and execution of the small group stakeholder meetings, focus group meetings and community survey/questionnaire.

The consultant team will assist in assemblage of survey materials as required and the Town will disseminate this information through a variety of public channels that the Town has found to be effective in past recent efforts. (We do not foresee any new methodologies being proposed to the Town by the consultant.)

The consultant will work with Town staff to refine the plan for two additional public meetings to promote more detailed public dialogue on subjects such as connectivity to residential areas, business owner perspectives, bicycle use and pedestrian safety concerns, and open space

preservations. Again we understand that these meetings are likely to receive significant support from Town Staff.

Additional meetings required by the consultant will be billed on a time and expense rate based on our current billing rates and pre-authorized by the Town. If desired by the Town, we will present the preferred concept plan in a public forum, such as a meeting of the Town Council.

Task V – Alternative Concepts and Draft Vision Report

Based on review of existing plan materials, traffic count data, existing infrastructure conditions and public input, our team will prepare a series of vision concepts. These concepts will consider the entire length of the Route 100 Corridor and most likely will be divided into three or four segments based on zoning and growth densification. We will prepare a minimum of three draft concept plans per segment.

This task will also begin to draft a vision report for initial review with the Committee. We will revise scenarios and preliminary recommendations (as needed) and develop draft text for review by the Committee and Town staff.

Task VI – Zoning Recommendations

Review the Town's Land Use and zoning regulations and make amendment recommendations to help achieve the Vision goals, including permitted uses, development intensity, and design/performance standards.

Task VII – Prioritize Implementation Steps

The implementations steps will help guide, prioritize, and coordinate a range of future infrastructure investments (incl. road, streetscape, utilities) in this area. This task will also evaluate the implementation projects identified in the West Falmouth Crossing TIF Development Program.

Task VIII - Develop Preferred Final Vision Plan

Amend report (as needed) to Final Report product. The draft materials will be revised and presented to the Committee and Town staff for review after the Preliminary Findings and Recommendations presentation to the public, as well as after the Final Plan Recommendations presentation to the public.

The consultant will address all additional public input and provide Town staff with a draft of the preferred Final Vision Plan for review. Following a suitable period for final review and comment, the core planning team will

meet with the Committee one final time to discuss final adjustments to the preferred Final Vision Plan. Following final editing for the plan, we will deliver the final product to the Town. As outlined in the Town's request-for-proposals, we envision providing the following final deliverables in electronic format (Word, Excel, PDF, AutoCAD, and GIS-compatible):

1. Inventory and condition assessment of current infrastructure
2. Traffic data collection and analysis
3. Concept options and typical conceptual cross section(s)
4. Cost estimates
5. Recommendations

PROJECT SCHEDULE

We understand the Committee is interested in working expeditiously through this process and hopes to deliver a concept plan to Town Council by spring 2015.

The following schedule represents general time length efforts after execution of a contract, as described in our Scope of Services. We also feel that we can adequately adjust our scope and schedule to best meet the Town's needs.

Task	*General Timeframe*
Consultant Interviews / Selection	October/November, 2014
Task I - Infrastructure Inventory and Condition Assessment	November, 2014
1. Compile Preliminary Base Mapping	
2. Review Local / Regional Plans and Ordinances	
3. Initial Field Investigations,	
4. Kick-Off Meeting with Town Staff	
Task II - Develop a Series of GIS Maps and Illustrations	November-December, 2014
Task III - Traffic Data Collection & Analysis	November, 2014
1. Inventory/Data Collection	
2. Existing Conditions Analysis	
3. Future Conditions Analysis	December- January, 2015
Task IV - Meetings	
1. Public Meeting - #1	January, 2015
2. Public Meeting - #2	March, 2015
3. Public Meeting - #3	May, 2015
Task V - Alternative Concepts and Draft Vision Report	January - March, 2015
Task VI - Zoning Recommendations	February - March, 2015
Task VII - Prioritize Implementation Steps	February – March, 2015
Task VIII - Develop Preferred Final Vision Plan	March – May, 2015