



Connecticut Department of Transportation



Local Transportation Capital Improvement Program Application

Municipality: _____ RPO: _____

Route/Road: _____

Project Title: _____

Roadway Functional Classification (if applicable): _____

RPO Contact Information:

Name	Title
Phone Number	Email

Municipal Contact Information:

Name	Title
Phone Number	Email

The applicant must answer the questions below which are intended to address basic issues about existing conditions, project management, project costs, impacts on private property, utilities, wetlands, etc. **You may provide your answer in the space provided below or submit separate answer sheets. It is important that the application be as thorough as possible as missing information will delay the review process. All project- related sections must be completely filled out or the application will be returned and will require resubmittal.**

The intent of the application is to establish eligibility, service life, and to ensure the municipality is considering all pertinent aspects associated with major infrastructure improvements consistent with the purpose and need of the project.

(A) Project Information

1. Select the type of proposed improvement (select all that apply):

Please note: The entire application must be completed for all projects in addition to any necessary supplemental sections (L through Q) as determined by the type of project.

- Roadway Geometric Improvement
- Stand-Alone Sidewalk Construction
- Bicycle/Pedestrian Improvement, including Multi-Use Trail Facilities
- Intersection Improvement

Provide additional information as required in section K

- Bridge Rehabilitation/Replacement

Provide additional information as required in section L

- Major Drainage Improvement

Provide additional information as required in section M

- Pavement Structure Improvement

Provide additional information as required in section N

- Traffic Signal Replacement/Upgrade/New Installation/Coordination

Provide additional information as required in section O

- Other (please specify): _____

Provide additional information as required in section P

2. Describe the purpose and need of the project. Please include specific information and describe in enough detail for those unfamiliar with the project. Provide a range of digital photographs to document the existing conditions and support the purpose and need.

3. Provide a project description and specifically describe how the proposed improvements address the purpose and need. What alternates were considered?

4. Provide concept plans of the proposed improvement. The plans must be sufficiently developed and provide enough detail on a scaled drawing (including aerial photography base mapping if possible) to identify the following:

- a. Project location
- b. Limits of project
- c. Approximate limits and extent of any pavement widening or realignment
- d. Proposed number of lanes, widths, and arrangements
- e. Approximate limits and extent of any anticipated ROW acquisitions (based on available ROW information from Assessors maps, GIS data, etc.)
- f. Structures (i.e. Retaining walls, bridges)
- g. Watercourses
- h. Typical Cross Section including lane and shoulder widths, pavement structure, etc.

5. Have the improvements at this location been submitted to the Department previously for funding? No Yes

If yes, when? _____

6. Does the project impact any State-owned Facilities (i.e. roads, bridges, etc.)? No Yes

If yes, describe the impacts:

7. In the area of the project, are there any known proposed developments?

- No Yes

If yes, describe the proposed developments:

8. Design Standards to be used:

- Established municipal standards
- AASHTO Policy on Geometric Design of Highways and Streets
- Connecticut Department of Transportation Highway Design Manual
- AASHTO LRFD Bridge Design Specifications and Connecticut Department of Transportation Bridge Design Manual
- Other, please specify: _____

(B) Rights of Way

1. Are any Right of Way (ROW) impacts anticipated? No Yes

If yes, describe the nature, extent, and type of impacts:

2. If ROW acquisitions will be required, who does the municipality plan to have perform acquisition activities?

- Municipal staff Consultant hired by municipality State

3. If ROW acquisitions are to be performed by the Municipality’s staff or their consultant, will the municipality be seeking reimbursement for ROW costs?

- No Yes

(C) Utilities

1. List all utilities within the project area, including their owners.

<u>Overhead</u>	<u>Underground</u>

2. Are any utility impacts anticipated? No Yes

If yes, explain the nature and extent of the impacts:

Note: Costs associated with utility betterments/upgrades that are not required to accommodate the proposed transportation improvement are not eligible project costs.

3. Have the utility companies identified any plans to expand or improve existing utilities that would that would compromise the service life of the proposed improvements?

No Yes

If yes, describe any proposed improvements and their schedule:

(D) Storm water drainage system and under drains

1. Do any existing storm water drainage problems exist? No Yes

If yes, describe the problem(s):

2. Is any storm water drainage system work anticipated, including any new or modified drainage outlets? No Yes

If yes, explain the nature and extent of the improvements:

3. Are there any existing watercourse crossings that are proposed to be modified, rehabilitated, or replaced as part of the project? No Yes

If yes, indicate the type of improvement needed and the reason for it. Please also indicate if any existing watercourse crossings have inadequate hydraulic capacity:

(E) Rail Crossings

1. Are there any railroad crossings that are likely to be impacted as part of the project?

- No
- Yes
 - At-grade
 - Grade separated

If yes, describe impacts and any necessary modifications:

(F) Pedestrian/Bicycle Safety and Mobility

1. Complete and attach the Department’s Bicycle and Pedestrian Needs Assessment Form to this application (a copy of this form is included in Appendix C). In accordance with Connecticut General Statutes, Section 13a – 153f, and the Department’s focus on accommodating non-motorized travel modes, accommodation of all users shall be a routine part of the planning, design, construction, and operating activities of all highways. The need for inclusion of accommodations for bicyclists and pedestrians, including those with disabilities, must be reviewed for every project, regardless of funding source.

(G) Traffic

The information below needs to be provided or reviewed (as specified) by the designer for all project types except for stand-alone sidewalk projects and bicycle/pedestrian improvements, and multi-use trail facilities that do not involve pedestrian crossings

1. Volumes

Provide existing and 20-year Projected ADTs and Turning Volumes. Refer to the Preliminary Engineering/Preliminary Design section for guidance on traffic volumes.

2. Accident Experience

Provide a summary of accident experience (most current three years data. An accident diagram is preferred.)

3. Traffic Signals

Review the existing traffic signal plans for projects involving signalized intersections

4. Speed Data

Provide 85th percentile speeds in the project area

Provide all posted speed limits in the project area

(H) Environmental Resource Involvement

Refer to Application Process/Preliminary Project Submittals - Information Provided by the Department for more information.

1. Parks, Cemeteries, Historic Structures

a. Are there any parks, cemeteries, or historic structures that are likely to be affected by the project? No Yes

If yes, describe the type and extent of the anticipated impact.

2. Wetlands

a. Are there any wetlands that are likely to be affected by the project?

No Yes

If yes, describe the type and extent of the anticipated impact.

3. Hazardous or Contaminated Sites

a. Has the potential for hazardous or contaminated sites and materials in the project area been investigated? No Yes

If yes, describe the type and extent of the anticipated impact.

(I) Public Involvement

Refer to Preliminary Engineering/Project Design - Public Involvement section for more information.

1. Has public involvement been conducted? No Yes

If yes, was there significant public opposition to the project? Describe below:

(J) Cost Estimate

Attach a preliminary cost estimate identifying:

- 1. Rights of Way
- 2. Approximate quantities and assumed unit prices of the major contract items
- 3. An allowance for minor items

4. Standard lump sum items (i.e. clearing & grubbing, mobilization, construction staking, maintenance & protection of traffic) as applicable
5. Eligible Utility Relocation Costs (in accordance with CGS13a-98f)
6. Incidentals to Construction, i.e. construction inspection, materials testing (10% of items 2, 3, and 4 above)
7. Contingencies (10% of items 2, 3, 4 above)

Refer to the Department's most current Cost Estimating Guidelines for cost estimate guidance or use town generated unit prices. The anticipated costs for each phase of the project shall be well documented and based on reasonable anticipated costs.

The guidelines are located at: <http://www.ct.gov/dot/cwp/view.asp?a=3194&q=484094>

ADDITIONAL INFORMATION TO BE PROVIDED BASED ON IMPROVEMENT TYPE SELECTED IN SECTION (A)1:

(K) Intersection Improvements

Capacity Analyses (For build and no-build conditions using existing and projected traffic volumes).*

(L) Bridge Rehabilitation/Replacement

Latest Condition Report

(M) Major Drainage Improvement

Material, Age, Hydraulic adequacy assessment of existing drainage system (Condition Report, post-cleaning is preferred)

(N) Pavement Structure Improvement

The level of investigation will be dependent upon the proposed improvements. Cores or test pits must be performed such that a representative sample of the existing roadway condition is obtained. If varying pavement conditions exist along the roadway indicating the possibility of different pavement conditions, a test pit should be performed in each roadway section. Pavement thickness and type, sub-base thickness and type, and the presence of fines and/or groundwater should be noted. Attach the data obtained. If full depth reconstruction is proposed, cores or test pits are not required.

Approximate percentage of heavy vehicles: _____

What is the existing pavement type, condition, and thickness?

What is the anticipated pavement design? Describe the type and depth of each course including the base that is suitable for the ADT and percentage of heavy vehicles. Does it meet current design standards? Describe the cross-section (i.e. lanes and shoulder widths, etc.).

Describe how the service life requirement for the proposed pavement design was determined:

(O) Traffic Signal Replacement/Upgrade/New Installation/Coordination

Who is/will be responsible for ownership, maintenance, and electrical costs

Age of existing signals

Capacity Analyses (For build and no-build conditions using existing and projected traffic volumes).*

Warrant Analysis for new signals

(P) Other

To be determined based on type of improvement proposed

***Capacity Analysis:** For the purposes of this application, a simplified analysis may be performed for signalized intersections that do not require detailed assumptions, proprietary software or specialized traffic engineering skills. The “Quick Estimation Method” is described in detail in the 2010 Highway Capacity Manual, with accompanying worksheets that can be completed by hand. A brief description of the method is also described in Section 3.3.6 of the FHWA Signal Timing Manual, where it is referred to as a “Critical Movement Analysis.” The relevant section of the FHWA publication can be accessed at: <http://ops.fhwa.dot.gov/publications/fhwahop08024/chapter3.htm#3.3>. This simplified analysis will yield an approximate critical volume/capacity ratio that can be used to assess overall operation of the intersection. The build and no-build conditions should be analyzed for the existing and projected traffic volumes.

APPLICATION SUBMISSION

This application and supporting documents must be submitted by the municipality to their RPO. At such time when the application is to be forwarded to the Department of Transportation by the RPO, it must be addressed to:

Mr. Hugh H. Hayward, P.E.
Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Prepared by: _____ Date: _____

Name & Title of Responsible P.E. (Municipal or Consultant)

Signature

Reviewed/Recommended by: _____ Date: _____

Name & Title of Municipal Chief Administrative Officer

Signature

Endorsed/Recommended by: _____ Date: _____

Name & Title of RPO Executive Director (or equivalent)

Signature

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

In accordance with Connecticut General Statutes, Section 13a-153f, and the Department’s focus on accommodating non-motorized travel modes, accommodation of all users shall be a routine part of the planning, design, construction and operating activities of all highways. The need for inclusion of accommodations for bicyclists and pedestrians, including those with disabilities, must be reviewed for every project. This form provides the documentation and information needed to make decisions on the need and extent of bicycle and pedestrian features. This form is not intended to dictate what features should be included in a project design - guidance on those questions can be found in numerous other reference documents. This form should be completed to the extent practical (at least Sections 1-3) during the project scoping phase and fully completed no later than at the completion of the Preliminary Design and attached to the Preliminary Design Statement.

Project Number(s): _____
Type of work: _____
Municipality(s): _____
Route(s): _____
Planning Region(s): _____

SECTION 1 - APPLICABILITY

Although bicycle and pedestrian accommodations should be considered for all projects, certain types of projects (e.g. bridge deck patching, culvert re-lining, projects on expressway mainlines) do not typically provide reasonable opportunity to provide improvements for these travel modes. If this project falls into this category, please explain why below, then skip to Conclusions section on the last page, sign the form, and file this form with the project documents. For all other projects, skip this section, go to Section 2 and complete the rest of the form.

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

SECTION 2 – EXISTING CONDITIONS

1. What is the suitability of the project area for bicycle travel according to the ConnDOT Bicycle Map website (<http://www.ctbikemap.org/bikemap.html>)? For town roads, is any portion of the project located on a road identified in a Regional Planning Organization, or Municipal Bicycle Plan? If the route is designated as “less suitable” or “least suitable”, would it be feasible to include improvements in the project to improve these ratings?

2. Describe any existing bicycle and pedestrian facilities within or just beyond the project limits, including features such as sidewalks (include width and material type), shoulder widths, bicycle markings/signs, and bike racks. Also describe any current or proposed features that hinder bicycle or pedestrian travel and the practicality of removing any such obstacles.

3. Is the project located on, or in close proximity to, a route identified in the Department’s Americans with Disabilities Act (ADA) Transition Plan?
http://www.ct.gov/dot/lib/dot/documents/ddbe/ADATransition_Plan_March_2011.pdf

4. Is there a history of bicycle or pedestrian crashes/incidents in the project area? If so, provide details. In addition to ConnDOT crash records, crash information can be found at ctcrash.uconn.edu.

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

SECTION 3 – ASSESSMENT OF CURRENT AND FUTURE NEEDS

Using a location map or aerial photograph, indicate the location of any of the following currently existing or planned typical bicycle and/or pedestrian generators, using the letters indicated (for planned facilities, precede the letter with a P). If the preparer's knowledge of the area is insufficient, consult with appropriate municipal officials. Generally, any facilities within approximately one-half mile of the project limits should be noted. Use this information to answer the following questions.

- Residential Areas (R): Indicate any general areas of dense residential housing
- Parks (P): Include areas that would attract people, whether officially designated as a park or not
- Recreational Areas (RA): Examples include athletic fields, dog parks
- Religious Facilities (C)
- Schools (S)
- Town Centers (TC): typically would include areas where Town Halls, Libraries and other public facilities exist
- Shopping Centers (M): especially centers with businesses where non-motorized customers might be expected (restaurants, bookstores, drug stores, etc.)
- Large Employment Businesses (E): Factories, large office buildings, hospitals, government offices
- Bus Stops (B)
- Public Transit Facilities (T): train/bus stations, airports
- Other (O): other known facilities expected to generate or attract non-motorized users

5. Does the project provide unique or primary access (defined as access which is not otherwise available within approximately one-half mile of the project):

- | | Yes | No |
|---|--------------------------|--------------------------|
| a. Across a river, highway corridor or other natural and/or man-made barrier? | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Into or out of any of the bicycle and pedestrian generators listed above? | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Between communities? | <input type="checkbox"/> | <input type="checkbox"/> |

6. Characterize the existing and future anticipated pedestrian and bicycle travel within the study area, with emphasis on locations and corridors of high demand.

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

SECTION 4 – EVALUATION OF BICYCLE AND PEDESTRIAN ACCOMMODATION

7. Describe any bicycle/pedestrian accommodation features that were considered for inclusion in the project, including benefits, approximate costs and other factors that were considered (e.g. environmental effects, feasibility).

8. Summarize the results of any coordination with stakeholders and general public outreach with regards to bicycle and pedestrian needs, including accommodations proposed during construction. Some of the stakeholder organizations that may be considered for coordination include: Regional Planning Organization, Local Municipalities, ConnDOT Non-Motorized Transportation Coordinator, ConnDOT Bureau of Public Transportation, CT Department of Public Health, Bike Walk Connecticut, and Board of Education Services for the Blind (BESB).

SECTION 5 - CONCLUSION

Describe how the anticipated bicycle/pedestrian travel, including those with disabilities, will be accommodated through existing infrastructure, project-proposed features and features that are planned for the future. If no bicycle/pedestrian features are proposed to be included, explain the reasons for not including them (e.g. project scope applicability from Section 1, excessive environmental or social impacts or costs, safety concerns, etc.).

Prepared by: _____ **Date Prepared:** _____
Project Engineer

Approved by: _____ **Date Approved:** _____
Project Manager

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

GUIDELINES FOR COMPLETING THE FORM:

Section 1: If the type of improvement does not lend itself to including bicycle and/or pedestrian improvements, describe that condition in this section. This section does not apply to reasons such as the project limits are felt to be too short to include meaningful improvements, there is an absence of need, the cost would be too high or the impacts would be too severe.

Section 2, Question 1: For projects on roads that are deemed suitable, designers should consider that the volume of bike traffic is already likely to be significant. For projects on roads deemed “less suitable” or “least suitable”, designers should consider what factors have led to this rating and consider whether the project could improve these ratings.

Question 2: Describe in general terms the existing bicycle and pedestrian facilities (i.e. “Five foot wide concrete sidewalks are provided throughout the project limits with the exception of _____ to _____ where no sidewalks exist”). Also, describe any existing hindrances to bicycle and/or pedestrian travel (such as a narrow bridge, steep side slopes, busy commercial driveways, etc.) and the feasibility of removing or improving the hindrances.

Question 3: If the project is on or close to a route identified in the Department’s ADA Transition Plan, coordination with those improvements is required. Leo Fontaine is in charge of the Department’s Transition Plan. Note: ADA related improvements are still required even if the project is not on one of these routes.

Section 3, Question 6: Based on the information provided on the map, describe where it can be reasonably expected that pedestrians and bicyclists will travel to and from and a general expectation of where these volumes will be high. For example, in an area of dense residential development relatively close to a school, high pedestrian volumes would be expected if sidewalks are present and high volumes of bicyclists could be expected between residential developments and large businesses.

Question 7: List bicycle and/or pedestrian features that were considered for inclusion in the project, regardless of whether or not they were actually included in the design. Describe why these features were, or were not, included.

Question 8: List the stakeholders the designers coordinated with regarding bicycle and pedestrian accommodations. The stakeholders listed are some suggestions. It is not necessary to contact all of these groups and there also may be other groups that could provide useful information.

Section 5: Summarize the results of this form by describing the methods in which bicycle and pedestrian travel is accommodated. For projects described in Section 1 as not being conducive to including these accommodations, describe why.