

STP-Urban

Application Guidelines

Town or Agency: _____

Street: _____ Route No.: _____

Project Title or Name: _____

Contact Person: _____ Phone Number: _____

Each proposal must include the following:

- Resolution of the town council** (by Monday, September 19th for all projects)
- Project description** (see Part 1 of the application guidelines)
- Project cost estimate** (see Part 2 of the application guidelines)
- Project rating information** (see Part 3 of the application guidelines)

General requirements:

- Project cost cannot exceed \$2,500,000 (\$3,500,000 for City of Hartford projects)**
- Pavement Rehabilitation/ Stand-Alone sidewalk project cost cannot exceed \$845,000**
- Bicycle/ Pedestrian project costs cannot exceed \$560,000**
- Roads must be on the Federal-Aid system** (with the exception of off-road trails)
(Check your federal functional classification map or call Robert Aloise at 860-522-2217 x214)
 - Urban areas: federal functional classification of *collector* or higher
 - Rural areas: federal functional classification of *major collector* or higher
- Return 3 copies of this completed application to CRCOG by:**
 - **Wednesday, August 24, 2011** for Pavement Rehabilitation/Stand-Alone Sidewalk Projects
 - **Monday, September 19, 2011** for all other Projects

Return to: Jennifer Carrier
Director of Transportation
CRCOG
241 Main St.
Hartford, CT 06106

Part 1:

Project Description Guidelines

Each proposal must be fully and clearly defined. At a minimum the applicant must supply the following materials for each proposal:

I. Written Description of Proposed Improvement

Provide a brief written description of the proposed improvement and why it is needed.

II. Project Location Map

Indicate the general location of the project on a suitable map. (an 8 1/2 x 11 sheet is adequate)

III. Preliminary Project Plans

Preliminary project plans, drawn at a scale of 1" = 100 feet or larger, should be submitted. The following items should be depicted on the plan or plans.

- All proposed improvements
 - drainage
 - culverts
 - sidewalks
 - traffic signals, etc.
- Existing edge of pavement
- Proposed new edge of pavement
- Project limits
- Existing property lines
- Proposed new property lines
- Utilities

This plan should be considered as a "conceptual" or "sketch" plan in which a high degree of accuracy is not required. An adequate base map for the plan would be your town assessor's maps (usually available on an air photo base at 1" = 100 feet) or an MDC quadrangle map (1" = 200 feet) enlarged to 1" = 100 feet.

IV. Preliminary Cross-Section

Provide one or more typical cross-sections (not to scale) depicting the following:

1. Pavement width (federal guidelines require at least 30 feet)
2. Sidewalk location and width
3. Utility pole placement
4. Snow shelf location and width
5. Right-of-way lines

V. Roadway Data

Provide the following information:

1. Traffic volumes: daily and peak hour

2. Speed data: posted speed, average vehicle speed, 85th percentile speed
3. Accident data (including pedestrian and bicycle accident data): latest 3 years available
4. Local design standards

VI. General

Provide the following information:

1. Any reports or engineering studies
2. Any news articles or public comments on the problem or project

VII. Additional Questions

In addition to the basic materials requested above, the applicant should answer the questions below which are intended to address basic issues about existing conditions, project management, impacts on private property, utilities, wetlands, etc. You may provide your answer in the space provided below or submit separate answer sheets.

(a) Functional Classification

Indicate the functional classification of the road as designated for the Federal-Aid system¹.

Urban Areas	Rural Areas
<input type="checkbox"/> Principal Arterial	<input type="checkbox"/> Principal Arterial
<input type="checkbox"/> Minor Arterial	<input type="checkbox"/> Minor Arterial
<input type="checkbox"/> Collector	<input type="checkbox"/> Major Collector
<input type="checkbox"/> Local (not eligible)	<input type="checkbox"/> Minor Collector (not eligible)
	<input type="checkbox"/> Local (not eligible)

(b) Design

1. Has any survey or design work already been done? Explain

2. Will the design be done by town forces or by a consulting firm?

(c) Rights-of-Way

1. Existing ROW (feet):
Proposed ROW (feet):
(50 feet is the minimum allowed in most federal projects)

2. Generally describe the nature and extent of the ROW impacts (e.g. 10-15 strip takes, 1 total)

¹ <http://www.ct.gov/dot/LIB/dot/Documents/dpolicy/policymaps/fcl/pdf/fclpdf.pdf>

3. If you anticipate that there will be ROW impacts, please supply the following:
 - a. a copy of the zoning map for the area, and
 - b. a copy of the assessor's map for the project area (including the parcel numbers)
4. How many takings will result in nonconforming lots that will require a zoning variance?
5. Do you anticipate any problems obtaining the zoning variance?
6. How many families and/or businesses will be displaced ?

(d) Pavement

1. Existing pavement type and width:
2. Will existing pavement be left as is, overlaid, reconstructed or recycled?
3. Proposed new pavement structure. Describe type & depth of each course including the base.

The typical DOT standards for pavement are:

collectors	arterials	
3"	4"	HMA 0.5 inch (previously Superpave 0.5 inch)
6"	6"	HMA 1.0 inch (previously Superpave 1.5 inch)
10"	14"	Suitable subbase

(e) Utilities

1. List all utilities and their owners within the project area (gas, water, sewer, electric, telephone, cable TV, etc.)

2. If any of these utilities are likely to be affected by the project, please explain the nature and extent of the impact.

3. Are there any plans to expand or improve existing utilities within the next five years?

(f) Storm Water Drainage System and Under Drains

If you propose to modify, replace, or install a system, please indicate the nature and extent of improvements. Provide a rough estimate of the improvements needed (e.g. length of new storm sewer pipe, number of new catch basins, etc.)

(g) Culverts, Bridges & Other Crossings

Identify any existing crossings that are likely to be modified (e.g. extended), rehabilitated, or replaced as part of the project. Indicate the type of improvement needed and the reason for it. If any existing crossings have inadequate hydraulic capacity, please indicate:

(h) Railroad Grade Crossings

Identify any existing crossings and indicate if any modifications are needed.

(i) Sidewalks

Provide a rough estimate of the number of linear feet of sidewalk to be replaced or constructed. Specify the type of material and whether or not the sidewalk fills a gap or connects pedestrian destinations.

What percentage of the above is for "replacement" of existing sidewalk?

If you are submitting a stand-alone sidewalk project, identify the pedestrian user (ie elementary school children).

(j) Parks, Cemeteries, Historic Structures

Identify any parks, cemeteries, or historic structures that are likely to be affected by the project.

(k) Wetlands

Identify any wetlands that are likely to be affected by the project (Locate them on a map if that is more appropriate).

(l) Hazardous or Contaminated Sites

Identify any known or suspected sites that are likely to be affected by the project. If the project includes work in the vicinity of a gas station or other facility with underground storage tanks, the locations should be identified. (Locate them on a map if that is more appropriate).

(m) Traffic Signals

Identify any intersections where traffic signals will need to be modified, replaced, or installed. If it is an old signal you should consider replacement rather than modification in your cost estimate. Indicate who is responsible for maintenance, ownership, and electrical cost.

(n) Curbing

Providing a rough estimate of the number of linear feet of new curbing to be installed. Specify the type of curbing. If you are going to reuse existing granite curb, please indicate.

(o) Retaining Walls

If you anticipate using retaining walls, please provide a rough estimate of the height, length, and type of materials.

(p) Transit, Pedestrians, and Bicyclists

Identify existing Transit, Pedestrian and Bicycle usage in the project area, any area generators (schools, employers, recreational areas, etc.), and any transit stops in or near the project. Indicate if the area is identified in CRCOG's or the Municipality's bike or pedestrian plans, and if the project is on the CRCOG bike network² and how will affect bike suitability as categorized on ConnDOT's Bicycle Map³.

Identify if the proposed project supports the region's transit system and, if it is supportive, explain why.

Identify how pedestrian mobility and safety issues may be improved by the proposed project.

Indicate if the proposed project supports bicycle mobility and safety and, if it is supportive, explain why.

Describe if the project closes any gaps in any existing system, provides any unique or primary access between important destinations, or has any local stakeholder or public support.

(q) Environmental Justice

Identify if the project is within the environmental justice target area.

Explain how this project could potentially benefit low income and/or minority neighborhoods.

² http://www.crcog.org/transportation/bicycle/bp_plan.html

³ www.ctbikemap.org/bikemap.html

(r) Stakeholder Information

Provide a list of homeowners, business owners and community groups that may be affected or have concerns / inputs regarding the proposed project.

Stakeholder Name	Role <small>(e.g. community group, homeowner)</small>	Phone Number
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(s) Safety and Security

Identify if the project is on an emergency evacuation route and/or serves an emergency shelter.

(t) School Zone Safety

Identify if the project will address safety concerns in a school zone, and if so, explain how.

(u) Green Infrastructure

Identify if the project will incorporate any green infrastructure initiatives, and if so, explain.

(v) Leverages other Finances

Identify if the project has any existing financing in place. Identify the funding source, amount, and if additional STP-Urban funding will result in full funding of the project.

Part 2:

Cost Estimating Guidelines

All proposals for CRCOG's STP-Urban Program must include a cost estimate based on the general procedures provided below.

In order to develop a program of projects that we can finance within the limits of available funds, we must receive project cost estimates that are reasonably accurate and not subject to significant increases upon completion of design. Therefore, we are requiring the following:

1. **Detailed Estimate Required.** All estimates must be developed from a detailed list of construction contract items, estimated quantities of those items, and unit prices based on recent bid prices for similar projects. The sample cost data supplied in this document are in **English units**, however, a town may prepare its quantity and cost estimate using **metric units**.
 - *Individual Unit Costs.* The recommended unit prices included in these guidelines are based on average unit prices for road improvement projects awarded by the Connecticut Department of Transportation (ConnDOT). If a town chooses to use a different set of unit prices it must **document** that the prices are based on recent bids for projects that are similar in nature and scale. (pages 14 & 15)
 - *Composite Costs.* Some composite costs are included to simplify the cost estimating procedure. You may choose to use the composite costs in lieu of individual items and quantities. The composite costs are on page 16.
2. **Include Itemized Cost Sheet with Application.** An itemized cost estimate sheet must be included as part of the proposal.
 - A town may substitute its own cost estimating form for the list of contract items included in the guidelines.
3. **Use Specified Cost Factors.** All estimates **must include the specified factors** for minor items, inflation, contingencies, incidentals, and trafficperson hourly rates.
 - *Minor Items (25% or less):* Minor items include materials and services not normally identified *early* in the design process. If a town has completed some design work and has developed a detailed list of items, and good estimates of quantities, the town may reduce the minor item factor from 25 percent to 15 percent. A town that has final plans available may reduce this factor to 0 percent. If less than 25 percent is used, justification must be provided. If structure costs are estimated with composite items, then Minor Items are not to be applied to the structure costs.
 - *Inflation (5% per year – assume 4 years)*
 - *Contingencies (10%)*
 - *Incidentals (25% - 30%):* Incidentals include construction survey, construction inspection, redesign necessitated by problems found in the field, materials testing, & miscellaneous items. On small projects (less than \$1,000,000) use 30 percent. On large projects (over \$1,000,000) use 25 percent.

- *Trafficperson* : In many instances this item is largely underestimated. During the estimating process, Towns need to first determine who will be on site during construction (Police Officers or Uniformed Flaggers) and how long their services will be needed. In some cases, town ordinances dictate who controls construction project traffic. The estimated hours need to be multiplied by the following rates: State, Town (City) Police Officer - \$75 per hour; Uniformed Flagger - \$55 per hour.

Example: Assume a construction duration of 5 months (100 days) and a need for 1 Police Officer and 1 Flagger.

Police Officer: $(100 \text{ days}) \times (8 \text{ hrs/day}) \times (\$75/\text{hr}) = \$60,000$

Flagger: $(100 \text{ days}) \times (8 \text{ hrs/day}) \times (\$55/\text{hr}) = \$44,000$

Total Trafficperson Cost = \$104,000

4. Lump Sum Items.

Environmental Considerations – Often times environmental contamination and treatment is overlooked or underestimated. Controlled materials handling and disposal are just a couple of the items that need to be considered when estimating projects. If you identified know or suspect sites under item (1) – Hazardous or Contaminated Sites on page 6 you must include the ‘Environmental Considerations’ multiplier in your estimate. If you are confident that there is no evidence of past or present contaminants, you do not need to include the environmental multiplier.

Cost Summary: PE, ROW, & Construction Costs

TOWN: _____

PROJECT: _____

1. Traditional Roadway Project on "Local" Road

	COST	Federal Share		State Share		Local Share	
Design ^(A)			80%		10%		10%
R.O.W.			80%		10%		10%
Construction ^(B)			80%		10%		10%
TOTAL			---		---		---

2. Traditional Roadway Project on "State" Road

	COST	Federal Share		State Share ^(C)		Local Share ^(C)	
Design ^(A)			80%		20%		0%
R.O.W.			80%		20%		0%
Construction ^(B)			80%		20%		0%
TOTAL			---		---		---

3. Pavement Rehabilitation / Stand-Alone Sidewalk Projects

	COST	Federal Share		State Share		Local Share	
Design			0%		0%	----	100%
R.O.W. ^(D)			80%		0%		20%
Construction ^(B)			80%		0%		20%
TOTAL			---		---		---

^(A) Typically - 10% to 12% of Construction Costs

^(B) Enter Construction Cost from line 18 of construction cost summary sheet (page 13).

^(C) Minimum State Share shall be 10%. On State roadways, ConnDOT may increase the State Share to 20% to absorb a portion of (or all of) the traditional 10% Local Share.

^(D) Stand-Alone Sidewalk Projects only

Cost Summary: PE, ROW, & Construction Costs

4. Bicycle/Pedestrian Projects

Prior ConnDOT policies disallowed STP-Urban funding to be awarded to projects that solely funded enhancement type projects (i.e. bike trails, streetscape projects, etc.) and encouraged applicants to apply for funding under the STP-Enhancement Program. New draft initiatives from ConnDOT recognize the importance of developing a more balanced multi-modal transportation system and offer flexibility, allowing STP-Urban funds to be use on bicycle and pedestrian projects.

Funding of off-road bike, pedestrian, or mutli-modal trails will now be eligible under this STP-Urban category. Wholesale streetscape projects and sidewalk rehabilitation projects are not considered eligible at this time. A project’s streetscape elements such as benches and decorative lighting may be deemed non-participating and require local funding.

	COST	Federal Share		State Share		Local Share	
Design ^(A)		80%		0%		20%	
R.O.W.		80%		0%		20%	
Construction ^(B)		80%		0%		20%	
TOTAL		---		---		---	

^(A) Typically - 10% to 12% of Construction Costs, Municipalities have the option of fully funding design costs in order to fully allocate the limited federal funding towards right-of-way and construction phases.

^(B) Enter Construction Cost from line 18 of construction cost summary sheet (page 13).

Cost Summary: Construction Costs

Town: _____

Project: _____

1. Construction Items (from your itemized estimate)	
2. Minor Items (25% or less. See page 9)	
3. SUM of 1 and 2	

Lump sum items (estimate as % of line 3 using percentages suggested below)

4. Clearing & Grubbing	2%	
5. Mobilization	7.5%	
6. Maintenance & protection of traffic (Trafficperson not included, See Item 15)	4%	
7. Construction Staking	1%	
8. Environmental Considerations (See page 10)	12%	
9. Inflation (5% per year - assume 4 years)	20%	
10. SUM of 4 thru 9		

11. Total contract items (Add lines 3 & 10)	
12. Contingencies (10 % of line 11)	10%

13. Contract items & contingencies (Add lines 11 & 12)	
14. Incidentals (25% or 30% of line 13) (30% for projects under \$1,000,000)	
15. Trafficperson (See page 10)	
16. Utilities (enter only if on State roads or MDC)	
17. Railroad force account	

18. TOTAL CONSTRUCTION COST (sum of lines 13 thru 17)	
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Individual Construction Items & Prices

See ConnDOT website for supplemental cost information, if needed

	Unit	Cost/unit
1. PAVEMENT		
HMA (0.25 inch to 1.0 inch) <100 tons	ton	150.00
HMA (0.25 inch to 1.0 inch) 100 - 1,000 tons	ton	120.00
HMA (0.25 inch to 1.0 inch) >1,000 tons	ton	100.00
Subbase	C.Y.	45.00
Processed aggregate base	C.Y.	50.00
Rolled gravel base	C.Y.	30.00
Formation of subgrade	S.Y.	3.00
Concrete for pavement	C.Y.	250.00
Cut pavement - bituminous	L.F.	4.00
Cut pavement - concrete	L.F.	10.00
Material for tack coat	GAL.	9.00
Milling of Bit. Concrete 0-4"	S.Y.	7.50
Reclamation (10" Maximum Depth)	S.Y.	8.00
Pavement Recycling (4" Maximum Depth)	S.Y.	6.75
Removal of concrete pavement	S.Y.	15.00

2. EARTHWORK

Earth excavation - less than 500 cy	C.Y.	37.50
Earth excavation - 500 to 2,500cy	C.Y.	25.00
Earth excavation - 2,500 to 5,000cy	C.Y.	22.50
Earth excavation - more than 5,000 cy	C.Y.	15.00
Rock excavation - less than 500 cy	C.Y.	90.00
Rock excavation - 500 to 2,500cy	C.Y.	82.50
Rock excavation - 2,500 to 5,000cy	C.Y.	70.00
Rock excavation - more than 5,000 cy	C.Y.	35.00
Borrow - less than 500 cy	C.Y.	30.00
Borrow - 500 to 5,000cy	C.Y.	22.50
Borrow - more than 5,000 cy	C.Y.	14.00

3. DRAINAGE

Catch basin	EA.	3,000.00
Double grate catch basin	EA.	3,500.00
Complex Basin (CM-2)	EA.	5,200.00
Catch basin top	EA.	700.00
Reset catch basin	EA.	900.00
Manhole (new)	EA.	3,000.00
Manhole (reset)	EA.	900.00
Class "A" concrete	C.Y.	900.00
Bedding material (< 100 cy)	C.Y.	45.00
Bedding material (500-1,000 cy)	C.Y.	38.00
Bedding material (>1,000 cy)	C.Y.	35.00
Riprap	C.Y.	75.00
Trench excavation (0'-4' deep)	C.Y.	16.00
Trench excavation (0'-10' deep)	C.Y.	25.00
Trench excavation (0'-15' deep)	C.Y.	40.00

Trench excavation (0'-20' deep)	C.Y.	45.00
Rock in trench excavation	C.Y.	115.00
Paved ditch	S.Y.	65.00
Sedimentation control system	L.F.	5.00
Sedimentation Chamber (10'x4')*	EA.	35,000.00
Sedimentation Chamber (13'x7')*	EA.	40,000.00
Sedimentation Chamber (18'x12')*	EA.	50,000.00
12" R.C. pipe	L.F.	52.00
15" R.C. pipe	L.F.	55.00
18" R.C. pipe	L.F.	70.00
24" R.C. pipe	L.F.	75.00
30" R.C. pipe	L.F.	90.00
36" R.C. pipe	L.F.	115.00
42" R.C. pipe	L.F.	130.00
48" R.C. pipe	L.F.	150.00
24" R.C. culvert end	EA.	1,000.00
30" R.C. culvert end	EA.	1,200.00
36" R.C. culvert end	EA.	1,500.00

4. GUIDE RAIL

Metal beam rail (type R-B 350)	L.F.	26.00
Metal beam rail (type R-B 350) - End Anchorage	EA.	1,200.00
Metal beam rail (type R-B 350) - Bridge Attachment	EA.	2,500.00
Three-cable guide railing (I-beam post)	L.F.	13.00
Merritt Parkway Guiderail (local roads only)	L.F.	60.00
Anchorage	EA.	1,200.00
Precast conc. median or Jersey barrier (15" X 32")	L.F.	50.00
Precast conc. median or Jersey barrier (24" X 32")	L.F.	75.00
Temporary precast conc. barrier (24" X 32")	L.F.	42.00

5. OTHER ITEMS

Bituminous concrete curbing (if new, consider adding pavement)	L.F.	7.50
Concrete curbing	L.F.	35.00
Granite curbing	L.F.	38.00
Reset granite curbing	L.F.	32.00
Cut concrete sidewalk	L.F.	20.00
Concrete sidewalk	S.F.	12.50
Concrete sidewalk(stamped/dyed)	S.F.	25.00
Brick sidewalk	S.F.	35.00
Concrete paving brick	S.F.	15.00
Bituminous concrete sidewalk	S.Y.	50.00
Bituminous concrete driveway	S.Y.	36.00
Sodding	S.Y.	12.50
Turf establishment	S.Y.	2.50
Furnish & place topsoil	S.Y.	6.50
Traffic signals - new (\$150,000 if part of a city system)	EA.	110,000.00
Traffic signals- modification (\$80,000 if major modification)	EA.	30,000.00
Temporary Signalization (\$35,000 if not at existing signal)	EA.	3,500.00
Street lighting	L.F.	45.00

* Required per Stormwater Phase II General Permit (see DEP/DOT guidelines)

Selected Composite Items & Prices

1. PAVEMENT

(unit prices include HMA, tack coat, and formation of subgrade; excavation **not** included and must be calculated separately)

Arterial composite pavement cost: 4" HMA 0.5 inch on 6" HMA 1.0 inch on 14" Subbase (20" rock)

Collector composite pavement cost: 3" HMA 0.5 inch on 6" HMA 1.0 inch on 10" Subbase (20" rock)

unit	<2,600	2,600 - 26,000 SF	>26,000 SF
S.F.	12.00 (12.65)	10.10 (10.70)	8.80 (9.35)
S.F.	10.50 (11.75)	8.75 (10.00)	7.60 (8.75)

Overlay:
2" HMA 0.5 inch with tack coat (min. overlay)

unit	<7,800 SF	7,800 - 78,000 SF	>78,000 SF
S.F.	1.97	1.58	1.33

Overlay:
3" HMA 0.5 inch with tack coat (structural)

unit	<5,200 SF	5,200 - 52,000 SF	>52,000 SF
S.F.	2.98	2.40	2.02

Overlay:
4" HMA 0.5 inch with tack coat (structural expressway)

unit	<3,900 SF	3,900 - 39,000 SF	>39,000 SF
S.F.	3.93	3.17	2.66

2. STRUCTURES

- Bridges - New (per sq. ft. of deck area)
- Bridges - Deck rehabilitation (per sq. ft. of deck area)
- Bridges - Deck replacement (per sq. ft. of deck area)
- Bridges - New superstructure-including deck (per sq. ft. of deck area)
- Bridges - Removal of superstructure over roadway
- Bridges - Removal of superstructure over water or rail
- Concrete Modular Walls / Mechanically Stabilized Earth Walls (sf estimate includes the subsurface area)
- Cast-in-place concrete wall (sf estimate includes the subsurface area)
- Precast box culverts (Estimate per sq. ft of top face; Length X Width)

unit	unit price
S.F.	375.00
S.F.	100.00
S.F.	125.00
S.F.	175.00
S.F.	55.00
S.F.	75.00
S.F.	55.00
S.F.	65.00
S.F.	210.00

3. DRAINAGE

(Unit prices include surface runoff and CB's; doesn't include cross culverts or sedimentation chambers)

- Compact Urban Area - Full Drainage Improvement (total cost / area of pavement)
- Suburban Area - Full Drainage Improvement (total cost / area of pavement)
- Suburban Area - Upgraded Drainage & Rural Drainage (total cost / area of pavement)

unit	unit price
S.F.	3.75
S.F.	2.50
S.F.	1.25

Part 3:

Project Rating Information

Part 3 outlines the *rating information* an applicant must provide for each proposal. The data will be used to rate your project on the basis of the predetermined criteria. Please provide full documentation for each of the criteria listed below.

1. **Structural Improvement: Pavement, Drainage, Bridge/Culvert (15 points)**

The structural improvement rating provides an indication of the extent to which the project will help correct or reduce a structural problem with a road, a bridge, or a culvert. A town must provide documentation of: (1) the existing structural problems, and (2) how the proposed project will correct the problem. The town should provide any available deficiency ratings such as the town's own pavement condition inventory or the State's ratings on local bridges. Photographs would also be helpful. The town should also describe how the project will address each of the deficiencies it identifies.

CRCOG staff will review the documentation on each project. They will then rate each project based on their professional judgment, the general criteria listed below, and the town's documentation.

General criteria: (indicate existing conditions & conditions after improvement)

- | | |
|---------------------------------|--|
| Roadway Pavement: | pavement condition rating (e.g., good, fair, poor) |
| Roadway Drainage System: | adequacy of subsurface drainage system (water in base?)
adequacy of surface drainage system (icing or ponding?) |
| Bridges & Culverts: | bridge condition rating (super structure, deck)
hydraulic capacity (adequate for 25, 50, or 100 year flood?) |

When assigning a project rating, staff will consider the range of existing problems (pavement, drainage, and culvert/bridge), the severity of the problems, and the degree to which the problem will be reduced.

2. **Traffic Improvement: Flow, Safety, & Geometrics (15 points)**

The traffic improvement criterion provides an indication of whether or not the proposed project will help improve traffic flow, traffic safety, or roadway geometrics. The applicant must provide documentation of: (1) the nature and severity of the existing problems, and (2) how the problems will be corrected by the proposed project. CRCOG staff will review the documentation and determine whether the improvement qualifies as major, moderate, minor, or none.

Points to address in documentation:

	Existing Problem	Proposed Improvement	Appropriate Criteria
Traffic Flow	Is there an existing congestion problem? What is the severity of the problem?	Will the proposal reduce the congestion problem? To what degree will it reduce it?	Level-of-service (LOS) before & after the proposal is implemented. Highway Capacity Manual procedures recommended but not required.
Traffic Safety	How many accidents occurred in the last 3 years ? Provide accident records, summary of accident types, <u>or</u> collision diagrams.	How many of those accidents would the proposed project have eliminated (3 years)?	Expected accident reduction over a 3-year period.
Roadway Geometry	Are there any geometric deficiencies on the road? Examples: excessive grade, substandard width, excessive horizontal curvature, poor sight line, improper super elevation. Describe the problems & their severity.	Will the proposed project correct the problem and to what degree?	Indicate degree of improvement in appropriate measure such as: expected improvement in sight distance, or increase in design speed from 25 to 35 mph.

3. Traffic Volume or Transit Ridership (15 points)

This criterion provides a general indication of the number of people who benefit from the proposed project. Measurement method is dependent on the type of project proposed. For roadway improvement projects, the applicant must supply data on either the annual average daily traffic (AADT) or the peak hour volume of traffic (PHV). For transit projects, the applicant must supply data on the number of transit riders who will benefit from the project. For projects other than road or transit improvements, the applicant must provide some other estimate of the number of people who will benefit and give an explanation of how the estimate was prepared. Submit documentation on one of the following:

1. **ADT,**
2. **PHV,**
3. **Transit Riders**

When using ADT, the score is calculated by the following formula:

$$\text{Score} = \text{ADT}/12,000 \times 15$$

(where ADT = Average Daily Traffic, and the maximum ADT that will be considered is 12,000)

4. Regional Significance (15 points)

Regional significance provides an indication of how widespread or localized the *transportation* benefits of the project are. The applicant must describe the area of impact of the project. For example, does the project benefit only a very small area, an entire town, multiple towns, or most of the region? A proposal can also receive rating points if it helps improve access to regional **public** facilities such as hospitals, colleges, and airports; on an evacuation route; or to an emergency shelter.

The applicant should provide documentation on (1) the size of the area that benefits from the proposed project, and (2) information on any regional **public** facilities that benefit from the proposed project. The documentation should demonstrate how the area or regional facilities benefit.

CRCOG staff will review the documentation and determine whether the project qualifies as regional, subregional, townwide, or localized.

5. Other Benefits (6 points)

Proposals can receive up to six extra points if the proposed project has any of the benefits listed below.

Environmental & Historic Preservation (maximum 2 points)

If the project will have a positive environmental impact, or will serve to advance recognized historic preservation goals of the community, the project is eligible for additional points. When considering environmental benefits, CRCOG staff will consider a wide range of potential environmental improvements such as air quality, water quality & flow, wetlands mitigation, open space improvements, etc.

Economic Development (maximum 2 points)

Projects that help the economic development goals of the community will receive additional points.

School Zones (maximum 2 points)

Projects that assist in addressing vehicular, pedestrian, or bicycle safety in school zones.

6. Municipally Owned Arterial or Collector Road (10 points)

A proposal will be awarded 10 extra points if the project is located on an arterial or collector road that is owned by the municipality (as versus State ownership).

7. Sustainability (17 points)

Proposals can receive up to 17 extra points if the proposed project has any of the benefits listed below.

Traffic Calming (maximum 3 points)

If the project will have a positive effect on reducing vehicular travel speeds, altering driver behavior and/or reducing the negative effects of automobile use, the project is eligible for additional points. When considering traffic calming benefits, CRCOG staff will evaluate a wide range of potential traffic calming improvements such as speed humps, reduced lane width, streetscaping elements, or other measures appropriate to the type of street. Proposals should indicate the severity of the existing problem and the degree to which the proposed improvements will reduce the problem.

❑ **Transit Supportive** (maximum 3 points)

If a proposal benefits the region's transit system or transit users it can receive up to an extra three points. Proposals should indicate if bus shelters are being proposed or if sidewalks to bus stops are being improved or installed.

❑ **Pedestrian Supportive** (maximum 3 points)

Proposals that improve pedestrian mobility and/or safety will receive up to three additional points. Proposals should indicate pedestrian measures that are being proposed such as new sidewalks, crosswalks, or pedestrian traffic signal equipment and how the measures will improve pedestrian safety.

❑ **Bicycle Supportive** (maximum 3 points)

If the project helps to improve the mobility and safety of bicyclists, or helps achieve the goals of the Regional Bicycle Plan, it can receive up to an extra three points. Proposals should indicate how bicycle provisions (ie. pavement striping to provide exclusive bicycle lane) will advance the vision of safety, convenience and improved linkages.

❑ **Green Infrastructure** (maximum 5 points)

If the project includes the implementation of new technologies and methodologies that reduce environmental impacts associated with transportation infrastructure, it can receive up to an extra five points. These new initiatives seek to reduce stormwater runoff and associated pollutants, promote the use of recycled materials, bring natural elements into streets, reduce "heat island" effects, and improve the access and accommodations for pedestrians and bicycles.

Green Streets strategies include the use of permeable pavement, bioslopes and bioswales, bioretention cells, and vegetated filter strips to reduce and filter stormwater runoff. Additional strategies to reduce environmental impacts include use of reclaimed or recycled pavements and integration of natural elements into streets. Additional strategies to reduce environmental impacts include use of in-place reclaiming of existing pavements for use as a road granular base on lower-volume roads, partial depth cold-in-place recycling of pavements up to 8,000 ADT, use of reclaimed asphalt pavement (RAP) into hot-mix-asphalt, warm-mix asphalt (WMA) technology, and integration of natural elements into streets.

8. Derived From Corridor Study (4 points)

A proposal will be awarded up to four extra points if the project is the result of a recommendation from a corridor study initiated through CRCOG.

9. Environmental Justice (8 points)

A proposal will be awarded up to eight extra points if the proposed project benefits low income and/or minority neighborhoods. A map of the environmental justice target areas is attached to this document.

10. Leverages other Finances (5 points)

A proposal will be awarded up to five extra points if the proposed project leverages other finances. Leveraging other finances is defined as using STP-Urban funds to supplement other existing funds to fully fund a project. The number of points awarded will depend on how complete the planning or design processes are. To receive points, the existing funding must be secure and cannot be in the form of an earmark. With difficult financial times expected, multiple funding sources will offer great flexibility towards completion of projects.

It is up to each applicant to provide a description and explanation of how they meet any of these criteria. CRCOG staff will review each application and determine the number of points warranted for the benefits described by the applicant.

Rating Criteria (Nontraditional; Bicycle and Pedestrian; Pavement Rehabilitation / Stand-Alone Sidewalk Project):

Since the proposed project rating system might not be well suited to rating nontraditional, bicycle and pedestrian projects, pavement rehabilitation projects, and stand-alone sidewalk projects, CRCOG staff will evaluate each project using criteria listed below.

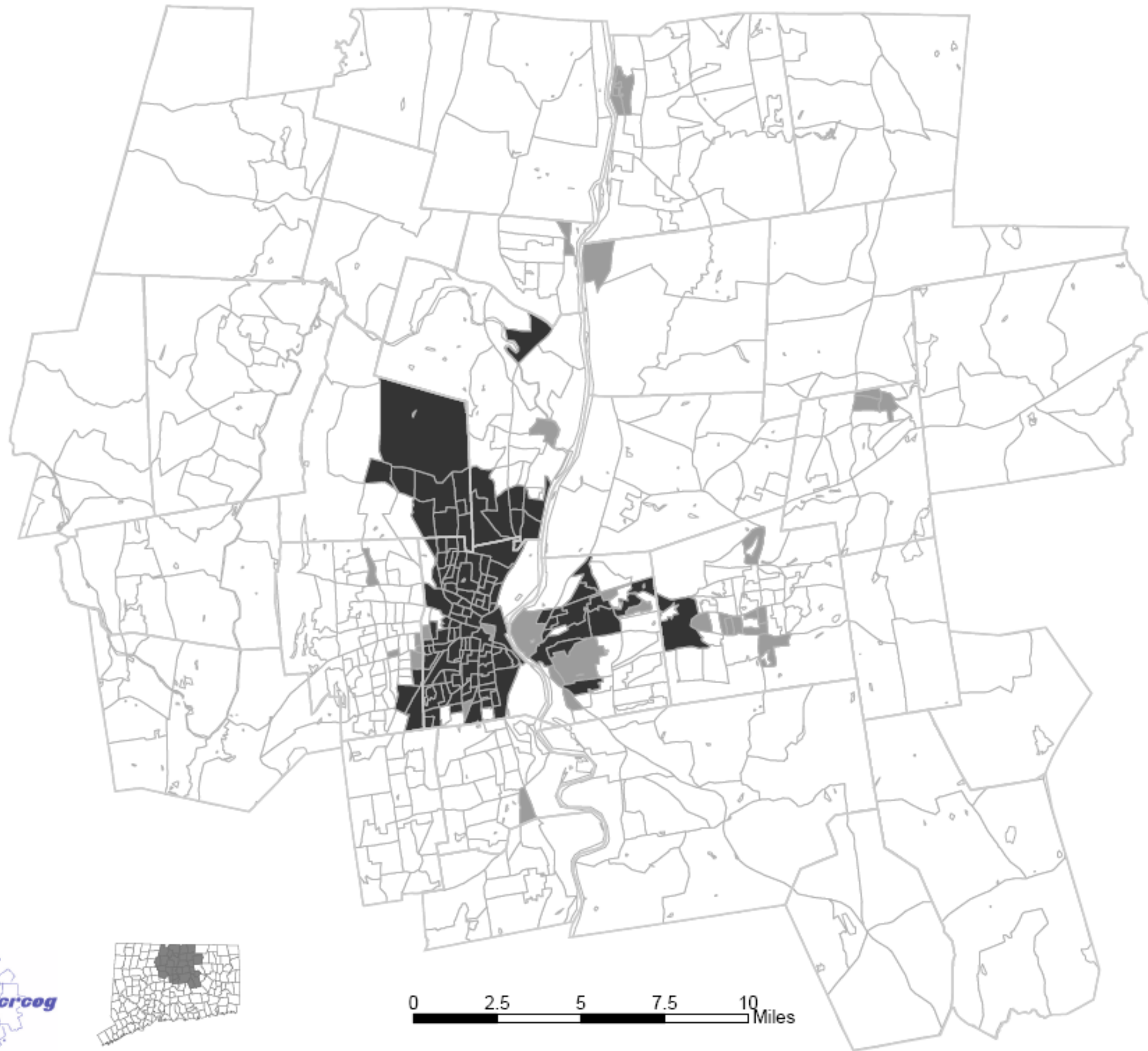
Nontraditional projects will be evaluated on an individual basis. Projects that demonstrate air quality benefits and environmental justice goal advancement will be given special consideration.

Pavement rehabilitation projects will be evaluated, but not limited, to the following criteria: the existing roadway issues and deficiency rating, drainage issues (ponding), average annual daily traffic (AADT) / peak hour volume of traffic (PHV), how widespread or localized the benefits of the project are.

Bicycle and Pedestrian projects and Stand-alone sidewalk projects primarily rated on their ability to improve bicycle and pedestrian mobility and safety. These projects will be evaluated, but not limited, to the following criteria: the user (i.e. elementary school children, handicap individuals, teenagers, commuters), whether or not the improvement fills a gap or connects destinations, right-of-way impacts, safety benefit to the community, and the effectiveness in providing alternatives to driving.



**Figure 1
Environmental Justice
Target Areas**



Target Areas

- Primary
- Secondary

Primary includes any block group that had at least 50% minority population according to the 2000 Census.

Secondary includes additional block groups that had at least 20% low-income population (household income 150% or below the Census poverty threshold, by family size) according to the 2000 Census.

Prepared by The Capitol Region Council of Governments

Source:
Census2000 SF1 P008
Census2000 SF3 P088
Census TIGER Line files, 2000

November 25, 2003

FOR REFERENCE ONLY



0 2.5 5 7.5 10 Miles