2019-2024 Transportation Improvement Program (TIP) Project Solicitation Project Justification Package

General Information

To apply for federal transportation funds, a Project Justification Package (PJP) must be prepared for each project. This document contains the project application along with general information on eligibility, submission instructions and the evaluation process. Note that NYSDOT's 2019 TIP/STIP Policy Guidance is not yet available. Reference is being made to the 2016 TIP/STIP Policy Guidance throughout the PJP as CDTC expects few changes in the 2019 Guidance document. Complete information related to this solicitation for projects is available on CDTC's 2019 TIP Update webpage at www.cdtcmpo.org/tipupdate.

Project Eligibility

All projects must be eligible for federal aid programs under the FAST Act including the National Highway Performance Program (NHPP), the Surface Transportation Block Grant Program (STBG) and the Highway Safety Improvement Program (HSIP). CDTC's 2019 TIP Update webpage at www.cdtcmpo.org/tipupdate contains details on federal aid programs and eligibility requirements including the following information:

- Functional classification map of roads provided by NYSDOT. For pavement related projects,
 Federal-aid cannot be used on roads functionally classified as local.
- 2017 pavement condition data on federal aid roads.

Albany, NY 12205

- Structurally deficient bridge list for local bridges (between 2016 and 2018).
- Data and analysis requirements for HSIP (safety) eligible projects. **HSIP funds may be used on any public road.**

Submission Instructions

One (1) electronic copy of the completed application (PJP) per project is due to CDTC by 5:00 p.m. on **Wednesday, November 28, 2018**. Completed applications (all sections) should be emailed to pip@cdtcmpo.org or provided on a USB flash drive. Note: CDTC cannot accept email from @yahoo.com email addresses and cannot accept emails larger than 20 MB - plan accordingly. If it is not possible to submit an electronic copy, a hard copy of the completed PJP may be submitted, which must be received by CDTC by the above deadline. Deliver or mail the completed PJP to:

Michael V. Franchini, Executive Director Phone: (518) 458-2161
Capital District Transportation Committee Fax: (518) 729-5764
One Park Place, Main Floor

Project Evaluation

Projects are evaluated by the CDTC staff. 50% of the score is derived from a calculated Benefit/Cost ratio and 50% is derived from a Merit Category Score. Details regarding the evaluation methodology and the Merit Category Score Sheet are available on the CDTC website at www.cdtcmpo.org/tipupdate. CDTC's Planning Committee and Policy Board are ultimately responsible for project selection.

Questions?

Sponsors may contact Michael V. Franchini, Executive Director or David Jukins, Deputy Director of the CDTC staff at (518) 458-2161 or by email pip@cdtcmpo.org at any time for assistance. If requested, CDTC staff will review your application before submittal and offer suggestions for improvement.

1) Project Name: 2) Project Location (city, town, village): 3) Project Sponsor (government body submitting the proposal): 4) Contact person with direct knowledge of the project: Name: Title: Municipality/Agency: Street Address: City/Zip: Telephone: Email: 5) Check the boxes to indicate that you have read and understand the following: A signed cover letter from the chief elected official or equivalent has been provided along with this Project Justification Package. A municipal sponsor or other non-NYSDOT agency will be responsible for project administration and management in accordance with NYSDOT Procedures for Locally Administered Federal Aid Projects (PLAFAP). The sponsoring municipality or agency agrees to provide the minimum required local match (20% of the total project cost). NOTE: The 20% local match may be reduced depending on the project type, the federal fund source and the availability of Marchiselli funding. The sponsoring municipality or agency acknowledges that funds for locally administered federal aid projects will be provided on a reimbursement basis. The sponsor will be responsible for 100% of the upfront costs and will be reimbursed following completion of the project. The sponsoring municipality or agency acknowledges that the cost estimate provided by the sponsor may be adjusted by CDTC staff based on federal unit costs or other information related to federal aid projects. The sponsoring municipality or agency acknowledges that if preliminary engineering funds are not obligated in the federal fiscal year in which they are programmed, the entire project will be removed from the TIP and federal funds will be returned to their source. The project would then have no status. The CDTC Planning Committee can take action to approve exceptions to this rule at its discretion. 6) Sponsors submitting multiple projects should numerically rank them (1 being highest) within a general project category (i.e. pavement, bridge, safety, transit, bicycle/pedestrian, etc.) as an indication of their priority. General Project Category: Priority Level:

Section A: Sponsor Information and Project Priority

Section B: Project Description and Key Project Features

Describe the proposed project with as much detail as possible including key project features by general project type.

Pavement Projects:

- 1) Project Limits Describe the start and end points of the project using side street names, reference markers or specific street addresses.
- 2) What is the length of the pavement area in feet or miles?
- 3) What is the width of the pavement area in feet (curb to curb or pavement edge to pavement edge if no curbs)?
- 4) If the project is related to an existing federal aid project funded in the current TIP, provide the TIP number and the NYSDOT PIN number (a list of current TIP projects is available at www.cdtcmpo.org/documents/transportation-improvement-program/tipsearch).
- 5) What is the AADT (Annual Average Daily Traffic) or the range of AADTs in the corridor and what year is the traffic count(s) from? If known, what is the percentage of Heavy Vehicles? Refer to the NYSDOT traffic data view for more information at: gis3.dot.ny.gov/html5viewer/?viewer=tdv. Traffic counts from local sources or consultant studies are also acceptable sources of data.
- 6) What is the purpose and need for the project? Is the project preventive maintenance, corrective maintenance, rehabilitation (system renewal) or reconstruction (system renewal)? Provide the pavement condition score and/or other necessary engineering data that describes the problem.
 - Note: Condition scores for local federal-aid roadways are available on the CDTC website www.cdtcmpo.org/tipupdate. Preventive/corrective maintenance projects typically have a pavement condition score of 6. A pavement can be considered for preventive/corrective maintenance with a condition score of 5 if the previous year the score was 6. Pavements with a score of 7 can be crack sealed after 4 to 6 years of service. Pavements with a condition score of 5 or less for more than two cycles are considered to be beyond preservation and should be considered for rehabilitation or reconstruction (system renewal projects). There are exceptions to these guidelines. In such cases, provide an engineering evaluation for proposed projects not meeting these criteria.
- 7) How was the need for the project identified? Was the project derived from CDTC's pavement condition inventory, NYSDOT's pavement condition inventory, a local pavement condition inventory, a planning/engineering study, part of an overall plan, or part of an existing capital plan? Other source? Provide a copy of the document and/or web link to the related planning/engineering study or other planning work as part of this application.
- 8) What specific pavement treatment will be used in the project? For examples of pavement work by category, see page 15 of the 2016 NYSDOT TIP/STIP Policy Guidance Document on CDTC's website at: www.cdtcmpo.org/tipupdate (note this information is subject to change).
- 9) Will ADA compliant features be included in the project such as sidewalk curb ramps, replacement of an impassible panel of sidewalk, etc.? If so, list the number of curb ramps to be upgraded and the linear square feet of sidewalk panels to be replaced.

Note: For resurfacing projects on roadways with sidewalks a technical advisory found at: www.ada.gov/doj-fhwa-ta.htm and issued jointly by the USDOT and US Department of Justice requires that such projects address the need for, or adequacy of, ADA curb ramps and crosswalks. See NYSDOT's website at http://on.ny.gov/1lyFENP and http://on.ny.gov/1lyINMK for more information.

10) Will complete street features be included in the project? If so, list them.

Note: Examples include but are not limited to sidewalks, crosswalks, bike lanes, special bus lanes, comfortable and accessible public transportation stops, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, etc. ADA compliant project elements, such as the number of sidewalk curb ramps to be upgraded or the replacement of an impassible panel of sidewalk must be identified as part of any resurfacing project on a roadway with sidewalks (see Question 9 for more information on ADA). For more information on complete streets features in various project types, see NYSDOT complete streets checklist at: http://on.ny.gov/1Rd5vHM.

- 11) Is there a specific road safety problem, based on crash history, the project intends to address? Provide relevant crash data and identify the specific project element that intends to reduce the documented crashes. CDTC staff is available to provide crash data by request.
 - Note: If the project is eligible for Highway Safety Improvement Program funds, additional documentation may be required from the sponsor at a later time.
- 12) Provide the following information in the table below for pre and post project conditions. If the width of the cross section (e.g. shoulder width, travel lane width, median width, sidewalk width, bike lane width, etc.) varies throughout the length of the project area, provide the information for each segment when a new cross section begins and/or is proposed. Include ADA features as well.

 Do not leave blank spaces insert N/A if the topic is not applicable to the proposed project.

Cross Section Feature	Base Condition (Pre Project)	Proposed Condition (Post Project)
Total Number of Travel		
Lanes in Cross Section		
Number of Travel Lanes by		
Direction		
Width of Travel Lanes		
(Feet)		
Shoulder Type (paved or		
unpaved)		
Shoulder Width by		
Direction (Feet)		
Median Type (i.e. Raised or		
two-way center turn lane)		
Median Width (Feet)		
Parking Lane Width by		
Direction (Feet)		
On-Street Bike Lane Width		
by Direction (Feet)		
Multi-Use Path Width		
(Feet)		

Number of Mid-block	
Crosswalks	
Sidewalk Width by	
Direction (Feet)	
Sidewalk/Path	
Buffer/Planting	
Area/Maintenance Strip	
Width (Feet)	

13) Additional project information from the sponsor?

Bridge Projects:

Bridge projects fall into two general ownership categories – those owned and maintained by New York State and those owned by local governments. Candidates should be drawn from:

- NYSDOT Asset Management Plan
- NYSDOT Capital Planning process
- Local Bridge Preservation Study found at www.cdtcmpo.org/tipupdate
- Bridge evaluation studies commissioned by local governments
- NYSDOT Bridge Condition Inventory
- Unfunded BridgeNY submittals (award announcement delayed)
- Identify the bridge by name and BIN number that the project intends to address. Provide geographic coordinates (preferred) for the bridge location or the feature carried/crossed by the bridge.
- 2) Is this a structurally deficient bridge?
- 3) Provide the NYSDOT calculated condition rating and date of most recent inspection report.
 - Note: During the previous TIP update cycle NYSDOT provided an improved condition rating using its Bridge Model. For local bridges, CDTC requested element specific ratings for various bridge components in order to calculate the improved condition rating (using the evaluation algorithm developed by CDM as part of the Local Bridge Preservation Study). CDTC staff is working with NYSDOT to determine the best approach for calculating the improved condition rating and may require additional information from local sponsors depending on the selected approach.
- 4) If the project is related to an existing federal aid project funded in the current TIP, provide the TIP number and the NYSDOT PIN number (a list of current TIP projects is available at www.cdtcmpo.org/documents/transportation-improvement-program/tipsearch).
- 5) What specific bridge treatment will be used in the project? Is it preventive maintenance, corrective maintenance, major rehabilitation (bridge renewal) or replacement (bridge renewal)?
 - Note: For examples of bridge work by category, see page 14 of the 2016 NYSDOT TIP/STIP Policy Guidance Document on CDTC's website at: http://www.cdtcmpo.org/tip. For local Bridges, if the proposed treatment is different than what was in the Local Bridge Preservation Study, explain the change and provide the necessary engineering evaluation. Note that the Local Bridge Study is several years old, so treatments and costs identified under that study should be viewed as a starting point.
- 6) If the project was not derived from the Local Bridge Preservation Study, where was it derived from? Indicate the other source (such as NYSDOT's Bridge Inventory or local assessment).
- 7) Will ADA compliant features be included in the project such as sidewalk curb ramps, etc.? If so, list the number of curb ramps to be upgraded and/or the linear square feet of sidewalk panels to be replaced. See NYSDOT's website at http://on.ny.gov/1lyFENP and http://on.ny.gov/1lyINMK for more information.
- 8) Will complete street features be included in the project? If so, list them.

Note: Examples include but are not limited to sidewalks, crosswalks, bike lanes, special bus lanes, comfortable and accessible public transportation stops, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, etc. ADA compliant project elements, such as the number of sidewalk curb ramps to be upgraded or the replacement of an impassible panel of sidewalk must be identified as part of any resurfacing project on a roadway with sidewalks (see Question 5 for more information on ADA). For more information on complete streets features in various project types, see NYSDOT's website at: http://on.ny.gov/1Rd5vHM.

- 9) Is there a specific road safety problem, based on crash history, the project intends to address? Provide relevant crash data and identify the specific project element that intends to reduce the documented crashes. CDTC staff is available to provide crash data by request.
 - Note: If the project is eligible for Highway Safety Improvement Program funds, additional documentation may be required from the sponsor at a later time.
- 10) For bridge replacement projects, are there physical changes to the existing bridge cross section? (Are sidewalks or shoulders added? Additional travel or turning lanes? Any other additions?)
- 11) Additional project information from the sponsor?

Transit Projects

- 1) What is the proposed project and where is it located (provide a map if necessary)?
- 2) What is the project's purpose and need?
- 3) How was the need identified? If the project was derived from an existing plan or study, provide a copy the document or a web link to the relevant plan or study.
- 4) Specific to an existing transit route(s), what is/are the route number(s) and what is the current ridership?
- 5) What is the estimated number of riders after project implementation, if known?
- 6) Would any transit vehicle travel time savings be expected with the project? If so, indicate in terms of travel time reduced and/or reduced delay per rider.
- 7) Does the project incorporate any transit supportive infrastructure?
 - Note: Examples include but are not limited to bus only travel lanes, transit shelters, bus bays or bus pull offs, curb extensions at bus stops, transit signal priority, queue jumpers, park and ride lots, pedestrian crossings or sidewalks, ADA or other accessibility features.
- 8) Is there a specific road safety problem, based on crash history, the project intends to address? Provide relevant crash data and identify the specific project element that intends to reduce the documented crashes. CDTC staff is available to provide crash data by request.
 - Note: If the project is eligible for Highway Safety Improvement Program funds, additional documentation may be required from the sponsor at a later time.
- 9) Additional project information from the sponsor?

Bicycle Projects

- 1) What is the proposed project and where is it located (provide a map if necessary)? Is the project a trail, traditional bike lane, protected bike lane, shared use lane, widened shoulder, etc.?
- 2) Project Limits Describe the start and end points of on-street projects using side street names, reference markers or specific street addresses. For trail projects, provide the connecting street or trail names with a route map.
- 3) What is the purpose and need for the project? How was the need identified? If the project was derived from an existing plan or study, provide a copy of the document or a web link to the relevant plan or study.
- 4) Are there bicycle counts in the project area? If so, provide the number of riders, date, time and length of the count.
- 5) What is the length and width of the project in feet, if applicable?
- 6) Are bicycle signals or other bicycle infrastructure being added with the project?
- 7) Is there a specific road safety problem, based on crash history, the project intends to address? Provide relevant crash data and identify the specific project element that intends to reduce the documented crashes. CDTC staff is available to provide crash data by request.
 - Note: If the project is eligible for Highway Safety Improvement Program funds, additional documentation may be required from the sponsor at a later time.
- 8) Additional project information from the sponsor?

Pedestrian Projects Not Related to a Pavement Project

- 1) What is the proposed project and where is it located (provide a map if necessary)?
- 2) Project Limits Describe the start and end points of the project using side street names, reference markers or specific street addresses.
- 3) Is this a new pedestrian facility or replacing an existing facility?
- 4) What is the length and width of the project in feet, if applicable?
- 5) What is the purpose and need for the project? How was the need identified? If the project was derived from an existing plan or study, provide a copy of the document or a web link to the relevant plan or study.
- 6) Are there pedestrian counts in the project area? If so, provide the number of pedestrians, date, time and length of the count.
- 7) Is there a specific road safety problem, based on crash history, the project intends to address? Provide relevant crash data and identify the specific project element that intends to reduce the documented crashes. CDTC staff is available to provide crash data by request.
 - Note: If the project is eligible for Highway Safety Improvement Program funds, additional documentation may be required from the sponsor at a later time. Sponsors are strongly encouraged to review the NYS Pedestrian Safety Action Plan and its engineering recommendations.
- 8) Will the project replace or add new pedestrian signals? What type (countdown timers, leading pedestrian interval, etc.)?
- 9) Will the project include a midblock crosswalk? If so, note the traffic control device to be used in addition to the crosswalk, if any (e.g. HAWK signal, rectangular rapid flashing beacon, etc.)
- 10) Any additional information the sponsor would like to provide about the project?

For All Other Projects

- 1) Provide a detailed description of the project including its location.
- 2) What is the purpose and need for the project? How was the need identified? If the project was derived from an existing plan or study, provide a copy of the document or a web link to the relevant plan or study.
- 3) Does the project include added capacity for motor vehicles (e.g. turning lanes, additional lanes, etc.)? Is there a related traffic study? Submit it if available.
- 4) Is there a specific road safety problem, based on crash history, the project intends to address? Provide relevant crash data and identify the specific project element that intends to reduce the documented crashes. CDTC staff is available to provide crash data by request.
 - Note: If the project is eligible for Highway Safety Improvement Program funds, additional documentation may be required from the sponsor at a later time.
- 5) Any additional information the sponsor would like to provide about the project?

Section C: Project Costs

Accurate cost estimates are an important part of the project evaluation process. To assist sponsors and to provide consistency in the development of project costs, CDTC staff has developed unit cost estimates for some project types based on recent federal-aid construction experience. Descriptions of what is available by project type are provided below.

Pavement Reconstructions: CDTC will estimate project cost using its time-tested and updated unit costs. Sponsors can provide information detailing specific ways the project might include exceptional features, for which CDTC unit costs won't apply.

Pavement Preservation: CDTC does not have time-tested unit costs but has gained a better understanding of preservation costs from projects delivered through the 2016-2021 TIP. Sponsors will be relied on heavily for cost estimates as will CDTC's recent federal aid experience. CDTC will screen the estimates for consistency among sponsors and for excessive variance from unit costs provided by NYSDOT Region One.

Sidewalks and Bike Paths: CDTC will estimate project cost using its time-tested and updated unit costs. Sponsors can provide information detailing specific ways that their projects might include exceptional features, for which CDTC unit costs won't apply.

Element Specific Bridge Repair: CDTC will use the costs provided by the 2016 Local Bridge Preservation Study prepared by CDM for CDTC as a starting point. Sponsors must provide information detailing differences between the scope they are proposing and the one for which cost estimates are provided in the 2016 study, and how this affects the cost of the project. CDTC will work with relevant parties to confirm costs of local bridges.

Bridge Replacement: CDTC does not have time-tested unit costs. Therefore, sponsors will be relied on heavily for estimates. But, given that these types of projects have routinely been underestimated, CDTC will screen the estimates for consistency among sponsors and for excessive variance from unit costs provided by NYSDOT Region One.

Other: For projects for which CDTC does not have a procedure, sponsors will be relied on heavily for estimates. CDTC will screen the estimates for consistency among sponsors and for excessive variance from like projects of which it is aware.

CDTC's unit costs should serve as a point of reference for above project types to ensure the proposed project cost is in line with federal aid experience. CDTC staff will be using its unit costs to confirm sponsor costs, when available. If sponsor costs are substantially different than CDTC's unit costs, the sponsor will need to justify the difference. CDTC's unit costs are available on the CDTC website at www.cdtcmpo.org/tipupdate.

1) Estimated Project Cost Worksheet

Sponsors should complete the worksheet below using the best available cost estimates. If the project includes an element(s) for which CDTC has no empirical unit costs or other experience, please provide a cost estimate and indicate its source.

Note: All project cost estimates will be inflated 2.0% annually by CDTC staff.

Construction Costs (in 2018 \$)	\$
+Inspection Cost/Contingency (10%)*	\$
+All Design Phases**:	
For Pavement and Bridge Preservation (10%)* OR	\$
For Pavements and Bridges Beyond Preservation (18%)* OR	\$
For All other project types (18%)*	\$
+Right-of-Way (if applicable)	\$
=Total Project Cost***	\$

Source of cost estimate:

Notes:

- * Percentage of the construction cost.
- ** Select the appropriate percentage based on project type.
- *** The total in the Estimated Project Cost Worksheet must equal the total in the Funding Worksheet.

2) Funding Worksheet

Sponsors should note the proposed source(s) of funding for the project. The amount of federal funds requested plus the required local match constitute the federal aid requested as federal funds are provided on a reimbursement basis. Overmatches and other sources of funding beyond the required match should be noted, if applicable.

Federal Funds Requested + Required 20% Local Match*	\$
+Additional Local Funds Beyond the Required Match**	\$
+Funds for Other Sources Beyond the Required Match**	\$
List the source of the other funding:	
=Total Project Cost***	\$

Notes:

- * Match percentage may vary based on federal fund source requirements.
- ** These funds would be in addition to the required Local Match.
- *** The total in the Funding Worksheet must equal the total in the Estimated Project Cost Worksheet.

Section D: Project Merit

CDTC's project evaluation process includes a Merit Score based on a number of project characteristics that are not directly evaluated as part of the Benefit/Cost Ratio (See Appendix H of the current TIP at: www.cdtcmpo.org/images/tip/6Sec4withmaps.pdf). The following categories are considered in the assignment of the merit score and aid in determining the relationship of the project to the New Visions 2040 Plan found at www.cdtcmpo.org/newvisions2040 and CDTC policies. All answers must be direct and brief and entered for each merit category as applicable to the project. Sponsors should refer to the Merit Category Scoresheet available on CDTC's website at www.cdtcmpo.org/tipupdate for full details related to each category.

Community Quality of Life & Equity (10 points possible) – Considers land use compatibility (3 points), smart growth (3 points, environmental justice (2 points) and accessibility/ADA/universal design/human services transport (2 points).

Appropriate Infrastructure (10 points possible) – Considers preservation/renewal of existing infrastructure (5 points) and complete streets (5 points).

Multi-Modalism (10 points possible) – Considers transit (5 points), pedestrians (3 points) and bicycles (2 points).

Environment & Health (8 points possible) – Considers sensitive area preservation/mitigation (2 points), greenhouse gas emissions reduction (2 points), alternative fuels support (2 points) and other environmental/health benefits (2 points).

Regional Benefit (5 points possible) – Considers benefits beyond the project to the transportation system or a quality region (5 points).

Economic Development (5 points possible) – Considers the potential economic impact of the project (5 points).

Safety & Security (5 points possible) – Considers the additional safety benefits beyond crash history (3 points) and security and resiliency to natural hazards and human caused events (2 points).

Operations & Technology (5 points possible) – Considers traffic operations & reliability improvements (3 points) and the project's use of beneficial advanced technologies (2 points).

Freight (5 points possible) – Considers the effect of the project on freight and goods movement (5 points)

Performance (3 points possible) – Considers the effect of the project on all transportation performance targets (3 points).

Innovation (2 points possible) – Considers the innovativeness of the project or project components (2 points).

Project Delivery (2 points possible) – Has the sponsor delivered projects on schedule and on budget (2 points).