Introduction

This simple guide provides insight on how Connecticut administers the Statewide Transportation Improvement Program (STIP) for projects funded under the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The article focuses on the planning process related to the program and provides sources of additional information.

The Statewide Transportation Improvement Program (STIP) is a four-year planning document that lists all projects for which funding is expected in those four years with Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) participation. The STIP must be developed according to Title 23 of the United States Code.
The STIP, which is multimodal, includes investments in various modes, such as transit, highways, and bicycle facilities. The STIP is the venue for implementing the goals and objectives identified in regional and State long-range transportation plans.

The regional Transportation Improvement Programs (TIPs) are similar documents prepared by each metropolitan planning organization (MPO) for its individual region. The STIP must include each MPO's TIP without modification, be fiscally constrained and be assessed for impacts to air quality. Without inclusion in the TIP/STIP, a project is ineligible for FHWA or FTA funding.

The Department posts the final STIP and any current draft STIPs online at the Department’s website at www.ct.gov/dot. To access the STIP page directly, navigate to www.ct.gov/dot/stip.

For additional definition of the planning process, air quality conformity and related acronyms, Article No. 01 of this reference series, entitled “Frequently Asked Questions (Federal-Aid)”, may be of interest. The article and others are posted at the Department’s website and can be located by navigating to Publications > Pamphlets.

**General Requirements**

The STIP has been developed in accordance with the terms and provisions of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the Clean Air Act Amendments of 1990 and all regulations issued pursuant thereto. According to these regulations, a STIP:

- must be developed once every four years;
- must cover a minimum of four years;
- must list projects in order by year;
- must be financially constrained by year;
- must include a financial plan that demonstrates which projects can be implemented using current and anticipated revenue sources;
- must include all significant projects that could affect air quality;
- must come from conforming State and Regional Long Range Plans;
- must be found in conformity with the State Implementation Plan (SIP).
Additionally, the STIP must contain the following information for individual project entries:

- project description, including sufficient detail to identify the project phase and,
- in non-attainment or maintenance areas, sufficient description to permit air quality analysis according to the U.S. Environmental Protection Agency’s (EPA) conformity regulations.
- specific project budget, including, total cost, Federal share and source by year, other funding shares and sources, by year and
- identification of the Americans with Disabilities Act implementation project elements.

In terms of coordination with regional planning organizations and local government officials throughout the STIP process, the following outlines the federal mandate.

- For each metropolitan area in the State, the STIP shall be developed in cooperation with the MPO designated for the metropolitan area.
- For each non-metropolitan area in the State, the STIP shall be developed in consultation with affected non-metropolitan local officials with responsibility for transportation using the State's consultation process(es) established under §450.210.
- For each area of the State under the jurisdiction of an Indian Tribal government, the STIP shall be developed in consultation with the Tribal government and the Secretary of the Interior.

**Air Quality Conformity**

The TIP/STIP is required by the Clean Air Act Section 176(c) to meet transportation conformity to ensure that the included highway and transit projects are consistent with air quality goals. Using techniques that have been approved by the federal Environmental Protection Agency (EPA), the program is reviewed to determine whether the TIPs, as proposed, will serve to reduce emissions of volatile organic compounds, oxides of nitrogen and fine particulate matters (PM2.5). Refer to Article 04 FHWA Congestion Mitigation Air Quality (CMAQ) Improvement Program of this reference series for additional detail on and mapping of air quality conformity areas in Connecticut.

**Public Review and Comment**

After coordination between the regional planning organizations (RPOs) and the Department, the draft TIPs and STIP are made available for public review. The Department announces via a legal notice placed in several of Connecticut's major daily newspapers, the availability of the draft STIP for public inspection and comment as well as the opportunity to attend a public informational meeting.
The regions perform public outreach to notify interested parties of the availability of their draft TIPs according to the individual public involvement plans that each region maintains. Additionally, the MPOs have cooperatively agreed to also notice the availability of the draft STIP for public review.

Each MPO provides opportunity for the public to view its draft TIP and the draft STIP at its regional offices. Copies of the draft STIP are also made available to view at the Connecticut Department of Transportation headquarters in Newington, Connecticut.

Each of Connecticut’s MPOs provides an informational meeting for public review of their draft TIP and the draft STIP. The Department also provides a public informational meeting for the draft STIP at the Connecticut Department of Transportation headquarters in Newington, Connecticut. Opportunity is provided for the public to comment and discuss the TIP/STIP at these meetings. The rural RPOs also publicize the opportunity to meet and discuss the draft STIP.

A minimum of 30 days is provided for the draft TIP/STIP public comment period. After review and serious consideration of all comments received, a final version of the STIP is prepared and submitted to the FHWA and the FTA for their approval. Additionally, once federally approved, all who submitted written comments are notified of the availability of the final document.

Once finalized, the STIP is posted online. As projects are initiated and developed, changes sometimes become necessary to the scope, altering anticipated costs or schedules. Also, available funding levels in programs previously anticipated to be used for federal or State match may also change. As such, the STIP often requires periodic updates during the four-year interval that it spans to reflect changes to project schedules, costs or funding sources. Processes have been established outlining the steps and roles for making such changes.
Periodic Updates
Some changes are considered minor or relevant to safety of the traveling public and thus require immediate attention. Examples include declarations for project activities necessary to address emergency conditions, relatively small changes to project costs or the addition of a separate project line to the TIP/STIP for certain bridge or safety projects. These changes only require notification by the Department to the MPO or rural RPO.

Other changes require additional attention and levels of coordination between the stakeholders.

- **Administrative Actions** — The need to break out projects, add/delete project phases, move anticipated project schedules between STIP years, implement mid-range increases to project costs, or apply program funds from different categories, would require an administrative action of the TIP/STIP to be endorsed by the MPO director and reviewed by the rural RPO director.

- **Amendments** — More significant changes to STIP project entries, such as adding/deleting a project, revision of the intent or limits of a project, some schedule changes for FTA projects and more significant funding level increases to projects, require an amendment of the TIP/STIP to be endorsed by the MPO director and reviewed by the rural RPO board.

Approved administrative actions are sent to FHWA and/or FTA approximately every two to three weeks. Amendments and the updated STIP are sent to FHWA/FTA for review and approval every two to three months. A copy of the letter(s) requesting STIP amendment approval, along with the list of amendments and the financial tables is also sent to each MPO and rural RPO.

The latest STIP, incorporating any administrative actions and amendments, is posted online upon receipt of federal agency approvals. With these periodic updates, the STIP remains a “living” document that more accurately reflects the State of Connecticut’s overall program as planned for FHWA and FTA funded projects.

Funding Sources
There are three sources of funds for this program:

- federal transportation appropriations available from the U. S. Department of Transportation (US DOT) through the FHWA and FTA,
- State Special Transportation Fund (primarily in the form of bond authorizations) and
- a small amount of other non-federal matching funds, typically from local sources.
Federal Share
Federal funding is determined by federal surface transportation authorizations. The current document is based on authorization levels established under the SAFETEA-LU. Federal-aid highway funds for individual programs are apportioned by formula using factors relevant to the particular program. Each category of funding has limitations, including rules on eligibility and ratios for matching federal dollars. The categories of federal funds supporting projects in the STIP have been fairly consistent over the years but can vary slightly at times with the offering of special or discretionary federal programs.

In the event of a reauthorization of the federal transportation bill, the available programs, eligibility rules, funding ratios and levels may change. At the time of this publication, the Department was working from federal funds available through continuing resolutions of the expired SAFETEA-LU authorizations and assumptions of future federal funding consistent with past levels.

State Share
Connecticut’s Special Transportation Fund (STF) was established by the 1983 State legislature to finance the State’s share of the Transportation Infrastructure Renewal Program. State resources have been sufficiently available to match federal dollars, as shown by Connecticut’s record of financing its transportation renewal program. The STF pays the necessary operating expenses of the Department of Transportation; the State (100%) funded infrastructure improvement projects and the interest and principal due from the sale of bonds. The sale of bonds has been consistently at a level sufficient to match available federal funds. The major sources of STF funds are the motor fuel tax and the motor vehicle receipts, which, combined, make up approximately 80 percent of the total fund revenue.

Other/Local Share
A limited group of projects included in the STIP require a local match to federal funds. Municipalities sponsoring the project typically provide the match through local resources. Local funding sources may include bonding, local capital improvement programs (LoCIP) or other sources, such as fundraising and private donations.
Operations and Maintenance
Operating and maintaining transportation systems are costly. SAFETEA-LU regulations require that the STIP demonstrate that appropriate funds are available to adequately operate and maintain the transportation system, as a whole. The majority of funds used to pay operations and maintenance costs are State funds.

Connecticut has many systems and processes that are required to monitor, analyze, and disseminate roadway/infrastructure data for operational, maintenance, and managerial uses as reflected in the Department’s estimated budget. Connecticut also uses intelligent transportation systems (ITS) to assist in managing roadway maintenance efforts and to enhance safety on the transportation system. Relative to operations and maintenance, ITS focuses on integrated management of maintenance fleets, identifying when specialized service vehicles are required, determining when hazardous road conditions require remediation, and improving work zone mobility and safety.

Other Notes and Resources
The Reference Series: Transportation in Connecticut is comprised of short articles on transportation topics pertinent to Connecticut. The series is provided as a first step in understanding the transportation planning, development, design and implementation process.

Many article topics focus on elements particularly relevant to locally administered transportation projects. These simple guides are the product of coordination between the Federal Highway Administration, the University of Connecticut’s CTI-Technology Transfer Center and the State of Connecticut Department of Transportation.

The full detail of transportation programs and processes, particularly rules of eligibility, special provisions, requirements, or constraints is not within the purview of these reference documents. It is imperative that municipal staff contact their RPO early in the process for guidance. In addition to the CT DOT website, www.ct.gov/dot, the Local Project Administration website, www.t2center.uconn.edu, of the University of Connecticut’s CTI-Technology Transfer Center provides many resources for municipal staff and managers of local projects.

Find more articles on transportation topics specific to Connecticut at www.ct.gov/dot/pamphlets.