

Questions And Answers On Financial Plans/Fiscal Constraint For Transportation Plans And Programs

Statewide and Metropolitan Transportation Improvement Program (STIP and TIP):

1. What is the statutory and regulatory basis for fiscal constraint of STIPs and TIPs?

As outlined in 23 CFR 450.216(a)(5) and 23 CFR 450.324(e), STIPs and TIPs, respectively, *"shall be financially constrained by year and include sufficient financial information to demonstrate which projects are to be implemented using current revenues and which projects are to be implemented using proposed revenue sources (while the system as a whole is being adequately operated and maintained)."*

In addition, 23 CFR 450.216(a)(5) and 23 CFR 450.324(e) state that *"In [air quality] nonattainment and maintenance areas, projects included for the first two years of the current STIP/TIP shall be limited to those for which funds are available or committed. Further, in the case of proposed funding sources, strategies for ensuring their availability must be documented."*

Additionally, pursuant to 23 U.S.C. 134(h)(2)(B), the TIP must include *"a financial plan that: (a) demonstrates how the TIP can be implemented; (b) indicates resources from public and private sources that are reasonably expected to be available to carry out the program; and (c) identifies innovative financing techniques to finance projects, programs, and strategies."*

While a financial plan may be developed for the STIP [23 U.S.C. 135(f)(2)(E)], 23 CFR 450.216(a)(5) requires that the STIP "include sufficient financial information to demonstrate which projects are to be implemented using current revenues and which projects are to be implemented using proposed revenue sources while the system as a whole is being adequately operated and maintained." **Moreover, 23 U.S.C. 135(f)(2)(D) specifies that the STIP "shall include a project, or an identified phase of a project, only if full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project."**

Moreover, regardless of funding source, costs for all regionally significant projects in air quality nonattainment and maintenance areas and projects requiring FHWA or FTA actions (regardless of air quality designation) must be included in the TIP and/or STIP [see 23 CFR 450.324(f)(3)-(5) and 23 CFR 450.216(a)(7)].

2. How should Federal and State funding be reflected in the TIP and STIP?

The Federal funding reflected in the TIP and STIP may be based on authorization levels for each year of the TIP and/or STIP, although obligation authority limitations could be utilized as a more conservative approach. In addition, for Federally-funded projects, the TIP and/or STIP must identify the appropriate "matched funds," by source. Importantly, because the State DOT will be involved in the development of all TIPs (as well as the STIP), the cumulative total of the

State/Federal funds in the TIPs and STIP must not exceed, on an annual basis, the total State/Federal funds reasonably available to the State.

Financial forecasts (for revenues and costs) to develop TIPs and STIPs (as well as for metropolitan and Statewide long-range transportation plans) may: (a) rely on a "constant dollar" base year or (b) utilize an inflation rate to reflect "year of expenditure." Each approach possesses merits. On one hand, the use of "constant dollars" facilitates a comparative assessment of projected revenues and costs with past trends. Conversely, "year of expenditure" better reflects the time-based value of money. If utilizing "year of expenditure," the inflation rate(s) should be based on sound, reasonable financial principles and information, developed cooperatively by the State DOT, MPOs, and transit agencies. Nevertheless, to ensure consistency, similar financial forecasting approaches should be utilized for all TIPs and STIPs in a given State. In addition, the financial forecast approaches, assumptions, and results should be clear and well-documented.

3. Do all projects, regardless of funding source, need to be included in STIPs and TIPs?

The STIP (and, by default, the respective TIPs) must contain all capital and non-capital projects/project phases proposed for funding under Title 23, U.S.C. (including Federal Lands highway projects) and the Federal Transit Act, excluding safety projects funded under 23 U.S.C. 402, emergency relief projects (except those involving substantial functional, locational and capacity changes), and planning and research activities (except those funded with National Highway System, Surface Transportation Program, and/or Minimum Guarantee funds). In addition, the TIP and STIP must include all regionally significant projects for which an FHWA or the FTA approval is required whether or not the projects are to be funded with Title 23, U.S.C., or Federal Transit Act funds [23 CFR 450.324(f)(1) and 23 CFR 450.216(a)(7)]. *Furthermore, the TIP and STIP must include all regionally significant projects to be funded with **Federal and non-Federal funds**, for information purposes and air quality analysis in nonattainment and maintenance areas [23 CFR 450.324(f)(4)-(5) and 23 CFR 450.216(a)(7)].*

Ideally, the financial plan that accompanies the TIP and the funding information or financial plan that supports the STIP should reflect all funding sources to operate and maintain the entirety of the transportation system. However, FHWA and FTA realize that obtaining individual local jurisdiction budgets to operate and maintain "local facilities" may prove a steep challenge to State DOTs and MPOs. Therefore, on an interim basis, it is acceptable for these financial plans to be limited to those portions of the transportation system (highway and transit) that the State is responsible for operating and maintaining and those facilities that receive FHWA/FTA funding.

4. How exact should the funding estimates for operations and maintenance be for the TIP and STIP?

Revenue and cost estimates for operations and maintenance will be more general than estimates for individual projects. For the financial plan that must accompany the TIP, the MPO may rely on the information contained in the financial plan that supports the metropolitan long-range transportation plan to develop three-year estimates of operations and maintenance funding sources and costs. Similarly for the STIP, the State DOT may utilize other documents (e.g., the Statewide long-range transportation plan and/or State DOT budget information) to demonstrate sufficient resources for the operations and maintenance of the State surface transportation system

for at least the time period covered by the STIP. *Operations and maintenance involving local and/or State funds may be shown as a "grouped line item" in the TIP and STIP.*

FHWA and FTA generally rely on the overall operations and maintenance information and analysis provided in support of the metropolitan and Statewide long-range transportation plans, including information on substantial changes to revenue streams for short-term (i.e., programming-level) operations and maintenance expenditures. It is also reasonable to rely on supplemental State DOT information for non-metropolitan areas if similar information and/or analysis are not contained in a financial plan for the Statewide long-range transportation plan for the TIP and STIP. Additionally, knowledge of local and/or State funding levels and previous year expenditures related to operations and maintenance compared to systems-level performance measures (e.g., pavement and/or bridge conditions) can provide insightful information on the reasonableness of future local and/or State investments on highway and transit operations and maintenance.

5. Must innovative finance mechanisms be reflected in the TIP/STIP? To what extent must Advance Construction (AC) be shown in the TIP/STIP?

Yes, innovative financing techniques (e.g., tolls, Grant Anticipated Revenue Vehicles (GARVEE bonds), State Infrastructure Banks, and Transportation Infrastructure Finance and Innovation Act) must be reflected in the TIP and/or STIP (*see responses to Questions 2 and 3 for specific information on the types of projects and funding sources to be included for the TIP and STIP*). Additional information on innovative finance can be obtained via the Internet at the following FHWA or FTA websites:

- [FHWA's Innovative Finance Guidance web site](#)
- [FTA's Innovative Finance Guidance website](#)
- [FTA's Flexible Funds website](#)

AC and partial conversion of advanced construction (PCAC) are cash flow management tools that allow States to begin projects with their own funds and only later convert these projects to Federal assistance. AC allows a State to request and receive approval to construct Federal-aid projects in advance of the apportionment of authorized Federal-aid funds. Typically, States (at their discretion) "convert" AC projects to Federal-aid at any time sufficient Federal-aid funds and obligation authority are available at one time. Under PCAC, a State (at its discretion) partially "converts" AC projects to Federal-aid funds in stages.

23 U.S.C. 115(c) specifies that an AC project application may be approved "***only if the project is included in the STIP.***" Because AC does not constitute a commitment of Federal funds to a project, the financial plan and/or funding information for the TIP and STIP, respectively, needs to demonstrate sufficient non-Federal revenues to provide 100 percent funding for the projects listed as "AC" in the TIP and/or STIP. The total amount of allowable AC in the TIP and/or STIP is determined by: (a) the State's current unobligated balance of apportionments **and** (b) the amount of Federal funds anticipated in the subsequent fiscal years of an approved STIP.

In practice, an AC project/project phase essentially is included in the TIP and/or STIP at two different points in time: (a) as State or local funds prior to the initial authorization of the AC project (including an assurance from the State that adequate State funds are available to "front"

the cost of the project/project phase) and (b) prior to the authorization of the project/project phase to "convert" it from AC to a Federal-aid funding program (including a demonstration from the State that this "conversion" maintains fiscal constraint with other Federal-aid projects). Therefore, in the year of an AC project's "conversion," the amount of the project is considered as both a State revenue source and a Federal-aid debit. Similarly, Federal funding utilized to make payments on debt instruments such as GARVEE bonds must be deducted from the amounts of Federal funds available for new Federally-funded projects. In either case, the TIP and/or STIP should show the obligation of Federal-aid category funds and the resultant increase in available non-Federal funds.

6. What does "available or committed" mean as related to the first two years of the TIP and STIP in air quality nonattainment and maintenance areas?

The specific requirements pertaining to the inclusion of projects in the first two years of the TIP and STIP limited only to funding that is "available or committed" are contained in 23 CFR 450.324(e) and 23 CFR 450.216(a)(5), respectively. The document entitled "Fiscal Constraint Definitions" that accompanies this guidance defines the terms "available funds" and "committed funds," which are highlighted below.

Available Funds: This term applies to the first two years of the TIP and STIP in air quality nonattainment and maintenance areas. Included are funds derived from an existing source of funds dedicated to or historically used for transportation purposes. For Federal funds, authorized and/or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered "available."

Committed Funds: This term applies to the first two years of the TIP and STIP in air quality nonattainment and maintenance areas. Included are funds that have been bound or obligated for transportation purposes. For State funds that are not dedicated to or historically used for transportation purposes, only those funds over which the Governor has control may be considered as "committed." In this case, approval of the TIP by the Governor is considered a commitment of the funds. For local or private sources not dedicated to or historically used for transportation purposes (including donations of property), a commitment in writing/letter of intent by the responsible official or body having control of the funds constitutes a "commitment."

Importantly, Federal funds distributed on a discretionary basis (including Section 5309, earmarks, and "demonstration funding") are not considered available or committed until they are awarded by USDOT (discretionary funds) or authorized by Congress (e.g., High Priority Projects).

7. To what extent can future Federal program funds be assumed for developing TIPs and STIPs, particularly beyond the current authorization or appropriations period?

When the TIP or STIP period extends beyond the current authorization period for Federal program funds, "available" funds may include an extrapolation based on historic authorizations of Federal funds that are distributed by formula. For Federal funds that are distributed on a discretionary basis (including FTA Section 5309, earmarks, and "demonstration funding"), any funding beyond that currently authorized and targeted to the area may be considered as reasonably available, if past history supports such funding levels.

Therefore, when determining future year authorizations/apportionments, the growth rate as determined through the previous authorizations can be used to approximate the future annual growth rate of Federal authorizations. For example, since the Transportation Equity Act for the 21st Century (TEA-21) was a six-year bill, the growth rate should be determined over the entire authorization period (FY 1998 - FY 2003), but excluding the Revenue Aligned Budget Authority from the calculations.

Upon the enactment of new authorizing legislation, State DOTs (in conjunction with MPOs and transit agencies) must utilize the actual authorization levels and individual discretionary project funding amounts in the development of any future new TIP/STIP or amendment of an existing TIP/STIP.

Statewide Transportation Plan:

8. Does fiscal constraint apply to the Statewide long-range transportation plan?

No. According to 23 U.S.C. 135(e)(4), the Statewide long-range transportation plan *"may include a financial plan that demonstrates how the adopted long-range transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs."* Also, this financial plan may include "illustrative projects" (see the response to Question 13 for additional information).

23 CFR 450.214(b)(6) requires that Statewide long-range transportation plans contain information (may be by reference) on the availability of financial and other resources necessary for implementing the Statewide long-range transportation plan. The extent and detail of this information is left to the discretion of the State DOT. ***Importantly, this financial plan (or referenced financial information) is not subject to a fiscal constraint determination by FHWA/FTA.***

Metropolitan Long-Range Transportation Plan:

9. What are the Federal requirements for financial plans and funding sources that support metropolitan long-range transportation plans?

23 U.S.C. 134(g)(2)(B) and 49 U.S.C. 5303(f)(B) state that the metropolitan long-range transportation plan must include *"a financial plan that demonstrates how the long-range transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs."*

Additionally, 23 CFR 450.322(b)(11) requires that this financial plan *"demonstrates the consistency of existing and proposed transportation investments with already available and projected sources of revenue. The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining, and operating the total (existing plus planned) transportation system over the period of the plan."*

Although the term "fiscal constraint" is not specifically used in describing the financial plan, the overall balancing of expected revenues with estimated costs constitutes, in practice, a fiscally constrained metropolitan long-range transportation plan.

10. How should estimated and proposed new revenues be reflected in the financial plan that supports the metropolitan long-range transportation plan?

For financial plans that support metropolitan long-range transportation plans, 23 CFR 450.322(b)(11) specifies that:

"The estimated revenue by existing revenue source (local, State, Federal and private) available for transportation projects shall be determined and any shortfalls identified. Proposed new revenues and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues shall cover all forecasted capital, operating, and maintenance costs. All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends. For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of projects and programs to reach air quality compliance."

11. How should revenues from "public-private partnerships" be treated?

"Public-private partnerships" are an emerging area in which additional guidance will be developed by FHWA in the future. For now, this type of financing should be addressed on a case-by-case basis in the development of transportation plans and programs. Additional information on SEP-15, a new FHWA experimental process to identify (for trial evaluation) new public-private partnership approaches to project delivery can be obtained via the Internet at www.fhwa.dot.gov/ppp/index.htm.

12. How should future Federal revenues be estimated and documented?

To estimate Federal formula funds in years outside the limits of existing Federal authorizing legislation, State DOTs, MPOs, and transit agencies may extrapolate revenues based on the trend line of historic authorizations of Federal funds that are distributed by formula.

To estimate Federal discretionary program funds (including FTA Section 5309, earmarks, and "demonstration funding"), funding beyond that currently authorized and targeted to an area may be considered as reasonably available, if past history supports such funding levels.

13. How should future costs be estimated and documented?

Financial forecasts (for revenues and costs) to support the metropolitan long-range transportation plan (as well as the TIP and STIP) may: (a) rely on a "constant dollar" base year or (b) utilize an inflation rate to reflect "year of expenditure." Each approach possesses merits. On one hand, the use of "constant dollars" facilitates a comparative assessment of projected revenues and costs with past trends. Conversely, "year of expenditure" better reflects the time-based value of money. If utilizing "year of expenditure," the inflation rate(s) should be based on sound, reasonable financial principles and information, developed cooperatively by the State DOT, MPOs, and transit agencies. Nevertheless, to ensure consistency, similar financial forecasting

approaches ideally should be utilized for the TIP and metropolitan long-range transportation plan in a given MPO. In addition, the financial forecast approaches, assumptions, and results should be clear and well-documented.

Cost forecasts can be established in a number of ways. For example, operations and maintenance costs can be based on historic data applied on a per-lane mile and functional classification basis or an annual lump sum basis. Capital costs can be based on historic costs for: (a) an interchange; (b) new construction on new rights-of-way; (c) structure (number, type, and deck square footage (area) for various structure types); (d) transit vehicles for rolling stock procurement; or (e) widening and/or reconstruction, based on the extent of the project. In addition, capital cost estimates can be based on project-specific estimates contained in planning, environmental, or engineering studies, and updated as new information is prepared as part of project development.

Transit operating costs can be estimated by general mode type on a revenue-mile or passenger-mile basis, in accordance with the following principles: (a) reflect historic operations; (b) anticipate future operations; (c) address all functional responsibilities of the transit property; (d) focus on major cost components; (e) apply consistent level of service data; (f) apply peer transit property experience; (g) apply readily available information; (h) provide fully-allocated costs for use in cost-effectiveness analysis; (i) structure for sensitivity analyses; and (j) document model theory and application [\[additional information\]](#). Transit system capital costs involve the estimation of capital costs for a broad variety of project components and the projection of future construction. Special consideration should be given to factors such as design changes, component upgrades, lengthened construction schedules, and the effects of general price inflation.

Revenues and related cost estimates for operations and maintenance should be based on a reasonable, documented process. Some accepted practices include:

- **Trend analysis** (a functional analysis based on expenditures over a given duration, in which costs or revenues are increased by inflation, as well as a growth percentage based on historic levels). This analysis could be linear or exponential. When using this approach, however, it is important to be aware of new facilities or improvements to existing facilities. Transit operations and maintenance costs will vary with the average age of the bus or rail car fleet.
- **Cost per unit of service** (e.g., lane-mile costs, centerline mile costs, traffic signal cost, transit peak vehicles by vehicle type, revenue hours, and vehicle-miles by vehicle type).

Regardless of the methodology employed, the assumptions should be adequately documented by the State DOT, MPO, and transit agency, ideally reflected in the State DOT and MPO self-certification statements on the statewide and metropolitan transportation planning processes.

FHWA and FTA recognize that estimating current and reasonably available new revenues and required operations and maintenance costs over a 20-year planning horizon is not an "exact science." To provide discipline and rigor, public agencies should attempt to be as realistic as possible, as well as ensure that all costs assumptions are publicly documented.

14. Does the financial plan need to include operation and maintenance costs for the entire transportation system or simply the portion for which the State is responsible? How should operations and maintenance be reflected in the financial plan?

Ideally, the financial plans that support the metropolitan long-range transportation plan need to reflect "the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system" [23 CFR 450.322(b)(11)], including portions of the system owned and operated by local governments. Because information on operations and maintenance costs for local roads may not be readily available in some States, this information may be temporarily omitted. However, in such cases, FHWA/FTA field offices should work with the State DOTs, MPOs, and transit agencies to ensure that local system operations and maintenance information is developed for inclusion in future financial plans that support STIPs, TIPs, and metropolitan long-range transportation plans.

Other Issues:

15. What are some examples of "reasonable" and "not reasonable" revenue forecasting assumptions?

Whether or not a funding source is reasonable may require a judgment call. Illustrative (but not all-inclusive) examples of "reasonable" and "not reasonable" assumptions are highlighted in the following table. Please note, however, that those described as "reasonable" do not necessarily meet the special test of "available or committed" funds.

Reasonable	A new toll with funds to be dedicated to a particular project or program may be reasonable, if supported by the Governor and there are indications of other support needed to enact or institute the toll.
Reasonable	A new local gas or sales tax requiring State legislation is reasonable if there are indications of sufficient support to enact the new tax.
Not Reasonable	Funds from an upcoming ballot initiative would not be reasonable if polls indicate strong likelihood of defeat or there is a history of repeated defeat of similar ballot initiatives in recent years.
Not Reasonable	A 25 percent increase in gas tax revenues over five years is not reasonable if the increase in the previous five years was only 15 percent, unless there are special circumstances to justify and support a significantly higher increase than the historic rate.
Not Reasonable	An assumption that the metropolitan area will receive 30 percent of a Federal discretionary program is not reasonable if the area has never received more than 10 percent in the past, unless there are special circumstances to justify and support such an assumption.

16. How do "illustrative projects" relate to transportation plan and program fiscal constraint?

For Statewide and metropolitan transportation plans and programs, TEA-21 modified Federal statute through the following provision:

"The financial plan may include, for illustrative purposes, additional projects what would be included in the adopted/approved transportation plan/program if reasonable additional resources beyond those identified in the financial plan were available" [see 23 U.S.C. 135(e)(4), 23 U.S.C. 135(f)(2)(E), 23 U.S.C. 134(g)(2)(B), and 23 U.S.C. 134(h)(2)(B)(iv), respectively].

Although "illustrative projects" are not part of fiscally constrained transportation plans and programs, per se, the inclusion of a listing of such projects presents an excellent opportunity for State DOTs, MPOs, and transit agencies to identify additional projects for future consideration in the event that additional future funding sources were subsequently defined to be "reasonably available."

However, "illustrative projects" may not actually advance into implementation until the TIP and STIP are formally amended, with a FHWA/FTA determination that the amended TIP and STIP meet conformity and/or fiscal constraint requirements. In nonattainment and maintenance areas, the advancement of a non-exempt "illustrative project" requires a new conformity determination. Additionally, FHWA Division Offices and FTA Regional Offices should ensure that any illustrative projects added to the fiscally constrained metropolitan long-range transportation plan, TIP, and/or STIP meet all appropriate transportation planning and programming statutory and regulatory requirements.

17. TEA-21 also established the requirement for MPOs to publish an annual listing of obligated projects. How does this requirement relate to TIP fiscal constraint?

As a result of TEA-21, 23 U.S.C. 134(h)(7)(b) and 49 U.S.C. 5303(c)(5)(B) require that "An annual listing of projects for which Federal funds have been obligated in the preceding year shall be published or otherwise made available by the MPO for public review. The listing shall be consistent with the categories identified in the TIP."

The Annual Listing, like the TIP, must reflect all projects for which Federal funds were obligated in the previous year. The Annual Listing provides a means to compare projects (or project phases) actually obligated to those proposed for obligation, thereby establishing a type of measure related to the implementation of priorities defined at the beginning of the year in the TIP. While the Annual Listing does not directly relate to fiscal constraint (since it is an after-the-fact report of past year Federal fund obligations), such information can be a valuable tool in gauging the accuracy of revenue projections, cost estimates, and project delivery schedules.

18. What is the connection (if any) between financial plans that support Statewide and metropolitan transportation plans and programs and financial/funding information for FHWA major (i.e., "mega") projects and FTA New Starts projects?

In general, the financial plans that support Statewide and metropolitan transportation plans and programs do not need to contain the specific cash flow schedule information that typically is

included for FHWA major projects or FTA New Starts projects. However, because a large-scale transportation project likely will have a substantial effect on a Statewide or metropolitan transportation plan and program, this project-specific cash flow schedule information can serve as a valuable resource on annual levels and sources of revenues for developing the financial plans that support Statewide and metropolitan transportation plans and programs.

Additional information on financial planning for FHWA major projects and FTA New Starts projects can be obtained via the Internet at:

- [*FHWA Financial Plan Guidance*](#) (May 23, 2000)
- [*FHWA Major Project Program Cost Estimating Guidance*](#) (June 4, 2004)
- [*FTA Guidance for Transit Financial Plans*](#) (June 2000)
- [*"Financial Planning for Transit"*](#) chapter of *FTA's Technical Guidance on Planning and Project Development*
- [*Estimation of Operating and Maintenance Costs for Transit Systems*](#) (December 1992)

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