



U.S. Department  
of Transportation  
**Federal Transit  
Administration**

# **Reporting Instructions for the Section 5309 Capital Investment Grant Program**

## **New Starts**

***August 2015***

*Prepared by:*  
*Federal Transit Administration*  
*Office of Planning and Environment*



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For additional guidance on the Section 5309 Capital Investment Grant program criteria, and for specific questions related to this document, contact Robyn Sinquefield, Chief, Program Division, Office of Capital Project Development, Federal Transit Administration, Washington, DC, at (202) 366-3307 or [robyn.sinquefield@dot.gov](mailto:robyn.sinquefield@dot.gov).

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## I. Introduction

The Federal Transit Administration (FTA) has produced these *Reporting Instructions for the Section 5309 Capital Investment Grant Program - New Starts* (“*Reporting Instructions*”) to inform sponsors of proposed New Starts projects of the information they must provide to FTA so that it may undertake the legislatively required evaluation and rating of project merit.

FTA reviews and evaluates the information developed according to these instructions to:

- Assign ratings to proposed New Starts projects for the purpose of deciding whether projects may advance into the Engineering phase of the New Starts process;
- Assign ratings to proposed New Starts projects for the [Annual Report on Funding Recommendations](#) (“*Annual Report*”) if significant changes have occurred since the last evaluation and rating; and,
- Determine final ratings for New Starts projects prior to a Full Funding Grant Agreement (FFGA).

FTA emphasizes that project sponsors may request advancement into Project Development or Engineering at any time throughout the year, and need not tie advancement to the *Annual Report* schedule. In addition, project sponsors may not need to provide all of the information requested in these *Reporting Instructions*. Project sponsors should talk to their assigned FTA staff member in the FTA Headquarters Office of Planning and Environment to determine what needs to be submitted. The requirements outlined in these *Reporting Instructions* are applicable until updated *Reporting Instructions* are released by FTA.

Parallel sets of reporting instructions for Small Starts and Core Capacity projects are available on FTA’s website at [www.fta.dot.gov](http://www.fta.dot.gov).

### Reporting Format

Information should be submitted electronically via email and/or on CDs or flash drives to the FTA Office of Planning and Environment, Office of Capital Project Development, 1200 New Jersey Avenue SE, Washington, DC, 20590. **FTA requests electronic files in their original format (Excel/Microsoft Word/etc.) and not PDF files. When submitting a financial cash flow electronically in spreadsheet format, sponsors must submit a version with the formulas included and not just a version with hardcoded numbers.**

As a reminder, New Starts project sponsors must use the most recent Standard Cost Categories (SCC) worksheets issued by FTA for reporting the capital costs and schedules of their proposed projects. New Starts project sponsors should report costs in 2015 constant dollars. New Starts project sponsors must also use the most recent New Starts templates issued by FTA.

In past years FTA required that project sponsors submit a “Certification of Technical Methods, Planning Assumptions, and Project Development Procedures.” This is no longer required. Instead, project sponsors should include with their submittal a cover letter addressed to FTA’s Associate Administrator for Planning and Environment from the Chief Executive Officer (CEO) of the sponsoring agency attesting that the technical approaches and assumptions used are consistent with FTA’s *Reporting Instructions* and *Final Interim Policy Guidance*. In the event that it is necessary to deviate from FTA’s guidance, the letter should identify any differences and

explain why. Any such differences should be discussed with FTA's Office of Planning and Environment in advance so that appropriate guidance can be provided. The cover letter should also summarize what changes were made to the project and to the information in the submittal since the last evaluation and rating, and explain the reasons those changes were made. This information should provide specific details on any changes. For example, if changes were made to the inflation assumptions in the Standard Cost Categories workbook, those changes and the associated reasons should be summarized.

### **Contacting FTA**

For additional guidance on the Section 5309 Capital Investment Grant program criteria, and for specific questions related to this document, contact Robyn Sinquefield, Chief, Program Division, Office of Capital Project Development, Federal Transit Administration, Washington, DC, at (202) 366-3307 or [robyn.sinquefield@dot.gov](mailto:robyn.sinquefield@dot.gov).

## II. Principles to Ensure a Level Playing Field for Comparison of Projects

FTA strives to create a “level playing field” upon which a wide variety of candidate projects compete for funding. This section summarizes FTA’s key principles to ensure consistency in project evaluations and ratings. Please visit FTA’s [New Starts](#) website for additional guidance on Capital Investment Grant Program projects.

### Time Horizons

FTA requires sponsors of proposed New Starts projects to calculate the measures for the evaluation criteria using current year inputs. The current year is defined as the most recent year for which demographic and transit usage data are available. The current-year build scenario must reflect the opening year service plan. At their option, sponsors may also calculate the evaluation criteria using a horizon year, either 10 or 20 years in the future. Horizon years are based on available socioeconomic forecasts from metropolitan planning organizations, which are generally prepared in five year increments such as for the years 2025, 2030, and 2035. The year 2040 is not yet acceptable as a horizon year for New Starts purposes even if it is the horizon year of the metropolitan planning organization’s current long-range transportation plan.

### Points of Comparison

Most evaluation measures are based on absolute rather than incremental values. Where a basis for comparison is required to calculate the evaluation measure, the no-build will be the point of comparison. The no-build scenario is defined in the table below.

Analysis year	No-Build Point of comparison
Current	Existing transportation system (excluding the proposed New Starts project)
10-year horizon	Existing transportation system plus transportation investments committed in the Transportation Improvement Plan (TIP) pursuant to 23 CFR 450 (excluding the proposed New Starts project). Project sponsor should use the TIP that is in place at the time that the sponsor seeks entry into the Engineering phase. If forecasts are updated later, as required when there is a significant change in the project, the point of comparison would include the projects in the TIP at that time.
20-year horizon	Existing transportation system plus all projects identified in the metropolitan planning organization’s fiscally constrained long range transportation plan (excluding the proposed New Starts project)

In cases where a New Starts project is part of a multimodal package that includes infrastructure for other modes such as highway expansion, the components of the package that are not

proposed for New Starts funding are not evaluated as part of the New Starts project. If a proposed New Starts project is proposed to be built in phases, FTA generally evaluates and funds each phase separately. Thus, only the phase currently seeking New Starts funds would be evaluated according to the New Starts criteria.

### **Cost Estimating Assumptions**

A project's capital cost estimate includes costs for planning, design and construction. It includes labor and materials for construction of the improvement – such as guideways, stations, support facilities, sitework, special conditions and systems – as well as costs for vehicle design and procurement, environmental mitigation, right-of-way acquisition, relocation of existing households and businesses, planning, facility design, construction management, project administration, finance charges, and contingencies. New Starts project sponsors must use the most recent SCC worksheets issued by FTA for reporting the capital costs and schedules of their proposed projects. New Starts project sponsors should report costs in 2015 constant dollars.

FTA expects that cost estimates for the project be up-to-date, be based on unit costs that apply to expected conditions during construction, and specifically identify remaining uncertainties in those unit costs. Similarly, estimates of operations and maintenance costs should be based on current local experience, adjusted for differences in vehicle and service characteristics, and, for any transit modes new to the system, consistent with experience in similar settings elsewhere.



### III. General Reporting Information

This section describes information that must be submitted to FTA for project evaluation and rating.

#### III.1. Project Background Information

The following subsections describe information necessary for FTA to understand the project, its planning context, and how (and why) it addresses the identified transportation problems in the corridor. Project background information comprises the three items described in this section:

- Project Description Template
- Project Narrative
- Project Maps

#### Project Description Template

Project sponsors must provide descriptive information on the proposed New Starts project and the regional public transportation system. FTA uses the information in the Project Description Template to understand the project and to establish a database of project characteristics and local contact information. All New Starts project sponsors must submit this template to FTA.

#### Project Narrative

A project sponsor may submit to FTA a short (no more than five-page) narrative that succinctly describes the benefits of the proposed project. The optional document helps to familiarize FTA with the proposed project and its rationale; it does not affect a project's rating. The short narrative should describe key project outcomes drawn from planning studies performed by the project sponsor that were used as the basis for selecting the proposed project.

Below is an outline of what the narrative could contain.

- **Project Identification.** In two or three short sentences, provide the essential characteristics of the proposed project: its location, length, termini, number of stations, hours of service, and frequency by time period.
- **Setting.** Along with a good map of the corridor, in a few paragraphs describe the key elements of the setting such as the major activity centers within the corridor, significant highway facilities, existing transit facilities like fixed-guideways and transfer centers, and the alignment of the proposed project.
- **Current Conditions.** Important conditions might include: the population and employment of the corridor and any major activity centers within the corridor; congestion levels on important highway facilities; existing transit shares, ridership volumes, and any key attributes (capacity issues, rider characteristics, etc.) that are important for the project. Highlight the principal functions of transit services in the corridor, focusing on whatever limitations exist on the performance of the transit system. Focus on the corridor itself, rather than the metropolitan area.

- **Conditions in the Horizon Year (if applicable).** If a project sponsor opts to submit horizon year data to FTA, the narrative might describe the anticipated changes in key corridor characteristics between today and the horizon year – absent significant transit improvements in the corridor. Particularly in rapidly growing corridors, this would highlight major changes in demographics, travel patterns, volumes and speeds on major highway facilities, the service quality and capacity of transit services, and anticipated transit ridership. The discussion should make clear the key functions of the transit system in the corridor and highlight whatever limitations are anticipated on its performance. As with the discussion of current conditions, this section must focus on the key characteristics of the corridor itself rather than aggregate information on broader geographical areas.
- **Purpose of the Project.** Succinctly describe the specific ways that the proposed transit investment will address the problems identified in the corridor.
- **Merits of the Project.** Describe how the project addresses the Purpose of the Project more effectively compared to other alternatives.
- **Summary.** In one paragraph draw together the key points made in the document. Highlight the conditions that motivate consideration of the transit improvement, the specific purpose of the project, and the ways that the project succeeds in addressing the purpose.

## Project Maps

All New Starts sponsors must submit electronic maps of their proposed projects. To ensure compatibility, maps should be created in a geographic information system (GIS) program such as Map Info, Arc Info, Maptitude, or TransCAD. In lieu of a GIS-based map, a clearly legible map of the project may be submitted. All maps should be submitted to FTA in Adobe Acrobat (PDF) format.

To ensure consistency between projects, maps submitted to FTA must include the following features:

- A title indicating the project's name and primary city and state.
- The alignment of the project, not including future proposed extensions of the proposed project or extensions to the existing transit system. For example, if the New Starts project is an initial operating segment, then only the initial operating segment should be shown on the map. The map should be scaled to the project; also, the line style used to depict the project's alignment should be easily distinguishable from styles used for other transportation infrastructure.
- Stations included in the project, labeled and marked in a distinguishable manner from existing transit stations. Stations with park & ride facilities should be further distinguished from others, either via markings or labels.
- Any transit vehicle maintenance or storage facilities to be constructed as part of the project.

- Street, highway and railroad networks in the area surrounding the project, with major streets' names and highways' designations labeled as appropriate.
- Key connecting mass transit lines including existing stations, particularly if the project represents an extension of an existing line.
- Major water bodies with names labeled as appropriate.
- Names of cities and/or counties to be served by the project, with jurisdictional boundaries demarcated as appropriate.
- A legend, scale, and compass.

Elements of the maps should be distinguishable when reproduced in grayscale. Maps should fit on 8.5 by 11 inch paper, with one inch margins. Maps may be provided in landscape or portrait orientation depending on the alignment of the project; typically, north-south alignments are provided in portrait orientation and east-west alignments are provided in landscape orientation.

### ***III.2. Travel Forecasts***

Project sponsors may choose to predict trips using one of three basic approaches: their own locally adopted travel forecasting procedures, FTA's forecasting tool entitled Simplified-Trips-on-Projects Software (STOPS), or, in some cases, an incremental data-driven method.

The chosen forecasting method should be discussed with FTA well before the submittal of information by the project sponsor for project evaluation and rating. Such discussions will involve a review of the forecast methodology validation and input assumptions specific to the project. If STOPS is chosen as the method used, documentation of the methodology and validation and a detailed review by FTA are not necessary. However, project sponsors who prepare the forecasts using STOPS must provide FTA with an electronic copy of their STOPS application, including both the inputs and the output reports.

The following three items must be submitted to FTA in support of the travel forecasts:

- Travel Forecasts Template;
- Forecast Results Report; and
- Supporting tabulations.

#### **Travel Forecasts Template**

The Travel Forecasts Template is the data entry mechanism for all travel forecast information used in the calculation of the mobility improvements and cost effectiveness criteria plus the change in Vehicle Miles Travelled (VMT) forecasts used in the calculation of environmental benefits. This information is transferred automatically through spreadsheet links between the templates to simplify the calculation of the measures and avoid the need for project sponsors to enter the same information more than once.

The Travel Forecasts Template includes a section for inputting trip information from travel forecasts, and another section for inputting VMT information from travel forecasts and transit operating plans. Most lines have current and horizon year fields; the latter need only be used if

the project sponsor is opting to calculate the evaluation criteria using both current year and horizon year input data.<sup>1</sup>

- Trips On the Project Section: <sup>2</sup>
  - Daily linked trips on the project, non-transit dependent users (Lines 1a and 2a): the number of daily linked trips using any part of the proposed New Starts project, excluding trips made by transit-dependent persons or the “special market” trips identified in Lines 3-6. Please contact FTA’s Office of Planning and Environment with any questions regarding project trips.
  - Daily linked trips on the project, transit dependent users only (Lines 1b and 2b): the number of daily linked trips using any part of the proposed New Starts project made by transit dependent persons. Transit-dependent trips are represented in STOPS and most local models as trips made by individuals from households that do not own a car, but some local models may instead represent them as trips made by individuals in the lowest household income category.
  - Special market project trips per-event and per-day by market (Lines 3-6): the number of trips per-event or per-day for each special travel market not considered by the travel model and for which ridership estimates were prepared “off model.” Per-event markets include sports venues, concerts, and other intermittent activities. Per-day markets include air passengers, circulation travel, and other markets that are present every day.
  - Annualization factors: the factors needed to compute annual totals from the daily estimates provided by the travel models and special event project trips. Because trips generated by the special markets are annualized separately, the annualization factor reported for lines 1 and 2 must exclude the effects of special markets.

For daily linked trips on the project (lines 1 and 2), the annualization factor should be consistent with local experience in the existing transit system and also appropriate to the proposed operating plan. For special market project trips (lines 3-6), market-specific annualization factors should be used and explained. For example, a venue for major league baseball should have an annualization factor of approximately 81 because every year each major league team plays 162 games, 81 as the home team and 81 as the visitor.

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<sup>1</sup> The horizon year must be selected in the Project Description Template. A selection of “none” signifies that the project sponsor is foregoing the optional horizon-year analysis. When “none” is selected, the cells for horizon-year entries in the Travel Forecasts Template will be grayed out and nothing should be entered in them.

<sup>2</sup> Project sponsors seeking warrants are not required to enter the model outputs requested in Lines 1 through 10 of the Travel Forecasts Template, but they are required to input current-year transit VMT information from the project’s service plan in Lines 11 through 19 since this information is used in the simplified calculation of environmental benefits. After a project sponsor selects “seeking warrants” on the Project Description template, the Travel Forecasts Template is updated automatically to make clear what data is required and what is not.

In addition to filling out the annualization factors in the Travel Forecasts Template, a written justification for the annualization factors should be provided to FTA.

- New Transit Trips (line 9): the number of total new daily linked transit trips using any part of the proposed New Starts project. This is an incremental value based on the comparison of daily linked transit trips in the build and the no build alternatives.
- Vehicle-Miles of Travel (VMT) section:
  - Daily VMT, automobile (Line 10): the total weekday VMT by automobile (any occupancy) for the no-build and build scenarios. Estimates of changes in VMT come from either the local travel model or STOPS. With STOPS, project sponsors will need to use an appropriate auto occupancy to convert the STOPS-predicted changes in automobile passenger-miles of travel to change in VMT. The annualization factor for automobile VMT should be the same as the transit annualization factor entered for trips on the project in lines 1 and 2.
  - Annual VMT, transit modes (Lines 11 through 19): the annual VMT for the no-build and build scenarios for each mode of public transit that has different service levels in the two scenarios. If a mode exists in a project sponsor's region but will not be affected by the proposed project, nothing needs to be entered for that mode because there would be no change in VMT between the no-build and build alternatives. Annual VMT totals for each mode that will be affected by the project should be calculated based on service plans. For rail transit modes, car mileage should be reported rather than train mileage.

### **Travel Forecast Results Report**

The travel forecast results report focuses on the forecasts themselves rather than on the methods used to prepare the forecasts. Documentation on the methods used to prepare the forecasts should have been previously submitted to FTA. The report provides a narrative describing the key characteristics of the forecasts. It is a concise, plain-English narrative of the primary mobility benefits of the project as indicated by the travel forecasts, including:

- the markets that the project serves and the difficulties those markets face (transportation and/or economic);
- the way the project improves transit service to address those difficulties;
- the way overall transit ridership responds to the implementation of the project;
- the resulting trips on the project itself;
- uncertainties inherent in all of these items;
- discussion of the reasons for any large changes in district-to-district trips from no-build to build (or from current year to horizon year, as applicable) that will help FTA reach an overall conclusion of forecast plausibility;

- summary figures as appropriate to support the narrative; and
- an index of the supporting tabulations for easy reference.

### **Supporting Tabulations**

The travel forecasts results report is accompanied by a series of summary tabulations of forecast results. Such tabulations should be provided as spreadsheets that are sized and formatted to be easily readable on a computer screen. Sponsors are encouraged to package the information into as few electronic files as possible using multiple pages or spreadsheet tabs. FTA can provide a sample formatted spreadsheet if requested, but the characteristics of each project are different and thus the size and layout of the tables may vary. Hard-copy paper printouts of the tabulations included in the spreadsheet files should not be provided to FTA. Electronic prints, in the form of a single PDF file of all of the tabulations, may be provided in addition to the spreadsheets to assist FTA with its review, but are not required.

The summaries should tabulate the forecasts for the current year and, if used in the project ratings, the horizon year. In cases where the sponsor has used locally developed travel forecasting procedures, the summaries must also tabulate the model-validation forecasts. The summaries are based on a set of summary districts defined by the sponsor to sum zone-to-zone information from the forecasts to a reviewable level of aggregation. The required tabulations are:

1. Demographic and socio-economic characteristics:
  - Information used for trip (or tour) production generation (e.g., households by socio-economic group, population, and workers in households) by Transportation Analysis Zone (TAZ) and summary district;
  - Information used for trip (or tour) attraction generation (e.g., number of jobs by classification type) by TAZ and summary district; and
  - All data fields should be clearly labeled.
2. Highway speeds:
  - For current year forecasts: unweighted average peak and off-peak period speeds computed across all zone-to-zone pairs within each district-to-district cell.
  - For horizon-year forecasts if applicable:
    - unweighted average peak and off-peak period speeds computed across all zone-to-zone pairs within each district-to-district cell; and
    - the horizon-year-to-current-year ratio in each cell of the unweighted average peak and off-peak period speeds tabulations.

3. Linked transit trips (for the no-build and build alternatives, including horizon year if applicable):
  - Trips on the entire transit system for each travel market (trip purpose by time-of-day by transit-access mode by socio-economic stratum), and the grand total across all markets, as represented in the mode choice analysis; and
  - Trips on the project for each of the same travel market breakdowns as discussed in the bullet above.
4. Weekday total and home-based-work person trip tables (district-to-district, with row and column totals). One single set of person trip tables must be used for both the no-build and build forecasts.
5. Weekday transit trip tables (district-to-district, with row and column totals), separately for walk- and drive-access, tabulating:
  - Total transit trips and home-based work transit trips -- no-build, build, and changes between the two
  - Trips on the project (by trip purpose and, separately, by access mode)
  - The number of zone-to-zone transit trips in the build alternative found in zone-to-zone cells that are zero in the no-build and non-zero in the build
  - The number of zone-to-zone transit trips in the no-build alternative found in zone-to-zone cells that are zero in the build and non-zero in the no-build; and
  - The change in the number of zone-to-zone trips (build minus no-build) found in zone-to-zone cells that are lower in the build than the no-build and non-zero in both.
6. Change in automobile VMT summarized at the district-to-district level. Change in auto VMT is computed as the difference between the no-build and build scenarios in the zone-to-zone auto travel distance multiplied by the zone-to-zone number of trips made by autos.
7. Transit weekday ridership:
  - For the entire transit system: total system boardings (unlinked trips) by mode, no-build and build.
  - For the project (in trip production-attraction format):
    - Station-to-station transit linked trips. For projects which are extensions to existing services, existing stations may be aggregated for simplicity except for the existing terminus from which the proposed project extends;
    - Station ONs and OFFs and link volumes between stations, by direction; and
    - Modes of access and egress by station.
8. A map (in PDF format) showing the boundaries of TAZs and summary districts, the name and number of each district, and the alignment and station locations of the project,

with the park and ride stations clearly marked. Generally, sponsors should include between 15 and 20 districts that are designed specifically to focus on the project, with smaller districts near the project and larger districts elsewhere in the region.

9. A map (in PDF format) and supporting tables of information that show changes in the coded transit route alignments, stop locations, and/or service frequencies between the no build and build scenarios.
10. GIS layers (ArcGIS shape file preferred):
  - the TAZ layer;
  - the summary district layer;
  - a layer containing the alignment and station locations of the project, with the park and ride stations clearly marked; and
  - a layer showing changes in the no-build transit routes to accommodate the coding for the build alternative.

Some of the above information may not be available (or may not be readily available) from some local travel forecasting procedures. In the event that local forecasting procedures are unable to produce one or more of these items, project sponsors should contact FTA to discuss possible remedies or a waiver of the individual reporting requirement. Project sponsors should contact FTA prior to preparation of the tabulations to discuss the proposed summary district structure, plus the demographic/network specifications for the current year and (if part of the submission) horizon year.

Sponsors using STOPS are not required to prepare detailed tabulation spreadsheets, because the necessary tabulations are included in the STOPS reporting files and will be included in the required submittal of the STOPS implementation to FTA. Sponsors using STOPS will rely on these tabulations to prepare the written Forecast Results Report. Sponsors must also provide the supporting maps described in bullets 8, 9, and 10 above.

### ***III.3. Operations and Maintenance Costs***

Project specific operations and maintenance costs are an input to the calculations of cost effectiveness and environmental benefits; system-wide and project specific operations and maintenance costs are a key component of the project financial plan. Project sponsors are required to submit to FTA documentation summarizing how operating and maintenance costs were developed. Guidelines for estimating operations and maintenance costs are available on FTA's website. Additionally, the following considerations apply:

- System-wide and route level operating cost data (and factors) are typically available as part of ongoing operations planning.
- The latest available operating and maintenance cost estimates, accurately reflecting the latest scope and service plan of the proposed project, should be used.



Annual operations and maintenance costs for the proposed project must be reported in Line 4 of the Mobility and Cost Effectiveness Template (the figures are automatically transferred to the Environmental Benefits Template). Both templates are described in more detail in Section IV.

### **III.4. Capital Costs**

This section provides information on the Standard Cost Category (SCC) workbook and general guidelines for when a project capital cost estimate should be updated.

#### **Standard Cost Categories**

Project sponsors are required to submit capital cost information electronically in the SCC Excel format. The SCC Workbook establishes a consistent format for the reporting of capital cost and schedule information. The SCC structure accommodates all project elements within 10 major cost categories. “Enrichments” for the cost effectiveness computation are also claimed (and justified) in the SCC workbook. The most recent SCC worksheets issued by FTA must be used. Capital costs must be reported in 2015 constant dollars.

The following worksheets of the SCC Workbook must be submitted:

- **Build Main:** Ensure that allocated contingency amounts are entered.
- **Project Description**
- **Inflation:** The inflation rates shown in the SCC worksheet are provided only as an example. The project sponsor should input inflation rates representative of conditions in their area.
- **Schedule**
- **Build Annualized:** One worksheet is provided for the annualized cost of the capital items needed to achieve the benefits in the current year, and one worksheet is provided for the annualized cost of the capital items needed to achieve the benefits in the horizon year. The latter would be used only if a sponsor chooses to perform and report a horizon year travel forecast.
- **Funding Sources by Cost Category**
- **Funding Sources by Year:** This is an important worksheet that FTA uses to understand annual New Starts funding levels the project sponsor anticipates receiving, as well as annual funding assumed to come from other sources. The information contained in this worksheet should match what is provided in the financial plan submitted to FTA.

Sponsors should refer to the following two worksheets in the SCC Workbook for general guidance:

- **SCC Definitions.** This worksheet contains explanations of the individual line items and thus helps to achieve consistency of use by all parties. Contact the FTA Office of Engineering if you have questions or would like to comment on the definitions.
- **Scopes and Activity Line Items (ALIs).** When applying for a grant from FTA (*any grant*, e.g. Congestion Mitigation and Air Quality, Section 5307, Section 5309, etc.) for

your New Starts project, use the 14-Series Scopes and ALIs shown on this worksheet to input your grant budget. The 14-Series matches the SCC Categories.

### **SCC Build Annualized Worksheet Instructions**

Capital costs in constant or base year dollars are estimated by the project sponsor for the proposed project. The Build Annualized Worksheet automatically calculates the annualized cost based on the useful lives of the various cost items and an established discount rate. The annualized cost figure is an input to the calculation of cost effectiveness and environmental benefits.

The SCC workbook includes two spreadsheets for Build Annualized Cost—one for the current year and one for the horizon year. Project sponsors who are calculating the measures for the evaluation criteria using only current year inputs will only need to fill out the Build Annualized Cost Current Year spreadsheet. Project sponsors who also choose to calculate the evaluation criteria using a horizon year will also need to fill out the Build Annualized Cost Horizon Year spreadsheet. Although the worksheets are filled in automatically, some minor adjustments may be required, and they are described below.

The final “Annualized Capital Cost Excluding Enrichments” at the bottom of the Build Annualized Worksheet must be entered in Line 3 of the Mobility and Cost Effectiveness Template. All project sponsors should enter an annualized capital cost for the current year. Project sponsors who choose to also submit information for a horizon year must also enter an annualized capital cost for the horizon year.

Below are specific instructions that must be followed when completing the Build Annualized Worksheet:

- **Useful Life Assumptions:** The Build Annualized Worksheet provides the project sponsor with the opportunity to claim anywhere from 12 to 18 years for the estimated useful life for buses on SCC Line 70.04. If the project sponsor claims a useful life longer than 12 years, documentation demonstrating experience with maintaining buses beyond 12 years (e.g. National Transit Database records) must be provided supporting the reasonability of such a claim.
- **Feeder Bus Service:** Where new feeder bus service is necessary to support the New Starts project, the capital cost for this feeder bus service should be included in the calculation of annualized cost. Note that the cost of this feeder bus service must be manually added to the Build Annualized Worksheet. It should not be included in the Build Main Worksheet because it is not part of the costs eligible for reimbursement under a Full Funding Grant Agreement (FFGA). Where new feeder bus service is required, enter the quantity (or increase in quantity) of buses and the total base year capital cost for buses in SCC Line 70.04 of the Build Annualized Worksheet. Note that different quantities and costs may need to be entered in the current year and horizon year Build Annualized Worksheets. For example, the current year Build Annualized Cost would need to include the feeder buses and costs necessary to provide the opening year service plan. The horizon year Build Annualized Cost would need to include the feeder buses and costs necessary to provide the horizon year service plan.

- Additional Capital Costs Needed to Realize Project Trips in the Horizon Year: Some New Starts project sponsors assume only the number of vehicles needed for opening year service in the Build Main Worksheet since this is all that is anticipated to be funded under the FFGA. For project sponsors who are calculating the project evaluation measures based only on current year inputs, no further changes will need to be made to the Build Annualized Current Year Worksheet.

However, some project sponsors will elect to also develop the evaluation criteria based on a horizon year forecast. In those cases, project sponsors must add to the Build Annualized Horizon Year Worksheet any additional vehicles needed to provide the service plan assumed in the horizon year. This requirement also applies to any other capital cost items needed by the horizon year, such as additional parking spaces.

Similarly, the financial plan cash flow statement must include the full number of vehicles and other capital items needed to meet the horizon year service plan, so that FTA can be assured the project sponsor has the financial capacity to realize the expected horizon year project benefits.

- Unallocated Contingency: Base Year costs are automatically populated in the Build Annualized Worksheets from the Build Main Worksheet. However, Unallocated Contingency must be manually distributed across the line items according to perceived risks. The same contingency distribution should be used for the current year and horizon year worksheets.
- Enrichments: The Build Annualized Worksheets identify line items that qualify as FTA-defined “enrichments.” The project sponsor must manually select any items which meet the FTA-definition of enrichments by selecting “yes” within the applicable SCC line item. For any line item claimed as an enrichment, a justification must be provided next to the corresponding line item in the Project Description Worksheet of the SCC Workbook. In the Build Annualized Worksheets, enrichment values claimed appear at the bottom of the worksheet under “New Starts Enrichments” and are automatically subtracted from the Annualized Cost to obtain a final “Annualized Capital Cost Excluding Enrichments.” This amount should be entered in the Mobility and Cost Effectiveness Template.

### **When to Report Updated Project Cost Estimates**

The capital cost estimate should be updated when it no longer accurately reflects the current scope and schedule of the project, triggered by either an expansion or reduction in the scope or schedule. The update should be accompanied by a brief explanation of what changed and why. More specifically, a project capital cost estimate should be updated when any of the following events occurs:

- Requests to Advance Through the Process
  - The project sponsor requests entry into the Engineering phase or requests an FFGA.
- Scope changes

- Design and construction scope of work changes - Horizontal or vertical alignment, number or type of stations, number or type of vehicles, length of guideway, mode, quantity of material, substitution of material, value engineering changes.
- Planning context changes - Political, institutional, or project management changes impacting project scope or schedule; project procurement conditions change such as changes in the bidding climate, price of commodities, or contracting methodology.
- Schedule changes
  - Schedule has slipped or been extended by six months or more, resulting in additional cost for labor, materials, and/or inflation which could result from extended community input, project review, funding disapproval, labor disputes, etc.
- Cost changes
  - The costing methodology has changed as a natural part of the continued development of the project, for example, from a parametric estimate to a detailed labor and materials quantity take-off.
  - A change in a funding source or financing method has caused modification of scope, schedule, or cost.

## **IV. Project Justification Criteria**

The following summarizes the information necessary to support the project justification criteria. Specific information on each of the criteria and measures can be found in the Final Rule and the *Final Interim Policy Guidance* found on FTA's website. All reporting templates are available there as well. Any questions regarding these criteria, their associated measures, and/or the calculation of the measures should be directed to the FTA Office of Planning and Environment.

### **IV.1. Project Justification Warrants**

Warrants are pre-qualification approaches that allow a proposed project to automatically receive satisfactory ratings on certain project justification criteria based on the project's characteristics or the characteristics of the project corridor. For information on how to become eligible for project justification criteria warrants, please see the *Final Interim Policy Guidance* found on FTA's website. Project sponsors wishing to be considered for warrants should discuss the matter with FTA during Project Development, prior to submitting information to FTA for evaluation and rating.

When submitting information for evaluation and rating, project sponsors must identify if they are seeking warrants for the project on the Project Description Template. If they select "yes", they are not required to submit some of the information requested in the Travel Forecasts Template; the Mobility, Cost Effectiveness and Congestion Relief Template; and the Environmental Benefits Template. These templates are updated automatically to make clear what data is required to be completed based on the selection made by the project sponsor on the Project Description Template.

### **IV.2. Mobility Improvements**

The following data must be entered in the templates to compute the mobility improvements measure if the project is not warranted:

- Trip information (in lines 1 through 6 of the Travel Forecasts Template), and
- Horizon year (in the Project Description Template), if applicable.

### **IV.3. Cost Effectiveness**

The following data must be entered in the New Starts templates to compute the cost effectiveness measure, if the project is not warranted:

- Trip information (in lines 1 through 6 of the Travel Forecast Template)
- Horizon year (in the Project Description Template), if applicable
- The project's annualized capital cost in constant 2015 dollars as generated by the Build Annualized Worksheets of FTA's SCC Workbook. For additional guidance on the calculation of annualized capital cost see Section III.3 Capital Costs. (Annualized capital

cost should be entered in Line 3 of the Mobility and Cost Effectiveness Template). If a horizon year forecast is used for projects that are not warranted, the project's annualized capital cost in constant 2015 dollars should also be entered for the horizon year.

- The project's incremental annual operations and maintenance cost in constant 2015 dollars relative to the system-wide annual operations and maintenance cost (in Line 4 of the Mobility and Cost Effectiveness Template).

If a horizon year forecast is used for projects that are not warranted, an incremental annual operations and maintenance cost in constant 2015 dollars should also be entered in Line 4 for the horizon year. The system-wide annual operations and maintenance cost should be based on the transit service plan for the "no-build" in the horizon year as defined in Section II, Points of Comparison. The project's incremental annual operations and maintenance cost should be based on the project's transit service plan in the horizon year.

#### ***IV.4. Congestion Relief***

The following data must be entered in the templates to compute the congestion relief measure if the project is not warranted:

- New daily linked transit trips (in line 9 of the Travel Forecasts Template), and
- Horizon year (in the Project Description Template), if applicable.

#### ***IV.5. Land Use***

The land use rating is based primarily on quantitative measures of existing corridor conditions.

Elements of the land use submission include:

- A quantitative Land Use Template;
- The land use portion of the Supplemental Land Use and Economic Development Information and Supporting Documentation Templates; and
- Supporting documentation.

#### **Quantitative Data**

The quantitative Land Use Template is the reporting format for quantitative data. The objective of gathering these data is to better understand current year and, if a project sponsor is including it in the evaluation, horizon year information about population, housing units, employment, and affordable housing associated with the project.

Quantitative data on population, employment, total housing, and affordable housing served by a proposed New Starts project are critical inputs to the assessment of existing land use conditions. Key indicators include population and employment in the metropolitan area, population and employment density in the corridor and in individual station areas, total employment in the Central Business District (CBD), and the proportion of legally binding affordability restricted housing units in the corridor compared to the proportion of legally binding affordability

restricted housing in the counties through which the proposed project travels. Appendix A provides a sample methodology for estimating station area population, households, affordable housing, and employment. FTA requests that sponsoring agencies follow this methodology in order to ensure consistent reporting of quantitative data among New Starts applicants.

### **Documentation of Information for Existing Land Use**

FTA requests that project sponsors submit the items in the following table. The footnotes denote whether the information requested should be submitted as supporting documentation or entered directly into the quantitative Land Use Template. In the existing land use portion of the Supplemental Land Use and Economic Development Information and Supporting Documentation Templates, the project sponsor should provide a summary of the most germane information and data for each category that is being provided to FTA as supporting documentation.

<b>Existing Land Use</b>	
Information Requested	Documentation
Existing corridor and station area development (population, employment, high trip generators)	<ul style="list-style-type: none"> <li>Corridor and station area population, housing units, and employment<sup>+</sup></li> <li>Listing and description of high trip generators (examples include colleges/universities, stadiums/arenas, hospitals/medical centers, shopping centers, performing arts centers, and other significant trip generators)*</li> </ul>
Existing station area development character	<ul style="list-style-type: none"> <li>Description of character of existing land use mix and pedestrian environment in corridor and station areas*</li> <li>Station area maps with uses and building footprints shown*</li> <li>Ground-level or aerial photographs of station areas*</li> </ul>
Existing station area pedestrian facilities, including access for persons with disabilities	<ul style="list-style-type: none"> <li>Station area maps identifying pedestrian facilities and access provisions for persons with disabilities*</li> <li>Documentation of achievement of curb ramp transition plans and milestones required under CFR 35.150(d)(2)*</li> </ul>
Existing corridor and station area parking supply	<ul style="list-style-type: none"> <li>Existing parking spaces per square footage of commercial development and/or per dwelling unit*</li> <li>Parking spaces per employee in the CBD and/or other major employment centers*</li> <li>Land area within ½ mile of station devoted to parking*</li> <li>Average daily parking cost in the CBD and/or other areas*</li> </ul>
Existing affordable housing	<ul style="list-style-type: none"> <li>Total number of legally binding affordability restricted housing units within a ½-mile radius of all station areas<sup>+</sup></li> <li>Total housing units of all types and total housing units that are legally binding affordability restricted for each county in which project stations are located<sup>+</sup></li> <li>A signed certification by the head(s) of the entities, such as state or local housing agencies or nonprofit organizations that maintain databases of affordable housing units, from where the information was gathered attesting to the accuracy of the numbers provided.* (Certification is not needed if using the National Housing Preservation Database to obtain affordable housing counts.)</li> </ul>
<p>* Provide this information as supporting documentation.                      + Enter this information in the quantitative land use template.</p>	



### **Timing and Frequency of the Land Use Submittal**

At a minimum, FTA will evaluate and rate land use once, when a project sponsor requests entry into the Engineering phase. FTA does not require project sponsors to resubmit land use information for re-evaluation and rating after that point. Instead, at their discretion, project sponsors may submit updated information and request that FTA re-evaluate land use if they believe that new information would result in a higher rating.

### **Additional Guidance**

- Provide a table of contents at the beginning of the submittal summarizing all materials that are being provided to FTA.
- Where appropriate, maps and graphics should be used to supplement data; for example, the reporting of development and pedestrian amenities via maps and/or aerial photos is helpful. Examples include:
  - Aerial and ground-level photographs of station areas; and
  - Maps showing existing and forecasted population and employment densities in the corridor.
- Submissions should be brief and precise, but thorough, in providing explanatory statements; important information should not be omitted for the sake of brevity.
- Information submitted should identify the mix of land uses within the corridor.

### ***IV.6. Economic Development***

The economic development criterion is based on a qualitative analysis of plans and policies to focus future development in the corridor.

Elements of the economic development submission include:

- The economic development portion of the Supplemental Land Use and Economic Development Information and Supporting Documentation Templates; and
- Supporting documentation.

The Supplemental Land Use and Economic Development Information and Supporting Documentation Templates allow project sponsors to provide written statements to highlight or expand upon information for specific factors. Sponsors may also provide specific references to existing maps, plans, or other attached documentation that address the specific factor and type of information requested by FTA.

The supporting documentation should consist of full or relevant portions of the documentation referenced in the Supplemental Land Use and Economic Development Information and Supporting Documentation Templates. Some examples from which to provide either full documents or relevant excerpts include:

- Regional growth management policies and agreements;
- Local comprehensive plans, small-area or station area plans, zoning ordinances, and design guidelines relevant to station areas;
- Station area planning documents (conceptual plans, land inventories, market studies);
- Local affordable housing plans (or sections of other local plans that concern affordable housing);
- Analysis of land development trends and market potential for transit supportive development within the region and station areas;
- Descriptions of the corridor and station area physical environment;
- Descriptions of other tools and incentives available for influencing development; and
- Site plans or descriptions of station area development proposals.

Visual aids, such as maps, photographs, and illustrations, can also be useful as supporting documentation to help communicate the impact of planned future development. Examples include:

- Maps of station areas showing the street network, planned land uses and zoning; and
- Photographs or illustrations of existing transit-supportive station area development that has taken place around any existing transit stations or corridors in the region.

In addition, project sponsors may provide an optional quantitative economic development submittal that forecasts future economic growth scenarios for the proposed station areas. This analysis should demonstrate how the project would produce changes in population and employment and estimate the effect those changes would have on VMT. FTA does not specify a methodology for the optional economic development scenario. Initially, FTA intends to examine any optional analyses prepared by project sponsors and assign ratings based on FTA's qualitative assessment of the reasonableness of the analysis and the magnitude of the numbers presented.

Although it is not used to develop the economic development rating, project sponsors should report their estimate of the number of U.S. jobs related to design, construction, operation and maintenance of the project on page 3 of the Project Description Template.

**Documentation of Information for Economic Development Effects**

FTA requests that project sponsors submit the following information:

Information Requested	Documentation
<p><b>I. Transit Supportive Plans and Policies</b>  <b>a. Growth Management</b></p>	
<p>Concentration of development around established activity centers and regional transit</p>	<ul style="list-style-type: none"> <li>• Regional plans or policies that promote increased development, infill development, and redevelopment in established urban centers and activity centers, and/or limit development away from primary activity centers</li> <li>• Regional plans or policies to concentrate development around major transit facilities</li> <li>• Local comprehensive plans or capital improvement plans that give priority to infill development and/or provide for opportunities for high density redevelopment</li> </ul>
<p>Land conservation and management</p>	<ul style="list-style-type: none"> <li>• Growth management plans (e.g. growth management areas, urban growth boundaries, agricultural preservation plans, open space preservation plans) with maps</li> <li>• Policies that allow for transfer of development rights from open space or agricultural land to urban areas</li> </ul>
<p><b>I. Transit Supportive Plans and Policies</b>  <b>b. Transit Supportive Corridor Policies</b></p>	
<p>Plans and policies to increase corridor and station area development</p>	<ul style="list-style-type: none"> <li>• Adopted city, county, and regional plans and policies and private sector plans and initiatives that promote development in the transit corridor and station areas; plans may include general plans, specific plans (subarea, station area, etc.), redevelopment project plans, or other district plans</li> <li>• Examples of transit supportive policies include: general policy statements in support of transit as a principal mode of transportation in the corridor; policies that support and promote the use of transit; policies/plans that provide for high density development in the corridor and station areas; and policies that support changes to zoning in the corridor and station areas</li> </ul>
<p>Plans and policies to enhance transit-friendly character of station area development</p>	<ul style="list-style-type: none"> <li>• Elements of adopted city, county, and regional plans and policies that promote transit-friendly character of corridor and station area development</li> <li>• Policies to promote mixed-use projects</li> <li>• Policies to promote housing and transit-oriented retail</li> <li>• Policies that allow/promote vertical zoning</li> <li>• Façade improvement programs</li> <li>• Funds to support transit-oriented plans</li> <li>• Private sector plans and initiatives consistent with the public plans and policies listed above</li> </ul>
<p>Plans to develop pedestrian facilities and enhance disabled</p>	<ul style="list-style-type: none"> <li>• Requirements and policies for sidewalks, connected street or walkway networks, and other pedestrian facility</li> </ul>

Information Requested	Documentation
access	<ul style="list-style-type: none"> <li>development plans for station areas</li> <li>• Capital improvement programs to enhance pedestrian-friendly design in station areas</li> <li>• Curb ramp transition plans and milestones required under CFR 35.150(d)(2), and other plans for retrofitting existing pedestrian infrastructure to accommodate persons with disabilities in station areas</li> <li>• Street design guidelines or manuals addressing pedestrian and transit-oriented street design</li> </ul>
Parking policies (allowances for reductions in parking and traffic mitigation for development near station areas, plans for park-and-ride lots, parking management)	<ul style="list-style-type: none"> <li>• Policies to reduce parking requirements or cap parking</li> <li>• Policies establishing maximum allowable parking for new development in areas served by transit</li> <li>• Shared parking allowances</li> <li>• Mandatory minimum cost for parking in areas served by transit</li> <li>• Parking taxes</li> </ul>
<p><b>I. Transit Supportive Plans and Policies</b>  <b>c. Supportive Zoning Regulations Near Transit Stations</b></p>	
Zoning ordinances that support increased development density in transit station areas	<ul style="list-style-type: none"> <li>• Ordinances and maps describing existing zoning (allowable uses and densities)</li> <li>• Recent changes to zoning ordinances to allow or encourage development with transit supportive densities and uses</li> <li>• Transit overlay zoning</li> <li>• Zoning incentives for increased development in station areas (density bonuses, housing fund subsidies, regulation relaxation, expedited zoning review, etc.)</li> </ul>
Zoning ordinances that enhance transit-oriented character of station area development and pedestrian access	<ul style="list-style-type: none"> <li>• Zoning regulations that allow mixed-use development</li> <li>• Zoning regulations addressing placement of building footprints, pedestrian facilities, façade treatments, etc.</li> <li>• Architectural design guidelines and mechanisms for implementation/enforcement of these guidelines</li> </ul>
Zoning allowances for reduced parking	<ul style="list-style-type: none"> <li>• Residential and commercial parking requirements (minimums and/or maximums) in station areas under existing zoning</li> <li>• Zoning ordinances providing reduced parking requirements for development near transit stations</li> </ul>
<p><b>I. Transit Supportive Plans and Policies</b>  <b>d. Tools to Implement Transit-Supportive Policies</b></p>	
Outreach to government agencies and the community in support	<ul style="list-style-type: none"> <li>• Promotion and outreach activities by the transit agency, local jurisdictions, and/or regional agencies in support of</li> </ul>

Information Requested	Documentation
of transit-supportive planning	<p>station area planning, growth management, and transit-oriented development</p> <ul style="list-style-type: none"> <li>• Inter-local agreements, resolutions, or letters of endorsement from other government agencies in support of coordinating planning with transit investment</li> <li>• Actions of other groups, including Chambers of Commerce, professional development groups, citizen coalitions, as well as the private/commercial sector, in support of transit-oriented development practices</li> <li>• Public outreach materials and brochures</li> </ul>
Regulatory and financial incentives to promote transit-supportive development	<ul style="list-style-type: none"> <li>• Regulatory incentives (e.g., density bonuses, streamlined processing of development applications) for developments near transit</li> <li>• Zoning requirements for traffic mitigation (e.g., fees and in-kind contributions) and citations of how such requirements can be waived or reduced for locations near transit stations</li> <li>• Programs that promote or provide incentives for transit-oriented development such as tax increment financing zones, tax abatement programs, and transit-oriented loan support programs</li> <li>• Other economic development and revitalization strategies for station areas or within the corridor</li> </ul>
Efforts to engage the development community in station-area planning and transit-supportive development	<ul style="list-style-type: none"> <li>• Outreach, education, and involvement activities targeted at the development community (including developers, property owners, and financial institutions)</li> <li>• Transit-oriented market studies</li> <li>• Joint development programs and proposals</li> <li>• Letters of endorsement or other indicators of support from the local development community</li> </ul>
Public involvement in corridor and station area planning	<ul style="list-style-type: none"> <li>• Description of public involvement process, including corridor and station area transit-supportive planning activities</li> <li>• Description of the level of participation in transit-supportive planning activities and support for these activities by the general public and community groups</li> <li>• Public outreach materials and brochures</li> </ul>
<p><b>II. Performance and Impacts of Policies</b></p> <p><b>a. Performance of Transit-Supportive Plans and Policies</b></p>	
Demonstrated cases of developments affected by transit supportive policies	<ul style="list-style-type: none"> <li>• Documentation of projects that have recently been built consistent with transit-oriented design principles (higher density, orientation toward street, provision of pedestrian access from transit, etc.)</li> <li>• Documentation of projects that incorporate a mix of uses</li> </ul>

Information Requested	Documentation
	or increased amounts of housing
Station area development proposals and status	<ul style="list-style-type: none"> <li>• Descriptions and plans for new development, including joint development proposals, including size, types of uses, and expected dates of start of construction and completion</li> </ul>
<p><b>II. Performance and Impacts of Policies</b></p> <p><b>b. Potential Impact of Transit Investment on Regional Development</b></p>	
Adaptability of station area for transit-supportive development	<ul style="list-style-type: none"> <li>• Description or inventory of land near transit stations that is vacant or available for redevelopment, and amount of development anticipated for these parcels</li> <li>• Projected timeline for development of station area properties</li> <li>• Amount of development allowed at station area build-out compared to existing amount of development</li> </ul>
Corridor economic development	<ul style="list-style-type: none"> <li>• Regional and corridor economic conditions and growth projections</li> <li>• Development market trends in existing corridors and station areas (for areas with existing transit)</li> <li>• Demonstrated market support for higher-density and transit/pedestrian-oriented development</li> <li>• Locations of major employment centers in the region, and expected growth in these centers</li> <li>• Projected population, employment, and growth rates in corridor or station areas compared to region</li> </ul>
<p><b>III. Tools to Maintain or Increase the Share of Affordable Housing in the Project Corridor</b></p>	
Evaluation of corridor-specific affordable housing needs and supply	<ul style="list-style-type: none"> <li>• Needs assessment that evaluates the demand of affordable housing and compares it to the supply of housing</li> </ul>
Plans and policies to preserve and increase affordable housing in region and/or corridor	<ul style="list-style-type: none"> <li>• Inclusionary zoning or housing programs that require or provide incentives for developers to set aside a percentage of units for income-qualified buyers or renters</li> <li>• Density bonuses or reduction of parking requirements for the provision of units made available for income-qualified buyers or renters</li> <li>• Employer assisted housing policies, using tax credits, partnerships, matching funds, and/or other mechanisms to encourage employers to help employees to buy or rent homes close to work or transit</li> <li>• Rent controls or condominium conversion controls on existing units to maintain affordability for renters</li> <li>• Zoning to promote housing diversity, such as zoning that permits accessory or “in-law” units, and residential</li> </ul>

Information Requested	Documentation
	<p>zoning based on floor area ratio rather than dwelling units to reduce the disincentive to build smaller units</p> <ul style="list-style-type: none"> <li>• Tenant “right of first refusal” laws, which require that an owner provide the tenants with an opportunity to purchase the property at the same price as a third-party buyer</li> <li>• Affordability covenants, which limit appreciation of rents and/or sales values for units rented or sold to income-qualified tenants for a given length of time</li> </ul>
<p>Adopted financing tools and strategies targeted to preserve and increase affordable housing in the region and/or corridor</p>	<ul style="list-style-type: none"> <li>• Funding for targeted property acquisition, rehabilitation, and development of low-income housing, including direct funding for public and nonprofit development authorities, low-income housing tax credits (including criteria that favor application of credits in transit station areas), and local tax abatements for low-income or senior housing</li> <li>• Land banking programs to support the assembly of land for new affordable housing development by public, private, or nonprofit developers</li> <li>• Financial assistance to housing owners and/or tenants through mechanisms, including affordable housing operating subsidies, weatherization and utilities support programs, tax abatement or mortgage or other home ownership assistance for lower-income and senior households</li> <li>• Local or regional affordable housing trust funds to provide a source of low-interest loans for affordable housing developers.</li> <li>• Targeted tax increment financing, other value-capture strategies, or transfer tax programs to generate revenue that can be directed toward low-income housing programs</li> </ul>
<p>Evidence of developer and public sector activity to preserve and increase affordable housing in the corridor</p>	<ul style="list-style-type: none"> <li>• Examples of the provision of affordable housing in new or existing developments, including number of units, specific affordability restrictions, length of time restrictions apply, etc.</li> </ul>
<p>Extent to which local plans and policies account for long-term affordability and the needs of very- and extremely-low income households in the corridor</p>	<ul style="list-style-type: none"> <li>• Documentation of evidence that legal affordability restrictions in the transit corridor will be continued over the long-term following the project’s opening. Examples include commitments tied to the receipt of Low-Income Housing Tax Credits, HOME or other HUD funds, payment in lieu of taxes (PILOT) agreements, and other legal instruments tied to the receipt of Federal, state, local and/or private funds/financing</li> </ul>





### **Timing and Frequency of the Economic Development Submittal**

At a minimum, FTA will evaluate and rate economic development twice, when a project sponsor requests entry into the Engineering phase and prior to FFGA approval. FTA does not require project sponsors to resubmit economic development information other than at those two times for re-evaluation and rating. Instead, at their discretion, project sponsors may submit information and request that FTA re-evaluate economic development if they believe that new information would result in a higher rating.

### **Importance of an Organized, Comprehensive Submittal**

Ratings assigned by FTA will be directly related to the ability of FTA to readily identify, locate, review, and assess the provided documentation. Thus, project sponsors should strive to produce well-organized submittals.

### **Additional Guidance**

- Provide a table of contents at the beginning of the submittal summarizing all materials that are being provided to FTA.
- Project sponsors should provide documentation to substantiate qualitative information rather than rely solely upon reference.
- Submissions should be brief and precise, but thorough, in providing explanatory statements; important information should not be omitted for the sake of brevity.
- Brief descriptions of anticipated development and implemented projects, rather than simply a list, are helpful.
- Submissions should include explanations of the impact of transit-supportive policies and how implementation would be achieved, particularly when significant changes are anticipated.
- Submissions should distinguish between station area, corridor, municipality, and regional transit-supportive policies and plans.
- Submissions should address parking policies and pricing strategies.

## ***IV.7. Environmental Benefits***

Environmental benefits are evaluated based on the change in VMT resulting from implementation of the proposed project. The estimated environmental benefits are then monetized automatically in the Environmental Benefits Template and compared to the annualized capital and operating cost of the proposed project.

VMT data is entered in the VMT section of the Travel Forecasts Template (described in Section III.2 Travel Forecasts). Annualized capital costs excluding enrichments and annual operating costs are entered in Lines 3 and 4, respectively, of the Mobility and Cost Effectiveness Template. The excel workbook containing the templates automatically transfers this information into the Environmental Benefits Template.

Project sponsors must enter the following information into the Environmental Benefits Template:

- o the Environmental Protection Agency's (EPA) air quality designation for four air quality criteria pollutants for the metropolitan area in which the proposed project is located (lines 1 through 4). This information can be found in EPA's [Green Book](#); and
- o if the project is seeking to be warranted, the existing annual transit ridership in the corridor today (line 15) and the percentage change in corridor annual transit vehicle hours that would result from implementation of the proposed project (line 16).

## V. Local Financial Commitment Criteria

### Financial Information Reporting Items

Project sponsors must submit documentation of local financial commitment to FTA. FTA requires all of the following items to evaluate and rate the local financial commitment:

- a completed Finance Template;
- a comprehensive financial plan, including a 20-year cash flow model submitted electronically in excel format with formulas included rather than just hardcoded numbers;
- supporting documentation; and
- a completed financial submittal checklist.

These items are described in detail in the next sections.

All project sponsors must provide all of the required information included in FTA's *Guidance for Transit Financial Plans*. Failure to include any of the elements required for the financial review will adversely impact the project's financial rating.

### New Starts Project Finance Template

All project sponsors must complete the Finance Template. The Finance Template is designed to provide a uniform reporting method for the basic financial information and transit system characteristics necessary for FTA to assess the local financial commitment for the proposed New Starts project. It is not intended as a substitute for a financial plan. A written explanation should be provided for not submitting any requested or current data. Failure to adequately justify any non-compliance will adversely impact the project's financial rating.

Project sponsors should ensure that information reported in the Finance Template matches that reported in other documentation. FTA recommends that project sponsors perform the following quality control checks on data entered in the Finance Template:

- The capital costs reported on this template should match what is reported in the Build Main Worksheet of the Standard Cost Categories and the Project Description Template. The capital cost estimate must include project development and engineering activities.
- Finance charges must be included in the capital cost estimate of all New Starts projects. Specifically, only finance charges that are expected to occur prior to either the revenue operations date or the fulfillment of the Section 5309 New Starts funding commitment in the FFGA, whichever occurs later in time, should be included.
- Verify that the total project cost in constant or base year 2015 dollars reported on the Finance Template differs from the total base year cost shown on the Build Annualized Worksheets in the SCCs only because the total cost included in the Build Annualized Worksheets does not include finance charges. (Note: in some cases the total base year cost in the Build Annualized Worksheets will also differ because of the inclusion of

additional capital cost items needed to achieve project benefits. For instructions on the SCC Build Annualized Worksheet see Section III.4 Capital Costs.)

- If the capital cost of the project has changed significantly from last year, please provide an explanation.
- Total Federal funding for the project (New Starts plus other Federal sources) should not exceed 80 percent.
- The sum of all proposed sources of operating funds reported on the New Starts Project Finance Template should equal the total transit system annual operating cost in the opening year.
- The type of funding sources should be identified for each capital and operating revenue source.

### **Financial Plan**

All project sponsors must submit a financial plan to FTA. In accordance with MAP-21, FTA evaluates the financial plan to ensure that the project sponsor has the financial capacity to construct and operate the proposed New Starts project while continuing to operate and maintain the existing transit system without requiring a reduction in existing services. FTA has developed guidance on the content and format of financial plans for transit agencies in FTA's [Guidance for Transit Financial Plans](#). All project sponsors submitting information for evaluation and rating are required to submit financial plans that adhere to these guidelines. Failure to provide a complete financial plan will adversely impact a project's financial rating.

### **Supporting Documentation**

Documentation demonstrating the level of commitment for each of the funding sources included in the financial plan must be provided. All underlying financial assumptions should be identified in the project finance plan and reflect capital financing strategies, projected rehabilitation and replacement costs for the existing system, operations and maintenance costs for the proposed project and the existing system, revenue stream assumptions, and cash flow projections.

Figure 1 on the following page provides a summary of typical supporting documentation for New Starts financial plans. The ratings assigned by FTA are directly related to the ability of reviewers to readily identify, locate, review, and assess the provided documentation. Therefore, a concise, well-organized submittal is to the advantage of the project sponsor.

**Figure 1: Examples of Financial Plan Supporting Documentation**

**General Documentation**

- Background information and description of the project sponsor, including organizational structure and an outline of any other significant capital projects underway (e.g., annual audits and annual reports for past three years, current budget).
- Background information and description of the New Starts fixed guideway project, including project status (e.g., project pamphlets, planning and engineering reports used to select and define the project).
- Information describing current and forecast economic conditions in the region (e.g., regional socioeconomic reports, regional planning estimates of socioeconomic growth used in the development of the financial and ridership estimates).

**Financial Documentation**

- Agency capital and operating cash flow analysis for the 20-year period (in year of expenditure dollars) as required by planning guidelines. The cash flow analysis should include expenses and revenues for the proposed project as a separate line item from expenses and revenues for the rest of the system.
- A description of the types and amounts of funds (in year of expenditure dollars) for the transit system and proposed project (e.g., local, state, Federal, sales tax, bonds, flexible funding, other funding sources).
- Operations and maintenance cost estimates (in year of expenditure dollars) for the entire planned transit system, including the proposed project.
- Capital cost estimates (in year of expenditure dollars) for the proposed project, broken out by major cost categories, including contingencies.
- Capital cost estimates (in year of expenditure dollars) for rehabilitation and replacement needs for the existing system broken out by major categories.
- Description of innovative financing techniques (e.g., innovative funding sources or financing techniques to be used to support the project or to be implemented as part of a larger system-wide program).
- Latest bonding prospectus, capital and operating financing plans, and other reports.
- Commitment letters, contracts, agreements, legislative referendums, joint development agreements, or other documentation evidencing commitment of funds.
- Correspondence or other documentation indicating local source's "intent to commit" if no formal commitment or programming of local funding is yet in place.

**Additional Documentation**

- Relevant portions of Regional Long Range Transportation Plan
- Relevant portions of Regional Transportation Improvement Program
- Independent Audit Reports
- Rail vehicle and bus fleet management plans

**Financial Submittal Checklist**

Table 1 below presents a checklist of information that should be submitted to FTA. The project sponsor must complete the checklist and include it with the financial submittal. If the checklist is not provided, the submittal will be considered incomplete. Insufficient or incomplete information supporting a project's local financial commitment criteria may result in a "Low" rating. Project sponsors are encouraged to pay careful attention to the reporting requirements.

**Table 1: Local Financial Commitment Checklist**

GRANTEE FINANCIAL SUBMITTAL	Included (check one)		Reason Why Information Has Not Been Provided
	Yes	No	
20-year cash flow statement (in year of expenditure dollars) including capital and operating financial plans (provided both electronically and in hardcopy). The cash flow statement should clearly show revenues and expenses for the project separated from those for the remainder of the transit system.			
Detailed written description/discussion of all assumptions used in the financial plan including: Federal/state/local/debt proceeds funding assumptions Average fare assumption Average weekday ridership assumptions Debt coverage requirements/assumptions Assumptions used in the calculation of operating expenses for each mode (i.e. -- vehicle miles, vehicle hours of service provided, etc.)			
Project Description and New Starts Project Finance Template			
Capital cost estimate for the proposed project (in year of expenditure dollars) in the FTA standardized cost category worksheet format			
Sensitivity Analysis (spreadsheet calculations as well as narrative summary)			
Supporting Documentation Including:			
Background information and description of the New Starts project, including project status			
Historical revenue and expense data (minimum of 5 years required, more than 5 years appreciated)			
Commitment letters, contracts, agreements, legislative referenda or other documents demonstrating local share commitment of non-Federal funding partners			
Enacting legislative documents for tax referenda			
Joint development agreements, or description and supporting documentation of other innovative financing techniques, if applicable			
Annual Operating and Capital Budgets for the past 3 years			
Audited Financial Statements and Compliance Reports for the past 3 years			
Annual Reports/Comprehensive Annual Financial Reports (CAFR) for the past 3 years			
Background information and description of the transit agency, including organizational structure and enabling legislation			
TIP, STIP and Short Range Transit Plan (SRTTP), if available (please provide only relevant pages of these documents)			

<b>GRANTEE FINANCIAL SUBMITTAL</b>	<b>Included (check one)</b>		<b>Reason Why Information Has Not Been Provided</b>
	<b>Yes</b>	<b>No</b>	
Regional Long Range Transportation Plan (please provide only relevant pages)			
Capital Improvement Program Documents			
Bus and Rail Fleet Management Plans including fleet replacement schedules			
Latest bonding prospectus/credit facility documents (credit lines, commercial paper, etc.)			
Local development, demographic and economic studies used in preparing the financial plan, plus documentation supporting efficiency or productivity gain assumptions			
Other materials (if any), please describe:			



## Appendix A: Sample Methodology for Estimating Station Area Socio-Economic Statistics

A sample approach follows for computing the station-area population, household and employment statistics requested in the *Quantitative Land Use Information Template*. Figure A and Table A provide examples of the approach applied to a hypothetical project.

Figure A: Sketch of Station Areas for a Hypothetical Project

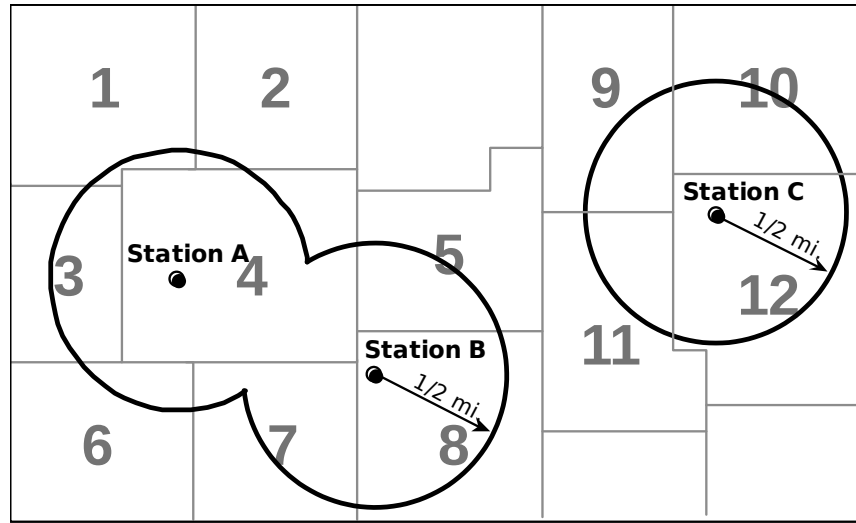


Table A: Calculation of Station-Area Statistics for a Hypothetical Project

	Census Tract Total				Fraction of Tract Land Area within 1/2 Mile of Station	Within 1/2 Mile of Station			
	Land Area (sq. mi.)	Population	Households	Employment		Land Area (sq. mi.)	Population	Households	Employment
<b>Stations A and B</b>									
Tract 1	0.452	2,309	987	1,654	0.08	0.036	185	79	132
Tract 2	0.362	133	58	611	0.06	0.022	8	4	37
Tract 3	0.294	398	145	1,254	0.52	0.153	207	76	652
Tract 4	0.655	2,634	1,154	2,719	0.85	0.557	2,239	981	2,311
Tract 5	0.429	1,038	393	858	0.41	0.176	425	161	352
Tract 6	0.416	2,412	887	1,477	0.19	0.079	458	168	281
Tract 7	0.380	2,088	856	2,785	0.54	0.205	1,127	462	1,504
Tract 8	0.434	2,344	991	2,031	0.68	0.295	1,720	720	1,349
Subtotal	3.422	13,542	5,541	13,342		1.523	6,370	2,652	6,618

Station C									
Tract 9	0.355	1,816	722	610	0.24	0.085	436	173	146
Tract 10	0.462	70	31	1,569	0.40	0.185	28	12	628
Tract 11	0.504	2,645	1,156	760	0.33	0.166	873	381	251
Tract 12	0.540	2,573	1,010	1,873	0.65	0.351	1,730	687	67
Subtotal	1.860	7,192	2,966	3,041		0.787	3,066	1,254	1,091
Total	5.282	20,734	8,507	16,384		2.310	9,437	3,906	7,709

1. Plot each station location on a map showing census tracts or, alternatively, TAZs.
2. Draw a circle of ½ mile radius around each station.
3. Obtain data on total land area, population, households, employment, and housing units for the tracts or zones that fall partially or completely within the station areas. Land area, population, and households can be obtained from the census (for census tracts) or from a regional land use database used for travel forecasting modeling (for TAZs). The regional Metropolitan Planning Organization (MPO) should have these data available. Employment data at the tract or TAZ level may be obtained from the MPO. Total residential housing unit data can be obtained from the latest American Community Survey five-year estimates at the county and census tract levels. Data on legally binding affordability restricted housing can be obtained by contacting area housing authorities. In addition, some statistics on affordable housing can be found in the National Housing Preservation Database (<http://www.preservationdatabase.org/>). This database includes an address-level inventory of federally assisted rental housing. It does not contain information on affordable units supported only by state and local programs.
4. Estimate the total land area, population, households, and employment contained within each ½-mile station radius by summing the data for each tract or zone that falls within the ½-mile station radius. For tracts or TAZs that partially fall within the ½-mile station radius, station-area population, households, and employment should be estimated by multiplying the total for the zone by the proportion of the zone estimated to fall within the ½-mile radius. The proportion of the zone falling within the ½-mile radius can be estimated either visually or using GIS.
5. Avoid double counting of population and employment for stations that are less than one mile apart. This can be done in two ways: (a) draw a line dividing the area enclosed by the overlapping circles into two parts; or, (b) group stations that are less than one mile apart into clusters and report total data for each cluster (as shown for Stations A and B in the table above). In either case, please report the total land area encompassed by the overlapping circles. (Total land area for individual stations not grouped together should be roughly the area enclosed by a circle of ½-mile radius, i.e.,  $3.1415 \times (0.5)^2 = 0.785$  sq. mi.)

6. If possible, attach a map showing station locations, ½-mile radii, and census tracts or traffic analysis zones, along with a Table listing the tracts or zones, estimated proportion of each within ½ mile of the station, and population, households, and/or employment for the tract.