

NEPA Introduction Course: Transit Project Delivery

Welcome to the National Environmental Policy Act also known as NEPA Introduction Course on Transit Project Delivery provided by the Florida Department of Transportation's or FDOT's Office of Environmental Management, as covered in Part 1, Chapter 14 of the Project Development and Environment (or PD&E) Manual.

This course provides an overview of the transit project delivery process, agency roles in the environmental review process, an overview of FDOT's five-step process, which includes planning and community support, concept development and alternatives screening, PD&E study phases, and the Federal Transit Administration's, or FTA's, funding programs.

Lesson 1 provides an overview of transit projects and NEPA, including definitions used for transit projects, an introduction to the FTA, and a comparison of how NEPA is conducted for FTA versus the Federal Highway Administration, or FHWA.

If a federal action is required or federal funding is being used, the project must comply with NEPA and other applicable environmental laws and regulations, including those related to historic preservation and protection of public lands.

FTA is typically the lead agency for transit projects, when FTA funding is being used to construct the project or purchase vehicles. Other agencies may be involved in the NEPA process, such as Federal Highway Administration, or FHWA, if the project involves an interstate facility or bridge, or the Federal Railroad Administration or FRA, if the project involves a freight or passenger railroad corridor, such as Amtrak.

FTA has its own procedures for NEPA compliance, including requiring the NEPA or project development phase to be completed within two years for certain funding programs. These requirements will be addressed in later sections of this training. FTA's goal is to maximize the linkages between the planning and NEPA phases to expedite completion of the NEPA process.

The terms used by various agencies may be similar but there are notable distinctions for certain key terms used by FDOT and FTA for transit project development purposes. Coming up, some special definitions for the FTA process will be reviewed. Several of these may be familiar from roadway projects; however, they have different meanings for transit projects.

For transit projects, the term alignment refers to the length of the route, the station locations, where intermodal connections occur, the degree of right-of-way separation, horizontal use of the right-of-way, and the vertical placement of the transit within the larger transportation facility.

Horizontal alignment refers to the location within the transportation facility. For example, commuter rail often uses existing freight rail infrastructure in an existing railroad corridor. Bus rapid transit, streetcars and light rail can all operate in exclusive lanes that are separated from vehicular traffic, in mixed traffic lanes with other vehicular traffic, or in separate lanes that merge with vehicular traffic at intersections.

Vertical alignment refers to where the transit operates in relation to the grade, either above grade, or elevated, at grade, or below grade or a combination thereof. The Miami Metromover, South Florida's TRI RAIL, is an example for at grade. Jacksonville's Skyway and Disney's Monorail are all examples of above grade or elevated transit. Subways, like those found in New York City and Washington D.C., are examples of below grade transit. Miami Dade Transit's Metrorail is an example of a transit system that have both elevated and at grade transit lines.

An alternative for a transit project includes the alignment, the transit technology, such as bus, bus rapid transit, streetcar, or heavy rail, and the proposed operating characteristics.

Operating characteristics include more than the type of service, such as local, express or limited stop, or service frequency; it also includes how passengers board and alight a vehicle, the fare structure and the funding strategy. An alternative also refers to a potential transportation improvement alternative under consideration that addresses the project's purpose and need.

The Locally Preferred Alternative, or LPA, is the selected alternative identified in the NEPA document and adopted into the Cost Feasible Plan by the appropriate Metropolitan Planning Organization, or MPO, or Transportation Planning Organization, or TPO. Previously the LPA was selected at the end of the Alternatives Analysis. Under MAP-21 and the FAST Act, the LPA is not selected until the end of the NEPA process.

Capital Investment Grants, or CIG, are one of FTA's funding programs. It is a discretionary funding program, meaning that projects compete for the funds at the national level. FTA has three different funding opportunities under this program, New Starts, Core Capacity and Small Starts. More information about each of these programs is provided in Lesson Seven of this course.

A brief description is provided here for reference:

- The New Starts program is for projects with total costs greater than \$300 million and for fixed guideway improvements such as rail or bus rapid transit.
- The Core Capacity program is for projects on existing fixed guideway systems that are at capacity or will be at capacity within the next five years.
- The Small Starts program is for projects with total costs less than \$300 million and fixed guideway projects and corridor-based bus rapid transit projects are eligible.

Project Development has a different meaning for FTA than it does for FDOT. For FDOT the term refers to the overall process of planning, designing and constructing a project. For FTA, the project development refers to a specific phase of a project where alternatives are evaluated and NEPA is completed. Project Development is a formal process that requires FTA approval to proceed into the CIG program. Transit project sponsors are required to obtain an FTA's approval to enter the Project Development phase.

The Project Sponsor is the agency that advances the project through NEPA. For transit projects, this could be the local transit agency or the FDOT District Office of Modal Development. The project sponsor does not need to be the FTA grant applicant. The FDOT District Modal Development Office may also serve as the project sponsor but usually only serves as a stakeholder in the environmental review process.

The recommended alternative, the alternative identified through the Planning process that meets the purpose and need while minimizing adverse impacts, is the transit alternative that is presented to the MPO or TPO for endorsement to carry forward into NEPA.

Transit Development Plans are required for all transit agencies. Transit Development Plans are 10-year plans that assess the existing conditions and future needs for the agency's system. They are required to be updated every five years.

The FTA is a grant-making agency that works directly with the state DOTs, transit agencies, Native American tribes, local governments and other public entities. The FTA Region IV office in Atlanta

serves as lead point of contact for the southeastern United States and for the environmental review process. The Region's specific duties include those shown here:

- Environmental reviews
- Grant making
- Program guidance
- Representation at meetings
- Metropolitan and System Planning issues
- Project schedules

All correspondence goes through the FTA Region IV Regional Administrator. The headquarters office in Washington D.C. provides technical assistance on travel demand forecasting, capital cost estimates, financial planning, and other areas as requested.

This lesson addresses agency roles in the environmental review process for transit projects.

For transit projects, FTA is typically the Lead Agency. As previously noted, OEM or the US Army Corps of Engineers, also known as the Corps, could also be the Lead Agency, depending upon the project's circumstances and funding. The Lead Agency works directly with the Project Sponsor, which is usually an FTA grant applicant or grantee. Cooperating agencies will be discussed later and may also be involved in the process.

FDOT can serve as a Project Sponsor. More likely FDOT will be a technical resource, a funding partner, a reviewer of safety and security plans, and a financial planner. The FDOT offices involved in transit projects include the Public Transit Office, the Office of Environmental Management and District staff.

FTA divides its roles and responsibilities between staff at the Region IV office in Atlanta and the Headquarters office in Washington, D.C. Contacts from both offices may be assigned to work with the project sponsor or FTA grantee.

The following are the roles of FTA in the project development phase:

- Provides project sponsors with basic guidance on discretionary programs, including Project Development requirements, project evaluation procedures, and grants requirements.
- Explains overall FTA policies and procedures, FTA positions on specific issues related to Project Development, and the process for advancing major transit investments into subsequent phases, and to provide technical guidance.
- Reviews grant applications, approves grants, and performs typical grant administration functions.
- Provides guidance and direction on metropolitan planning requirements and issues which may impact the final Environmental Documents and subsequent project advancement, such as air quality conformity, financial constraint, and project programming.
- Reviews project schedules and provides guidance to the project sponsor.

Next summarizes the role of the different local or regional agencies in the environmental process. The MPO or TPO identifies the regional need for projects and identifies funding sources. The transit

agency identifies the specific local need and serves as the operating agency. Local governments, such as cities or a county, may be a partner in all phases of the project's development and may also be a funding partner.

Additionally, project sponsors respond to information requests by local decision makers and FTA or other Lead Agency during the course of the Project Development process; keep other interested agencies, private operators, and the public informed and seeking their input through established public involvement mechanisms; and provide professional management and direction as the work progresses, ensuring that work is done in an efficient manner and that deliverables are obtained in a timely fashion.

Participating agencies may include any federal, state, tribal, regional, and local government agencies that have an interest in the project. Participating agencies must identify any issues of concern which could substantially delay the project. It is the responsibility of the Lead Agency to identify and collectively invite potential participating agencies.

Private and nongovernmental organizations are not eligible to serve as participating agencies. The fact that an agency accepts the designation of a participating agency does not imply support or provide them with increased oversight or authority over the project.

Cooperating agencies are any federal agency, other than the Lead Agency, that has legal jurisdiction or special expertise as it applies to the environmental impact of a proposed project or project alternative. Cooperating agencies can also include, through agreement with the Lead Agency, a state or local agency with similar qualifications as well as Native American Tribes with lands or cultural resource areas of interest that may be impacted by a proposed project.

Cooperating agencies are, by definition, participating agencies, but not all participating agencies are cooperating agencies. The cooperating agencies have a greater role of involvement, responsibility, and authority in the environmental review process.

FTA is the Lead Federal Agency for most transit projects. There are exceptions including when federal funds are NOT used but a permit is required. FTA may be a Joint Lead Federal Lead Agency when federal funds are used AND a permit is required from another agency. For example, when a transit project requires a new bridge over a navigable waterway and a permit from the US Coast Guard is required.

Examples of FTA funded projects where FTA may be a joint lead agency with other federal or lead agencies include:

- OEM and FTA on a transit project located on the National Highway System, or NHS;
- OEM and FTA on a transit project that includes a new or modified bridge structure over an interstate corridor;
- OEM and FTA on a multimodal project that involves roadway widening and new transit-only lanes on the NHS;
- FRA and FTA on a transit project located in a freight or intercity railroad corridor; and,
- United States Coast Guard and FTA on a transit project that includes a new bridge structure over a navigable river.

This lesson addresses FDOT's five-step transit project development process.

This slide shows the five steps of FDOT's transit project development process, starting with Planning & Community Support in Step 1. Step 2 is the concept development and alternatives review process. During Step 2, the Transit Concepts and Alternatives Review, or TCAR, Study is completed. TCAR process is one option to conduct the alternatives analysis.

Step 3 is the PD&E Study. This is when the NEPA document and the FTA's Project Development phase are completed. Step 4 is Design and Construction and Step 5 is Operations. As with other transportation improvement projects, public involvement occurs throughout each step of this process.

After a transit project is identified through Steps 1 and 2 and the decision is made to pursue FTA funding, the next step is FTA's NEPA and Project development phase.

FTA's Project Development begins and is completed entirely within FDOT's Step 3, the PD&E Study. After completion of Project Development, the project undergoes evaluation and rating by FTA and further approval is needed to enter both the Engineering and Full Funding Grant Agreement or FFGA phases, which parallel FDOT's step 4, Design and Construction. Receipt of an FFGA is contingent upon project rating and the availability of CIG funds.

This is how FTA's NEPA and Project Development phase for projects under the Small Starts funding program fit into FDOT's five-step process. FTA's Project Development begins and is completed entirely within FDOT's Step 3, which is the PD&E Study. Unlike New Starts and Core Capacity projects, Small Starts projects have only two FTA phases, Project Development and Expedited Grant Agreement. The evaluation, rating and approval of the project occurs after Project Development prior to the Expedited Grant Agreement phase. Entry into the Expedited Grant Agreement phase depends upon the availability of CIG funds as well as the project's rating.

This shows the FTA's Evaluation and Rating criteria for New Starts and Small Starts project:

- Mobility Improvements (16.66%)
- Environmental Benefits (16.66%)
- Congestion Relief (16.66%)
- Cost Effectiveness (16.66%)
- Economic Development (16.66%)
- Land Use (16.66%)
- Current Condition (25%)
- Commitment of Funds (25%)
- Reliability / Capacity (50%)

Using these criteria early in the planning phase will allow for a link between the planning and environmental phases of the project. FTA consistently encourages Project Sponsors to develop additional criteria to address community needs and desires instead of relying solely on their rating criteria. It is always recommended to confirm the evaluation criteria for New Starts and Small Starts and rating approach with FTA prior to beginning any transit study that anticipates use of FTA funds.

In order to advance to the next phase an overall project rating of Medium or higher is required. This rating is comprised of two summary ratings. Half of the project's overall rating is based on the Project Justification summary rating and the other half is based on the Local Financial Commitment summary

rating. These summary ratings are based on 9 criteria, 6 for Project Justification and 3 for Local Financial Commitment.

As stated in the June 2016, Final Interim Policy Guidance Federal Transit Administration Capital Investment Grant Program, FTA gives 50 percent weight to the summary project justification rating and 50 percent weight to the summary local financial commitment rating to arrive at an overall rating. FTA requires at least a Medium rating on both project justification and local financial commitment to obtain a Medium or better rating overall.

Returning now to FDOT's Five-Step Process, this lesson will focus on the first step of the process.

Step 1 of the five-step process is Planning and Community Support. Activities that are considered early planning include transit systems planning, operational analyses and identification of potential funding sources.

Transit system plans are most often conducted by transit agencies to identify broad transportation needs and deficiencies. The MPO or TPO and the FDOT District Office of Modal Development may participate in these studies. The analysis typically results in identifying corridor and technology options within a specific study area or region where the transportation network is not currently meeting demand under existing conditions or will not meet future demand.

Once transportation needs are identified an areawide or corridor-specific travel market analysis is conducted to understand where people travel to and from most frequently. The analysis determines the components of the problem and avoids identifying corridors or transit solutions before travel patterns are fully understood.

The travel market analysis will potentially identify trip purpose and length, magnitude of unmet demand, origins and destinations, peaking characteristics, and current travel times. The travel market analysis should be performed concurrent with the operational analysis of existing and planned transit services.

On the operational analysis side, a Transit Development Plan is a required document that looks at system level operations for a transit agency. This is often the first step in identifying corridors that are in need of additional transit service. Together, if the travel market analysis and the operational analysis reveal that a major transit project is necessary to meet the forecast travel demand, then a decision should be made regarding the use of FTA funds or other federal funds for the project and who the primary grant applicant for the FTA funding will be.

The third early planning activity is the identification of funding sources. This includes identification of the anticipated costs, availability of local funding, and state and federal funding sources. The FDOT Work Program, State Transportation Improvement Program, or STIP, and Long Range Transportation Plan, or LRTP, Cost Feasible Plan should be updated to reflect anticipated costs and funding sources for the proposed action.

Since most federal funding sources do not fund 100 percent of the total construction costs for the project, state and or local funds are required. State and or local funds are used not only to comply with application requirements but also to be competitive with other grant applicants from across the country. This is illustrated in the chart which shows that the majority of projects, 56 percent, receiving New Starts funding in Fiscal Year 2016 received less than 50 percent of federal funds for construction.

FTA's funding programs include formula grants and discretionary grants that are reviewed later in this training. The CIG program is a discretionary grant program that includes the New Starts, Core Capacity and Small Starts funding programs.

Not all transit projects automatically require that FTA be the Lead Federal Agency. Use of FTA funds for Project Development or Design does not necessarily make it an FTA project. Consultation with FTA Region IV is necessary to determine both the reasonableness of seeking FTA funding for a project, as well as to determine if FTA is the appropriate Lead Federal Agency.

If FTA funds will be used to for construction or vehicle acquisition for a New Starts, Core Capacity or Small Starts project, then FTA will be the Lead Federal Agency.

Concept Development and Alternatives Screening is Step 2 of FDOT's Five-Step Process

This lesson addresses Step 2 of the process, which may include the completion of the TCAR Study. For more guidance on how to complete TCAR, review the most recent version of the FDOT Transit Concept and Alternatives Review Guidance from the transit office website. A separate training that goes into detail about the TCAR process is offered by FDOT Transit Office. This lesson provides only an overview of the TCAR process and the other steps that are necessary to prepare for FTA's Project Development phase.

This step consists of the following recommended activities leading to entry into FTA's Project Development phase. These include:

- Coordination with Partners & the Lead Federal Agency
- Alternatives Screening
- Environmental Screening through the ETDM process
- Determine NEPA Class of Action
- Linking Prior Planning Work with NEPA
- Requesting Entry into Project Development

Early coordination with the public, agencies, partners, special interest groups, and elected officials is crucial to obtaining feedback and information to support local planning work. Activities that should be coordinated with local partners include costs and funding, potential environmental impacts and right of way needs, agency responsibilities, project purpose and need, and project goals, objectives and evaluation measures.

Activities that should be coordinated with the Lead Federal Agency include the project purpose and need, project goals, objectives and evaluation measures, and early scoping and development of a Public Involvement Plan, if appropriate. Issues to discuss with FDOT staff include environmental documentation requirements and grant programs to assist with the non-federal share of the project costs.

The purpose of the alternatives screening is to gather information and conduct early evaluations of transit alternatives, including transit modes and alignments to streamline the process so that the Project development phase can be completed within the two-year timeframe established by FTA for New Starts and Core Capacity projects.

If the District Office of Modal Development leads the alternatives screening, then close coordination with the transit operator, MPO or TPO, and affected jurisdictions is required. In addition, the District

Offices and other Project Sponsors should contact FDOT's Transit and Environmental Offices to discuss the study methods and assumptions throughout the process. Even if federal funds are not sought, a State or Project Environmental Impact Report may be required and therefore coordination with FDOT is encouraged.

Coordination with FTA is also encouraged as they may also have tools or preferred methods for analyses to support the concept development and alternatives screening. At a minimum, an alternatives screening should consider a wide range of options, include a Planning Screen in ETDM to document agency comments and concerns and provide support for the Class of Action determination, and provide for continuous stakeholder engagement.

The end result is a recommended alternative that is carried forward into the Project Development. It is recommended that resolutions of support be adopted by the MPO or TPO and/or local governments as appropriate as these can be provided to FTA as part of the application or, Request to enter Project Development.

Activity 3 under Step 2 is the environmental screening using the Environmental Screening Tool, or EST. EST is an internet-based interactive database and mapping application that brings together information about a project and provides analytical and visualization tools that help synthesize and communicate project information.

It provides a single point of reference where stakeholders have access to the same information at the same time for a common and comprehensive assessment of the project and any decisions, comments, and issues identified by participants. As shown here, it provides the anticipated Degree of Effect for different resources from the various regulatory agencies.

There are two screening events in the Efficient Transportation Decision Making or ETDM process. The Planning Screen, which would be completed during the alternatives screening phase of a transit project, is used to identify projects for inclusion in the Long Range Transportation Plan. The Programming Screen, which is completed to determine the appropriate Class of Action for projects, supports development of FDOT's Work Program.

Since FTA does not participate in the ETDM process for determining Class of Action direct coordination with them is required. However, the Programming Screen Summary Report provides information to assist with FTA consultation and discussions concerning the environmental review process, such as the preliminary purpose and need, environmental resource information, and identification of cooperating and participating agencies.

The Class of Action determination identifies the level of documentation required for a project. Unless the proposed action is listed as a Categorical Exclusion under Title 23 of the Code of Federal Regulations Part 771.118(c), a written request to FTA Region IV staff for a Class of Action determination needs to be prepared.

This request should include the following information:

- Project description;
- Summary of prior planning products or decisions
- The summary of the alternatives screening;
- Final draft purpose and need or a statement of need;

- Maps or figures showing the location of the project, project termini, proposed station locations and sizes, and proposed vehicle storage and maintenance facility location;
- Information from the Programming Screen Summary Report concerning any known environmental issues and constraints, but not the entire report; and,
- Information describing other known project features such as bridge structures.

A written response from FTA regarding the Class of Action should be requested and included in the project file, as well as uploaded to the EST.

Linking planning products and decisions with NEPA is encouraged by FTA and is particularly important for requesting entry into Project Development for New Starts, Core Capacity, or Small Starts projects. For planning products and decisions to be included in the NEPA document, they must meet conditions and requirements stated in Title 23 of the Code of Federal Register Part 450 and Title 23 of the United States Code Chapter 168.

Prior to requesting entry into the Project Development, the Project Sponsor of a New Starts, Core Capacity, or Small Starts project should conduct local planning studies and/or feasibility studies. The Project Sponsor may initiate the environmental review process to gather the information required to request entry into PD.

In Florida, Project Sponsors have two tools to ensure that all transportation planning work is securely linked to the environmental review process for the project: the alternatives screening phase and the ETDM process.

- The alternatives screening phase, particularly when properly documented, shows how the alternatives considered led to the recommended alternative being evaluated in NEPA.
- The ETDM process carries forward planning products, previous analyses, and a decision supporting transportation project implementation during subsequent project development phases and is fully consistent with the streamlining objectives prescribed in the Title 23 of the United States Code Chapter 168 and Title 23 Code of Federal Register Part 450.

The final activity under Step 2 is requesting entry into FTA's Project development phase. Coordinating with Region IV, a short 2 to 5 page letter is prepared to the Associate Administrator for FTA's Office of Planning and Environment that includes key project information such as the Project Sponsor, a brief description and clear map of the corridor, the statement of purpose and need, and preliminary cost estimates. This full list of items is included in Chapter 14 of the PD&E Manual.

FTA has 45 days to respond to the request, and this response may indicate that the project was accepted or that additional information is required.

Within two years after entry into Project Development is accepted, the NEPA document must be completed and have FTA approval, the Locally Preferred Alternative must be identified and adopted as part of the Cost Feasible Plan of the LRTP, sufficient information must be provided to allow FTA to evaluate and rate the project based on the previously discussed criteria, and sufficient engineering and design work should be completed to prepare the construction, real estate, and operating cost estimates as well as the summary of the scope and risks associated with the project.

This lesson focuses on Step 3 of the five-step process, including FTA's requirements for completing NEPA. Step 3 is FDOT's PD&E Study that is aligned with FTA's Project Development phase.

The NEPA process can only begin after FTA approves entry into the Project Development. Eligibility for future FTA grant assistance could be jeopardized if NEPA is started without FTA approval, especially if FTA is the Lead Agency. It is strongly recommended that Project Sponsors review the most recent *FTA Policy Guidance Federal Transit Administration Capital Investment Grant Program*, prior to starting the NEPA evaluation to ensure that evaluation criteria meet FTA's expectations for environmental review.

FTA's evaluation methods and criteria for most environmental impact areas are different from those of FHWA and other federal agencies. Furthermore, it is highly advisable that the Project Sponsor or FTA Project Sponsors discuss the scope and proposed methodology for all NEPA documents with the FTA Region IV office prior to conducting any environmental analysis. The project sponsor must also obtain the FTA Regional IV Categorical Exclusion checklist prior to starting NEPA.

Evaluation of Archaeological and Historic Resources and Wetlands for FTA uses the same guidance and documentation as described in relevant Chapters of Part 2 of the PD&E Manual. Please refer to the NEPA Introductory Courses and PD&E Manual Chapters for each of these topics for more information.

There are several resources that use the same guidance for evaluation as FHWA but that requires different documentation for FTA as different terminology is used. For example: Protected Species and Habitat, Essential Fish Habitat, and Coastal Barrier Resources that are documented as Ecologically Sensitive Areas and Endangered Species for FTA.

FTA has its own guidance, the Transit Noise and Vibration Impact Assessment Handbook, that should be used when evaluating noise impacts. There are three levels of noise analysis that can be used depending on the type and scale of the proposed transit project, the class of action, and the environmental setting and existing conditions. The technical content of each level of analysis is specified in the Transit Noise and Vibration Impact Assessment Handbook.

The three levels of analysis are:

- A Screening Procedure that identifies noise-sensitive land uses in the vicinity of the project, and if present, determines the study area for further analysis.
- A General Assessment that identifies and estimates the severity of noise impacts identified in the Screening procedure. This provides the appropriate level of detail needed to compare alternative modes and alignments.
- A Detailed Analysis that quantifies impacts through an in-depth analysis. This is usually only performed for a single alternative and documented in the Final Environmental Impact Statement or FEIS.

The properties and land use along the study corridor are categorized numerically based on FTA's Noise Criterion categories. Category 1 land use is defined as "tracts of land where quiet is an essential element in their intended purpose such as outdoor amphitheaters, concert pavilions, and National Historic Landmarks with significant outdoor use.

Category 2 land use is defined as "buildings and residences where people normally sleep including but not limited to homes, hospitals, and hotels where nighttime sensitivity to noise is of supreme importance." Category 3 is defined as "institutional land uses such as schools, libraries, theaters, and religious facilities which are primarily used during the day and evening hours where it is important to

avoid interference with activities that include speech, meditation, and concentration on reading materials.”

FTA requires that a vibration impact assessment be conducted for most transit rail projects according to the Transit Noise and Vibration Impact Assessment Handbook. Vibration is the motion of the ground transmitted into a building that can be described in terms of displacement velocity or acceleration.

Ground Borne Noise or GBN is a form of low-frequency noise that radiates from building walls and ceilings due to vibration caused by transit rail or freight rail operations. Similar to the noise impact assessment, FTA has three categories that are based on the land uses present and their sensitivity to vibrations and Ground Borne Noise. Impacts are assessed using one of the three levels of analysis, similar to those for noise analysis. For more information refer to Chapter 8 of the FTA’s Transit Noise and Vibration Impact Assessment Handbook.

Project-level air quality analysis is performed as part of the NEPA process for the purpose of identifying and disclosing project-related impacts and to evaluate possible mitigation for these impacts. The FTA Categorical Exclusion Checklist does not include an air quality impact category for a comprehensive air quality impact discussion for the FTA-funded project.

Rather, the checklist includes separate impact categories for carbon monoxide, or CO, hot spots and particulate matter, or PM, hot spots at levels of PM2.5 and PM10. Project sponsors should contact the FTA Region IV office to discuss the emissions modeling, or “hot-spot” analysis requirements, for the transit mode included in each project alternative.

Transportation impacts need to consider impacts to parking, traffic and other transit operations. The level of analysis is dependent on the project type and the relationship to the transportation network, and should be coordinated with FDOT and FTA. For example, in road running bus service may directly impact traffic flows, whereas fixed guideway systems may impact traffic near major transit stop locations.

A major element for the transportation impact evaluation is determining current and future ridership projections for the proposed transit project. Ridership can be estimated using FTA’s Simplified Trips-on-Project Software, or STOPS. For more information on the STOPS model, visit FTA’s website.

Finally, Safety and Security is a key issue for transit projects, especially rail projects. Safety looks at the impact of the project on pedestrians, traffic, the rider and employee using the system. Security considers the overall safety of the transit system from external hazards, especially at the stations or stops. Depending on the project size and type, particularly those with major transit stations, this section may require discussion of safety and security features within the stations.

FDOT is not authorized to make CE determinations for FTA. FTA Region IV will review and approve the CE checklist and associated documentation. FTA will make CE determinations based on definitions and criteria found in the Code of Federal Regulations, titles 40 and 23 respectively.

FTA has two types of CEs:

- (1) actions that only need a record in the project file that confirms the action fits the CE description and normally do not require additional approval by FTA; and,
- (2) additional actions that require FTA’s approval, as applicable, after consideration of documentation demonstrating that CE criteria are satisfied.

The categorical exclusion criteria must be met and documented as appropriate before a CE determination can be made. It must be sufficiently evident that the proposed action will not involve significant environmental impacts such as:

1. Induce significant impacts to planned growth or land use for the area;
2. Require the relocation of significant numbers of people or businesses;
3. Have a significant impact on any natural, cultural, recreational, historic, or other resources;
4. Involve significant air, noise, or water quality impacts;
5. Have significant impacts on travel patterns; or,
6. Have significant impacts either individually or cumulatively.

If any of the following unusual circumstances are present, then further coordination with FTA is required to determine if a CE is appropriate:

- Significant environmental impacts
- Substantial controversy on environmental grounds
- Significant impacts to properties protected by Section 4(f) of USDOT Act, or Section 106 of the National Historic Preservation Act, or
- Inconsistency with any federal, state or local law, requirement, or administrative determination relating to environmental aspects of the action.

Actions identified in Title 23 Code of Federal Regulations as identified CEs include:

- Utility and Similar Appurtenance Actions
- Pedestrian or Bicycle Actions
- Environmental Mitigation or Stewardship Actions
- Planning and Administration Activity
- Action Promoting Safety, Security Accessibility
- Acquisition or Transfer of Real Property Interest
- Acquisition or Maintenance of Vehicles/Equipment
- Maintenance, Rehabilitation or Reconstruction of Facilities
- Assembly or Construction of Facilities
- Joint Development of Facilities
- Emergency Response Actions
- Action within Existing Operational ROW
- Action with Limited Federal Funding
- Bridge Removal and Related Activities

- Preventative Maintenance of Culverts/Channels
- Geotechnical and Other Similar Investigations
- Highway Modernization
- Bridge Replacement or Rail Grade Separations
- Hardship or Protective Property Acquisition
- Acquisition of ROW
- Reserved for Future Use
- Facility Modernization
- Modern Facility Realignment for Rail Safety Purposes
- Facility Modernization/Expansion Outside Existing ROW

The entire list, including additional details, can be found in Part 1 Chapter 14 of the PD&E Manual. Some actions of interest include:

- Actions promoting Safety, Security, Accessibility including repairs, replacements and rehabilitation activities such as the deployment of Intelligent Transportation System or ITS or the installation of safety and communications equipment, either within or adjacent to the existing right of way.
- Actions within Existing Operational Rights of Way means right of way that has already been disturbed for an existing transportation facility or that is maintained for a transportation purpose, such as bridge footprints, clear zones, or traffic control signage.
- Reserved for Future Use does not refer to land that has been identified and reserved for future transportation uses. Rather it is a subsection of these regulations that has been reserved for the identification of a future action that qualifies as a CE.

A Public Involvement Plan should be prepared by the Project Sponsor to indicate how the community will be included in the decision-making process. FTA does not require CE documentation to be made available for a publicly advertised review period.

To comply with FDOT's requirements, a Project Sponsor may publish a notice in a local newspaper informing the public that FTA has approved a CE. This notice also serves as a notice of opportunity to request a public hearing. The environmental process is complete when FTA approves and signs the CE. This approval does not guarantee funding and should be noted in FTA's Transit Award Management System.

There is no pre-defined list of Environment Assessments, or EA, actions for FTA. An EA should be completed when the proposed action is not a CE and clearly not an EIS. Based on the degree of environmental impacts as discussed in the EA, FTA may issue a Finding of No Significant Impact, or FONSI. Otherwise, if a project's EA concludes that there is potential for significant impacts as a result of its implementation, FTA requires that the project sponsor prepare an EIS.

An EA should be concise and include the purpose and need; alternatives considered; environmental impacts, including Economic Development, Safety and Security, and Vibration and Ground Borne

Noise; and agency and public coordination. The outline for an FTA EA is similar to the one provided in Part 1, Chapter 6 of the PD&E Manual.

Resources for which the potential impact is insignificant do not require discussion but should be mentioned briefly and are typically summarized at the beginning of the document in a section titled "Resources of No Concern". Technical reports or studies that support the findings included in the EA but that are not significant should be incorporated by reference.

FTA will review and approve the EA and supporting technical documentation prior to releasing it for public and agency review. The review period is typically 30 days but may be extended for complex projects. A public hearing may be held during the review period provided notice about the public hearing is provided at least 15 days prior to the hearing and the document has been available for public review for a period of at least 21 days.

The schedule and process for public and agency review, including the public hearing, should be outlined in a Public Involvement Plan. Distribution of the EA for public and agency review can be accomplished in several ways including publication on the project website, electronic distribution via CD, and hardcopy distribution to interested agencies and placement of hardcopies in public viewing places, such as libraries and other government buildings.

If FTA determines that the project will have no significant environmental impacts and will not require preparation of an EIS, a Finding of No Significant Impact, or FONSI, is issued. This represents FTA's environmental decision and does not guarantee funding.

The FONSI:

- Briefly describes the LPA;
- Summarizes the rationale used to select the LPA from the alternatives considered;
- Summarizes all environmental impacts and findings associated with the LPA including a statement of findings on all relevant impact disciplines and environmental laws (e.g., Section 106, Section 4(f), wetlands, floodplains, coastal zone consistency);
- Summarizes specific mitigation measures that will be incorporated into the LPA to reduce environmental impacts to less than a significant magnitude; and,
- Includes an attachment of the summary of comments received during the public and agency review period and public hearing for the EA.

After the FONSI is reviewed for compliance with FTA's rules and regulations, it is approved and sent to the Project Sponsor electronically. The Project Sponsor should then announce that the environmental review process is complete for the project. This process is different from FHWA, who normally appends a cover letter to the FONSI stating that the location and design concept acceptance has been granted concurrently with approval of the FONSI.

An EIS is prepared when significant impacts are expected from a proposed project. The significance of impacts is determined based on the context and intensity of impacts. An EIS includes detailed environmental studies, and related engineering analysis, results of agency coordination, and public involvement. An EIS is conducted to evaluate the project's reasonable alternatives, specify the significant social, economic, and environmental impacts of the proposed action, and designate methods to avoid or mitigate these impacts.

Prior to preparing the EIS document, coordination with FTA is required to ensure the proposed outline and documentation complies with their requirements. The following are the principal components of an EIS:

- Purpose and need for the proposed action
- Alternatives considered, including the Build Alternatives and No-Build alternative for the proposed action
- Transportation Analysis
- Community and Social Analysis
- Physical and Environmental Analysis (the built and natural environments);
- Indirect and Cumulative Impacts
- Environmental Justice
- Section 4(f) Analysis
- Consultation and Coordination
- Financial Considerations (particularly important for New Starts, Core Capacity, and Small Starts projects)
- Evaluation of Alternatives

FTA expects EIS documents to be written for both the general public and professional staff in a logical and reader-friendly format. The document should concisely convey the study process and the issues that influenced decisions. As with the EA, supporting technical memoranda or reports should be incorporated by reference. FTA suggests development of a multi-volume document where the first volume contains a concise description of the required items and the subsequent volumes provide additional detail.

Prior to distribution for agency review, the EIS must be signed by the Regional Administrator and the authorized official of the local lead or cooperating agency. The document is then concurrently filed with the US Environmental Protection Agency and distributed to federal and state agencies for review.

The EIS process includes the steps listed here:

- Notice of Intent
- Scoping
- Annotated outline
- Coordination plan
- Draft EIS (DEIS)
- Public and agency review requirements
- Final EIS (FEIS)
- Record of Decision

Notable steps include:

- Development of an annotated outline that identifies scoping issues, prioritizes the impact areas for further consideration, and provides key information on the project development activities.
- Development of a Coordination Plan that includes the Public Involvement Plan and provides the protocol and schedule for coordination among agencies, stakeholders, and the public during the preparation of the EIS. The main goal is to expedite and improve the environmental review process by clearly establishing agency roles, responsibilities and expectations.
- FTA typically does not advertise a public and agency review period for the Final EIS. A Project Sponsor may request a review period and this 30-day comment period will be noticed in the Federal Register.
- FTA has very specific language to use for the Record of Decision or ROD. The project sponsor should coordinate with FTA Region IV staff for confirmation of language that should be used in the ROD, including the Limitation on Claims notice language.

Title 40 Code of Federal Register Section 1503.4(c) and Title 23 United States Code Section 139 allow for the preparation of an FEIS by attaching errata sheets to the DEIS if certain conditions are met. To the maximum extent practicable, and unless certain conditions exist, FTA should develop a single document that combines the FEIS and ROD unless: 1. The FEIS makes substantial changes to the proposed action that are relevant to environmental or safety concerns; or 2. There are significant new circumstances or information relevant to environmental concerns and that bear on the proposed action or the impacts of the proposed action.

During Project Development, prior to the completion of the environmental review process, a sufficient level of engineering must be performed before the project sponsor request entry into Engineering phase. At a minimum, the level of design detail should be as described in FTA's Checklist for Approval to Enter Engineering.

Coordination with FTA on the request to enter Engineering can begin prior to the completion of NEPA with a review of the strengths and weaknesses of the alternatives still under consideration.

Once the project development phase is complete, the Project Sponsor may request entry into the Engineering phase for New Starts and Core Capacity projects.

Formal oversight begins only at the completion of NEPA and is designed for each Project Sponsor based on how far the project has advanced in conceptual design work, the complexity of the project, and the Project Sponsor's ability to undertake engineering and construction.

A NEPA re-evaluation may be required if there have been changes to the project design or project boundaries, or changes to laws, regulations, or policies that may affect the environmental review process. As with entry to the Project Development, entry into Engineering is requested via a letter to the Associate Administrator for FTA's Office of Planning and Environment.

FTA evaluation, rating and approval for new starts and core capacity projects occur during the Engineering phase where the project gains commitments of all non-CIG funding and completes sufficient engineering and design.

This lesson will briefly cover FTA funding programs.

FTA has formula and discretionary grant programs. The CIG program is a subset of the discretionary grant programs, however for purposes of this lesson, they are being treated as a stand-alone category.

Funding legislation establishes three categories of eligible projects under the CIG program: New Starts, Small Starts, and Core Capacity projects. Each type of project has a unique set of requirements although many similarities exist among them. Project sponsors interested in pursuing funding for an eligible project under the CIG program should contact FTA Region IV to obtain guidance for requirements beyond those specific to the environmental review process.

The New Starts program is for projects with a total cost of greater than \$300 million or total New Starts funding sought equals or exceeds \$100 million. The total New Starts share is 60 percent with a possibility of receiving up to 80 percent in federal funds from other sources. Projects eligible for New Starts funding are fixed guideway projects such as light rail, commuter rail, or bus rapid transit. FTA identifies 3 phases for New Starts projects namely Project Development, Engineering and Full Funding Grant Agreement.

The Small Starts program is for projects with a total cost of less than \$300 million and the amount of Small Starts funding sought is less than \$100 million. Eligible projects include corridor-based bus rapid transit and fixed guideway systems. Small Starts has 2 phases namely, project development and Expedited Grant Agreement.

The Core Capacity program is for projects on existing fixed guideway systems that are at capacity or will be at capacity within 5 years. Proposed projects must increase the capacity by 10 percent and include actions such as right of way acquisition, double tracking, and signalization improvements. Like New Starts, FTA has identified 3 phases for Core Capacity projects namely Project Development, Engineering and Full Funding Grant Agreement.

Program of Interrelated Projects is a funding combination of two or more projects receiving New Starts, Small Starts or Core Capacity funds that have logical connectivity. The maximum share of CIG funds is 80% and total federal funds for the Program of Interrelated Projects as a whole may not exceed 80%. Non-federal funds committed to a project in the Program of Interrelated projects may be used as a match for any other project in the program as long as the federal share does not exceed 80%.

Formula grants are allocated to pay for transit operating and maintenance costs and therefore, these funds are rarely used for advancing construction for a new transit project. These funds are typically distributed based on the transit agency's service area population.

FTA's discretionary program funding is allocated through a competitive process with detailed evaluation criteria used for comparison purposes. Along with the CIG program, there are other discretionary FTA funded programs. Eligibility for any of these programs may require the completion of NEPA documentation consistent with FTA's guidance. More information about these programs is provided in Chapter 14.

You have now completed the NEPA Introduction Course on Transit Project Delivery. Thank you for your time and attention.