

1 INTRODUCTION

The Eastern Corridor Transit Study Transitional Analysis to Locally Preferred Alternatives (ECTS-TA) was sponsored by the Southwestern Pennsylvania Commission (SPC), Westmoreland County Transit Authority (WCTA), Allegheny County and the Pennsylvania Department of Transportation (PennDOT) to advance the results of the earlier Eastern Corridor Transit Study (ECTS) toward implementation of one or more transit investments.

1.1 STUDY HISTORY (ECTS)

The ECTS, sponsored by the Port Authority of Allegheny County (PAAC), the SPC and WCTA, was a multi-corridor Major Investment Study completed in December of 2003 that identified the public transportation needs and community concerns in an area bounded by Pittsburgh's Golden Triangle in the west, Greensburg in the east, the Allegheny River to the north and the Monongahela River to the south (see **Figure 1-1**). As part of the effort to systematically identify transit solutions to the region's transportation needs, an extensive public outreach campaign was conducted to allow the public, stakeholders and elected officials to participate in the definition of those needs. The result of this process was a Statement of Needs for the study area¹.

¹ **ECTS Statement of Needs:**

1. **Improve transit choices in the Study Corridor** – Provide more rapid transit service and choices in the study area, inclusive of community circulator routes within neighborhoods and improved connections to through routes. Improve access to Oakland from the Airport and other locations in the corridor. Consider serving areas beyond the study corridor (e.g. Pittsburgh International Airport, Cranberry) and improve service and connections to developing areas such as the Waterfront (Homestead), Monroeville, RIDC and Penn Township. Provide more park-and-ride lots for convenient access to both fixed guideway transit and fixed-route bus service.
2. **Improve the quality of service and amenities at station stops and transfer points** – Provide more direct and more efficient links between the suburbs, urban areas and activity centers. Lengthen transit service periods and provide more frequent service to allow more flexibility to access jobs and recreational activities during non-business hours. Upgrade transit stops with sufficient seating areas, protection from the elements and visually aesthetic designs. Provide better information about transit service routes, transfer points and intermodal connections including those between service providers.
3. **Preserve, protect and utilize existing transportation resources** – Identify a mechanism to preserve rail rights-of-way within the study corridor and region. Improve transit service and access in the Allegheny Valley through the use of an underutilized transportation facility (e.g. Allegheny Valley Railroad) to accommodate transit service to areas in Lawrenceville, Oakmont and New Kensington. Provide dedicated bus lanes and/or transit prioritization to speed up service between areas in Westmoreland and Allegheny Counties.
4. **Enhance environmental quality** – Relieve air and noise pollution by considering environmentally friendly transit vehicles and modes. Consider light rail vehicles or cleaner and quieter fuel technologies on the East Busway. Improve the appearance of station stops and shelters through landscaping and attractive design. Increase investments in pedestrian and bicycle facilities along existing and planned fixed guideway transit investments. Utilize existing transportation resources such as transit and railroad rights-of-way to avoid new disturbances to the environment from a construction and operational perspective.
5. **Reduce congestion with effective transit solutions** – Major roadways in the study area, such as I-376, Routes 28, 22, 30, 48, 286, 51 and 837, are congested and are projected to operate in the highly and severely congested range in future years. Provide viable transit alternatives to reduce reliance on single occupancy vehicles.
6. **Coordinate transit and community planning to enhance economic development and quality of life** – Improve collaboration between transit agencies, regional planning organizations, local townships/municipalities and neighborhood planning efforts to coordinate future transit investment locations/designs with community plans. Increase economic development opportunities along existing and planned transit guideways. Create partnerships between businesses and transit to coordinate development and service planning coordination that matches employee needs. Update transit facilities so that they are community assets.
7. **Develop a transit network that conveniently and continuously links people and activity centers** – Integrate a fixed guideway transit system that connects through Downtown Pittsburgh to serve various parts of the region. Improve service from the Hill District to other parts of the region to eliminate the need for a transfer. Reduce automobile and bus congestion in Downtown Pittsburgh to relieve gridlock during peak commuter periods and during special events.

individually or in trains operation by a single driver. Light rail alternatives in the ECTS were assumed to be powered electrically by overhead catenary wires, as is currently done on the “T” in Downtown Pittsburgh and to the South Hills.

- **Bus Rapid Transit (BRT)** – upgrades to standard local bus route transit corridors that would improve transit speed and reliability. These upgrades can include a designated bus-only busway such as exists already in Southwest Pennsylvania with the South Busway, Martin Luther King Jr. East Busway and the West Busway. On-street BRT includes less cost-intensive investments such as signal priority for buses at intersections, queue jumpers, enhances stops or stations, improvements to fare collection for faster boarding, or other modifications.

The long list of 29 transit investments was reviewed for their ability to address the corridor’s needs, effectiveness and constructability and thereby reduced to a short list of nine alternatives. A more detailed review of those nine short list alternatives reduced the list further to a set of six recommended alternatives.

1.2 STUDY PURPOSE AND FEDERAL PLANNING PROCESS

The ECTS was completed in a manner consistent with the federally prescribed process for development of transit investments that may seek federal funding, but did not complete the final step of selecting a Locally Preferred Alternative (LPA). The ECTS-TA updated the recommendations in the ECTS and conducted the public outreach necessary to designate LPAs for entry into the region’s Long Range Plan and advancement through the federal transit planning process.

The federal process, depicted in **Figure 1-2**, begins with Alternatives Analysis (AA), where transportation needs are identified, suitable solutions are developed, recommendations are made and LPAs are chosen. With concurrence from the Federal Transit Administration (FTA), one or more of the LPAs from the ECTS-TA would move into the next stages of the federal process:

- **Advanced Planning and Draft Environmental Impact Statement (DEIS)** - These two processes can be performed simultaneously. In this step, a corridor study would be performed to revisit one of the previously selected LPAs independently from the other LPAs. At the initiation of the DEIS, a public scoping process would be performed, in which it would be determined what will be reviewed in the study. At this stage, if desired, any other relevant alternatives or enhancements to the LPA could be added to the review, such as alternatives from the Oakland Transit Study, or other alternatives that have been proposed since the completion of the ECTS. A larger number of alternatives would result in a longer DEIS process. All alternatives that are added at the DEIS phase should also satisfy the purpose and needs statement developed in the AA process.

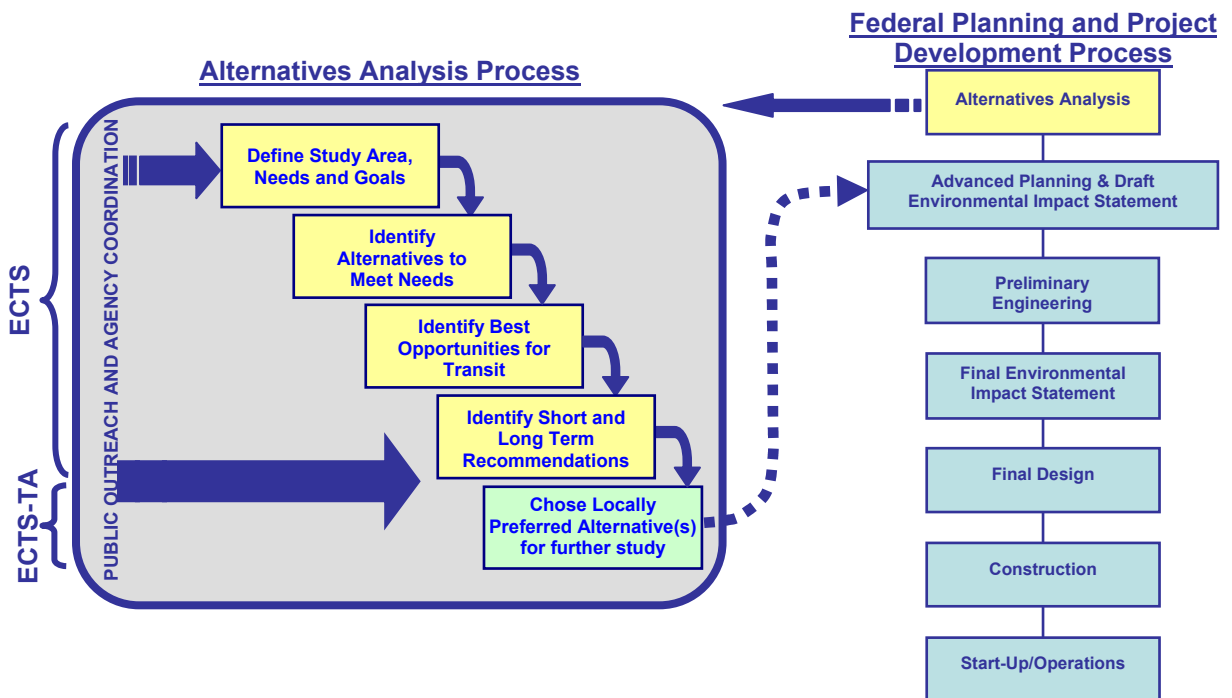
At this stage, if desired, other relevant options or alternatives to the LPA could be added to the review, including those that have been proposed since completion of the ECTS.

It should be noted that for select alternatives for which detailed planning analysis determines that major environmental impacts are unlikely (e.g. uses existing

rights-of-way, creates minimal displacements, no disturbance to natural resources, etc.), it might be possible to perform a less involved Environmental Assessment (EA) instead of a full DEIS. This, however, would be at the discretion of the FTA.

Advanced planning would be a more detailed study effort than AA since it would focus on one corridor, as opposed to the six corridors that were evaluated in the ECTS. Each alternative included through the DEIS scoping would be analyzed in the advanced planning study while coordinating with the environmental review in the DEIS. At the completion of this stage, an application for New Starts Funding would be completed and submitted to the FTA with a request to enter Preliminary Engineering.

Figure 1-2: Federal Major Investment Planning and Project Development Process



- **Preliminary Engineering (PE)** – PE would refine an LPA from the Advanced Planning stage to comply with the National Environmental Policy Act (NEPA) and to develop more detailed cost estimates. This stage is a demonstration of the sponsoring agency’s ability to design, manage and finance the construction of the transit investment.
- **Final Environmental Impact Statement (FEIS)** – The FEIS is a revision of the DEIS that accounts for any changes made to the project’s design during PE and addresses environmental issues raised during the DEIS process. It would not be required for projects that perform an EA instead of a DEIS. The FEIS would be submitted to the FTA, which would determine whether the project satisfies the environmental requirements of NEPA. If the project satisfies the requirements it would receive a Record of Decision (ROD) or a Finding of No Significant Impact

(FONSI). Once the project has completed PE and received either a ROD or a FONSI it would be eligible to advance into Final Design.

- **Final Design** – The Final Design phase is defined by the FTA to include right-of-way acquisition, utility relocation, and the preparation of final construction plans (including construction management plans), detailed specifications, construction cost estimates, and bid documents. At this point the financial plan would be finalized and the FTA could enter into a Full Funding Grant Agreement (FFGA) with the project's sponsoring agency to provide federal funds for a percentage of the project's construction costs.
- **Construction** – Once all previous steps have been completed and an FFGA has been issued, the project can begin construction.
- **Start-up and Operation** – Start-up includes testing, training and initiation of transit service.

1.3 ECTS-TA STUDY PROCESS

The ECTS-TA was not a full AA, but an incremental analysis that built on the statement of needs and the recommendations from the ECTS to choose LPA corridors for advancement through the remainder of the federal project development process. The ECTS-TA did not redo or replace the work done in the ECTS, only update it and complete the public outreach necessary to identify the LPAs.

Since the next step in the federal process allows review of an LPA corridor, inclusive of any other promising alternatives that might not have been considered at this stage, the ECTS-TA did not focus on developing new alternatives. As LPA corridors advance to the next level of study, any realistic alternatives in those corridors that satisfy the purpose and needs statement can be reviewed. This allows for new alternatives in Advanced Planning, as is evident from the wide range of study corridor needs that were identified in **Section 1.1**.

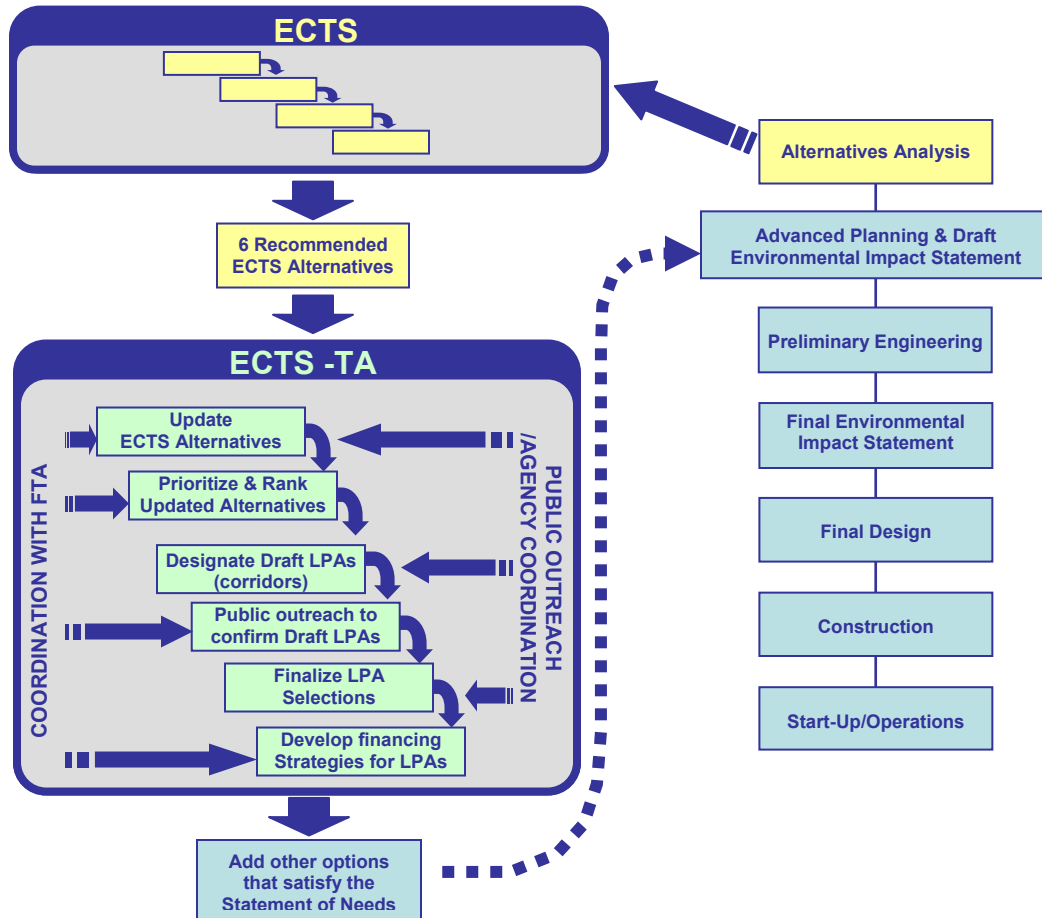
To move toward implementation of transit investments that satisfy the needs of the ECTS corridor, the ECTS-TA followed the steps shown in **Figure 1-3**:

- **Update/Modify ECTS Alternatives** – Through outreach to stakeholders the assumptions made for the ECTS alternatives were updated to reflect current conditions and any developments over the past two years. A few minor changes to the alternatives were allowed to improve their performance or cost. Cost estimates were updated to current-year dollars (2006).
- **Review the updated alternatives/Select draft LPAs** – An initial review process that was approved by the Steering Committee was completed internally to determine which alternatives have the best chance of moving forward through the federal process. Based on the results of this review, four draft LPAs were designated.
- **Public outreach to confirm draft LPAs** – The ECTS-TA alternatives were presented to stakeholders, elected officials and the public through a variety of

outreach methods to confirm or revise the selections. Following the outreach, final LPAs were designated with the approval of the Steering Committee.

- **Financing strategies** – Financing strategies were reviewed for the final LPAs. This includes identification of possible funding sources and discussion of the impacts related to various funding methods, in particular the impacts of using federal funding versus state funding.

Figure 1-3: ECTS-TA Study Process



- **Coordination with the FTA** – Throughout the ECTS-TA the FTA was consulted to ensure that the study progressed in a manner consistent with FTA's requirements for advancement to Advanced Planning and DEIS. The ECTS-TA was performed so that the ECTS purpose and needs statement, which was developed through an extensive and comprehensive public outreach effort, will satisfy the purpose and needs requirements of the next study phases.