

## 4 PURPOSE AND NEEDS

### 4.1 PURPOSE OF STUDY

The purpose of the Eastern Corridor Transit Study was to identify the transportation needs within the study area and develop appropriate transit solutions that efficiently and effectively satisfy those needs. The study effort built on existing public transportation infrastructure and systems while improving mobility, fostering economic development, considering environmental impacts, and utilizing existing transportation resources. Potential transit alternatives were explored, including improvements to existing bus service, busway / light rail extensions and/or improvements, and commuter rail service on existing railroad rights-of-way. The study encompassed the following technical tasks:

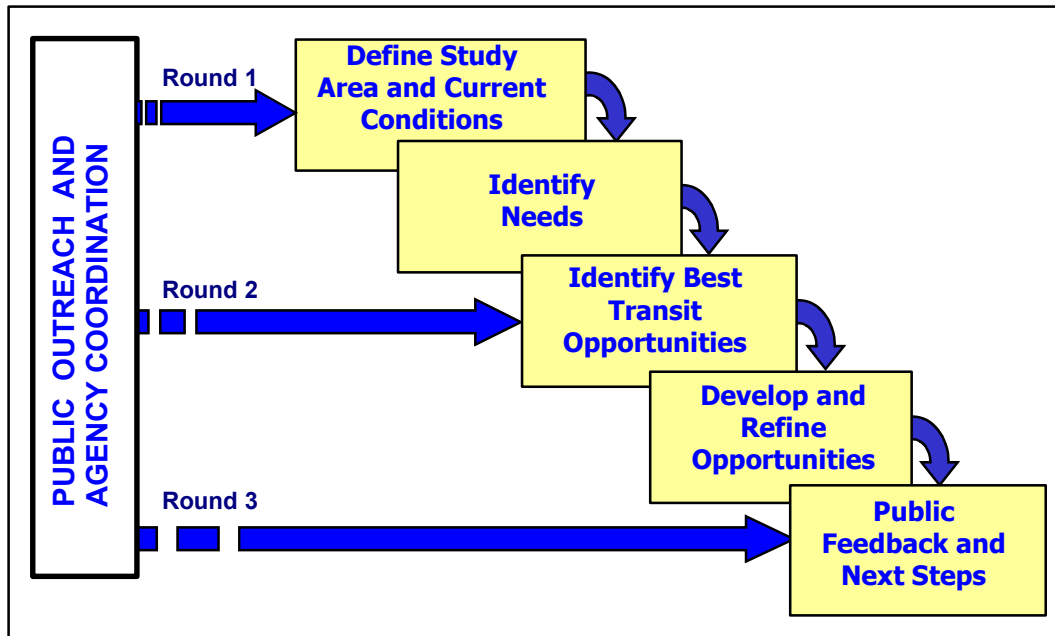
- **Needs Assessment** – Identification of existing transportation and economic conditions
- **Purpose and Need Statement** – Reasons for the study and need for transit improvements
- **Definition of Alternatives** – Development of public transportation alternatives to satisfy needs
- **Evaluation of Alternatives** – Qualitative and quantitative evaluation process to develop a Short List of Alternatives for more detailed analysis
- **Technical Analysis** – Operating, capital, ridership analysis and environmental review
- **Public and Agency Coordination** – General and targeted public outreach and agency coordination
- **Next Steps** – Guidance on the next phases of project development including Alternatives Analysis and Draft Environmental Impact Statement

In addition, this study was coordinated with several ongoing planning studies in the region including the 20/20 Visioning Study, Airport Multi-Modal Corridor Study, North Shore Connector, and the Pennsylvania High-Speed Maglev Project. The final objective of the ECTS was to identify the best opportunities for new public transportation investments in the study area that are competitive, both regionally and nationally, on a technical and economic scale.

### 4.2 STUDY PROCESS

The ECTS represents the preliminary step towards a more detailed analysis of public transportation investments for travel corridors extending east from downtown Pittsburgh. The purpose of ECTS is not to recommend any one specific transportation investment or corridor, but rather to provide information and conclusions to enable local decision makers to determine the best transit opportunities in each corridor for accommodating new and improved public transportation. This study began by defining a specific area and assessing current transportation conditions and needs. Through extensive public outreach and analysis, the study sought input from the general public and regional stakeholders to document transportation needs in each corridor and subsequently develop and evaluate public transportation opportunities to meet those needs. Three rounds of public involvement and agency coordination provided the overall guidance to the study process as illustrated in **Exhibit 4-1**.

Exhibit 4-1: ECTS Process



Next steps would include moving one or more of the best transit opportunities to the next phase of project development (e.g. AA, DEIS) after adoption into the SPC LRP.

### 4.3 STATEMENT OF NEEDS

The transportation and community needs of the study area were developed through the public outreach process, technical analyses, and agency coordination efforts. A major component to the development of the needs statement was the comments gathered at the first round of five corridor working group meetings and four open houses, as well as numerous targeted outreach sessions early in the study. Several general themes were expressed during meetings. As a result, these efforts laid the groundwork for the development of the study needs. The transportation and community needs for the Eastern Corridor Transit Study are:

#### Need 1: Improve Transit Choices in the Study Corridor

- There is a need for more rapid transit choices and service in the study area.
- There is a need for community circulator services for better access within neighborhoods and improved connections to through routes.
- Consider transit options that extend beyond the study corridor (e.g. Pittsburgh International Airport, Cranberry).
- There is a need for more park & ride lots for convenient access to both fixed guideway transit and fixed-route bus.
- Improve access to Oakland, the second largest activity center in southwestern Pennsylvania, from other points in the corridor as well as the Airport.
- There is a need for better service and connections to developing areas such as the Waterfront (Homestead), Monroeville, RIDC, and Penn Township.

**Need 2: Improve the Quality of Service and Amenities at Station Stops and Transfer Points**

- There is a need for longer service periods and more frequent service to allow more flexibility for accessing jobs and recreational activities during non-business hours.
- Upgrade transit stops with sufficient seating areas, protection from the elements, and visually aesthetic designs.
- There is a need for more direct or efficient links between the suburbs, urban areas, and activity centers.
- Provide better information about transit service routes, transfer points, and intermodal connections, including those between service providers.

**Need 3: Preserve, Protect, and Utilize Existing Transportation Resources**

- Need a mechanism to preserve rail rights-of-way within the study corridor and region.
- Better 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.
- Need for dedicated bus lanes and/or transit prioritization to speed up service between areas in Westmoreland and Allegheny Counties.

**Need 4: Enhance Environmental Quality**

- Need to relieve air and noise pollution by considering environmentally friendly transit vehicles and modes. Consider light rail vehicles on the East Busway, or at a minimum, cleaner and quieter fuel technologies that could include electric buses.
- 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.
- Station stops and shelters should be adequately landscaped with attractive designs to enhance the visual and aesthetic qualities of both existing and planned transit facilities.
- Increase investments in pedestrian and bicycle facilities along existing and planned fixed guideway transit investments.

**Need 5: Reduce Congestion with Effective Transit Solutions**

- All of the major roadways in the study area, such as I-376, Routes 28, 22, 30, 48, 286 and 837, are now and are projected to be congested, with a majority of the roadways operating in the highly and severely congested range.
- A viable alternative to single occupancy vehicle usage is needed as a way to offset the effects of increased congestion in the corridor.
- An attractive transit solution will allow for transportation choices, which can serve to diminish reliance on the automobile.

**Need 6: Coordinate Transit and Community Planning to Enhance Economic Development and Quality of Life**

- Improved collaboration with neighborhood planning efforts should be commonly pursued by transit agencies, regional planning organizations, and local townships/municipalities in an effort to coordinate and integrate future transit investment locations/designs with community plans.
- Find ways to increase economic development opportunities along existing and planned transit guideways by improving partnerships between businesses and transit through joint development initiatives and service planning coordination that matches employee needs.
- Update transit facilities so that they are community assets.

## **Need 7: Develop a Transit Network that Conveniently and Continuously Links People and Activity Centers**

- There is a need for an integrated fixed guideway transit system that connects through downtown Pittsburgh, serving differing parts of the region.
- Better service from the Hill District to other parts of the study area and region that eliminates the need for a transfer.
- Reduce automobile and bus congestion in downtown Pittsburgh to relieve gridlock during peak commuter periods and during special events.

### **4.3.1 GOALS AND OBJECTIVES**

The statement of goals and objectives is an essential component of the Alternatives Analysis project planning process. Given the considerable geographic extent of the Eastern Corridor Transit study area, the study goals had to be sufficiently comprehensive to encompass the needs of a wide array of its neighborhoods, residents, activity centers, and jurisdictions. To this end, the goals were derived from the needs, and reflect the plans and desires of the communities within the study area, as well as the region as a whole. The goals represent a fusion of the identified transportation and community needs from the extensive public outreach and agency coordination process and needs assessment analyses, the SPC LRP vision, and the factors set forth in TEA-21, as discussed below.

**Goal 1: Provide More Transit Choices and Improved Quality of Service:** This goal addresses one of the primary concerns of the study area as indicated by the public for implementing additional transit choices, such as new bus routes, busways, light rail transit, bus rapid transit or enhancing existing facilities and services will serve to meet this goal. The objectives to attain this goal are:

- To improve and/or expand public transit service/alternatives to complement existing and ongoing investments
- To improve the attractiveness of public transit by making it faster, more reliable, and more convenient to use
- To improve access to rapidly developing areas (e.g. Oakland, Waterfront, Monroeville, Penn Township)
- To enhance transit access to the transit dependent

**Goal 2: Promote Economic Development and Improve Quality of Life:** Developing alternate transportation improvements provides the means to address not only mobility and accessibility issues, but also the opportunity to enhance economic development and the general quality of life in the study area. In order to maintain a quality of life that retains residents and attracts economic growth, the transportation system must offer efficient access to important destinations and must be implemented in concert with local community planning initiatives. The objectives to attain this goal are:

- To strengthen older urban communities as centers of economic opportunity
- To broaden the range and availability of public transportation alternatives for a variety of trip purposes
- To foster Transit-Oriented Development (TOD)
- To upgrade existing transit facilities so they become community assets
- To maximize economic development opportunities along existing and planned transit routes

**Goal 3: Reduce Roadway Congestion through Transit Solutions:** In the Eastern Corridor, travel demand is dominated by the automobile with all of the major roadways in the study area projected to experience high levels of congestion into the horizon year of 2025. By offering increased public transportation solutions, the study area can achieve a reduction in automobile vehicle miles traveled, thereby reducing traffic congestion, air pollution, and energy consumption. The objectives to attain this goal are:

- To provide an effective and attractive alternative that provides a convincing option to the use of the automobile for both work and recreational trips
- To reduce vehicle miles of travel in the study area and the region
- To reduce travel times between key activity centers in the study area

**Goal 4: Minimize Impacts to the Environment and Preserve Existing Resources:** Environmental quality is a multi-faceted consideration in transportation planning, encompassing air quality, energy conservation, and the preservation of farmland, open space, and existing transportation rights-of-way, all of which have an impact on quality of life in the region. It is desirable from a local and regional perspective to invest in transportation projects that reduce impacts to environmental resources, promote more compact (less land-intensive) forms of development, and utilize existing transportation resources. The objectives to attain this goal are:

- To address residential, commercial, and industrial "sprawl" development
- To utilize environmentally friendly transit vehicles and modes
- To increase the development and use of pedestrian and bicyclist facilities
- To identify transit improvements that utilize and preserve existing and underutilized transportation resources

**Goal 5: Develop a Convenient, Cost Effective, and Integrated Transit Network:** The development of a transit network that is cost effective, efficient, and integrated is a primary goal of the Eastern Corridor Transit Study and is supported by recommendations from the general public through the public outreach process. The development of an integrated transit network that links people, communities and activity centers, will serve to increase both convenience and productivity of the transit system. The objectives to attain this goal are:

- To invest resources efficiently
- To connect to other areas of the region beyond the Eastern Corridor Transit Study area
- To connect and enhance existing transit investments such as the existing busways to allow for convenient one-seat rides to various parts of the region
- To maximize the benefits to the region of the existing Light Rail Transit system, including the Downtown subway
- To improve the productivity and cost effectiveness of the transit system
- To reduce traffic congestion in downtown Pittsburgh

