

# AMENDED RECORD OF DECISION

by the

Federal Transit Administration for the

North Shore Connector LRT Project in

Pittsburgh, Pennsylvania

## Decision

The Federal Transit Administration (FTA), in accordance with 23 CFR 771, the regulations that govern the environmental review process for transportation projects, has decided that the requirements of the National Environmental Policy Act of 1969 (NEPA) have been satisfied for the Revised North Shore Connector LRT Project, in the City of Pittsburgh, Allegheny County, Pennsylvania. The Port Authority of Allegheny County (Port Authority), the project sponsor, has applied for FTA financial assistance for the project. The North Shore Connector is an extension of Port Authority's existing 25-mile light rail transit (LRT) system in Allegheny County that will connect the Golden Triangle of the City of Pittsburgh with the City's rapidly growing North Shore of the Allegheny River.

The North Shore Connector project as originally proposed included an extension of approximately 1.4 miles in length from the existing Gateway Center Station in the Golden Triangle through a tunnel under the Allegheny River to the North Shore and a spur of about 0.2 miles in length from the Steel Plaza Station to the proposed Convention Center Station with four new stations located at Gateway Center (which will replace the existing station), PNC Park, Allegheny Avenue and the Convention Center. Due to greater than forecasted inflation rate, skyrocketing increases in the cost of concrete, steel and fuel and higher than expected bids for the construction of the tunnel beneath the river, the Port Authority analyzed alternatives which would allow for the completion of a project within budget. Port Authority determined that only by downsizing the project could they preserve the main benefits of the project to extend the light rail transit system from the Golden Triangle in downtown Pittsburgh to the North Shore.

The revised project retains the construction of the extension of the light rail line from the Gateway Center Station through a tunnel under the Allegheny River to its terminus just west of Allegheny Avenue on the North Shore, including three new stations--Gateway, North Side and Allegheny. Design and construction of the Convention Center Line and Station from the Steel Plaza Station to the proposed Convention Center Station and the acquisition of four new light rail vehicles will be deferred.

Federal Transit Administration, with Port Authority's assistance, has evaluated the project changes and has determined that no new significant impacts not already evaluated in the Final Environmental Impact Statement will result. The document entitled "North Shore Connector Environmental Report on Proposed Project Revision" supporting this conclusion is attached to this Amended Record of Decision as Attachment E. This Amended ROD supersedes the ROD issued by FTA on July 5, 2002 for the North Shore Connector LRT Project.

## **Background**

The North Shore / Central Business District (CBD) Transportation Corridor Major Investment Study (MIS) was initiated by the City of Pittsburgh and the Southwestern Pennsylvania Commission (SPC) in 1997 to address transportation deficiencies in the area comprising Pittsburgh's CBD / Golden Triangle and the North Shore. The MIS analyzed highway, parking, public transit and pedestrian improvements and recommended that a multi-modal package of transportation improvements (including fixed-guideway transit investment alternatives) between the Golden Triangle and the North Shore be analyzed in more detail in the environmental impact analysis phase of project development. The MIS concluded in 1998, followed by the issuance of the final report in early 1999.

In January 1999, Port Authority assumed responsibility for the project when it initiated, with FTA, the preparation of a Draft Environmental Impact Statement (DEIS) for a major fixed-guideway investment in the Golden Triangle/North Shore Corridor. The DEIS commenced with a 30-day public scoping period which provided the public an opportunity to comment on environmental issues of concern and to suggest alternatives. From an initial list of 61 alternatives, Port Authority undertook a screening process that reduced the number of alternatives for detailed evaluation to five: a No-Build Alternative, a Transportation System Management (TSM) Alternative, and three Light Rail Transit (LRT) Alternatives. The DEIS was circulated for public comment during a 45-day period in June and July of 2000, during which Port Authority held two public hearings on June 29, 2000. More than 80 organizations and individuals provided oral and written comments ranging from support for a particular alternative to the identification of specific environmental concerns.

After the conclusion of the public comment period, the Port Authority reviewed the public comment record and the social, economic, and environmental benefits and impacts of each alternative. In August 2000, the Port Authority Board of Directors voted to select the Gateway LRT Alternative as the Locally Preferred Alternative. Hereinafter, the Locally Preferred Alternative will be called the North Shore Connector.

Development of the FEIS beginning in January 2001 was supported by preliminary engineering to refine the project further and to respond to comments received during the public circulation of the DEIS. The alignment of the North Shore Connector was adjusted slightly to avoid impacts to sewer downshafts and to avoid conflicts with the column foundations of State Route 65 along the North Shore. The method of constructing the tunnel under the Allegheny River was changed from an immersed tube (which would require excavation of a large section of the riverbed) to a bored tunnel (which would significantly reduce the impact on the riverbed and on water quality). The profile of the tunnel under the Allegheny River was lowered to accommodate bored-tunnel construction.

Refinements were made to the North Shore Connector alignment to eliminate all potential at-grade crossings with local streets. Design of the Gateway Center Station was revised to include a new center platform to improve patron access, and the North Side Station (formerly PNC Park Station) was moved slightly to the northwest to accommodate future development. The former ITC Station cited in the DEIS and the Steeler Way Station were consolidated into one station and moved to a location straddling Allegheny Avenue. The storage tracks in the North Shore were terminated east of North Shore Drive, avoiding a potential displacement and a grade crossing.

## **Basis for Decision**

FTA has reviewed and accepted the purpose and need for the project and the corresponding goals and objectives established by the local transportation agencies involved. The North Shore Connector was selected as the Locally Preferred Alternative based on its level of satisfaction of the following goals of the project:

- Goal 1: Improve transportation access to and within the North Shore Connector study area. The North Shore Connector will provide convenient transit connections between the North Shore, the Cultural District and other downtown-area attractions and hotels.
- Goal 2: Support existing and proposed development within the study area. The North Shore Connector will provide transportation capacity and accessibility that support the existing and future development plans, including the Pittsburgh Downtown Plan and the North Shore Master Plan.
- Goal 3: Minimize the impact on the community and on the natural environment. The North Shore Connector will provide benefits and improved access to the surrounding neighborhoods while minimizing the impact on these neighborhoods and on natural and cultural resources.
- Goal 4: Produce a system that is efficient, effective, equitable, and capable of future expansion into nearby established neighborhoods. The North Shore Connector will provide an efficient, cost-effective extension of Port Authority's LRT system that is capable of being expanded to the north and to the west.

FTA has determined that the Locally Preferred Alternative reasonably satisfies these local goals and that appropriate efforts have been made and will be made to avoid and minimize the adverse impacts on the community and on the natural environment that will result. The environmentally preferable alternative, the Transportation System Management (TSM) alternative, would not fully satisfy the goals established for the project.

## **Alternatives Considered**

The planning process for the North Shore Connector began in 1997 with the MIS sponsored by the City of Pittsburgh and SPC. During the course of the MIS, more than 50 alternatives and technologies were initially considered to improve access and support existing and future North Shore and Golden Triangle/CBD development. The initial list of alternatives included automated guideway-transit (similar to the people mover systems found at major airports), low-speed magnetic levitation (maglev), LRT, and bus modes. The list of alternatives was reduced through a screening process to four:

- LRT/People Mover Combination A, consisting of an extension of the LRT system from Gateway Center to the West End Bridge area with a people mover (either automated guideway transit or low-speed maglev) from Steel Plaza Station to PNC Park.
- LRT/People Mover Combination B, consisting of a people mover (either automated guideway transit or low-speed maglev) from Gateway Center to PNC Park with an extension of the LRT system from Steel Plaza Station to the West End Bridge area.

- All-LRT, consisting of an extension of the LRT system from Steel Plaza Station to the West End Bridge area and an LRT extension from Gateway Center to PNC Park.
- All-People Mover, consisting of a new line (either automated guideway transit or low-speed maglev) separate from LRT system, that would begin in the vicinity of the Gateway Center Station, cross the Allegheny River to PNC Park, and then turn east to the Fort Wayne Bridge area and cross the Allegheny River to Steel Plaza Station.

These four alternatives were recommended for further analysis at the conclusion of the MIS.

At the start of the DEIS process, Port Authority sought, during a 30-day scoping process, public comment on potential environmental concerns and alternatives to be studied in the DEIS, including the four MIS-recommended alternatives, a No-Build Alternative and a TSM Alternative. Through the public scoping process and subsequent refinement, an initial list of 61 alternatives was developed that included LRT, automated-guideway transit or low-speed maglev modes. A three-level screening process was used that reduced the number of alternatives for detailed evaluation to five: a No-Build Alternative, a Transportation System Management (TSM) Alternative, and three Light Rail Transit (LRT) Alternatives. The LRT Alternatives included Steel Plaza LRT Alternative A, Steel Plaza LRT Alternative B and the Gateway LRT Alternative.

The DEIS was circulated for public comment during a 45-day period between June 2, 2000 and July 17, 2000, during which time Port Authority held two public hearings on June 29, 2000. At the conclusion of the comment period, the Port Authority Board of Directors selected the Gateway LRT Alternative as the Locally Preferred Alternative for the North Shore Connector.

The alternatives evaluated in the FEIS are the No-Build Alternative, the TSM Alternative and the locally preferred North Shore Connector. The No-Build Alternative represents conditions (i.e., transportation facilities and services, land uses, population and employment) that would be present in the year 2015, as described in the SPC report, *A Region on the Move: A Transportation Investment Strategy for Growth and Renewal in Southwestern Pennsylvania*. This report, updated in 1997 by the SPC, comprised the long-range plan for the southwestern Pennsylvania region at the time of the DEIS and continued to serve as the basis for the FEIS.

The TSM Alternative consisted of lower-cost capital improvements to the transportation network of the No-Build Alternative. Examples of TSM actions included traffic and/or transit service improvements to facilitate and increase transit service offered to riders. The following components were included in the TSM Alternative for the North Shore Connector:

- Increased bus frequency on Route 501.
- Shuttle bus service to the cultural attractions in the study area.
- Through-routing service on selected Port Authority bus routes.
- Additional bus service to Pittsburgh Pirates, Pittsburgh Steelers and University of Pittsburgh Panthers games.
- Easy identifiable stop locations and passenger amenities.

The North Shore Connector will extend LRT service from the existing Gateway Center Station in the Golden Triangle through a tunnel under the Allegheny River to the North Shore terminus, a distance of approximately 1.2 miles. The North Shore Connector also includes a link of approximately 0.3 miles in length between the existing Steel Plaza Station and the Convention Center which will be deferred indefinitely. If, at any time in the future, the Port Authority seeks

FTA funding to advance the Convention Center spur, FTA will review the currency and adequacy of the environmental record for that spur and, if necessary, supplement that record as appropriate.

At the existing Gateway Center Station, a new station entrance will be constructed in the triangular grass median bounded by Penn Avenue, Liberty Avenue and Stanwix Street that will direct passengers to the new platform under Stanwix Street. The existing station entrance and platform will be discontinued. The North Shore Connector will then continue northward under Stanwix Street, Fort Duquesne Boulevard, the 10<sup>th</sup> Street Bypass, the Allegheny River, Roberto Clemente Memorial Park and North Shore Drive to the site of the proposed North Side Station. Both the Gateway Center and North Side Stations will be constructed using a cut-and-cover construction method, whereas the section between the stations will be constructed primarily by using a tunnel-boring machine.

North of PNC Park, the alignment of the North Shore Connector will curve westward while transitioning from a subway configuration into an aerial configuration in the vicinity of Tony Dorsett Drive. At Art Rooney Avenue, the North Shore Connector will be completely aerial and will continue on an aerial structure over that street, behind Heinz Field, over Allegheny Avenue and on property owned by the Carnegie Science Center that will become the site of the Allegheny Station and tail tracks.

Other elements of the North Shore Connector include a traction power substation and rehabilitation of the Merchant Street underpass to improve the pedestrian environment of the underpass. The traction power substation will provide electric power to the LRT system. The Locally Preferred Alternative now includes the substation located under the Route 65 overhead ramp west of Martindale Street south of Reedsdale Street. However, during final design the other two potential locations for the substation identified during preparation of the FEIS will be re-evaluated in accordance with FTA NEPA procedures. The Merchant Street underpass links the North Shore with the North Side. The final details of its rehabilitation will be developed during final design in consultation with the affected communities.

In summer 2005, Port Authority solicited bids for the Allegheny River Tunnel. As the lowest bid was significantly over the budget for this component of the project, Port Authority considered options for reducing project costs in order to construct the project within the budget. Deferral of the Convention Center Line and the acquisition of four new rail vehicles was identified as the option which would allow the project to realize most of its benefits while staying within budget. Port Authority issued a press release on the proposed project changes on December 23, 2006.

## **Environmental Impacts and Mitigation**

The FEIS provides a detailed description of the project and of the measures that are now incorporated into the project to avoid and minimize the adverse impacts. FTA will ensure that Port Authority designs and builds the North Shore Connector in accordance with the mitigation measures contained in the FEIS and summarized in Attachment A. In addition, FTA will require that Port Authority establish a mitigation-monitoring program to ensure adequate communication of mitigation and design commitments to the teams working on final design and construction, and to provide a means for Port Authority and FTA to track the progress in accomplishing the mitigation commitments. The tracking of mitigation by Port Authority will be periodically reviewed by FTA at quarterly review meetings or through other appropriate means.

In accordance with 23 CFR 771.129, if it becomes necessary to change the scope of the North Shore Connector project or to change any mitigation measure, FTA will require an appropriate

level of environmental review (i.e., a written re-evaluation of the FEIS, an environmental assessment of the change, or a supplemental environmental impact statement) before further approving the change.

As Port Authority intends to defer the Convention Center Line, an environmental review of this change was conducted, under FTA's guidance. FTA, with Port Authority's assistance, has evaluated the project changes and determined that no new significant impacts not already evaluated in the FEIS will result. The document, North Shore Connector Environmental Report on Proposed Project Revision supporting this decision is attached to this amended ROD as Attachment E.

FTA notes the following major impacts of the North Shore Connector in reaching a decision:

***Displacements and Relocations:*** Construction of the Allegheny Station and tail track section will require acquisition and demolition, or partial demolition, of one former industrial property owned by the Carnegie Museums of Pittsburgh that currently is used for storage and temporarily houses a 40,000 square foot sports entertainment facility. This facility opened subsequent to the preparation of the FEIS. Carnegie Museums of Pittsburgh's current plans are to expand the Carnegie Science Center that will include a permanent facility to house the sports entertainment facility. While architectural design of the expanded Carnegie Science Center is currently underway, a definitive schedule for construction has not been established. It is projected that the North Shore Connector construction will require relocation of the sports entertainment facility from its current temporary location before the Carnegie Science Center expansion has been completed.

***Cultural Resources:*** FTA and Port Authority, in consultation with the Pennsylvania State Historic Preservation Officer (SHPO), have determined that the North Shore Connector may have an adverse effect on historic properties listed on or eligible for listing on the National Register of Historic Places. The adverse effects on the historic properties identified in Section 3.5 of the FEIS will be mitigated in accordance with the attached Programmatic Memorandum of Agreement (Attachment C) signed by FTA, Port Authority, and SHPO.

***Construction Impacts:*** The adverse effects of construction on the aquatic environment of the Allegheny River will be avoided through bored tunneling under the riverbed. Other construction impacts have also been considered as summarized in Attachment A.

## **Comments and Coordination**

The extensive public involvement conducted by Port Authority throughout the environmental review process is detailed in Section 9.3.1 of the FEIS. It included scoping meetings, agency coordination meetings, one-on-one briefings of neighborhood and business groups, community workshops, station design charettes, the establishment and support of advisory committees, the publication and distribution of a project newsletter, the creation of a project website, and numerous other activities.

The Notice of Availability of the FEIS was published by the Environmental Protection Agency in the May 3, 2002 Federal Register. Twenty-two letters or emails of comment were received on the FEIS, of which nine arrived from federal and state agencies and local units of government. The relevant, substantive comments are summarized, and responses to those comments are provided in Attachment B. Port Authority published a Notice of Availability in area newspapers on the

proposed project revision on December 27, 2005 and received comments which are summarized along with responses to those comments in Attachment D.

## **Determination and Findings**

### ***Environmental Finding (49 USC §§5301(e) and 5324(b))***

FTA finds that an adequate opportunity to present views was given to all parties with significant economic, social, or environmental interest in the North Shore Connector, and that the project's environmental record includes a statement on:

- the environmental impacts of the proposed project;
- adverse environmental effects which cannot be avoided;
- alternatives to the proposal; and
- irreversible and irretrievable impact on the environment.

The opportunities for public comment and involvement are detailed in Chapter 9 of the FEIS, which, together with the DEIS and this Record of Decision, constitute the environmental record for the project.

On the basis of the evaluation of social, economic, and environmental impacts contained in the FEIS and the written and oral comments offered by the public and by other agencies, FTA has determined, in accordance with 49 USC §§5301(e) and 5324(b), that:

- Adequate opportunity was afforded for the presentation of views by all parties with a significant economic, social, or environmental interest, and fair consideration has been given to the preservation and enhancement of the environment and to the interest of the community in which proposed project is located; and
- All reasonable steps have been taken to minimize adverse environmental effects of the proposed project, and where adverse environmental effects remain, there exists no feasible and prudent alternative to avoid or further mitigate such effects.

### ***Conformity with Air Quality Plans***

The Clean Air Act, as amended, requires that Federally-funded transportation projects in air quality nonattainment and maintenance areas conform to the State Implementation Plan (SIP) for eliminating or reducing the severity and number of violations of the national ambient air quality standards (NAAQS) and for attaining such standards. The regulation of the U.S. Environmental Protection Agency implementing this provision of the Clean Air Act (40 CFR Parts 51 and 93) establishes criteria for demonstrating that a transportation project is in conformity with the goals of the SIP. The Pittsburgh metropolitan area in which the North Shore Connector is located was recently reclassified by EPA as an ozone maintenance area. The project is therefore subject to the conformity requirements of the EPA regulation.

The North Shore Connector is included in the SPC's regional transportation plan and in the 2005-2008 Transportation Improvement Program (TIP) for the southwestern Pennsylvania region. SPC, FTA, and the Federal Highway Administration have determined that that plan and TIP conform. In addition, micro-scale air quality analyses in the FEIS indicate that no localized violations of the NAAQS would result from implementation of the North Shore Connector. The

North Shore Connector therefore satisfies the EPA criteria for project-level conformity. FTA finds that the project conforms to air quality plans for the area.

***Environmental Justice***

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires that federal agencies consider and address adverse environmental effects of proposed federal projects on minority and low-income communities. The North Shore Connector was evaluated with respect to its impacts on minority and low-income communities in the FEIS. This analysis determined that anticipated human and environmental effects of the project would not be disproportionately borne by minority or low-income populations. In addition, the North Shore Connector will provide benefits to minority and low-income persons in the surrounding neighborhoods through increased mobility and access to jobs in the North Shore area and the Golden Triangle through LRT and bus service to the new LRT stations and to other centers served by the existing LRT system, and increased employment opportunities during construction of the project. Therefore, FTA finds that the North Shore Connector project does not disproportionately adversely affect minority or low-income populations.

***Section 4(f) Determination***

Section 4(f) of the Department of Transportation Act (49 USC §303(c)) affords certain protections to public parks, recreation areas, wildlife habitats, and historic sites. Federal regulations that implement Section 4(f) found at 23 CFR 771.135 specify that such lands may be used for a transportation project only if there is no feasible and prudent alternative to such use, and the project includes all possible planning to minimize harm to the resources resulting from such use.

The FEIS identified no resources protected by Section 4(f) that would be permanently used by the North Shore Connector. Two protected resources, however, would be temporarily used – the Allegheny Riverfront Park in the Golden Triangle and the North Shore Riverfront Park in the North Shore. Portions of both parks would be disturbed in order to construct the tunnel under the Allegheny River. Upon completion of construction activities, Port Authority will restore the parks to their original condition, and there will be no permanent impact on the use of the parks.

FTA has determined that there is no prudent and feasible alternative to the temporary use of the Allegheny Riverfront Park and the North Shore Riverfront Park and that all possible planning has been undertaken to minimize harm to these park resources.

There are two historic resources in the project area that may be affected by the project, making them subject to Section 106 of the National Historic Preservation Act as well as Section 4(f). They are listed in Section 10 on page 10-4 of the original Final EIS document. FTA has determined that with certain design considerations, there will be no adverse effect on these resources: Port Authority will ensure that the project design in the vicinity of the properties is consistent with the Secretary of the Interior's Standards for Rehabilitation of Historic Properties and is developed by architects who meet or exceed Secretary of the Interior's Professional Qualifications Standards. The requirements of the Section 106 Agreement (Attachment C) will ensure that the qualities, features, and attributes of the properties that qualify them for the National Register are not substantially impaired by the project. With respect to Section 4(f), although the construction plans require construction of a passageway under one of the buildings, consistent with the intent of Section 6009 of SAFETEA-LU, FTA finds the Section 4(f) use of the resource to be de minimis.

/signed by/ \_\_\_\_\_

Susan Borinsky  
Regional Administrator, Region III  
Federal Transit Administration

Date: June 15, 2006 \_\_\_\_\_

## **Attachment A**

### **Mitigation Program for the North Shore Connector**

The FEIS provides a detailed description of the project and of the measures that are now incorporated into the project to avoid and minimize the adverse impacts. FTA will ensure that Port Authority designs and builds the North Shore Connector in accordance with the mitigation measures contained in the FEIS. To that end, FTA will require that Port Authority establish a mitigation monitoring program to ensure adequate communication of mitigation and design commitments to the teams working on final design and construction, and to provide a means for Port Authority and FTA to track the progress in accomplishing the mitigation commitments. The tracking of mitigation by Port Authority will be periodically reviewed by FTA at quarterly review meetings or through other appropriate means. This Attachment provides a summary of the mitigation commitments in the FEIS. This summary is intended to be the starting point for the mitigation tracking program.

1. Section 10 of the Rivers and Harbors Act of 1899 prohibits the placement of any obstruction within a navigable waterway of the United States unless such obstruction has received approval by the US Army Corps of Engineers (USACE). The FEIS described the need to place temporary cofferdams within the Allegheny River during construction of the North Shore Connector. Port Authority will coordinate with the USACE during final design regarding the Section 10 permitting process. Any conditions placed on the Section 10 permit by the USACE will be added to this mitigation tracking program.
2. Port Authority will minimize the temporary use of the Allegheny Riverfront Park and the North Shore Riverfront Park. The portion of the parks disturbed in order to construct the tunnel under the Allegheny River will be minimized. Port Authority will make a record of the original condition of the park before construction and will restore the park to its original condition immediately after project construction in the area is completed.
3. All real property acquisition will be in accordance with 49 CFR Part 24, the federal regulation adopted pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
4. Port Authority will meet with Carnegie Museums of Pittsburgh as necessary to coordinate the design and construction of the Allegheny Station and tail track section with the architectural design of the expanded Carnegie Science Center and with the other plans of the Carnegie Museums of Pittsburgh.
5. Port Authority will prepare an addendum to the Phase IA Archaeological Survey to cover areas outside of the Area of Potential Effect (APE) that might be impacted by the North Shore Connector, such as deposit areas for excavation fills, haul roads or other similar project-related impacts.
6. Port Authority will conduct field tests and consult with SHPO regarding the need for additional archaeological surveys and data recovery. If archaeological data recovery is required by SHPO, Port Authority will disseminate information to the public about the data recovered.

7. Port Authority will provide SHPO with an opportunity to comment on schematic designs, station architecture, landscape designs and development guidelines.
8. Port Authority will prepare and implement a Maintenance and Protection of Traffic (MPT) Plan. Port Authority will coordinate with PENNDOT in the preparation of the MPT plan.
9. Port Authority will manage noise, vibration and fugitive dust through the enforcement of industry standards.
10. Port Authority will establish instrumentation monitoring of buildings and structures adjacent to the construction.
11. Port Authority will provide alternative pedestrian access to Allegheny Riverfront Park in the Golden Triangle and the North Shore Riverfront Park in the North Shore during construction.
12. Port Authority will restore Allegheny Riverfront Park and North Shore Riverfront Park to their pre-construction condition, in consultation with the City of Pittsburgh and the Sports and Exhibition Authority.
13. Port Authority will restore streets and sidewalks in coordination with the City of Pittsburgh.
14. Port Authority will incorporate Best Management Practices and erosion and sedimentation control to minimize water quality impacts.
15. Port Authority will restore the riverbed of the Allegheny River in consultation with the Pennsylvania Fish and Boat Commission if soil stabilization is conducted in the Allegheny River.
16. Port Authority will reconstruct seawalls in consultation with the Pennsylvania Fish and Boat Commission.
17. Port Authority will minimize settlement of adjacent buildings through ground stabilization techniques.
18. Port Authority will provide Penn Avenue Place with water for its cooling system should operation of its well needs to be suspended during construction.
19. Port Authority will coordinate with the owners of all affected buildings to mitigate construction-related impacts and to restore the affected properties to their pre-construction condition.
20. Port Authority will develop disposal, remediation and containment plans in accordance with guidelines of the U.S. Environmental Protection Agency and the Pennsylvania Department of Environmental Protection regarding contaminated materials.
21. Port Authority will coordinate with the U.S. Army Corps of Engineers and the U.S. Coast Guard Marine Safety Office in Pittsburgh during final design and construction concerning conflicts to river navigation.
22. Port Authority will coordinate with the appropriate state and local agencies during final design and construction concerning threatened and endangered species, erosion and sedimentation control, and storm water management.

23. Port Authority will coordinate with the environmental review agencies during final design and construction concerning appropriate areas for the disposal of clean fill to ensure that it is not placed in an area that violates environmental regulations (e.g., a wetland).
24. Port Authority will coordinate with the environmental review agencies during final design and construction to identify appropriate locations for the disposal of suspected contaminated waste.
25. During final design, Port Authority will coordinate with the Pennsylvania Fish and Boat Commission (PFBC) regarding the replacement of the seawall and riverbed stabilization techniques.
26. Port Authority will take additional samples of riverbed sediment during final design to test for contamination and review the testing results with the PFBC.
27. Port Authority will use bored tunnel as the means of constructing the tunnel under the Allegheny River. Port Authority will ensure that the maximum amount of subsidence that occurs in the riverbed is approximately one inch.
28. During final design, Port Authority will provide the PFBC with additional information on the design of the replacement seawall, riverbed stabilization and waste containment techniques, potential for encountering contaminated riverbed sediments, and potential for riverbed subsidence.
29. Port Authority will coordinate with the Pennsylvania Department of Environmental Protection (PaDEP) during final design and construction to meet the requirements of the permitting process for PaDEP.
30. Port Authority will obtain from the Pennsylvania Department of Transportation (PENNDOT) a Highway Occupancy Permit to facilitate PENNDOT review of the North Shore Connector as it relates to PENNDOT rights-of-way.
31. Port Authority will coordinate with PENNDOT in acquiring appropriate aerial and subsurface easements for placement of the North Shore Connector above or below PENNDOT rights-of-way.
32. Port Authority, as part of the North Shore Connector project, will improve the pedestrian environment of the Merchant Street underpass. Details of the improvement will be determined during final design in consultation with the community.
33. Port Authority will investigate off-site pedestrian improvements (such as improvements to the northern sidewalk of Ridge Avenue) that are not included in the North Shore Connector project to determine whether parties such as the City of Pittsburgh and the Sports and Exhibition Authority would be interested in pursuing sidewalk, street lighting, or other improvements in conjunction with the project to promote and enhance use of the transit system.
34. The Port Authority will incorporate performance specifications into construction contracts to require contractors to minimize construction-related noise, dust and aesthetic impacts.

35. Port Authority will coordinate with Carnegie Museums of Pittsburgh to integrate the plans of the North Shore Connector with the expansion plans of the Carnegie Science Center to the greatest degree possible.

36. Port Authority will work with the Carnegie Museums of Pittsburgh to determine ways of maintaining the function of a two-way Reedsdale Street (e.g., through a one-way couplet with North Shore Drive).

37. With respect to the impacts to the walkways along the river during construction, Port Authority will maintain pedestrian access to the park and provide detours during construction.

38. During final design, Port Authority will develop the final details of its rehabilitation of the Merchant Street underpass that links the North Shore with the North Side in consultation with the affected communities.

## **Attachment B**

### **Comments on the FEIS and Responses**

#### **North Shore Connector Project**

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The Notice of Availability of the FEIS for the North Shore Connector in Pittsburgh was published by the Environmental Protection Agency in the May 3, 2002 Federal Register. Twenty-two letters or emails of comment were received on the FEIS, of which nine arrived from federal and state agencies and local units of government. The relevant, substantive comments are summarized, and responses to those comments are provided below.

#### **U.S. Coast Guard Eighth Coast Guard District**

The Eighth Coast Guard District offered comments concerning conflicts to river navigation during construction and the need to coordinate with the U.S. Army Corps of Engineers and the U.S. Coast Guard Marine Safety Office in Pittsburgh to minimize any impacts. Port Authority has and will continue to coordinate with these agencies during final design and construction.

#### **U.S. Environmental Protection Agency, Region III**

The Region III Office of the U.S. Environmental Protection Agency (EPA) stated that in general, “the FEIS addresses our comments on the DEIS”. EPA also offered three comments about the need for future coordination with local agencies regarding threatened and endangered species, erosion and sedimentation control and storm water management. Port Authority will continue to coordinate with the appropriate state and local agencies during final design and construction. Two comments pertained to earth movement – one stating that clean fill should not be placed in an area that violates environmental regulations and the other recommending that the conditions in the permits of area landfills be reviewed to determine if suspected contaminated waste can be accepted at those sites. Port Authority will coordinate with the environmental review agencies during final design and construction concerning permitting issues. One comment noted a change in the air quality status of the Pittsburgh region. The region has been upgraded to an ozone maintenance area, rather than the non-attainment status described in the FEIS.

#### **Pennsylvania Fish and Boat Commission**

The Pennsylvania Fish and Boat Commission (PFBC) concurred with the selection of the Gateway LRT Alternative as the Locally Preferred Alternative and with the selection of the bored tunnel as the means of constructing the tunnel under the Allegheny River. The PFBC also requested during final design additional information on the design of the replacement seawall, riverbed stabilization and waste containment techniques, potential for encountering contaminated riverbed sediments, and potential for riverbed subsidence. During final design, Port Authority will coordinate with the PFBC regarding the replacement of the seawall and riverbed stabilization techniques. Port Authority will also take additional samples of riverbed sediment during final design to test for contamination and review the testing results with the PFBC. With respect to the comment on

subsidence, it has been estimated that the maximum amount of subsidence that is likely to occur is approximately one inch.

### **Pennsylvania Department of Environmental Protection**

The Pennsylvania Department of Environmental Protection (PaDEP) offered overall guidance involving permitting process, air quality, environmental cleanup, mining, oil and gas, soils and waterways, waste management, water supply management and water management activities. Port Authority has coordinated with PaDEP throughout the DEIS and FEIS efforts and will coordinate with PaDEP during final design and construction to meet the requirements of the permitting process for PaDEP.

### **Pennsylvania Department of Transportation**

The Pennsylvania Department of Transportation (PENNDOT) provided three comments regarding coordination with PENNDOT whenever PENNDOT rights-of-way are affected, one comment concerning traffic levels of service, and one comment recommending stronger justification of the selection of the Locally Preferred Alternative. The three right-of-way related comments pertain to acquisition of a Highway Occupancy Permit, acquisition of easements and use of state roadways as detours. Port Authority will obtain from PENNDOT a Highway Occupancy Permit to facilitate PENNDOT review of the North Shore Connector as it relates to PENNDOT rights-of-way. Port Authority will also coordinate with PENNDOT in acquiring appropriate aerial and/or subsurface easements for placement of the North Shore Connector above or below PENNDOT rights-of-way and in the preparation of the MPT plan. The comment pertaining to traffic levels of service noted that several intersections within the project area are anticipated to operate at Level-of-Service “E” and “F” during the design year and that any degradation of operation below Level of Service D attributable to the North Shore Connector must be mitigated. As described in the FEIS, the North Shore Connector does not cause these intersections to operate at Level of Service “E” and “F”; they are anticipated to do so under the No-Build and TSM Alternatives as well. Justification of the selection of the Locally Preferred Alternative is documented in Section 2.1.3 of the FEIS.

### **Allegheny West Civic Council, Inc.**

The Allegheny West Civic Council, Inc. wrote to express support for the North Shore Connector and to request an additional point of ingress and egress at Allegheny Station. During the preparation of the FEIS, means of ingress and egress were studied in detail and reviewed with adjacent property owners at public meetings and design workshops. Additional consideration of ingress and egress will be made during final design.

### **Community College of Allegheny County**

The Community College of Allegheny County (CCAC) commented on the condition of two pedestrian underpasses (Allegheny Avenue and Merchant Street) in the vicinity of CCAC campus. CCAC believes that the Allegheny Avenue underpass presents safety concerns for pedestrians and that the northern sidewalk along Ridge Avenue is in poor condition. The route to CCAC via the Merchant Street underpass is “circuitous” and the environment of the underpass itself not pedestrian friendly. The Sports and Exhibition Authority has plans to improve the lighting at the Allegheny Avenue underpass. Port

Authority, as part of the North Shore Connector project, will improve the pedestrian environment of the Merchant Street underpass. Details of the improvement will be determined during final design. Requested off-site improvements (such as improvements to the northern sidewalk of Ridge Avenue) would not be covered by the North Shore Connector, however, Port Authority will investigate whether parties such as the City of Pittsburgh would pursue a sidewalk improvement.

### **Nancy Ward Baldenofo**

Ms. Baldenofo wrote to express support for future LRT service to the Manchester and Allegheny West neighborhoods.

### **Carnegie Museums of Pittsburgh**

The Carnegie Museums of Pittsburgh offered additional information regarding the attendance at the Carnegie Science Center and the expansion plans for the Science Center. One comment expressed concern that the track alignment as shown in the FEIS would jeopardize the potential widening of Reedsdale Street in order to allow for two-way operation. Two other comments expressed a desire to work with Port Authority to integrate the design of the Allegheny Station with the expansion of the Science Center. One comment noted that: “while we support the project in general, it is understood that we will expect full, complete and good faith evaluation and consideration of the property and the property rights taken and impacted and of the impact to the Carnegie Science Center ongoing operations, revenues and financial obligations”. Port Authority has and will continue to coordinate with Carnegie Museums of Pittsburgh to integrate the plans of the North Shore Connector with the expansion plans of the Carnegie Science Center to the greatest degree possible. Regarding the track alignment comment, it might not be possible to adjust the track alignment without creating additional impacts to the Science Center and adjacent properties; however, Port Authority will work with the Carnegie Museums of Pittsburgh to determine ways of maintaining the function of a two-way Reedsdale Street (e.g., through a one-way couplet with North Shore Drive). Acquisition of property will be in accordance with 49 CFR Part 24, the federal regulation adopted pursuant to the Uniform Relocation and Real Property Acquisitions Policies Act of 1970, as amended.

### **James L. Ferris**

Mr. Ferris wrote to express opposition to the North Shore Connector, stating that pedestrian access between the Golden Triangle and the North Shore is sufficient. The North Shore Connector is included on the Southwestern Pennsylvania Commission’s *2025 Transportation and Development Plan for Southwestern Pennsylvania* and, therefore, is an important part of the region’s long range transportation system.

### **Michael Coleman**

Mr. Coleman, a resident of Allegheny West, provided six comments. One requested additional information of a hazardous-materials site west of the terminus of the North Shore Connector. Two were editorial in nature regarding the FEIS document. The remaining three comments were more substantive in nature – one asked about the impacts

to the walkways along the river during construction, one suggested additional points of ingress and egress at Allegheny Station, and one suggested that the alternative locations for a traction power substation would likely be unacceptable. With respect to the impacts to the walkways, Port Authority will maintain pedestrian access to the park and provide detours during construction. In regard to Allegheny Station, Port Authority has coordinated ingress and egress with affected property owners during the FEIS preparation and has found the design to be adequate. The alternative locations for the traction power substation were identified to minimize visual impacts – both locations are under transportation facilities, where visual quality impact would be less than that elsewhere in the project area. The locations will be reviewed during final design.

### **Sam Robinson**

Mr. Robinson submitted two comments. One suggested that the platforms of stations on the North Shore Connector should be designed to accommodate three-car trains. The second suggested retaining the loop at Gateway Center and incorporating into the track design the provision for short-turning North Shore Connector trains at Gateway Center so that the existing system and the North Shore Connector could operate independently if so desired. The land area bounded by the Two Gateway Center, Four Gateway Center and Fifth Avenue Place buildings was found to be too small to accommodate a redesigned station containing a platform long enough to serve a three-car train. The area was also found to be too small to retain the Gateway loop. Tail tracks west of Allegheny Station provide a place to store trains instead of returning all morning weekday trains to South Hills Village.

### **Glenn Walsh**

Mr. Walsh commented in support of the North Shore Connector and provided specific design-related comments: including more than one point of ingress and egress at stations (including a pedestrian bridge over Allegheny Avenue); use of center platforms at all stations; incorporation of fans at passenger waiting areas at stations; and redesigning the Gateway Center Station to maintain use of the existing headhouse. Access to the stations was analyzed in detail in the FEIS and reviewed with the public at a public meeting on March 22, 2001. The preferred means of pedestrian access will be by use of sidewalks along city streets and signalized crosswalks to the station entrances and exits as shown in the FEIS. Based on public input, the Gateway Center Station was redesigned as a center platform station to enhance access and operations, thus the current headhouse cannot be utilized. Passenger waiting area fans will be considered during final design.

**Attachment C**  
**Section 106**  
**Programmatic Memorandum of Agreement**  
**North Shore Connector Project**

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37 NOW, THEREFORE, the FTA, Port Authority and the SHPO agree that the PROJECT shall be  
38 administered in accordance with the following stipulations to satisfy the FTA's Section 106  
39 review requirements for all undertakings and aspects of the project.

40

41

## STIPULATIONS

42 The FTA will ensure that Port Authority implements the following measures:

### 43 I. ARCHAEOLOGICAL RESOURCES

44 A. Port Authority, the FTA and the SHPO have coordinated in the development of, agreed  
45 upon and accepted a Phase IA Archaeological Survey (SURVEY). Pursuant to the  
46 SURVEY, Port Authority has identified which parcels within the APE that will require field  
47 tests.

48 During the final design phase of the project, Port Authority will prepare an Addendum to  
49 the SURVEY to identify all other areas where potential impacts beyond the boundaries  
50 of the APE may occur, including deposit areas for excavation fills, haul roads or other  
51 similar project-related impacts.

52 B. Set forth in the Appendix to this Agreement is a summary of the proposed fieldwork and  
53 archaeological monitoring to be done on the identified parcels within the APE.

54 C. Port Authority will conduct these field tests and make a recommendation to the SHPO  
55 regarding the need for further investigations. If the SHPO determines such further  
56 investigations are necessary, Port Authority will conduct the field work and make  
57 recommendations regarding eligibility for listing on the REGISTER of the identified  
58 properties to the SHPO in a Phase II Archaeological Survey Report which will include  
59 recommendations regarding data recovery/treatment plans.

60 D. Port Authority, in consultation with the FTA and the SHPO, will develop Data Recovery  
61 Plans, if required. The plans will be consistent with the Secretary of Interior's Standards  
62 and Guidelines for Archaeological Documentation (48 FR 44734-37). The plans will take  
63 be prepared in accordance with the Advisory Council on Historic Preservation's  
64 (COUNCIL) publication *Treatment of Archaeological Properties* (ACHP 1980, Draft),  
65 subject to any revisions prior to completion of the plan, and in accordance with the  
66 Bureau of Historic Preservation/Pennsylvania Historical and Museum Commission's  
67 *Cultural Resource Management in Pennsylvania: Guidelines for Archaeological*  
68 *Investigations* (July 1991). Port Authority will finalize the data recovery/treatment plans  
69 after comments, if any, are received and will implement the plan for each property as  
70 agreed upon by Port Authority, the FTA and the SHPO.

71 E. Within 180 days of the completion of fieldwork, done pursuant to the data  
72 recovery/treatment plans, Port Authority will submit a formal report to the SHPO which  
73 documents the eligibility of the archaeological resources for listing on the REGISTER,

74 and efforts taken to minimize or mitigate any effects of the PROJECT on such  
75 resources. If the report cannot be completed within 180 days, Port Authority will submit  
76 to the SHPO a management summary evaluating the results of the data  
77 recovery/treatment plans. The SHPO will respond to the recommendations regarding  
78 determinations made in the formal report, or management summary; within 30 days of  
79 receipt from Port Authority.

80 F. Port Authority will ensure that any human remains and grave-associated artifacts  
81 encountered during the archaeological investigations are brought to the immediate  
82 attention of the SHPO, the COUNCIL, and Tribal Historic Preservation Offices and/or  
83 appropriate descendant populations. No activities that might disturb or damage the  
84 remains will be conducted until all parties have determined whether excavation is  
85 necessary and/or desirable. All procedures will follow guidance outlined in the Native  
86 American Graves Protection and Repatriation Act of 1990 (P.L. 101-601), the National  
87 Park Service Publication, National Register Bulletin 41 *Guidelines for Evaluation and*  
88 *Registering Cemeteries and Burial Places* (Washington, DC, 1992) and the  
89 Pennsylvania Historical and Museum Commission's *Policy for the Treatment of Burials*  
90 *and Human Remains* (1993).

91 G. Port Authority shall comply with 36 CFR 800.13 if archaeological resources are  
92 discovered during the implementation of the undertaking.

93 H. All records and materials resulting from the archaeological investigations will be curated  
94 in accordance with 36 CFR 79 and the curation guidelines set forth in the Bureau for  
95 Historic Preservation/Pennsylvania Historic Museum Commission's Cultural Resource  
96 Management in Pennsylvania: Guidelines for Archaeological Investigations (July 1991).  
97 The submission of records and materials shall include the appropriate curation fee.

98 I. Port Authority will ensure that research results from Data Recovery excavations at  
99 eligible archaeological sites will be disseminated to the public. Public information  
100 materials may include newsletters, pamphlets, brochures, artifact displays, lectures or  
101 exhibits. Drafts of all educational materials will be submitted to the SHPO for comment  
102 prior to distribution to the public.

## 103 II. ARCHITECTURAL RESOURCES

104 A. Historic architectural resources have been identified for this PROJECT and are detailed  
105 in a Determination of Eligibility Report submitted to the SHPO. Resources that have  
106 been listed or determined eligible for the National Register are summarized in Chapter 3  
107 of the FEIS.

108 B. Port Authority has applied the criteria of effect to those historic architectural resources  
109 identified in Chapter 3 of the FEIS that are listed or determined eligible for listing on the  
110 REGISTER (HISTORIC PROPERTIES) and has prepared a Determination of Effect  
111 Report (EFFECT REPORT) on these resources.

112 C. The SHPO has reviewed the EFFECT REPORT and has concurred with the effect  
113 determinations for each architectural resource, as outlined in Chapter 3 of the FEIS.

114 **III. DESIGN REVIEWS**

115 For those components of the system that may visually affect HISTORIC PROPERTIES (i.e.  
116 head houses and ancillary facilities), Port Authority has and will continue to develop design  
117 documents in consultation with the SHPO. These design submittals will serve as the baseline  
118 for the PROJECT and will be agreed upon by Port Authority and the SHPO prior to the adoption  
119 of a final design. Documents will include schematic designs, conceptual station design and  
120 station architecture, landscape designs, and development guidelines. The SHPO will be  
121 afforded the opportunity to review and comment on these documents and schematic designs to  
122 determine whether the proposed design is compatible with affected HISTORIC PROPERTIES  
123 and the STANDARDS. The SHPO shall respond within 30 calendar days to any design  
124 submittal pursuant to this AGREEMENT. To facilitate these reviews PORT AUTHORITY may  
125 hold a review meeting with SHPO following each design submittal.

126 **IV. PROJECT MODIFICATIONS**

127 Should changes be proposed to the PROJECT, prior to the signing of a full funding grant  
128 agreement, that would alter the Determinations of Effect, Port Authority and FTA shall notify and  
129 consult with SHPO to determine what, if any, action should be taken pursuant to this  
130 AGREEMENT.

131 **V. DISPUTE RESOLUTION**

132 If at any time during the implementation of this AGREEMENT, Port Authority, or the SHPO  
133 objects within 30 days to any action proposed, or any failure to act pursuant to this agreement,  
134 they may file written objections with the FTA. However, prior to filing such objections, any party  
135 to this agreement shall attempt to resolve any dispute with Port Authority before involving the  
136 FTA. The FTA shall notify the parties of this agreement of the objection, and then take the  
137 objection into account, consulting with the objector and at the objector's request, with any of the  
138 parties to this agreement in order to resolve the objection. The FTA will facilitate resolution with  
139 any of the parties involved.

140 If the FTA determines that the objection cannot be resolved, then the FTA shall forward all  
141 documentation relevant to the dispute to the COUNCIL. Within 30 days after receipt of all  
142 pertinent documentation, the COUNCIL will either:

- 143 1. Provide the FTA with recommendations, which the FTA will evaluate in reaching a  
144 final decision regarding the dispute; or
- 145 2. Notify the FTA that it will comment pursuant to 36 CFR Section 800.7(b) and Section  
146 110(1) of the National Historic Preservation Act and then proceed to comment. Any  
147 COUNCIL comment provided in response to such a request will be taken into  
148 account by the FTA in accordance with 36 CFR Section 800.6(a)(1)(C)(ii) with  
149 reference to the subject of the dispute.

150 Any recommendation or comment provided by the COUNCIL will be understood to pertain only  
151 to the subject of the dispute, the FTA's responsibility to carry out all actions under this  
152 AGREEMENT that are not the subject of the dispute will remain unchanged.

153 **VI. MONITORING**

154 The COUNCIL and the SHPO may monitor activities carried out pursuant to this AGREEMENT,  
155 and the COUNCIL will review such activities if so requested.

156 **VII. DISCOVERY**

157 If historic properties are discovered or unanticipated effects on historic properties occur, Port  
158 Authority will notify the SHPO and make reasonable efforts to avoid, minimize or mitigate  
159 adverse effects to such properties. Port Authority and the SHPO shall be guided by steps  
160 established in 36 CFR Section 800.13.

161 **VIII. AMENDMENTS**

162 Any party to this AGREEMENT may request that it be amended. Any amendments shall be in  
163 writing and signed by all parties.

164 **IX. TERMINATION OF AGREEMENT**

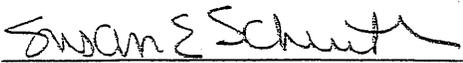
165 Any signatory to this AGREEMENT may terminate it by providing thirty (30) days-notice to the  
166 other parties, provided that the parties will consult during the period prior to termination to seek  
167 agreement on amendments or other actions that would avoid termination. In the event of  
168 termination, Port Authority will comply with 36 CFR Sections 800.3 through 800.13 with regard  
169 to the undertakings covered by this AGREEMENT.

170 **X. DURATION OF AGREEMENT**

171 In the event that construction of this undertaking has not begun within five (5) years of the date  
172 of this AGREEMENT, the FTA and Port Authority will consult with the SHPO to extend or amend  
173 this Programmatic Agreement.

174 Execution of this AGREEMENT and implementation of its terms evidences that the FTA has  
175 afforded the COUNCIL a reasonable opportunity to comment on the PROJECT and that the  
176 FTA has taken into account the effects of the PROJECT on historic properties.

177 **FEDERAL TRANSIT ADMINISTRATION**

178 By: 

179 Date: JUN 19 2002

180

181 PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICE

182 By: Brady D. Hays

183 Date: 6/6/02

184 PORT AUTHORITY OF ALLEGHENY COUNTY

185 By: Paul P. Skonietz

186 Date: May 20, 2002

## APPENDIX SUMMARY OF PHASE 1B ARCHAEOLOGICAL SURVEY AND MONITORING

### *Phase IB Archaeological Testing*

**PNC Park Station** area including the proposed new station, the subway right-of-way and proposed construction staging area. The section of the APE extends approximately 200 feet from the riverfront and includes the proposed new station site and associated staging area. There is a high probability of a railroad roundhouse, urban wells, privies, refuse areas, and prehistoric sites in this area. The Phase IB Archaeological Survey will take place between baseball and football seasons to reduce impacts to the newly paved parking lots.

**Allegheny Station** area including the proposed new station, the subway right-of-way and the area beneath and surrounding the existing Miller Printing Company building. Once the Miller Printing Company building is demolished or partially demolished, the Phase IB Archaeological Survey is recommended for the entire area of demolition.

Deep trench excavations will be conducted in accordance with *Guidelines for Archaeological Investigations* prepared by the Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation (BHP). Trenches will be excavated at 30-meter intervals or four per acre and will continue to the water table, gravel or Pleistocene levels. Mechanical equipment will be required to reach the deepest cultural components and to identify any deeply buried archaeological resources.

Due to restrictions of the maximum reach of the mechanical equipment, it may be necessary to re-stage the equipment in order to reach the required level. A one-by-one meter unit will be hand-excavated in the wall of each trench unless pervasive deep impacts to the depth of the water table, gravel or Pleistocene levels are confirmed. For safety reasons and to comply with OSHA standards, units may require stabilization either through shoring or by stepping down trenches.

A qualified geomorphologist will be consulted to document any potential buried occupation levels or unusual soil profiles with maps, drawings and pedological descriptions. All excavation units will be filled and returned to original ground condition.

Artifact analysis and final report will be prepared according to standards published by the Bureau for Historic Preservation and the Secretary of the Interior's *Standards and Guidelines*.

### *Phase IB Archaeological Monitoring*

**Gateway Station** including the subway right-of-way and proposed new station in existing urban streets. The Phase IB Survey will be conducted during construction in an area of approximately 1.16 acres.

**Convention Center Station** including the subway right-of-way and associated construction in existing urban streets. The Phase IB Survey will be conducted during construction in an area of approximately 6.2 acres.

Monitoring of these areas will be conducted during construction; details regarding the monitoring will be coordinated during Final Design.

## **Attachment D**

### **Comments on the North Shore Connector Environmental Report on Proposed Project Revision and Responses**

The North Shore Connector Environmental Report on Proposed Project Revision was made available on December 27, 2005 for public review and comment. During the public comment period, 14 submissions were received, of which seven were from federal and state agencies and local units of government. These comments are summarized, and responses to those comments are provided below.

#### **U.S. Fish and Wildlife Service**

**Comment:** There are no federally-listed or proposed threatened or endangered species under its jurisdiction known to occur in the project area. There is nothing in the revised project which would cause a change in that determination. There would be no objection to the issuance of a Clean Water Act Section 404 permit, with appropriate mitigation by the Corps of Engineers.

**Response:** FTA and Port Authority concur with this assessment.

#### **U.S. Army Corps of Engineers**

**Comment:** Why did the report only consider modification of the Convention Center Line with no consideration of other options such as substituting a bridge for the tunnel to cross the Allegheny River?

**Response:** A bridge would be a substantial alteration of the project requiring a major environmental reassessment, including significant additional coordination with the Corps of Engineers and new coordination with the U.S. Coast Guard with respect to a Section 9 Bridge Permit. The only feasible bridge alignment, an extension from the Steel Plaza Station, was found to generate lower ridership, offer fewer possibilities for future extensions and result in major impacts on existing and future development. Moreover, due to the much greater length, such an alternative would probably not meet FTA's cost-effectiveness criteria because of the greater travel times involved.

**Comment:** If the cut-and-cover method of tunneling under the Allegheny River is selected, re-coordination and re-permitting will be required. Cut-and-cover construction will invalidate previous Corps comments and concerns (or lack thereof) contained in the FEIS.

Response: Port Authority will use the bored tunnel method of construction and has no intention of using the cut-and-cover method of tunnel construction for the section under the Allegheny River.

### **Pennsylvania Department of Transportation**

Comments were received from two separate units of the Pennsylvania Department of Transportation (PENNDOT): the Environmental Quality Assurance Division and District 11 Office.

Comment: The report is “thorough, comprehensive and well written.”

Comment: PENNDOT will cooperate with Port Authority on the region’s transportation plan.

Response: Port Authority will coordinate with PENNDOT as the North Shore Connector Project advances into construction.

### **Pennsylvania Historical and Museum Commission**

Comment: Appreciates being notified of the proposed change in the project. Requested that Port Authority continue to consult with Pennsylvania Historical and Museum Commission (PHMC) concerning the effects of the current and future projects on cultural resources in the Area of Potential Effect.

Response: Port Authority will coordinate with PHMC as the project advances.

### **McKees Rocks Borough and McKees Rocks Community Development Corporation**

McKees Rocks Borough and the McKees Rocks Community Development Corporation submitted a joint letter.

Comment: Support the project as revised. Extension of the North Shore Connector enables a Light Rail Transit (LRT) link to the Airport.

Response: Planning for a future extension of the North Shore Connector to the Pittsburgh International Airport was conducted in the Airport Multimodal Corridor Major Investment Study which was completed in 2003. Further planning efforts for this corridor are anticipated.

## **Shaler Township**

**Comment:** Understands of the rationale for reducing scope of project and supports expansion of the rail transit system.

**Response:** Port Authority, along with the City of Pittsburgh, Allegheny County, Southwestern Pennsylvania Commission (SPC) and other planning partners, have engaged several planning initiatives to consider future expansions of the light rail transit system.

## **Allegheny County Transit Council Long-Range Planning Committee, Stuart Strickland and Glenn Walsh**

The Allegheny County Transit Council (ACTC) Long-Range Planning Committee, Stuart Strickland and Glenn Walsh submitted similar comments in three separate letters.

**Comment:** Support Port Authority's plan to proceed with the Gateway Line of the North Shore Connector.

**Comment:** Requests consideration of a grade-separated pedestrian walkway linking the East Busway, Amtrak, Greyhound and the Convention Center. Such an improvement would enhance access to and within the Convention Center area. Mr. Strickland also noted that with more development in the Strip District, activity in the Convention Center area is likely to increase which would increase pedestrian-vehicle conflicts. He stated that a pedestrian facility could be built at a fraction of the cost of an LRT extension.

**Response:** An elevated pedestrian linkage would require significant additional planning and engineering analysis and environmental analyses to address the following issues:

1. The elevated pedestrian linkage would have to pass along and/or through the Pittsburgh Parking Authority's Grant Street Transportation Center which is already well underway with demolition of the Greyhound Terminal and the parking garage. To include the pedestrian connection might substantially delay construction of this facility as major new design work could be required. Construction costs would also be increased.
2. If any of the walkway needs to be built adjacent to the Norfolk Southern railroad, extensive negotiations with the railroad would be required, potentially at significant cost to the agency proposing the facility.

3. Because of the linkage with Penn Station of the Martin Luther King, Jr. East Busway, there is the potential of large numbers of people passing through the Pennsylvanian property, a former railroad station and railroad regional headquarters renovated into a residential development. This would require coordination and agreements with the Pennsylvanian owners. Additionally, because the Pennsylvanian building is listed on the National Register of Historic Places, the impacts to this historic resource would have to be analyzed and coordination would be required with PHMC.

Should funding become available in the future to construct an elevated pedestrian linkage, Port Authority would work with the project sponsor and other stakeholders in the area to advance such a facility. However, a pedestrian facility would not be a substitute for direct transit access to the Convention Center area. Additionally, this proposal primarily involves Pittsburgh Parking Authority (PPA) and Sports and Exhibition Authority (SEA) facilities. For these reasons, PPA and/or SEA would be the appropriate lead agencies, not Port Authority.

Comment: ACTC stated that the need for the Convention Center Line should only be considered in the context of a possible extension of LRT.

Response: Such an extension was considered during the planning phases of the North Shore Connector. The ability to accommodate future extensions was one of the major considerations in development of the locally preferred alternative. A future extension from the Convention Center was subsequently analyzed in several alternatives considered in the Eastern Corridor Transit Study conducted by Port Authority and SPC. SPC is prioritizing those alternatives in a Transitional Analysis being prepared for the Corridor.

Comment: ACTC noted that deferral of the Convention Center Line will extend usage of the Penn Park Line, Penn Station and the adjacent storage yard.

Response: Port Authority will continue to use these facilities as needed until replaced by the Convention Center Line.

### **Transportation for Livable Communities**

Comment: If the Convention Center Line is to remain separate, what is the proposed funding source and when is construction anticipated? Will the Convention Center Line be considered the next in line to receive funding?

Response: Funding for the Convention Center Line has not been identified. It would be funded from the same sources as Port Authority's other major capital

projects (New Starts/other federal sources, state and local sources). There is no construction schedule for the deferred Convention Center Line. The priority of the Convention Center Line will be determined through the regional planning process and public support.

Comment: How will the proposed PNC Plaza 3 and Civic Arena casino redevelopment plans be incorporated into the Convention Center Line and North Shore Line?

Response: The North Shore Connector was planned and designed to support recent, on-going and future development in and adjacent to Downtown Pittsburgh. As such, the project will accommodate new developments being proposed for this area. As the proposed PNC Plaza 3 is located within two blocks of the new Gateway Station, it will generate additional riders for the station without requiring any modifications to the station.

The casino associated with the Civic Arena is one of three such proposals for the City of Pittsburgh. Until a casino bid is accepted, Port Authority cannot make plans for such development. The Civic Arena/casino complex is located within a short walking distance of the Steel Plaza Station, but no changes would be required if this project is built. The new arena and casino would, however, generate additional riders for the Convention Center Line. Guidelines developed by the City of Pittsburgh's Gaming Task Force include ensuring sufficient transit access to a new casino.

Comment: Are there any temporary and/or permanent pedestrian and/or bicycle connections planned between the East Busway and the Grant Street Intermodal Transportation Center and the Convention Center prior to the construction of and/or in conjunction with the construction of the Convention Center Line?

Response: This issue is addressed in the response to ACTC *et al.*

### **William W. Bright**

Comment: Agrees with deferral of the Convention Center Line. Notes that it would be a mistake to defer the tail track and Allegheny Station and the North Shore Connector to the Pittsburgh International Airport should receive priority.

Response: The tail track and Allegheny Station will be included in the project.

Comment: Stated a preference on the alignment of an airport extension, asked when FTA would approve funding for an extension to the airport and asserted that when the Convention Center Line is built, it should be extended through the Strip District to Oakland.

Response: These issues will be addressed in the planning studies for the Airport and Eastern Corridors and subsequent development activities.

**Robert W. Orchowski**

Comment: Opposes the project as designed and stated that at-grade and bridge options should have been more fully explored.

Response: Alternatives utilizing at-grade alignments and bridge alignments were considered extensively during the planning and environmental studies, but they did not address the corridor needs or meet the project goals.

**Edward and Mary Daly**

Comment: Oppose the entire project.

Response: The North Shore Connector is included on the SPC's *2030 Transportation and Development Plan for Southwestern Pennsylvania* and, therefore, is an important part of the region's long range transportation system. The North Shore Connector is also, as a result of Port Authority Board and Southwestern Pennsylvania Commission action, the region's priority corridor for federal New Starts funding.

**Attachment E**  
**North Shore Connector**  
**Environmental Report on Proposed Project Revision**

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**NORTH SHORE CONNECTOR**

**Environmental Report  
on Proposed Project Revision**

*Prepared by:*  
**Federal Transit Administration  
U.S. Department of Transportation**

*and*  
**Port Authority of Allegheny County**

**December 2005**

## **1.0 INTRODUCTION**

### **1.1 Background**

In the late 1990s, the City of Pittsburgh developed the *Pittsburgh Downtown Plan*. The *Plan* envisioned a revitalized Downtown that extends across the rivers beyond the traditional confines of the Golden Triangle. A key element to achieving that vision is a new rapid transit line linking the Golden Triangle and the North Shore. In addition, a need was identified to connect to other areas adjacent to and near the Golden Triangle such as Station Square, Uptown and the Strip District.

At the same time, in 1997, the City of Pittsburgh and SPC began investigation of Light Rail Transit (LRT) extensions to the North Shore under the *North Shore/CBD Transportation Corridor Major Investment Study* (MIS) which considered a variety of transportation improvements in the corridor extending from the Golden Triangle to the North Shore and the western edge of the Strip District. That study recommended pursuing a rapid transit link between Downtown and the North Shore.

In 1999, Port Authority assumed responsibility for the project and began the North Shore Connector Draft Environmental Impact Statement (DEIS). That study analyzed in further detail the alternatives considered in the MIS as well as another 60 alternatives generated during the public scoping process. These were screened down to a short list of alternatives which underwent detailed analyses of environmental, transportation and community impacts along with capital and operating and maintenance cost estimates and ridership forecasts. Based on the results of these analyses and the input of North Side residents, North Shore and Golden Triangle stakeholders, local elected officials and other community, business and civic groups, the Port Authority Board of Directors adopted the Gateway LRT Alternative as the Locally Preferred Alternative (LPA) in August 2000.

In January 2001, the Federal Transit Administration (FTA) granted Port Authority approval to enter the LPA (North Shore Connector) into the Preliminary Engineering and Final Environmental Impact Statement (PE/FEIS) phase. During the PE/FEIS, project alignments and station locations were refined and more detailed environmental analysis was conducted on the LPA. In July 2002, FTA issued the Record of Decision (ROD) indicating that Port Authority had met the requirements of the National Environmental Policy Act (NEPA) and specifying the environmental mitigation measures which Port Authority would implement as part of the project. FTA issued approval for Port Authority to begin Final Design in April 2003. In early 2004, and again in 2005, FTA designated the North Shore Connector as "Recommended" for a Full Funding Grant Agreement (FFGA).

The project, for which the Final Design was conducted, includes the following two extensions:

- An extension of Port Authority's LRT system from the existing Gateway Station in Downtown Pittsburgh to the Carnegie Science Center in the North Shore via a tunnel under the Allegheny River.
- An underground extension of Port Authority's LRT system from the existing Steel Plaza Subway Station in Downtown Pittsburgh to the Convention Center located in the northeast end of the Golden Triangle.

The project cost estimate was \$393 million in construction year dollars.

## **1.2 Cost Increases**

Before it would sign the FFGA, FTA asked Port Authority to put out for bid the Allegheny River Tunnel. The tunnel was the component of the project considered to have the highest level of risk in terms of the potential bidder's price in relation to the cost estimate. Three firms responded to the solicitation for the bid and the lowest bid received was 24% higher than the engineer's estimate.

In order to determine the cause of the variance in Port Authority's cost estimate and the bid price, Port Authority reviewed the entire project cost estimate. Due to significant cost increases, it is no longer possible to build the North Shore Connector as originally proposed for the anticipated \$393 million budget to be contained in the FFGA.

Factors that have contributed to the increased project cost include a greater than forecasted inflation rate, skyrocketing increases in the cost of concrete, steel and fuel, and overall cost escalation due to project delay. Overall construction cost increases, which were significantly outpacing inflation prior to Hurricane Katrina, accelerated further after that disaster and other national events. The increases impacted all elements of the project including line segments, stations, structures, train control system, design and other project support costs.

## **1.3 Revised Project**

With the projected cost increasing beyond the budget of \$393 million, Port Authority considered revisions to the project which would allow it to be completed within the \$393 million budget, and which satisfy the need for a rapid transit link between the Golden Triangle and the North Shore.

Port Authority proposes to revise the project by building the line from the Gateway Center Station to its terminus just west of Allegheny Avenue and by deferring design and construction of the Convention Center Line and Station. Additionally, acquisition of four new light rail vehicles (LRVs) would be deferred.

Deferral of acquisition of the four LRVs would not have any environmental impacts. Therefore, this report focuses on the deferral of the Convention Center Line and Station.

Although this deferral represents a significant change in the project scope, the project still satisfies the project need and addresses the project goals. It provides for a grade-separated, traffic-free rapid transit line linking the Golden Triangle with the North Shore.

As funding becomes available, the deferred elements of the North Shore Connector can be implemented.

This Environmental Report has been prepared in accordance with the provisions of NEPA to inform Port Authority, the FTA and the public in understanding the changes in environmental impacts for the revised North Shore Connector project. The document provides the analysis required by FTA to determine if construction and operation of the revised North Shore Connector Project will result in impacts significantly different from those described in the 2002 North Shore Connector FEIS.

The Environmental Report will be circulated for public review beginning December 23, 2005 and ending on January 23, 2006.

## **2.0 NATURE OF THE PROPOSED ACTION AND PROJECT NEED AND PURPOSE**

The revised North Shore Connector project is scheduled for construction to begin in 2006 with revenue operation to start in 2010. The following major elements will be built:

- A 1.2-mile extension of the existing Light Rail Transit (LRT) system from a new Gateway LRT Station in Downtown Pittsburgh to a terminus just west of Allegheny Avenue on the North Shore (Gateway Line);
- A twin-tube tunnel under the Allegheny River; and
- Three new stations: Gateway, North Side and Allegheny.

The primary project elements which will be deferred include:

- The 0.3-mile extension from the existing LRT system at Steel Plaza Subway Station in Downtown Pittsburgh to the Convention Center (Convention Center Line);
- The Convention Center Station; and
- Four new light rail vehicles (LRVs).

The schedule for implementing the Convention Center Line has not yet been determined.

This report addresses the following areas included in the *North Shore Connector Final Environmental Impact Statement and Section 4(f) Statement (FEIS)*: changes in impacts to the socio-economic environment, the transportation network and the physical environment resulting from deferral of the Convention Center Line and Station, and to determine if deferring these items would have any environmental impacts.

### **2.1 Project Area Description**

The study area is the same covered in the FEIS. It is shown in Figure 2-1 which is reprinted from the FEIS.

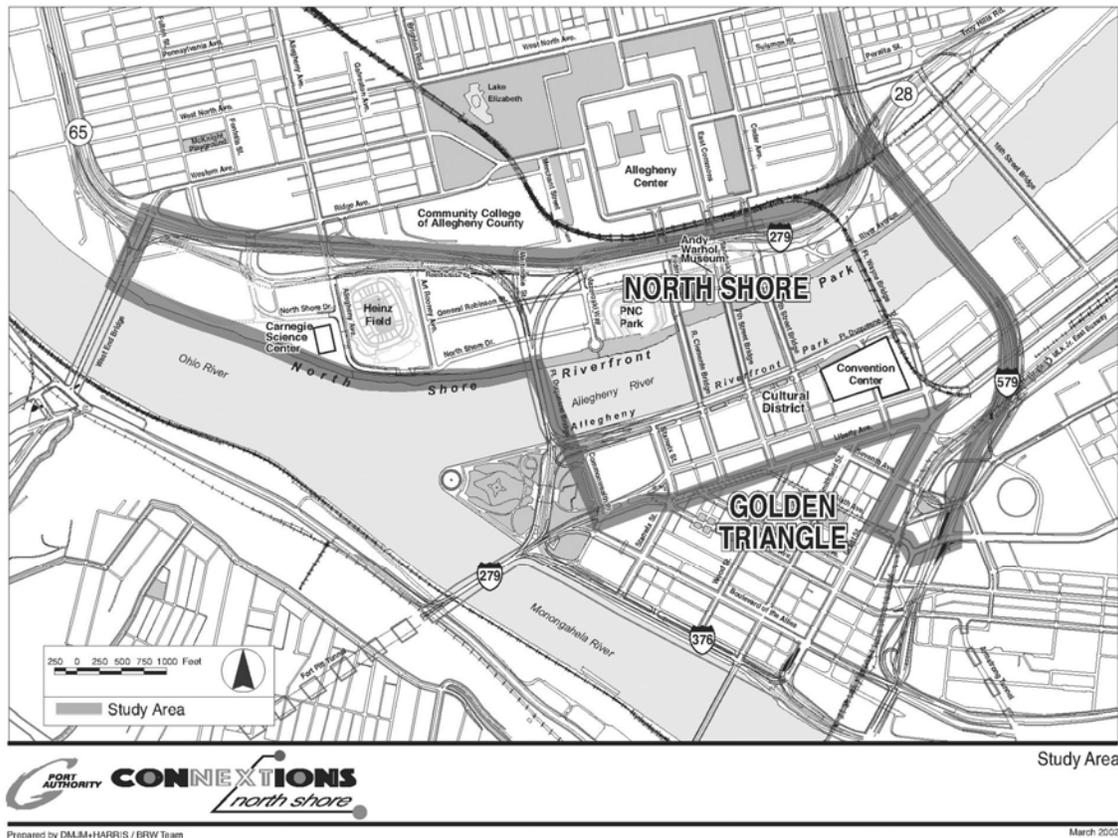


Figure 2-1

## 2.2 Project Need and Purpose

The following needs were addressed in the FEIS:

- Reduce traffic congestion;
- Increase parking supply;
- Improve intra-area and regional transit connections;
- Consider future transportation connections into the North Side; and
- Improve pedestrian connections.

Implementation of the revised project will help to reduce traffic congestion, provide improved transit service to fringe parking facilities, improve area and regional transit connections, and consider future transit and pedestrian connections to the North Side. The benefits of extending LRT service to the Convention Center area will be deferred.

### 2.3 Project Goals and Objectives

Table 2-1, reprinted from the FEIS, lists the four major project goals and their associated objectives: accessibility/mobility, development, environment, and equity/effectiveness/expandability. Of the 18 objectives listed, two are specifically associated with the Convention Center Line:

- Provision of accessible and sufficient transit service for events held at the Convention Center (One component of Objective 1 of the Accessibility/Mobility Goal); and
- Provision of convenient and readily identifiable transit connections to the eastern end of the Cultural District and the western end of the Strip District (Objective 2 of the Accessibility/Mobility Goal).

Accessible and sufficient transit service was viewed as necessary to ensure that the Convention Center and other nearby attractions are sufficiently linked to other locations in the Downtown – North Shore Corridor through the regional transit system. While deferral of the Convention Center Line will delay implementation of this LRT link, bus routes will continue to serve the Convention Center area.

Because many users of the Convention Center and other nearby attractions are not regular transit riders, having convenient and readily identifiable transit connections to the eastern end of the Cultural District and the western end of the Strip District was viewed as necessary for achieving reductions in automobile travel and important to the success of developments in these areas. Such benefits will be delayed with deferral of the Convention Center Line.

Two objectives, while not specifically identifying the Convention Center area, are nevertheless, associated with the Convention Center Line:

- Improve intermodal connections within the study area (including the Convention Center area) (Objective 6 of Accessibility/Mobility Goal); and
- Maximize future expansion capability (Objective 2 of the Equity/Effectiveness Goal).

With respect to Objective 2 of the Equity/Effectiveness goal (maximize future expansion capability), the revised project allows for future expansion. Potential future extensions to the Strip District and other points in the Allegheny Valley and perhaps to other eastern communities will need to be assessed in detail as part of a future Convention Center Line study or other analyses of the eastern corridor. Such investments are under consideration in the Eastern Corridor Transitional Analysis currently being conducted by the Southwestern Pennsylvania Commission (SPC). These future extensions will require future detailed studies even with the Convention Center Line in place.

Deferral of the Convention Center Line will have a minor impact on achieving the goal of minimizing the impact on the socio-economic and natural environments. Environmental

impacts of the Convention Center Line will occur later. The environmental impacts of deferring the Convention Center Line are addressed in Chapters 3, 4 and 5. There may be some benefit to not building both lines concurrently in terms of construction impacts on Golden Triangle activity.

**Table 2-1  
Study Area Goals and Objectives**

<b>Accessibility/ Mobility Goal</b>	<b>Objectives</b>
<b>Improve transportation access to and within the North Shore Connector study area.</b> <i>(refined from MIS)</i>	<ol style="list-style-type: none"> <li>1. Provide accessible and sufficient transit service for events held at the new ballpark, new stadium, Cultural District theaters, and the expanded convention center.</li> <li>2. Provide convenient and readily identifiable transit connections between the North Shore, Cultural District, Near Strip and other downtown-area attractions and hotels.</li> <li>3. Improve the linkage between North Shore fringe parking lots and the employment centers in the Golden Triangle.</li> <li>4. Reduce the reliance on the automobile for intra-study area trips.</li> <li>5. Improve reverse-commuting opportunities.</li> <li>6. Improve intermodal connections within the study area.</li> <li>7. Provide convenient service from the region to activities within the study area.</li> <li>8. Provide convenient pedestrian connections between the stations/stops and activities.</li> </ol>
<b>Development Goal</b>	<b>Objectives</b>
<b>Support existing and proposed development within the study area.</b>	<ol style="list-style-type: none"> <li>1. Expand opportunities for transit-supportive land use development.</li> <li>2. Expand opportunities to promote the principles of livable communities within the study area.</li> <li>3. Support growth of recreation, convention, and tourism facilities.</li> </ol>
<b>Environmental Goal</b>	<b>Objectives</b>
<b>Minimize the impact on the socio-economic and natural environments.</b>	<ol style="list-style-type: none"> <li>1. Improve air quality.</li> <li>2. Minimize aesthetic impacts.</li> <li>3. Minimize impacts to historical and archaeological resources.</li> <li>4. Minimize impacts to natural resources.</li> </ol>
<b>Equity/Effectiveness Goal</b>	<b>Objectives</b>
<b>Produce a system that is efficient, effective, equitable, and capable of future expansion into nearby established neighborhoods.</b>	<ol style="list-style-type: none"> <li>1. Maximize cost-effectiveness.</li> <li>2. Maximize future expansion capability.</li> <li>3. Maximize relationship to adjacent communities.</li> </ol>

Source: DMJM + Harris and BRW, Inc.

## 2.4 Need for the Proposed Action

The action is being proposed because the estimated cost for the North Shore Connector is now significantly greater than the engineer's estimates. The project, as revised, allows the majority of the project benefits to be achieved during the virtually the same schedule

while allowing for completion of the entire project as proposed in the July 2002 Record of Decision (ROD) upon the receipt of sufficient funding.

In particular, the revised project generates 3,696 daily hours of travel time savings, or 91.5 % of the original amount of 4,038 hours in travel time savings that would be realized with the original project.

Opportunities to expand the project are not precluded. In fact, future extensions to the north and west can be built from the Gateway Line, and the Convention Center Line and future extensions to the Strip District and other Allegheny Valley and/or eastern points will still be possible. As noted in Chapter 1, future extensions to the east are currently under consideration in the SPC's Eastern Corridor Transitional Analysis.

Additionally, the project will still be able to meet the majority of the goals and objectives listed in Table 2-1.

## **2.5 Alternatives**

Deferral of the Convention Center Line was one of several options considered to reduce the costs of the North Shore Connector while providing the majority of the project benefits. These options significantly compromised the effectiveness of the project and/or failed to offer sufficient reductions in project costs.

Constructing half of the Convention Center Station – The Convention Center Station would initially be built with one track and one platform. Cost savings would be achieved by reducing the width of the box needed for the Convention Center Station. Additionally, installation of special track work would be deferred. Construction of the other half would be deferred until more funding became available. The single-track station configuration would have resulted in less efficient operation, particularly for accommodating large crowds, and recovery of disabled vehicles would be more difficult. To construct half of the station and then later add the other half would subject to the Convention Center area of Downtown Pittsburgh to two construction periods. Property owners and the general public would be inconvenienced twice with disruptions to traffic flow and pedestrian activity.

Defer Construction of the Tail Track – Construction of the tail track immediately to the west of the Allegheny Station would be deferred. The purpose of the tail track is to provide mid-day storage for trains and to stage trains for operations serving events at PNC Park and Heinz Field. Without the mid-day storage area, all trains would have to return to South Hills Village, thus increasing Port Authority's operating costs. Without the tail track there would be no ability to stage trains in order to operate the frequent service necessary to accommodate large crowds during post-event periods.

Shorten the Gateway Line – The Gateway Line would be constructed to the North Side Station with a section of tail track just to the west of the station. The Allegheny Station and the entire elevated section would be deferred. There would be no direct connections to the Manchester and Allegheny West neighborhoods, Carnegie Science Center, Heinz

Field, Community College of Allegheny County, and other existing and future attractions. As Manchester is a low-income and minority neighborhood, there may be disproportionately high and adverse effects impacts to this community resulting from deferral of this segment. A future extension to the west would be more costly due to deferral of the transition segment west of the North Side Station.

## **3.0 SOCIO-ECONOMIC IMPACTS**

This chapter addresses the social and economic impacts of deferring the Convention Center Line project on a range of factors, including land use and development, neighborhoods, environmental justice, visual and aesthetic conditions, cultural, historic and archaeological resources, parklands, utilities, and safety and security. All potential environmental impacts in the North Shore Connector Study area are summarized and impacts in the Convention Center area are considered. This discussion is summarized in Table 5-1.

### **3.1 Land Use and Development Activity**

Development in the North Shore Connector study area has occurred and continues to occur consistent with the *Pittsburgh Downtown Plan – A Blueprint for the 21<sup>st</sup> Century* and *North Shore Master Plan* cited in the *North Shore Connector Final Environmental Impact Statement and Section 4 (f) Statement* (FEIS). The revised North Shore Connector project would serve most of this development. The FEIS discusses existing and future development at the new Gateway Station and the proposed PNC Park Station (now the North Side Station), Allegheny Station and Convention Center Station.

In the vicinity of the Convention Center Station is a variety of office, commercial, and institutional entities. East of the station is the Strip District, which has a variety of commercial, entertainment, retail, warehouse and light industrial entities. There is ongoing and future development in the vicinity of the Convention Center Station and in the Strip District east of the station. Developments near the Convention Center Station currently under construction are the Grant Street Transportation Center and the African American Cultural Center.

With deferral of the Convention Center Line, the development occurring near the Convention Center will be served by LRT at a later date. In the interim period, this area will continue to be served by Penn Avenue and Liberty Avenue bus routes operating throughout the Convention Center area.

The FEIS determined that there would be no long-term adverse land use impacts associated with construction of the North Shore Connector. Deferral of the Convention Center Line would not change this conclusion.

### **3.2 Neighborhoods and Displacements**

The FEIS identified the following 12 neighborhoods in the North Shore Connector study area: Golden Triangle, Strip District, Hill District/Crawford-Roberts, Bluff, North Shore, Chateau, East Allegheny, Allegheny West, Allegheny Center, Manchester, Central Northside, and California-Kirkbride.

According to the FEIS, all of the neighborhoods except Strip District, North Shore and Chateau were considered minority neighborhoods, i.e., minority population greater than

the Pennsylvania average at the time of 13%. In addition, all the neighborhoods except Chateau and Allegheny West were predominantly low-income, i.e., percentage of low-income population greater than the Pennsylvania average of 11%.

The study area contains a wide range of land use types, including educational, residential, institutional, industrial, cultural, recreational, high-rise and other office, employment centers, retail/commercial operations, community facilities and warehouses.

The Convention Center Line is in or is proximate to three neighborhoods: Golden Triangle, Strip District and Hill District/Crawford-Roberts. Golden Triangle and Hill District/Crawford-Roberts are considered minority neighborhoods, and these two neighborhoods are considered predominantly low-income. It should be noted that the Convention Center Station does not directly serve Hill District/Crawford-Roberts, because the neighborhood sits on a bluff above the Convention Center Line and there are no direct pedestrian or street connections between the neighborhood and the line.

With the proposed deferral of the Convention Center Line, the study area would continue to be served by LRT except for the Strip District and the northeastern corner of the Golden Triangle.

Forty-five community facilities were identified in the study area, of which four are located closer to the proposed Convention Center Station than to one of the existing LRT stations. The following are the four community facilities are located in the vicinity of the Convention Center Line:

- Senator John Heinz Pittsburgh Regional History Center, 1212 Smallman Street;
- Federal Court/U.S. Post Office, Grant Street between Seventh Avenue and 11<sup>th</sup> Street;
- Bureau of Fire Engine Company Number 3, 1401 Penn Avenue, 22; and
- Pittsburgh High School for Creative and Performing Arts, 111 Ninth Street.

Additional community facilities under construction are the Grant Street Transportation Center and African American Cultural Center. These facilities and the areas around them would continue to be served by bus service as they are currently, and would be served by LRT at a later date.

Construction of the North Shore Connector is not expected to disrupt neighborhood activities except for temporary interruption of access to businesses. Pedestrian and vehicular access to the Strip District would be maintained. Staging of construction equipment would occur at or near the project site. There would be no changes in construction mitigation due to deferral of the Convention Center Line, except that mitigation of construction impacts of the Convention Center Line would occur at a later time.

### **3.3 Environmental Justice**

Environmental Justice analyzes whether a proposed action would have a disproportionate impact on low-income and minority areas. This discussion describes the revised project's compliance with Executive Order 12898 of February 11, 1994, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which requires that federal agencies determine if there are "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations"

Section 3.2 identified 12 neighborhoods served by the North Shore Connector, of which nine are considered minority and ten low-income neighborhoods. The Convention Center Line is in or is proximate to the Golden Triangle, Strip District and Hill District/Crawford-Roberts neighborhoods.

With the deferral of the Convention Center Line, the Golden Triangle would continue to be served by LRT, but the Strip District would not. It is noted that Hill District/Crawford-Roberts would continue to be served by LRT because it is a closer walk for pedestrians and drive for automobiles to the existing Steel Plaza Subway Station than it would be to the proposed Convention Center Station, due to topographical constraints. All nine minority tracts and nine out of ten low-income tracts would be served by LRT even with deferral of the Convention Center line. Thus, there would not be disproportionately high and adverse human health or environmental effects of this action on minority populations and low-income populations.

Consideration is also given to any impact there might be on persons boarding the light rail system outside the study area who might be destined to a location served by the Convention Center line. With deferral of the Convention Center Line, the benefits of direct LRT service to the Convention Center area would be deferred for all riders, not just minority and low income-riders. Thus, there should not be disproportionately high and adverse human health or environmental effects of this action on minority populations and low-income populations.

The Convention Center Line has been designed to permit future LRT extensions into the Strip District and possibly further to other points in the Allegheny Valley and/or towards the east. The Eastern Corridor Transitional Analysis, currently being conducted by the Southwestern Pennsylvania Commission (SPC), is considering future transit investments in the aforementioned areas.

No disproportionate construction impacts to minority or low-income populations were identified in the FEIS. Therefore, deferral of the Convention Center Line construction would have no disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

### **3.4 Visual and Aesthetic Conditions**

The most visible elements of the North Shore Connector project are the station entrances and the elevated section in the North Shore. The Convention Center Line is primarily below grade. The only visual impacts identified in the FEIS for the Convention Center Line were from street level station entrances which were originally planned to be integrated into the Greyhound Station (now the Grant Street Transportation Center) and the Convention Center structures. With deferral of the Convention Center Line, it is no longer possible to coordinate construction of the Convention Center Line with the construction of the Grant Street Transportation Center. The Conceptual Design was coordinated with the Transportation Center. When development of the station resumes, Port Authority intends to continue the effort in the final design of the station entrance to minimize visual impacts.

The FEIS identified potential construction impacts to the visual environment resulting from construction of the North Shore Connector. These would include large areas for excavations, staging and storage of equipment, cofferdams by the edges of the Allegheny River, signs and traffic control devices related rerouting of pedestrian and vehicular traffic, appearance of construction equipment and above-grade construction activity. Deferring construction of the Convention Center Line would affect only the timing of these anticipated impacts.

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### **3.5 Historic, Archaeological, and Cultural Resources**

This section addresses the effect of deferral of the Convention Center Line on known historic and archaeological resources.

To determine which historic properties could be impacted by the project, an area of potential effect (APE) was identified during the DEIS. The APE identifies the geographical area within which the North Shore Connector Project may directly or indirectly cause an effect to significant characteristics of known and/or potential historic and archaeological resources. The boundaries of the APE were established to encompass all known and potential historic and archaeological resources. In addition, the APE includes all properties within view of the proposed undertaking, and all properties that may have the proposed undertaking within their viewshed. The Convention Center Line lies entirely within the APE for the North Shore Connector. The APE includes all areas where ground disturbance may take place, areas where subway construction would occur and the Convention Center Station area.

The Cultural Context and methodology for identifying historic and archaeological resources is described in the FEIS. Determinations of eligibility and effects are documented in *Determination of Eligibility and Criteria of Effect, North Shore Connector, City of Pittsburgh, Allegheny County, Pennsylvania*.

As recorded history in the project area dates back to the late 17<sup>th</sup> century, artifacts of human activity are present in all parts of the North Shore Connector project area.

Potential archaeological sites are located in the North Shore, Gateway Center area and the Convention Center area. The FEIS identified 24 historic resources within the APE. Of these, seven were determined to be not eligible for the Register of Historic Places. Seven properties were previously listed on the National Register of Historic Places and ten were found to be eligible for listing on the Register. Of the 17 listed and eligible sites, the following are located in the vicinity of the Convention Center Line:

- Adelman Lumber Company/Consolidation Storage Company (Chautauqua Lake Ice Company), 1212 Smallman Street. This structure currently houses the Senator John Heinz Pittsburgh Regional History Center;
- Arnfeld Building, 1111-19 Penn Avenue;
- Byrnes and Kiefer Building, 1127 Penn Avenue;
- Pennsylvania Canal and Grant's Hill Tunnels, 11th St. at the Allegheny River to First Avenue near the Monongahela River. The tunnels are beyond the APE but the Pennsylvania Canal prism is an archaeological site within the APE that may be impacted by construction of the Convention Center Line;
- Pennsylvania Railroad Right-of-Way. The right-of-way is currently owned and operated by the Norfolk Southern railroad;
- Pennsylvania Railroad Station and Rotunda, 1101 Liberty Avenue;
- Pennsylvania Railroad Bridge (Fort Wayne Bridge), spanning the Allegheny River. This structure is also owned by Norfolk Southern; and
- U.S. Post Office and Courthouse, Grant Street and Seventh Avenue.

A ninth resource, the Greyhound Bus Station at 11<sup>th</sup> Street and Liberty Avenue, was identified in the FEIS as being eligible for the National Register. Subsequently, the Pittsburgh Parking Authority acquired this property and demolished it in 2005 as part of another project, the new Grant Street Transportation Center. Therefore, when development of the Convention Center Line resumes, design and construction can proceed without concern to impacts on the Greyhound Bus Station.

Deferral of the Convention Center Line would not change the determination of effect on these historic resources.

The May 2002 Programmatic Memorandum of Agreement among FTA, Port Authority and the Pennsylvania State Historic Preservation Officer (SHPO) committed Port Authority to implement a number of actions regarding archaeological and historic resources. When development of the Convention Center Line resumes at a later date, Port Authority will:

- Monitor through field tests and surveys archaeological resources in the Convention Center Station Area;
- Develop data recovery plans, if required;
- Submit formal reports to the SHPO which document the eligibility of the archaeological resources for listing on the National Register of Historic Places and efforts to minimize the impacts on those resources;
- Ensure that any human remains and grave-associated artifacts encountered during the archaeological investigations are brought to the immediate attention of the SHPO, Advisory Council on Historic Preservation, and Tribal Historic Preservation Offices and/or appropriate descendant populations;
- Curate all records and materials resulting from the archaeological investigations;
- Ensure that research results from Data Recovery excavations at eligible archaeological sites will be disseminated to the public (can be in the form of newsletters, pamphlets, brochures, artifact displays, lectures or exhibits); and
- Develop design reviews in consultation with the SHPO for components which may visually affect historic properties.

Deferral of the Convention Center Line may require further coordination with the SHPO.

The FEIS identified minor construction impacts related to noise, vibrations and dust emissions. These are anticipated to have minor impacts on historic and archaeological resources. There would be particular attention to ensuring that there are no vibration impacts on the Pennsylvania Railroad Station and Rotunda. Deferral of constructing the Convention Center Line will not change these conclusions.

### **3.6 Public Parkland & Officially Designated Wildlife and Waterfowl Refuges**

There are no public parklands or officially designated wildlife and waterfowl refuges in the vicinity of the Convention Center Line.

### **3.7 Utilities**

The North Shore Connector study area contains a number of utilities, ranging from individual lines that service private property to major trunk lines that provide coverage to a broad area. In the study area, major utilities include sewer, water, communications, electric, natural gas, and steam facilities. Operation of the North Shore Connector would not result in any long-term impacts to these utilities. There would be temporary impacts to utilities throughout the project area occurring during the construction phase. Any impacts would cease once construction has been completed.

The following utilities are in the Convention Center Line area:

- ALCOSAN
- AT & T
- Duquesne Light Company with conduits leased to DQE Communications, LLC and Penn Telecom
- Equitable Gas Company
- MCI
- Pittsburgh Allegheny County Thermal
- Pittsburgh Water and Sewer Authority
- Verizon Pennsylvania INC with conduits leased to COMCAST, Fibertech and TelCove

Deferral of the Convention Center Line construction will have no impact on these utilities. Port Authority will coordinate with these utilities as necessary when development of the Convention Center Line resumes at a later date.

### **3.8 Safety and Security**

The project would include four new stations. Measures will be incorporated into the design of stations (such as minimizing hidden areas) to enhance patron security. The LRT alignment would have no impacts on pedestrian safety, as the alignment would be completely grade separated from pedestrian traffic.

No specific long-term safety or security issues were identified for the Convention Center Line in the FEIS. Accordingly, deferral of Convention Center Line operations will have no impact on safety or security.

North Shore Connector construction would place heavy construction equipment near major pedestrian ways. Barriers will be installed where necessary to separate pedestrian traffic from construction activities during the construction of the North Shore Connector. Such barriers may need to be placed along 11<sup>th</sup> Street for the Convention Center Line. With deferral of Convention Center Line construction, these measures will be implemented at a later date.

## **4.0 TRANSPORTATION: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

### **4.1 Affected Environment Existing System**

Port Authority's transit system described in Section 4.2 of the *North Shore Connector Final Environmental Impact Statement and Section 4 (f) Statement* (FEIS) is virtually unchanged. However, there have been two major additions since 2002. The 2.3-mile Martin Luther King, Jr. East Busway Extension and the Stage II Light Rail Transit (LRT) System, both of which were under construction when the FEIS was distributed in 2002, are now in operation. The Stage II LRT System added 28 new light rail vehicles (LRVs) to Port Authority's original fleet of 55 LRVs.

Additionally, beginning in 2005, the region's other transit operators, Beaver County Transit Authority, Mid-Mon Valley Transit Authority, Myers Bus Lines, New Castle Area Transit Authority, Washington County Transit and Westmoreland County Transit Authority all operate to Penn Station of the East Busway. Converging these routes at this location further emphasizes the comprehensive bus service in and around the Convention Center area.

### **4.2 Transit Operating Plans**

Deferral of the Convention Center Line will not change the LRT Operating Plan proposed in the Full Funding Grant Agreement (FFGA) except that operations to the Convention Center will occur later. Table 4-1 shows the LRT service to be provided in the 2025 forecast year without the Convention Center Line. Note that the only difference between Table 4-1 and the service plan of the FFGA is that the Steel Plaza - Convention Center service would not be operated. The other seven LRT routes would continue to be operated as proposed in the FFGA.

### **4.3 Ridership Forecasts and Other Transit System Impacts**

Without the Convention Center Line, average weekday ridership on the North Shore Connector would be 12,485 in the year 2025. When ridership associated with events is included, average weekday ridership is projected to be 14,300. This compares to a projected 2025 ridership of average weekday 15,800 for the North Shore Connector with the Convention Center Line.

The FEIS did not specifically identify any impacts to existing LRT operations resulting from construction of the Convention Center Line. Therefore, deferral of the Convention Center Line will have no impact on existing LRT service.

**Table 4-1  
LRT Operating Plan by Time of Day**

Route Number	Route Name	Northern Terminus	Headway (minutes between trains)				
			Weekday				Weekend
			Peak	Peak Shoulder	Base	Evening	
42C	Castle Shannon Via Beechview	Allegheny Station	12	7.5	10	15	15
42M	Mt. Lebanon Via Beechview	Allegheny Station	12	--	--	--	--
47D	Drake Via Overbrook	Allegheny Station	12	--	--	--	--
47DS	Drake-Wash. Jct. Shuttle	Washington Jct.	--	15	20	30	30
47L	Library Via Overbrook	Allegheny Station	12	15	20	30	30
47S	S. Hills Village Via Overbrook	Allegheny Station	12	15	20	30	30
52	Allentown	Allegheny Station	48	45	60	60	60

Source: Manuel Padron and Associates and Port Authority

Note: One-car trains are assumed except during peak periods when two-car trains are assumed.

#### **4.4 Roadway and Parking Impacts**

The FEIS did not identify any negative impacts on existing traffic level of service and parking resulting from operation of the Convention Center Line. Some additional traffic on area roadways will occur with deferral of the Convention Center Line due to deferral of an effective transit link.

The FEIS identified the following impacts to roadways and parking due to construction of the Convention Center Line:

- Temporary closures and lane restrictions to Eleventh Street, Penn Avenue, Liberty Avenue, Mulberry Way, and the Martin Luther King, Jr. East Busway (between Liberty Avenue and the 26<sup>th</sup> Street Ramp);
- Adjacent street blocks along Tenth Street and Twelfth Street may require traffic flow changes and on-street parking restrictions to accommodate local detour routes. Smallman Street (at the northern subway construction limit) and Seventh Avenue (at the southern subway construction limit) may experience minor impacts and require some restrictions pending work-zone requirements at each location;

- Traffic restrictions on Eleventh Street could affect Greyhound bus operations, possibly requiring temporary closure of the Greyhound Bus Terminal Eleventh Street access and relocation of private-vehicle passenger/luggage drop-off areas;
- Traffic restrictions on Penn Avenue and Eleventh Street could affect loading dock access for both Liberty Center and the newly expanded convention center;
- Subway construction in front of The Pennsylvanian, adjacent to the East Busway, would temporarily displace several surface-lot parking spaces and require relocation of The Pennsylvanian's underground parking garage access;
- Subway construction behind the Federal Courts Building (between Seventh Avenue and the East Busway) could affect access to the parking deck, which may need temporary underpinning and/or stabilization during construction; and

Since completion of the FEIS, several changes have occurred relating to potential roadway and traffic impacts in the Convention Center area.

- A method of constructing the Convention Center Line was identified which would minimize impacts to the street surface, except for the station area which would still require cut-and-cover construction.
- No station entrances would be built into the Liberty Center garage, thus avoiding displacement of 11 parking spaces
- The new Grant Street Transportation Center includes a new 1,000-space parking garage and Greyhound Bus Terminal. As with the previous bus terminal, the primary bus access to the terminal will occur at 11<sup>th</sup> Street. Port Authority will coordinate with Greyhound to minimize impacts on its operations.

Thus, the above construction impacts to traffic and parking will be either eliminated or deferred with deferral of the Convention Center Line. One benefit to deferring the line is that by sequencing construction of the two North Shore Connector lines, impacts to Golden Triangle traffic due to concurrent or overlapping construction will not occur simultaneously.

#### **4.5 Railroad Impacts**

Due to the proximity of the proposed northern end of the Convention Center Line to the Norfolk Southern's 11<sup>th</sup> Street overpass, coordination is required. When development of the Convention Center Line resumes, Port Authority will continue to coordinate with the railroad to avoid any impacts to railroad operations. As noted in the FEIS, no long-term impacts to railroad operations would occur with operation of the Convention Center Line.

#### **4.6 Waterways Impacts**

No impacts to waterways operations were identified in the FEIS for the Convention Center Line. Therefore, deferral of the Convention Center Line will have no impacts on Allegheny River traffic.

#### **4.7 Pedestrian Facilities**

No long-term impacts to pedestrian facilities were identified in the FEIS. Therefore, deferral of the Convention Center Line will have no impacts on pedestrian passageways in the area. During construction, sidewalks adjacent to streets affected by the construction of the Convention Center Line may require temporary closure. With deferral of construction of the Convention Center Line any such impacts will occur at a later date.

## **5.0 PHYSICAL AND NATURAL ENVIRONMENTAL IMPACTS**

This chapter addresses the impacts to the physical and natural environment of deferring the Convention Center Line project on a range of factors, including air quality, noise and vibration, ecology, water resources, soils and geotechnical, contaminated/hazardous materials and energy. Impacts in the North Shore Connector Study area are summarized and impacts in the Convention Center area are considered. This discussion is summarized in Table 5-1.

### **5.1 Air Quality**

The *North Shore Connector Final Environmental Impact Statement and Section 4(f) Statement* (FEIS) analyzed the potential impact on regional and local air quality of the North Shore Connector. The FEIS found that the North Shore Connector will improve air quality by increasing transit ridership, thereby reducing vehicle-miles of travel by automobile.

As indicated in Section 4, the revised project will carry 14,300 average weekday riders compared to 15,800 in the original project. Because the revised project will attract travelers from their automobiles, thereby reducing vehicle miles of travel, the revised North Shore Connector will improve air quality.

The FEIS identified temporal construction impacts due to fugitive dust emissions and emissions from construction equipment. As the time period for construction is relatively short, no detailed analysis of air quality impacts due to construction was conducted. Deferral of construction for the Convention Center Line would not change this assessment.

### **5.2 Noise and Vibration**

The FEIS analyzed noise and vibration impacts of the North Shore Connector at a number of sensitive receptors in the corridor. The analysis indicates that there are no noise or vibration impacts to sensitive receivers due to operation of the North Shore Connector. Deferring the Convention Center Line will not impact this result.

The FEIS identified a number of temporal noise and vibration impacts due to construction activities such as operation of trucks and jack hammers, pavement-breaking and pile-driving. Mitigations of these impacts such as time of day restrictions and sequencing of noisy activities were recommended in the FEIS. Deferral of the construction of the Convention Center Line will not change these conclusions.

### **5.3 Ecology**

According to the U.S. Fish and Wildlife Service, no federally listed or proposed terrestrial threatened and endangered species under their jurisdiction are known to exist in the North Shore Connector project area. Additionally, the Pennsylvania Game Commission concurred that no significant impact to the Peregrine Falcon, a state endangered species, would occur within the study area. Deferring the Convention Center Line will not impact this result.

While there is the potential for impacts to endangered species in the Allegheny River associated with construction of the underwater tunnel, no such impacts were identified for construction of the Convention Center Line. Deferral of construction for the Convention Center Line will not change this conclusion.

### **5.4 Water Resources**

The FEIS investigated impact to water quality, floodplains and transportation use of the Allegheny River due to the North Shore Connector project.

There is the potential for impacts to the Allegheny River's water quality resulting from construction of the tunnel and from surface erosion due to road realignments. No specific impacts were identified for construction of the Convention Center Line. Deferral of construction of the Convention Center Line will not change this conclusion.

#### Water Quality

The FEIS found that nearly all of the study area is already developed, and most new construction would involve redevelopment of areas that currently have high amounts of impervious surface. Therefore, the project should not generate a significant amount of runoff in these areas. Permanent water quality structures, such as sediment ponds and oil/grease skimmers, would be considered as part of final design and would be coordinated with permitting agencies. These structures could improve water quality conditions as compared with existing conditions.

To avoid settlement of buildings supported by shallow foundations, modification of the subgrade by using either cement/chemical grouting or underpinning with mini-piles are potential mitigation measures to be considered during Final Design. Deferring the Convention Center Line will not result in any impacts on water quality.

There is the potential for impacts to the Allegheny River's water quality resulting from construction of the tunnel and from surface erosion due to road realignments and tracks. No specific impacts were identified for construction of the Convention Center Line. Deferral of the construction for the Convention Center Line will not change this conclusion.

## Floodplains

The floodplain in the project area is well-developed. Therefore it is not anticipated that construction or operation of the North Shore Connector would cause any long-term impacts to the floodplain. Deferring the Convention Center Line will not result in any impacts on floodplains.

## Transportation Use of the Allegheny River

Neither operation nor construction of the North Shore Connector would cause any long-term effects to the transportation or recreational use of the Allegheny River. Deferring the Convention Center Line will not impact this result.

### **5.5 Soils and Geotechnical**

The FEIS found that there would be no issues regarding coal resources or soils in the construction influence area. Final design would address methods to avoid settlement of buildings supported by shallow foundations, modification of the sub grade by using either cement/chemical grouting or underpinning with mini-piles. The FEIS also addressed construction impacts such as removing excavated material, tunnel boring operations, soil stabilization, construction dust and groundwater.

Any long-term impacts on soils and geotechnical due to the Convention Center Line, and mitigation resulting thereof, will be deferred.

Construction of the North Shore Connector would involve excavation and deposition of substantial amounts of soil. For the Convention Center Line, about 98,000 cubic meters would need to be excavated. Because of the short distances to the Interstate Highway System and low volumes of truck movements needed to haul the material, no impacts to adjacent land uses are anticipated from transporting the spoil material. Deferral of the Convention Center Line will defer these impacts.

### **5.6 Contamination/Hazardous Materials**

There are no sites with contaminated soils located along the Convention Center Line and there are no impacts associated with deferral of construction or operation of the Convention Center Line.

### **5.7 Energy**

Similar to the discussion of Air Quality, the North Shore Connector contributes to energy savings because it reduces auto vehicle miles of travel.

As indicated in Section 4, the revised project will carry 14,300 average weekday riders compared to 15,800 in the original project. Because the revised project will carry transit

riders, thereby reducing vehicle miles of travel, the revised North Shore Connector will contribute to reducing energy consumption.

**Table 5-1  
Summary of Potential Environmental Impacts**

<b>Impact Area</b>	<b>Project Described in FEIS</b>	<b>Deferral of Convention Center Line</b>
Population, Economy, and Land Use	Compatible with area Land Use Plans	Benefits of Convention Center Line deferred
Acquisitions / Demolitions	7 partial land acquisitions, 1 building to be demolished, 14 easements, and 11 parking spaces displaced.	11 parking spaces no longer needed. All other property acquisitions associated with the Convention Center Line will be deferred.
Environmental Justice	New LRT service and improved through bus service to minority and low-income neighborhoods.	Benefits of Convention Center Line will be deferred. Any impacts will be to all users; minority and low-income users not disproportionately impacted.
Visual	Low	Low. Impacts will be deferred.
Historic Resources	No effect on 10 historic resources; no adverse effect on 2 historic resources; conditional no adverse effect on 5 historic resources; potential effect on 4 archaeological resources.	Deferral of the Convention Center Line will have no impact on historic and archaeological resources. One resource identified in the FEIS, the Greyhound Bus Station, has been demolished by the Pittsburgh Parking Authority as part of a separate project.
Parkland	Temporary construction impacts	No impacts identified in FEIS for Convention Center Line.
Utilities	Low	Low. Impacts on will be deferred
Air Quality Impacts	Low	Low
Noise and Vibration	None	None
Endangered Species	Temporary impacts to fish habitat during construction; potential impacts to federally-listed threatened or endangered mussel species during construction.	No impacts identified in FEIS for Convention Center Line.

<b>Impact Area</b>	<b>Project Described in FEIS</b>	<b>Deferral of Convention Center Line</b>
Water Resource Impacts	Low	No impacts identified in FEIS for Convention Center Line.
Contamination	Potential impacts during construction; 5 properties require additional Phase II investigation	Deferral of Convention Center Line has no impacts.
Energy (difference in BTU's from No-Build)	Reduces energy consumption for transportation	Reduces energy consumption for transportation

Sources: DMJM+HARRIS, Inc. and BRW, Inc., September 2001 and Port Authority of Allegheny County, December 2005

## 6.0 SECONDARY AND CUMULATIVE IMPACTS

Secondary impacts are those impacts that could potentially occur, not as a direct consequence of the proposed action, but as a result of any subsequent actions that may be induced by the proposed action. Cumulative impacts potentially result when the effects of an action are added to or interact with other effects in a corridor within a given time frame.

The *North Shore Connector Final Environmental Impact Statement and Section 4(f) Statement* (FEIS) identified a number of projects in the study area where there could be potential interaction during design and/or construction of the North Shore Connector Project. Some of those projects were completed since 2002, for example, the Fort Pitt Bridge and Tunnel rehabilitation. Other projects discussed in the FEIS that are still underway or are under consideration are:

- Intermodal Transportation Center – To be located next to the Allegheny Station of the North Shore Connector. This project is included in the regional Long Range Transportation Plan, but is not under active development at the current time. Deferral of the Convention Center line would have no impact on this project.
- High-speed Maglev from Greensburg to Pittsburgh International Airport – This project is subject of a recently completed Draft Environmental Impact Statement. Deferral of the Convention Center line would not impact this project.
- Regional Transit Planning – Since 2002, the Airport Multi-Modal Corridor Study and Eastern Corridor Transit Study have been completed, and the 20/20 Regional Transit Vision study is being completed. The Airport corridor study identified potential light rail that would begin at the Allegheny Station of the North Shore Connector and extend northwest and west to the Airport corridor. Deferral of the Convention Center line would have no impact on this proposed project. The Transit Vision Study assumed the North Shore Connector would be implemented.

As indicated in previous chapters, Southwestern Pennsylvania Commission (SPC) is currently undertaking the Eastern Corridor Transitional Analysis to further refine the recommendations of the Eastern Corridor Transit Study. The Transitional Analysis will consider the Convention Center line as it relates to potential future transit alternatives in the Allegheny Valley.

The FEIS identified a number of development projects in the corridor: Allegheny Riverfront Park in the Pittsburgh Cultural District, new hotel in the vicinity of the Convention Center, North Shore Master Plan development, and expanded Convention Center. The Allegheny Riverfront Park and expanded Convention Center are in place. The North Shore Master Plan development is being done incrementally, and a Convention Center hotel is under consideration. More recently, construction of the African American Cultural Center has begun along Liberty Avenue at William Penn

Way. Since the Convention Center line is still being pursued, albeit in a longer time frame, these projects should not be impacted by deferral of the Convention Center line.

The FEIS identified two potential secondary impacts of the North Shore Connector. The first area of potential secondary impact is that the Connector could facilitate future LRT extensions to the west and north from the Gateway line, and to the Strip District and potentially to the east and Allegheny Valley Corridors via the Convention Center line. Deferral of the Convention Center line could impact the timing of potential future extensions to the northeast and east, and this will be considered by SPC's Transitional Analysis and by other future studies.

The second area of potential secondary impact discussed in the FEIS was the encouragement of transit oriented development in the North Shore; this will not be impacted by deferral of the Convention Center line. This section of the FEIS did not specifically address how the Convention Center line might encourage transit oriented development in the Convention Center area.

The Pittsburgh Parking Authority has begun pre-construction activities for the Grant Street Transportation Center which will include a 1,000-space parking garage and a new Greyhound Bus Terminal. The ground floor was designed for to accommodate retail development. An entrance to this facility was to be enclosed with the station to facilitate intermodal connections. Although Port Authority and the Pittsburgh Parking Authority coordinated schedules for their respective facilities, these coordination efforts will need to be revisited when work on the Convention Center Line resumes.

The FEIS discussed potential cumulative impacts in the various environmental categories. This information is summarized below.

According to the FEIS, the North Shore Connector would not have cumulative long-term impacts in the following areas: cultural, historic and archaeological; parklands; utilities; safety and security; noise and vibration; ecology; water resources; soils/geotechnical; and contamination/hazardous materials.

The FEIS indicated that the North Shore Connector would have positive long-term impacts in these areas: land use and development; neighborhoods and environmental justice; visual and aesthetic; transportation; air quality; and energy.

Deferral of the Convention Center line will not change these conclusions.