Pennsylvania
State Transportation
Advisory Committee

PENNSYLVANIA STATEWIDE PASSENGER RAIL NEEDS ASSESSMENT

EXECUTIVE REPORT

TRANSPORTATION ADVISORY COMMITTEE
DECEMBER 2001

ACKNOWLEDGEMENTS

Gannett Fleming, Inc. wishes to thank the members of the TAC Study Task Force for their guidance, insights, and ongoing participation as we conducted this important study. We appreciate their constructive dialogue, incisive review of materials, and participation in the many meetings.

Task Force Members:

Chairman:

Brad Cober, Commissioner, Somerset County

Members:

H. Michael Liptak, TAC Chairman
Andrew Galloway, Senior Director, Transportation Planning and Policy, Amtrak
Larry King, Deputy Secretary for Planning, PENNDOT
Joseph Mangarella, TAC Member
Georgia Masters-Earp, Community and Economic Development, TAC Member
Richard Peltz, Deputy Secretary for Local and Area Transportation, PENNDOT
Robert Roush, Pennsylvania Department of Education, TAC Member
Bill Schafer, Director of Corporate Affairs, Norfolk Southern Corporation
David E. Sims, P.E., TAC Member
Fred Wertz, Pennsylvania Department of Agriculture, TAC Member

PENNDOT Staff:

James Arey, Center for Program Development & Management
James Brantner, Center for Program Development & Management
Joseph Daversa, Director – Bureau of Public Transportation
James Grier, Division Chief, Bureau of Public Transportation
Robert Janecko, Center for Program Development & Management
Ran Marshall, Bureau of Rail Freight
Robert Shellenberger, Bureau of Public Transportation
William Trethaway, Center for Program Development & Management
Anita Everhard, State Transportation Advisory Committee

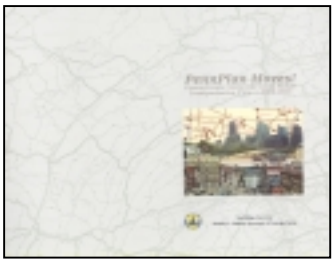
Consultant Team:

Keith Chase, Project Director
Toby Fauver, AICP, Project Manager
Patrick Anater
Michelle Hoshauer

TABLE OF CONTENTS

Technical Report – a separately bound technical report containing more detailed supporting documentation is also available from PA State Transportation Advisory Committee.

1.0 INTRODUCTION



The Pennsylvania State Transportation Advisory Committee (TAC) chose to broadly assess the need for statewide intercity passenger rail service in key transportation corridors pursuant to *PennPlan* Objective #20. *PennPlan* contains ten broad goals that relate to various key themes, public input, and 29 specific objectives. One objective (#20) is to "Develop a statewide, passenger-rail needs assessment." That objective relates to several of the ten *PennPlan* goals, including:

1. Retain jobs and expand economic opportunities
2. Make transportation decisions that support land use planning objectives
3. Maintain, upgrade, and improve the transportation system.

These goals in turn relate to many *PennPlan* themes including: Mobility, Transportation Options, Efficiency, Environment, Equity, Economy and Safety. The *PennPlan* issues are addressed along with the study goals in order to assess the Commonwealth's statewide passenger rail needs. The following work tasks were performed as part of TAC's passenger rail needs assessment:

- Identify and prioritize (with respect to broad potential) intercity passenger rail corridors;
- Develop a baseline comparison of the corridors;
- Develop profiles for the high potential corridors;
- Identify areas of need and opportunity for passenger rail service in the Commonwealth;
- Identify future policy considerations for intercity passenger rail service.

This study has two basic components: an identification of potential intercity rail corridors and the identification of key policy issues that would likely be associated with any major initiative to further advance intercity rail service in the Commonwealth.

1.1 CORRIDORS IDENTIFIED

The study focuses on identifying the need for intercity passenger rail service in the *PennPlan* Corridors and qualitatively assessing the potential of the corridors by the identified level of need. It is important to note that this assessment of corridor potential is for initial consideration only.

This study focuses on *intercity* passenger rail and not *commuter* rail. For this study we have defined intercity passenger rail as passenger rail service that connects two or more population centers and is not operated by a local or regional transit authority.

This study relied entirely on existing data sources to evaluate the need for intercity rail passenger service in the Commonwealth. Future feasibility assessments of any of the corridors would require detailed evaluations to identify right-of-way, station locations, ridership, costs and benefits.

The Transportation Advisory Committee's Passenger Rail Task Force identified a set of initial corridors to be studied within this assessment. While the higher potential corridors may indeed be those with the greatest promise, this report in no way prohibits the Commonwealth from addressing other corridors in the future or for that matter rearranging the corridor potential assignments—especially on the basis of changing conditions.

The corridors were broadly identified without defining the exact right-of-way, rail technology or exact station locations along each route. Corridor definition at that level of detail and specificity would be a subject for future planning and engineering efforts.

The corridors are identified and descriptions are included in this report and are geographically located on Map 1 on page 7.

This study focuses on *intercity* passenger rail rather than *commuter* rail, which is routinely addressed by Metropolitan Planning Organizations.

2.0 STUDY METHODOLOGY

This section describes the 9-step methodology that was used to identify and assess the intercity passenger rail corridors for future analysis and consideration.

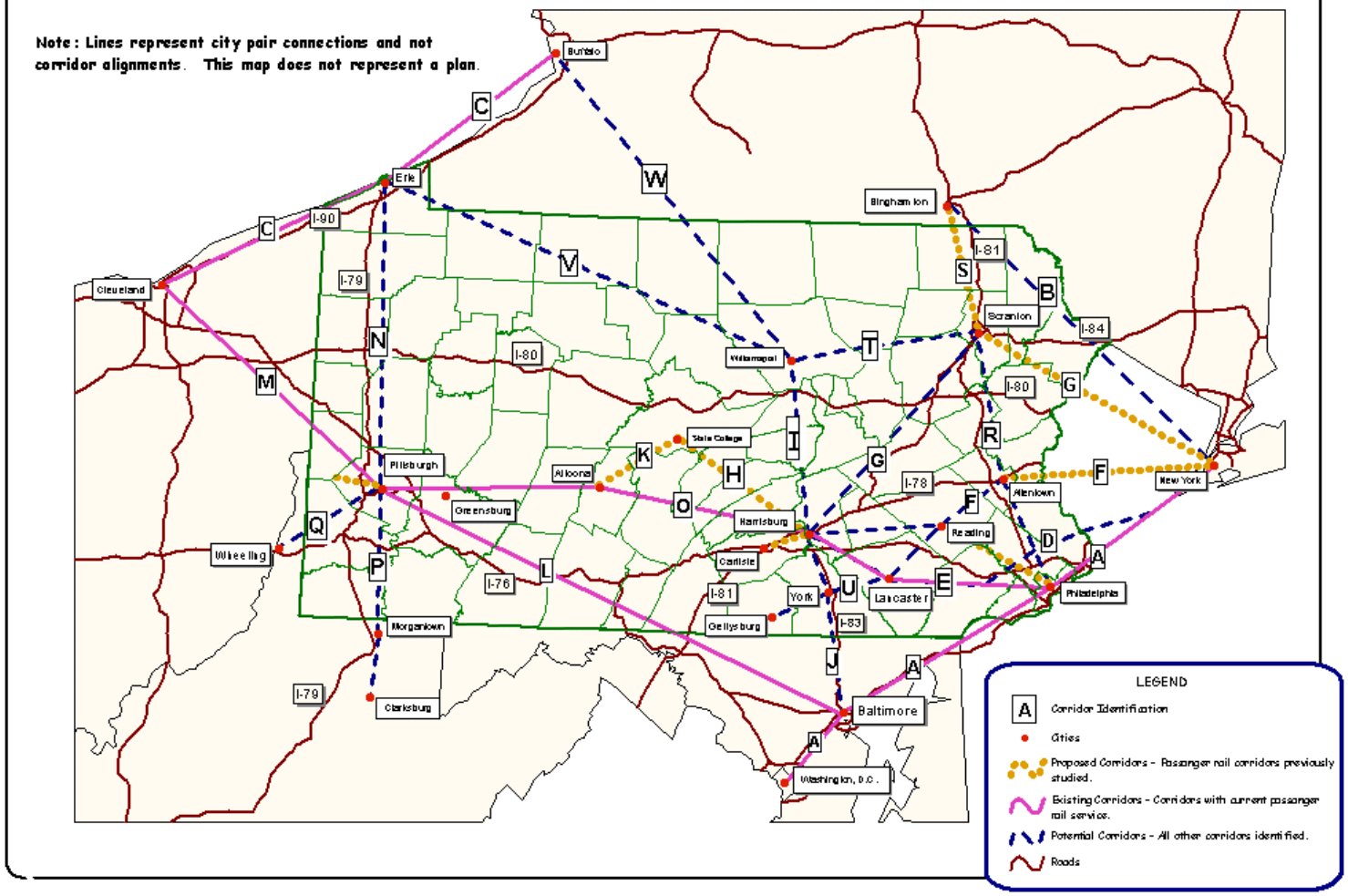
1. **Initial Corridor Definition and Background:** At the study outset, the TAC Task Force, PENNDOT staff, and the study consultant identified and mapped initial corridors for consideration. The corridors were defined broadly to connect major population/employment centers and destinations both within Pennsylvania and adjacent states.
2. **Benchmark Review:** Following the initial definition of corridors, a review of other state research and practices was conducted to determine how other agencies are addressing similar issues and formulating long-range plans for passenger rail service.

3. **Initial Corridor Evaluation Process and Criteria:** An initial set of evaluation criteria was defined and an evaluation process was developed.
4. **Regional Planning Partner Meetings:** Regional meetings were conducted with PENNDOT regional planning partners and other stakeholders. The focus of the regional meetings was to gather additional qualitative and quantitative data regarding the corridors.
5. **Evaluation Matrices:** Corridor profiles were developed highlighting the key characteristics related to the potential for rail passenger service in each corridor. The data presented in the profiles include: a corridor description, land use trends, existing infrastructure, socio-demographic/economic trends, congestion, other regional trends, institutional/policy considerations, perceived barriers, and other factors.
6. **Planning Partners Meeting:** The corridor profiles were presented to the MPO/LDD planning partners at the State Planning Partners Meeting in Harrisburg on June 14, 2001. Identification of key policy issues resulted regarding future intercity passenger rail investment. An update was given to the Planning Partners at the October 31st Planning Partners Meeting in Philadelphia. The Partners did not take any action during this update.
7. **Corridor Ratings:** The evaluation matrices (with the planning partners' input) were presented to the TAC Task Force for consideration in rating the corridors. The Task Force rated each corridor's potential as high, medium or low for future study and evaluation.
8. **Corridor Details:** For the high potential corridors additional data was collected and summarized in the form of detailed corridor profiles.
9. **Policy and Funding Review:** A policy and funding review was conducted to identify policy and long term funding considerations to support an expanded intercity passenger rail program.

9 Step Methodology

1. Initial Corridor Definition and Background
2. Benchmark Review
3. Initial Corridor Evaluation Process and Criteria
4. Regional Planning Partner Meetings
5. Evaluation Matrices
6. Planning Partners Meeting
7. Corridor Ratings
8. Corridor Details
9. Policy and Funding Review

Map 1 - Initial Corridors for Consideration



3.0 BACKGROUND RESEARCH ON CANDIDATE CORRIDORS

3.1 EXISTING INTERCITY RAIL SERVICE

Five Amtrak intercity rail routes currently serve Pennsylvania. The following table describes these Amtrak services. More detail on each corridor is provided in the Technical Report.

Corridor	Description
Keystone Corridor	The Keystone Corridor is a 104-mile, state-supported Amtrak line that runs between Harrisburg and Philadelphia through Lancaster. The corridor is a designated High Speed Rail Route that has experienced significant ridership growth between 1995 and 2001.
Capitol Limited	The Capitol Limited Service operates from Chicago through Pittsburgh to Washington D.C. on a combination of CSX and Norfolk Southern track. There are two Pennsylvania stops on the Capitol Limited, Pittsburgh and Connellsville.
Pennsylvanian —Three Rivers	The Pennsylvanian—Three Rivers Amtrak service operates daily from Chicago through Pittsburgh, Harrisburg, and Philadelphia to New York City. The service operates on both CSX and Norfolk Southern tracks to Harrisburg where it joins the Keystone Corridor.
Lake Shore Limited	The Lake Shore Limited operates 1 time daily from Chicago through Erie, to Albany, (where it splits to serve) Boston or New York City. The service operates on CSX tracks across the Pennsylvania Northern Panhandle through Erie. The train's only Pennsylvania stop is in Erie.
Northeast Corridor	The Metroliner/Acela Express operating between Boston, New York, Philadelphia and Washington, D.C is the final intercity rail corridor in PA. Amtrak operates the service on its own right-of-way at top speeds of 125 to 150 mph. This corridor is the heaviest used in the Amtrak system.

In addition to the intercity rail service in the state, there are two major intercity bus service providers. Combined, Greyhound and Trailways provide intercity bus service to most of Pennsylvania's major communities.

3.2 OTHER STATE RESEARCH FINDINGS

During the study, Pennsylvania border-states and other states were contacted to identify successful planning and intercity rail service practices. This section presents the key findings from these contacts. Note that more detailed information is provided in the Technical Report.

State Contacted	Key Findings
Ohio	• Has an established statewide passenger rail policy with parts of their passenger rail system designated as high speed rail corridors by the Federal Railroad Administration (FRA). • Is a member of the Midwest high-speed rail compact establishing Cleveland as the hub of a multi-state high-speed rail system.
New Jersey	• The growing long distance commute trend between the Lehigh Valley and Northern New Jersey has strained the road based transportation infrastructure. New Jersey is working to extend rail service to provide a convenient alternative to the automobile. • New Jersey has a statewide rail and transit operator (NJ Transit) that is responsible for both rail and bus transit planning and operations in the state.
Maryland	• The success of passenger rail service in the state is due to increased investment by both Amtrak and the Federal and State Governments. This is a direct result of high corridor densities and predictable commute patterns, which provides sustainable ridership.
Virginia	• Virginia and North Carolina have collaborated on several studies to extend the Northeast Corridor passenger rail service to Charlotte and eventually to Florida. The relationship between the two states provides an excellent example of interstate cooperation and is one of the main reasons that the Federal Railroad Administration has designated the Southeast Corridor as a high-speed rail corridor.
West Virginia	• Amtrak service currently passes through the southern part of the state with its Cardinal service and through the eastern panhandle with the Capitol Limited Service. CSX is completing $15 million of track improvements that should increase the speed of passenger trains along this line.

State Contacted	Key Findings
California	• The state has realized that it cannot build its way out of highway gridlock and has thus focused on meeting its transportation needs with intercity passenger rail service. • The Golden State has provided a high level of state funding for intercity rail service. To plan for the effective usage of that funding, California works in partnership with the commuter and freight railroads and local planning partners to achieve statewide consensus on passenger rail planning. • The 20-year plan that resulted contained a blueprint to guide future rail planning and investment decisions. • The State contracts services to Amtrak and has a local task force for each of four corridors to oversee and plan for the passenger and freight service in each.
Washington	• Washington's Long Range Transportation Plan recognizes the need for intercity passenger rail as an important component of the overall transportation network. • Washington has numerous intercity passenger rail partners that work together to improve existing service and propose new routes, including: Oregon, British Columbia, Amtrak, Burlington Northern – Santa Fe (BNSF), Ports, local residents and private entities.
New York	• The New York State Department of Transportation (NYSDOT) is currently working with Amtrak and the relevant freight railroads to initiate a high-speed rail program. • A Governor's Passenger Rail Advisory Council is being established to assist in the development of long-term, statewide strategies for future improvements in intercity passenger rail service.
North Carolina	• The state allows the use of highway funds or gasoline taxes for funding rail improvements. • NCDOT has instituted an innovative highway/rail crossing hazard elimination program known as the *Sealed Corridor Initiative* to improve or close every crossing along the North Carolina portion of the Southeast Corridor, thus helping to ensure safe operation along the line. • North Carolina is spending significant state monies in advance of Federal money being available.
Michigan	• Michigan is focused on improving service quality to attract riders; the factors include reliability (on time), convenience (sufficient frequency), comfort (adequate stations and coaches), and courteous service. • Michigan is aiming to reduce travel times to have a significant impact on ridership as rail passenger service trip times become more competitive with auto travel times.

3.3 REGIONAL MEETING FINDINGS

Seven regional meetings were held to identify sources of data, regional considerations and policy issues for the intercity rail evaluation. In each region, representatives knowledgeable in the following areas were asked to participate:

- Local/Regional Planning
- Economic Development
- Tourism
- Freight and/or Passenger Rail
- Local Transit
- Other potentially interested participants.

Regional Meeting Map

The regional meetings typically resulted in identification of regional trends, transportation issues and priorities and specific comments on the initial corridors identified on the map and in the corridor descriptions. The following table provides an overview of the key regional meeting findings. The technical report provides a complete summary from each regional meeting.

Meeting Location	Key Findings
Meeting # 1: Northeast (Dunmore)	• The region is aggressively pursuing Scranton based rail service. • Scranton to Northern New Jersey/New York City is a heavily traveled commuter corridor.
Meeting # 2: Northcentral (Montoursville)	• As roadway improvements are made in the region and capacity is added, the demand for intercity rail service will be reduced. • Rail freight service is a regional priority. The region is focusing on improvements to its freight and intermodal systems.
Meeting # 3: Southwest (Bridgeville)	• The Maglev project is a major regional focus. It has potential if constructed to expand into an intercity line between Pittsburgh and Harrisburg. • The regional priority for intercity passenger rail service is the Pittsburgh to Harrisburg Corridor. The existing service should be improved and the corridor should be modified to include State College directly.

Meeting Location	Key Findings
Meeting # 4: Northwest (Oil City)	• The region is rural in nature with a stable dispersed population that would probably not support rail service in the region. • The State has invested in the airports in the region and the participants were concerned that rail service could compete with the airports for patrons.
Meeting # 5: Southcentral West (Hollidaysburg)	• The Pittsburgh-Altoona-State College-Harrisburg-Philadelphia route should be a priority intercity corridor focusing on existing major commuting patterns and key major destination hubs. • The major regional transportation priority is highway and airport access.
Meeting # 6: Southcentral East (Harrisburg)	• Intercity rail service needs to be user-friendly and accessible. Harrisburg is a major station in the Keystone Corridor. Parking is expensive and not readily available early in the mornings. • The Keystone Corridor should continue to be an intercity rail priority. The Pittsburgh to Harrisburg service should be improved.
Meeting # 7: Southeast (King of Prussia)	• Harrisburg to State College should be a priority route consideration. • The region is quickly growing both in population and employment.

In addition to the regional meetings, interviews and a group meeting of regional planning partners, freight rail interests, and others were conducted to gather information and identify concerns. The findings from these efforts are included in the Technical Report.

4.0 CANDIDATE CORRIDOR ANALYSIS

Once the initial corridors were identified and profiles were developed, the corridors were evaluated and rated using the following five criteria:

- **Infrastructure and right-of-way availability:** This initial screening factor considers the current availability of infrastructure and right-of-way (ROW) (e.g., including available ROW, freight service and passenger service) in particular to support potential intercity rail service.
- **Major destinations and trip generators:** This criterion considers the extent and coverage of concentrated activity centers or "volume nodes" within the potential corridors.

- **Market size:** This factor primarily considers the key demographic variables – population and employment.
- **Transportation patterns and conditions:** This factor is a basic "indicator" of present conditions such as automobile traffic congestion and volume to reflect major travel patterns and key destinations.
- **System continuity and connectivity:** This factor considers the practical matter of how the individual candidate corridors relate to a larger intercity rail system or larger transportation network.

Key Evaluation Factors:

- Infrastructure and right-of-way availability
- Major destinations and trip generators
- Market size
- Transportation patterns and conditions
- System continuity and connectivity

The TAC Task Force reviewed the five criteria and established weights for each of the criteria to reflect the relative importance of each factor in prioritizing the corridors for further study. The established weights are as follows:

Factor	Weight
Infrastructure and Right-of-Way Availability	2.6
Major Destinations and Trip Generators	2.5
System Continuity and Connectivity	2.2
Market Size	2.1
Transportation Patterns and Conditions	1.6

Each corridor was assigned a high, medium or low rating for each factor. **Figure 1** provides the rationale that was used in assigning the ratings.

Figure 1
Guidelines for Applying Corridor Evaluation Criteria

Factor	High	Medium	Low
Infrastructure and Right-of-Way Availability Weight – 2.6	• Rail right-of-way (ROW) in place for extent of corridor. • Much or all track in place and in good condition. • Low freight impact. • Ability to add/expand rail in the future.	• Some ROW in place and available. • Some acquisition and or significant repair/ improvements needed. • Medium freight impact. • Some ability to add/expand rail in the future.	• Little or no existing rail or other reasonable right of way to provide for intercity connection. • High freight impact. • No ability to add/expand rail in the future.

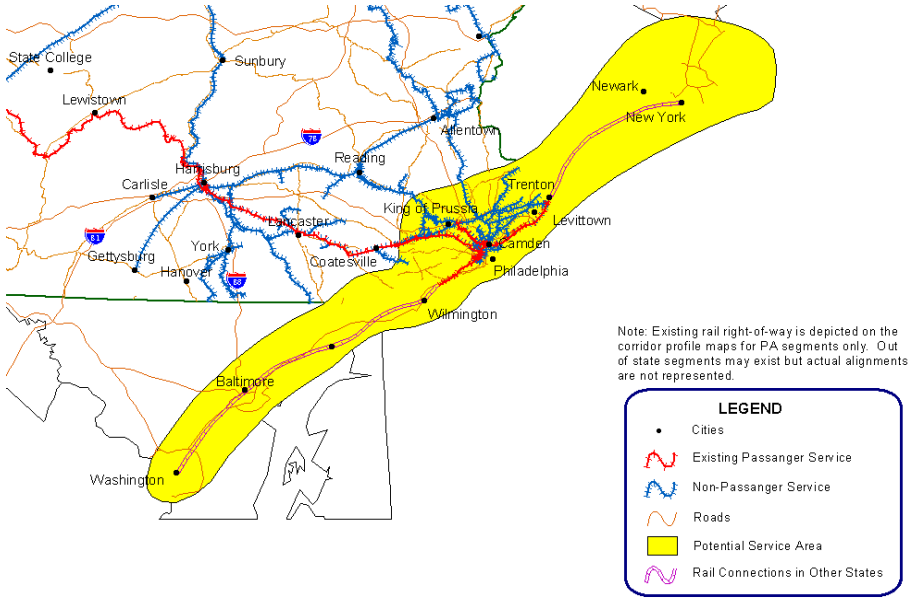
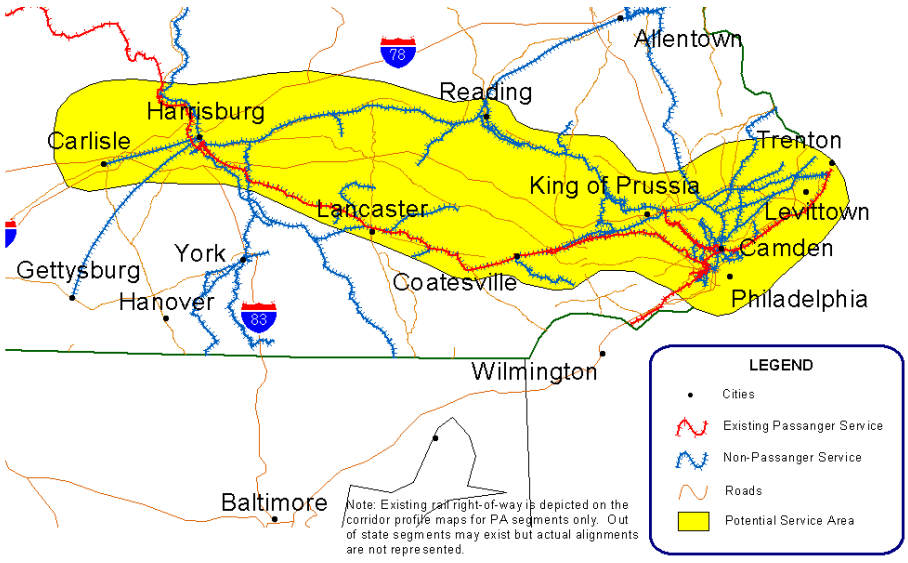
Factor	High	Medium	Low
Major Destinations and Trip Generators Weight – 2.5	• Corridor serves major clusters of employment, tourism, and other concentrations of destinations on both ends and points along the corridor. • Connects economically and socially tied cities.	• Some destinations potentially served have special or seasonal events that draw commuters but are not considered major year-round destinations.	• Fewer tourist and cultural attractions. • Little movement of residents to outside the area.
System Continuity and Connectivity Weight – 2.2	• Existing passenger rail with relatively high use, and increasing ridership. • Large number of transit connections at potential rail stops and terminal corridor ends.	• Existing rail service with relatively low and/or declining ridership and few connections with other modes. • No existing service, with several potential connections with other modes.	• No existing passenger rail service. • No transit or comparable connections at potential rail stations. • Potential stations a larger distance from population centers.
Market Size Weight – 2.1	• Major and growing population centers along the corridor. • Major and growing employment centers along the corridor.	• Corridor connects medium sized population centers with steady population and employment.	• Small rural communities with low population densities and sparse employment. • Areas with higher rates of decreasing population.
Transportation Patterns and Conditions Weight – 1.6	• Heavy existing travel volumes along the corridor by all modes. • Large amount of congestion along the corridor. • Multiple transportation alternatives along the corridor.	• Somewhat reliable transportation system with fewer delays and slower growing volume.	• Low volumes of intercity traffic on existing modes. • Good level of service on existing highways between corridor's terminal ends.

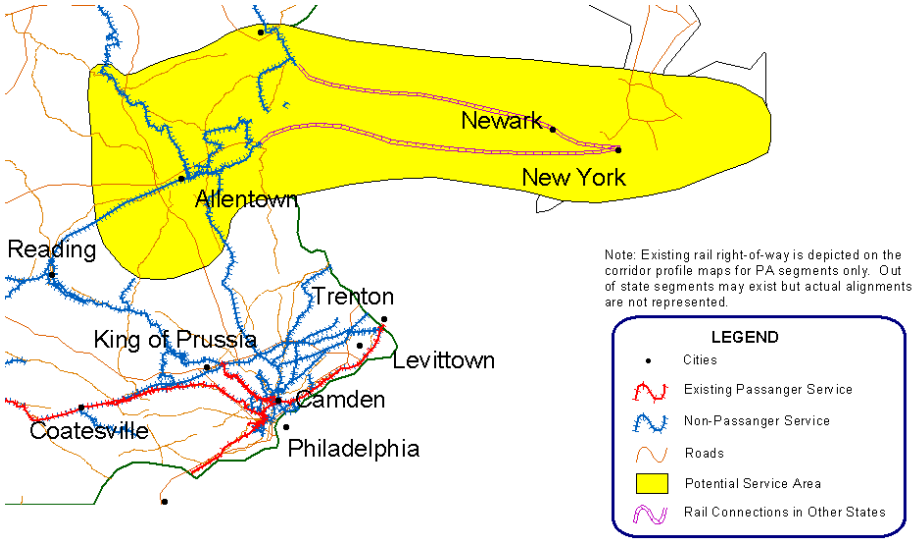
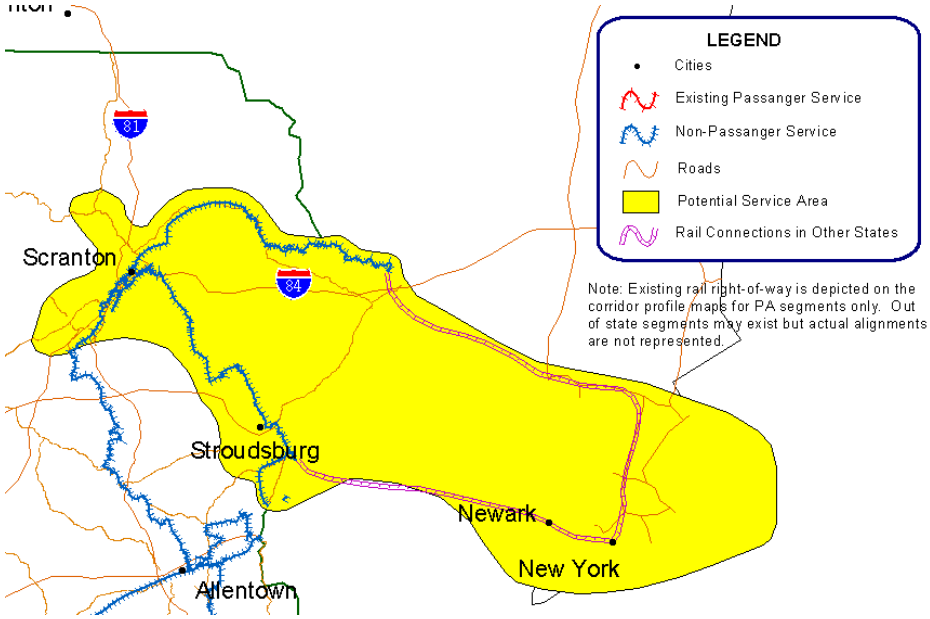
Using this methodology, the TAC Task Force prioritized the corridors outlined in this study into four groupings; High, Medium-High, Medium and Low. The evaluation criteria were applied to all the rail corridors. The Technical Report details the corridor ratings.

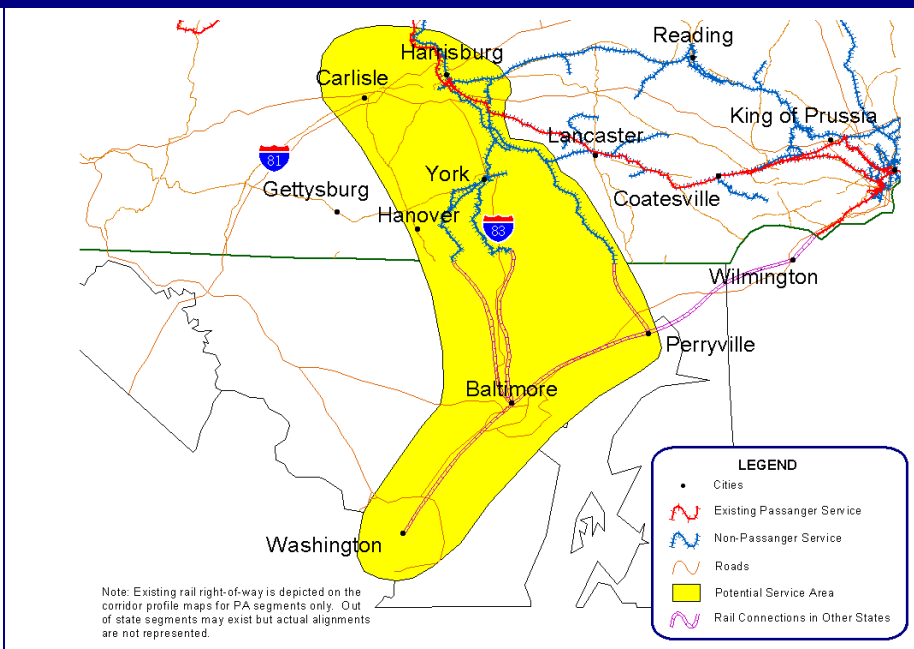
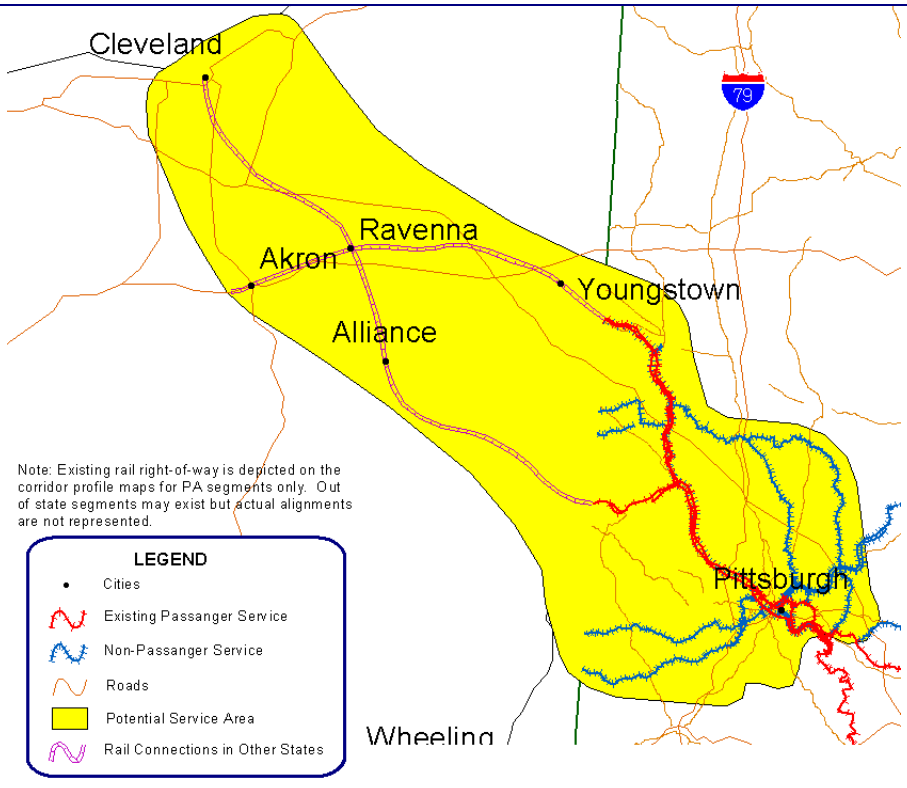
5.0 HIGH PRIORITY CORRIDOR DESCRIPTIONS

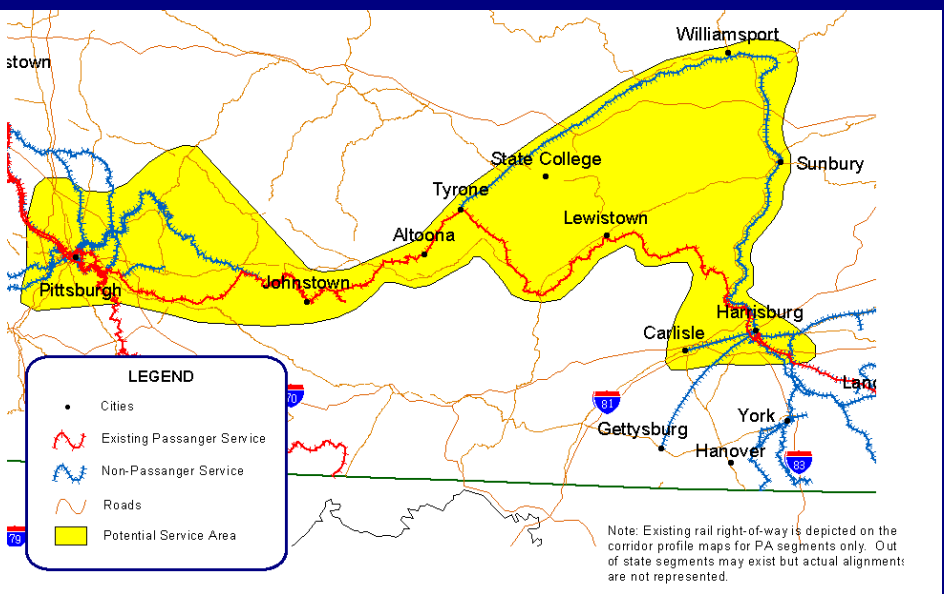
For each of the High priority corridors, a corridor profile was developed to provide PENNDOT with baseline information on each corridor as a starting point for future analysis. The Technical Report provides the complete corridor profiles. The following table provides

a description of each high priority corridor. **Please note that the corridors are not ranked and therefore are not listed in any priority order.**

Corridor	Description	Location
Baltimore/Washington to Philadelphia to New York	The Northeast Corridor provides rail passenger connections along the east coast between Washington and New York. All modes of transportation are near capacity. The corridor is well established providing connections to Boston in the North and ultimately to Florida in the South.	
Harrisburg to Philadelphia	Known as the Keystone Corridor, this corridor is a heavily used commuter/intercity rail line between Harrisburg and Philadelphia. An option that was identified during the study was to provide a connection from King of Prussia to New York City in lieu of connecting through Philadelphia.	

Corridor	Description	Location
Allentown to New York	This east-west corridor spans the Lehigh Valley and the New York metropolitan region. The corridor provides a strategic connection for both goods and people to New York City/Northern New Jersey.	
Scranton to New York	This corridor is not currently an operating rail passenger line but is proposed regionally to become an operating passenger rail route. A Major Investment Study (MIS) is under development as required by FTA.	

Corridor	Description	Location
Harrisburg to York to Baltimore/ Washington D.C.	The corridor provides a direct route between Harrisburg and Washington, D.C, which presently can only be accessed by rail via Philadelphia. Portions of the corridor are critical core freight routes for Norfolk Southern. These portions would vary based on alignment of the service.	
Pittsburgh to Cleveland	This corridor is a busy passenger and freight rail line because of the direct interaction between Pittsburgh and Cleveland and connections to larger outlying destinations such as Detroit and Chicago to the west and Wash., DC, Philadelphia and New York City to the east. Amtrak operates on Norfolk Southern right of way.	

Corridor	Description	Location
Pittsburgh to Harrisburg	Amtrak currently operates service in this corridor connecting Harrisburg to Pittsburgh. Another corridor option includes service through State College. Current service operates along an important Norfolk Southern freight right of way.	

6.0 FUTURE POLICY FRAMEWORK

This section provides a starting point for the Commonwealth if a Statewide Passenger Rail Initiative is considered in the future as a long-term initiative. The Department and Commonwealth can consider each of these issue areas and their implications for future intercity rail development. The intent of this section is to simply begin framing the issue. A series of initial policy and funding considerations are identified. Twenty topics are organized into the four general categories: Institutional, Funding/Partnerships, Infrastructure, and Planning/Public Awareness. The policy issues are also categorized as either short term (1-3 years) or long term (3-10 years) indicating the time frame for beginning to address the issue, not necessarily completion. In many instances implementation may be an ongoing item.

POLICY TOPIC	DESCRIPTION	TIME FRAME
A) Institutional: Intercity Rail as a major initiative will pose a series of institutional related issues that span each level of government and the participation of key stakeholders.		
INTERCITY PASSENGER RAIL VISION	The Commonwealth should consider the results of this study to define a long-term vision, goals and objectives for the development of an intercity rail passenger system. The vision should address the need for rail service and the incremental approach to advance passenger rail as a component of the overall transportation system.	1-3 years
PENNDOT ROLES AND RESPONSIBILITIES /ORGANIZATIONAL IMPLICATIONS	The Bureau of Public Transportation has been the organizational focus for the Department's involvement in passenger rail matters. PENNDOT should consider how it would need to further adapt organizationally for any major statewide passenger rail focus. PENNDOT's leadership should consider this opportunity as part of its next update of the Statewide Long Range Transportation Plan. This issue is inseparable from the intergovernmental and financing mechanisms issues that immediately follow. Funding for rail passenger investments will be central to any long-term direction setting and associated staffing.	1-3 years
INTERGOVERNMENTAL—FEDERAL, STATE, LOCAL ROLES	Absent a clear Federal policy with respect to the development of intercity rail, the Commonwealth should take proactive steps in clearly defining roles for state and local government. Intergovernmental solutions will not come easily, but will require substantial commitments among federal, state, and local partners to achieving shared goals for mobility and intermodalism. Pennsylvania has an opportunity to help shape Federal policy for intercity passenger rail, especially given its impact on previous Federal legislation.	3-10 years
B) Funding Partnerships: Intercity Passenger rail will be a costly undertaking in any setting. All involved will be challenged to stretch the envelope with regard to existing concepts of innovative finance, funding flexibility, and private participation.		
FINANCING MECHANISMS	Any significant commitment to intercity rail development may bring with it the need for a dedicated and predictable funding source. Planning horizons for corridor development will be long term and not be an effective use of resources unless there is some reasonable expectation that funding will be available for meritorious projects.	3-10 years

POLICY TOPIC	DESCRIPTION	TIME FRAME
LOCAL/REGIONAL FUNDING SUPPORT	Future financing mechanisms can be developed to take advantage of intercity corridors, as broader geographic areas. Strategies that effectively pool public and private resources regionally using mechanisms such as corridor impact fees, transportation partnership districts, and other collaborative financing approaches will help to ensure a meaningful level of local support.	3-10 years
PRIVATE SUPPORT	One feature of a Pennsylvania Intercity Passenger Rail Initiative should be the consideration of maximizing private support. This should not only be construed in terms of incentives, innovative finance or revenue base definition, but also partnership opportunities with respect to the role of any intercity passenger rail operator.	3-10 years
MULTI-STATE APPROACHES	Since potential corridors will link service points across multiple states, funding strategies should consider innovative ways in which states can pool resources. Federal incentives and funding should be the primary lever to encourage this approach. In doing so it will foster a stronger national intercity rail network rather than a piecemeal approach state to state.	3-10 years
C) Infrastructure: A primary area of policy attention will be the availability and suitability of infrastructure to support intercity passenger rail development. This was a major consideration in assessing the potential corridors in this report. Rail infrastructure is a unique property with lengthy ribbons of right-of way that are extremely difficult to create. As such, to a great degree our rail network will rely almost entirely on the use and reuse of existing rail lines. From a planning standpoint, infrastructure should be broadly defined to encompass track, equipment, signals, and other elements in addition to the necessary right-of-way.		
PUBLIC-PRIVATE ASSETS	Joint use is complicated from the standpoint that it requires the effective deployment of both public and private assets. Overall direction/funding for intercity passenger rail for the near term will be a public sector function.	3-10 years
TECHNOLOGY BALANCE	A key consideration in advancing intercity passenger rail issues is the balance that will need to be struck between existing infrastructure and new rail technology. New technologies such as Magnetic Levitation (Maglev) cannot divert attention from promising opportunities with existing technologies.	3-10 years

POLICY TOPIC	DESCRIPTION	TIME FRAME
CORRIDOR PRESERVATION	There are many existing rail corridors and segments of right-of-way that are still intact. As our transportation needs continue to change over time, these rail lines and rights-of-way will become strategically important to maintain an effective and reliable transportation system. The Commonwealth should explore various methods of preserving existing rail right-of-way to meet long-term transportation needs for both people and freight. This does not imply public ownership but public support for the preservation effort.	3-10 years
LOCAL INTERMODAL CONNECTIONS	Pennsylvania has extensive community transit and intercity transit infrastructure with intercity bus providers, fixed route transit services and the shared ride community transit systems. It is essential that the rail stations along the state's intercity rail system have intermodal connections with these systems and facilities.	3-10 years
D) Planning / Public Awareness: Intercity Rail development will need to occur in ways that systematically link with existing planning processes and other methods for raising public awareness and involvement. This is not unique to passenger rail transportation. Most transportation modal development now occurs in relation to a wider range of state and local planning forums.		
PENNPLAN	The completion of this TAC study achieves just one of the strategic objectives advanced in *PennPlan*. Other *PennPlan* objectives (such as 4, 6, and 14 as well as others)[1] have a significant link to the Statewide Passenger Rail Needs Assessment. These objectives, although having significant independent value, should also be advanced to support and enhance this needs assessment. Future *PennPlan* updates provide the opportunity to further define and develop the state's intercity passenger rail direction.	1-3 years

[1] *PennPlan* Objectives are: 4) Reduce the number of fatalities and severity of crashes on the state's highways; 6) Consistently meet the requirements of the Clean Air Act, and achieve compliance with all relevant environmental laws and regulations; 14) Implement physical and service upgrades to the Keystone Corridor.

POLICY TOPIC	DESCRIPTION	TIME FRAME
INDIVIDUAL CORRIDOR STUDY/EVALUATION PROCESS	This TAC study may encourage certain regions of the state to further investigate the feasibility of developing passenger rail service. The first step in such implementation efforts would be to perform an in-depth corridor evaluation. The TEA-21 reauthorization process should consider provision of funding for this type of meritorious corridor study. A detailed data collection and evaluation process/protocol should be developed to determine the feasibility in terms of alignment, ridership, cost, land use, and socioeconomic impacts of passenger rail service in that area.	3-10 years
BENCHMARKING	Other states including California are advancing intercity passenger rail as a matter of statewide policy. Pennsylvania will need to consider if and how it wishes to benchmark to other state-level intercity rail development efforts.	1-3 years
MODAL BALANCE	As PENNDOT continues to evolve as a multimodal organization, one notable challenge will be to make decisions across and between modes that are mutually supportive. This issue of modal coherence will only become more apparent as DOTs advance intermodally.	3-10 years
PUBLIC AWARENESS	If intercity rail is to be advanced in the Commonwealth, a comprehensive public awareness process will have to be developed to gain public support in conjunction with examples of good intercity passenger rail service such as the Keystone or Northeast Corridors.	3-10 years
ECONOMIC DEVELOPMENT	As a matter of policy, the economic development aspects of intercity rail should be proactively led and managed as part of any statewide initiative or regional project. Prospective corridor development, for example, should be integrated with economic development activity at both the state and regional/local level.	3-10 years
DEMOGRAPHIC AND CULTURAL CHANGES AND IMPACTS	Pennsylvania will soon experience some rather pronounced impacts of changing demographics. By 2008 Baby Boomers will begin to retire. Transportation safety will take on even greater importance; as such issues generally tend to correlate with this expanding age cohort. Socio-economic trends will be an important input for developing policy and planning for intercity rail. The September 11, 2001 terrorist attack on the United States and other recent events may also directly and indirectly impact both public policy and the transportation choices that Americans will make in the future.	3-10 years

POLICY TOPIC	DESCRIPTION	TIME FRAME
SUPPORTIVE LAND USE	Land use patterns impact the efficiency, convenience, and cost effectiveness of the transportation system. Public transportation and intercity passenger rail are both especially dependent on supportive land use practices. Potential future directions related to land use policies that are supportive of intercity passenger rail should be seriously considered by Pennsylvania's municipal governments.	3-10 years
ENVIRONMENTAL	Consideration of intercity rail passenger service will have both positive and negative environmental impacts. Environmental factors should continue to be considered in the transportation alternative evaluation and decision processes regarding *PennPlan* and intercity rail corridors.	3-10 years

7.0 CONCLUSIONS

When this TAC Study began no one could have ever assumed how quickly intercity rail would appear on the nation's radar screen. However, given the horrific events of Sept. 11th and its implications, the importance of rail passenger service in a balanced transportation system has indeed come into clear view. Such unforeseen events underscore the importance of TAC's forward-looking mission. Independent of this broad scale national tragedy and its transportation implications, there are several overall conclusions that stem from this study.

1. Development of intercity rail passenger infrastructure would represent a long-term initiative. As such, it must be part of a broad transportation plan while building on current initiatives. TAC has identified a series of potential policy issues that should help to frame the development of a strategic longer-term initiative to advance intercity passenger rail.

2. TAC also has identified rail corridors that have potential for development. These corridors tend to be in areas that either have some existing rail service, significant traffic congestion, or that provide linkage to existing Amtrak service. The TAC study provides an overview of passenger rail service in the Commonwealth and considers future policy issues. Corridors identified as having "higher potential" still must be evaluated in great depth with respect to right of way availability, estimated passenger levels, cost, and a myriad of other issues that would

establish such a Corridor's actual feasibility and investment potential.

3. State DOTs can be expected to play a larger role with intercity passenger rail. Traffic congestion; land use, and the overall need for greater mobility options point to a likely expansive role for state government in general and progressive multimodal DOTs in particular. PENNDOT's activity to date is laudable and worthy of recognition. Its strengthened partnership with Amtrak and its major commitments to an improved Keystone Corridor form the basis and foundation for future initiatives. TAC reviewed other states as well. California may provide a particularly strong benchmark with respect to a state having to make some bold decisions and commitments to expand intercity rail service.

PENNDOT's strengthened partnership with Amtrak and its major commitments to an improved Keystone Corridor form the basis and foundation for future initiatives.

4. Rail passenger rights of way cannot be practically recreated. Development of this unique infrastructure will rely upon the use of both existing active and inactive corridors. Those involved in planning for this mode will need to pay special attention to issues related to corridor preservation as well as establishing effective relationships with freight railroads.

5. If Pennsylvania is to have a strong and successful passenger rail network for the 21st century, it will be built on partnerships between government at all levels, railroad operators, and the private sector. A realistic perspective is necessary in recognizing that private rail rights of way will only serve public purposes if positive and constructive leadership and problem solving can be brought to bear both from public sector transportation/rail agencies and the freight railroads. The view that passenger rail can somehow be "imposed" on freight carriers is at best unrealistic and at worst potentially destructive to the legitimate and achievable goal of accommodating **both** freight and passenger objectives.

The view that passenger rail can somehow be "imposed" on freight carriers is at best unrealistic and at worst potentially destructive to the legitimate and achievable goal of accommodating *both* freight and passenger objectives.

6. While many of the study's issues are long term in their implementation, one short-term opportunity is for Pennsylvania to be proactive in shaping a national policy for passenger rail transportation. The Commonwealth should take the leadership role and clearly define roles for state and local government. In order to accomplish this the Federal Government needs to establish a firm, clear policy with regard to intercity passenger

rail that can be followed by the local and state governments. TAC believes that this study can play a role in helping the Commonwealth formulate a strategy for influencing future transportation policy and funding at both the federal and state level.

7. One Pennsylvania asset that should not be overlooked is its solid cadre of transportation planning capability—PENNDOT and its regional planning partners. Incremental phases and steps to begin planning for passenger rail represent another potential key strategy going forward. PENNDOT, in fact, has adopted corridors as its planning focus through its *PennPlan Moves* Long Range Transportation Plan—a natural framework for a steady but progressive approach for advancing passenger rail in the future—as well as being ready for new opportunities that federal policy changes might afford.

8. Although this report considers future directions for intercity rail, PENNDOT has made significant progress in that direction. The Keystone Corridor Initiative represents the most ambitious intercity rail passenger project in the Department's history. The innovative PENNDOT – Amtrak partnership will result in improved rail passenger service between Harrisburg and Philadelphia with trip times that are less than auto travel. This is a significant step in the right direction and could serve as the foundation for leveraging support for additional funding and new or enhanced service in other corridors. It is conceivable that Pennsylvania's ultimate rail passenger network will be one that spun-off from these early and visionary investments in the Keystone Corridor.

9. As Pennsylvania formulates its strategy for passenger rail transportation, consideration of technology choices should be part of that policy direction. Likely enhancements for passenger rail will be a combination of incremental improvements using existing rail technology as well as the strategic deployment of new and emerging technologies such as Maglev.