



PENNSYLVANIA INTERCITY
**passenger
& freight**
RAIL PLAN

Appendix 1

Plan Purpose and Authority

Appendix 1

Plan Purpose and Authority

Purpose of the Pennsylvania Intercity Passenger and Freight Rail Plan

The Commonwealth of Pennsylvania has one of the most dense rail networks in the United States, and is a major linchpin in the movement of passengers and goods across the nation. Not only does Pennsylvania contain the United States' fifth-largest rail network in terms of rail mileage within its borders, the state is home to the greatest number of shortline and regional railroads in the country.¹

Pennsylvania must keep the rail network functioning for its current customers and prepare the system for the next 25 years of rail traffic. Economic growth and job creation can take place when railroads are able to handle as much freight as possible on a predictable and expedient basis. Carbon emissions can be reduced and overburdened highways and airports can operate more efficiently when more passengers and shippers can depend upon fast and frequent rail service.

The Plan visualizes the passenger and freight rail network in 2035 and offers goals and objectives to achieve its vision. Making investments that will maintain and improve Pennsylvania's rail network needs to occur in a strategic fashion, so that individual projects will enhance the entire system and provide the greatest benefit. The Pennsylvania Intercity Passenger and Freight Rail Plan provides a strategic framework for making decisions about the investments that will create the 21st century rail network as described in the plan's vision statement. The Plan also offers potential project financing mechanisms that could provide short- and long-term funding sources and methods.

State and Federal Legislative Planning Requirements

The Pennsylvania Intercity Passenger and Freight Rail Plan was developed to satisfy several state and federal legislative planning requirements that call for the development of state rail plans.

State Legislation for Rail Planning

Pennsylvania's legislature requires the Department to undertake a

¹ Association of American Railroads, 2007, www.aar.org/resources/railroad



comprehensive study of rail freight in the Commonwealth per the Pennsylvania Rail Freight Preservation and Improvement Act of 1984. The following are recent planning documents that are in compliance with the 1984 act, or pertain to the topic of rail planning.

2001 Pennsylvania Statewide Passenger Rail Needs Assessment. The *2001 Pennsylvania Statewide Passenger Rail Needs Assessment* was compiled earlier in the decade and was a part of PennPlan, a larger initiative that focuses on statewide mobility. The assessment identified and prioritized development of passenger rail corridors and identified policy issues surrounding intercity rail service.

2003 Pennsylvania State Rail Plan. The *2003 Pennsylvania State Rail Plan* is an updated edition of the 1996 State Rail Plan. The 2003 edition conducted a survey of the entire rail network and concentrated solely on issues facing freight railroads. Additionally, the Plan gathered data on the freight railroads, described service, identified key issues, and outlined funding options.

2007 Pennsylvania Mobility Plan. The *2007 Pennsylvania Mobility Plan* is a statewide transportation plan that will guide transportation initiatives through 2030. The Mobility Plan seeks to improve transportation links, promote economic development, develop and sustain infrastructure, and create sustainable investment practices, among other initiatives, across all modes of transportation.

Federal Legislation for Rail Planning

The Pennsylvania Intercity Passenger and Freight Rail Plan will satisfy the requirements set forth in several pieces of federal legislation.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). In 2005, surface transportation reauthorization legislation (SAFETEA-LU) was passed that required each state to undertake a transportation planning process that would achieve a variety of outcomes through projects, such as:

- Support economic vitality of the United States and its state and local entities.
- Increase safety and security of the transportation system.
- Increase accessibility and mobility of people and freight.
- Protect the environment, promote energy conservation, improve quality of life, and promote consistency among transportation and development patterns.
- Enhance integration and connectivity across modes.
- Promote efficient system management and operations.
- Preserve the existing transportation system.

Rail Safety Improvement Act of 2008. The act calls for states and their respective transportation authorities to maintain a state rail plan that presents priorities and strategies to enhance rail service. The plan should involve input from rail stakeholders including, but not limited to, railroads, shippers, regional planning organizations, and the public. Additionally, the act calls for state rail plans to include the elements found in this report.

Many states across the country have produced state rail plans to meet the requirements of this act. PennDOT surveyed 12 nearby states to reveal best practices in rail plan development in order to provide a benchmark against which Pennsylvania's rail plan will be measured. A summary of the survey of benchmarking and best practices appears in Appendix 1-1.



Passenger Rail Investment and Improvement Act of 2008. The act establishes an intercity passenger rail capital grant program for states. States must identify intercity passenger rail corridor improvements in their current state rail plans in order to be eligible for the federal capital grant program.

Regional Plan

Although Pennsylvania seeks to improve intercity passenger service, the Commonwealth recognizes the importance of developing a plan from a regional perspective. As the “Keystone State,” Pennsylvania serves as a pass-through state for regional destinations and is home to residents that travel to nearby states for employment and recreation.

Mid-Atlantic Rail Operations Study (MAROpS)

The 2002 Mid-Atlantic Rail Operations Study is an initiative of the I-95 Corridor Coalition, comprised of five Mid-Atlantic states and three railroads, to address regional transportation needs as one unified system. The study recognizes the need to manage and respond to growing capacity needs, build improved regional communication and coordination amongst states and railroads, and develop funding strategies that enhance the regional rail network. An update of the 2002 study, known as MAROpS Phase II, was completed in December 2009.



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Appendix 1-1

Benchmarking and Best Practices: A Survey of Other States



Benchmarking and Best Practices: A Survey of Other States

Summary of Responses/Key Findings

To understand the support for rail transportation provided by other states, a survey of the departments of transportation and rail agencies of other states was conducted. The survey was directed to Pennsylvania's neighboring states and four states that have demonstrated exemplary rail support. A total of ten states responded to the survey. The survey resulted in the following key findings.

- Legislatures in the states surveyed have been actively promoting rail transportation through legislation and funding increases.
- The vast majority of the states surveyed have a rail plan. The plans, however, vary widely in scope and detail.
- All states surveyed financially support freight rail, with many states operating grant programs similar to those in Pennsylvania.
- All states surveyed, except Ohio, provide financial support to Amtrak. The amount and type of support ranges from minor station improvement projects to \$86 million in operating subsidies.
- States' involvement in the implementation of Positive Train Control varies widely. All surveyed states are, at a minimum, monitoring the process.
- Most states surveyed are currently reporting grade crossing data to the National Highway-Rail Crossing Inventory. Significant inaccuracies in the national file have been discovered by some states.
- Two of the states surveyed specifically noted that they are not satisfied with the data being reported by railroads regarding collisions and fatalities at grade crossings due to the reports being inaccurate or incomplete.
- Only four of the states surveyed collect data on motorist violations of grade crossings.
- Only three states of those surveyed have laws regulating sight distance at grade crossings.
- Operation Lifesaver was mentioned by every state surveyed when asked about special programs promoting rail crossing safety.
- Six of the ten states surveyed are actively using new technology for grade crossing safety. Four-quadrant gates are the most commonly used piece of new technology.

Background/Introduction

Rail transportation has a long history in Pennsylvania. To build on the Commonwealth's proud history, the Pennsylvania Intercity Passenger and Freight Rail Plan will serve to direct federal and state rail investments in the future. A piece of information that will be used to inform the Plan is the understanding of what other states are doing to promote freight and passenger rail transportation. In order to provide this information the planning team undertook a process of contacting states to administer a survey. This survey was intended to uncover best practices put into place by other states and to provide a benchmark against which Pennsylvania's new Plan will be measured.

A total of 12 states were contacted for interviews. Those states included eight states surrounding Pennsylvania:

- Connecticut
- Delaware
- Maryland
- New Jersey
- New York
- Ohio
- Virginia
- West Virginia

In addition, four states that were identified as exemplary in planning for and implementing rail transportation were also contacted:

- North Carolina
- California
- Wisconsin
- Illinois

Of the twelve states contacted, ten responded. The states that did not respond to the survey were Connecticut and Delaware. Internet research was performed for these two states, revealing answers to some of the survey questions.

Summary and Discussion of Survey Responses

A summary of the responses to each of the questions follows. The summary attempts to quantify the responses provided and give additional details regarding some of the notable responses.

Question 1 – Has your legislature passed any legislation supporting or promoting freight rail or passenger rail usage in the past five years?

Of the ten states responding to the survey, eight noted some new legislation within the past five years. Of the states with new legislation, three states' legislation includes new or increased funding for rail transportation. Those states are California, Virginia, and Wisconsin. In addition, Connecticut's website noted a new program for rail funding in that state. Other noted items included legislation for:

- Transit-oriented development (Maryland).

- Establishment of a transportation infrastructure study committee (North Carolina).
- Upgraded provisions regarding rail trespass and the disposal of former railroad rights-of-way (New Jersey).
- The authority to coordinate new rail service in the state (West Virginia).

Question 2 – Does your state have an existing Statewide Rail Plan?

Eight states have an existing state rail plan adopted within the past five years. While this is a majority of the states surveyed, the plans themselves vary widely in scope and detail. Some of the plans are largely a collection of projects, either those that are upcoming or those that have been recently funded through a grant program. Other states do not have a stand-alone rail plan, but have rail included in other transportation planning documents. Still other states' plans are quite comprehensive stand-alone documents. Four states that have well-developed and comprehensive rail plans are California, Virginia, New York, and North Carolina.

The California Rail Plan is an extensive document that contains both long-term vision elements as well as specific projects to meet the vision. The project listings are used to prioritize the projects and program the projects for funding. The California plan is updated every two years, with the most recent version released in 2008. Virginia's Rail Plan is equally extensive. The most recent plan was released in summer 2009. North Carolina has a long history of rail planning and support for rail transportation. Their most recent rail plan was released in 2009.

Three states do not have an up-to-date rail plan. Ohio has never had a rail plan, West Virginia's plan is from 1994, and Connecticut has one that was released in 1996. These three states are currently addressing their lack of an up-to-date plan. Ohio began a planning process in June 2009; Connecticut is currently working on a plan, with the intent to release it in late 2009; and West Virginia is researching the requirements for a new plan.

Question 3 – Does your state financially support or promote freight rail?

All ten states surveyed provide some type of financial support for freight rail. Many of the states operate grant programs with some similarity to the ones implemented in Pennsylvania. These programs are often targeted at rail infrastructure upgrades, industrial economic development, and assistance to short line railroads. The states operating grant programs include: New York, West Virginia, Ohio, New Jersey, Illinois, North Carolina, Virginia, and Wisconsin.

Some of the states' programs are not dedicated exclusively to rail transportation. For example, three of New York's programs can be used for other modes of freight transportation. Similarly, West Virginia's Intermodal Enhancement Fund can be used for multiple modes.

Question 4 – Is your state involved in supporting or promoting Amtrak or other heavy passenger rail services?

All states except Ohio provide financial assistance to Amtrak or other intercity passenger rail. This support for passenger rail ranges from relatively minor investment in passenger station upgrades in West Virginia to the \$86 million subsidy that California contributes to Amtrak to support the operation of three intercity lines—the Pacific Surfliner, San Joaquin, and Capital Corridor. Five of the ten states contribute between \$5 million and \$10 million to Amtrak per year. Funding is often provided for both capital improvements and operations.

Question 5 – Is your state involved with the implementation of Positive Train Control?

Most states surveyed will be involved with Positive Train Control (PTC) in some manner. Those states that own railroads or equipment, such as West Virginia, Maryland, and North Carolina, will be involved firsthand. Other states will have minimal involvement, only participating by attending meetings and keeping up-to-date with developments. Some states, such as California and Illinois, are actively engaging with the railroads to help coordinate the implementation of PTC.

Question 6 – Do you intend to apply for federal safety grants authorized by RSIA (the Rail Safety Improvement Act) if funds are appropriated?

Seven of the ten states surveyed indicated that they would apply for grants. Most states, however, did not know the specific projects that they would try to fund. Virginia, Wisconsin, and West Virginia did not have any immediate plans to apply for these grants.

Illinois noted that it intends to apply for funding for its Public Education and Enforcement Research Study (PEERS) program. This unique program/study involves the use of video monitoring at railroad crossings within a community coupled with targeted education and enforcement regarding railroad crossing safety within the community. The video monitoring is conducted prior to, during, and following the education and enforcement to monitor the changes in behavior within the community.

Question 7 – Are you currently reporting information on grade crossing physical and operational characteristics to DOT's National Crossing Inventory?

Eight of the ten states indicated that they are reporting the data to the National Crossing Inventory. One state did not answer the question, and one stated that it currently is not reporting the data. New York noted that it is making a renewed push to obtain accurate information on its crossings and report it to the Inventory. They noted that their effort has revealed significant inaccuracies in the National Crossing Inventory.

Question 8 – Are you satisfied with the information currently being reported by the railroads on grade crossing collisions and fatalities?

Six of the states are satisfied with the reporting being done by the railroads on grade crossing collisions and fatalities. Two states had no response to the question. Ohio and Illinois specifically noted that they are not satisfied and that the information appears to be incomplete or inaccurate.

Question 9 – Do you collect data on motorist violations of grade crossing warning devices?

Four states reported that they do collect data on motorist violations of grade crossing warning devices. The nature of this data collection is different in each case. In North Carolina, this data has been collected in conjunction with their sealed corridor program, the mission of which is to provide grade

separation or advanced safety devices to seal the Southeast High Speed Rail Corridor for high-speed train operations. In New Jersey, certain crossings are continually monitored by video. Maryland noted that their State Highway Administration collects violation data, while in Virginia, the DOT collects this data. The remaining six states specifically noted that they do not collect this violation data.

Question 10 – Does your state have any laws regarding highway users’ sight distance at highway grade crossings?

Three of the states (Ohio, Wisconsin, and Illinois) indicated that they do have sight distance laws, and that they generally only regulate the clearing of brush and other items within a sight triangle at the grade crossing.

Question 11 – Do you have any special programs promoting rail safety at highway-rail grade crossings?

All states noted their participation in Operation Lifesaver. Operation Lifesaver is a non-profit public education program aimed at ending collisions, deaths, and injuries at rail crossings and on railroad rights-of-way.

In addition to Operation Lifesaver, Illinois noted its PEERS program (described in Question 6), and North Carolina discussed its sealed corridor program (see Question 9) along the Southeast High Speed Rail route.

Question 12 – What actions, if any, are you taking to promote new technology for advanced warning at grade crossings?

Six of the ten states surveyed noted that they are actively looking to use new technology for advanced warning at grade crossings. Quiet Zones have been used in Ohio, New Jersey, and North Carolina. In Quiet Zones, trains are restricted from blowing their horns at highway crossings, and, to compensate, additional crossing safety measures are implemented. Four-quadrant gates, where a gate mechanism is located on both sides of the tracks for both directions of traffic, have been used in Ohio, Virginia, Illinois, and North Carolina. Illinois has interconnected many grade crossings with adjacent traffic signals. North Carolina has utilized an EVA signal system, which uses LED lights to highlight railroad crossing signs at grade crossings.

Questions 13 – What actions, if any, are you taking to broadly promote rail safety in your state?

States are working on a variety of safety issues, each reflecting priorities within the state.

- Illinois and New York noted that their railroad inspectors continually perform inspections to verify that railroad operations meet current federal safety regulations.
- North Carolina is currently working with Operation Lifesaver to pass a more comprehensive trespassing initiative.
- Ohio noted its investment of \$15 million per year into grade crossing upgrades. The grade crossings are prioritized by a comprehensive database of grade crossing data.
- Virginia has a no trespassing law for railroad track, ties, and ballast.
- California has increased its contribution to Operation Lifesaver and has recently been sponsoring a “Trooper on the Train” day. In the trooper program, a state trooper rides on a train for the day to spot motorists violating grade crossing warning signals.

- New Jersey is increasing its use of fencing and “no trespassing” signage.
- Wisconsin noted that it recently upgraded its rail crossing law so that it’s only legal to cross at a designated grade crossing.
- Maryland is doing greater emergency planning, including greater tracking of toxic inhalation hazards, incorporation of rail freight into the Statewide Homeland Security Plan, and greater partnering with Transportation Security Administration (TSA) surface inspectors. In addition, they plan to deploy chemical, biological, radiological, and nuclear (CBRN) detectors within the state.

Question 14 – Has your state applied for funds under the IPR (Intercity Passenger Rail Service) State Grant Program established by the FY 2008 Appropriations Act?

Eight of the ten states applied for and received funding under the IPR program. New Jersey and West Virginia did not apply for any funding. The projects funded were extremely varied, ranging from planning studies to station upgrades to track upgrade projects.

Question 15 – Is there a state or states that you believe lead the nation in planning for and supporting passenger rail?

A total of nine states were mentioned as being models in the area of passenger rail. The ones most commonly cited were North Carolina, California, and Washington. The states mentioned included:

- California
- Florida
- Illinois
- North Carolina
- Pennsylvania
- Virginia
- Washington
- Wisconsin

Question 16 – Is there a state or states that you believe lead the nation in planning for and supporting freight rail?

Eight states were mentioned, and Pennsylvania was noted most frequently. Following are all the states cited:

- California
- Illinois
- Iowa
- New York
- Ohio
- Pennsylvania
- Virginia
- Washington

Question 17 – Is there a state or states that you believe lead the nation in addressing grade crossing safety?

Fewer responses were received for this question than the previous two, and only five total states were mentioned.



- Pennsylvania
- Illinois
- Wisconsin
- North Carolina
- Ohio

Appendix A – Survey Questions

A survey interview form containing 19 questions was used for all states.

RAIL SURVEY

State: Date: Time: Phone #:	Interviewees and Titles:
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General questions regarding rail support and legislation and freight rail funding

1. Has your legislature passed any legislation supporting or promoting freight rail or passenger rail usage in the past 5 years?
 - a. Is anything currently being considered by the legislature?
2. Does your state have an existing Statewide Rail Plan?
 - a. If so, what year was the plan released?
 - b. What are your state’s plans for updating the rail plan or creating a new plan?
3. Does your state financially support or promote **freight** rail?
 - a. What are eligible uses/expenses? (Examples: rail sidings, signals, tie replacement, intermodal equipment)
 - b. What’s the assistance amount on a yearly basis?
 - c. Do you have a list of **freight** rail investments that your state plans to make in the future? (Especially ones that will have an impact on Pennsylvania.)

Questions related to the Passenger Rail Investment and Improvement Act of 2008

4. Is your state involved in supporting or promoting Amtrak or other heavy **passenger** rail services?
 - a. Does the state provide financial support for both operations and capital improvements?
 - b. What are eligible uses/expenses? (Examples: rail sidings, signals, tie replacement, station improvements and upgrades)

- c. What's the assistance amount on a yearly basis?
- d. Do you have a list of **passenger** rail investments that your state plans to make in the future? (Especially ones that will have an impact on Pennsylvania.)

Questions related to the Railroad Safety Improvement Act of 2008

- 5. Is your state involved with the implementation of Positive Train Control?
- 6. Do you intend to apply for federal safety grants authorized by RSIA if funds are appropriated? (Grants are available for the following purposes: Implementation of Safety Technology, Operation Lifesaver, Highway-Rail Grade Crossing Safety, and Infrastructure Improvement for Safety.)
 - a. If so, what types of projects are you seeking funding for and where are the projects located?
- 7. Are you currently reporting information on grade crossing physical and operational characteristics to DOT's National Crossing Inventory?
 - a. How, if at all, will you change your reporting in the future?
- 8. Are you satisfied with the information currently being reported by the railroads on grade crossing collisions and fatalities?
 - a. Are you collecting or receiving this data currently?
- 9. Do you collect data on motorist violations of grade crossing warning devices?
- 10. Does your state have any laws regarding highway users' sight distance at highway grade crossings?
- 11. Do you have any special programs promoting rail safety at highway-rail grade crossings?
- 12. What actions, if any, are you taking to promote new technology for advanced warning at grade crossings?
- 13. What actions, if any, are you taking to broadly promote rail safety in your state? (Examples include: listening in to RR communications, alcohol and drug testing, hazardous materials regulations, whistleblower provisions, laws prohibiting trespassing on RR property.)

Question Regarding the Intercity Passenger Rail Service (IPR) State Grant Program

14. Has your state applied for funds under the IPR State Grant Program established by the FY 2008 Appropriations Act?
 - a. If so, what projects are you seeking grant funds for?

General Questions

15. Is there a state or states that you believe lead the nation in planning for and supporting passenger rail?
16. Is there a state or states that you believe lead the nation in planning for and supporting freight rail?
17. Is there a state or states that you believe lead the nation in addressing grade crossing safety?
18. Is there anything that we haven't talked about that you feel would be relevant to our Pennsylvania Passenger and Rail Freight Plan?
19. Is there anyone else in your state that we should talk to regarding rail transportation?

Appendix B – Survey Respondents

State	Interviewees and Titles
Connecticut	None
Delaware	None
Maryland	Rick Johnson Manager, Rail Freight Policy and Programs Office of Freight Logistics Maryland Department of Transportation
New Jersey	Miki Krakauer Administrative Analyst (Rail Freight Planner) New Jersey Department of Transportation
New York	Raymond Hessinger Acting Director, Freight and Passenger Rail Bureau Policy and Planning Division New York State Department of Transportation
Ohio	Don Damron Rail Planner Ohio Rail Development Commission
Virginia	Kevin Page Chief of Rail Transportation Virginia Department of Rail and Public Transportation
West Virginia	Cindy Butler Acting Executive Director West Virginia State Rail Authority
North Carolina	Shirley Williams Director, Environmental and Planning Rail Division North Carolina Department of Transportation
California	Patrick Merrill Manager, Rail Project Development, Operations, and Marketing Division of Rail California Department of Transportation
Wisconsin	Ron Adams Director, Bureau of Railroads and Harbors Division of Transportation Infrastructure Development Wisconsin Department of Transportation
Illinois	George Weber Bureau Chief, Bureau of Railroads Division of Intermodal Transportation Illinois Department of Transportation

Appendix C – List of Resources

During the course of the interviews, many relevant documents and resources were highlighted by the interviewees. A listing of the documents available on agencies' Web sites is presented here.

California

- California State Rail Plan 2007-08 to 2017-18
- Proposition 1A (2008) – Safe, Reliable High-Speed Passenger Train Bond Act of 2008
- Proposition 1B (2006) – The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act

Connecticut

- Connecticut Rail Plan Update 1996

Illinois

- Chicago Region Environmental and Transportation Efficiency Program (CREATE) Final Feasibility Plan 2005
- Public Education and Enforcement Research Study (PEERS)
- Illinois State Transportation Plan 2007

New Jersey

- New Jersey Rail Plan 2009

New York

- New York State Rail Plan 2009

North Carolina

- North Carolina Rail Plan 2009

Virginia

- Virginia State Rail Plan 2004
- Statewide Rail Resource Allocation Plan, 2008
- Advancing Passenger Rail in the Commonwealth of Virginia, 2008

Wisconsin

- Wisconsin Rail Issues and Opportunities Report, 2004