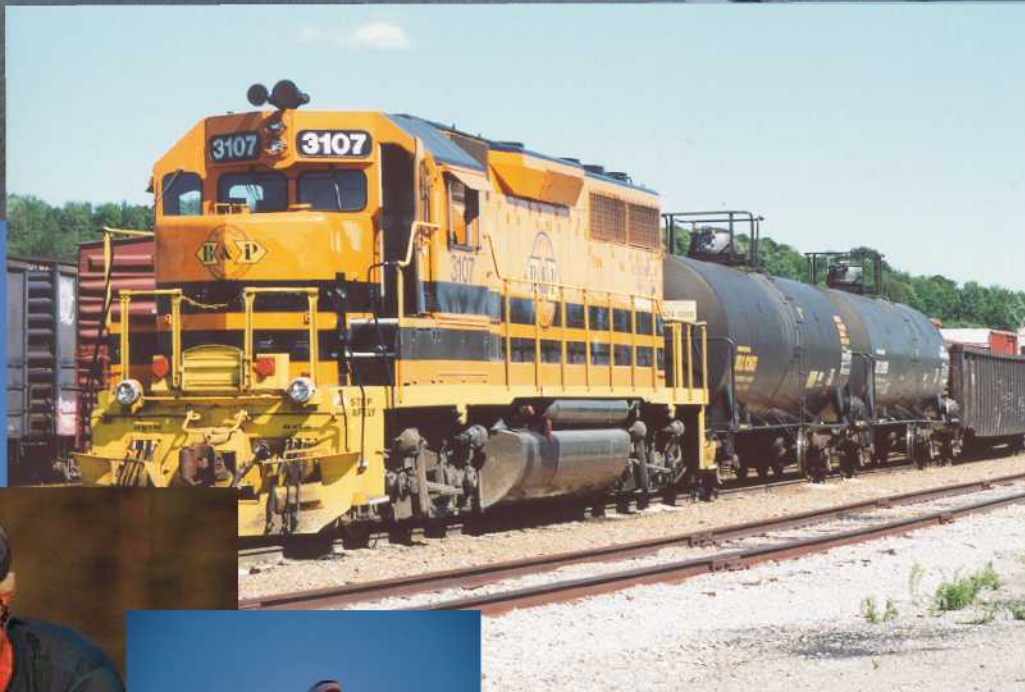




Transportation Choices for Pennsylvania



February 2005



This work was sponsored by the Pennsylvania Department of Transportation and Federal Highway Administration.

The contents of this report reflect the views of the author(s), who is (are) responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Commonwealth of Pennsylvania, the United States Department of Transportation, or the Federal Highway Administration at the time of publication. This report does not constitute a standard, specification, or regulation.

February 2005



Dear Fellow Pennsylvanian,

PennDOT is updating its Long-Range Transportation Plan. The Pennsylvania Mobility Plan is being prepared to establish strategic direction for the effective and efficient investment of resources. The plan covers a 25-year period through 2030 and considers the transportation needs of Pennsylvania residents, businesses, and visitors, and how we can achieve the greatest benefits over that period. The Mobility Plan's development has significant public participation at several key steps. This is one such key planning milestone.

The *Transportation Choices for Pennsylvania* document has a sole purpose – to facilitate a dialogue with the public about a transportation vision and supporting goals and some alternative future directions that we call planning scenarios. Many readers will participate in Regional Outreach sessions during the month of March. Reading this document will be good preparation for what promises to be exciting and relevant discussion. Others may not participate in these sessions but their perspectives are no less important. They will have an opportunity to provide input via the www.pamobilityplan.com web site over the next several months.

Statewide long-range transportation planning is a complex process. In a state as large and diverse as Pennsylvania, there are many considerations to balance. And, whatever the economic climate, we must always take a disciplined approach to priority-setting and transportation investment. Those goals—wisely and fairly making transportation system decisions—are the heart of our long-range transportation planning process.

As with all Mobility Plan analytical and outreach efforts, *Transportation Choices for Pennsylvania* is intended to encourage a robust and frank statewide dialogue that will lead to a true blueprint for the future of transportation in Pennsylvania.

I welcome you to this process, and thank you for your interest and commitment.

Sincerely,

A handwritten signature in black ink that reads "Allen D. Biehler". The signature is written in a cursive, slightly slanted style.

Allen D. Biehler, P.E.
Secretary of Transportation
Commonwealth of Pennsylvania

P e n n s y l v a n i a M o b i l i t y P l a n

Timeframe	Activity	More Information
September to November 2004	Surveys and Data Collection	Public and stakeholder surveys and focus groups were conducted to help begin framing the Mobility Plan. Highlights of the public input received to date are available on the project web site, www.pamobilityplan.com .
December 2004	Trends and Implications	This report identifies key transportation issues and trends for consideration in Mobility Plan development.
January 2005	Mobility Plan Strategic Directions	This report defines the Mobility Plan's broad vision, goals, and objectives for use in future public involvement and in guiding the detailed development of the Mobility Plan.
February 2005	Transportation Choices for Pennsylvania	The <i>Choices</i> document is a major deliverable identifying alternative future directions for Pennsylvania transportation. The Choices and Strategic Directions documents will be the focus for Regional Outreach I and will be made available for public review in advance.
March 2005	Regional Outreach I — Transportation Choices	The public and key stakeholder groups will have an opportunity to directly evaluate the Mobility Plan's broad directions and the alternative future transportation directions. Sessions are planned in eight areas of the state.

P e n n s y l v a n i a M o b i l i t y P l a n

Timeframe	Activity	More Information
May 2005	Mobility Plan Summit	The results of the Regional Outreach I will be the basis for a major statewide meeting of planning partners, modal operators, and other stakeholders to help set direction for the Draft Mobility Plan. This will be a special meeting of the Mobility Plan Development Team.
December 2005	Draft Pennsylvania Mobility Plan	The completion of the draft Mobility Plan will provide the foundation for a range of public and stakeholder review over the next several months.
Spring 2006	Regional Outreach II — Plan Validation	The second round of major regional outreach will also occur statewide. The public will have an opportunity to evaluate the Draft Mobility Plan.
Summer 2006	Mobility Plan Completion	This will include making the document available on the web site and conducting a public awareness and feedback survey. The Mobility Plan's implementation will begin and related background and status information will be made available.

What's Inside



Purpose and Context

Page 7

- What is long-range transportation planning?
- How is Pennsylvania's long-range transportation plan being developed?
- How does this document fit into the Mobility Plan process?



Setting a Direction

Page 11

- Vision
- Goals



Evaluating Scenarios

Page 14

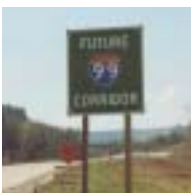
- PennPlan/Baseline Scenario
- Capacity Expansion Scenario
- System Preservation and Enhanced Operations Scenario
- Intermodal Scenario
- "What-If?" Scenarios



Choices/ Making Trade-offs

Page 34

- Introduction to Trade-off Analysis
- Transportation Program/Services Categories



Next Steps

Page 36

- Regional Outreach I
- Development Team Summit
- Choices and Scenarios Assessment
- Draft Mobility Plan

Purpose and Context

What is Long-Range Transportation Planning?

Statewide long-range transportation plans are decision-making tools to guide future transportation investment and ultimately improve the movement of people and goods. Historically, there have always been more proposed transportation projects than there is money to fund them. Long-range plans consider the state's future transportation needs and resources based on alternative conditions along with the priorities of a state's residents, businesses, and visitors. The aim is to ensure that money is spent on the most worthwhile transportation projects that provide the greatest value.

How is Pennsylvania's Long-Range Transportation Plan Being Developed?

It is a top priority of Governor Rendell and Pennsylvania Secretary of Transportation Allen Biehler to develop a new statewide long-range transportation plan, known as the Pennsylvania Mobility Plan. The two-year process builds on the state's current plan, *PennPlan MOVES!* PennDOT, stakeholders, a study team, and Pennsylvanians from all walks of life are examining current conditions in Pennsylvania, recognizing trends that will affect future needs, setting a transportation vision and goals, articulating our priorities as a state, and testing future alternatives.

Pennsylvania is large and diverse, and the ideas and needs of Pennsylvanians and the state's visitors vary widely. The Mobility Plan's development is structured to systematically gather input from a wide range of Pennsylvanians before, during, and after development of the plan through extensive, comprehensive public involvement. Ideas and data are being gathered from the general public, business executives, and government leaders, carefully balancing geographical locations, transportation modes, and perspectives.





Transportation Choices for Pennsylvania

P e n n s y l v a n i a M o b i l i t y P l a n

Based on the input received during public involvement, the Pennsylvania Mobility Plan should address the following issues:

- Improving the safety of the transportation system
- Maintaining and preserving the existing infrastructure
- Streamlining the process of completing transportation projects
- Reducing car/truck conflicts on roadways
- Improving public transit
- Developing funding options that use impact fees and tolls
- Using the transportation system to stimulate economic development
- Obtaining greater national energy independence
- Using the transportation system to combat sprawl

Additional highlights of the public involvement effort to date are available on the project web site, www.pamobilityplan.com.

How do we move from pages of ideas and concerns to a cohesive, fair, well thought-out plan to direct transportation investment? We work together to identify themes, translate them into goals, and then formulate a plan to attain those goals. To start the process, the Mobility Plan team—comprised of the consultant team along with the Steering Committee (PennDOT representatives from various modes and divisions) and the Development Team (75 representatives of local and regional organizations throughout the state)—has drafted an overall vision statement to guide development of the plan.

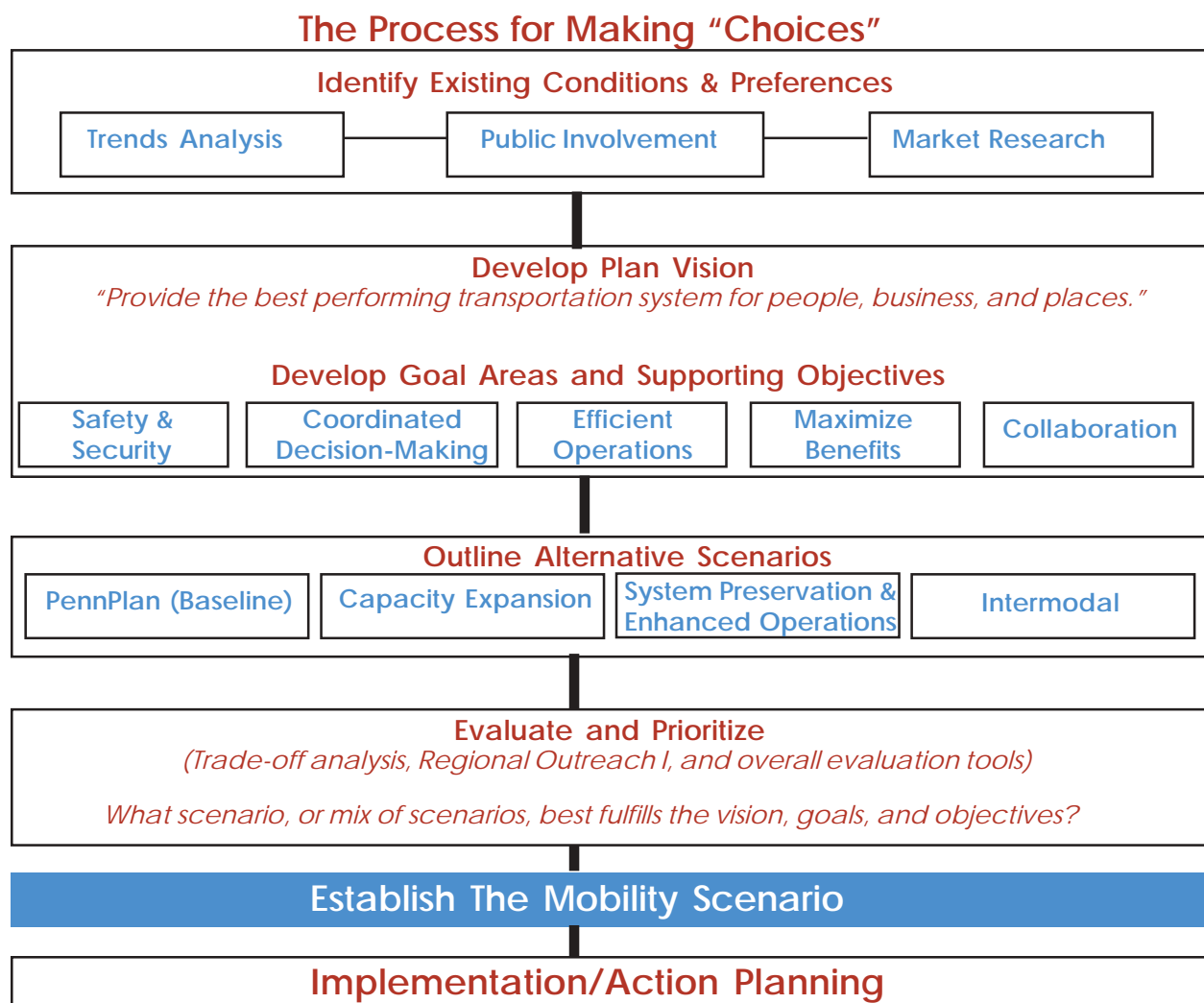
Next, the team drafted goals to work toward that vision, based on the input received during several public involvement initiatives. The goals will be further defined through the process of developing supporting objectives.

P e n n s y l v a n i a M o b i l i t y P l a n

At this point in the planning process, we need to collaborate with an even broader base of Pennsylvanians and move from goal-setting to scenario development and selection. A “scenario” simply means the overall future focus of our transportation investments across all facilities and modes that best achieves the plan’s vision, goals, and objectives. For example, do we focus on maintaining what we already have, or do we focus on expanding the capacity of our transportation system? Or do we try to achieve a balance between the two?

Once we establish the “Mobility Scenario”—the preferred focus of transportation investments in Pennsylvania—we will work to establish the policies and partnerships that best support implementation of that scenario.

The Mobility Plan development process is illustrated on the following flow chart:





Transportation Choices for Pennsylvania

P e n n s y l v a n i a M o b i l i t y P l a n

How Does this Document Fit into the Mobility Plan Development Process?

The long-range transportation planning process is all about making the best possible choices. This document, *Transportation Choices for Pennsylvania*, is intended to introduce the draft planning direction developed thus far and the broad options before us as a state, and to facilitate a dialogue throughout Pennsylvania regarding those choices. This document:

- Presents the draft vision and goals for achieving that vision.
- Highlights several future broad transportation scenarios.
- Identifies some of the potential future resource trade-offs that may be necessary, recognizing that there will always be more worthwhile projects than there will be resources to maintain and improve Pennsylvania's extensive multimodal transportation system.

The vision, goals, scenarios, and trade-offs will be discussed as part of a month-long dialogue in March 2005. Up to 40 regional outreach sessions will occur throughout Pennsylvania with a broad cross-section of stakeholders. "*Choices*" will also be placed on the project web site at www.pamobilityplan.com so that others may consider the issues and questions this document poses. The document will be used to foster extensive listening by the Mobility Plan team through May 2005 in order to have a strong foundation of stakeholder input to the Mobility Plan's draft development, including evaluation of the alternative scenarios.

As you evaluate the Mobility Plan's draft direction, please use the questions alongside the text to help trigger ideas and guide your analysis. We encourage you to use the space provided after the questions to jot down notes and ideas. Feel free to print out the document and make notes manually or just type in your thoughts in the form fields provided if you are comfortable working online. Then save the file to preserve your notes.

Are we on the right track? What else must be considered? What are Pennsylvania's most important priorities and how can our transportation system best support those priorities?



Setting the Direction for Transportation Investment

Draft Vision Statement

Provide the best performing transportation system for people, business, and places.

The above draft Mobility Plan vision statement, which has been refined by the PennDOT Steering Committee and the Stakeholder Development Team—more than 80 representatives of various modes and interests—is intended to direct the overall planning effort.

The Mobility Plan vision sets the stage for plan development, including goals and objectives, evaluating alternatives, providing the tools and direction to make the most cost effective investments, and facilitating implementation of priority projects of statewide significance over the short- and long-term. In its structure, content and tone, it is intended to set a larger framework for decision-making and to serve as a tool that is useful through every step in the planning and implementation process.





Transportation Choices for Pennsylvania

P e n n s y l v a n i a M o b i l i t y P l a n

Excerpt from Public Involvement Highlights report, available at www.pamobilityplan.com.

Comparison of Values

What values and principles should guide the development of the transportation system in Pennsylvania?

Funding Option	General Public	Stakeholders	Businesses
Stimulate the growth of businesses and jobs	1	2	1
Obtain greater national energy independence	2	4	5
Improve safety	3	1	3
Maintain and improve environment	4	7	8
Improve security	5	10	6
Environmental justice	6	9	12
Save people and businesses time and money	7	11	2
Create desirable land use patterns	8	3	9
Create healthier lifestyles for people	9	12	11
Cost of delivering/managing services	10	8	7
Travel alternatives/Options	11	5	4
Attractive communities	12	6	10

Key
Top 4 Values
Middle 4 Values
Bottom 4 Values

What do you think?

The focus is on results, or performance, while considering people, the economy, and our communities and natural resources. In very broad terms, is that the appropriate vision?

Your Notes Here

P e n n s y l v a n i a M o b i l i t y P l a n

Draft Goals

In addition to the vision statement, the Mobility Plan will be driven by a set of goals that provide more specific direction for the development and implementation of the Mobility Plan, and form the basis for evaluating various transportation scenarios. Draft goals as developed by the Steering Committee and Development Team are:

1. Provide for a safe and secure transportation system.
2. Balance transportation, land use, economic development, and the environment.
3. Target investments for maximum statewide benefits.
4. Create an efficient, interconnected, multimodal transportation system.
5. Ensure collaborative planning, funding, and implementation.

Based on the input received during Regional Outreach I, objectives will be developed that support and further define each goal.



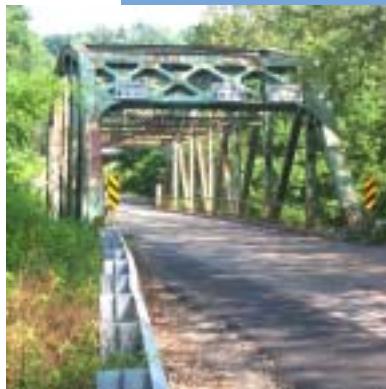
Evaluating Transportation Scenarios

Transportation “scenarios,” sometimes referred to as “alternative transportation futures,” outline possible approaches to transportation—on what are we most focused? Where is the emphasis of our new projects? For the Mobility Plan, we need to develop a scenario that best supports the goals and objectives outlined during the planning process.

As a starting point for scenario development, four preliminary scenarios have been identified:

- PennPlan (Baseline) Scenario
- Capacity Expansion Scenario
- System Preservation and Enhanced Operations Scenario
- Intermodal Scenario

Developing a Mobility Scenario, which may be a blend of the above and/or other scenarios, involves ranking priorities and making transportation choices. To begin the discussion process, the following pages briefly describe each of the above scenarios in terms of distinctive elements and supporting policies, and highlight trends and public input that support each scenario.



P e n n s y l v a n i a M o b i l i t y P l a n

Over the coming months, the scenarios will be further developed to include a mix of transportation programs and services and “projects of statewide significance” (projects with a broad multi-regional impact) that most closely represent each scenario’s distinctive elements and policy considerations.

Another way to understand and build the scenarios is to define the approximate mix or percentage split of Preservation, Operations, and Capacity Expansion investment associated with each scenario. For example, PennDOT’s current mix is approximately 70 percent System Preservation, 10 percent Operations, and 20 percent Capacity Expansion. Participants in Regional Outreach I will have an opportunity to provide input on their preferred split.

In the summer of 2005 the expanded scenarios will be evaluated in terms of their transportation, economic, and other impacts. The scenarios will also be assessed according to how well they support the Mobility Plan’s goals and objectives.

Short descriptions of each scenario follow.



What do you think?

Before you read further... What should be our transportation focus? Business as usual? Increasing the volume of traffic that each mode can handle through improved operations? Simply maintaining what we have now? Working to link the various modes more efficiently?

Your Notes Here

PennPlan (Baseline) Scenario

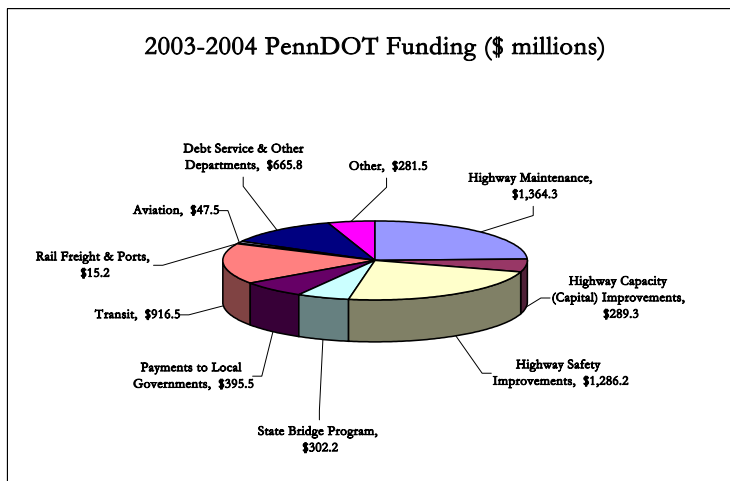
Summary Description

This scenario represents the “baseline” or current transportation direction. As a planning scenario it can be further understood to represent the continuation of current policy, program mix, and programmed projects across all modes for the Mobility Plan 25-year planning horizon to 2030. When the draft scenarios are expanded to include programs and projects of statewide significance, the associated “spending mix” for this scenario will most closely reflect current allocations.

Important Note: All scenarios will initially be considered financially constrained within current resources. The scenarios may also be evaluated in terms of what could be accomplished with some additional level of resources.

Distinctive Elements

- Future distribution of funding for transportation programs/services in line with present distribution, i.e., existing program funding levels (adjusted for inflation) and mix for all modes.
- Includes improvement projects for all modes that are currently programmed in the State Transportation Improvement Program (STIP), Regional Transportation Improvement Programs (TIPs) of the Metropolitan Planning Organizations and Rural Planning Organizations, and their respective regional long-range plans. Note that the STIP is also the first four years of the Commonwealth’s 12-Year Program of Transportation Spending.



P e n n s y l v a n i a M o b i l i t y P l a n

Supporting Policies

- Continuation of the present policy direction as reflected by the goals and objectives of the current long-range plan, *PennPlan MOVES!*
- PennDOT Maintenance First Policy with an approximate 80-20 preservation/expansion split.

Relevant Trends

- System capacity is not keeping pace with increasing vehicle miles traveled.
- There are more than 25,000 bridges in Pennsylvania, which underscores the importance PennDOT's "Maintenance First Policy" of directing approximately 80 percent of funding to the maintenance of the existing system and 300 bridge lettings (major improvement projects) per year.
- Greater focus on intermodal freight demand.
- After years of decline, transit ridership nationally is showing some upward growth.

Related Public Input

- "Streamline the existing process of developing and completing transportation projects."



What do you think?

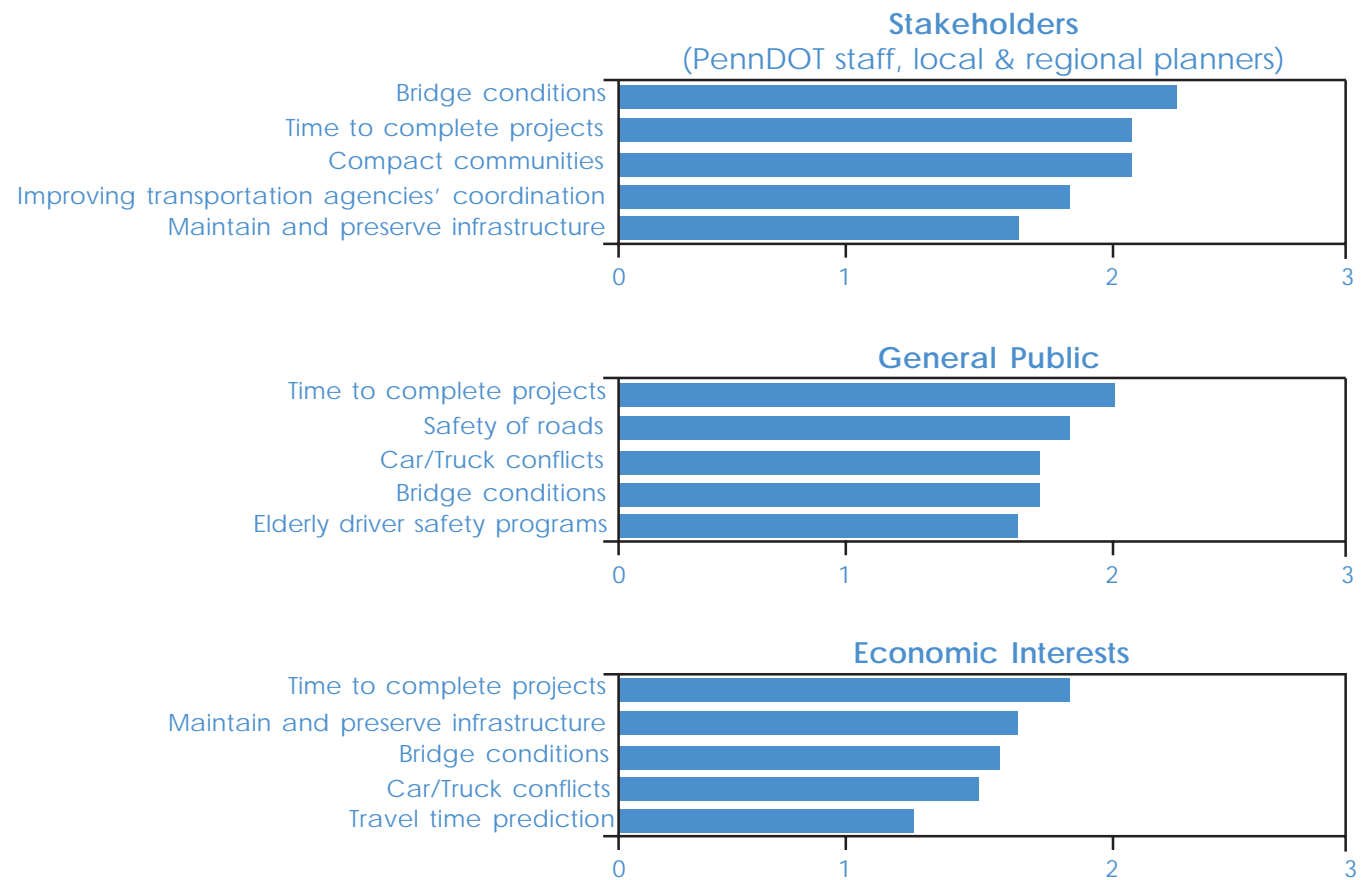
What effect would PennPlan approaches have on Pennsylvania over the next 25 years?

Your Notes Here

Excerpt from Public Involvement Highlights report, available at www.pamobilityplan.com.

Transportation System Features Deficits

Comparison of features that have the greatest difference between importance and satisfaction ratings. Example: The general public sees the greatest difference between the importance of and their satisfaction with the time to complete projects.



Capacity Expansion Scenario

Summary Description

The priority and emphasis of this scenario is to add system capacity—the ability to move more people and goods—across transportation modes to the greatest degree possible (within available resources). It would especially target investments that support strategic economic growth. Basic functions such as maintenance continue under this and all of the scenarios, but likely at a relatively lower level as the “trade-off” for adding more capacity.

Distinctive Elements

- Capacity-adding projects that have the greatest transportation benefit consistent with the Mobility Plan’s goals and economic impact for Pennsylvania.
- Highway and bridge construction (new and expanded) to improve Level of Service (traffic flow).
- Eliminate the backlog of construction needs at a greater rate.
- Improving priority freight railroads to accommodate greater traffic and heavier weight cars.
- Public Transit New Starts, especially in areas where such investments have a greater impact and are more feasible than a highway alternative.



What do you think?

If you were going to expand transportation capacity in Pennsylvania, where would you start?

Your Notes Here



Transportation Choices for Pennsylvania

P e n n s y l v a n i a M o b i l i t y P l a n

- Expanded airside and landside facilities at priority airports.
- Investments that improve access and performance of ports and other major freight hubs.
- Expanded accommodation of bike-pedestrian facilities as part of most major highway and transit capital projects.

Supporting Policies

- Early project definition and prioritization (“right-sizing”). The policy aims to better define projects prior to programming funds, taking into account all apparent issues that could impact cost. Project cost control is important in relation to any scenario, but would be an especially critical policy under a Capacity Expansion Scenario.
- Would generally follow a mode-neutral approach within resource constraints—invest in the “solution” with the greatest capacity-adding impact.

Relevant Trends

- Population decentralization increased during the 1990s and continues to accelerate, placing greater demand on existing infrastructure and transportation capacity. The state’s population grew by just 2.5 percent between 1982 and 1997, but its urbanized area stretched out by 47 percent over that time. The need for effective land use and transportation strategies is now widely recognized and being increasingly advanced in planning and project development.
- Employment growth tends to be on the periphery of traditional metropolitan areas and older communities, which drives demand for greater investment in capacity expansion.





Transportation Choices for Pennsylvania

P e n n s y l v a n i a M o b i l i t y P l a n

- Suburb-to-suburb is becoming the most predominant commuting pattern.
- Even though vehicle miles traveled continues to increase, air quality for the state keeps improving, which may not hinder future capacity expansion.
- Census data shows that Pennsylvania workers are traveling longer distances to work, and are increasingly reliant on their cars as the mode of choice.
- Carpooling has declined in successive decades from 20.2 percent in 1980 to 12.9 percent in 1990 and down to 10.4 percent in 2000.
- New roadways can serve intermodal purposes and facilitate the use of public transportation.
- The percentage of commercial vehicles and trucks on Pennsylvania's National Highway System interstates will continue to increase.

Related Public Input

- "Focus on integrating transportation with land use and economic development decision-making."
- "Stimulate growth of businesses and jobs and invest in projects that will have the greatest economic impact."
- "Save people and businesses time and money."
- "Improve capacity of the rail freight system."

What do you think?

Building more costs more. How should the Capacity Expansion scenario be funded?

Your Notes Here

P e n n s y l v a n i a M o b i l i t y P l a n

Excerpt from Public Involvement Highlights report, available at www.pamobilityplan.com.

Comparison of Funding Preferences

If more money were needed for the transportation system of the future, which of the following funding options would you feel are acceptable to use to pay for transportation projects?

Funding Option	General Public	Stakeholders	Businesses
Impact fees & private funding	1	1	1
Road tolls	2	4	3
Private ownership and operation	3	6	2
State fuel tax & license fee	4	2	4
State general fund	5	5	6
Federal fuel tax	6	3	5
Local taxes	7	7	7

Key
Top 2 Options
Middle 3 Options
Bottom 2 Options



System Preservation and Enhanced Operations Scenario

Summary Description

This scenario emphasizes preserving the existing system over building additional physical capacity. The latter will be minimal as the scenario is developed in greater detail—far less than present conditions. Investments would shift even more to maintenance, Intelligent Transportation Systems efforts (implementing technology to enable the transportation system to function more efficiently), and system operations. Transportation operations would be the primary means of managing existing capacity. Transportation operations include elements such as incident management, highway and transit/rail operations, and signal system operations.

Distinctive Elements

- Greater emphasis on the effective operation and condition of existing infrastructure.
- Keeping transportation systems in a good state of repair (resources permitting).
- Limited or no investment in building new capacity-adding projects—any mode.
- Expanded investments for improved system operations including things such as improved traffic signals, transit signal pre-emption, and Intelligent Transportation Systems (including incident management).
- Greater commitments of resources to adhering to desired maintenance cycles.



What do you think?

Which elements of Pennsylvania's transportation system are most in need of funding for maintenance?

Your Notes Here

P e n n s y l v a n i a M o b i l i t y P l a n

- Expanded Travel Demand Management (TDM) and Transportation System Management Strategies. Car sharing/pooling, High Occupancy Vehicle (HOV) lanes, Park and Ride facilities.
- Promoting rail freight strategies that help to shift some truck traffic to rail, and in so doing preserve highway and bridge life.

Supporting Policies

- Priority on asset management and related investments.
- Greater land use and transportation incentives to discourage requirements for new infrastructure.
- Access management supportive policies.

Relevant Trends

- Pennsylvania's population growth is slowing and travel demand may not grow as fast as it has in the past, supporting a focus on making improvements to the existing system.
- Pennsylvania continues to shift from a manufacturing to a service economy, which may pose both opportunities and challenges in relation to advancing this scenario. The service economy typically has a high degree of flexibility, but workers are also generally more dispersed.



What do you think?
What happens if we focus on system preservation? What happens if we don't?

Your Notes Here

P e n n s y l v a n i a M o b i l i t y P l a n

- Continued improvements in technology and communication have facilitated flexibility in work locations and schedules, which will continue to support improvements to the existing system.
- Pennsylvania has been losing a significant amount of farmland and open spaces which impacts scenic beauty and tourism opportunities, thus supporting continued investment to the existing system.
- The Baby Boomer generation will begin turning 65 in 2011. This fact, coupled with the increase in over-the-road traffic and commercial truck traffic, means that our transportation system will need to be more predictable and user-friendly for the average user, including better lighting, signage, and roadway geometry for the existing system.
- Many of the important reliever airports are in areas experiencing the greatest development pressure. Development around airports can impact operating ability and even viability, thus supporting preservation of the existing system and compatible land use patterns.
- Increasing use of in-vehicle technology could reduce fatal accidents on highways, and other operational and intelligent transportation system improvements may be critical in reducing delay and economic loss.
- A significant percentage of funding (approximately 20 percent) is being spent on capacity expansion, while many existing maintenance needs are not met.



P e n n s y l v a n i a M o b i l i t y P l a n

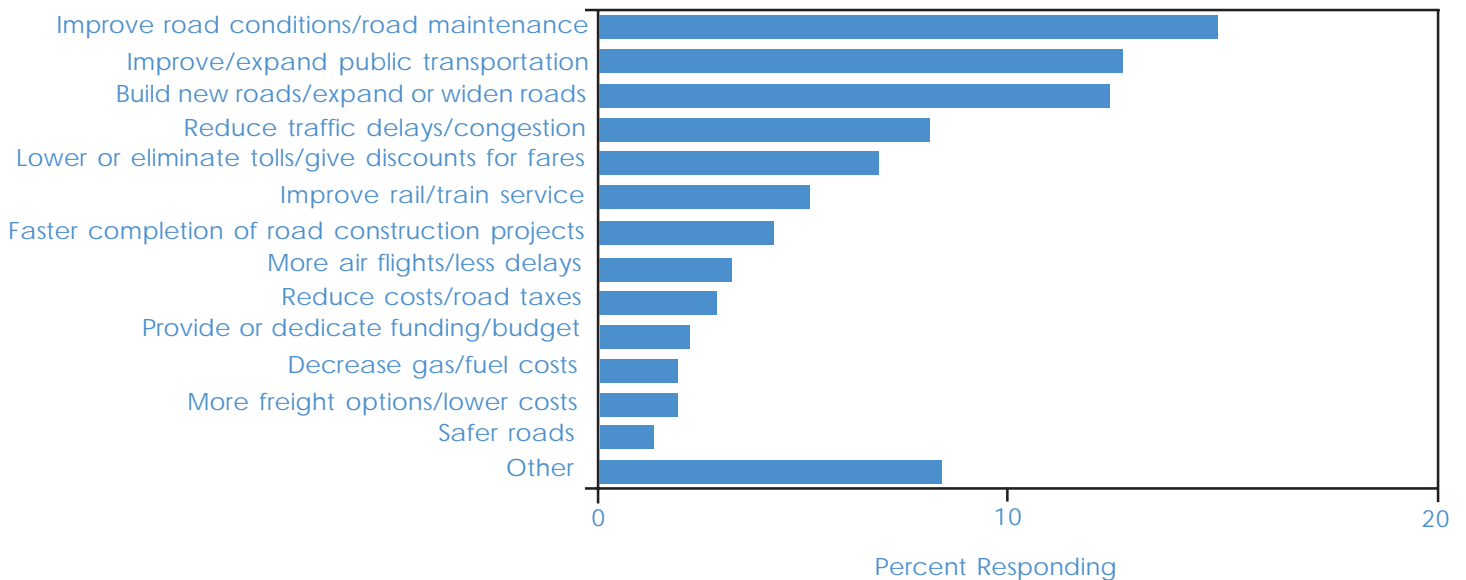
Related Public Input

- “Maintenance of the existing system should be a priority.”
- “Protect the environment.”
- “Improve the safety of the existing network.”
- “Fund priority infrastructure.”
- “Improve the condition of bridges.”
- “Improve rail capacity for better shared access by passenger and freight railroad operations.”

Excerpt from Public Involvement Highlights report, available at www.pamobilityplan.com.

Transportation Impact on Business

From the perspective of your business, what is the one most significant thing that could be done with regard to Pennsylvania’s transportation system that would have a positive impact on your business?



Intermodal Scenario

Summary Description

The Intermodal Scenario emphasizes improved modal connectivity for moving people and goods and providing more modal choices. The strict definition of “intermodal” is the connection between two or more modes for moving people or goods. For this scenario, the definition is broader, involving modal connection and modal choices, or “multimodal.”

Distinctive Elements

- Priority for investments that improve the overall connectivity and performance of a multimodal transportation network.
- Access roads and connectors to airports, water ports, and other significant facilities.
- Investments that improve the performance/quality and effective “reach” of public transit.
- Freight and passenger hubs/facilities.
- Intelligent transportation systems and other technology investments that enhance modal connectivity and choice.
- Investments in bike and pedestrian facilities, particularly those of statewide significance.
- Investments in information, including improved signing to enhance intermodal connectivity.

What do you think?

What other investments should be priorities under an intermodal scenario?

Your Notes Here

Supporting Policies

- The development of a multimodal Priority Pennsylvania Transportation System of Statewide Significance as the basis for planning, prioritization, and programming (see next full page).

Relevant Trends

- Pennsylvania's population is aging. Therefore, autos may no longer be a viable option for many residents, which may increase demand for transit and ride-sharing options.
- Pennsylvania is a relatively high transit-user state and it is reasonable to expect that it will continue to be so in the future, particularly given the needs of residents in urban areas and older suburbs.
- Pennsylvania has more operating railroads than any other state (69), and has three major water ports.
- Demand for freight transportation is expected to grow substantially over the next 25 years, as will the challenge to make the best use of each mode for moving goods in a seamless manner.



What do you think?

What are the advantages and disadvantages of focusing on connecting modes and providing more choices of mode?

Your Notes Here

Priority Pennsylvania Transportation System (of Statewide Significance) A Mobility Planning Concept

An historic strength of highway planning has been the definition and use of priority networks to help systematically identify needs and prioritize resources. The most obvious examples include the Interstate Highway System and the National Highway System (NHS).

Network definition has also occurred at the state and regional levels throughout the nation including: priority goods movement networks, agricultural networks, commercial networks, and even priority routes and networks for bicycle and pedestrian use.

For the most part, however, these useful networks have been specific to an individual mode and purpose rather than integrating each into a complete transportation system for moving people and goods.

The Mobility Plan development process offers an opportunity to consider developing a Priority Pennsylvania Transportation System (PPTS) that would include those networks and facilities that form a system that is indeed significant for planning and programming at a state level and consistent with regional resource investment planning.

The PPTS would:

- Be multimodal and intermodal—all major modes and key points of connection.
- Include passenger and goods movement.
- Also include or recognize emerging operating investments and systems such as Intelligent Transportation Systems.
- Focus needs identification and investments on problems and opportunities that are of statewide significance.
- Provide a basis and framework for future system performance monitoring.
- Be flexible in application to support individual modal planning and operations.

The Mobility Plan development processes will evaluate potential investments of all types that align with the statewide significance concept. As this occurs, consideration will be also given to the potential for a PPTS network. Existing highway, air, and rail networks will be evaluated in terms of a possible combination of each into the multimodal network. Other major facilities such as Pennsylvania's water ports would also be included.

What do you think?

What do you see as the benefits and the problems associated with the development and designation of a Priority Pennsylvania Transportation System—representing all modes? Ideas for moving forward?

Your Notes Here

P e n n s y l v a n i a M o b i l i t y P l a n

- Coordination of land use planning and multimodal transportation planning will grow in importance as housing and employment dispersion continues.
- In Pennsylvania, there are three major types of intermodal moves that have a major effect on the delivery of goods and services: truck to rail, ship to rail to truck, and passenger intermodal.
- Pennsylvania's roadway network has a high degree of connectivity in linking population with employment, and between major urban areas.

Related Public Input

- "Focus on modal integration."
- "Improve the freight system."
- "Expand intermodal choices."
- "Obtain greater national energy independence."



What do you think?

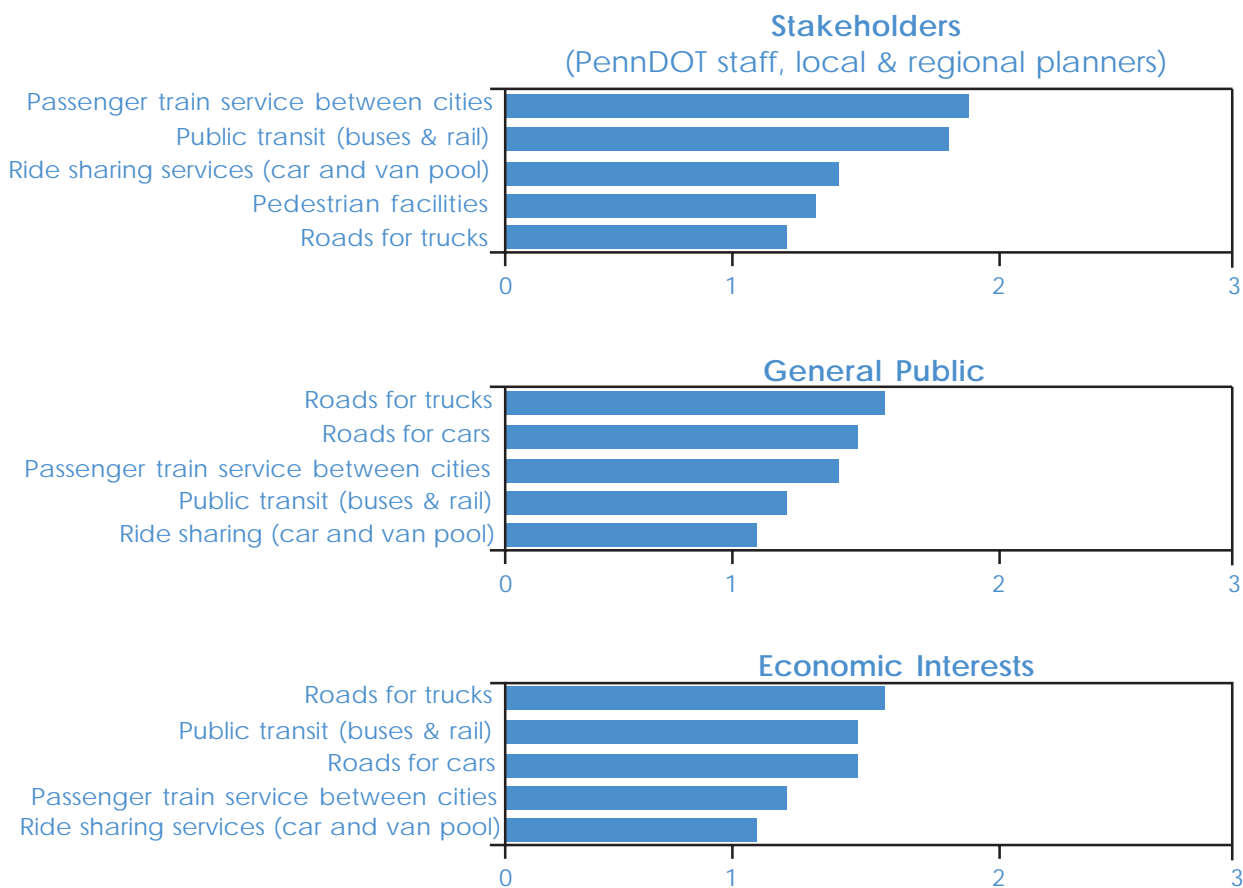
How should intermodal improvements be funded?

Your Notes Here

Excerpt from Public Involvement Highlights report, available at www.pamobilityplan.com.

Travel Options Deficits

Comparison of travel options that have the greatest difference between importance and satisfaction ratings.



What do you think?

Having read through descriptions of each scenario, do you still agree with your initial thoughts on Pennsylvania's transportation investment priorities? What are the most significant pros and cons to be weighed?

Your Notes Here

“What-If?” Scenarios

The Mobility Plan’s four initial scenarios are an important planning approach recognizing that alternative future directions must be considered and evaluated in the Plan development process. Good planning must also consider another type of scenario—the “What-If?” scenario.

The present is not static, and the future is almost totally unpredictable. Consider the following “what-if” questions in terms of transportation:

- What if gasoline supplies are disrupted and/or prices rapidly increase?
- What if the nation, or Pennsylvania in particular, suffers from another incident of terrorism or a natural disaster?
- What if the federal transportation program were eliminated or devolved to the states?
- What if major breakthroughs in alternative energy sources for transportation are advanced?
- What if other major technological breakthroughs further change the way we work, shop, and play?



P e n n s y l v a n i a M o b i l i t y P l a n

- What if the U.S. (including Pennsylvania) tolled portions of the Interstate Highway System or other primary roadways?
- What if other actions were taken to make users pay for premium services such as peak hour pricing in congested corridors?

What do you think?

How should the "What-If" scenarios impact the Mobility Plan's direction?

What objectives or actions should be established in light of What-If analysis?

How do the What-If analyses impact the development of alternative scenarios?

Your Notes Here



Choices/Making Trade-offs

A core component of the March 2005 Regional Outreach meetings will be a trade-off analysis involving a wide range of transportation programs/services. Meeting participants will have the opportunity to indicate how they would prioritize transportation spending. Scenarios will ultimately be developed by examining the trade-offs and how well they achieve the Mobility Plan’s vision, goals, and objectives. Each scenario will ultimately include its own distinct mix of transportation services/programs and Projects of Statewide Significance.

Eleven Transportation Program/Service categories have been developed for the trade-off analysis, as shown in the table below:

Transportation Program/Service	Description
Road and Bridge Maintenance and Preservation	<ul style="list-style-type: none"> • Highway and bridge repairs • Routine and preventive maintenance • Roadside beautification
Road and Bridge Reconstruction	<ul style="list-style-type: none"> • Rehabilitation of <u>existing</u> state highways/bridges
Road and Bridge Capacity Expansion	<ul style="list-style-type: none"> • Construction of <u>new</u> or <u>expanded</u> highways and bridges
Public Transportation	<ul style="list-style-type: none"> • Bus, subway, light rail, paratransit, incline, inter-city passenger train and bus service • Intermodal connections among rail, air, bus, and car • Bus rapid transit
Safety and Security	<ul style="list-style-type: none"> • Improved design to reduce injury or deaths • Safety education programs • Homeland security • Response to natural disasters

Transportation Program/Service	Description
Demand Management Efforts	<ul style="list-style-type: none"> • Car sharing • Car pooling • High Occupancy Vehicle (HOV) lanes • Park-and-ride facilities • Land use policies to reduce Single-Occupancy Vehicle travel • Telecommuting • Education efforts to promote the above
Freight	<ul style="list-style-type: none"> • Capacity of rail, truck, and marine freight ways • Intermodal connections at rail, truck, and marine facilities
Operations Strategies	<ul style="list-style-type: none"> • Signal coordination and preemption • Removal of stalled and disabled vehicles, emergency response • Traveler Information (before and during travel) • EZ pass technology • Traffic handling during road repairs and construction • Access management policies • Intelligent Transportation Systems (ITS)
Aviation	<ul style="list-style-type: none"> • Airport passenger and freight facilities • Airside maintenance and capacity expansion (runways, taxiways) • Landside maintenance and capacity expansion (terminals, intermodal connections) • Aviation services
Environmental & Energy Management Programs	<ul style="list-style-type: none"> • Reduction of transportation-related air pollution • Reduction of fuel consumption • Contact sensitive solutions • Greenways, wetland replacements, swales, and retention ponds • Other environmental mitigations related to new projects
Bicycle and Pedestrian Facilities	<ul style="list-style-type: none"> • Bicycle paths and pedestrian walkways • Improving school routes • Bicyclist and motorist education • Enhancements for citizens with disabilities

The Mobility Plan stresses priority setting and making hard choices. Clearly, the above categories all represent important areas of investment for improved mobility and access. The present and future reality of transportation decision making in Pennsylvania and across the nation is that increasingly decision makers will need better information to make the greatest impact possible with available resources relative to bona fide needs that greatly exceed those resources.

Next Steps

- “Choices” will facilitate an extensive dialogue about Pennsylvania’s strategic transportation future through the Spring of 2005. This will occur through stakeholder meetings in March, a Mobility Plan Development Team Summit in May, and other forums and channels including feedback through the project web site (www.pamobilityplan.com).
- This input will be used to sharpen and expand the plan’s supporting objectives, actions, targets, and measures. It will also be key to developing the scenarios, including alternative transportation program/service investments, to a much more detailed level for evaluation purposes.
- The evaluation phase of plan development will occur primarily through the summer months when the various choices and scenarios will be assessed and compared in terms of:
 - How well they satisfy the plan’s goals and objectives
 - Transportation impacts
 - Economic impacts
 - Environmental impacts
 - Other considerations and evaluation factors.
- A draft plan will be developed in the fall and be presented in many forums to the public through the first several months of 2006 for validation and refinement purposes.
- The plan’s implementation components will also be developed during this period. This task will address a wide range of issues, each with a common thread—to complete the development of the Mobility Plan in such a way that enhances its implementation and ultimate impact. This will include among other things, partnerships for the Plan’s initiatives, plan monitoring systems to track and monitor goal and objective attainment and system monitoring to gauge how the Mobility Plan’s direction improves transportation performance over time.
- By June 2006, Pennsylvanians—citizens, businesses, and government leaders—can expect a completed Mobility Plan that they helped to craft and that will help to serve their transportation needs for many years.