



**STATE
TRANSPORTATION
ADVISORY
COMMITTEE**

**ACTIVITY
SUMMARY**



2001 — 2005

**COMMONWEALTH OF PENNSYLVANIA
STATE TRANSPORTATION ADVISORY COMMITTEE
HARRISBURG, PENNSYLVANIA 17120**

The Honorable Allen D. Biehler, P.E.
and Members of the State Transportation Commission

The members of the State Transportation Advisory Committee are pleased to present this report which describes the activities of the Committee from calendar year 2001 through 2005. Studies completed during the time period include: *Pennsylvania Statewide Passenger Needs Assessment*; *Streamlining PennDOT's Project Delivery Process*; *TAC Study Effectiveness*; *Future Investment Strategy In Pennsylvania's Transportation Program*; *The Economic Impact of Railroads in Pennsylvania*; and *Pennsylvania Traffic Signal Systems: A Review of Policies and Practices (2004)*. Details of each of these studies are found on the following pages.

The Advisory Committee is proud of its efforts and appreciates the support received from the Department of Transportation, the General Assembly, the Administration, and the many TAC members and transportation industry stakeholders that participated in each of these studies.

During Calendar Year 2006 the Advisory Committee has looked at *Defining A Core PA Transportation System* that will tie into PennDOT's Mobility Plan, the Department's long range transportation plan, as well as reviewing *Storm Water Facilities on State Highways*.

My thanks to the members of the Advisory Committee, and everyone in the transportation community whose dedication, ideas, and efforts have supported the work of the Committee. We look forward to continuing our work in the future and providing valuable and quality documents for the Department and Commonwealth.

Respectfully submitted,

H. Michael Liptak, Chairman
State Transportation Advisory Committee

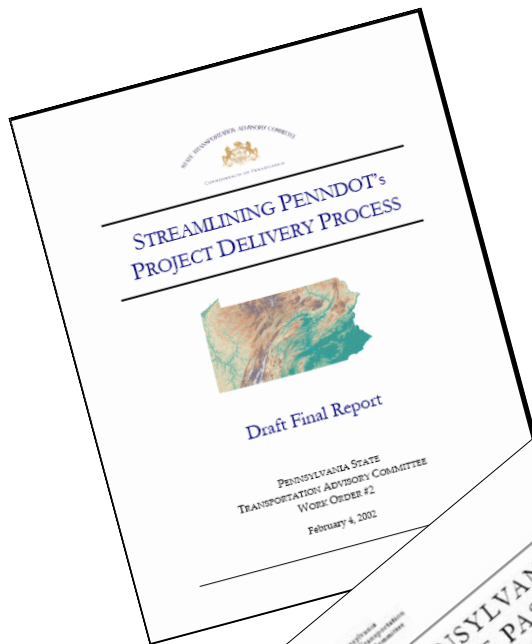


TABLE OF CONTENTS

Preface.....	1
State Transportation Advisory Committee.....	2
Pennsylvania Statewide Passenger Rail Needs Assessment.....	3
Streamlining PennDOT's Project Delivery Process.....	5
TAC Study Effectiveness.....	7
Future Investment Strategy In Pennsylvania's Transportation Infrastructure.....	9
The Economic Impact of Railroads in Pennsylvania.....	12
Pennsylvania Traffic Signal Systems: A Review of Policies and Strategies (2004).....	13

APPENDIX A

Transportation Advisory Committee Catalog of Reports 1985–2000.....	15
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An electronic copy of this document is available at:
www.dot.state.pa.us/Internet/pdCommissCommitt.nsf

PREFACE

Since its beginning in 1970, the State Transportation Advisory Committee has conducted research on a wide variety of topics of relevant interest to state transportation policy makers. This continued during the 2001 - 2005 period. The studies, which were done during this time, reflect the major issues faced by state transportation agencies.

The purpose of this report is to highlight the activities and studies of the Transportation Advisory Committee regarding transportation issues of immediate concern.

A summary of each study is included in this report, along with the names of the task force members and research personnel. The summaries are arranged in chronological order. In the following paragraphs, a brief description of each study is given.

Pennsylvania Statewide Passenger Rail Needs Assessment - December 2001 : Identified and prioritized the need of intercity rail passenger service in the *PennPlan* corridors.

Streamlining PennDOT's Project Delivery Process - February 2002 : Identification of common issues affecting the efficient delivery of transportation projects in the Commonwealth.

TAC Study Effectiveness - December 2002 : A self-assessment review of the effectiveness of TAC Studies since the establishment of the State Transportation Advisory Committee by Act 120 of 1970.

Future Investment Strategy in Pennsylvania's Transportation Program

January 2004 : Assesses the fiscal status of Pennsylvania's transportation program including trends and assumptions about future revenues from local, state, federal and other sources that support the overall transportation system.

The Economic Impact of Railroads in Pennsylvania - January 2005 : Examination of the impact of railroad operations on the Pennsylvania economy.

Pennsylvania Traffic Signal Systems: A Review of Policies and Procedures

(2004) - January 2005 : Examination of Pennsylvania's Traffic Signal Systems and the policies and practices associated with their management and operation. In particular, traffic signal systems were considered in the context of their role in congestion relief.

STATE TRANSPORTATION ADVISORY COMMITTEE

The State Transportation Advisory Committee was established by Act 120 of 1970, which also created the Pennsylvania Department of Transportation (PennDOT). The Committee consults with and advises the Secretary of Transportation and the State Transportation Commission and undertakes in-depth studies on key issues as appropriate. Through its public members, the Committee also serves as a valuable liaison between PennDOT and the general public.

The Advisory Committee consists of the following members:

- The Secretary of Transportation
- The heads or their designees from the Department of Agriculture; Department of Education; Department of Community and Economic Development; Public Utility Commission; Department of Environmental Protection; and the Governor's Policy Office.
- Two members, one from each party, of the State House of Representatives
- Two members, one from each party, of the State Senate
- Nineteen public members; seven appointed by the Governor; six each appointed by the President Pro Tempore of the State Senate and the Speaker of the State House of Representatives

Public members, with experience and knowledge in the transportation of people and goods, are appointed to represent a balanced range of backgrounds (industry, labor, academic, consulting, and research) and the various transportation modes. Appointments are made for a 3-year period and members may be reappointed. The Chair of the Advisory Committee is annually designated by the Governor from among the public members.

The Advisory Committee has two primary duties. First, the Committee "consults with and advises the State Transportation Commission and the Secretary of Transportation on behalf of all transportation modes in the Commonwealth". In fulfilling this task, the Committee assists the Commission and Secretary "in the determination of goals and the allocation of available resources among and between the alternate modes in the planning, development and maintenance of programs, and technologies for transportation systems". The second duty of the Advisory Committee is "to advise the several modes (about) the planning, programs, and goals of the Department and the State Transportation Commission".

Periodically, the Advisory Committee establishes subcommittees and task forces to study specific problems of interest to the Committee. These task forces are composed of members of the Committee, outside parties with expertise on the topic under study, and other interested individuals. This report contains a summary of the task force studies completed between January 2001 and December 2005.

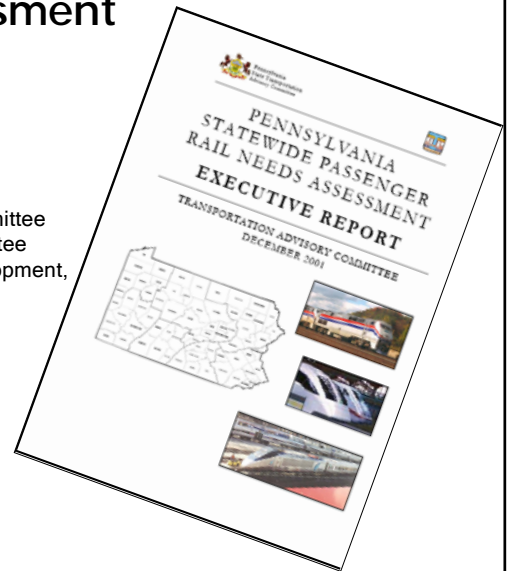
Statewide Passenger Rail Needs Assessment

Task Force Members

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Principal Investigators: Keith Chase; Toby Fauver, AICP; Patrick Anater and Michelle Hoshauer



Objective

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.

Technical Report Title and Date

Pennsylvania Statewide Passenger Rail Needs Assessment - December 2001

Study

The purpose of this study was 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".

The study goals included the following:

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

Findings

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. 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.
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.
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.

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, 2001 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.

Streamlining PennDOT's Project Delivery Process

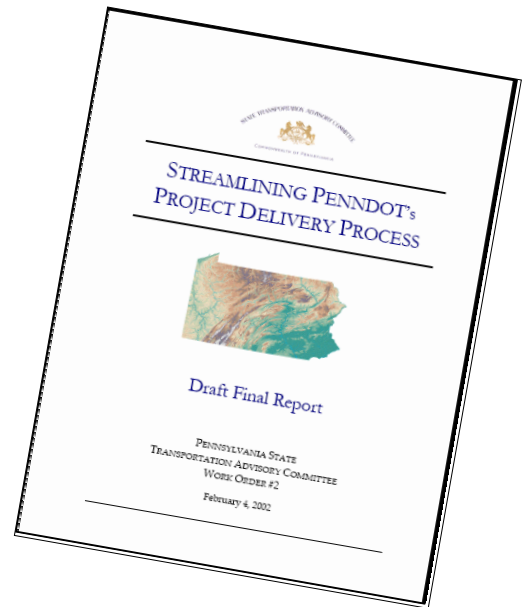
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Roy E. Brant, Transportation Advisory Committee
David Hart, PA Public Utility Commission, Transportation Advisory Committee
Joseph Mangarella, Transportation Advisory Committee
Julia Morton, Governor's Policy Office, Transportation Advisory Committee
Anthony Ross, Transportation Advisory Committee
Richard Shaw, Transportation Advisory Committee
David Sims, Transportation Advisory Committee
Anne Titus, PA House of Representatives, Transportation Advisory Committee
Ronald Wagenmann, Transportation Advisory Committee
Christine Martin, Governor's Policy Office
David Cough, Federal Highway Administration
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Objective:

To identify inefficiencies and delays of transportation project delivery related to the fulfillment of required environmental compliance during the preliminary engineering phase of project development.

Technical Report Title and Date:

Streamlining PennDOT's Project Delivery Process - February 2002

Study:

The purpose of the study was to identify common issues affecting the efficient delivery of transportation projects in the Commonwealth. While the initial scope of the report addressed issue identification, the high level of interest in this subject by the Transportation Advisory Committee led to the development of a set of initial recommendations for further consideration by PennDOT. These recommendations suggest some broad-based strategies and issue specific ideas which may have applicability and result in project delivery improvements.

Findings:

Following are issue recommendations that the TAC Streamlining PennDOT's Project Delivery Process Task Force deemed to be most important or opportune.

Pennsylvania Streamlining Summit - The summit would involve PennDOT, resource agencies and local planning partners to be held to develop a framework for developing an overall streamlining strategy for the Commonwealth. The Summit concept is recommended to advance two basic but significant goals: (1) to establish a broad, shared strategic direction for streamlining improvements, and (2) to establish a more specific program or action plan to achieve the strategic direction. The Summit would advance a systematic and objective assessment of the project development process with the goal of achieving tangible strategies and initiatives for further considerations.

Business Process Reengineering Study of PennDOT's Project Development Process - This recommendation involves development of an extensive management study of the PennDOT project development processes and the related preliminary engineering and environmental analysis activities. The intent of this recommendation is to achieve constructive improvements that results in greater efficiency and economy and more resources applied to our transportation system without compromising environmental stewardship.

Advance a Federal Legislative Streamlining Initiative - As the TAC engaged in project delivery issue identification and prioritization, one pattern emerged with regard to several issues - those requiring legislative action generally received lower scores in the TAC issue ranking process. Those issues that required legislative remedy generally were deemed to have low priority, reflecting a view that the opportunity to affect change regarding those issues may not be as feasible as those that can be addressed administratively.

The following recommendations were offered to support and advance effective change in federal legislation affecting project delivery in Pennsylvania:

- TAC recommends that the Commonwealth advance a comprehensive federal streamlining initiative.
- Continue to support initiatives for federal review of legislation to reduce overlap and reduce compliance complexity.
- Promote innovative mitigation concepts and demonstration projects. PennDOT should promote the philosophy of planned mitigation in contrast with the more reactionary approaches presently encountered to support environmental stewardship and get beyond current emphasis on strict regulatory compliance.
- Work with resource agencies to reduce different interpretations or expectations of regulations across agency divisions, districts or offices.
- Work with resource agencies to determine best practices (within or beyond Pennsylvania) and use to develop improved guidance.
- Explore the opportunity to delegate authority for the federal Section 404 permitting program to Pennsylvania through a cooperative effort with the Pennsylvania Department of Environmental Protection.

Development of Accountability Framework - The TAC recommends that accountability be a central component of any Pennsylvania streamlining initiative. Accountability does not imply the imposition of some punitive program or procedures, nor does it imply that there is no accountability in the process as it presently exists. TAC believes that accountability can be a positive and broad based framework for improving the overall project development phase of project delivery. This broad based concept will entail leadership of each agency partner to adopt a shared set of streamlining goals and to then establish a process for achieving those goals.

TAC Study Effectiveness

Task Force Members:

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Charnelle Hicks, CH Planning.



Objective:

Objectives of the study were: The evaluation of the overall effectiveness of TAC studies and the related benefits of the TAC process. Specific benefits of select individual reports were assessed; and the identification of feasible opportunities and methods to further improve TAC products and related processes.

Technical Report Title and Date:

TAC Study Effectiveness - December 2002

Study:

The State Transportation Advisory Committee (TAC) commissioned a "self assessment" in the spring of 2002. The primary intent of the self assessment was to evaluate the utility of study products in relation to TAC's mission of providing independent and objective advice to PennDOT and the State Transportation Commission.

Findings:

Following are issue recommendations that the TAC Study Effectiveness Task Force deemed to be most important or opportune.

TAC and its studies are effective - TAC topics have been increasingly important and relevant - Department Focus Groups, State Transportation Commission and State Transportation Advisory Committee member interviews, Policy and Legislative interviews yielded consistent information that TAC studies are not only effective, but that in recent years the quality and value to PennDOT has increased. Topics are uniformly seen as appropriate and timely with more attention in recent years to non-highway modes consistent with the TAC's mission to be multimodal.

TAC's statutory roles, responsibilities, and limits are not sufficiently understood - Incorporation of standard language in all future TAC reports that clearly defines the statutory role and mission of the State Transportation Advisory Committee and the development of a new member orientation package and process were defined.

Opportunities exist for greater interaction and mutual awareness of TAC with the State Transportation Commission and PennDOT - TAC by statutory design, is one leg in a tri-partite structure with the State Transportation Commission and the Secretary of Transportation. Several TAC members responding to the STC/TAC survey indicated they were not sufficiently familiar with either the STC or the Department. Conversely, several PennDOT executives and senior managers indicated that some Department managers with major program and project responsibilities are not familiar with TAC, its process, or its products. The degree of familiarity with TAC depends on a number of factors including whether the manager has had direct involvement in a TAC study.

Opportunities exist for greater involvement of transportation stakeholders and subject experts in TAC study Task Forces - Historically, TAC study Task Forces have been comprised of TAC members and select Department staff depending on the subject matter under consideration. In recent years, TAC has increasingly augmented Task Forces with outside experts of topic stakeholders. The Task Force believes that increasing the focus on external or outside expertise will only serve to reinforce independent, third party objectivity in the study process.

TAC's strength and value is its independence and objectivity - that status and stature must be maintained -

A significant number of participants in the STC/TAC Survey, Department Focus Groups, and Policy and Legislative interviews stressed the importance of TAC's stature as an independent and objective advisory body. The dominant view is that the principle of independence upon which TAC was legislatively established is central to its current and future success. Many transportation issues require analysis and recommendations that are free from any real or perceived conflicts of interest.

The process for study topic identification and selection should be reviewed and evaluated - The current process for study topic identification is consistent with TAC's statutory authority. Topic suggestions come from TAC members, the Department, and the State Transportation Commission. Many of those surveyed or interviewed believe that the process for topic identification could be broadened as an opportunity for TAC to consider potential study issues from a wider range of transportation and public officials as well as stakeholder organizations. TAC's authorizing legislation neither prescribes nor restricts how study topics are to be identified.

Many important and emerging issues merit TAC's review including a greater focus on infrastructure, design-build, trucking, aviation and public transit - TAC's enabling legislation does provide the requisite authority to study all modes of transportation. In addition, the Associated Pennsylvania Constructors-a group representing the highway building industry - stressed the need for independent evaluation of critical issues such as the effectiveness of design-build projects.

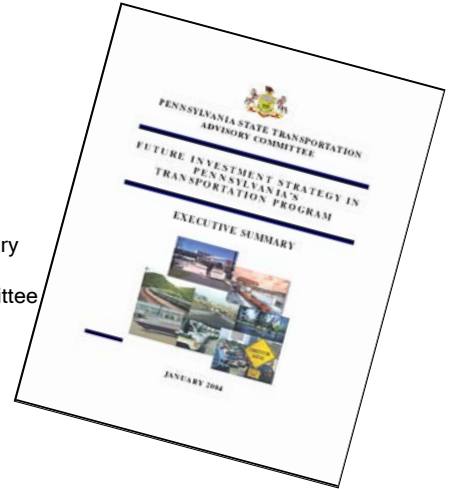
A need exists for a more systematic process for notification of TAC study availability/distribution of reports once approved - Many organizations, including state agencies, with an interest in TAC's work, expressed that they were neither aware of ongoing study efforts nor completed reports on various topics. Any process changes to address this need should be reviewed for general acceptance with the Secretary of Transportation and the State Transportation Commission since it is not within TAC's statutory to formally communicate with these external organizations.

A generally uniform process for assigning and tracking the use and disposition of the TAC reports is needed - The overall utility and accountability associated with completed TAC studies would be enhanced through a systematic process to assign a lead for the report within the Department of Transportation and periodically provide a basic status as to the study's utility.

Future Investment Strategy in Pennsylvania's Transportation Program

Task Force Members:

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H. Michael Liptak, Transportation Advisory Committee
Roy E. Brant, Transportation Advisory Committee
Brad Cober, Transportation Advisory Committee
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Stephen DeFrank, Alternate for the Honorable Richard A. Kasunic, Transportation Advisory Committee
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Principal Investigators: Keith Chase; Toby Fauver, AICP; Patrick Anater; Nancy Sacunas, Sacunas and Saline, Inc; Rebecca Haner, Sacunas and Saline, Inc.

Technical Report Title and Date:

Future Investment Strategy in Pennsylvania's Transportation Program - January 2004

Study:

This study assesses the fiscal status of Pennsylvania's transportation program. Trends and assumptions about future revenues from local, state, and other sources that support the overall transportation system are analyzed and plausible future scenarios presented. Potential program issues and financial strategies, along with their potential benefits and risks, are identified. The study assesses the transportation needs covering all major transportation modes, with an emphasis on state-owned assets.

Findings:

Following are some of the study highlights from the Future Investment Strategy in Pennsylvania's Transportation Program:

Implement a "PA Mobility-21 Initiative"/Package - Pennsylvania's next transportation funding package should be tied to a broad strategy that reflects many policy areas ranging from improved land use, to multimodal transportation, to asset management and economic development. The TAC recommends that PennDOT create a wide ranging package of funding increases to meet mobility needs with emphasis on system preservation, but also provided for cost beneficial capacity addition improvements as well.

Indexing - The Department should propose to the General Assembly legislation to index transportation funding. This would allow for more predictable funding levels which will mean more efficient and effective program and project planning.

Expand Funding Levels for All Modes - Each transportation mode required additional investments to ensure an acceptable level of mobility for moving people and goods. Without such an investment many systems will be stumbling blocks to Pennsylvania's development and mobility goals rather than enablers of progress.

Improve Criteria and Related Data for Defining Need - Projects funded in each mode should satisfy some reasonable but substantiated needs test given the level of resources involved and the intense level of competition for meritorious projects across the Commonwealth.

Use Revenue Bond Financing with Appropriate Management Controls - There is a place for bond finances of transportation as long as it is prudently managed and debt service does not erode the ability to meet year to year needs.

Expand Local Government Funding - Any transportation funding package or strategy should provide resources at a level that makes significant inroads into addressing the level of unmet needs discussed in the final report.

Expand Local Government Funding - Any transportation funding package or strategy should provide resources to address the local transportation system. If local transportation needs are not meaningfully addressed as part of the overall strategy, the potential for system inefficiency continues.

Expand Public Private Partnerships/Innovative Finance - A major initiative is required along with a broad-based strategy to substantially increase the role of the private sector in funding transportation improvements. This will likely include legislative, policy and other actions. Tools, processes, and funding requirements need to be developed.

Implement a Strategy for Expanding and Improving the Use of Impact Fees - This was a primary issue among stakeholders, but one that has barriers in law that need to be removed. These issues were addressed in a previous 1998 TAC Study. Impact fees appear to be increasingly recognized as a promising and necessary funding tool in recent years.

Substantially Advance Business Strategies and Thinking - Public works agencies will increasingly have to increase their efforts to leverage assets and make deals in a business like fashion.

Incentivize Policy and Program Initiatives that support the Department's Goals by Making Them a Condition of Funding - Transportation resources are substantial and should, where practicable, result in other beneficial activity by the recipient who contributes to overall mobility strategies.

Achieve More Stability in Funding Sources Over Time - Disruptions in energy supply or changing technology will likely force some re-thinking of more stable and user-oriented means for finance.

Implement a Phased Approach to Interstate Tolling - Facilities such as I-80 have enormous costs to maintain yet are similar in function to the Pennsylvania Turnpike which has a dedicated source of revenue. Tolling would be a necessary means for covering these costs in the future and would allow more resources to be allocated to other roads and bridges.

Mode by Mode System Rationalization - Over time the Department and its planning partners should increasingly get a better handle on what systems and facilities are truly part of a core state system and those that are not.

Economic Development Projects Require Additional Funding Sources - Projects that have a substantial economic development impact should qualify for funding sources in addition to the Motor License Fund.

Advance Department and Project Streamlining to Result in Greater Organizational Capacity - TAC has studied project streamlining extensively and reiterates the critical need to systematically reduce the amount of dollars that do not result directly in "bricks and mortar" improvements.

Advance a Major Public Involvement Initiative in Concert with the Funding Strategy - The recommended PA Mobility 21 initiative will hinge on public support. The Department's success in its 1997 funding increase reflected an outstanding and unprecedented effort of taking the message to the public. That should be replicated if not expanded for the next funding package.

Develop an Empirical Approach to Appropriately Evaluate Modal and Project Investment Tradeoffs - One method to improve the linkage between good planning and good programming is to develop tools that result in funding projects with the greatest positive impacts.

Maximize Optimal Cyclical Maintenance and Asset Management - Another analytical tool and approach that should be central to future funding is to direct resources in ways that maximize the life cycle/investment life of facilities.

Identify and Advance Relative Low Cost, High Impact Investments such as Traffic Signalization Upgrades - Transportation as a discipline needs to consider investment payback in making resource allocation decisions. As a long term initiative, the Commonwealth should explore the potential for regional agencies to manage and fund the traffic signal system. Synchronization of signals from one municipality to another, or across several contiguous municipalities, would likely have substantial benefits that would justify an approach higher than the municipal level. Advances in technology also support the feasibility of a regional or even a state-wide managed system.

Provide Incentives for Regionalism and Inter-municipal Cooperation - Pennsylvania's local government system with 2500 municipalities and many more authorities and school districts, etc. is inherently inefficient. The TAC recommendation for expanded local government funding is also offered with this recommendation to provide as many incentives as possible for local governments to collaborate in providing transportation improvement and services on a multi-municipal or even regional scale.

Advance/Enable Regional Transportation Funding Initiatives - Pennsylvania will need a paradigm shift to some degree that results in meeting some transportation needs through regional empowerment rather than from state sources.

Applied Fiscal Related Research - The study raised a number of issues that likely merit research attention given their positive and potentially significant fiscal implications. The issues are: Materials research for longer highway life; energy capture as a means of revenue generation; congestion pricing; advanced storm water management and maintenance strategies; and mileage based revenue systems.

Consider Long Term Implications of Policies - The study attempted to present the transportation needs in the context of short and long term policy issues. Capital planning must occur with consideration to both the short and long term. The 25 and 30 year time horizons of long range transportation plans are not an abstraction, but a practical reality given the nature of infrastructure investment. The same consideration must be given to the revenue side as the expenditure side.

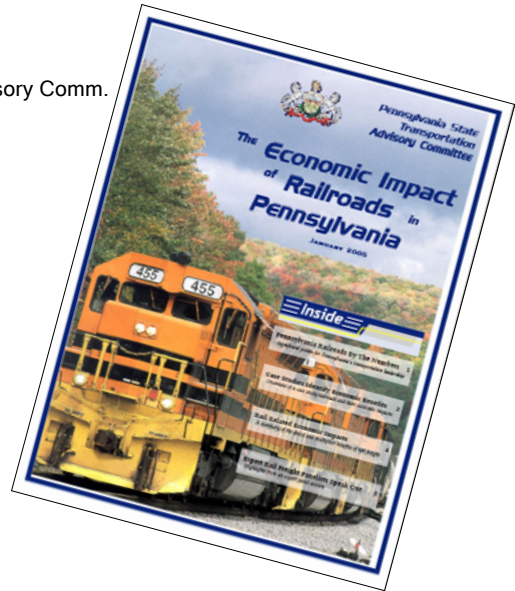
The Economic Impact of Railroads in Pennsylvania

Task Force Members:

Mary Worthington, Task Force Chair, Transportation Advisory Committee
H. Michael Liptak, Transportation Advisory Committee
Brad Cober, Transportation Advisory Committee
David Sims, Transportation Advisory Committee
Fred Wertz, Alternate for the Honorable Dennis Wolff, Transportation Advisory Comm.
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Michael Fesen, Norfolk Southern Corporation
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Dr. John Spychalski, The Pennsylvania State University
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Technical Report Title and Date:

The Economic Impact of Railroads in Pennsylvania - January 2005

Study:

The Pennsylvania State Transportation Advisory Committee (TAC) has advanced this effort to better understand the impact railroads have on the state's economy. Although some economic benefit data exists, there has never been this type of comprehensive analysis. Public funding for rail has increased in recent years and raises legitimate questions concerning rail's economic benefits, and more particularly the public benefits that presumably justify public investment in private infrastructure.

Findings:

Following are study highlights that the TAC Economic Impact of Railroads in Pennsylvania deems to be important or opportune.

Improve the Practice of Project Specific Economic Impact Analysis - There are many competing transportation needs within the state's transportation planning process. The process for allocating funding and prioritizing projects is a monumental challenge. PennDOT, MPOs and RPOs should continue to improve their economic impact evaluation of proposed rail projects. Tools for assessing potential rail project's economic impact should be incorporated and weighted within the overall transportation funding process.

Give Greater Consideration to Rail in State and Regional Planning - The four rail freight corridor case studies utilized in this study demonstrate the growing importance of rail freight to encourage vibrant local economies. Some corridors are coordinating planning at the local, county, MPO/RPO, and state level as well as utilizing public and private parties to encourage investment of rail industries. The Commonwealth has been giving greater attention to creating state policies that reflect the importance of integrating land use and transportation planning. More specifically, this integration needs to broaden its approach by incorporating the economic development importance of rail freight transportation projects.

Utilize Incentives and Coordinate Rail Related Development and Land Use Planning by Public and Private Parties - Land use policies in and around rail serviceable sites should be compatible with industries that service rail. Local and county comprehensive plans and ordinances should be consistent and incorporate compatible rail land uses near rail lines such as industrial, manufacturing, high-tech, and others.

Pennsylvania Traffic Signal Systems: A Review of Policies and Practices (2004)

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Technical Report Title and Date:

Pennsylvania Traffic Signal Systems: A Review of Policies and Practices (2004) - January 2005

Study:

Currently there are more than 13,600 signals in Pennsylvania. This study examines Pennsylvania's Traffic Signal Systems and the policies and practices associated with them. Traffic signal systems are the sole focus of the study in relation to congestion.

Following are Study Findings:

Develop an Asset Management System - Asset management is a strategic approach to managing transportation infrastructure. It includes a set of principles and practices for building, preserving and operating facilities more cost-effectively and with improved performance, delivering the best value for public tax dollar spent, and enhancing the credibility and accountability of the transportation agency.

Pursue Tiered Operations and Maintenance on Critical Corridors - Operations on critical corridors are a primary concern. Under current conditions, many of the signal systems along a specific corridor are operated individually by a local authority and sometimes without the broader consideration of the entire corridor. A holistic approach would be to pursue tiered operations and maintenance along critical corridors across jurisdictional boundaries.

Pursue Tiered Operations and Maintenance for Most Signals - A tiered, inter-jurisdictional effort along critical corridors may be the best approach in the short-term, long-term solutions may consider tiered operations and maintenance of all tiered signal systems.

Promote a "Holistic" Approach to Signal Management - The development of an asset management system and tiered approach to operations and maintenance establishes a conduit for PennDOT and planning organizations to develop a Regional Traffic Signal Improvement Program (RTSIP).

Expand Traffic Signal Enhancement Initiative (TSEI) and Congested Corridor Improvement Program (CCIP) - Both PennDOT's Traffic Signal Enhancement Initiative and Congested Corridor Improvement Program are valuable tools in congestion reduction and should be expanded.

Review and Update the Traffic Signal Permit Process - The review and update of the existing traffic signal permit process offers a mechanism for shared accountability, but also offers opportunities to more efficiently operate and manage signal systems by tracking critical characteristics and attributes. The review and update should be organized by two phases: Technical and Legal.

Establish Operational Audits Program - Several stakeholders cited that critical signal systems are not evaluated frequently enough due to data collection and analysis costs. Critical systems are typically those on major arterials or state routes. Ideally, critical systems should be extensively evaluated every three to five years. An efficient and cost-effective procedure should be considered that periodically assess critical systems in order to improve operations.

Complete Updates and Revisions to PennDOT Traffic Signal Publications - PennDOT publications and guidelines provide a vital tool for both PennDOT and local authorities in designing, constructing, maintaining and operating signal systems. Signal systems involve a variety of disciplines and evolving technologies. PennDOT is currently updating several traffic signal publications. These publications should continue to be updated.

Allocate a Portion of Any New Funding Increase to Signals - The TAC believes that a dedicated traffic signal systems funding source is not only needed, but justified as traffic signals often become a low priority given competing needs by local government, planning partners, and the Department in broader planning and programming activities. These funds could be applied to the operations as well as maintenance of systems, TAC recommends that some portion of any new funding source be allocated for operations including signal systems operations and maintenance.

Provide Incentives for Operational Enhancements - Presently, there are not direct incentives for operational enhancements; therefore, municipal practices focus on maintenance, keeping the signals operating in a red/yellow/green mode and to avoid liability issues, not necessarily on operational efficiency. Operational enhancements could significantly improve safety and mobility at a low cost.

Encourage Regional Maintenance Contracts with Operational Incentives - Shared maintenance across jurisdictional boundaries provides an opportunity to decrease signal maintenance contract costs and also provides an opportunity to improve operations through better coordination and communication as well as through operational incentives to maintenance contractors.

Provide Incentives for Inter-jurisdictional Coordination - Inter-jurisdictional coordination can help promote a regional, as well as a holistic system approach to managing and maintaining traffic signal systems. As part of this recommendation, funding preferences would be given to projects that are requested using collaborative funds by multiple entities. The approach would encourage MPOs/RPOs, counties, etc., to work closely together and think beyond their political boundaries.

Transportation Advisory Committee

Catalog of Reports

1985 – 2000

Experience and Response to Tort Liability in the Pennsylvania Department of Transportation -

April 1985

The Tort Liability Task Force was charged with two principal objectives: (1) to assess the future outlook for tort claims and (2) to evaluate the propriety and effectiveness of legislative or administrative changes to reduce the magnitude of the claims

The Role of the Engineering District in PennDOT in the Mid - 1980s - April 1985

The task force evaluated the role of the PennDOT engineering districts in the mid-1980s. At the time of the study, PennDOT was implementing organizational changes affecting the districts. The objectives of this task force were to: (1) examine how the districts would be affected by the change, (2) identify any existing or potential problem areas resulting from the changes, and (3) identify areas not adequately addressed by the changes.

Summary Report of the Aviation Development Subcommittee - October 1985

The task force requested a study that would: (1) provide a historical perspective on the role of Pennsylvania's State government in aviation development; (2) review past and current Federal government programs for aviation; (3) examine the current condition of the aviation industry in Pennsylvania; and (4) review aviation programs in other States.

Value Capture and Private Investment in Highway Projects - December 1985

The objective of the Land Values Task Force was to investigate alternative highway financing techniques and their potential applicability in Pennsylvania.

Future Directions For PennDOT - January 1986

The Future Directions Task Force was established to develop a list of recommendations and issues for improving the fiscal and operating strategies of the Pennsylvania Department of Transportation.

Pennsylvania Public Transportation Fiscal Review - March 1986

This task force was formed because of concerns over the financial condition of public transit in Pennsylvania. This study was conducted by the task force to: (1) evaluate the then current and future financial condition of public transit in Pennsylvania and (2) assess the need for a predictable funding source for public transit.

1986 Review of Transportation Funding in Pennsylvania - April 1987

The 1986 Fiscal Review Task Force established four objectives for this study. The objectives were to: (1) conduct a review on the status of the recommendations developed during the 1983 fiscal review; (2) reactivate the Motor License Fund Cash Flow Model (MLF Model) developed during the 1983 study and update and adapt it for current use; (3) develop case studies comparing transportation funding approaches used in Pennsylvania, Texas, Illinois, and Virginia; and (4) review nontraditional sources of transportation funding.

The Coordination of Motor Carrier Administration in Pennsylvania - July 1988

The major objective of the Motor Carrier Activities Coordination Task Force was to investigate the feasibility of coordinating motor carrier regulations in Pennsylvania for both trucks and busses.

The Effectiveness of Pennsylvania's Truck Safety Program - July 1988

The objective of the Motor Carrier Safety Task was to review selected aspects of the PennDOT motor carrier safety program with particular emphasis on roadside inspections conducted under the federally sponsored Motor Carrier Safety Assistance Program (MCSAP).

Transportation Advisory Committee Catalog of Reports 1985 – 2000 (Continued)

Traffic Management - April 1989

The task force had the following objectives: (1) To report on the implementation status of the Pennsylvania Transportation Partnership Act; (2) to identify alternative transportation financing mechanisms that are compatible with the Act; (3) to review sample partnership agreements used by State and/or local transportation agencies in Pennsylvania; (4) to examine techniques used in other States that may be applicable to Pennsylvania, and; (5) to examine ancillary issues pertinent to the use of transportation partnerships.

A Preliminary Pennsylvania Highway Cost Allocation Study - June 1989

The objective of the Highway Cost Allocation Task Force was to design a highway cost allocation methodology that would provide for the systematic and comprehensive analysis of the relationships between highways expenditures, highway user-group activity levels, and tax revenue sources for Pennsylvania.

Right-of-Way Preservation - June 1991

The study examined and developed approaches and mechanisms to better preserve right-of-way in Pennsylvania.

Pennsylvania Core Highway Network - March 1991

The study reviewed a number of highways within Pennsylvania which appear to be vital to the stability and continued improvement of the economy and livability of the state. Such a network should connect the major activity centers of the state including, but not limited to, population centers, education facilities, nuclear power stations, airports, military centers, ports and manufacturing centers.

Suburban Mobility - January 1991

The objective of this study was to assess the potential for Transportation Management solutions to help alleviate the suburban mobility situation in Pennsylvania.

Fiscal Alternatives - March 1993

This study looked to determine the steps and costs of implementing the recommendations of the two State Transportation Advisory Committee research projects titled "Suburban Mobility", January 1991 and "Pennsylvania Core Highway Network", March 1991.

Improved Aviation Advisory Function - May 1994

The objective of this study was to determine if there is a need to establish a formal means of providing aviation advice and information in Pennsylvania; and if so, to recommend methods of establishing a formal aviation advisory function for the Commonwealth.

Investing in Pennsylvania's Transportation Infrastructure - A Report on the Future of Transportation in the Commonwealth - December 1994

The study analyzed the fiscal situation with regard to Pennsylvania's transportation program and determined responsible recommendations for fiscal activities to enable Pennsylvania to provide the best possible transportation system and services to its customers.

Financing Pennsylvania's Local Roads - February 1996

The study focused on Pennsylvania's local transportation system and determined how to ensure adequate financing for its efficient operation.

Pennsylvania Highway Improvement and Financing Study (Impact Fees and Special Assessments) March 1997

The objective of this study was to identify mechanisms by which state and local governments could equitably distribute the cost of development-related transportation improvements.

Pennsylvania Innovative Financing Options Analysis - June 1997

This study looked to identify a variety of financing tools which can be used to increase the efficiency of investment in Pennsylvania's transportation infrastructure.

Transportation Advisory Committee Catalog of Reports 1985 – 2000 (Continued)

Trees and Utility Poles Safety Study - January 1998

The study reviewed the problem of vehicle collisions with trees and utility poles and developed a series of solutions to reduce/eliminate these accidents.

Fatigue/Inattentive Driving and Road Rage (Aggressive Driving) Relationships, Research and Recommendations - January 1998

The study explored the problems of fatigue, inattentiveness, road rage and aggressive driving and identified tools which Pennsylvania can use to combat these driving hazards.

Evaluation of Safety Administration's Decentralization and Privatization of Driver and Vehicle Services January 1998

The objective of this study was to assess the overall effectiveness of the decentralization initiative to date and to evaluate the possibility of further expansion of decentralized driver and vehicle services.

Transportation Partnerships and Impact Fees - December 1998

The study objectives were to identify the barriers impeding the use of impact fees and partnerships and recommend strategies and actions to address those barriers.

Freight Movement in the Commonwealth - April 1999

Four study objectives were derived from a series of meetings with the State Transportation Advisory Committee. Each objective is interdependent and provide structure for this report. These objectives included:

- (1) Document the relative volumes and the associated geography of multimodal goods movement in the Commonwealth;
- (2) determine key issues and opportunities affecting Pennsylvania goods movement;
- (3) conduct "state of the practice" research that is primarily focused on freight planning and programming activities that can be applied to development of recommendations for the issues and opportunities, and;
- (4) provide any other recommendations that can benefit PennDOT and the Commonwealth's shippers and carriers.

Implementation of the 21st Century Environment Commission Report - January 2000

The study determined what actions PennDOT should take to address the transportation related issues identified in the Governor's "21st Century Environment Commission Report".

Statewide Highway Access Management and Growth Accommodations - January 2000

The study looked to develop and recommend strategies to effectively address highway access management in the Commonwealth.

Evaluation of PennDOT's Bridge Program - April 2000

The key study focus was a review of existing bridge conditions in relation to a historic trend analysis of spending for bridge construction, improvements and maintenance. The basic concept was to determine if the bridge system is improving relative to the investments made. The report also reviewed the Department's bridge delivery process and the various funding requirements and policies for each bridge program. Findings were in three key areas: Condition assessment, funding and project delivery.

Assessing the Availability of Transportation Services for Persons with Disabilities in Rural Pennsylvania June 2000

The objective of the study was to assess the need for transportation services for persons with disabilities in rural Pennsylvania.



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