

Transportation-Trouble Ahead



Findings and Recommendations of the New York State Advisory Panel on Transportation Policy for 2025

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Acknowledgement

Over 300 citizens, legislators and other stakeholders testified at nine public hearings held throughout the State. Their testimony was earnest, well thought out and helpful in the deliberations of the Panel. Others chose to submit written testimony, which was equally welcomed and considered. The Panel thanks them for their valued contributions.

The Panel thanks Joseph H. Boardman, Commissioner of the New York State Department of Transportation (NYSDOT) and his staff as well, for arranging and moderating each of the public hearings. In addition, a special thank you is offered to the University Transportation Research Center (UTRC) for their assistance in preparing notes from each of the public hearings and the preparation of this report.

No undertaking like this is possible without solid staff work. Staff handled numerous logistical issues including travel and many other details, and did so in an efficient and professional manner. The Panel wishes to express our appreciation and thanks to them for a job well done.



The NYS Advisory Panel on Transportation Policy for 2025

November 29, 2004

Joseph H. Boardman, Commissioner
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Commissioner Boardman:

We respectfully submit, *Transportation-Trouble Ahead: Findings and Recommendations of the N.Y.S. Advisory Panel on Transportation Policy for 2025*. After careful deliberation of the results of the extensive hearings held throughout the State over this past year, our findings conclude that without bold leadership and substantial new investments in our transportation system, our infrastructure will deteriorate, the economy will falter, jobs will be lost, and the quality of life in New York State will suffer dramatically.

The problems we face are complex. Multiple modes of transportation must work together seamlessly in ways they do not today. The current demands on the transportation system must be recognized and future demands anticipated. Multi-year funding programs on both the State and federal level are reaching their conclusion and future legislative funding solutions face uncertain resolution. While many improvements have been made to our infrastructure over the last decade, major changes in global trade, technology and traffic have placed stress on the transportation network, requiring a renewed investment in system-wide transportation improvements.

We do not have to slip back to the 1980s, a time when underinvestment and poor planning led to a crumbling infrastructure, unsafe travel and unreliable service. New York State plays a critical role in the nation's economy and its transportation system serves as its economic lifeblood. It is vital that New York State remains competitive in the global economy by providing for a transportation system that is reliable, safe, efficient, and secure, while continuing to enhance the environment and improve our quality of life.

The findings and recommendations in this report are a starting point. Comprehensive transportation planning must follow, along with legislative action. The Panel stands ready to contribute to this effort.

Respectfully,

The N.Y.S. Advisory Panel on
Transportation Policy for 2025

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Transportation-Trouble Ahead

Findings and Recommendations of The New York State Advisory Panel on Transportation Policy for 2025

Executive Summary

Over the past year the New York State Advisory Panel on Transportation Policy for 2025, a group of transportation professionals representing many perspectives, conducted an extensive series of hearings throughout the State. After careful deliberation of the results of those hearings the Panel has concluded that **trouble lies ahead** for transportation without **bold leadership** and **substantial new investments of tens of billions of dollars** in just the next five years alone. The trouble that is on the horizon will have immediate ramifications on the citizens and businesses throughout the State. If bold leadership is not shown and adequate, meaningful funding is not provided, the infrastructure will deteriorate, the economy will falter, jobs will be lost, and the quality of life in New York State will suffer dramatically.

The problems are complex. Multiple modes of transportation must work together seamlessly - today they do not. The current demands on the transportation system must be recognized and new demands anticipated. Multi year funding programs on both the State and federal level are reaching their conclusion. Future legislative solutions face uncertain resolution. Substantial, sustainable and flexible funding must be provided. While it is true that many improvements have been made to the infrastructure over the last decade, major changes in global trade, technology and traffic and the resulting stress placed on the transportation network, requires that an emphasis be placed on renewed investment in system-wide improvements.

It is essential that the State take bold and decisive action to ensure that the infrastructure of the Empire State does not slip back to the deplorable conditions of the 1980s. During that time in the State's history, years of poor planning and under investment led to a crumbling infrastructure, unsafe travel and unreliable service. New York State plays a critical role in the nation's economy and its transportation system serves as its economic lifeblood. It is vital that New York State remains competitive in the global economy by providing for a transportation system that is reliable, safe, efficient and secure, while also continuing to enhance the environment and improve our quality of life.

The Panel's report, as summarized here, provides key findings on the condition of the State's transportation system and makes policy recommendations which, if followed, will ensure that the economy of New York State thrives in concert with a high quality of life. This outcome is not certain. State leaders must not delay in taking the necessary steps that will meet the transportation needs of New York State citizens today and for generations to come.

Findings and Recommendations

FINDING #1: The transportation system is under stress, and conditions will worsen, unless New York State dramatically changes the planning, investing, managing, and institutional relationships that drive the system.

Current transportation infrastructure, after years of improvement, is starting to deteriorate again and conditions will worsen quickly without significant new investment.

Restoring and maintaining our existing infrastructure is not enough. New infrastructure and system-wide improvements are also needed in order to keep up with increased demands.

Revenues for transportation operations and capital improvements are currently insufficient and will certainly not meet future needs.

The needs of an aging population and physically challenged individuals is placing stress on the transportation system and must be met with new approaches and standards.

Providing a secure transportation system in a post 9/11 world has increased safety and security expectations for the transportation system that must be met.

Institutional relationships are impeding the State's ability to address transportation challenges and seize opportunities both across modes and jurisdictions. Changes are required to take advantage of the opportunities that technology offers to substantially improve customer service, mobility, and reliability, system-wide efficiency, safety and security.

FINDING #2: The New York State Department of Transportation (NYSDOT), as the only statewide multimodal transportation agency, must lead a comprehensive effort to optimize the transportation system in New York State. The multiple transportation operations in the State must be integrated to form a seamless system that delivers significantly improved service while enhancing the environment.

New York State must expand its newly established federation of transportation agencies and consider agency consolidation where it makes the most sense.

NYSDOT must work closely with, and help strengthen, local transportation agencies and Metropolitan Planning Organizations (MPO's).

NYSDOT must take the lead in developing and implementing solutions that improve freight movement.

NYSDOT must assume a leadership role in achieving the State's environmental and energy goals.

NYSDOT must lead the effort to link land use and transportation decisions to ensure quality communities with effective transportation systems.

NYSDOT must develop and implement solutions to manage demands.

NYSDOT must develop a State Transportation Master Plan that integrates the transportation system physically and operationally to achieve performance goals for mobility & reliability, safety, security, economic competitiveness and environmental improvement.

NYSDOT must educate the public, legislators and the media about the risks to the transportation system and the rewards to be gained by overcoming the challenges faced.

FINDING #3: New York State must develop a new strategy that provides substantial, sustainable and predictable funding dedicated to transportation investments. This strategy must reinforce the goals of mobility & reliability, safety, security, economic competitiveness and environmental enhancement; strike a balance between payments by beneficiaries and the benefits received; and provide for financial transparency and accountability to ensure continued confidence in the financing strategy.

New York State and local transportation agencies and authorities must take steps to continuously hold down costs, but this alone will not come close to providing the revenue necessary to meet our transportation needs.

New York State must examine all possible sources of revenue for transportation investments, including user fees, taxes, tolls, and private investment.

New York State must consider tolling for congestion management and revenue generation.

Conclusion

Trouble lies ahead. There will be **severe** consequences if New York State fails to address the transportation issues enumerated in the Panel's report - the transportation infrastructure will deteriorate, the economy will falter, jobs will be lost and the quality of life in New York State will suffer dramatically. **Bold leadership** is essential to make the institutional changes that are needed and the funding decisions that are recommended.

The stress placed on the transportation network, can be addressed through renewed investment in system-wide improvements. It is vital that New York State remains competitive in the global economy by providing for a transportation system that is reliable, safe, efficient, and secure, while continuing to enhance the environment and improve our quality of life. Multi-year funding from the State must be substantial, sustainable, predictable, and flexible.

The findings and recommendations in this report are a starting point. Comprehensive transportation planning must follow, along with legislative action. The Panel stands ready to contribute to this effort.

Transportation – Trouble Ahead

INTRODUCTION

This report provides findings on the condition of New York State's transportation system and makes policy recommendations which, if followed, will ensure that the economy of the State thrives in concert with a high quality of life. Today, this outcome is not certain. It will take strong leadership to bring about positive change. New demands are being placed on the system, with growing congestion being the most visible result.

Changes in trade, technology and traffic have contributed to the globalization of the economy and the advent of "Just in Time" principles have turned our highways and rail lines into our nation's warehouses. The implication of such changes has placed further emphasis on the need for a safe, seamless, reliable and secure transportation system. Never has there been a time when the transportation system has played such a significant and integral role in the nation's manufacturing and distribution sectors. The role of transportation in the economy has fundamentally changed. Transportation has an ever increasing responsibility to be the economic lifeblood of the State, to create meaningful jobs, to provide the public with viable choices for getting to and from work, to move people and goods safely, and to not only protect, but enhance the environment.

Transportation services in the State are fragmented and the current funding programs, both on the State and federal levels, are drawing to a close. Future legislative solutions face uncertain resolution. Substantial, sustainable, predictable and flexible funding is imperative. **Tens of billions of dollars in transportation investments will be needed in just the next five years.** State leaders must not delay in taking the steps necessary to meet the needs of New York State citizens today and for generations to come.

The New York State Transportation System

New York State's transportation system is large and complex. It is a mix of privately and publicly owned infrastructure. The transportation modes include cargo ships, freight & passenger ferries, seaports, airports, freight & passenger airliners, private airplanes, commuter railroads, freight railroads, intercity passenger railroads, private automobiles and trucks, taxi cabs, rail rapid transit, buses (metropolitan & intercity), para-transit buses, bicyclists and pedestrians, and the connections between these modes. There have even been studies of potential use of dirigibles to carry super-heavy freight shipments by air.

A few measures of this system give us a sense of its size, complexity and criticality:

- New York State's transportation system includes over 110,000 miles of highway and 17,000 bridges owned by the State, counties, towns, cities and villages. While most highways are owned by governments, a significant number of bridges are privately owned. For example, there are over one thousand bridges owned by railroads.



- New York State’s rail system includes the two large railroads serving the eastern coast (CSX and Norfolk Southern), two transcontinental railroads (Canadian National and Canadian Pacific), and 32 short line railroads. One of the largest freight railroad yards east of the Mississippi River is located in Selkirk, New York.
- Intercity passenger rail service in New York State is operated by Amtrak primarily over the freight railroad lines and commuter rail tracks just north of New York City. Service includes well over 500 route-miles and 23 stations in the State. Penn Station has more than twice the number of boardings as the next busiest Amtrak station (Philadelphia). The Albany/Rensselaer station ranks 14th in the nation based on the number of boardings.
- There are over 130 transit operators in New York State. They serve more than 7.4 million passengers a day - **nearly one-third of the nation’s total transit ridership**. The largest operator by far is the Metropolitan Transportation Authority (MTA). The MTA’s subway system, for example, carries 10 times the number of passengers as the next largest system, located in Chicago. Four upstate transit authorities provide service to metropolitan Albany, Buffalo, Syracuse and Rochester.



- Five public ports and seven privately owned ports handle over 110 million tons of cargo a year. The Port of New York and New Jersey is the largest on the east coast.
- More than 31 million air passengers a year use the State’s 456 airports. These include



LaGuardia and JFK airports, which together serve the largest number of originating air travelers in the country. JFK airport has more international flights than any other United States airport and is a major entry point for air cargo.

The direct users of these transportation facilities, including commuters, shoppers, tourists and shippers are not the only beneficiaries. Employers and all consumers of shipped goods benefit as well. **Every citizen is a stakeholder** and it is only by integrating these various transportation operations that the transportation system can be optimized.

Preamble – Our History and Future

New York State has always had the vision and the conviction necessary to be the nation’s transportation leader. Willy Grimmke, Superintendent of Washington County’s Department of Public Works, eloquently spoke of this past leadership in his testimony before the Panel, as he urged continued leadership.



- In the early 1800s Governor DeWitt Clinton invested in the Erie Canal and the return on investment became legendary. New York City, initially ranked 5th in population in our new nation, quickly became the dominant Atlantic coast port.
- In the mid-1880s, with public support, the private sector made significant investments in railroad development and New York State continued as an economic power.
- In the 1940s, Mayor LaGuardia committed to air transportation in the City of New York, and that buoyed the economy of the metropolitan region.
- From the 1920s to the 1960s, Robert Moses, with the support of several mayors and governors, presided over the construction of numerous transportation facilities that serve us today.
- In the 1950s, Governor Thomas E. Dewey committed to the construction of the New York State Thruway, a model for the interstate highway system.

These transportation investments made New York “the Empire State”.

Regrettably, the fiscal crisis of the 1970s had a severe impact on the quality and safety of the State’s transportation system. Public investment in transportation fell and our transportation infrastructure deteriorated to intolerable levels. Within a short period a truck fell through Manhattan’s elevated West Side Highway; a NYS Thruway Authority bridge in Schoharie County collapsed into the waters below; and subway service over the Manhattan Bridge was shut down when a crack was found on the bridge. The late 1970s and early 1980s were the “bad old days” for New York’s transportation infrastructure.

In 1983 there were 20 subway derailments and subway cars were only able to go a few thousand miles before breaking down. More than 25% of the Metropolitan Transportation Authority’s buses were past their planned retirement age and breaking down every 600 miles. All too often, buses, subways and commuter rail serves were notoriously late. In 1984 there were over 9000 deficient highway bridges in the State and over 50% of the State highway pavement had advanced deterioration.

New York State met this challenge with an aggressive funding program that leveraged new revenue through the sale of bonds. The funding program was a success, bringing us back from the brink. Highway and bridge conditions have improved and the Metropolitan Transportation Authority has made significant progress in bringing its system to a state of good repair.

Today, however, due to new demands placed on the system, changes in trade, technology and traffic, and increased concerns for safety and security, the physical infrastructure has again begun to decline. Additionally, current revenue for the most part will not be available to help because it will be needed to pay the debt service on bonds that financed previous capital projects. Without increased revenue and other measures, the State’s transportation system could easily return to the intolerable conditions of the 1980s. The result would be lost jobs, a weakened economy and a diminished quality of life.

Taken together there are three broad reasons to fear the worst for New York's transportation system.

- Our transportation system is under new and growing stresses as traffic and congestion increase, costs rise, and the needs of the users change.
- Our transportation institutions are fragmented, making it difficult to optimize the transportation system.
- There is no financing program in place for the immediate and long term future.

We have a choice and it is obvious. New York must create, maintain and operate the various components of its extensive and diverse transportation system as a seamless enterprise. We need a system that uses investments to achieve desired results – mobility & reliability, safety, security and the ability to sustain our State's economic competitiveness while enhancing the natural environment.

The Panel envisions a future where we live in quality communities, served by transportation, rather than dominated by it. Parents can feel safe with their child walking to school and a bicycle trip to the local store is a healthy and safe option. Through sound land use planning and coordination with transportation providers, there is open space for recreation and sufficient home and business densities to make transit service a viable option. People with disabilities are able to conveniently travel to their job, medical facilities and to visit a friend.

We imagine a future where a local business owner, who perhaps employs 50 neighbors, can compete in the global market. She does not have to worry about the delivery of a spare part getting stuck in traffic and not arriving until the next day. Nor will she have to fear suppliers adding a congestion surcharge to deliver goods. Any surcharge becomes a cost of doing business that gets passed on to the consumer and eventually could drive her out of business.

We expect a future in which travelers do not recognize jurisdictional boundaries. New York's citizens deserve an integrated and seamless transportation system which will have a network-wide view of travel conditions where agencies and jurisdictions share information and control. Such an integrated transportation system can make full use of all resources and help agencies achieve greater safety, efficiency, and economies of scale. In addition, benefits may include increased customer satisfaction, safety, mobility, efficiency, productivity, and reduced vehicle emissions and fuel consumption. The transportation system will be secure, customer oriented, performance driven, institutionally innovative, and enabled by information from a fully integrated spectrum of communications technologies.

Achieving this vision requires more than fixing what we have. It requires **major new investments** to expand certain services, improve efficiency and reliability, replace aging infrastructure and provide critical links between travel facilities. It requires **a new mindset** as well, where government does more than fund construction. Government must **operate** the transportation system in an effective and efficient manner. The results will be economic prosperity, an enhanced environment and quality communities where we are proud to live.

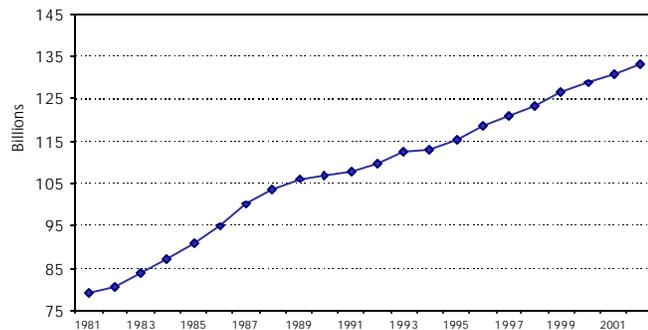
FINDINGS

The findings and policy recommendations presented in this report need to be considered as a group. The complexity of the transportation system makes these findings complementary and interdependent.

FINDING #1: The transportation system is under stress, and conditions will worsen, unless New York State dramatically changes the planning, investing, managing, and institutional relationships that drive the system.

New York State is blessed with an extensive and diverse multimodal transportation system, but it is under stress from several fronts. Age, heavy use and harsh conditions are taking their toll on the physical infrastructure. The number of vehicle miles of travel has steadily increased for decades. Metropolitan Transportation Authority (MTA) transit ridership is increasing too as services improve. The infrastructure was improved during the 1990s, but has recently begun to deteriorate faster than it is being repaired.

Vehicle Miles Traveled - Historic

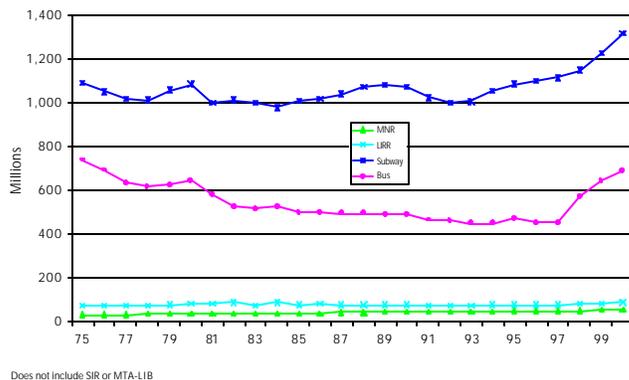


The global economy has increased traffic in ways that require better operating strategies for existing facilities and new infrastructure to be built. Improvements are needed to ease

commuter trips, alleviate transit and highway congestion, and facilitate freight flow.

Improvements are needed at airports, at seaports, on transit systems, on railroads, on highways, and most importantly at the connections between these modes.

MTA Ridership



Does not include SIR or MTA-LIB

Additional stress is coming from the users of the system. The expectations are higher than ever before. Commuters with busy lives are not willing to be stuck in traffic. Businesses also require the free flow of freight to hold down costs and save jobs.

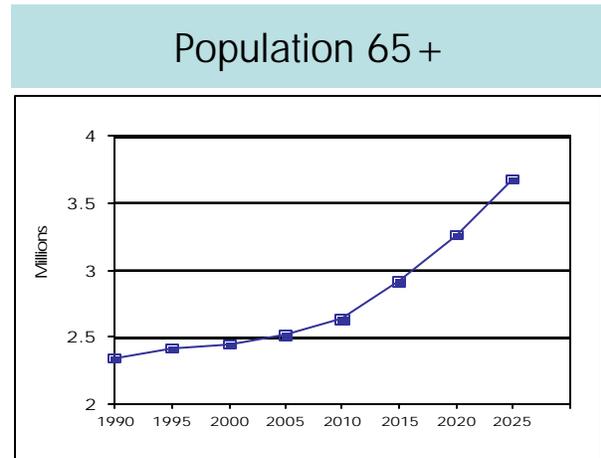
Everyone following 9/11 correctly expects a more secure transportation system. This new requirement increases the cost to maintain and operate the transportation system. Technology

offers some promise in this area and will affect transportation in many ways that are as yet unforeseen, yet it must be integrated. There is too much fragmentation among providers. Institutional changes are needed to embrace technology and to optimize the performance of the transportation system.

Our aging population is another source of stress. The number of people over 65 years of age will grow rapidly in the next two decades. The baby boomers will need additional accommodations as their reaction times slow and their vision becomes less acute. Transit will be in more demand as the population ages, yet in rural areas there is inadequate transit service already.

People with disabilities require transit and para-transit services today, and they too, cite a special need in rural areas.

Today downstate transit systems, highways and airports are at or near capacity. Upstate, the North American Free Trade Agreement (NAFTA) has increased traffic. Truck traffic is exploding, increasing congestion at border crossings with Canada and at other choke points.



Trade in general is having a major effect on New York State. New York's unique location as the eastern gateway to the United States, the gateway to Chicago and the Midwest, and a major gateway to Canada places the State in a strategic position with regard to both the United States and the global economy. Goods entering the U.S. through the Port of New York and New Jersey often cross the State on their way elsewhere and JFK Airport serves as one of the major international cargo and passenger terminals in the country. Many goods entering the U.S. from eastern Canada move across New York's highways and rail lines, serving the local economy on these international trade routes.

Millions of people each year travel to New York State from all over the globe and use our transportation system to gain access to our employment centers, tourist destinations and financial resources. The states in the Northeast, (including New York), represent the world's third largest economy and people or goods traveling throughout the Northeast from other areas of the Nation and beyond must pass through New York State. Goods manufactured or warehoused in New York must travel on New York's transportation system to reach their markets. The advent of "just-in-time" principles is turning our highways and rail lines into the Nation's warehouses. The speed and predictability with which goods and commuters travel and the condition of our transportation infrastructure, shape business conditions in the State and dramatically impact New York's ability to compete in the global economy.

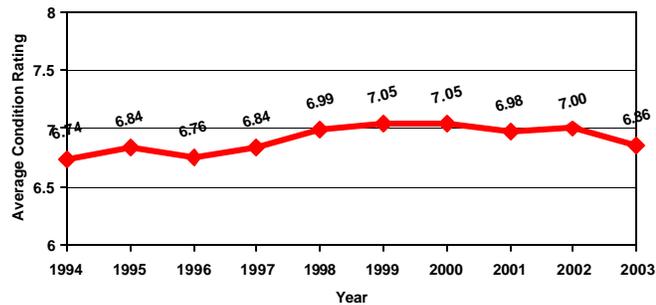
All of these stresses on the transportation system will be compounded by the lack of adequate funding going forward. The funding program that served us well in the 1990s dramatically improved the infrastructure. Revenue streams were pledged when bonds were sold and they must now be devoted to paying off those bonds. New funding is not in place to fill the gap

between debt service payments and continued operation and maintenance of the system. To proceed without a substantial increase in funding will most certainly have a profound negative impact on the State's economy and quality of life.

1A: Current transportation infrastructure, after years of improvement, is starting to deteriorate again and conditions will worsen quickly without significant new investment.

The State's transportation infrastructure is one of the fundamental building blocks required to attract and retain businesses. After years of improvement during the 1990s, there are signs that the infrastructure on average has begun to deteriorate. The statewide trend in average highway

condition rating shows a drop in the average surface rating from 7.05 in 2000 to 6.86 in 2003. This indicates pavement cracking is becoming more frequent and the size of the cracks is larger. With the freeze thaw cycles in New York State, water entering the pavement through cracks and then freezing can do significant damage.



Average pavement scores are driving this change and are forecasted to continue on a downward path if corrective action is not taken. The percent of pavement rated *fair* or *worse* is currently more than 1/3 of all lane-miles (34.1%). The percent of pavements rated *fair* or *low good* has increased to 77% of all State highways. Without maintenance treatment, this mountain of pavement will slip into the *poor* or *fair* range over the next five years.

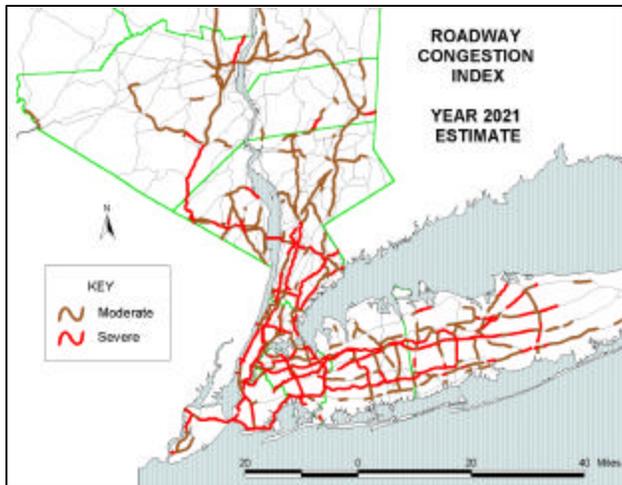
The American Society of Civil Engineers' 2003 update of its "2001 Report Card on America's Infrastructure" reported:

- 37 percent of New York's bridges are structurally deficient or functionally obsolete; and
- New York's motorists spend \$ 218 per year in extra vehicle repairs and operating costs as a result of driving on roads in need of repair, at an estimated total cost of \$2.3 billion.

New York State must adopt a "fix-it-first" approach to protect its transportation assets. Investments should follow the principles of asset management, where the benefits to the users and society are the basis for making decisions.

The creation and retention of jobs for New Yorkers is critical in this global market. New York State is competing with other destinations such as Beijing, Singapore, and Zurich. China alone, has invested \$9.7 billion this year on economic development projects, including several new motorways and the Qinghai-Tibet railway. **The adequacy of the transportation system matters.**

Deterioration of the infrastructure must be halted and the deterioration of the transportation system's performance must be addressed. Congestion in downstate New York is particularly severe and growing. This is true for all modes of travel. The Long Island Rail Road, for example, has capacity constraints at key locations impacting its ability to respond to market changes. Penn Station operates at or near full capacity during many periods of the day. The station's twelve platforms and twenty-one tracks are shared by Long Island Rail Road, Amtrak, and New Jersey Transit, and handle over 1,000 trains each day. Growth is currently impossible given the physical structure of the train station, not to mention tunnel capacity under the Hudson River and storage capacity. The map below shows the projection for highway congestion.



LaGuardia and JFK airports face similar landside access problems, restricting their ability to move people and freight in the global economy. Access to airports must be improved and should include transit as well as better highway access.

The downstate rail freight system has only a tenuous connection with the national rail freight network. The lack of rail/intermodal yards is

a huge impediment to redeveloping rail freight as a serious option for moving freight downstate and reducing truck-generated highway congestion.

Automobile and truck traffic on New York State's highways increased by 21% from 1991 to 2001, causing the State's urban highways to become severely congested. Much of this congestion is from rapid increases in truck traffic, which nationally, has risen at twice the rate of automobile traffic during the past decade. Forecasts for New York State predict that truck traffic will nearly double in the next twenty years.



Taken together, these problems increase costs to business and end-user customers, harm the environment, weaken the economy, and reduce the quality of life of our citizens.

1B: Restoring and maintaining our existing infrastructure is not enough. New infrastructure and system-wide improvements are needed in order to keep up with the increased demands.

Tens of billions of dollars to relieve congestion and provide critical links will be needed to construct new transportation facilities across the State. This is above and beyond the cost to maintain and operate the current system.

Connectivity of transportation systems is a priority which will enhance the regional economy and will ease access to businesses, tourism, and jobs throughout New York State. New York State's transportation system provides important links to national and international multimodal transportation networks. Aside from the existing transportation infrastructure being important to the State's economy, there are major transportation projects that must be considered in order to make these most necessary improvements to the connectivity of the system.

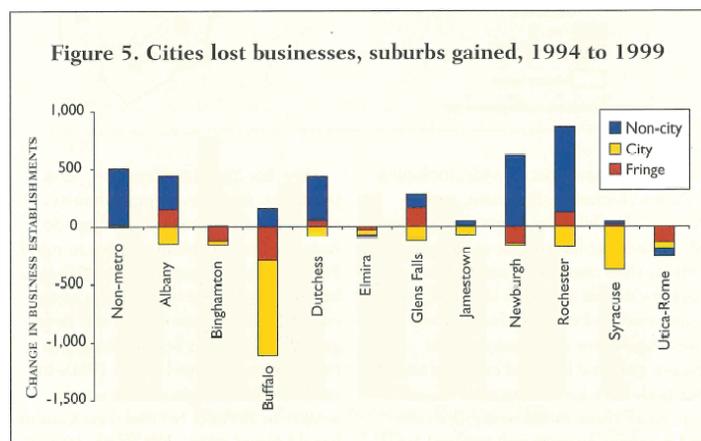
New York State requires a truly multimodal transportation network focused on the delivery of goods and services between economic centers, and of equal importance, focused on making living and working in the State attractive to current and potential new residents.

Well planned, well designed transportation projects help to improve the mobility, reliability, safety, security, economic competitiveness and environmental health of both the immediate locality and the entire State.

Many people presented testimony advocating for specific projects. The projects ranged from a call for a noise wall along a busy highway to multibillion dollar transit and highway projects. Panel members as individuals strongly support some of the projects cited in testimony and each project in its own right should be carefully considered. Nevertheless, no position is taken on specific projects because the purpose of this report is to provide findings and recommendations on transportation policy. Policies should be set before individual projects are discussed.

Meeting the future needs of the State will require new infrastructure. Capacity in certain highway and rail corridors cannot be met without selected expansions. Upstate cities have been losing business and need to be supported. New capacity is needed for passengers and freight, triggered in part by the North American Free Trade Agreement (NAFTA). Replacement of major bridges is another

Upstate Business Locations



requirement. Finally, the State must support the upstate economy by providing links to key employment centers and to interstate highway extensions in other states.

Upstate New York is at the cross roads of major commerce traveling to and from Canada and New England. The challenge is to make transportation investments that will support economic development upstate. Transportation investments must support our manufacturing and growing high tech facilities, logistics firms and the needs of commuters. High quality passenger rail service across the State will link upstate cities and spur economic growth.

1C: Revenues for transportation operations and capital improvements are currently insufficient and will certainly not meet future needs.

Transportation is critical to how we work, play and function in society, yet despite its importance to our everyday lives, as a basic government program, it is losing ground to escalating health care costs and demands for greater education investments. Yet the transportation system cannot be taken for granted. **All of New York** depends on a safe, sound, reliable and efficient transportation system. Without substantial new investment in transportation, the State faces far reaching consequences which will have resoundingly negative impacts on us all.

As Congress continues to deliberate on the next multi-year federal transportation program it is becoming clear that we cannot anticipate that federal transportation funding will come close to meeting the State's transportation needs. Unfortunately, and unjustly, New York State's share of funding from the Federal Highway Trust Fund is declining. Growth in federal funding will likely be directed largely to faster growing states in the south and west.

The current State funding program is "ending." Current revenues are needed to pay off bonds issued during the 1990s for transportation improvements. While the State has benefited from the improvements these bonds afforded, there is now a major funding gap. The rising cost of debt service to finance prior commitments has reduced the pool of funding available to meet existing and future needs for all modes. In 1995 New York State paid \$73.7 million for highway debt service. By 2002 that amount had risen to \$715 million. A similar reliance on borrowed funds occurred with the Metropolitan Transportation Authority. In 1995 the Authority paid \$169 million in debt service. This year the debt service figure has grown to \$916 million. This increase in payments to debt service has resulted in fewer dollars being available for use in transportation operations or capital improvement.

Local highway departments have already felt the squeeze. County taxes across the State have gone up for health care and educational expenditures, leaving little for local highways. State assistance through the Consolidated Highway Improvement Program (CHIPs) has been welcomed, albeit inadequate. State funding has not been predictable, nor has it kept pace with rising costs. The inadequacies of the CHIPs program must be addressed.

New funding must be provided that is substantial, sustainable, predictable, and flexible. Failure to provide new funding will lead to a bare bones program where deterioration continues, congestion grows, and no new infrastructure is built. **Jobs will be lost.**

1D: The needs of an aging population and physically challenged individuals are placing stress on the transportation system and must be met with new approaches and standards.

New York State must ensure that all citizens have access to transportation. People rely on transportation to participate in society. In the case of people with disabilities, transit and para-transit systems are often the primary means of travel, allowing them to become a part of their community. The number of people with disabilities will grow as baby boomers age, so there is a need for new transportation options in addition to the strengthening of existing options.

In spite of reduced skill, many older people continue to drive. This is truer today than at any time and it presents its own challenges. The number of licensed drivers over 70 years of age has increased by 50% in the last decade. Highway designs will need to be adjusted to reflect the capabilities of an aging population.



Fully accessible and newly renovated stations have tactile-Braille signage.

Even as people retain their driver licenses, people over 65 years of age do travel less frequently and many often stay home all day. In urban areas 43% of the elderly stay home most days. The problem is worse in rural areas, where 61% stay at home. There are several factors that could explain their isolation from society, but the difference between urban and rural citizens implies the lack of transportation options is a significant factor. Special attention must be placed on our rural population. As the once mobile population ages, demands on already limited public transportation services will grow.

Urban areas are also challenged by the need to accommodate people with disabilities. While transit authorities have established programs to comply with the Americans with Disabilities Act (ADA), testimony received made it clear that transit agency compliance with their own ADA related policies is inconsistent. Furthermore, people with disabilities are seeking service levels that exceed the minimum required by the ADA.

1E: Providing a secure transportation system in a post 9/11 world has increased safety and security expectations for the transportation system that must be met.



Transportation systems for centuries have been built to withstand violent storms and vehicles colliding into bridges and viaducts thanks to the conservative approach of structural engineers. But nothing prepared us for a terrorist attack aimed at killing people and destroying critical infrastructure. Since September 11,

2001, a great deal of thinking and subsequent action has gone into making our transportation system more secure. This has and will continue to place a stress on the transportation system.

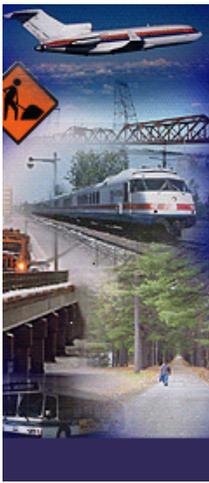
Security is a must. Bridges, tunnels, rail tracks and highways were examined to determine where they might be vulnerable to an attack. Engineering drawings were reviewed to determine the ability of a structure to withstand an attack. Key facilities were examined to determine the ease with which a terrorist could gain access. Many actions to increase public safety were taken. Access to facilities and engineering information has been restricted. Key structures have been strengthened. Staff was trained to recognize threats and report them.

Steps are being taken to provide security in a way that minimizes constraints on economic activity. Border crossings, ports of entry, and transportation sites where large numbers of people congregate are all areas deserving special attention. Government must continue in its efforts to prevent a terrorist attack, as it works simultaneously to take steps that will mitigate the damage from an attack. In addition, plans need to be in place to recover from an attack.

Building redundancy into key links in the transportation system and the use of technology to operate the transportation system safely and securely are recommended. Research into new methods to detect and offset problems is required. Much of the lead in this area appropriately falls to the federal government; however, New York State has been a target on more than one occasion and we must not leave any stone unturned.

1F: Institutional relationships are impeding the State's ability to address transportation challenges and seize opportunities across both modes and jurisdictions. Changes are required to take advantage of the opportunities that technology offers to substantially improve customer service, mobility and reliability, system-wide efficiency, safety and security.

New York State's transportation system is large and complex. Numerous authorities, public agencies, and private organizations operate and maintain parts of the State's transportation system. The Office of the State Comptroller lists twelve (12) separate authorities involved with transportation, in addition to the New York State Department of Transportation (NYSDOT) and local highway departments. Many facilities, most notably the freight railroads, are independently owned. Aside from four major private railroads operating in the State, thirty-two (32) short line railroads provide needed service. With multiple agencies, independently in charge of their portion of the system, **no one is truly in charge** of the system as a whole for New York State.



New York State requires a seamless transportation system. Current institutional relationships are impeding the State's ability to address challenges and seize opportunities. Full integration is required to

optimize the transportation system. The system must be viewed from the customer's perspective.

A trucker, for example, potentially must go separately to NYSDOT, the NYS Thruway Authority, bridge authorities and local governments to obtain special hauling permits for a single trip. Only one application and one permit should be needed. While steps are underway to provide relief in this particular case, it is an example of how inefficient the process can be from a customer's point of view.

System integration must occur at many levels. The application of new technology will often be the means by which improvements are made. Customers require useful information on all parts of the transportation system, not just information on the section where they are traveling at the moment. This is not done well today. Customers with a single question or need should only have to conduct a single transaction to be satisfied. That is often not the case today.

Technologies being designed into new vehicles, which will alert drivers to real time traffic conditions or the location of services, must be able to receive information from facility owners in a standard fashion. Steps must be taken to ensure agencies and authorities are able to do this.

Technology offers the promise of going beyond providing current information. Traffic conditions might be forecasted like the weather, so a driver will know what to expect and an appropriate route and trip time can be selected. The exact location and speed of intercity trains might be monitored by local taxi cabs, so they can be waiting for arrivals. A cab could be ordered from the train en route to the station. Cars and diesel trucks should become much less polluting, through the introduction of technology. Toll plazas may become a part of history, as tolls are collected electronically and at higher speeds.

Realizing these opportunities, and many more, requires an integrated approach to managing the transportation system. Individual transportation service providers are not organized to achieve technological, system-wide integration. Funding for the future is critical, but if organizational change and a new way of thinking about transportation do not accompany new funding, we will fail.

FINDING #2: NYSDOT, the only statewide multimodal transportation agency, must lead a comprehensive effort to optimize the transportation system in New York State. The multiple transportation operations in the State must be integrated to form a seamless system that delivers significantly improved service while enhancing the environment.

New York State's future transportation systems should be based on information management and availability, connectivity, and system control and optimization. The information to be gathered and managed includes real-time information on the physical state of the infrastructure, how it is being built, used, maintained and kept secure, as well as its environment, including relevant weather conditions and forecasts. Realizing this vision depends greatly on forging new

partnerships within and between the public and private sectors in their broadest sense, including manufacturers, carriers, service providers, and travelers on all modes.

Much of the testimony received at public hearing held across the State called for greater integration and coordination of transportation policy and planning. Virtually all of the major transportation issues faced by New York State require multimodal solutions involving numerous institutions. The New York State Department of Transportation (NYSDOT) is the only government agency with statewide responsibilities covering all modes of transportation and, as such, it must take the lead on policy and programmatic transportation issues. If the State is to achieve the desired objectives of a seamless, integrated and optimized multimodal transportation system, it is vital that the NYSDOT lead the effort.

The New York State Department of Transportation already has the legal authority under Article 2 of the State Transportation Law “*to coordinate and develop comprehensive, balanced transportation policy and planning for the state to meet present and future statewide needs for adequate, safe and efficient transportation facilities and service at a reasonable cost to the people.*” What is now required is the support of elected officials, along with the regulatory and budgetary tools to effect change for the better.

In order to reach its full potential, a transformed NYSDOT leading an integrated, comprehensive approach to transportation in the State is a must. In addition to its current efforts to improve customer service and efficiency of its operations, expertise must be enhanced or obtained in order to achieve environmental and energy goals, encourage sound land use, take advantage of technology, and to become active in managing the demand for automobile travel.

A number of individual plans for various parts of the transportation system exist, but these plans are too independent, prepared by organizations that are not fully integrated. Instead, a strong and comprehensive State Transportation Master Plan must be developed to lay the policy framework from which investment decisions can be made. Investment plans must focus on the accomplishment of results – mobility & reliability, safety, security, economic competitiveness and an enhanced environment – not the mere construction or reconstruction of infrastructure.

A new mindset is required with a focus on measurable results that can be applied across modes and modal operators. How the system performs will be determined by the condition of the infrastructure and how it is operated.

2A: New York State must expand its newly established federation of transportation agencies and consider agency consolidation where it makes the most sense.

New York State has begun to recognize the value of having transportation agencies and authorities work together to improve services and cut overhead costs. E-ZPass, as an example, is accepted by many operators throughout the northeast.

NYSDOT, the NYS Thruway Authority and the NYS Bridge Authority have recently created a federation, aimed at integrating services. The federation has begun work on several initiatives including a unified special hauling permit issuance system, development of a single “Smart Card” that will be accepted by multiple transportation

operators, and provision of real time travel information from multiple operators at a single source. Work of this type must continue.

Opportunities to work together must go beyond the current federation. Expanding the federation to include other authorities and agency consolidation, where appropriate, must be considered as a means to improve service to the public and increase efficiency.

2B: NYSDOT must work closely with, and help strengthen, local transportation agencies and Metropolitan Planning Organizations.

NYSDOT, in its role as a strong statewide leader, must work in partnership with local agencies and Metropolitan Planning Organizations (MPOs) to be effective. (Metropolitan Planning Organizations are regional transportation planning organizations of local officials.) Participation by State, regional and local interests must be built upon sound technical capabilities. The nature of transportation is changing and the NYSDOT must take steps to ensure the technical capabilities of all involved are kept current.

A regional and local perspective is needed to complement consideration of statewide travel corridors and can aid in developing solutions that are sensitive to local needs and characteristics. A close working relationship among NYSDOT, local transportation agencies and Metropolitan Planning Organizations will help ensure all modes of transportation and local conditions are considered as decisions are made.

NYSDOT should work with local communities to arrive at transportation solutions that are in harmony with broader community goals. Solutions should meet transportation needs while striving to balance environmental, scenic, aesthetic, cultural and natural resources.

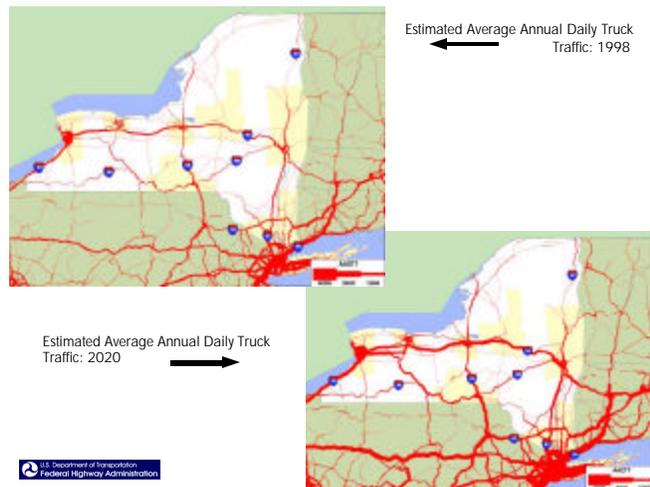
The most compelling rationale for working closely with local communities is that transportation policy, operations and management will be more effective. A close working relationship will lead to better land use policy and help ensure highway projects fit in with the unique circumstance of the local community. From the transit perspective, it can offer the potential of improving the quality of transit service, make obtaining information more convenient to customers, and provide a single fare media accepted by all transit operators. This offers many benefits, including improved access and lower administrative costs, to both the traveling public and participating agencies.

2C: NYSDOT must take the lead in developing and implementing solutions that improve freight movement.

Truck traffic is exploding, causing congestion which in turn jeopardizes our economy; yet, today no entity has complete responsibility for freight policy and implementation across modes. Intermodal transportation involves moving freight between points of origin and destination using two or more modes (rail, water, air, highway). To provide for a “seamless” transportation connection between modes, three elements must work in harmony. Terminal facilities, terminal flows and landside access must be adequate to

accommodate expected demands. Intermodal facilities require a focus on system-wide performance rather than the performance of any individual mode. This places an emphasis on the efficiency and reliability of the transportation system. NYSDOT should be charged with creating and implementing freight solutions that achieve these results.

With regard to efficient freight movement, **New York State should recognize and emphasize the development of trade corridors.** “Trade corridors” are designated routes that provide redundant connections to major urban areas in the State with critical northeaster U.S. and international trade centers. Facilities along trade corridors will serve as focal points for shippers and businesses and provide quicker and more reliable access to the national and global market.



Although efforts have been made to improve the efficiency and reliability of the intermodal freight network, congestion remains a problem. Predictable travel times are important in an economy where just-in-time delivery and tightly scheduled production and distribution processes are the norm. Congestion degrades the reliability and performance of carriers, shippers, and terminal operators—a serious problem for businesses. It also raises the cost of consumer goods, creating in effect a “congestion tax.” This is a particular problem downstate where rail freight service east of the Hudson River is inadequate.

To facilitate the movement of trade, the State must support the construction of state-of-the-art intermodal facilities and terminals at strategic locations throughout the State. These facilities must effectively use Intelligent Transportation Systems (ITS) and other cutting edge technologies. The resulting seamlessness between and among modes will ensure safe and efficient freight movement and support economic growth.



Quicker access to global markets through New York's border with Canada is important for the transport of freight. Any work that can be done to increase security, alleviate congestion at and smooth the flow of goods and people through New York's border with Canada will make the State more attractive to business. This makes it important to promote the use of technology-based solutions such as NEXUS or FAST, which will expedite border crossings and enhance security. To further speed the flow of important freight traffic, consideration should also be given to the creation of dedicated commercial vehicle lanes. Regardless of the solution, resolution of access issues at the

State's border will require intermodal, interagency and cross-border cooperation on both policy and management.

In addition, air, sea and inland ports must function well internally and have good landside access. These are the State's points of entry and exit for goods circulating in the global economy. Goods coming from over the Atlantic, and from Canada and the West over the Great Lakes make New York State a major destination and transshipment point for the Northeast. It is important to provide for the maintenance and improvement of air, sea and inland ports as well as intermodal linkages among them to provide access to this global flow of goods. An example where access is not efficient is the landside access to JFK Airport. JFK Airport is a major employer in the State and is in danger of losing cargo business and jobs because landside access is so limited.

NYSDOT should be vested with the authority for and take the leadership in the development and implementation of a statewide freight policy. Funding for freight solutions and freight projects must follow. While billions of dollars are needed for transit and highway projects, a relatively small investment of hundreds of millions in freight projects can be leveraged into large public benefits.

2D: NYSDOT must assume a leadership role in achieving the State's environmental and energy goals.

New York State's transportation system affects the environment and its impact on land, water and air quality can be measured. The State Transportation Master Plan must set environmental performance goals for the State's transportation system (highways, rail, airports, and ports) and describe strategies for meeting these goals. It is essential for our quality of life.

NYSDOT has made great strides in establishing a department-wide environmental ethic and has been recognized nationally as a leader among states in this effort. This agency has made its environmental ethic initiative a top priority and should continue to build on past successes as it looks to the future.

Governor Pataki has been applauded for his concern for the environment. In July 2001 he formed a New York State Greenhouse Task Force to develop policy recommendations for greenhouse gas (GHG) emissions and global warming. The recommendations of this Task Force were presented two years later in July 2003.

New York State has taken action to reduce greenhouse gases. The Panel believes that all the transportation recommendations of the GHG Task Force should be adopted. For example, one of the major transportation recommendations was to set up the capacity and funding to support transportation demand management type initiatives. The State has developed an Energy Plan too. The State Transportation Master Plan must be fully compliant with the State Energy Plan to ensure a cleaner and healthier environment.

2E: NYSDOT must lead the effort to link land use and transportation decisions to ensure quality communities with effective transportation systems.

Quality communities have a well designed land use plan at their core. Problems occur, however, when the implications of local land use decisions are not thought through with regard to transportation. Traffic congestion is often the result of poor land use decisions. At the Panel hearings, many people testified about the need to consider transportation implications when making land use decisions, and for NYSDOT to become involved before traffic problems occur. The Panel agrees that NYSDOT must assume a much stronger role in working with local communities, governments and developers, on land use decisions.

There are collaborative models for making the transportation/land use connection. An example of work in this area is the Pilot Sustainable Development Studies Program developed by the New York Metropolitan Transportation Council (NYMTC). Work on this program entails collaboration with local, State and federal officials in order to develop a consensus as to what types of future land use and transportation solutions are optimal for sustainable development in the areas under study.

NYSDOT must adopt policies and practices that lead to local land use decisions which encourage open space preservation, make provisions for pedestrians and bicyclists, and revitalize and ensure denser developments. Technical assistance should be provided to local governments and Metropolitan Planning Organizations. If local planning ignores traffic implications, then NYSDOT should allow the consequences of local decisions to stand. If the State adds capacity to local highways to offset poor land use planning, this only rewards poor decision-making and encourages poor land use planning to continue.

Land use plans that lead to denser development will increase the viability of transit services. Communities with effective transit systems help to reduce congestion and automobile emissions, and they improve accessibility for the physically challenged. Land use plans should make provisions for pedestrians and bicyclists when possible. When walking and biking are a convenient option, people of all income levels are more active and healthier as a result. These types of quality communities attract a highly skilled workforce, encouraging economic development.

2F: NYSDOT must develop and implement solutions to manage demand.

Congestion can be reduced through a variety of steps that temper the demand to travel during peak periods. Steps that can be taken include, alternate work hours, car pooling and increasing tolls in peak travel periods. NYSDOT has traditionally focused on adding capacity through construction or technology. NYSDOT must develop as a third option, demand management strategies. **Tempering demand must not be an afterthought.** It should be one of the key tools used to improve the operation of the transportation system.

Development and implementation of demand management strategies will take a commitment of staff time. The payoff in reduced congestion and its associated costs,

provides a large return on investment. People and goods can travel with greater ease and large capital costs for new facilities can be avoided.

2G: NYSDOT must develop a State Transportation Master Plan that integrates the transportation system physically and operationally to achieve performance goals for mobility & reliability, safety, security, economic competitiveness and environmental improvement.

Integration of the transportation system is a key theme of the Panel's findings. Customers must view the transportation system as seamless. All operators must work together to have an efficient and effective multimodal system.

Giving NYSDOT the clear responsibility, authority and capability for integrating the State's transportation system is a first step. Simultaneously, NYSDOT must present a policy plan for transportation, a State Transportation Master Plan. This must be a true master plan, one that covers all modes, regardless of owner or operator. The plan must cause all operators to focus on how to deliver the expected results for customers and stakeholders, with performance goals and measures across modes. Performance should drive investment decisions.

The State's transportation system must provide mobility for its residents and businesses, and the trips made must allow travelers to reliably predict their arrival time. On time arrivals are important for commuters and businesses. Shippers are often required to make deliveries at specified times.

A trip must be reasonably safe and secure. Even as motor vehicle accident rates decline, these accidents injure and kill far too many people each year and have significant social costs as well. Motor vehicle accidents in New York State during the year 2000 injured 188,251 people and resulted in the death of another 1,358 people. Constant vigilance must be applied to lower this human cost. This includes making our transportation system safe from terrorists.

Our desire for a safe and secure transportation system that enhances mobility and ensures reliable travel must be balanced against the cost of such a system. New York State businesses and their employees look for the State to remain economically competitive in the global economy. An efficient transportation system provides benefits to business, but taxes, tolls and fees cannot be too high, or they will drive away business. Every investment must have a positive rate of return and we must continuously measure the effect transportation is having on economic competitiveness to judge how well the transportation system is working.

Finally, our environment is in large part influenced by the transportation choices we make. Air, water, land, wildlife and people are all affected by transportation decisions. The transportation system we envision will recognize the need to protect and enhance the environment. The impact transportation decisions have on the environment should be positive and this too should be measured to judge how well the transportation system is working.

Developing a results-focused State Transportation Master Plan to show the way is essential.

2H: NYSDOT must educate the public, legislators and the media about the risks to the transportation system and the rewards to be gained by overcoming the challenges faced.

Transportation investments today will pay for themselves with a better economy and better quality of life. The future can be bright if we seize the opportunity and make the investments needed.

Challenges can and must be overcome, as the State has done many times in its history. NYSDOT, as a leader, must accept the role of educator, ensuring that all stakeholders understand the policy options available and the consequence of not acting. This involves providing meaningful education programs to the public, chambers of commerce, business groups, legislators, the media, and transportation professionals. By providing each group of stakeholders with the appropriate information, meaningful discussion can occur, potential conflicts are reduced, and opportunities for new and exciting initiatives are possible.

FINDING #3: New York State must develop a new strategy that provides substantial, sustainable and predictable funding dedicated to transportation investments. This strategy must reinforce the goals of mobility & reliability, safety, security, economic competitiveness and environmental enhancement; strike a balance between payments by beneficiaries and the benefits received; and, provide for financial transparency and accountability to ensure continued confidence in the financing strategy.

Transportation is just as vital a governmental function as education, healthcare and welfare, but it does not always get the attention it deserves. Every citizen and business in the State relies on transportation every day. Citizens use the transportation system to commute to work and earn a living; to be with family; to attend religious services; and, to participate in society. Even citizens who are shut in and do not travel are affected because the cost of the goods and services increase when a provider's transportation costs increase.

Providing adequate funding to maintain and improve transportation is an imperative. Investments in transportation pay for themselves through better service and improved quality of life. Not to invest would mean less frequent transit service, reduced highway and pedestrian safety, increased congestion, and increased air pollution. It would cost the State jobs as well because of the increased cost of doing business in the State.

The funding needed for maintenance, operations and capital improvements over the next two decades will be large, especially given the size and age of the transportation system in New York State. Over the past ten years (since 1995), in an effort to reduce cost and improve efficiency without compromising productivity, the NYSDOT has reduced its work force by over 25%,

providing a savings of \$300 million annually that has been reinvested in the transportation system. Improved efficiency alone, however, is not enough to close the funding gap. Additional sources of revenue must be tapped in order to provide the billions of dollars required.

Maintaining the existing infrastructure to ensure safe and reliable travel is critical. The rehabilitation of deteriorated sections of infrastructure – airports, water ports, rail lines, bridges and highways – must continue. As traffic grows, ensuring mobility will increasingly rely on new and better technology to ease congestion and, to some extent, on the construction of new links. For example, providing real time travel information to travelers can be quite beneficial. Perhaps the greatest operational improvement will be the true integration of all of the facilities operated in the State. The State’s transportation system is complex and all types of funding – maintenance, operational, and capital – will be needed.

New York State applies a combination of fares, tolls, taxes and fees to fund transit and highway improvements. Taxes and fees are placed in a Dedicated Mass Transportation Fund for transit and a Dedicated Highway and Bridge Trust Fund for highway improvements. These funds are nearly depleted after having financed the State transportation needs since 1993.

These dedicated transportation funds have achieved the intended purpose in financing past transportation programs, but will prove to be inadequate to make the necessary investments needed for the future. The Panel recommends that additional revenues be provided to replenish these funds, and that they be directed to transportation. Funds must be raised in a way that supports the results sought – improved mobility & reliability, safety, security, and environmental enhancement, while striking the right balance to ensure New York State remains economically competitive.

Multiple sources of funding may be required as new funding packages are established on both the State and federal level. One thing is clear, we cannot simply rely on funding from the federal government to resolve our transportation financing needs. Substantial and sustainable funding on the State level is a must. As we examine funding sources, it should be made clear to our customers and other taxpayers how user fees and transportation taxes lead to improved transportation. Transparency is important because it establishes credibility. We must have a financing system that instills and maintains the public confidence. This is required to have sustainable funding.

3A: New York State and local transportation agencies and authorities must take steps to continuously hold down costs, but this alone will not come close to providing the revenue necessary to meet our transportation needs.

Savings from administrative and operational efficiencies should be sought. However, there should be no illusion that savings alone will produce sufficient revenue to finance the transportation system.

A strong oversight role for NYSDOT is favored and will help maintain public confidence that funds collected are necessary for the services provided. Construction costs and operational costs should be checked to ensure they are in line with comparable organizations. Cost comparisons should be done for all modes.

Other measures should be pursued as well. Technology should be introduced when cost-savings or service improvements will result. Benchmarking should be conducted to find and implement best practices and optimize benefits across operators. Public transportation organizations should be consolidated when cost-savings are possible while maintaining or enhancing service delivery. Regulatory relief should be provided, consistent with achieving the results desired from the transportation system. Procurement reform should be pursued, including reforms that allow for design-build options when time and cost savings can be achieved.

Maintaining a planning and research program is important too. The lifecycle cost of a facility, for example, may be lowered with research into new techniques or more cost effective materials. Planning and research are necessary to make sure systems are integrated, investments are justified and operational practices are on the cutting edge.

3B: New York State must examine all possible sources of revenue for transportation investments, including user fees, taxes, tolls and private investment.

The charge given to the Panel was to articulate needed policies, which in turn would document the need for future funding. It is the task of the Governor and State Legislature to determine the sources and level of funding for transportation. In developing future funding for the State's transportation system, the Panel urges the State's leaders to establish a funding program that is:

- Substantial / Adequate – Tens of billions of dollars in transportation investments will be needed in just the next five years. Funding is needed to support the maintenance of existing aviation, transit and highway infrastructure; rail freight and passenger improvements; better access to ports and airports; para-transit services for persons with disabilities; and, provisions for bicyclists and pedestrians. Funding is also needed to add vital links to the transportation system, necessitated by the changing conditions described in Finding 1B.
- Sustainable – The need for efficient and effective transportation is ongoing and important. The financial sources selected to meet transportation needs and strategies must support transportation for the long term.
- Predictable – Transportation services are highly reliant on costly infrastructure. Planning and engineering efforts often require several years before a project is ready for construction. Predictable funding allows for proper planning and ensures that there are no false starts or costly disruptions in the ongoing process of maintaining the infrastructure.
- Flexible – The State's transportation system is complex. Transportation providers must be given the flexibility to invest in projects and services that achieve system results, and are not predetermined to go to a specific mode. The freight system requires several hundred millions of dollars, for example, and these funds should be available for public investment in private railroads, when

there is a positive return on the investment to the public. An investment in a railroad could reduce truck traffic and avoid the need for a more costly highway solution.

- Reinforces Transportation Goals – The sources of funding for transportation must work to support transportation goals. If transit ridership will reduce traffic congestion and pollution from automobiles, then keeping fares affordable should be part of the strategy. If tempering highway travel in peak periods is sought, then higher tolls in the peak period will reinforce this goal.

All possible revenue sources must be considered when determining how to finance transportation beyond the current State Fiscal Year. In addition to current or traditional revenue sources, new sources must be considered. For example, as improvements reduce deaths and injuries, auto insurance companies benefit. These benefits should result in lower premiums or a direct contribution to the transportation improvements that created the benefit.

The funding program must cover both State and local transportation facilities. The Panel supports investments in statewide travel corridors, but the Consolidated Highway Improvement Program (CHIPs) needs funding too.

3C: New York State must consider tolling for congestion management and revenue generation.

Presenters at several hearings saw congestion / value pricing of existing and new highways as a logical way of encouraging discretionary travelers to avoid peak period



travel. Many services, such as commercial airlines, phone companies, movie theaters and restaurants charge more during peak periods. To a limited extent, some bridge and tunnel operators, such as the Port Authority of New York and New Jersey (PANYNJ) have adopted this pricing strategy as well.

In addition to raising peak period tolls on current toll facilities, demonstration projects around the country are gaining popular support for adding tolls to existing

and new highway lanes in order to guarantee predictable high speed travel times for drivers willing to pay the toll for the extra value. Successful operations are underway in California and Texas, where they have found drivers who occasionally need to be on time are willing to pay for this premium service. The toll paid supports the cost of the

facility or can provide a profit to support transit services. Buses could operate for free in these fast lanes, providing a second type of enhanced travel service – Bus Rapid Transit.

There is another strategic reason to consider tolls as a revenue source. Tolls were the preferred user fee charged to travelers at the beginning of the twentieth century because the actual users of a facility paid for the service provided. Unfortunately, because collecting tolls a hundred years ago involved high administrative costs and toll plazas caused delays and accidents, legislators turned to the gas tax as another way to raise revenue. The gas tax, while somewhat flawed because a traveler can purchase gas in one jurisdiction and travel in another, nevertheless became and remains a mainstay in generating highway revenue. In the near-term gas taxes will continue to generate needed revenue for transportation, but as the year 2025 approaches the revenue from gas taxes will be severely diminished unless gas taxes are gradually increased to reflect both the environmental costs of combusting fossil fuels and revenue needs.

New vehicle propulsion systems, such as hybrid vehicles (gas / electric), have already started entering the market. The higher fuel efficiency that everyone desires will mean less gas tax revenue per mile driven. Potentially, by the year 2025 many vehicles may be powered by fuel cells and not require gasoline at all.

Tolls deserve to be reconsidered as the ideal user fee. Collection and safety impediments have largely been overcome through technology. Toll plazas are no longer necessary, lowering administrative costs and eliminating associated delays and accidents. Transponders, those little white E-ZPass boxes on car windshields, provide a means to collect a small fee as drivers speed down the highway or over a bridge. The potential even exists for Global Positioning Systems (GPS) built into cars to replace the need for transponders.

While research is required to absolutely ensure that privacy is protected, no matter how value pricing evolves, it is clear that we are on the dawn of new capabilities and the State should be at the forefront of exploring these options as a way to finance the transportation system.

CONCLUSION

Trouble lies ahead. There will be **severe** consequences if New York State fails to address the transportation issues enumerated in the Panel’s report - the transportation infrastructure will deteriorate, the economy will falter, jobs will be lost and the quality of life in New York State will suffer dramatically. **Bold leadership** is essential to make the institutional changes that are needed and the funding decisions that are recommended.

The stress placed on the transportation network, can be addressed through renewed investment in system-wide improvements. It is vital that New York State remains competitive in the global economy by providing for a transportation system that is reliable, safe, efficient, and secure, while continuing to enhance the environment and improve our quality of life. Multi-year funding from the State must be substantial, sustainable, predictable, and flexible.

The findings and recommendations in this report are a starting point. Comprehensive transportation planning must follow, along with legislative action. The Panel stands ready to contribute to this effort.

Appendix

NYS ADVISORY PANEL MEMBERS

Dennis Fitzgerald – Former CDTA Executive Director



Dennis Fitzgerald recently retired after completing over 31 years of transit management at the Capital District Transportation Authority (CDTA) in Albany, NY. He served nearly 23 years as Executive Director, making him one of the longest tenured CEO's in the transit industry. He has been an active member of the Transit Community, serving as a member of the Executive Committee of the Transportation Research Board, Regional Director for the American Public Transportation Association (APTA) and chair or member of several APTA committees and panels. He served as President of the New York State Public Transit Association for two terms. The readers of Metro Magazine voted him as one of the Ten Most Respected General Managers in North America in 2000. He has served on or chaired numerous panels for the Transit Cooperative Research Program. He also served as an expert witness before Congress.

Richard E. Garman – President, R & P Oak Hill, LLC



Richard E. Garman is President of R & P Oak Hill, LLC, President of Newbery Alaska, Inc., an electrical contractor, and managing partner of R.E.G., LLC, a private investment company. Prior to July 2000, he was President and Chief Executive officer of A.B.C. Paving Company, Inc., performing heavy highway work for New York State and President and CEO of Buffalo Crushed Stone, Inc. He is past President of the Association of General Contractors, New York State Chapter. Mr. Garman is a director of M & T Bank and a member of its Executive Trust and Investment Committees. He is the immediate past Chairman of the Board of Merchants Group, Inc. Mr. Garman is also an Exofficio Director of the Buffalo Niagara Partnership and a Director of the Greater Frontier Council of the Boy Scouts of America.

Patricia Gilchrest – Executive Director, Orange County Citizens Foundation



Patricia Gilchrest is Executive Director of the Orange County Citizens Foundation, a position she has served in since 1989. Her previous professional associations include community relations and fundraising work for the Orange County Cerebral Palsy Association, and work in the Executive Offices of TEXACO, Inc. She is Treasurer of the Friends of the Orange County Arboretum, Secretary of the Community Foundation of Orange County, and a Board Member of Orange County Chamber of Commerce, Orange Pathways, Orange Regional Medical Foundation, and the Inspire Foundation. She is a past Board Member of the College of New Paltz Foundation and a past Board Member and Founding Member of Leadership Orange.

James J. McGowan – President, AAA New York State, Inc.



James J. McGowan is President of AAA New York State, Inc. He is a former Vice President of the Automobile Club of New York, with which he has been associated since 1953. He has been a member of the Club's Board of Directors since 1984. He also served as the Club's Counsel. During his career with the Club, he served in managerial positions in the Emergency Road Service and Government Affairs unit. He was appointed Director of Government Affairs in 1976, Secretary in 1981 and Vice President in 1988 in which

position he remained until his retirement in December 1996. Mr. McGowan has long been active in AAA state and national affairs. He was Chairman of the Legislative and Safety Committees of AAA New York State and currently serves on its Board of Directors. He also served on several committees of AAA, including the Driver Education Task Force which he chaired. Mr. McGowan served on the Board of Governors of the New York Automobile Insurance Plan, various State Advisory Councils and on numerous government and civic committees. He has served as a member of the New York State Motor Vehicle Theft and Insurance Fraud Prevention Board since it began operations in 1997.

James M. Melius, MD, Dr. P.H. – Administrator, NYS Laborer’s Tri-Fund



Dr. Melius is an occupational physician and epidemiologist. He received his MD from the University of Illinois in 1974, and a Dr. P.H. in Epidemiology from the University of Illinois School of Public Health in 1984. From 1980-1987, he worked for the National Institute for Occupational Safety and Health where he directed NIOSH’s health hazard evaluation program and epidemiology programs. From 1987 to 1994, he worked for the New York State Department of Health where he directed environmental and occupational health programs including the development of the state network of occupational health clinics and was Professor of Environmental Health and Toxicology at the School of Public Health in Albany. For the past seven years, he has worked for the Laborers’ International Union of North America and currently is Administrator of the New York State Laborer’s Employers Cooperation and Education Trust Fund (NYSLECET), Health and Safety Trust Fund, Labor Management Fund, and Political Action Committee. His work for the Laborers focuses on the promotion of work opportunities for union members and their contractors and construction safety issues. He is currently a member of the Board of Scientific Counselors for the National Institute for Occupational Safety and Health, the Presidential Advisory Board of Radiation and Worker Health, and the Institute of Medicine Roundtable on Environmental Health Issues.

James D. Newman – President, NOCO Energy Corporation



Jim Newman, President of NOCO Energy Corp., represents the third generation of leadership in this family owned and operated business, which began in 1933 in Tonawanda, NY. NOCO provides quality energy products and services to a wide variety of commercial and residential customers across NYS. NOCO employs over 500 people in NYS, and operates distribution facilities in Tonawanda, Syracuse and Kingston, New York. The company also operates over 150 vehicles with DOT permits. He has been very active in several industry-related organizations including Independent Petroleum Markets of NY (IPNY), Society of Independent Gasoline Marketers of America and the Business Council of New York State. He is also the Chairman of the Board for BioEconomy Partners, Inc., which through the Center for BioIndustry Development is helping to bring bioproducts to the Western New York region. He currently is a board member for the Buffalo Niagara Partnership and has participated in the Partnership’s Government Affairs Committee. He is also a member of the 43 x 79 group and the Young President’s Organization (YPO). He has just completed his chairmanship of the Buffalo Philharmonic Orchestra’s Board of Trustees and remains very active on the Board.

Mitchell H. Pally – Vice President, Long Island Association, Inc.



Mitch Pally was elected as Vice President for Legislative and Economic Affairs of the Long Island Association in January 1992. He is responsible for all governmental and community activities of the Association. He has been associated with the LIA since August 1985 when he was appointed Director of Legislative and Economic Affairs. Established in 1926, the LIA is the region's largest business and civic organization with more than 3,000 member firms and organizations employing more than 400,000 people. Prior to his service at the LIA, he held a number of positions in the NYS Legislature. From 1975 to 1983 he served in various capacities to the NYS Senate Committee on Transportation and the Legislative Commission on Critical Transportation Choices. From 1983 to 1985 he was the Chief Counsel to the Committee and the Commission. During his service to the Senate, he played a key role in the drafting and passage of such important transportation legislation as the first in the nation seat-belt law, child restraint law, the Transportation Bond Issues of 1983 and 1979, reserved parking spaces for disabled drivers and others.

Mr. Pally currently serves as a member of the Board of Directors of the Automobile Club of New York; LI Chapter of the National Urban League; LI Development Corporation; Cornell Cooperative Extension of Suffolk County; Nassau-Suffolk Development Corporation; LI Sports Commission; and LI Transportation Management. He is also a member of the Technical Advisory Group for the NYS Department of Transportation LI Travel and Information Centers; LI Economic-Environmental Roundtable; Brookhaven Industrial Development Agency; Pine Barrens Advisory Commission; DOT Advisory Council on Transportation Enhancements; LIE/HOV Task Force; Town of Riverhead Community Development Agency and the MTA Task Force on Fare Policy. He has served on the Calverton Joint Use Citizens Advisory Council; Nassau/Suffolk Health Systems Agency Manpower Plan; as co-chair of the BOCES Merger Task Force; Advisory Council of the W. Averill Harriman School of Management at SUNY Stony Brook; the Governor's Task Force on LI Sound Crossings. In addition, he is the President of the Stony Brook Three Village Soccer Club.

Arthur J. Roth – Former Commissioner, NYS Department of Taxation and Finance



Arthur Roth is a highly accomplished visionary executive with over 30 years of public and private experience in government administration, financial management and economic development. A results-driven professional with extensive experience leading people and project teams, implementing and overseeing technology programs and administering multi-million dollar budgets, Arthur has an in-depth understanding of emerging technologies and their commercial applications. An entrepreneur and administrator with the proven ability to turn around financially and managerially troubled business units and agencies, he serves on the Board of Directors of 1st Albany Company, Albany Molecular Research, Inc., MVP Health Plan and the law firm of Hodgson Russ LLC. He was recently appointed by the Governor to the Harriman Campus Development Corp.

Janette Sadik-Khan – Senior Vice President, Parsons Brinckerhoff



Janette Sadik-Khan is Senior Vice President of Parsons Brinckerhoff and Director of Transit Programs in the US for the firm. She serves on the Global Management Committee and U.S. Management Committee of Parsons Brinckerhoff. She is nationally recognized for her expertise in innovative finance, public policy development and transportation issues, a knowledge gained in over 15 years of experience at the federal, state and local level. She recently served as Deputy Administrator at the U.S. Department of Transportation, where she was responsible for a staff of 170 providing financial support and capital program oversight to over 400 state and local transit agencies. She previously was appointed Chief Financial Officer of the Federal Transit Administration (FTA) managing the agency's \$4 billion annual capital construction budget and was responsible for developing the FTA's innovative finance program which provided localities with increased funding and regulatory flexibility. She also served as Director of the Office of Policy where she initiated the FTA's new Art in Transit program, expanding federal funding for art and design in transit facilities and implemented new criteria that improved how the benefits of transit capital projects are quantified. Before her tenure in Washington, DC, she was Director of the Mayor's Office of Transportation for New York City, serving as the Mayor's principal advisor on mass transit and as the City's liaison to the MTA. She serves on several Committees of the National Academy of Sciences, Transportation Research Board, and is a Board Member of Women in Transportation Seminar, the Center for Transportation Excellence and Reconnecting America. Janette holds a JD from Columbia Law School and is a member of the New York bar.

Elliot Sander – Senior Vice President, DMJM Harris



Elliot G. "Lee" Sander is Director of the Rudin Center for Transportation Policy and Management and is responsible for founding the Center at New York University in 1996. In addition to overseeing the Center's activities, he serves as publisher of The New York Transportation Journal. He is Co-Chairman of the Empire State Transportation Alliance (ESTA), a coalition of leading business, labor, and civic organizations in the downstate New York region that has worked closely with the Governor, State Legislature, the Mayor, the transportation agencies, and other stakeholders to help shape transportation policy in the downstate metropolitan region. He was appointed by Governor Pataki to the Lower Manhattan Advisory Council in the fall of 2002. He was the founding Chairman of the National Academy of Science's Transportation Research Board's (TRB) Standing Committee on Transportation in Large Cities. He also serves as senior advisor to the National Association of City Transportation. He is also a Senior Vice President at DMJM+HARRIS, a leading global planning, architectural, and engineering firm headquartered in New York City. In 1998 he won Frederic R. Harris' President's Cup, which is the corporation's highest award for outstanding performance of a corporate officer.

Prior to 1996, Mr. Sander spent twenty years in public service at the city and state level. From 1994 to 1996, he served as Commissioner of the New York City Department of Transportation. Additional public titles include Director of Transit for the New York State Department of Transportation, Deputy Director of the Governor's Office of Management and Productivity, Deputy Commissioner and New York State Rent Administrator for the New York State Division of Housing and Community Renewal (DHCR), Assistant General Manager for Surface Transit for the New York City Transit Authority, Executive Director of Operational Services for the Bureau of Traffic Operations of the New York City Department of Transportation, and Special Assistant to the City Council President. Currently he is serving a seven-year term as Commissioner on the New York City Taxi and Limousine Commission.

G. Thomas Tranter, Jr – President, Corning Enterprises and Director of Government Affairs for Corning, Inc.



Tom Tranter joined Corning Incorporated as Director of Government Affairs in May 2000. Effective July 1, 2004 Tom was given the additional responsibilities as President of Corning Enterprises, the Community and Development arm of Corning Incorporated. Prior to joining Corning he served as Chemung County Executive, a position he was elected to for three 4 year terms. Before assuming the County Executive post he served as Deputy County Executive for seven years and Horseheads Village Manager for two. Previously he held the position of Executive Director for the Sullivan Trail American Red Cross for seven years. During his thirty two year career he has been a leader in the Southern Tier in Economic Development, Transportation and Human Services. For several years he has been Chairman of the Regional Transportation Planning Organization and currently serves on the Boards of Southern Tier Economic Growth, Three Rivers Development Corporation, Southern Tier Central Planning and Development Board, the Regional Economic Development Loan Board and the County Industrial Development Agency. Tom also serves on the Board of Directors of the Clemons Performing Arts Center, the Corning LPGA Classic, Corning Hospital, and the Corning-Hornell Empire Zone.

James T. B. Tripp – General Counsel, Environmental Defense



Jim Tripp is the General Counsel of Environmental Defense, a national, non-profit environmental organization. He is responsible for the review of all Environmental Defense legal action initiatives, and he helps coordinate Environmental Defense's transportation project in the New York metropolitan area. He served as chair of the non-profit Tri-State (New York, New Jersey, and Connecticut) Transportation Campaign from its founding in 1993 until early 2004, and he continues to serve on its board. He is a member of the Board of the Environmental Advocates of New York, the New York League of Conservation Voters, the Pinelands Preservation Alliance, and Coalition to Restore Coastal Louisiana and currently serves as chair of the NYC Water Board and the four-state (New York, Connecticut, New Jersey and Pennsylvania) Highlands Coalition. He serves on the Long Island Pine Barrens Credit Clearinghouse. He has authored numerous articles on environmental review, wetland preservation, groundwater quality, solid waste, and ozone protection. He has been the recipient of awards granted by the Environmental Law Section of the NY State Bar Association, Environmental Advocates of New York and the Long Island Pine Barrens Society. He was Assistant US attorney, Southern District of New York (1968- 1973) and graduated from Yale Law School in 1966.

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