

# Identifying and Reducing Institutional Barriers to Effective and Efficient Freight Movement in the Downstate New York Region

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## EXECUTIVE SUMMARY

This report is the culmination of a study, funded by the New York State Department of Transportation (NYSDOT), that seeks to identify and recommend means for reducing one set of barriers – namely institutional barriers – to effective and efficient freight movement in the downstate New York region. The specific goals of the report are four-fold: (1) to identify and analyze institutional barriers to effective and efficient freight movement in the downstate New York region; (2) to identify potential means for overcoming such barriers; (3) to identify regional actions that could potentially improve the movement of freight in the downstate New York region; (4) and to identify a set of priority actions that could be taken.

The report is not meant to prioritize specific freight infrastructure projects; indeed, one could argue that the region is not yet ready to conduct such a prioritization. The findings do call for efforts aimed at increasing communication, sharing best practices, and gathering additional information. They are action oriented and meant to build upon and strengthen the collaboration and cooperation already in place so that over time, regional projects will have a better chance of being effectively prioritized and implemented.

### THE CONTEXT

Moving freight efficiently and effectively along the nation's transportation network, as well as through the downstate New York region's system,<sup>1</sup> continues to present ongoing challenges. In 1998, the downstate New York region moved 333 million tons of freight. Current forecasts predict that by 2025, the region will need to move over 490 million tons of freight on an annual basis, an increase of 47%.<sup>2</sup>

At the same time, as a result of a changing business environment that is leading to shifts in how goods are moved, when they are moved, and where they are moved, additional pressures are being felt by a transportation system already having difficulty meeting today's freight needs. While manufacturing continues to play an important role in the U.S. and regional economies, the shift to a more service-oriented economy has led to increased customer demands for flexible, reliable, and timely services. This shift places additional burdens on the regional transportation system already congested in many places.

Yet, congestion is only one of the freight-related difficulties facing the downstate New York region. Also in the mix is the need for increased security in the form of enhanced communications and sharing of information, as well as increased redundancy and resiliency of the transportation network along which freight moves. Meeting such concerns nationally and in the downstate New York area presents an even greater challenge given the modal imbalances, with close to 80% of all freight moving on trucks.

Implementing measures to address freight movement is no small task. Because freight moves among and between various geographical and jurisdictional boundaries, for example, determining who should bear the costs of improvements is difficult. Investments in one locale can reap benefits many miles away, often making it all but impossible for any single entity or region to successfully pursue freight improvement projects on its own. Because freight increasingly needs to move across transportation modes, but most transportation agencies from the federal government down to local entities are organized according to mode (not to mention, historically focused on passenger service), identifying eligible funding sources is difficult and opportunities for multimodal cooperation are often missed.

While many of these difficulties are felt across the nation, the downstate New York region has its own peculiarities which further complicate matters, in part because of its sheer size and density, in part because of its aging and outdated infrastructure, and in part because of the diversity of agencies and stakeholders involved in moving both passengers and freight along the region's transportation system. On

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<sup>1</sup> The downstate NY region is defined here as the area covered by the New York Metropolitan Transportation Council (NYMTC), which includes the 5 boroughs of New York City, as well as Nassau, Putnam, Rockland, Suffolk, and Westchester Counties. This definition includes NY State Department of Transportation Regions 10, 11, and part of Region 8.

<sup>2</sup> NYMTC, *NYMTC Regional Freight Plan: An Element of the Regional Transportation Plan – Public Draft* (NY: NYMTC, April 2004), p. 2-1.

the other hand, because much of the transportation network in the downstate New York region is shared by freight and passengers, improvements in the former are likely to also bring benefits to the latter.

### **INSTITUTIONAL BARRIERS**

Prioritizing regionally focused freight projects has proven difficult in the downstate New York region. While broad priorities are shared by the multiple agencies within the region, specific rankings are not, and trying to reach a consensus is often hampered by a number of institutional barriers. These institutional barriers take several forms in the region:

- Organizational barriers – agencies continue to be organized according to mode; this can be exacerbated by separation of policy and planning divisions.
- Inter-jurisdictional barriers – along with New York City, there are 5 counties, 8 cities, 43 towns, and 138 villages, not to mention multiple agencies involved in making transportation decisions in the downstate New York region, and each of these has a different mission and view about its responsibility and authority regarding freight; further compounding this difficulty is the fragmented nature of the private sector freight stakeholders, each of which has its own agenda.
- Resource barriers – inadequate funding levels and lack of adequate communication and analyses also play roles in the downstate New York region.

Beyond these barriers are several other constraints within the region, including lack of coordination, modal dependence, aging infrastructure, operational limitations, and a more generalized problem with public and stakeholder perceptions regarding the importance of freight and current efforts. Several of these, notably lack of coordination, operational limitations, and the broader perception issue are entirely, or are partly, related to broader institutional barriers.

There are a number of strategies for reducing such barriers, including structural strategies (e.g., redefining missions and visions to focus more on market needs rather than on modes), procedural strategies (e.g., streamlining regulations and simplifying requirements), and leadership strategies (e.g. focusing on better dissemination of information). There are also technological strategies (e.g., E-Zpass<sup>sm</sup>) that, when combined with other types of efforts, can yield great value. As an organizing framework one strategy has proven particularly helpful, particularly in complex jurisdictional environments like those in the downstate New York Region – that of coalition building. Southern California, Vancouver, British Columbia, and the Mid-Atlantic States have all utilized coalitions successfully in addressing freight movements. Successful coalitions share several features: clear and common goals, existence of a champion, financial participation by stakeholders, private sector support, and federal agency involvement.

### **FINDINGS**

#### **1. While broad priorities may be shared, specific rankings are not**

The *NYMTC Regional Freight Plan* identifies a number of recommended freight-related projects and studies for the region. In principle, the agencies agree with this listing; however, when asked to provide a rank order, results were markedly different from agency to agency and tended to be reflective of the different constituencies they serve.

#### **2. Leadership is a necessity**

The importance of effective leadership on any transportation issue, and particularly on freight, cannot be understated – this is demonstrated repeatedly, and is integral to the success of any coalition. Yet, it has been lacking in the downstate New York region. NYSDOT's positioning itself in this role is an important step for the region and one that is welcomed, at least in principle, by many of the region's agencies.

#### **3. Sufficient distribution of information is lacking**

A quick review of the projects currently in place in the downstate New York region reveals some of the inadequacies of information dissemination on freight within the region. To track down

projects, one must visit multiple agency websites, and the information available on those sites is often outdated and/or difficult to find. More importantly, during the interviews, several individuals noted studies they had been involved with in the past and pointed out that they no longer were aware of the status of such projects because they were no longer directly involved in them and it was often not a simple task to track down the information.

**4. To fully address modal imbalances within the region, actions may be required beyond it**

When asked about the modal shares in the region, especially East of Hudson, the standard response is that more freight rail service is needed in order to move trucks off the already congested roadways. However, while many may agree in principle that more goods should be moved by rail, determining which businesses should begin this shift is much more difficult, particularly when many freight-reliant companies are reluctant to change traditional ways of doing business. Furthermore, there is a similarity here to the “one-seat ride” preference demonstrated by passengers in that freight carriers also tend to be less willing to use multiple modes for trips unless significant time and/or cost savings are demonstrated. Thus, a cultural shift at the national level that leads to more intermodal options and a different combination of incentives and disincentives within and beyond the region may be needed to begin to see more movement toward non-highway modes.

**5. Improved public awareness is important**

There are several aspects to this finding. With respect to non-agency stakeholders, there are numerous freight-related projects and studies already in place in the downstate New York region, but the perception is often that not much is occurring. Another facet of this finding relates to the need to better educate community groups and non-transportation related business leaders about the importance of freight and the hidden costs associated with inefficiencies in the transportation system.

**6. Private sector involvement is needed**

As more public-private partnerships are sought for funding, private sector companies are a source of funds. However, they play other roles as well. The private sector can help raise the profile of freight-related efforts and can play an advocacy role that public sector agencies cannot. Furthermore, private sector companies can aid in taking the pulse of customers and markets, something of particular importance given dramatically different times lines within which public and private sectors work.

**SUGGESTED ACTIONS**

While some of the findings point to effecting change beyond the region, several actions can be taken more locally to aid in reducing some of the institutional barriers in the downstate New York region. The following paragraphs provide some suggestions, both in terms of overall approach and specific actions.

**Changes in Overall Approach and/or Philosophy:** Several of the suggested actions reflect the need for an overall change in approach and/or philosophy. Such shifts often require a longer time frame but remain important. They are described in the following paragraphs.

**1. Focus on Short-term Actionable Goals and Highlight Successes**

The issues posed by freight are complex and interrelated and can take many years to address. Focusing on short-term goals within the larger policy picture, helps make the situation manageable and leads to quicker and more obvious successes that show progress and keep participants at the table for the longer-haul projects. Highlighting successes also aids in changing the perception that little is happening within the region.

**2. Formulate Additional Research/Analyses within a Regional Framework**

In times of fiscal constraint, prioritizing projects is critical even if all are valuable. However, a current National Cooperative Highway Research Project (NCHRP) suggests that a key barrier is the “*lack of generally accepted procedures for identifying, evaluating, selecting, and funding*”

*freight initiatives*.<sup>3</sup> The research from the NCHRP describes various types of assessments (e.g., benefit-cost analysis, cost-effective analysis) and describes the limitations of each regarding decision making on rail freight.<sup>4</sup> Further assessment and recommendations are expected from this project and warrant careful review since they will likely be relevant for other freight decisions as well.

Regardless of the type of analysis, if the goal is to develop priorities on a *regional* basis, then regional assessments are needed. In some cases, this might mean combining several project assessments together and comparing them to some other combination or alternative. In other cases, it might mean comparing different types of projects that all have regional implications. For example, in addition to a cost-benefit analysis comparing a cross-harbor rail freight tunnel to expanded rail car float operations, a comparison might also be made to cargo access to John F. Kennedy International Airport (JFK), with a view to the overall costs and the benefits that would be accrued on a regional basis. Finally, when thinking on a regional basis, assessing implications for New Jersey and Connecticut, and possibly beyond, will also be important, particularly when federal funding is involved. Analysis along these lines would be an important tool for helping make regional decisions on priorities.

### **3. Build Upon Already Existing Agency Relationships, and Expand and Strengthen Relationships with Non-agency and Non-transportation Stakeholders.**

In their paper on institutional challenges for freight planning in the New York region, Holguín-Veras and Paaswell outlined three sets of options for moving forward: modifying the agenda and mandates of different agencies; defining interagency cooperative agreements; or taking steps to either change or create new agencies.<sup>5</sup> Notwithstanding recent changes at NYSDOT, given the history of the agencies and the political dynamics in the downstate New York region, the second of these choices in some form, is likely to be most realistic in the near term.

As an overall framework in which to approach freight flows in the downstate New York region, building upon *and expanding* already existing relationships among the agencies and key non-agency (e.g., railroads, shippers, trucking companies), and non-transportation stakeholders (e.g., business associations, Departments of Environmental Protection or Conservation) in the region will be critical. In areas where there have been successful endeavors in dealing with freight (or transportation more broadly), coalition-building has proven helpful in generating political and financial support for freight-related activities, as well as for coordinating across modes and jurisdictions.

The components of successful coalitions include identification of common goals, leadership, financial participation, private sector support, and federal agency involvement. Examples within the downstate New York region already exist but tend to be project-specific (e.g., *Hudson Line Railroad Corridor Transportation Plan*). A broader, transparent approach to find common policy goals across the whole region and across specific projects will be important.

### **4. Craft a “Marketing Strategy” for Freight Activities**

Perceptions regarding freight and freight-related transportation activities pose a challenge. On the one hand, there is a perception that not enough is happening in the region. This can be dealt with, as noted above, by highlighting successes more effectively and better disseminating and/or providing better access to information about all the activities in the region. On the other hand, there is a broad lack of understanding of how transporting freight affects people’s everyday lives, which often makes it difficult to garner community, business, and even policy leader support for

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<sup>3</sup> TRB, NCHRP, “Rail Freight Solutions to Roadway Congestion: Interim Report on Transportation Trends, Road-to-Rail Diversion and Model Elements for Decision-making,” NCHRP 8-42, Task 3-4-5-6, Prepared by Reebie Associates, Economic Development Research Group, Draft Report, 2/4/05, p. 95.

<sup>4</sup> *Ibid.*, pp. 104-106.

<sup>5</sup> José Holguín-Veras and Robert Paaswell, “New York Regional Intermodal Freight Transportation Planning,” *Transportation Journal Law* 27, 3 (Summer 2000): 18.

freight. Some of this can be dealt with by highlighting short-term successes. However, there are some other considerations and potential courses of action as well.

First, given how much of the downstate New York region's transportation system is shared by freight and passengers, many investments that will aid freight flow will also benefit passenger flow as well. The benefits to passengers need to be more explicitly described. In a culture where, as one individual described it, "*freight has often taken a back-seat to passenger transportation,*" demonstrating these benefits could help gain the support of voters, or at least lessen their opposition as they see complementary interests served.

Second, a common language is needed for demonstrating the impact freight transportation has for the general population, particularly in terms of costs and benefits. Generating this type of information in a format easily accessible could help broaden and deepen the understanding of how freight transportation affects everyone and build support for initiatives.

**Specific and Tangible Actions:** In addition to modifications in approach or philosophy are two specific and tangible actions that could be implemented in a shorter time frame. They are as follows.

**1. Create a Senior Level Freight Steering Group**

Support at the highest levels of the various agencies and by non-agency stakeholders is important. Several examples of regional arrangements that have met with some success (e.g., Delaware Valley Regional Planning Commission, Southern California Association of Governments, I-95 Corridor Coalition) point to regular meetings at the highest levels. As the agency with the broadest planning and operational reach within the State, NYSDOT should consider taking the lead in convening such a group on a regular basis. The group could draw upon the work of the NYMTC Freight Transportation Working Group, which is already in place. To fully benefit from such a coordinated relationship, the NYMTC Group should also consider moving away from holding meetings on an *ad hoc* basis and establish a regular schedule more along the lines of the Delaware Valley Regional Planning Commission. This way NYMTC's work and discussions could more easily be coordinated with the work of the higher level group hosted by NYSDOT.

**2. Develop a Central Source for Accessing Comprehensive and Updated Information on Freight Projects, Studies, and Issues**

Sharing information is a critical component to any coordinated effort and serves several important roles. Information sharing among agencies (and potentially private company stakeholders) can help achieve and maintain common goals and can aid in building trust among participants. Sharing information about projects not only helps to keep everyone aware of what is happening, but also may help avoid redundant studies while helping participants see links among those that are relevant to each other. Sharing information on best practices within and outside the region can also be helpful. Finally, for the purposes of coalition building, it is imperative to share information on progress being made.

A central location that could be updated on a regular basis should be developed for such information. A technological solution for this is not difficult to accomplish and has the potential to yield great value. A website could be developed as a centralized location for all freight-related projects in the region. The site could be used for not only for updating the agencies on projects so they know everything happening that might be of interest, but with timely updates could also aid in demonstrating progress to those directly involved in each of the projects. While there would be upfront costs to design the site and populate it, beyond these the primary cost of such an endeavor would be related to personnel costs.

Several entities could host such a site, including NYSDOT itself. However, NYMTC would be a preferred choice since it is already responsible for developing regional transportation plans, including the Transportation Improvement Program and the Regional Transportation Plan, and

should thus be in a better position to determine whether all projects have been included on the site. However, the site would need to be developed so it is more user-friendly and allows more interaction than their current website. While the specific format and functions associated with the website are beyond the scope of this study, one potential model is the Works in Progress component of the American Association of State Highway and Transportation Officials (AASHTO) Asset Management website <<http://assetmanagement.transportation.org>>. Another example is provided by [ContextSensitiveSolutions.org](http://ContextSensitiveSolutions.org), though the latter focuses more on work already formally published rather than in progress. A combination of these is preferable, with a location specifically for works in progress, and a location for final outcomes.

Given the experiences of others who have attempted such types of sites, it is strongly recommended that if this option is pursued, there is some central mechanism for gathering and updating information for the site; if each agency is left to do this on its own, it likely will not be as successful. This is another reason for centralizing this website somewhere other than NYSDOT and preferably at NYMTC since as noted earlier, the MPO should be in the best position to ensure that all projects have been included and are being updated.

Finally, a website could also be helpful in educating the public about freight and serving as a marketing tool. Such a use would be geared toward a different audience and would need a different design with information accessed in a different way than the site described above, but the importance remains of having a single location in which to obtain such information. Indeed, with a single location, both functions could be developed with an internet and intranet option – the former for the general public and the latter for NYMTC's member agencies.

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# 1. INTRODUCTION

Moving freight efficiently and effectively along the nation's transportation network, as well as through the downstate New York region's system,<sup>1</sup> continues to present ongoing challenges. In 2000, the nation's freight system moved 14 billion tons of domestic freight, valued at \$11 trillion. Of that, trucks moved 11 billion tons (78%), valued at \$9.5 trillion (88%).<sup>2</sup> By 2020, domestic freight tonnage is expected to grow by about 57%; total freight tonnage, including domestic and international freight moving through the United States is forecast to increase by 67% from 2000 levels.<sup>3</sup> Further, even though the growth rate forecasted for the northeastern United States (58%) is lower than for the West, South, and Central states (76%, 71%, and 63%, respectively), the Northeast is expected to witness the highest increases in volume.<sup>4</sup>

At the same time, as a result of a changing business environment that is leading to shifts in how goods are moved, when they are moved, and where they are moved, additional pressures are being felt by a transportation system already having difficulty meeting today's freight needs. While manufacturing continues to play an important role in the United States and regional economies, the shift to a more service-oriented economy has led to increased customer demands for flexible, reliable, and timely services. As this has happened, the proportion of smaller shipments to meet such demands has increased markedly in terms volume.<sup>5</sup> This shift places additional burdens on a transportation system already congested in many places.

The movement toward a more service-oriented economy has been accompanied by a logistics shift as well. The more traditional manufacturing economy relied on inventory-based or "push" logistics where products were manufactured and warehoused awaiting shipment. The shift is now toward "pull" logistics where products are manufactured to order, reducing the need for large inventories, and relying on "just-in-time" delivery. While "pull" logistics are more efficient, they are significantly more fragile.<sup>6</sup> Thus, having a reliable and predictable transportation system is increasingly critical to ensuring the efficacy and efficiency of freight movement.

According to the Federal Highway Administration (FHWA), deregulation in the industry has further complicated the environment in which goods move, leading to new routes, new partnerships, a significant increase in the number of actors, and higher volatility as it has become easier to enter and leave the market.<sup>7</sup> Finally globalization of trade continues to influence the location and development of facilities and brings increased demand for intermodal capacity. Indeed between 1990 and 2000, U.S. international trade more than doubled, placing additional strain on international gateways like the marine port and airport facilities in the downstate New York region.<sup>8</sup>

What does this mean, particularly for the downstate New York region? If no measures are taken, such growth will likely translate into additional congestion at the airports, marine ports, and on the highways and streets of the region, all of which are already under strain. This in turn will lead to less reliability and higher prices for all involved, including freight shippers as well as passengers who must share the transportation network, and customers to whom the increased prices are often passed. The end result will

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<sup>1</sup> The downstate NY region is defined here as the area covered by the New York Metropolitan Transportation Council (NYMTC), which includes the 5 boroughs of New York City, as well as Nassau, Putnam, Rockland, Suffolk, and Westchester Counties. This definition includes NY State Department of Transportation Regions 10, 11, and part of Region 8.

<sup>2</sup> American Association of State and Highway Transportation Officials (AASHTO), *Transportation – Invest in America: Freight-Rail Bottom Line Report* (Washington, DC: AASHTO, 2003), p. 13.

<sup>3</sup> *Ibid.*, p. 50.

<sup>4</sup> *Ibid.*, p. 51.

<sup>5</sup> USDOT, Federal Highway Administration (FHWA), *The Freight Story: A National Perspective on Enhancing Freight Transportation* (Washington, DC: FHWA, November 2002), p. 6.

<sup>6</sup> *Ibid.*, pp. 7-8. Also see Cambridge Systematics, *NYMTC Regional Freight Plan: Task 2 – Description of Freight Transportation System in the Region*, Final Technical Memorandum, Prepared for NYMTC (July 2001), p. 2-1.

<sup>7</sup> USDOT, FHWA, *The Freight Story*, pp. 6-7.

<sup>8</sup> *Ibid.*, p. 10.

be a reduced market share as other regions around the country are viewed as offering more competitive advantages.

Yet, congestion is only one of the freight-related difficulties facing the downstate New York region. Also in the mix is the need for increased security in the form of enhanced communications and sharing of information as well as increased redundancy and resiliency of the transportation network along which freight moves. Meeting such concerns nationally as well as in the downstate New York area presents an even greater challenge given the tremendous modal imbalances, with close to 80% of all freight moving on trucks.

Implementing measures to address freight movement is no small task. Various obstacles exist, institutionally, organizationally, technologically, financially, operationally, and socio-politically to name but a few, and many of these are interwoven and interrelated. Because freight moves among and between various geographical and jurisdictional boundaries, for example, determining who should bear the costs of improvements is difficult. Investments in one locale can reap benefits many miles away, often making it all but impossible for any single entity or region to successfully pursue freight improvement projects on its own. Because freight increasingly needs to move across transportation modes, but most transportation agencies from the federal government down to local entities are organized according to mode (not to mention, historically focused on passenger service), identifying eligible funding sources is difficult and opportunities for multimodal cooperation are often missed.

While many of these difficulties are felt across the nation, the downstate New York region has its own peculiarities which further complicate matters, in part because of its sheer size and density, in part because of its aging and outdated infrastructure, and in part because of the diversity of agencies and stakeholders involved in moving both passengers and freight along the region's transportation system. On the other hand, because much of the transportation network in the downstate New York region is shared by freight and passengers, improvements in the former are likely to also bring benefits to the latter both directly and indirectly.

## **GOALS OF THE REPORT**

This report is the culmination of a study, funded by the New York State Department of Transportation (NYSDOT), that seeks to identify and recommend means for reducing one set of barriers – namely institutional barriers – to effective and efficient freight movement in the downstate New York region. The specific goals of the report are four-fold: (1) to identify and analyze institutional barriers to effective and efficient freight movement in the downstate New York region; (2) to identify potential means for overcoming such barriers; (3) to identify regional actions that could potentially improve the movement of freight in the downstate New York region; (4) and to identify a set of priority actions that could be taken.

### **A Note on Methodology and Findings**

The study began with an extensive literature review that examined institutional obstacles to freight movement within the downstate New York region as well as throughout the country. Specific regional and extra-regional examples were also reviewed to discern lessons or considerations that could be applied within this region. Interviews were held with representatives from various agencies and stakeholders within the region as well as several agencies and freight-related stakeholders outside the region. The study took place in the midst of the *Transformation for Tomorrow* initiatives occurring at NYSDOT and concurrently with the work of the New York State Advisory Panel on Transportation Policy for 2025. Thus, several of the interviews included questions related to the transformation and NYSDOT's priority result areas as well as the findings of the Advisory Panel, which were released in November 2004.

This report is not meant to prioritize specific freight infrastructure projects. Indeed, one could even argue that while key regional projects have been researched and are generally recognized, the inability (or unwillingness) to prioritize as a region is a reflection of the continued existence of a number of institutional barriers. Thus, the findings in this report, which were developed through an iterative process, call for a number of efforts aimed at increasing communication, sharing best practices, and gathering additional

information. These suggestions are action oriented and meant to build upon and strengthen some of the collaboration and cooperation already in place so that regional freight projects will have a better chance of being effectively prioritized and implemented.

### **Structure of the Report**

Before one can fully appreciate the barriers to freight movement, an understanding of the context within which freight moves in the downstate New York region is important. Thus, Section 2 focuses on the regional context, examining the importance of freight to New York and nationally, various dimensions of freight movement in the downstate New York region, and the status of the many freight-related projects already in place in the downstate New York area. Section 3 then explores institutional barriers, broadly in terms of types of barriers and why they exist, and more specifically in terms of how they present in the downstate region. Section 3 also provides some discussion on how such barriers may be overcome and provides examples from initiatives beyond the downstate New York region. Finally, Section 4 describes the findings and provides some suggestions for action.

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## 2. THE REGIONAL CONTEXT

Transportation is a critical part of the U.S. and the downstate New York region economies, moving both people and goods. As members of the New York State Advisory Panel on Transportation Policy for 2025 noted in their recent findings, 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...”<sup>9</sup>

Though not as visible to the average person who is usually more familiar with passenger-related transportation, freight is an important component of the overall transportation sector. Freight transportation and economic growth are closely linked. According to a 2002 FHWA report, “improvements in the efficiency and reliability of freight transportation have been the engine of prosperity and competitive advantage.”<sup>10</sup> Changes in economic activities (like the shift from a push to pull economy described in Section 1, for example) influence demand for freight services.<sup>11</sup> In 2002, transportation-related goods and services was the fourth largest contributor (10.4%) of U.S. Gross Domestic Product (GDP), behind housing, healthcare, and food.<sup>12</sup> According to the U.S. Department of Transportation (USDOT) Bureau of Transportation Statistics (BTS), 68% of the for-hire transportation service contribution to GDP in 2001 (roughly \$208 billion) was the result of freight transport.<sup>13</sup>

Freight transportation also contributes to the national and regional economy by providing jobs. According to the BTS, 15.6% of U.S. jobs (roughly 20 million) in 2002 were in transportation and transportation-related industries.<sup>14</sup> In that same year, an additional 6.2 million jobs were in related industries such as transportation equipment and manufacturing, highway construction, and auto repair. Another 9.2 million jobs were in transportation-related occupations in non-transportation industries (e.g., truck drivers for pharmaceutical companies).<sup>15</sup>

### A BRIEF DESCRIPTION OF GOODS MOVEMENT IN THE DOWNSTATE NEW YORK REGION

To fully understand the complexities of freight movement and the obstacles associated with moving goods efficiently and effectively, it is helpful to have a sense of the extent of the system, how things move, and what is moved. The following paragraphs are not meant to be an exhaustive analysis of goods movement in the region. For that, the best source is the *NYMTC Regional Freight Plan*, which provides in-depth assessment of all the facilities in the region as well as current and forecasted commodity flow data.<sup>16</sup> Instead, the subsequent discussion is meant to offer some basic contextual background.

To place the New York downstate region in perspective, a few national statistics are helpful. The national transportation network along which freight moves is extensive. According to a 2002 report issued by the Federal Highway Administration, the system is composed of 4 million miles of roadway, 100,000 miles of rail, and 1.4 million miles of gas and liquid pipelines. Additionally, there are more than 19,000 airports and more than 5,000 coastal, Great Lakes, and inland waterway facilities.<sup>17</sup> In 2002, 11.7 billion tons of freight,

<sup>9</sup> New York State Advisory Panel on Transportation Policy for 2025, *Transportation – Trouble Ahead: Findings and Recommendations of the New York State Advisory Panel on Transportation Policy for 2025*, (NY: University Transportation Research Center, 2004), p. 4.

<sup>10</sup> USDOT, FHWA, *The Freight Story*, p. 1.

<sup>11</sup> U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), “Economic Impact of Freight,” Accessed Online, 2/4/05, [http://www.bts.gov/programs/freight\\_transportation/html/freight\\_and\\_growth.html](http://www.bts.gov/programs/freight_transportation/html/freight_and_growth.html).

<sup>12</sup> USDOT, BTS, “Economic Impact on Transportation,” Accessed Online, 2/4/05, [http://www.bts.gov/programs/freight\\_transportation/html/transportation.html](http://www.bts.gov/programs/freight_transportation/html/transportation.html); and *Freight Shipments in America: Preliminary Highlights from the 2002 Commodity Flow Survey*, p. 13, Table 3: Transportation and the U.S. Economy, Accessed Online, 2/4/05, [http://www.bts.gov/publications/freight\\_shipments\\_in\\_america/html/table\\_03.html](http://www.bts.gov/publications/freight_shipments_in_america/html/table_03.html) and [http://www.bts.gov/publications/freight\\_shipments\\_in\\_america/pdf/entire.pdf](http://www.bts.gov/publications/freight_shipments_in_america/pdf/entire.pdf).

<sup>13</sup> USDOT, BTS, “Economic Impact on Transportation.”

<sup>14</sup> USDOT, BTS, *Freight Shipments in America*, p. 13, Table 3.

<sup>15</sup> *Ibid.*, p. 12.

<sup>16</sup> Cambridge Systematics, Inc. *NYMTC Regional Freight Plan: Task 4 – Definition and Assessment of Needs*, Final Technical Memorandum, Prepared for NYMTC (November 2001).

<sup>17</sup> USDOT, FHWA, *The Freight Story*, p. 3.

valued at \$8.4 trillion moved across this system. Of that, 74.3% of the value and just over two-thirds of the weight was carried by truck.<sup>18</sup>

### Key Characteristics of the Downstate New York Region

New York State's transportation system is comprised of 113,252 centerline highway miles and 17,000 bridges, 5 public and 7 private marine ports, and 456 airports.<sup>19</sup> More than 20% (23,054 miles) of the total state centerline highway miles are located in the downstate New York region.<sup>20</sup> Almost 12% (2,027) of the state's bridges are located in the five boroughs of New York City alone. In 1998, the downstate New York region moved 333 million tons of freight. Current forecasts predict that by 2025, the region will need to move over 490 million tons of freight on an annual basis.<sup>21</sup>

With respect to specific facilities, the downstate New York region boasted two of the four top ports of exit and entry for U.S. international trade by value in 2003 – the Port of New York and New Jersey and JFK International Airport.<sup>22</sup> With respect to marine freight gateways, the Port of New York and New Jersey ranks second in value and third by weight of marine imports and exports, though it still remains the largest ocean-borne automobile handling port in the United States (Table 1). More importantly is the growth at the Port. From 1999 to 2003, tonnage entering and exiting the Port of New York and New Jersey increased by 27%, while the value of those commodities increased by 40%.<sup>23</sup>

**Table 1: Top 5 U.S. Maritime Freight Gateways, 2003, Ranked by Value and Weight**

Rank by Value	Port name	Total Trade (billions)	Rank by Weight	Port Name	Total Trade (short tons, thousands)
1	Port of Los Angeles, CA	\$122	1	Port of Houston, TX	126,098
2	Port of NY and NJ	\$101	2	Port of South Louisiana, LA	80,324
3	Port of Long Beach, CA	\$96	3	Port of NY and NJ	77,934
4	Port of Houston, TX	\$50	4	Port of Beaumont, TX	68,747
5	Port of Charleston, SC	\$39	5	Port of Corpus Christi, TX	53,386

From: USDOT, BTS, *America's Freight Transportation Gateways*, p. 11 – Table 8.

While still a small percentage of overall international trade in terms of volume, air freight accounted for 26% of the total value of U.S. trade in 2003. John F. Kennedy International Airport (JFK) was the leading U.S. airport for international freight by value in that same year, handling 21% (\$112 billion) of U.S. air imports and exports, though in cargo volume it ranked third behind Memphis International and Los Angeles International Airports.<sup>24</sup> While the top origin-destination route pairs on non-stop segments are all in Europe, these represent hubs for the markets truly driving this trade. The top export markets for commodities leaving JFK are Tokyo, Seoul, and London; the top import markets are Seoul, Hong Kong, and Taipei (London is fourth).<sup>25</sup>

<sup>18</sup> USDOT, BTS and U.S. Census Bureau, *2002 Commodity Flow Survey: United States Data* (December 2004), Table 1a – Shipment Characteristics by Mode of Transportation for the United States: 2002, Accessed online, 2/2/05, [http://www.bts.gov/publications/commodity\\_flow\\_survey/2002/united\\_states\\_final/html/table\\_01\\_a.html](http://www.bts.gov/publications/commodity_flow_survey/2002/united_states_final/html/table_01_a.html).

<sup>19</sup> New York State Department of Transportation (NYSDOT), "2003 Highway Mileage Summary," Accessed Online, 2/4/05, [http://www.dot.state.ny.us/tech\\_serv/high/highwaym.html](http://www.dot.state.ny.us/tech_serv/high/highwaym.html); also, New York State Advisory Panel on Transportation Policy for 2025, *Transportation – Trouble Ahead*, p. 4.

<sup>20</sup> NYSDOT, "2003 Highway Mileage Summary."

<sup>21</sup> NYMTC, *NYMTC Regional Freight Plan: An Element of the Regional Transportation Plan – Public Draft* (NY: NYMTC, April 2004), p. 2-1.

<sup>22</sup> Until 2003, JFK had been the top gateway, but was surpassed by the Port of Los Angeles, primarily as a result of increased trade with Asia and the Pacific Rim countries. See USDOT, BTS, *America's Freight Transportation Gateways: Connecting Our Nation to Places and Markets Abroad* (Washington, DC: BTS, 2004), p. 2.

<sup>23</sup> *Ibid.*, p. 20.

<sup>24</sup> *Ibid.*, p. 10. With 26% of total airfreight tonnage, Anchorage was the nation's leading air gateway by weight; however, because commodities transported by air are higher in value per ton than those transported by other modes, the value of shipments is a better indicator than weight when measuring the impact of air freight gateways. *Ibid.* Also, Cambridge Systematics, *NYMTC Regional Freight Plan: Task 2*, p. 5-5.

<sup>25</sup> USDOT, BTS, *America's Freight Transportation Gateways*, p. 16.

Two other important characteristics of the downstate system are the high degree of congestion and inadequate and aging infrastructure. Highways, railways, marine and airport facilities are all plagued by ever-increasing congestion that continuously erodes reliability and predictability. In 2000, the region's Travel Time Index (TTI) was 1.41; in other words, during peak hours a trip took 41% longer than that same trip during periods of free flowing traffic.<sup>26</sup> Highways, tunnels, bridges, and railways in the region are further limited, and congestion is exacerbated, by antiquated infrastructure and insufficient vertical or horizontal clearances in many locations; regional marine ports are constrained by channel depths, and both air and marine ports are hindered by lack of sufficient rail and/or highway access.<sup>27</sup> Indeed, as the 2025 report found, in the downstate New York region, "*the lack of rail/intermodal yards is a huge impediment to redeveloping rail freight as a serious option for moving freight downstate...*"<sup>28</sup>

### **Freight Flows, Modes, and Commodities in the Downstate New York Region**

Beyond the extent of the system, the facilities, and conditions, there are several other features that help define the context within which freight moves throughout the region. First and foremost, the vast majority of goods moving through the region utilize trucks either in part or entirely. In 1998, 80.7% of the region's freight moved by truck, 18.3% by water, and only 0.8% by rail.<sup>29</sup>

According to the *NYMTC Regional Freight Plan: Task 2*, three categories of truck trips are represented in the region:

- **Through Trips** in which the goods both originate and are destined for points outside the region;
- **Terminal and Warehouse Trips** in which one end of the trip taken lies within the region; and,
- **Distribution Trips** in which the flow of commodities is encompassed entirely within the region.<sup>30</sup>

Almost three-fourths (74%) of all truck trips within the region are terminal and warehouse trips. Through trips account for 11% of the total truck freight flow and the remaining 15% is comprised of distribution trips. A difference exists depending upon location within the region: while Manhattan, Brooklyn, and Queens, and the counties of Long Island are primarily importers of goods, freight flows in the Bronx and Staten Island, as well as the three counties to the north are primarily characterized by through trips. In fact, almost half the traffic in the Bronx, Rockland, and Westchester results from through trips and more than 80% of total goods movement in Staten Island represents through trips.<sup>31</sup>

The region is a net consumer of goods, with imports representing 58.9% of the total freight flow in the region on an annual basis.<sup>32</sup> The most active trading partners for the downstate New York region are upstate New York, other counties within the NYMTC region itself, and Northern New Jersey. These, together with Pennsylvania, and trading partners along the East Coast and in the Midwest, account for 83% of the tonnage and 82% of the value of shipments.<sup>33</sup>

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<sup>26</sup> Environmental Defense and the East of Hudson Rail Freight Operations Task Force, *Investing in Mobility: Freight Transport in the Hudson Region* (NY: Environmental Defense, 2004), p. 12.

<sup>27</sup> Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 1-2.

<sup>28</sup> New York State Advisory Panel on Transportation Policy for 2025, *Transportation – Trouble Ahead*, p. 11.

<sup>29</sup> Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 4*, pp. 8-2 and 8-3. The reader should be aware that slightly different figures (78.6% truck, 19.6% marine, 1.7% rail) are presented in Environmental Defense and The East of Hudson Rail Freight Operations Task Force, *Investing in Mobility: Freight Transport in the Hudson Region* (NY: Environmental Defense, 2004), p. 12. Nevertheless, the basic assessment is the same – there is a tremendous modal imbalance, particularly in the East of Hudson portion of the region.

<sup>30</sup> Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, pp. 2-2 to 2-4.

<sup>31</sup> *Ibid.*, pp. 1 and 2-2 through 2-4. Also, New York City Economic Development Corporation (NYCEDC), *Cross-Harbor Freight Movement Project – Draft Environmental Impact Statement: Appendix 2B – Commodity Flow Analysis*, Produced in cooperation with U.S. Department of Transportation, Federal Highway Administration and Federal Railroad Administration (April 2004), p. 28.

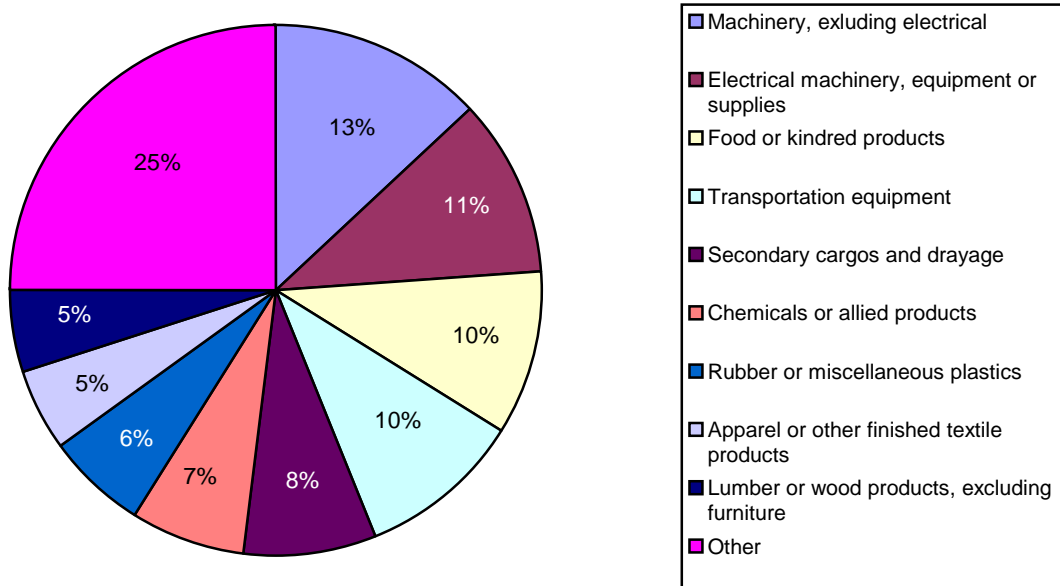
<sup>32</sup> Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 7-3.

<sup>33</sup> *Ibid.*, p. 7-3.



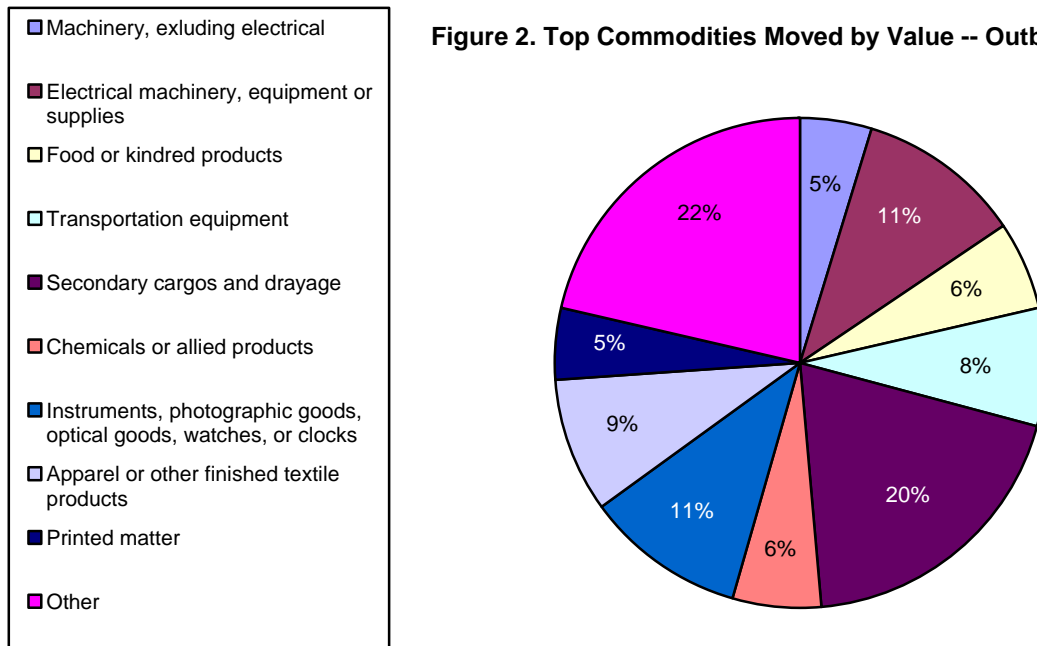
With respect to the types of commodities moving throughout the downstate New York region, Figures 1 – 4 show the top ten commodities being moved, both by value and weight. According to the *NYMTC Regional Freight Plan*, the movement of certain commodities is expected to grow more quickly than others. In particular, increases are expected in petroleum or coal products, pulp paper or allied products, and lumber and wood products.

**Figure 1. Top Commodities Moved by Value -- Inbound**



From: Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 7.A-4.

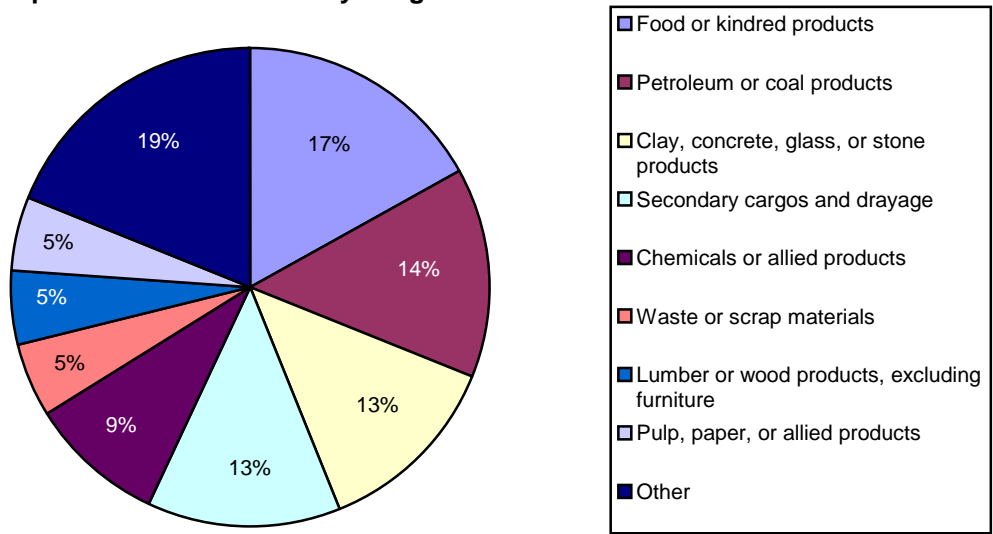
**Figure 2. Top Commodities Moved by Value -- Outbound**



From: Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 7.A-4.

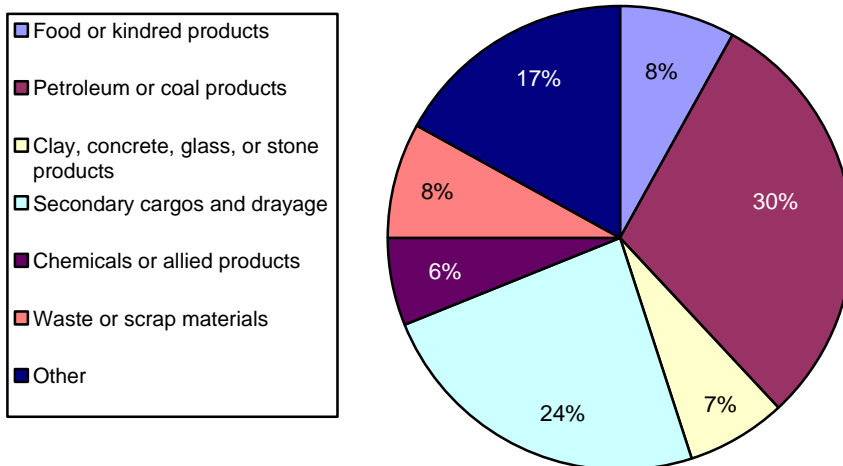
Importantly, these are all products that traditionally travel by modes other than truck. Only two of the top ten fastest growing commodities (secondary cargoes and drayage and clay, concrete, glass, and stone products), are considered truck-dependent.<sup>34</sup> Nevertheless, these shifts are not expected to have a major impact on the current modal imbalances.

**Figure 3. Top Commodities Moved by Weight -- Inbound**



From: Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 7.A-3.

**Figure 4. Top Commodities by Weight -- Outbound**



From: Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 7.A-3

<sup>34</sup> NYMTC, *NYMTC Regional Freight Plan: Task 2*, p. 2-3.

The *NYMTC Regional Freight Plan* categorizes the downstate New York counties as being having a high freight-intensity, medium freight-intensity, or low freight-intensity. In the first category are Brooklyn, Manhattan, Queens, and Suffolk. These counties, which tend to have highly industrialized districts, trade actively within the metropolitan area and outside the region.

The second category, which trades to a lesser degree outside the region, includes the Bronx, Nassau, Rockland, and Westchester. The last category is comprised of the primarily residential areas of Staten Island and Putnam which import most of their goods from within the region.<sup>35</sup>

## **CURRENT STATUS OF FREIGHT RELATED ACTIVITIES IN THE REGION**

To address current freight movements and forecasted needs, a number of projects and/or studies are already planned or underway in the region (Table 2, next page). They include projects on highways, rail, and waterways, within the five boroughs of New York City and around the larger downstate region.

As can be seen in Table 2, there are varying degrees of collaboration and cooperation on the different projects and studies. In some cases, there is also private sector involvement. A good illustration of such cooperation and coordination is provided by the *Hudson Line Railroad Corridor Transportation Plan*, referred to commonly as the Joint Users' Study.<sup>36</sup> While the MTA Metro-North Railroad managed the consultant study project, NYSDOT played critical facilitative and financial roles. Additional partners in the study included Amtrak on the public side, and CSX Transportation and Canadian Pacific Railway (CP) on the private side. Released in January 2006, the study not only examines how to balance commuter service, high speed passenger rail, and freight rail needs along Metropolitan Transportation Authority (MTA) Metro-North Railroad's Hudson Line, but prioritizes projects "*based on their potential to improve existing conditions for both freight and passenger operators, and on their projected future usefulness.*"<sup>37</sup>

### **Other Efforts Aimed at Coordination**

Beyond the projects and studies, there are also a number of efforts aimed at increasing coordination and collaboration among the agencies on a more ongoing basis, as well as at transforming some of the agencies so they are better able to address new or changed transportation needs. Among these, for example, NYMTC runs a Freight Transportation Working Group that includes individuals from New York, New Jersey, and Connecticut. They meet on an *ad hoc* basis to discuss various issues related to freight. NYMTC has also recently released its first *Regional Freight Plan*.

A more formal arrangement is the New York State Transportation Federation, the creation of which was directed by Governor Pataki in November 2003. Working together in this Federation, the New York State Department of Transportation (NYSDOT), the New York State Thruway Authority (NYSTA), and the New York State Bridge Authority (NYSBA), are charged with "*developing strategies to better coordinate transportation planning and policy making to create economic efficiencies in government and more effectively move people and goods across the state transportation system.*"<sup>38</sup> As part of this effort, the agencies have created the Travel Information Gateway, an internet service that provides real-time information on travel conditions on the state highway system. Additional services that are under development include a unified permitting system and a statewide smartcard for tolling.

Recognizing that changing economic and political environments call for a new way of doing business, NYSDOT has also been remaking itself, first under the leadership of Commissioner Joseph Boardman and more recently under the leadership of Commissioner Thomas Madison. The agency has identified its

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<sup>35</sup> Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, p. 7-9.

<sup>36</sup> The following is based on Personal Communication with John Kennard (Director, Capital and Long Range Planning), Fred Nangle (Manager, Transportation and Environmental Planning), and Kim Smith (Deputy Director, Capital and Long Range Planning), Metropolitan Transportation Authority Metro-North Railroad, 1/6/05.

<sup>37</sup> "NYSDOT, MTA, Amtrak & Rail Partners Announce Long-Awaited Hudson River Rail Plan," *Destination Freedom* 7, 4 (January 30, 2006), Accessed Online 6/15/06, <http://www.nationalcorridors.org/df/df01302006.shtml#NYS>.

<sup>38</sup> New York State Transportation Federation, "About Us," Accessed Online, 2/8/05, <http://www.travelinfony.com/tig/aboutus/index.html>.

five priority results areas by which to measure its success in responding to transportation needs and expectations: (1) mobility and reliability; (2) safety; (3) economic competitiveness; (4) environmental conditions; and, (5) security.<sup>39</sup> Though not solely aimed at improving freight movement, this *Transformation for Tomorrow* process certainly affects the freight industry even as it does passenger transportation within the state.

**Table 2: Existing Freight-Related Projects or Studies in the Downstate New York Region**

<b>Project or Study Title</b>	<b>Goals</b>	<b>Public Agencies</b>
Unified Permitting Initiative (oversize / overweight vehicles)	Improved mobility; reduced costs and travel time; simplified administration; increased compliance	NYSDOT, NYSTA, NYSBA
Bronx Arterial Needs Study	Improved mobility	NYSDOT
Bruckner-Sheridan Expressway Interchange / Hunts Point Peninsula Commercial Access EIS	Expressway improvements and improved truck access to Hunts Point Peninsula	NYSDOT
Commercial Vehicle Parking / Loading Zones	Increase turnover rates, minimize tickets, generate revenues	NYCDOT
Cross Harbor Rail Freight Tunnel Draft Environmental Impact Statement (DEIS)	Enhanced freight rail capacity; increased freight rail service east-of-Hudson River	NYCEDC
East of Hudson Freight Rail Enhancements	Rail clearance and axle load improvements; increased freight rail service	PANYNJ, NYSDOT, MTA
Freight Information Real-Time System for Transport (FIRST)	Real-time traveler information for commercial vehicles	NYSDOT, NYCDOT, PANYNJ
Goethals Bridge Priority Access to NY Container Terminal	Infrastructure repairs; improved traffic flow to/from Howland Hook; reduced accidents	PANYNJ, NYMTC
Hudson Line Railroad Corridor Transportation Plan (Joint Users') Study	Reduction of operational conflicts; increased freight rail service	NYSDOT, MTA, Amtrak, CSXT, CPR
Hunts Point Market Logistical Enhancement Study	On-site truck movement improvements; improved air quality; improved market operations	NYSDOT, NYSERDA
Hunts Point Waterborne Freight Assessment	Reduced truck traffic on local roads	NYMTC
Integrated Incident Management System	Reduction of non-recurring congestion and improved safety	NYSDOT, MTA, NYCDOT, NYPD, NYCOEM
Long Island Truck and Rail Intermodal Facility EIS (Pilgrim State)	Freight rail intermodal yard; rail-truck transload facility, truck access	NYSDOT
National Rail Linkage Enhancements	Improved national rail access to port facilities, including NY Container Terminal on Staten Island	PANYNJ
Port Inland Distribution Network (PIDN)	Move containerized freight by rail or barge to inland distribution terminals (e.g. Albany, Syracuse, Buffalo, etc.)	PANYNJ
New York State Rail and Ports Improvements	Freight yard intermodal enhancements; rail clearance improvements; rail structural load improvements; enhanced rail capacity; increased freight service	NYSDOT
South Brooklyn Track Improvements – 1 <sup>st</sup> Avenue	Reconstructed freight rail infrastructure between 65 <sup>th</sup> Street Yard and Bush Terminal Yard for enhanced rail float interchange.	NYCEDC
Staten Island Expressway Service Roads	Mainline and interchange traffic flow improvements	NYSDOT
Staten Island Railroad Reactivation	Enhanced freight rail access to New Jersey; reestablishment of freight service along Travis Branch; Port Ivory rail access	NYEDC, PANYNJ
Tappan Zee Bridge II EIS	New / repaired river crossing with motor vehicle, transit, and freight rail considerations	NYSDOT, NYSTA, MTA
Truck Route Management and Community Impact Reduction Study	Improvement of regional connectivity with reduced community impacts	NYCDOT

From: NYMTC, *NYMTC Regional Freight Plan* (April 2004), pp. ES-6 to ES-10, Table ES.1-Actions by Goals and Strategies; Personal Communication with Howard Mann, Associate Transportation Analyst, NYMTC, 2/15/05; and NYSDOT Freight and Economic Development Division.

<sup>39</sup> NYSDOT, "Statement by Commissioner Boardman – Preparing for the Future," Accessed Online 12/22/04, <http://www.dot.state.ny.us/tranplan/statement.html>.

In many ways, NYSDOT is positioning itself to be a leader in the state on freight, identifying and focusing on key corridors that link the state with the national and international system of goods movement. As the “only government agency with statewide responsibilities covering all modes of transportation...,” the members of the 2025 panel view NYSDOT as the most logical agency to play this role.<sup>40</sup> When asked, representatives from the other public agencies in the downstate New York region generally echoed this sentiment, in principle. Pointing to the role NYSDOT has already played with MTA Metro-North and the Joint Users on rail, John Kennard, Director of Capital and Long Range Planning at Metro-North, for example, noted that “NYSDOT is uniquely qualified to be the umbrella,” while Bill Wheeler, Director of Planning at the Metropolitan Transportation Authority described it as a natural outcome of the role NYSDOT has already assumed since the 1980s.<sup>41</sup> However, concerns were raised by some agencies which, while admitting that NYSDOT’s integrating role could be useful, see potential conflicts in missions, needs, and goals, i.e., “NYSDOT needs to recognize their authority may not extend across certain jurisdictional/agency boundaries.”<sup>42</sup> Such responses reveal the underlying institutional barriers that still need to be addressed.

### **Lack of Shared Priorities**

A number of efforts are underway that are aimed either directly or indirectly at addressing the difficulties involved with freight movement in the downstate New York region. Furthermore, there is some degree of cooperation and coordination, as evidenced by the multiple projects on which more than one agency is involved, but it is not enough. As the *NYMTC Regional Freight Plan* makes clear, obstacles remain.

As noted in the preceding discussion, the region is overly dependent upon highways which are regularly congested. Moreover, much of the infrastructure within the region, particularly for rail and highway movement, is antiquated and inadequate. Related are operational limitations as rail freight must share the lines with passenger trains and trucks find that the routes for commercial vehicles often are not contiguous. Finally, the *NYMTC Freight Plan* notes that there are economic challenges and a historical lack of coordination which has resulted in competition and redundancy.<sup>43</sup> These last two issues have a direct impact on, and are in turn affected by, the ability or inability of the agencies to coordinate and collaborate in a way that successfully promotes regional freight goals. In fact, the NYMTC list of current and proposed projects illustrates the inability (or unwillingness) to prioritize these projects. As Mann described it, the list is more an “enumeration,” not a “prioritization.”<sup>44</sup>

While most agency representatives agree in principle that the projects and studies identified in the *NYMTC Regional Freight Plan* are important for the region, interviews conducted in late 2004 and early 2005 with agency representatives throughout the region yielded a more nuanced picture – broad priorities may be shared but specific rankings are not. For example, when asked to rank freight priorities Tim Gilchrist, Downstate Integrator at NYSDOT, identified the following: (1) access to JFK; (2) real-time travel information; (3) Port Inland Distribution Network (PIDN); (4) Pilgrim; and, (5) Southern Corridor improvements (between New Jersey and Long Island).<sup>45</sup> Joan McDonald, Senior Vice President at New York City Economic Development Corporation (NYC EDC) identified a different mix when asked the same question. On her list, not in rank order, were the Staten Island Railroad Reactivation; Brooklyn Waterfront improvements; Hunts Point Peninsula Commercial Access; Access to JFK, and successful completion of 55-foot dredging of the Harbor.<sup>46</sup> A conversation with representatives from New York City Department of Transportation (NYCDOT) yielded one response – completion of the Truck Route Management and

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<sup>40</sup> New York State Advisory Panel on Transportation Policy for 2025, *Transportation – Trouble Ahead*, p. 17.

<sup>41</sup> Personal Communication, Kennard, Nangle, Smith, 1/6/05 and Personal Communication, William Wheeler (Director of Planning) and Jack Dean (Manager), MTA, 1/7/05.

<sup>42</sup> The individual who provided this statement is a representative from an agency in the downstate region. The person prefers to remain unnamed. However, because it reflects an important underlying unease with NYSDOT’s potential role, it is important to include here even without a direct citation.

<sup>43</sup> NYMTC, *NYMTC Freight Plan*, p. ES-3.

<sup>44</sup> Personal Communication, Gerry Bogacz (Assistant Director) and Howard Mann (Associate Transportation Analyst), NYMTC, 12/6/04.

<sup>45</sup> Personal Communication, Tim Gilchrist, Downstate Integrator, NYSDOT, 11/23/04.

<sup>46</sup> Personal Communication, Joan McDonald, Senior Vice President, NYC EDC, 1/5/05.

Community Impact Reduction Study.<sup>47</sup> Finally, Cruz Russell, Director of the Office of Policy and Planning at the Port Authority of NY and NJ (PANYNJ) identified a list of six, again not in rank order: Access to JFK; Airport runway improvements; Deep water port improvements (55-foot dredging); New Goethals Bridge; Improved Outerbridge Crossing; and Enhanced security measures and increased reliability.<sup>48</sup> Recognizing that priorities shift over time, Table 3 provides a snapshot graphic illustration of these results.

**Table 3: Top 5 Freight Priorities Identified by Public Agencies in the Region, April 2004**

Priorities/Agency	NYCDOT	NYCEDC	NYSDOT	PANYNJ
Access to JFK		*	1	*
JFK Airport Runway Improvements				*
Brooklyn Waterfront Improvements		*		
Deep water (55-foot) Dredging of the Harbor		*		*
Goethals Bridge (Staten Island)				*
Hunts Point Market Intermodal Capacity Improvements		*		
Bruckner-Sheridan Expressway Interchange / Hunts Point Peninsula Commercial Access EIS		*		
Outerbridge Crossing Improvements (Staten Island)				*
Port Inland Distribution Network (PIDN)			3	
Long Island Truck & Rail Intermodal Facility (Pilgrim State)			4	
Freight Information Real-time System for Transport (FIRST)			2	
Security and Reliability Enhancements				*
Staten Island Railroad Reactivation		*		
Southern Corridor Improvements: (NJ - Long Island)			5	
Truck Route Management and Community Impact Reduction Study	*			

Agencies, of course, are not the only stakeholders in the freight equation. Private trucking companies, air cargo companies, shippers, and railroads, as well as the merchants that need freight are but a few of the other stakeholders involved. Not surprisingly, the same question asked of Mitchell Pally, Vice President of Government Affairs at the Long Island Association yielded yet another set of priorities: Long Island Truck-Rail Intermodal Facility at Pilgrim State, the Main Line Corridor improvements and third track on the MTA Long Island Rail Road, and the Cross Harbor Rail Freight Tunnel.<sup>49</sup>

<sup>47</sup> Personal Communication, David Woloch (Deputy Commissioner, External Affairs), David Harris (Deputy Director, Office of Policy, Technology, and Management Analysis), and David Stein (Project Manager, Division of Traffic Planning, Research Safety, and Implementation), NYCDOT, 1/25/04.

<sup>48</sup> Personal Communication, Cruz Russell, Director, Office of Policy and Planning, PANYNJ, 1/26/05.

<sup>49</sup> Personal Communication, Mitchell Pally, Vice President, Government Affairs, Long Island Association, 1/14/05.

The lack of shared priorities in the region in part reflects the different missions, and thus differently perceived roles, of the various agencies involved in freight in the downstate New York region. As an operator and owner of numerous transportation facilities, the Port Authority, for example, sees itself as a key player in freight movement. Similarly, NYSDOT views itself as playing a central role in freight movement; indeed, it is positioning itself as a leading agency in this area. As *the “keeper of streets, highways, and roads within New York City,”* NYCDOT sees a responsibility for how freight is moved; however, ensuring quality of life goals in the municipality while also ensuring the efficient movement of *all* vehicles is a complex balance to maintain.<sup>50</sup> Similarly, the Metropolitan Transportation Authority (MTA) continues to be willing to accommodate freight on its two regional rail systems to the degree that it can given current capacity constraints, but it needs to do this while remaining true to its mission and core businesses of transporting commuters.<sup>51</sup> These differences in missions are one component of a much broader set of institutional barriers that hamper the region’s ability to effectively and efficiently deal with freight.

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<sup>50</sup> Personal Communication, Woloch, Harris, and Stein, 1/25/05.

<sup>51</sup> Personal Communication, Wheeler, 1/7/05.

### 3. INSTITUTIONAL BARRIERS

Interestingly and important to note at the outset is that not all the agencies in the downstate New York region view institutional barriers as a problem (or at least the key problem) to moving freight more efficiently in the downstate New York region. When asked to identify the critical barriers, the following responses were given: lack of buy-in by principals, lack of buy-in by operational entities, lack of sufficient funding, limited and aging infrastructure, and lack of understanding on the part of the population regarding the importance of freight. On the other hand, some of the barriers noted are, in fact, institutional barriers or related to them (e.g., buy-in by principals or operational entities, funding). Furthermore, at the same time, comments were made like “*there are no real problems with the agencies collaborating; each agency understands its purview*” or “*what is one institution’s “institutional problem” may be another institution’s emphasis on its primary mission.*” Such perceptions are indicative of inter-jurisdictional barriers and demonstrate the tendency for regional agencies to focus on their own concerns and needs.

#### TYPES OF INSTITUTIONAL BARRIERS

A 1996 Transit Cooperative Research Program (TCRP) report, titled *Institutional Barriers to Intermodal Transportation Policies and Planning in Metropolitan Areas*, identified three major categories of institutional barriers to the efficient flow of freight: organizational barriers, inter-jurisdictional barriers, and resources barriers.<sup>52</sup> Though the report is somewhat dated, the findings are still very much relevant.

#### Organizational Barriers

Organizational barriers refer to the various regulatory processes at the federal, state, and local levels that often impede rather than promote effective freight movements. Foremost among the organizational barriers is modal separation. From USDOT down to local entities, transportation agencies have historically been structured according to mode. This approach hinders intermodal planning as each internal group focuses on moving passengers and freight along its own mode, often missing opportunities for collaboration and failing to recognize potential cost savings.<sup>53</sup> In terms of the downstate New York region, Tim Gilchrist noted, that “*people tend to be focused on modes, not on objectives or even corridors.*”<sup>54</sup> Modal separation is often further exacerbated by separating policy and planning as well as by having different divisions focused upon freight or passengers, rather than in some combination.

This modal separation is reflected in regulatory and legal restrictions, which are sometimes overly onerous, and often lead to difficulties obtaining funds since different modes tend to be governed by different funding mechanisms and standards. Additional restrictions imposed at the state level can further complicate the regulatory and funding environments.

The federal Intermodal Surface Transportation Efficiency Act (ISTEA, enacted 1991) and the subsequent Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21, enacted 1998) introduced formal consideration of freight movements during statewide and metropolitan planning processes. Continuation of these federal initiatives received increased encouragement in the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU, enacted 2005) which identified the importance of freight transportation to economic development. In particular, SAFETEA-LU recognized that public investment in effective freight movement is critically linked to regional economic competitiveness and to the overall health and efficiency of the nation’s transportation system.

These successive federal surface transportation acts have increasingly promoted an intermodal as well as a regional approach via the metropolitan planning organizations (MPOs) to freight transportation. Nevertheless, in practice, the transportation planning and operations culture remains strongly modal.

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<sup>52</sup> *Institutional Barriers to Intermodal Transportation Policies and Planning in Metropolitan Areas*, Transit Cooperative Research Program (TCRP) Report 14 (Washington, DC: National Academy Press, 1996), p. 3.

<sup>53</sup> *Ibid.*, pp. 3-4. Also, Personal Communication, James Ireland, Director of Information Services, Vancouver Port Authority, 12/20/04.

<sup>54</sup> Personal Communication, Gilchrist, 11/23/04.



Indeed, an illustration of the difficulty in shifting this culture is provided by the Transportation Security Administration which was originally structured with a more intermodal focus, but was then reorganized more along modal lines in order to work more effectively and efficiently with USDOT.

### **Inter-jurisdictional Barriers**

In addition to the organizational barriers, there are also inter-jurisdictional barriers, something of particular relevance in the downstate NY region, where there are multiple agencies, governmental authorities, and stakeholders involved, all with different missions and different views about their responsibilities and authorities regarding freight. According to Holguín-Veras and Paaswell,

*The complexity of this institutional structure is magnified by the power relationships among the agencies. Contrary to the case of simpler metropolitan regions in which a single agency – frequently a DOT – is able to marshal the power to play a dominant role in its region; in the NYC metropolitan region no single agency enjoy[s] a situation of dominance.<sup>55</sup>*

Moreover, the geographical boundaries that constitute the region are defined differently by different agencies and other groups. For example, while NYMTC is responsible for the 10-county region described earlier, the Regional Plan Association (RPA) focuses on a 31-county New York metropolitan region, encompassing the NYMTC region, but also including four additional counties to the north (Dutchess, Orange, Sullivan, and Ulster), three counties in Southern Connecticut, and fourteen counties in Northern New Jersey. The NYSDOT regional offices have yet another slightly different makeup in terms of the downstate New York focus: Region 10 covers Nassau and Suffolk on Long Island, Region 11 is responsible for New York City, and Region 8 extends beyond the NYMTC region, adding one additional county (Columbia) at their northern limit that is not included in the NYMTC or RPA regions.

Further compounding the difficulty is the fragmented nature of many of the private freight stakeholders who do not always speak with a single voice. Thousands of truck companies move throughout New York's east-of-Hudson River region, as well as two Class I freight railroads (CSX Transportation and Canadian Pacific Railway), two short-line regional freight railroads (New York & Atlantic Railway and Providence & Worcester Railroad), and the New York Cross Harbor Railroad's rail car float service. In addition, there are multiple air cargo carriers and marine cargo shippers, all of whom have an interest in seeing freight move efficiently throughout the downstate area.<sup>56</sup>

These inter-jurisdictional barriers can result in a reluctance to form true partnerships as each agency (and private company) tends to pursue its own interests and agenda. For freight, this is made more difficult when the responsibilities are not always clear and policies are often ill defined.<sup>57</sup> Beyond the agencies, there are multiple governmental entities that play varying roles in making decisions that affect freight movement either directly or indirectly. Such entities often have other interests in mind, in particular economic development, and do not always effectively integrate decisions regarding issues like land use and zoning with transportation projects and needs.<sup>58</sup> This is clearly a challenge for the downstate New York region as well. Along with New York City and the five county governments, the downstate New York region is comprised of another 189 governmental entities: 8 cities, 43 towns, and 138 villages.<sup>59</sup>

### **Resource Barriers**

Finally, the TCRP report identified several institutional-related resource barriers, including inadequate funding levels, insufficient information, insufficient human resources, and lack of adequate tools for

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<sup>55</sup> José Holguín-Veras and Robert Paaswell, "New York Regional Intermodal Freight Transportation Planning: Institutional Challenges," *Transportation Law Journal* 27, 3 (Summer 2000): 17.

<sup>56</sup> For more on multiple stakeholders, see Cambridge Systematics, *NYMTC Regional Freight Plan: Task 2*.

<sup>57</sup> *Institutional Barriers to Intermodal Transportation Policies and Planning in Metropolitan Areas*, Transit Cooperative Research Program (TCRP) Report 14 (Washington, DC: National Academy Press, 1996), p. 5.

<sup>58</sup> *Ibid.*, p. 6.

<sup>59</sup> The breakdown is as follows: Nassau County – 2 cities, 3 towns, 64 villages; Putnam County – 6 towns, 3 villages; Rockland County – 5 towns, 19 villages; Suffolk County – 10 towns, 30 villages; Westchester County – 6 cities, 19 towns, 22 villages. This listing does not include the various unincorporated entities.

analysis.<sup>60</sup> Inadequate funding presents an ongoing problem, particularly for freight projects which tend to be large in scale and complex institutionally. In the discussions leading up to the reauthorization of the federal transportation bill in August 2005, FHWA noted that “as long as freight projects must compete in such a highly constrained fiscal environment, they will advance slowly.”<sup>61</sup> Moreover, because benefits are often felt well beyond the localities in which freight projects are implemented, it is difficult to justify local funding so federal funding becomes all the more important. This is certainly seen in discussions for marine port improvements in the New York metropolitan region, where opponents often point to the fact that a significant share (15-25%) of containerized cargo is “discretionary,” with origins and destinations beyond the region that could be served by other ports, rather than having that cargo moving along the region’s transportation system.<sup>62</sup> The same types of discussions are repeated in other regions, like Southern California, which are associated with major international gateways or transportation hubs.

Even more significant perhaps, as increased emphasis is placed on finding alternative funding sources and establishing public-private partnerships, are the divergent planning and funding time frames for the public and private sectors. As William Goetz, Resident Vice President, NYC-NJ-CT for CSX Transportation, explains, because of the high levels of accountability and governmental processes needed when dealing with the public sector, the time to obtain funding can be significantly longer than is customary in the private sector where quarterly earnings are tracked and reported and results must be shown in short time frames.<sup>63</sup> Such differences in timelines can derail public-private enterprises when the public funding takes too long to set in place as the business environment continually shifts. Furthermore, because projects with broad public sector benefits are often characterized by long payback times, high risk, and insufficient equity, they are often perceived as likely to provide insufficient returns on capital, thus making them less appealing to private sector interests.<sup>64</sup>

## OTHER CHALLENGES

In some cases, institutional barriers are inextricably linked or even the cause of other constraints. NYMTC’s *Regional Freight Plan* identifies five key limitations for freight movement in the downstate New York region:

- Lack of coordination;
- Modal dependence;
- State of the infrastructure;
- Operational limitations; and,
- Economic challenges.<sup>65</sup>

Clearly, lack of coordination is related to these institutional barriers and economic challenges can be connected as well. Not as clear, perhaps, is the fact that some of the operational limitations are also related to such barriers. The private sector is responsible for most freight operations but the public sector has responsibilities that directly affect freight movement. Among these activities, the public sector provides infrastructure; owns and manages the highways, tunnels, bridges, ports, inland waterways, and commuter railroad networks; finances the construction and operation of facilities and collection of user fees related to freight; and provides regulation regarding freight movement.<sup>66</sup> If institutional barriers prevent effective action in any of these activities, operations can be hampered. Finally, in a culture characterized by modal separation, modal imbalances are that much more difficult to address since the mix of incentives and disincentives needed to shift are not easily developed in such a framework.

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<sup>60</sup> *Institutional Barriers to Intermodal Transportation Policies and Planning in Metropolitan Areas*, Transit Cooperative Research Program (TCRP) Report 14 (Washington, DC: National Academy Press, 1996), pp. 6-7.

<sup>61</sup> USDOT, FHWA, Freight Management and Operations, “Southern California Regional Freight Study,” p. 17, Accessed Online 6/15/04, [http://www.ops.fhwa.dot.gov/freight/freight\\_analysis/reg\\_ind\\_studies/so\\_cal\\_study.htm](http://www.ops.fhwa.dot.gov/freight/freight_analysis/reg_ind_studies/so_cal_study.htm).

<sup>62</sup> Cambridge Systematics, Inc., *NYMTC Regional Freight Plan: Task 2*, pp. 4-34 and 4-35.

<sup>63</sup> Personal Communication, William Goetz, Resident Vice President, NYC-NJ-CT for CSX Transportation, 2/7/05.

<sup>64</sup> USDOT, FHWA, Freight Management and Operations, “Southern California Regional Freight Study,” p. 18.

<sup>65</sup> NYMTC, *Regional Freight Plan*, p. ES-3.

<sup>66</sup> TRB, *Freight Capacity for the 21<sup>st</sup> Century*, p. ES-4. Also, USDOT, FHWA, *The Freight Story*, p. 14.

Planning in an environment in which the timelines for financing are so different also becomes increasingly difficult.<sup>67</sup> Moreover, because of the different missions, the priorities of the various agencies involved, and the fact that the freight constituency is so fragmented, little attention has historically been given to freight compared to passenger transportation. Further, even when freight plans are developed, they often exist side by side with passenger transportation rather than integrated with them even though the solutions to various capacity problems are often complementary. Indeed, according to an FHWA study on Southern California, “*some of the most successful public-private collaborations involve facility improvements that benefit both freight and passenger vehicle movement.*”<sup>68</sup>

Finally, there is a broader issue related to perceptions and understanding of freight. The majority of the population does not grasp the importance of freight beyond the package they ship or receive. As Russell notes, referring to this as an educational issue is too simplistic; it is deeper than that. The costs for freight are built into the costs for goods, but are not immediately obvious to the consumers. Further, as noted in Section 1, because the benefits of investments might be felt in locations much further away, communities often do not see or recognize them. Worse, freight-related topics about which the public is aware tend to be related to more negative aspects such as congestion, health, and safety concerns.<sup>69</sup>

## **STRATEGIES FOR REDUCING INSTITUTIONAL BARRIERS**

There is no single panacea for dealing with institutional barriers. Further, there are some barriers which necessitate changes beyond the region. For example, to deal with modal imbalances and move more freight transport off the highways, it is likely that a cultural shift toward true multimodalism and intermodalism at the highest levels will be needed. Without such a shift, actions taken in one region may still fail to generate the desired results since the mix of incentives and disincentives may still be insufficient for shippers to change behavior when they need to travel through multiple regions and can still rely on trucks elsewhere. With that said, it is worthwhile to explore some of the broadly recommended strategies with a mind to what has worked in other locations around the country relative to institutional barriers.

### **Types of Strategies**

The TCRP report on institutional barriers identifies several structural, procedural, and leadership strategies that could help reduce institutional barriers. Structural strategies focus on increasing integration, better defining visions, and establishing partnerships. Procedural strategies aim at reducing regulatory obstacles and increasing the sources from which funding may be drawn. Leadership strategies target capabilities, providing information, and sharing best practices.<sup>70</sup>

Structural strategies may be helpful for dealing the modal culture shared by most transportation agencies, the reluctance of these agencies to share power and authority, and the weaknesses of many of the MPOs in truly functioning as regional bodies that can integrate and prioritize projects. At the federal level, such strategies include, for example, placing more emphasis on modal integration. At a regional level, this could also be done by the various agencies which have an impact on freight. Another recommended structural strategy is for these agencies to redefine their missions and visions in terms of market needs rather than on modal solutions.<sup>71</sup> This is something that NYSDOT is already in the process of doing with its *Transformation for Tomorrow* initiatives, and with its focus now oriented more toward corridors.

Procedural strategies can aid in dealing with overly extensive regulations at the federal and state levels, as well as in tackling the difficulties associated with poorly integrated land-use and transportation decision-making processes. At the federal level, this means streamlining regulations and simplifying requirements, while implementing incentives for intermodal solutions. The latter would also be relevant at

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<sup>67</sup> USDOT, FHWA, *The Freight Story*, p. 17.

<sup>68</sup> USDOT, FHWA, Freight Management and Operations, “Southern California Regional Freight Study,” p. 20.

<sup>69</sup> Personal Communication, Russell, 1/26/05

<sup>70</sup> TRB, *Institutional Barriers to Intermodal Transportation Policies and Planning*, p. 12.

<sup>71</sup> *Ibid.*, p. 13.

the state level.<sup>72</sup> Also important here would be the need to have planners and policymakers working more closely together.

Leadership strategies aim at disseminating information and building skills. At all levels, they involve educating policymakers and their staffs on the importance of freight. Such strategies also involve disseminating information, both to enable more effective decision-making and to communicate success stories.<sup>73</sup>

Some strategies span these three categories. For example, a 2002 FHWA report recommends creating an institutional environment that supports identification and advancement of freight concerns within the transportation development process and establishing comprehensive and sustainable funding sources for freight projects and programs.<sup>74</sup> Creating this type of environment and these sources of funding would require structural, procedural, and leadership changes.

These are broad brush strokes and often require multiple steps in terms of actual implementation. Thus, it is helpful to look at a few examples of strategies that have been successfully implemented. Given the size and complexity of the downstate New York region as well as the multiple agencies involved, the region often has more in common with multi-state efforts. Thus, several examples are drawn from such situations.

### Coalition Building

Coalition building is a successful strategy for dealing with reducing multiple institutional barriers. It has been used in the I-95 Corridor, along the I-69 High Priority Corridor 18, and for the Latin American Trade and Transportation Study, to name a few. According to Paula Dowell of Wilbur Smith Associates, there are several advantages of such coalitions. First, they provide a greater sphere of influence and with it a collective power that no one entity can achieve on its own. Second, there is an agglomeration of economies that helps to deal with costs. Third, such coalitions allow for larger studies and the tackling of larger issues since funding can be pooled.<sup>75</sup> Finally, such coalitions can help attract funding.

Coalitions can range in formality, with informal collaborative efforts where there are no specific terms of reference on one end of the spectrum to situations guided by a Memorandum of Understanding (MOU) at the other end. Regardless of level of formality, successful coalitions have several common features:

- **Common goals.** This does not mean that all goals are shared, but that there is at least one issue on which there is agreement among the members and around which they can rally. Pursuing common goals also does not necessitate relinquishing jurisdictional control.
- **Existence of a champion.** The champion can take the form of a person, a private organization, or an agency, but someone or some group must be responsible for bringing everyone else to the table and for sustaining interactions.
- **Financial participation.** Each member of the coalition must provide some level of financial support. Such support is crucial for maintaining and showing others a level of commitment.
- **Private sector support.** Private sector support is helpful since a well-organized group can play an advocacy role on key issues that public agencies often cannot.
- **Federal agency involvement.**<sup>76</sup> This last point has been a feature of multi-state efforts, and can be important for dealing with funding (particularly if it comes from multiple sources) as well as for aiding in coordinating between different states.

Also of importance, for the purposes of the downstate region, is that the success of such coalitions is often facilitated by previous experiences of working together. In other words, as trust is built, barriers for future collaboration are reduced. This is illustrated by the experience of the Joint Users' Group described briefly in Section 2. The larger study now in place on MTA Metro-North's Hudson Line was not the first

<sup>72</sup> TRB, *Institutional Barriers to Intermodal Transportation Policies and Planning*, p. 16.

<sup>73</sup> *Ibid.*, p. 18.

<sup>74</sup> USDOT, FHWA, *The Freight Story*, p. 29.

<sup>75</sup> Paula Dowell, "Multi-state/Jurisdictional Freight Transportation Planning," Presented for the FHWA Talking Freight Seminar, 12/15/04.

<sup>76</sup> *Ibid.*

step taken by the group. Initially NYSDOT brought the various parties together to discuss everyone's concerns related to capacity constraints on the Hudson Line and determine whether they could agree on some solutions. Several earlier steps were taken on specific efforts to alleviate some of the infrastructure constraints. It was only after working together on these initiatives that over time the group decided a larger study would be useful.<sup>77</sup>

Once built, a coalition needs to be sustained. Here the keys to success are maintaining funding streams and implementing proposals. If either of these fails to occur, the coalition tends to fall apart over time since the benefits of joint action are not realized.<sup>78</sup> Following are several examples from around the country of different types of coalitions that have been successful to varying degrees in dealing with freight traffic.

### ***Mid-Atlantic Rail Operations Study (MAROps)***<sup>79</sup>

The I-95 Corridor Coalition *Mid-Atlantic Rail Operations Study*, completed in 2002, is a good example of a successful coalition dealing with freight movement. Indeed, according to Marygrace Parker, Program Coordinator for Freight, Mobility, Safety, and Security at the I-95 Corridor Coalition, MAROps helped "create the model for how to bring everyone together to develop a benefits assessment model that assesses project benefit accruals across jurisdictional lines."<sup>80</sup>

The impetus behind the study came from the various stakeholders – Amtrak, Norfolk Southern Railway, CSX Transportation, and the five states involved (Delaware, Maryland, New Jersey, Pennsylvania, and Virginia). The stakeholders recognized that the rail system along the corridor was designed in the 19<sup>th</sup> century to serve east-west traffic and was ill-equipped to meet current or future north-south traffic demands. Further, a great deal of the capacity limitation was imposed by the need to share tracks between freight and passenger rail, as well as by clearance issues and choke points in specific locations.

In terms of goals, the private railroads were interested in increasing capacity between Richmond, VA and northern New Jersey. For some time, the railroad companies had been discussing infrastructure improvements with New Jersey Department of Transportation (NJDOT) and it was clear that investments made around the Port in New Jersey would not be helpful unless changes were implemented in other portions of the system as well.<sup>81</sup> At the same time, senior level executives at the state level throughout the corridor were interested in and willing to try tackling some of the difficulties as a means for reducing truck traffic along the adjacent highway corridor. NJDOT, for example, had its own program of \$130 million in improvements, but was looking to coordinate its efforts; MAROps provided that opportunity.<sup>82</sup>

With reauthorization of the federal bill approaching, there was added incentive on the part of all the parties to address these concerns. On July 18, 2001, though the group was already in place, the Baltimore fire CSXT's Howard Street Tunnel further highlighted the need to tackle the problems faced and the need for a multi-jurisdictional approach, since the ripple effects of this incident were felt in New Jersey, Delaware, and Pennsylvania.

Foremost in the minds of the participants was the need to make the project manageable so that consensus could be reached about common goals and actions could be taken. Thus, there was a clear decision to focus on the rail system in the five Mid-Atlantic States and to hold off on including New York State, which was viewed as sufficiently dissimilar in its rail capacity constraints as to warrant its deferral to a later effort. However, there was a sense from the beginning that additional studies would be needed to look beyond the mid-Atlantic region, and in July 2004, the *Northeast Rail Operations Study* (NEROps) began. Using MAROps as the model for bringing the stakeholders together to identify constraints and develop a benefits assessment, NEROps aims to bring together the states of New York, Connecticut,

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<sup>77</sup> Personal Communication, Kennard, Nangle, and Smith, 1/6/05.

<sup>78</sup> Dowell, "Multi-state/Jurisdictional Freight Transportation Planning."

<sup>79</sup> Except where noted, the discussion here is based on Personal Communication with Marygrace Parker, Program Coordinator for Freight, Mobility, Safety, and Security, I-95 Corridor Coalition, 12/3/04.

<sup>80</sup> Personal Communication, Parker, 12/3/04.

<sup>81</sup> Personal Communication, John Powers, Administrative Analyst I, Freight Liaison, Intermodal, NJDOT, 1/28/05.

<sup>82</sup> Ibid.

Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont, with the railroads and border crossing authorities relevant to the region.<sup>83</sup>

Commitment for the five states' participation was received from the Executive level of each of the transportation agencies. Much of the championing of this commitment was under the leadership efforts of Anne Canby, then-Secretary of Transportation for Delaware. Joseph Boardman, Commissioner of NYSDOT, also played an important role in raising the profile of rail as a major transportation system issue via his work with the American Association of State Highway and Transportation Officials (AASHTO) on the *Transportation – Invest in America: Freight-Rail Bottom Line Report*. In fact, according to Steven Eisenach, Director of Public Partnerships at Norfolk Southern Corporation, the immediate impetus for his company's involvement was a comment by Boardman noting that there was no more room to build additional roads and that the railroads were needed to deal with congestion and capacity issues in the corridor.<sup>84</sup> The I-95 Corridor Coalition played the role of the honest broker, providing a neutral forum for the multiple stakeholders to explore their interests, issues, and goals. Importantly, issues of funding were not raised until common goals had been established.

Finally, in terms of commitment, Parker explains that the fact the private railroads were willing to provide half the funding for the study was critical. By providing their monies, as well as other resources, and effort, the railroads demonstrated their commitment to the project and to its outcome.<sup>85</sup> This commitment was matched on the public sector side at the highest possible levels. Without the buy-in of executives on both sides, the project would not have been as successful.

In terms of process, having the key stakeholders together was important since it allowed for a degree of transparency that would not have been possible with one-on-one discussions among the various entities. Further, early on it became clear that a common lexicon was needed since initially, the railroad companies and departments of transportation pointed more toward their differences than their similarities, which made identifying common goals more difficult. Once the participants moved past defining differences to finding common problems, they were able to develop common goals and identify specific projects to address them.<sup>86</sup>

The result of the project is a proposed program of \$6.2 billion that would implement 71 infrastructure and information system improvements. These improvements are divided into those that need to be addressed in the near-term (within 5 years), medium-term (5-10 years), and long-term (10-20 years) and are itemized by state.<sup>87</sup> Additional studies were also conducted alongside MAROps to examine freight financing and how to fund regional transportation initiatives. Efforts are now focused upon tweaking the internal priorities as well as better understanding how benefits resulting from implementation of the project components will accrue beyond the five-state region.

Of the 71 identified improvements, one has been accomplished thus far – Norfolk Southern Railway's Shellpot Bridge near Wilmington, DE. Beginning in December 1994, when Conrail discontinued service over the bridge, freight trains operating in Wilmington had to run on Amtrak's Northeast Corridor through the Wilmington Transit Center. This route hampered access to the Port of Wilmington. Delaware Department of Transportation (DelDOT) agreed to pay for the restoration of the bridge through a combination of a \$5 million grant and tax-exempt bonds, with the understanding that Norfolk Southern would repay DelDOT over the next two decades through a toll system, believed to be the first of its kind east of the Mississippi. Norfolk Southern will pay DelDOT an annual minimum, regardless of the amount of traffic; however, after that minimum the more volume over the bridge, the lower the cost of the toll per unit.<sup>88</sup>

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<sup>83</sup> For more on NEROps, see <http://144.202.240.28/pman/ViewProject.asp?pid=183>, Accessed Online, 2/1/05.

<sup>84</sup> Personal Communication, Steven Eisenach, Director, Public Partnerships, Norfolk Southern Corporation, 2/1/05.

<sup>85</sup> Personal Communication, Parker, 12/3/04.

<sup>86</sup> Personal Communication, Powers, 1/28/05.

<sup>87</sup> Cambridge Systematics, Inc., and Parsons Brinckerhoff Quade and Douglas, Inc., *Mid-Atlantic Rail Operations Study: Summary Report*, Prepared for the I-95 Corridor Coalition (April 2002).

<sup>88</sup> Personal Communication, Eisenach, 2/1/05.

According to Eisenach, the restoration of the bridge has allowed for the volume of rail traffic to increase by multiples of the estimates. Moreover, the Port has been able to increase its volume and access to the Delmarva Peninsula has also been enhanced. Further, as DeIDOT points out, since there is no longer a need to route freight trains through the Wilmington Amtrak Station, congestion is eased for passenger rail service as well.<sup>89</sup>

### ***Delaware Valley Regional Planning Commission (DVRPC)***<sup>90</sup>

Another type of coalition building model is provided by the freight efforts of the DVRPC, the MPO for the Philadelphia-Camden metropolitan region. Covering an area including 9 counties within 2 states, DVRPC's freight efforts are broader than those of the I-95 MAROps study; however, they offer some additional insights for effective collaboration on freight movements.

According to Ted Dahlburg, Manager, Office of Freight Planning at DVRPC, their overarching approach to freight is to be comprehensive, continuous, and coordinated – what he refers to as the 3-C approach. Freight efforts are comprehensive since all modes are represented in meetings; they are continuous, having begun in 1992 with four scheduled meetings annually with representatives from the highest levels; and coordinated so that everyone knows what is happening, when it is happening, and why.<sup>91</sup>

The DVRPC's Freight Advisory Committee, the Delaware Valley Goods Movement Task Force, provides the "context and focal point" for freight and is a good mechanism for updating members on issues and efforts. The Committee is currently co-chaired by a Pennsylvania Deputy Secretary of Transportation and the Executive Director of DVRPC. Three subcommittees (Data, Planning, and Shippers) are each headed by private sector representatives (currently from Norfolk Southern Corporation, a consulting firm, and Sunoco, Inc., respectively). Members on the Committee include representatives from carriers, shippers, economic development agencies, member governments and adjacent regions, as well as federal agencies and consultants.

Leadership has been a critical component of DVRPC's success, but Dahlburg is quick to point out that while leadership at the highest levels of the participating organizations is necessary, well-versed and professional staffing is also crucial to move the work ahead. Members of the committee represent the states and counties as well as the three Class I and ten short line railroads represented in the region, the public and private port facilities, and trucking and aviation representatives.

One of DVRPC's strategies is to share successes on a regular basis. In Dahlburg's words, "*they keep both big and little things before the committee at all times so members see progress; they see tangible products resulting from their participation.*"<sup>92</sup> For example, each year, as the overall work plan is developed, the Goods Movement Task Force is approached for their views on what needs to be incorporated and for the past five years, the Committee's first priority project has consistently been funded. Nevertheless, funding transportation improvements continues to be a looming concern, particularly as the Task Force looks to fund the MAROps suggested projects.

Finally, Dahlburg points to the need for flexibility and education as integral to successful efforts in addressing freight movement. It is important to remember this is a process and that as the business environment changes, priorities may as well. At the same time, it is critical to educate committee members and the larger communities on the importance of freight, their role in it, and the benefits they accrue from efficient freight flows.

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<sup>89</sup> DeIDOT, "Shellpot Bridge is Open for Business," *Press Release* 9/2/04, Accessed Online 2/21/05, <http://www.deldot.net/public.ejs?command=PublicNewsDisplay&id=1946&month=9&year=2004>.

<sup>90</sup> Information here is drawn largely from Personal Communication, Ted Dahlburg, Manager, Office of Freight Planning, DVRPC, 12/17/04.

<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

### ***Southern California Association of Governments (SCAG)***

SCAG is the MPO responsible for California's Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial Counties has also been doing a great deal in building coalitions to support freight activities in Southern California. Indeed, it views itself as playing the role of regional "integrator" on issues of freight.<sup>93</sup>

Like the downstate New York region, SCAG is faced with a particularly complex jurisdictional environment, consisting of the five county transportation commissions, 14 sub-regional councils of government, 4 district offices of the California Department of Transportation (Caltrans), several joint power authorities, and 184 cities. (Unlike the downstate New York region, Caltrans is involved but has not played as central a role on freight as NYSDOT is beginning to play.) The region is home to the largest container port complex (including the Ports of Los Angeles and Long Beach), a major air cargo center that includes 8 airports, a rail hub, and numerous distribution centers. As the second largest metropolitan area in the country, it is also one of the largest markets for freight service.<sup>94</sup>

Southern California is also facing some of the same pressures as the downstate New York region. Projections forecast growth of over 80% in goods movement by 2020 – a more than 65% increase in truck traffic, over 240% increase in rail tonnage, and over 300% increase in air cargo tonnage.<sup>95</sup> At the same time, the population is expected to increase by more than 5 million, exacerbating congestion while increasing the internal market.<sup>96</sup>

Within this complex situation, SCAG has had a number of successes related to freight. Among them, the Alameda Corridor is an example of a success in bringing large capital projects on freight to the region as well as providing a model for funding that combined local grants, federal loans, and user-fee-backed revenue bonds. Infrastructure improvements have been undertaken at the regional marine and airports; the West Coast Waterfront Coalition has been instituted to organize shippers and other stakeholders in an effort to address logistics in the area; and several travel demand models have been developed and studies undertaken to generate much needed data.<sup>97</sup>

As with other collaborative efforts, SCAG has been successful at maintaining the interest of the various stakeholders and at identifying some common goals. This has been helped, in part, by a sense of urgency – the region is perceived to already be in the midst of a crisis situation, not heading toward one. (According to Nancy Pfeffer, Senior Regional Planner at SCAG, concerns have risen since the release of a study that showed even if multiple strategies are undertaken, congestion would only be maintained rather than reduced, and emissions would continue to worsen from already unacceptable levels.)<sup>98</sup>

Leadership plays a role in SCAG's efforts as well and, as Pfeffer and Naresh Amatya (Lead Planner for the Regional Transportation Plan) noted, having the governor heavily interested in finding solutions for addressing freight certainly helps. As with the DVRCP, SCAG also has coordinated and regularly held meetings to discuss freight. Also similar is SCAG's focus on keeping issues relevant to the stakeholders and on providing an ongoing perception that solutions will be found and implemented. In other words, the stakeholders see progress occurring.

### ***Pacific Gateway Portal (PGP)***<sup>99</sup>

Internet and web technologies, and the ease and immediacy with which one can now access information, are displacing the old model of closed enterprises with fixed boundaries and discrete islands of information. Instituted at the west coast of British Columbia roughly three years ago, the PGP is a Web based *community* system to help gateway stakeholders manage business growth and related information processing requirements, while improving customer service, gateway operating performance, and safety.

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<sup>93</sup> Personal Communication, Nancy Pfeffer (Senior Regional Planner) and Naresh Amatya (Lead Planner for the Regional Transportation Plan), SCAG, 1/10/05.

<sup>94</sup> USDOT, FHWA, Freight Management and Operations, "Southern California Regional Freight Study, pp. 2 and 11.

<sup>95</sup> *Ibid.*, p. 8.

<sup>96</sup> *Ibid.*, p. 9.

<sup>97</sup> *Ibid.*, pp. 13-16.

<sup>98</sup> Personal Communication, Pfeffer and Amatya, 1/10/05.

<sup>99</sup> Unless otherwise noted, this section is drawn largely from Personal Communication, James Ireland, Director of Information Services, Vancouver Port Authority, 12/20/04.



Initial discussions and studies centered on either a centralized vessel data repository or a specific business problem (e.g., the need to better coordinate dangerous goods incidence response). Since its introduction, several new PGP applications have been implemented related to land side logistics and security. One of the earliest of these types of systems, the PGP has been pointed to as a particularly successful example and one for others to emulate. Several interest groups are involved, focused around several different issues (e.g., security, empty container markets).

In terms of successfully developing the PGP, careful planning up front by a group of stakeholders at the Port and in the surrounding business community was critical.<sup>100</sup> The process contained four elements: (1) development of the vision; (2) development of the plan for how to implement the vision in practical terms; (3) identification of a development team; and, (4) implementation and maintenance of the system, especially in terms of how and from where funds will be raised.<sup>101</sup> The Vancouver Port Authority (VPA) played the primary leadership role in terms of developing the vision and helping to bring other stakeholders to the table.

There were several important incentives for participation in the effort, including clear evidence demonstrating potential cost savings; reciprocity within the relationship; and contributions to the project from the Vancouver Port Authority, the province, and the Crown. Once common goals were identified, a service level agreement was drawn up to ensure maintenance of a certain level of service. The document identifies critical success factors that help maintain focus and provides several metrics for measuring success, particularly in the area of customer satisfaction and system performance.

As with other successful collaborative efforts, the various stakeholders involved provided funding for the initial efforts, demonstrating commitment to the effort. The PGP has proven successful in several areas, including vessel tracking and managing hazardous cargo. They have been enhancing security systems, and managing access card technologies. Dealing with landside container logistics is still difficult since the groups involved are very fragmented, and there are many data pools that still need to be combined effectively.

The lessons learned in terms of successfully implementing the PGP are similar to those from other coalition building experiences. Most important, perhaps, is to “plan big, but deliver small.” In other words, according to Ireland the vision needs to be broad, but deliverables should be seen often in small increments so stakeholders see movement and progress.

### **Technological Strategies – Means, Not Ends in Themselves**

Technological strategies offer a means for mitigating some of institutional as well as other types of barriers. As Dilara Rodriguez, Project Manager at Caltrans, explains “*technological strategies tend to show a high value of return.*”<sup>102</sup> Thus, they warrant a brief but separate discussion.

Technological strategies can help agencies attend to operational issues related to freight, but they can also provide information (addressing resource-related institutional barriers), aid in facilitating interaction across modes (easing organizational-related institutional barriers), and reduce jurisdictional-related barriers by centralizing information and/or access. This last point is exemplified by efforts of the New York State Transportation Federation to implement a unified permitting system. Similarly, the broader region’s experience with E-Zpass<sup>sm</sup> has demonstrated the successful use of technology combined with coalition building efforts.

However, it is important to keep in mind that, for the most part, for dealing with freight flows, technological efforts alone cannot in themselves be effective without some form of collaboration or cooperative effort

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<sup>100</sup> USDOT, *Freight Information Real-Time System for Transport (FIRST) – Evaluation Final Report* (Washington, DC: USDOT, October 2003), p. ES-3. Among the founding members were the Chamber of Shipping of British Columbia, Canadian National, Pacific Pilotage Authority Canada, Marine Container Inc., Team Transport Services Ltd., Terminal Systems Inc., the Fraser River Port Authority, and the Vancouver Port Authority. Personal Communication, Ireland, 12/20/04.

<sup>101</sup> Personal Communication, Ireland, 12/20/04.

<sup>102</sup> Dilara Rodriguez, “National I-10 Freight Corridor Study,” Presented for the FHWA Talking Freight Seminar, 12/15/04. The presentation may be accessed at [http://www.fhwa.dot.gov/download/hep/freightplanning/talking\\_freight121504dr.PPT](http://www.fhwa.dot.gov/download/hep/freightplanning/talking_freight121504dr.PPT).

already in place. One of the key reasons for the success of the PGP described above, for example, was the tremendous amount of planning and stakeholder interest and involvement prior to launching the PGP. Commitment was further demonstrated by their providing some amount of funding for the system. In contrast, the downstate New York region's experience with the PANYNJ-run *Freight Information Real-Time System for Transport* (FIRST) has not been as successful.

Similar to the PGP, FIRST is an internet-based, real-time network that integrates numerous sources of freight location and status information in a single web portal. Types of information potentially available in both systems include real-time container status, vessel schedules, web cameras, and port traffic conditions. However, FIRST's initial focus was solely on motor carrier and truck data, rather than on a broader vision of what was needed at the marine port facilities. Further, the data that has been collected has, in cases, been faulty with regard to timeliness and accuracy. Moreover, according to a USDOT evaluation report on FIRST, there is little incentive for stakeholders to participate and update information. In fact, a number of terminal operators and ocean carriers have begun their own websites, making them even less likely to share data in the future.

USDOT's evaluation report concluded that FIRST has been unsuccessful achieving many of the goals identified. It has not reduced truck wait times at the terminal gates; it has not assisted in the exchange of more accurate information, partly because there are so few users at this point in time; and there has been no appreciable difference in the efficiency of the Port facilities or in emissions.<sup>103</sup>

One could argue that FIRST failed to function as intended because the emphasis was placed on the technology rather than on coalition building. Indeed, one of the key elements for successful coalitions – requiring some level of financial commitment from stakeholders – was not expected in the case of FIRST.<sup>104</sup> Further, focusing primarily on truckers excluded the many other stakeholders that needed to take part in shaping the common goals and vision for the project.

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<sup>103</sup> USDOT, *Freight Information Real-Time System for Transport (FIRST) – Evaluation Report*, pp. ES-63 to ES-65.

<sup>104</sup> *Ibid.*, pp. ES-2 to ES-4.

## 4. OVERCOMING THE BARRIERS – FINDINGS AND SUGGESTIONS FOR ACTION

The combination of literature review and interviews for this study yielded several interesting findings regarding institutional barriers in the downstate region, as well as some suggestions for addressing them. All three types of institutional barriers (organizational, inter-jurisdictional, and resource) are represented in the downstate New York region. Additional institutional barriers at the federal level affect the region (e.g., modal separation at the federal level that affects funding sources and the ability to draw from them for multimodal freight projects).

While addressing the barriers at the federal level may be more difficult, there are a number of steps that might be taken regionally to effect change within the downstate New York region. To determine how best to proceed, it is helpful to move from the more theoretical constructs described in Section 3 to the more concrete findings related to how these barriers are expressed in the region.

### FINDINGS

#### 1. **While broad priorities may be shared, specific rankings are not**

The *NYMTC Regional Freight Plan* identifies a number of recommended freight-related projects and studies for the region. In principle, the agencies agree with this listing; however, when asked to provide a rank order, results were markedly different from agency to agency and tended to be reflective of the different constituencies they serve.

#### 2. **Leadership is a necessity**

The importance of effective leadership on any transportation issue, and particularly on freight, cannot be understated – this is demonstrated repeatedly. Yet, it has been lacking in the downstate New York region. NYSDOT's positioning itself in this role is an important step for the region and one that is welcomed, at least in principle, by many of the region's agencies.

#### 3. **Sufficient distribution of information is lacking**

A quick review of the projects currently in place in the downstate New York region reveals some of the inadequacies of information dissemination on freight within the region. To track down projects, one must visit multiple agency websites, and the information available on those sites is often outdated and/or difficult to find. More importantly, during the interviews, several individuals noted studies they had been involved with in the past and pointed out that they no longer were aware of the status of such projects because they were no longer directly involved in them and it was often not a simple task to track down the information.

#### 4. **To fully address modal imbalances within the region, actions may be required beyond it**

When asked about the modal shares in the region, especially East of Hudson, the standard response is that more freight rail service is needed in order to move trucks off the already congested roadways. However, as Pally noted, *“while everyone may agree at the macro level that more goods should be moved by rail, determining at the micro level which specific businesses should begin this shift is much more difficult.”*<sup>105</sup> This sentiment was echoed by Goetz as he explained that moving freight from one mode to another is a significant business decision and many freight-reliant companies are more comfortable with their traditional ways of doing business.<sup>106</sup> Furthermore, there is a similarity here to the “one-seat ride” preference demonstrated by passengers in that freight carriers also tend to be less willing to use multiple modes for trips unless significant time and/or cost savings are demonstrated. Thus, a cultural shift (based on a clear policy choice), at the national level that truly fosters intermodalism and that leads to a different combination of incentives and disincentives within and beyond the region may be needed to see significant movement toward non-highway modes of transportation.

<sup>105</sup> Personal Communication, Pally, 1/14/05.

<sup>106</sup> Personal Communication, Goetz, 2/7/05.

## 5. Improved public awareness is important

There are several aspects to this finding. With respect to non-agency stakeholders, there are numerous freight-related projects and studies already in place in the downstate New York region, but as several individuals noted, the perception is often that not much is occurring. Another facet of this finding relates to the need to better educate community groups and non-transportation related business leaders about the importance of freight and the hidden costs associated with inefficiencies in the transportation system.

## 6. Private sector involvement is needed

The private sector is important for several reasons. Certainly as more public-private partnerships are sought for funding, private sector companies are a source of funds. However, they play other roles as well. The private sector can help raise the profile of freight-related efforts and can play an advocacy role that public sector agencies cannot. Furthermore, private sector companies can aid in taking the pulse of customers and markets, something of particular importance given dramatically different times lines within which public and private sectors work.

## SUGGESTED ACTIONS

While some of the findings point to effecting change beyond the region, several actions can be taken more locally to mitigate some of the institutional barriers in the downstate New York region. The following paragraphs provide some suggestions, both in terms of overall approach and specific actions.

### Changes in Overall Approach and/or Philosophy

Several of the suggested actions reflect the need for an overall change in approach and/or philosophy. Such shifts often require a longer time frame but remain important. They are described in the following paragraphs.

#### 1. Focus on Short-term Actionable Goals and Highlight Successes

The issues posed by freight are complex and interrelated and can take many years to address. Focusing on short-term goals within the larger policy picture, helps make the situation manageable and leads to quicker successes that show progress and keep participants at the table for the longer-haul projects. Highlighting successes also aids in changing the perception that little is happening within the region.

#### 2. Formulate Additional Research/Analyses within a Regional Framework

In times of fiscal constraint, prioritizing projects is critical even if all are valuable. However, a current National Cooperative Highway Research Project (NCHRP), suggests that a key barrier is the *“lack of generally accepted procedures for identifying, evaluating, selecting, and funding freight initiatives.”*<sup>107</sup> The research from the NCHRP describes various types of assessments (e.g., benefit-cost analysis, cost-effective analysis) and describes the limitations of each regarding decision making on rail freight.<sup>108</sup> Further assessment and recommendations are expected from this project and warrant careful review since they will likely be relevant for other freight decisions as well.

Regardless of the type of analysis, however, there is another issue when dealing with regional projects. If the goal is to develop priorities on a *regional* basis, then regional assessments are needed. In some cases, this might mean combining several project assessments together and comparing them to some other combination or alternative. In other cases, it might mean comparing different types of projects that all have regional implications. For example, in addition to a cost-benefit analysis comparing a cross-harbor rail freight tunnel to expanded rail car float operations, a comparison might also be made to cargo access to JFK, with a view to the overall

<sup>107</sup> TRB, NCHRP, “Rail Freight Solutions to Roadway Congestion: Interim Report on Transportation Trends, Road-to-Rail Diversion and Model Elements for Decision-making,” NCHRP 8-42, Task 3-4-5-6, Prepared by Reebie Associates, Economic Development Research Group, Draft Report, 2/4/05, p. 95.

<sup>108</sup> *Ibid.*, pp. 104-106.

costs and the benefits that would be accrued on a regional basis. Finally, when thinking on a regional basis, assessing implications for New Jersey and Connecticut will also be important at times, particularly when there is federal funding involved. Analysis along these lines would be an important tool for helping make regional decisions on priorities.

### **3. *Build Upon Already Existing Agency Relationships, and Expand and Strengthen Relationships with Non-agency and Non-transportation Stakeholders***

In their paper on institutional challenges for freight planning in the New York region, Holguín-Veras and Paaswell outlined three sets of options for moving forward: modifying the agenda and mandates of different agencies; defining interagency cooperative agreements; or taking steps to either change or create new agencies.<sup>109</sup> Notwithstanding recent transformation changes within NYSDOT, given the history of the agencies and the political dynamics in the downstate New York region, the second of these choices in some form, is likely to be most realistic in the near term.

As an overall framework in which to approach freight flows in the downstate New York region, building upon *and expanding* already existing relationships among the agencies and key non-agency (e.g., railroads, shippers, trucking companies), and non-transportation stakeholders (e.g., business associations, Departments of Environmental Protection or Conservation) in the region will be critical. In areas where there have been successful endeavors in dealing with freight (or transportation more broadly), coalition-building has proven helpful in generating political and financial support for freight-related activities, as well as for coordinating across modes and jurisdictions.

The components of successful coalitions were described earlier and they would hold true for this region as well – identification of common goals; leadership; financial participation; private sector support; and federal agency involvement. There are examples already existing within the region albeit aligned more by project (e.g. Hudson Line Railroad Corridor Transportation Plan); but a broader, transparent approach to find common policy goals across the whole region and across specific projects will be important.

### **4. *Craft a “Marketing Strategy” for Freight Activities***

Several individuals noted the difficulties associated with perceptions regarding freight and freight-related transportation activities. On the one hand, there is a perception that not enough is happening in the region. This can be dealt with, as noted above, by highlighting successes more effectively and better disseminating and/or providing better access to information about all the activities in the region. On the other hand, there is the broad lack of understanding of how transporting freight affects people’s everyday lives, which often makes it difficult to garner community, business, and even policy leader support for freight. Again, some of this can be dealt with by highlighting successes. However, there are some other considerations and potential courses of action as well.

First, given how much of the downstate New York region’s transportation system is shared by freight and passengers, many investments that will aid freight flow will also benefit passenger flow as well. The benefits to passengers need to be more explicitly described. In a culture where, as one individual described it, “*freight has often taken a back-seat to passenger transportation,*” demonstrating these benefits could help gain the support of voters, or at least lessen their opposition as they see complementary interests served.

Second, reminiscent of the MAROps discussion regarding the need for a common lexicon among highway and railroad officials, a common language is needed for demonstrating the impact freight transportation has for the general population, particularly in terms of costs and benefits. Generating this type of information in a format easily accessible could help broaden and deepen the understanding of how freight transportation affects everyone and build support for initiatives.

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<sup>109</sup> Holguín-Veras and Paaswell, “New York Regional Intermodal Freight Transportation Planning,” p. 18.

## Specific and Tangible Actions

In addition to modifications in approach or philosophy are two specific and tangible actions that could be implemented in a shorter time frame. They are as follows.

### 1. **Create a Senior Level Freight Steering Group**

Support at the highest levels of the various agencies and non-agency stakeholders is important. Several examples of regional arrangements that have met with some success (e.g., Delaware Valley Regional Planning Commission, Southern California Association of Governments, I-95 Corridor Coalition) point to regular meetings at the highest levels. As the agency with the broadest planning and operational reach within the State, NYSDOT should consider taking the lead in convening such a group on a regular basis. The group could draw upon the work of the NYMTC Freight Transportation Working Group, which is already in place. To fully benefit from such a coordinated relationship, the NYMTC Group should also consider moving away from holding meetings on an *ad hoc* basis and establish a regular schedule more along the lines of the Delaware Valley Regional Planning Commission. This way NYMTC's work and discussions could more easily be coordinated with the work of the higher level group hosted by NYSDOT.

### 2. **Develop a Central Source for Accessing Comprehensive and Updated Information on Freight Projects, Studies, and Issues**

Sharing information is a critical component to any coordinated effort and serves several important roles. Information sharing among agencies (and potentially private company stakeholders) can help achieve and maintain common goals and can aid in building trust among participants. Sharing information about projects not only helps to keep everyone aware of what is happening, but also may help avoid redundant studies while helping participants see links among those that are relevant to each other. Sharing information on best practices within and outside the region can also be helpful. Finally, for the purposes of coalition building, it is imperative to share information on progress being made.

Several individuals noted it would be helpful to have a central location for such information that could be updated on a regular basis. A technological solution for this is not difficult to accomplish and has the potential to yield great value. A website could be developed as a centralized location for all freight-related projects in the region. The site could be used for not only for updating the agencies on projects so they know everything happening that might be of interest, but with timely updates could also aid in demonstrating progress to those directly involved in each of the projects. While there would be upfront costs to design the site and populate it, beyond this the primary cost of such an endeavor would be related to personnel costs.

With respect to potential difficulties, the first issue to contend with would be which agency, if any one, should oversee such a site. The obvious answer is the regional MPO, NYMTC. However, NYSDOT could assume this role if it so chose or a non-agency entity, like the University Transportation Research Center in Region 2 or some other university, could do so as well. Of these three, though elsewhere this report has called for leadership by NYSDOT, on this item, having a more objective institution would be preferred (even if NYSDOT contracted out with them for services). NYMTC would, in fact, be a preferred choice since they are responsible for the Transportation Improvement Program and the Regional Transportation Plan, among other formal documents, and should thus be in a better position to determine whether all projects have been included on the site.

The information sharing website would need to be developed so it is user-friendly and allows more interaction than the current NYMTC website. While the specific format and functions associated with the website are beyond the scope of this study, one potential model is the *Works in Progress* component of the American Association of State Highway and Transportation Officials (AASHTO) Asset Management website <http://assetmanagement.transportation.org>. Another example is provided by [ContextSensitiveSolutions.org](http://ContextSensitiveSolutions.org), though the latter focuses more on work

already formally published rather than in progress. A combination of these is preferable, with a location specifically for works in progress, and a location for final outcomes.

The key would be to determining how the information would be gathered and updated on a regular basis. Given the experiences of others who have attempted such types of sites, it is strongly recommended that if this option is taken, there is some central mechanism for gathering and updating; if each agency is left to do this on its own, it likely will not be as successful. This is another reason for centralizing this website somewhere other than NYSDOT and preferably at NYMTC since as noted earlier, the MPO should be in the best position to ensure that all projects have been included and are being updated.

Finally, a website could also be helpful in educating the public about freight and serving as a marketing tool. Such a use would be geared toward a different audience and would need a different design with information accessed in a different way than the site described above, but the importance remains of having a single location in which to obtain such information. Indeed, with a single location, both functions could be developed with an internet and intranet option – the former for the general public and the latter for NYMTC’s member agencies.

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