



New York City Truck Route Management
and Community Impact Reduction Study

Technical Memorandum 4
Education Program

March 2007



New York City
Department of Transportation
Iris Weinshall, Commissioner



Edwards
AND **Kelcey**

The logo for the consulting firm Edwards and Kelcey. It features the name "Edwards" in a bold, italicized font above the word "AND" in a smaller font, and "Kelcey" in a bold, italicized font below it. A horizontal line is positioned above the "Edwards" text.

TECHNICAL MEMORANDUM 4

Education Program

MARCH 2007

TABLE OF CONTENTS:

1. INTRODUCTION	1
A. PURPOSE OF THE EDUCATION PROGRAM	1
2. AWARENESS OF TRUCK ROUTE REGULATIONS AND POLICIES.....	4
A. GENERAL PUBLIC	6
B. BUSINESS COMMUNITY	12
C. TRUCKING INDUSTRY	15
D. LAW ENFORCEMENT	19
E. GOVERNMENT AGENCIES	22
3. RECOMMENDATIONS.....	25

LIST OF FIGURES:

Figure 3-1: Portion of Citywide Truck Route Map	28
Figure 3-2: Flow Chart of Typical Truck Route Call to 311	34
Figure 3-3: Port Authority Bus Terminal Kiosk.....	40
Figure 3-4: Proposed NYPD Placard Design	43

LIST OF TABLES:

Table 2-1: Existing Information Sources and Issues for Each Stakeholder Group	5
Table 2-2: Awareness of Truck Routes by Borough	8

APPENDIX:

Appendix A: Education Plans by Stakeholder Groups

1. INTRODUCTION

a. Purpose of the Education Program

Key to the success of a self-enforcing truck route program is the development and dissemination of a comprehensive education program. The results of public outreach efforts have indicated that the identified stakeholder groups have varying levels of knowledge concerning existing regulations and policies. In order to elevate this level of understanding, provide for a higher level of adherence to the regulations and policies, and improve the overall quality of life for City residents, a concerted and ongoing education program should be implemented.

The program should be developed in a manner that strives to educate the various stakeholder groups in a manner that is most appropriate to the needs of each group. The program should likewise also be ongoing and allow for an iterative process between New York City and the stakeholder groups to allow for constant updating of the policies and program as well as the ability to quickly respond to the goods movement industry, land use or other changes within the City. By developing this comprehensive education program, NYCDOT will create a mechanism that fosters public awareness and in effect increases the opportunities for the successful implementation and operation of the program.

It is crucial that the education program be multi-leveled in its approach. In some instances it will be important to relay very detailed information, while in other instances it will be sufficient to be more general in nature. The education program should provide the tools and techniques that allow for different types of communication. At the same time, the program must be tailored with the needs of the provider (NYCDOT or other New York City agencies) in mind. The program should be clear, concise and efficient, getting the greatest impact for the least effort. It should allow for dissemination by multiple individuals who, themselves may not be experts in goods movement regulations or policies. Finally, it should draw upon a series of prepared materials that are focused in their scope and content and relatively inexpensive.

The following is the Mission Statement of the education program:

To disseminate pertinent information through the use of a variety of tools and techniques that is targeted at specific stakeholder groups with the overall goal of improving truck route regulation and policy adherence, safety, efficiency, cost effectiveness and the overall quality of life for residents, employees and businesses within New York City.

i. Education Program Goals

Goals and objectives for the program should at a minimum, include the following:

- Provide a mechanism for the clear, concise communication of information to multiple stakeholders concerning truck route policies and regulations;
- Educate a cadre of professionals within NYCDOT to act as leaders and mentors within the education program;

- Create customized education programs that respond to the particular needs of each of the key stakeholder groups (Public, Business Community, Trucking Industry, Enforcement, and New York City Agencies);
- Incorporate the use of coordinated multiple communication tools (Internet, publications, face to face, e-letters, etc) in order to effectuate the most targeted message;
- Continually reevaluate the education program on an ongoing basis to allow for changes in truck route regulations and policies as well as changes within the goods movement industry, the existing roadway network or significant land use changes;
- Create an education program that acknowledges the ethnic diversity within New York City and the region through the development of materials that are multilingual;
- Improve the consistency of truck route policy and regulation enforcement through a special outreach effort focused towards the NYPD and the Administrative Law Judges;
- Provide a mechanism within the education program for the collection of comments and other information from the various stakeholder groups and the funneling of this information to the appropriate parties;
- Create and distribute a brochure/map that identifies truck routes and significant policies in an interesting and easily readable graphic format;
- Build and continually update a data base of specific stakeholders that can become the audience for education efforts;
- Establish and maintain a presence within the goods movement industry in order to use these existing organizations as conduits to educate stakeholders;
- Develop relationships with other state and City NYCDOT's in order to facilitate the exchange of information, tools and techniques relative to truck route policies and regulations; and,
- Create a framework for the education of other City agencies as to the implications of their actions relative to truck routes and policies.

In effect, the education program must be viewed as multiple programs focused towards the individual stakeholder groups. The focus of each program will be slightly different in terms of the tools used, the information disseminated and outcomes desired. Many of the elements within these plans will overlap, allowing for the efficient reuse of materials. However, the creation of a focused individualized message to each stakeholder group will be crucial to the program's success. Overview of the specific message and considerations by stakeholder groups follows.

- **General Public**

From the public perspective, truck route/regulation and policy issues are generally related to quality of life and public safety. These include noise, air quality, vibration, traffic, blocked streets, accidents, pedestrian/truck conflicts, property damage and other issues resulting from the incompatibility of trucks with residential uses. As a result, the public education program needs to be focused on a number of topics: the necessity and importance of goods

movement within the City; a simple and concise explanation of the routes and regulations; identification of what constitutes a violation of the regulations; and what actions to take and who to contact when violations occur.

- **Business Community**

The business community is a disparate group of concerns located throughout the City. Many of them rely on trucks for the majority of their ingoing and outgoing materials. As such they are origins and destinations for trucks. They are concerned with the movement of their materials in an efficient, timely and cost effective manner. The message to these stakeholders should be focused towards providing easily accessible and understandable versions of the rules, regulations and routes through multiple media and even more so how this understanding of the regulations benefits them. The business community tends to organize itself along industry lines that often have numerous trade association and groups. These organizations should be a key focus of the education program.

- **Trucking Industry**

The trucking industry includes both the drivers as well as the companies they work for. Clearly both of these entities are most concerned with making their deliveries and pick-ups in a timely manner with a minimum of conflict. Many of these stakeholder groups originate from outside the region and cannot be presumed to be knowledgeable of the rules and regulations. They need information prior to getting on the road so that logistics can be predetermined. Signage is clearly important once underway, but significant conflicts can be avoided if truck routes and regulations are widely available long before that point. Education efforts to this group should be focused towards the wide dissemination of the routes, regulations and policies. Tools for reaching this audience outside New York City should be investigated. Special efforts should also be developed to disseminate information related to penalties for violations.

- **Law Enforcement**

The enforcement community is comprised primarily of the NYPD and the administrative law judges. These groups are responsible for issuing violations and adjudicating penalties. Special efforts need to be made to insure that both groups understand the rules and regulations. Education efforts to these groups would also include printed materials explaining the rules and regulations but might also include more intensive education of individuals within precincts so they could become a resource to other enforcers.

- **Government Agencies**

Multiple City agencies play a role at some level related to trucks and goods movement – from agency management of large truck fleets to policy development. For instance, the New York City Department of City Planning oversees zoning within the City. Zoning plays a key role in determining origins and destinations for trucks as well as establishing land use adjacencies that may or may not be compatible with truck activity. Other agencies with an impact on trucking policy include the Department of Sanitation, as well as Small Business Services. Efforts should be taken to identify and educate these and other departments regarding the intersection of their functions and goods movement. This may take the form of creating a representative group that meets on a regular basis to discuss agency actions vis-à-vis Truck Route Network, rules and policies.

2. AWARENESS OF TRUCK ROUTE REGULATIONS AND POLICIES

The awareness level of any particular stakeholder group is directly related to the amount of truck route information easily available to that group. If an individual or business does not have frequent contact with the network, either through its use or close geographic proximity to it, they may not know that it exists. When the public needs information, they often do not know where to get it, who to call, or even where to begin. The same can be said for the trucking industry, many of whose members are traveling to the City from another part of the country and do not realize the information they are using may be incomplete or inaccurate. The business community does not have a consistent source of good information, particularly the small business community, who may not be affiliated with business industry associations or business improvement districts. Larger businesses often feel that receiving summonses is part of the “cost of doing business” in the City, and may not be inclined to follow the truck routes at all times. The public agency community does not have sufficient awareness of the Truck Route Network to make completely informed decisions. Those agencies dealing with enforcement are not receiving enough information or training to allow them to successfully enforce violations of the network.

Through extensive community outreach and anecdotal information, as well surveys and stakeholder meetings, the study team has amassed a great deal of information about truck route knowledge and how people acquire it. This section will detail how each stakeholder groups gets its information regarding truck routes, as well as the effectiveness of those sources, as evidenced by the awareness level. Issues and challenges related to the provision of this information will also be discussed. A summary of this information is found in Table 2-1.

Table 2-1: Existing Information Sources and Issues for Each Stakeholder Group

Stakeholder Group	Sources of Information	Issues and Challenges
General Public	<ul style="list-style-type: none"> ▪ New York City DOT website and truck route maps ▪ 311 ▪ Truck Route signs ▪ Visual observations and experiences 	<ul style="list-style-type: none"> ▪ Confusing website ▪ Clarity of existing online information ▪ Various sources of information from various city, state and federal agencies ▪ Language barriers ▪ Access to computers/internet
Business Community	<ul style="list-style-type: none"> ▪ New York City DOT website and truck route maps ▪ 311 ▪ Truck Route signs ▪ Business industry associations ▪ NYC Department of Small Business Services ▪ Department of Finance 	<ul style="list-style-type: none"> ▪ Confusing website ▪ No single information source ▪ Clarity of existing online information ▪ Language barriers ▪ Access to computers
Trucking Industry	<ul style="list-style-type: none"> ▪ New York City DOT website and truck route maps ▪ 311 ▪ Truck Route signs ▪ Printed atlases such as Hagstrom Maps ▪ Online mapping programs ▪ Trucking Industry Associations 	<ul style="list-style-type: none"> ▪ Lack of NYC truck routes or commercial vehicle information in printed atlases ▪ Online mapping lack of truck routes and other pertinent information ▪ Confusing website ▪ No single information source ▪ Clarity of existing online information
Law Enforcement	<ul style="list-style-type: none"> ▪ NYPD <ul style="list-style-type: none"> ▪ Limited Academy training ▪ Learn “on the job” ▪ Various interpretations of regulations ▪ Administrative law judges <ul style="list-style-type: none"> ▪ Learn from other judges ▪ Learn “on the job” ▪ Various interpretations of regulations 	<ul style="list-style-type: none"> ▪ Not enough training on truck route policies ▪ Confusion regarding signage policies ▪ Flexibility in adjudication ▪ No clear standards for summons criteria ▪ Many summonses dismissed
Government Agencies	<ul style="list-style-type: none"> ▪ Other agency projects ▪ City Environmental Quality Review (CEQR) ▪ Interagency communication 	<ul style="list-style-type: none"> ▪ No widespread use of Truck Route Network on agency maps ▪ Drivers of City trucks may not know regulations

a. General Public

i. Existing Methods of Information

1) New York City Department of Transportation Website and Truck Route Maps

There are several methods by which NYCDOT disseminates truck route information to the general public. The primary and most comprehensive method for providing information is through the NYCDOT website (<http://www.nyc.gov/dot>). This website serves as the primary information portal for the New York City Department of Transportation. Like many other City agencies, primary agency information, announcements and agency activities are posted on this website. The website also serves as the source of information for relevant stakeholders, as users can find all City traffic rules, advisories and most transportation projects on this website. As such, the Department provides truck related information through this portal, where users can find information regarding the truck route study, as well as maps and relevant regulations pertaining to trucks in New York City. These resources are available for both viewing and in many cases, downloading.

Currently, the primary truck route resource available to all stakeholders including the general public is the provision of color truck route maps for each of the five boroughs. All of the truck route maps show both local and through truck routes, as well as local streets, parks and waterways. In addition, the maps of Manhattan indicate special restriction zones (i.e., Financial District, Midtown Core, etc). These color maps are in Adobe Acrobat PDF format and can be printed or downloaded. Paper copies of the Truck Route Network maps can also be obtained upon request from NYCDOT. These are usually the primary resources that the general public refer to when inquiring about or trying to identify truck routes in their community.

In addition, the Traffic Rules and other resources about truck routes and commercial vehicles are available on the Website. These resources however are geared toward drivers in their content and information.

One of the drawbacks of the NYCDOT website is the lack of a quick shortcut directly to information requested, in particular regarding the truck route regulations. In addition, the information provided is often difficult to locate because it is spread out, making retrieval difficult and time consuming.

2) 311

New York City's 311 Citizen Service Information Center, which began in March 2003, was created to make City government more accessible by enabling individuals to request and receive information and services by calling one number. Operators answer questions, take service requests and refer callers to government agencies.

The 311 system allows City officials to obtain real time data on requests. In the long term, the data generated by 311 will improve the City's ability to allocate resources and personnel across agencies. 311 will improve government efficiency by replacing processes performed on paper with computerization and providing technology and training to City agencies.

All City agencies and resources are accessible in some capacity via the 311 system. This service, available 24 hours a day, seven days a week allows users to make inquiries for relevant

information or government services. Many service requests made via 311 are electronically transferred to relevant agencies for direct service. For example each police precinct in the City has been equipped with computer terminals dedicated to the 311 application, so that the police can appropriately respond to quality of life complaints.

Through 311, callers are able to report any traffic related problem, request information from NYCDOT or issue a complaint about truck traffic or commercial vehicles. Depending upon the issue, callers are either directed toward the relevant division or personnel associated with that request, or a service order is prepared by 311 and electronically routed directly to the agency.

Calls made directly to 311 in reference to truck route issues are handled on a case by case basis. Depending upon the service request or concern, a 311 operator will seek to answer or address the concern or forward it to the appropriate agency for action. This may include requests for signage, questions on vehicle routing or other truck and commercial vehicle related concerns. These are handled by the relevant agency including the Department of Transportation, the Police Department, or in some cases, the Department of Environmental Protection.

3) Truck Route Signage

For many members of the general public, the only experience they have with the Truck Route Network is “Truck Route” signs posted near their home or business. For many residents, these signs are the only clue people have that the Truck Route Network exists. People may see the signs and not know what they refer to. The City’s Truck Route Network, for the most part, is only signed along the truck routes. Negative or restrictive signage (“No Trucks”) does exist on certain streets, but is only installed on a case-by-case basis in special circumstances if warranted. This may lead to confusion as to why certain streets are signed in a negative fashion. A complete discussion of signage can be found in *Technical Memorandum 3-Truck Signage Program*.

Because of the number of signs and the visual characteristics of street signage, truck route signage is one of the most important and critical mechanisms for informing truck operators, and accordingly, should be presented and signed in a clear, uniform, coherent manner, easily understood by drivers and the general public.

ii. Issues and Challenges

1) Community Survey

The project team has conducted a great deal of outreach to the general public during the course of this study. The first outreach activity, intended to gather input from the public and gauge the level of awareness regarding truck route policies, was the distribution of a community survey, which was conducted as the study began in the spring 2003. As a community-driven study, the survey was seen as the “kick off” to the first round of public participation activities, and would be the basis for the summer of 2003 public meetings.

The survey questions were developed to gather a street level understanding of specific problems and areas of concern. The survey was comprised of 13 questions and several general comment prompts. A full report on the Community Survey is provided in *Technical Memorandum 4, Community Outreach*. The first piece of information requested on the survey was the respondent’s zip code. This information proved very useful in tracking and sorting

survey results and easily identifying neighborhoods that were areas of concern. Respondents were then asked to list the streets in their community that were most frequently used by trucks, what types of truck they most often saw, and what time of day the truck traffic was perceived to be the heaviest.

The next series of questions were in a “Yes/No” format with a prompt for additional information. The questions covered the presence of truck route signs on streets where truck traffic was witnessed, whether truck traffic contributed to dangerous pedestrian conditions, and dangerous conditions for other vehicles, air pollution, and noise pollution. Similarly formatted questions addressed adherence to truck routes, double-parking, and truck idling.

As industrial areas are common generators of truck traffic, a question was included in the survey about major distribution facilities or industrial areas as sources of truck traffic. An opportunity was provided for respondents to describe specific areas or facilities. The next question concerned streets that are physically unable to accommodate truck traffic. Again, space was provided to solicit specific streets seen as a problem. Respondents were also asked to rank a number of issues relating to truck traffic, including traffic congestion, pedestrian safety, and vehicular safety, enforcement, and air/noise pollution.

The final survey questions addressed respondents’ knowledge of truck routes in the City and asked which form of public involvement they would most prefer. The question regarding truck route knowledge offered choices of “Very familiar,” “Some knowledge,” and “No idea.” As a community-based study, it was important that respondents receive study materials and stay informed and involved during the process. Public involvement options included Borough-wide meetings; Neighborhood meetings, E-mail updates, or Postal mail updates. Space was provided for additional forms of public involvement to be written in by the respondent. Respondents were given an opportunity at the end of the survey to recommend additional participants in the study, provide contact information, or classify themselves.

In total, 619 responses were received by the NYCDOT. The most surveys received were from Brooklyn with 250 surveys and a total of 30 participating zip codes. Manhattan followed with a total of 204 survey submissions from 36 zip codes. Surveys from Queens and Staten Island totaled 130 and 35, respectively. The Bronx had 28 submissions.

When asked about their familiarity with New York City’s traffic laws regarding truck route policies, 22% of respondents Citywide said that they were very familiar with the laws, 51% said that they had some knowledge, and 26% said that they had no idea what laws and regulations applied to truck routes (Table 2-2). The results were also broken down by borough, as follows:

Table 2-2: Awareness of Truck Routes by Borough

Knowledge of truck route policies	Bronx	Brooklyn	Manhattan	Queens	Staten Island
Very Familiar	23%	21%	20%	27%	3%
Some Knowledge	50%	56%	48%	48%	83%
No Idea	27%	23%	32%	25%	14%

With the exception of Staten Island, the levels of understanding by borough were relatively close. The majority of respondents both Citywide and by borough have some level of knowledge of but are not very familiar with the regulations. Additional comments received on the community survey verified these results. For most respondents, knowledge of truck routes

in the vicinity of their homes was the primary basis of their familiarity with the truck route system. Additionally, knowledge or the perception of being able to identify trucks, knowing the location of truck routes and being able to identify that a truck was off-route were the most common themes.

During the summer of 2003, the project team traveled to each borough to hold public meetings. The purpose of these meetings was twofold. First, the team introduced the study and gave an overview of the tasks and the study objectives. The community survey results were reported, in general and by borough. As a community-based study, the goal was to reach the widest possible audience and gather as much input as possible. Second, residents were given an opportunity to make public comments to the study team at the meeting, or via e-mail, regular mail, or telephone at any other time. A second round of community meetings was held in December 2003 and January 2004. Again, the team was looking to solicit input on the study to date and to inform the public of the study progress. Several problem areas in each borough were presented with representative problems and examples of potential solutions to each type of problem. This was to give the attendees an idea of the direction the study was going and clarify issues that the team was analyzing.

The comments and input received were numerous, varied and addressed any and all aspects of trucks in the City. Regarding awareness of the general public, location seems to be a major factor in one's level of knowledge. However, living on a truck route does not guarantee any level of understanding, as the team learned. Some residents did not know that they lived on a truck route and were concerned with the number of trucks on their seemingly residential street. This could result from a lack of understanding of the network, but is also a bona fide concern. This particular comment ties in to a general theme of the study of changing land uses, which is reflected in comments from all of the stakeholder groups. The Truck Route Network has been around for more than 20 years with very few changes made since that time. The landscape of the City, however, in many areas, has changed dramatically. A route placement that made perfect sense in 1981 may be very out of place in 2004.

A second general category of comments tied in to awareness level and heard throughout the study is from residents who live very close to truck routes, perhaps a few blocks away, or adjacent to truck routes. This category of resident is usually seeing off-route trucks that are using their street as a shortcut, normally because of congestion on the nearby truck route. These residents see trucks on their streets on a daily basis and know that they do not belong there.

Many residents witnessing trucks committing violations such as being off-route have also commented on enforcement. In general, residents feel that there is not enough enforcement of the Truck Route Network. While it is understood that the NYPD is faced with a growing number of crucial tasks and limited manpower, trucks are seen as a quality of life issue that needs to be addressed by the police. Enforcement issues and recommendations are found in *Technical Memorandum 1, Policies and Traffic Rules*.

In addition, the study team has incorporated all of the public comments received during all of the outreach activities into its analysis. An analysis of these comments is provided in *Technical Memorandum 2, Truck Routing Analysis*.

2) Additional Issues and Concerns

The Department's internet portal www.nyc.gov/dot is the primary conduit for public information. As indicated, the clarity of existing online information sources poses a challenge to those looking for specific information. If the information sought on the NYCDOT website is found, it may be difficult to comprehend for the average New Yorker. Truck route maps are currently available by borough in 11x17 PDF format, which users can download or print out. Even at this size, the limited number of street names may not be entirely legible; and local and through routes may be indistinguishable unless the map is printed in color. If the user is not familiar with New York City, the prospect becomes more difficult as there are no indexes to locate City streets, and if they must travel through one borough to get to another, each borough must be printed separately. This may prove to be a disincentive for the user to utilize the maps. Additional information useful to drivers, such as dimensional restrictions and inconsistencies between City and State rules are either difficult to find or nonexistent on NYCDOT's website. Improved online resources are discussed in the *Recommendations* section.

While many people who want or need truck route information can consult the NYCDOT website or send an e-mail to the project team, many still cannot. Information is available via phone or regular mail request, but there may be a delay before the information is received. The Truck Route Study team has an extensive mailing list that is utilized for all public communications. If a particular stakeholder is not on the mailing list, it is up to the Community Board or local civic association to notify that individual that meetings are occurring. This is not often the most reliable channel for information dissemination, as the team has learned from attendees at the study public meetings. A public education program is discussed in the *Recommendations* section.

While 311 has proven to be a great asset to the City for handling truck related concerns, there are limitations to the system. Given that 311 is a citywide resource for all information and services provided by the City of New York, content and information is dependent upon programming requests and content changes made by various agencies. 311 operators utilize keywords and general issues to appropriately direct and assist callers. For instance, a complaint about illegal truck traffic may be directed in one of two ways. A 311 operator may take down information about the perceived violation, which is then packaged and forwarded to the New York City Police Department for response. However, while this information may be forwarded to the relevant Police Department personnel, the content of this call and relevant information may or may not be transmitted to the Department of Transportation for their response and action. In the case of the issues directed toward the Department of Transportation, callers are either advised to write a letter or complaint to the Department or a service request is produced by the 311 operator and routed to the appropriate Departmental division. In some cases, the Police Department may or may not receive notice of these issues, although the Department does typically copy Precincts on truck related correspondences.

For other types of inquiries to 311 about truck routes, callers may receive specific content information that is available and programmed into the 311 system or are referred to the Department of Transportation to report a general traffic problem on their street. Given the Department of Transportation's role in governing traffic on city streets, these calls may have several issues associated with the request or complaint. These typically require a multi-pronged approach by the agency to respond.

One of the final challenges faced in terms of the general public is responses to general correspondences. Concerned citizens, elected officials and other groups typically write

correspondences to the Department regarding truck issues or complaints. Typically, the Department investigates and responds to the complaint within a 6 to 8 week timeframe. These community requests and the applicable responses are sometimes the only interaction the general public has in regard to truck route violations.

b. Business Community

i. Existing Methods of Information

1) New York City Department of Transportation

The NYCDOT website and 311 are resources available to all, including the business community, as each provides access to transportation and traffic related information, as well as a point of contact for questions and concerns. In reality, however, most businesses do not rely on NYCDOT as their main source of information, nor do they deal with NYCDOT on a regular basis. The business community is more likely to have dealings with the Department of Small Business Services (DSBS) or the New York City Economic Development Corporation (NYCEDC). They may also deal with the Department of Finance for parking and taxation issues. A recommendation for NYCDOT to work with DSBS and NYCEDC to educate businesses is found in the Recommendations section of this document.

The resources made available to the business community are identical to those made available to the general public. The deficiencies of the existing information have been identified in the previous section. These include the truck route maps, the Traffic Rules, and other informational resources that are difficult to find on the Department's website and can be difficult to communicate in a business environment.

In addition, different industries may have different needs from the Department of Transportation. This includes permitting issues, parking and curb utilization issues, or other regulatory issues that are within NYCDOT's purview.

2) Business Industry Associations

The project team met with several industry associations during the study, including representatives of the Construction Industry, the Air Cargo Community, the Teamsters and other truck specific industry associations. These industry groups provided valuable input to the study team on City truck route issues and concerns currently facing their industries. In general, these issues focused on the services or vehicles that each of these organizations represented. Primary concerns included vehicle dimensions, accessibility and existing truck routes and congestion. These issues are discussed in further detail in *Technical Memorandum 1, Policies and Traffic Rules* and *Technical Memorandum 2, Truck Routing Analysis*.

Additional business industry associations have also identified issues and concerns about truck related issues in New York City. Given the large range of businesses and industries that rely on trucks to function, the information needs for each of these stakeholders vary. In addition, different industries rely on different types of trucks and associate logistical challenges in routing their vehicles throughout the city, and sometimes the entire region.

3) New York City Department of Small Business Services and Other Business Related City Agencies (Economic Development Corporation)

Early in the study, the team met with the New York City Department of Small Business Services (formerly the Department of Business Services) to discuss how best to reach the local business community. DSBS provides many services to small businesses throughout the City, including assisting businesses that wish to set up a Business Improvement District (BID). BIDs serve as an important source of information for small businesses that may have no other way to learn

about updates in City programs and services. They can serve as clearinghouses for information, and as places for business owners to go if they need assistance. In addition, BIDs often engage in marketing activities for their member businesses to increase economic development opportunities and awareness in their communities.

The Department of Small Business Services does not generally provide information about truck routes to small businesses in the City, nor is any information provided to the BIDs and LDCs. Any information that BIDs may provide regarding truck routes is done solely upon their own initiative. Coordination and information dissemination between NYCDOT and DSBS to educate BIDs and businesses will be discussed in the Recommendations section.

In addition, in January 2005, Mayor Bloomberg created the Office of Industrial and Manufacturing Businesses to retain and grow the sector's job base, execute the goals of the industrial policy, and serve as a single point of coordination for the industrial and manufacturing sector. At the core of this policy is the creation of Industrial Business Zones (IBZs). These geographic areas build upon the existing In-Place Industrial Parks to better reflect industrial land uses within the City. Based upon the recommendations of an interagency task force, 16 IBZs have been proposed and represent areas in which the city will provide expanded assistance services to industrial firms in partnership with local groups.

ii. Issues and Challenges

The project team began to reach out to the business community in the summer of 2003. A survey was developed with the assistance of the New York City Department of Small Business Services. This survey was mailed to all New York City Business Improvement Districts (BIDs) and Local Development Corporations (LDCs). The BIDs and LDCs were asked to distribute the surveys to their membership.

Questions were designed to garner specific information about how each business ships or receives goods in New York City. Topics included type of business; method, time, duration and location of deliveries; and familiarity with truck route regulations and policies.

Sixty-nine (69) survey responses were received by NYCDOT. Respondents represented a wide range of industries, including theaters, various manufacturing enterprises, retail establishments, restaurants and hospitals. When asked if they were familiar with the New York City truck route policies, 45% of respondents said no, 17% said yes, and 38% said that they were somewhat familiar. Thirty-eight percent (38%) of respondents stated that they did not know which streets were truck routes near their businesses, and 49% stated that they were not familiar with the regulations that applied to curbside deliveries. An equal number of respondents (42%) stated that they did not know or that there were not any truck route signs posted near their businesses. In addition, 70% of respondents stated that they had no established schedule for deliveries, and 88% said that they do not specify the trucking firm that delivers their goods.

Overall, the businesses surveyed do not possess a great deal of knowledge about the truck routes or regulations. Furthermore, the majority of respondents do not know nor do they seem to be concerned with how the deliveries get to them, as long as they arrive. By not specifying a trucking company, the businesses have no way of knowing how the goods are being delivered or what routes the trucks are taking to reach them. One concept that will be further discussed in the *Recommendations* section of this Technical Memorandum as a potential pilot program with large businesses is requiring them to specify the route that delivery trucks take to reach them.

This type of strategy may increase the accountability of the businesses and the truckers themselves in ensuring that the trucks stay on truck routes.

Many businesses who want or need truck route information can consult the NYCDOT website or send an e-mail to the project team, but there is a large population of businesses without Internet access. This includes small businesses and trucking concerns that may not know how else to retrieve necessary information about truck route regulations. While information is available via phone or regular mail request, there is often a delay until the information is received. The Truck Route Study team has an extensive mailing list that is utilized for all public communications. If a particular stakeholder is not on the study mailing list, it is up to the BID/LDC (where applicable) to notify that business that meetings are occurring. This is not often the most reliable channel for information dissemination, as the team has learned from attendees at the study public meetings.

While those industries directly related to trucking and goods movement in the City are likely to have associations that are involved with truck route issues, the majority of businesses may receive deliveries by truck but have no knowledge of how those goods arrive at their doorstep on a daily basis. The responsibility for knowing the truck routes is placed upon the shipper or courier as the transporter of the goods.

For those who have access to the Internet, if the information sought on the NYCDOT website is found, it may be difficult to comprehend. Truck route maps are currently available by borough in a 11x17 PDF format, which users can download or print out. Even at this size, the limited number of street names may not be entirely legible, and local and through routes may be indistinguishable unless the map is printed in color. If the user is not familiar with New York City, it becomes more difficult as there are no indexes to locate City streets, and if required to travel through one borough to get to another, each borough must be printed separately. This may prove to be a disincentive for the user to utilize the maps. Additional information useful to drivers, such as dimensional restrictions, are either nonexistent or difficult to find on NYCDOT's website.

The New York City Traffic Rules are also difficult to comprehend and follow. While most businesses are for the most part aware of the general rules that regulate street traffic in New York City, they may not be aware of the nuances of all the street, commercial vehicle and truck regulations. There are several sections within the Traffic Rules that dictate rules and regulations applicable to businesses and truck drivers, such as the truck routes, height and weight restrictions, and curbside parking regulations. This document is over 100 pages long and is not distributed publicly, adding to the absence of knowledge by businesses and drivers.

In addition, many businesses are reliant upon third-party companies to bring goods and services to their businesses. This may include the use of common parcel carriers such as FedEx and UPS, but may also entail companies that are contracted to deliver or ship their goods. As such, these businesses may or may not be knowledgeable about the regulations governing truck movements in New York City. This may include the use of vehicles such as 53 foot trailers or trucks that may exceed height restrictions on a certain roadway. For some businesses, they have no control on the type of size of vehicle that may be servicing their location.

c. Trucking Industry

i. Existing Methods of Information

1) New York City Department of Transportation

There is a great deal of information pertaining to commercial vehicles on the NYCDOT website, including the New York City truck route maps. However, as previously discussed, a drawback of the NYCDOT website is the lack of direct shortcuts to truck route regulations and information. The information most useful to truckers is spread out on various unrelated pages and is often difficult to locate. While most of the content is identical for all stakeholders, there are some information resources that are directed toward the trucking industry and truck drivers. These include a page on the rules pertaining to Commercial Vehicles and height, weight and other restrictions relating to the operation of trucks and commercial vehicles in New York City. For some, the content and information may be difficult to understand. In addition, given that New York City has more stringent regulations regarding vehicle size and weight, there are limited opportunities for drivers to be made aware of these restrictions. The Department does link to other transportation agencies, however, these links and the information are not regularly updated and navigating among various sites can be tedious and difficult to understand.

The City's 311 information system is also a useful resource for truckers, who may call with specific routing questions or permit information. However, as indicated previously, the information available directly by 311 operators is content driven, and may not adequately answer the questions posed by the caller. In many instances, this stakeholder group looks for specific routing instructions or immediate responses to questions which the 311 call system or agency personnel may not be able to directly provide. This is increasingly problematic for callers who need immediate services such as assistance on routing or point of reference questions which cannot be handled through the 311 system or by the Agency on an immediate basis.

2) Trucking Industry Associations

The project team met with several local and national trucking industry associations during the study. These organizations represent the trucking industry and provide many valuable services including keeping their members informed of changes in laws and regulations, and promoting the safe movement of goods. The team met with the following associations:

New Jersey Motor Truck Association (<http://www.njmta.org>)

New York Motor Truck Association (<http://www.nytrucks.org>)

American Trucking Association (<http://www.trucking.org>)

Truckload Carriers Association (<http://www.truckload.org>)

Association of Bi-State Motor Carriers

These organizations represent the trucking industry on local, state, and national levels. Among other duties, they serve as advocates for the industry regarding laws and regulations affecting their members. Most have extensive websites and employ numerous means of communicating with their membership, including weekly e-mails and alerts about important news and issues affecting the industry. The New Jersey and New York State Motor Truck Associations assisted the study team with dissemination of the Truckers Survey sent out in the fall 2003. A link was posted on their websites, informing members of the survey and encouraging them to fill it out. The survey was also mentioned in weekly e-mails sent out by the associations.

The study team's experience with the trucking industry has been a positive one, and the industry associations are supportive of the study and its efforts to raise awareness of the Truck Route Network among truckers. The industry has also provided input to the study. The *Recommendations* section will discuss concepts for continuing coordination with the trucking industry associations.

There are numerous additional organizations that exist throughout the City. Similar to the business interests, these organizations represent specialized industries, each with unique needs and characteristics. For example, these organizations may represent different portions of the food distribution industry, the oil and gas heating and transport companies, and other specialized industries. There are unique characteristics to each of these industries, ranging from the type of vehicles used, to the routing issues relating to the movement of these vehicles on city streets. Much of their information may come from general lobbying and keeping apprised of issues that reflect the needs of their constituency such as enforcement, curbside issues and public safety.

3) Printed Atlases and Other Mapping Resources

One of the most common resources used by drivers is print maps, usually in the form of a laminated atlas. Of these available maps, the most widely used resource in New York City is the Hagstrom New York City Atlas. Truckers frequently rely on these atlases for detailed specific street information, although there are no current atlases that show the New York City Truck Route Network on its maps, which may confuse drivers. While the format is consistent with many other atlases, Hagstrom utilizes yellow lines to delineate commercial corridors or perceived major arterials. These lines are commonly mistaken as legal truck routes and commercial corridors by the trucking industry and drivers, as Hagstrom highlights these routes as major or principle arterials. Hagstrom also offers a vinyl-coated atlas, which allows truckers to identify their destination and mark out a route.

With the proliferation of online mapping programs, drivers are increasingly using software platforms for obtaining exact point-to-point directions. Companies offering these programs include Mapquest, Mapblast, Yahoo, MSN, and Rand McNally, among many others. Truck routes are not currently represented on any online mapping programs, and may provide users with inaccurate and incomplete routing information. The challenges surrounding online mapping applications are discussed in the following section.

ii. Issues and Challenges

The trucking industry was included in outreach efforts during the summer of 2003. With the assistance of the motor truck associations of New York and New Jersey as well as several national groups, a survey was developed and distributed to the associations' members. Seventy-two (72) responses were received by NYCDOT. Results of the survey indicated that the New York City truck route policies are not well known by those outside of the immediate area, and even those companies located in the New York City region are not fully aware of the regulations governing truck routes. 32% of the respondents indicated that they were familiar with the New York City Truck Route Network, 12% said they were not familiar and 56% indicated that they were somewhat familiar with the network. Thirty-four percent (34%) of respondents answered that their company had a dedicated New York City dispatcher and 63% said that they did not.

The level of awareness of truck route regulations varies greatly between local and non-local drivers traveling to New York City. Generally speaking, the majority of local drivers knows the routes and regulations, and may also know the shortcuts to use when faced with traffic congestion.

Inbound drivers from out of the area are using Hagstrom, other printed maps, or online directions to determine their routes. One of the most telling anecdotes the project team heard from scores of truckers involves the Hagstrom New York City Atlas. As previously mentioned, there are no standards for displaying the New York City Truck Route Network. Given that the Hagstrom map is billed as a truckers' resource, many drivers mistakenly believe that the yellow lines indicate truck routes. The result of this confusion is drivers utilizing incorrect information as they perform their deliveries, and accordingly, receiving tickets for using improper routes. To compound this issue, NYPD officers often carry the Hagstrom in their patrol cars and some may be similarly unaware of the discrepancies between the atlas and the designated truck route system. The *Recommendations* section of this Technical Memorandum further discusses the Hagstrom New York City Atlas.

Online mapping programs are generally accurate for most map queries and automobile trips, but they currently do not provide sufficient complete information for a commercial vehicle to make a trip into the five boroughs of New York City. Neither the New York City Truck Route Network nor clearance constraint information is included on the maps. The result is that a trucker from Alabama can go online and plot directions to a location in Queens, believing that the directions are accurate and not realizing that he may be directed to travel on a non-Truck Route or a roadway with height or weight restrictions to reach his destination. The online mapping programs currently available normally utilize the shortest route from point-to-point, and are geared toward passenger, not commercial trips. Such programs do not take into account Parkways, which are restricted to trucks, nor is accurate information provided regarding height or width restrictions or one-way streets. An online mapping program will be further discussed in the *Recommendations* section of this Technical Memorandum.

There is currently no single source for truckers to find free, complete, easy-to-understand information related to commercial vehicles traveling on New York City roadways. This includes traffic information, regulations, and information such as height and weight constraints on particular facilities. Currently, the following information related to commercial vehicles using New York City roads can be found on a number of websites besides that of NYCDOT, including (but not limited to) the following:

- *New York State Department of Transportation* (<http://www.dot.state.ny.us>)
The website for NYSDOT Region 11 (covering New York City) provides information on current and upcoming roadway construction and studies underway on its roadways, including detours. Also included on this site is information on state permits for operating special dimensioned commercial trucks on the state roadways.
- *MTA Bridges and Tunnels* (<http://www.mta.info>)
MTA's website provides service advisory information and photos of near real-time conditions at the bridges and tunnels it operates.
- *Port Authority of New York and New Jersey* (<http://www.panynj.gov>)
The Port Authority's website provides traffic advisory information for its facilities, including closures for construction or maintenance.

- *TransCom* (<http://www.xcm.org/>)
Transcom's website provides links to all of the member agencies and provides information for parties to sign up to receive various information on travel routes, traffic conditions and construction reports. This information, available for a fee, can be forwarded to members via pager or e-mail.
- *Metrocommute* (<http://www.metrocommute.com>)
Metrocommute offers advisory information for roadways and transit in the tri-state region. The format of the information can be cumbersome to navigate if searching for multiple roadways. If a driver is familiar with the route and the specific roadways that he will be traveling, this may be a useful tool. For drivers coming from outside the area, the information presented may be confusing. New York City truck routes are not represented on the maps, and there is no information on roadways that may be restricted to commercial vehicles (i.e. parkways).
- *Trips123* (<http://www.trips123.com>)
Through Trips123, 16 transit and transportation agencies in the New York/New Jersey/Connecticut metropolitan region provide computer-based travel information to Trips123 which in turn processes it and redistributes it to transportation consumers in a continuously updated form. While geared toward the passenger vehicle and transit trip, it can be used by businesses and truckers in making decisions and reducing transportation related problems. The service is accessible through the internet.

Once a user reaches these separate websites, the advisory information is easy to locate, but it is time consuming to navigate to each site separately. In addition, if drivers coming to New York City from out of the area are looking for advisory information, they may find one of these agency sites but not realize that they need to consult the others as well. Even local drivers may not be aware of the number of different agencies responsible for roadways and facilities in the City. A "one stop shop" website for all information concerning operating a commercial vehicle in New York City will be discussed the *Recommendations* section of this Technical Memorandum. In the interim, it would be very useful for each agency to provide links to other agencies' traffic advisories.

d. Law Enforcement

i. Existing Methods of Information

The New York City Police Department (NYPD) is responsible for enforcement of the City's truck route regulations. When Police Department recruits are trained at the Police Academy, they are responsible for retaining a great deal of information on New York City laws that they will be charged with enforcing. The traffic rules are just one small portion of this information. Upon graduating from the Academy, much of what an officer learns is on the job, from day to day experience and learning from superiors and fellow officers. As a result, many officers on the street do not have a working knowledge of the Truck Route Network. More specialized units, such as the Highway Patrol Unit and the Borough Task Forces are more knowledgeable of these rules and regulations, and as a result perform more targeted enforcement of trucks and truck routes. However, the primary responsibility for enforcing the routes falls onto the local precincts. There are varying levels of awareness and education in each of the precincts throughout the City. Some precincts, which have a high number of truck generator sites, may be proactive in their education of officers and resources provided, however, in many precincts, the overall truck route system and the many rules and regulations are not entirely known by officers. In addition, the Traffic Safety Officers within each precinct are the primary conduits of information. Their level of knowledge on the truck routes and interpretation of the regulations varies.

These varying levels of awareness and knowledge, coupled with individual issues in each precinct, may result in varying levels of enforcement. This lack of awareness, coupled with the increasing demands put on the NYPD, results in many violations going unnoticed. In many communities, communication with the residents might be the only way the PD knows that a problem exists. Calling the precinct does not always result in satisfaction for the caller, as the truck is usually gone by the time the phone call is made. Oftentimes the local precinct will not hear about a problem until it reaches the DOT Borough Commissioner or an elected official, who then will contact the precinct. With the introduction of 311, a system now exists for all calls to be tracked. Complaints relating to the Truck Routes may go to one of two places, either the Department of Transportation or the NYPD. The NYPD encourages residents to use 311 for truck route complaints and other quality of life issues. A record is created with every call, enabling the identification of ongoing problem areas by the NYPD. Enhancements to the 311 system and this process are further discussed in the *Recommendations* section of this Technical Memorandum.

The Administrative Law Court represents the City of New York and its agencies in court actions involving enforcement of City laws and regulations, including the truck route regulations as part of the traffic code. The New York City Traffic Code is the main source of information the judges use to uphold the regulations. The New York State Vehicle and Traffic Laws are also applied, as certain state laws are applicable to trucks traveling in New York City. However, the Administrative Law Judges do not appear to be well trained in truck route laws or consistent in their judgments. One of the conflicts that exists is the relationship of the Administrative Law Court, which is under the New York State Department of Motor Vehicles and that of the other City and State courts which may hear other truck related summonses. However, all judges should refer to both the City and State Traffic regulations when hearing their cases.

ii. Issues and Challenges

The study team met with the NYPD on several occasions to discuss enforcement issues. Information obtained from these meetings indicated that the majority of NYPD officers have limited knowledge regarding the Truck Route Network and its regulations. Only a small amount of time is spent training recruits at the Police Academy on the proper enforcement of the commercial vehicle rules and regulations, and very little or no refresher training is provided in this area. Based upon community issues and concerns, as well as activity by the precincts themselves, there are varying levels of additional training that may be going on or resources for the officers to use in understanding the regulations and rules. As a result, few officers are actually able, on a day-to-day basis, to actively and effectively enforce the regulations. In addition, the truck route enforcement ability of the NYPD is hampered further by the adjudication process.

Most of the truck regulation enforcement is reactive in nature and typically occurs when an issue receives enough attention by the community residents, elected officials or through intra-agency communication. While there are problematic locations throughout the City, the presence of a truck does not always indicate that a truck is traveling in violation of the regulations. In some precincts, checkpoints or interdiction points have been identified to inspect trucks for violations or illegal truck traffic. Finally, persistent enforcement can be futile and difficult on a single roadway and signage may not always be a deterrent.

Finally, there are manpower and resource issues with the NYPD that may limit the amount of enforcement personnel that can be allocated for this activity.

In addition, based upon interviews with the Administrative Law Judges, it is apparent the level of understanding of truck route policies among the court judges is inconsistent, that the Court is dismissing a high number of truck route violations. One judge may dismiss violations because of drivers' claims that no negative signage was present, whereas another judge may hold the driver responsible for knowing the appropriate routes. Analysis of this issue is made more challenging by the fact that truck route violations are not tracked separately, meaning that there is virtually no way to know which violations are being upheld and which are being dismissed out of the entire body of cases heard by the Court. This creates a fundamental gap between the Administrative Law Court and the NYPD officers that are handing out summonses. The officer may never understand why a particular violation was dismissed. If an officer is unsure of the regulations to begin with, this adds to their potential hesitation when it is time to cite a truck for being off-route. The officers need to know how best to handle the violations when they occur, to ensure that the violation is upheld when it reaches the court system.

One example concerns truck route signage. Throughout the course of this study, it has become apparent that many citizens are under the impression that signage is required for summonses to be issued. While it is debatable whether a "No Trucks" or negative sign is going to solve a neighborhood's truck problems, according to the law, negative signage is not required anywhere in the City, to enforce a truck route violation. The New York City Truck Route Network is positively signed, meaning that truck routes should be signed accordingly and should have signs posted directing truckers to the designated route system and drivers should be cognizant of the rules and regulations relating to that vehicles operation. This is a primary source of confusion for the public, as well as the law enforcement community and private interests. Education, targeted towards each of these stakeholders, must address these issues more concisely. Respective stakeholder education programs will be addressed in the *Recommendations* section of this Technical Memorandum.

Currently, the majority of truck route violations are heard in Administrative Law Court (ALC). Moving violations are heard in Criminal Court. The Administrative Law Court tries to hear all truck route violations, because unlike Criminal Court, plea bargains are not permitted in the ALC. Truck Route violations may be heard in Criminal Court if there are multiple violations for one vehicle, including a moving violation. The inability to plea bargain in the ALC does not prevent numerous truck route summonses from being dismissed, however. Administrative Law Judges are not adjudicating the law consistently, and there is a good deal of flexibility afforded the judges in these matters. One anecdote brought forth by the ALC concerned Bills of Lading that every truck is required to carry at all times. If a driver is found in violation of the Truck Route Network and cannot produce a Bill of Lading documenting his origin and destination, a summons is issued. The judge may dismiss the summons if the driver produces the Bill of Lading in Court after the fact. This flexibility should be eliminated to ensure consistent adjudication. Further discussion of this recommendation can be found in the Recommendations sections of this Technical Memorandum, as well as *Technical Memorandum 1, Policies and Traffic Rules*.

e. Government Agencies

i. Existing Methods of Information

Truck routes and the management of commercial vehicles factor into both the planning and operational activities of a myriad of city, state and federal agencies.

At a planning level, many land use and developmental studies rely upon truck and commercial vehicle movements as a primary focus of their traffic mitigation plans. The actions resulting from these studies often have a major impact on how truck routes are utilized and how truck traffic flows on city arterials. The primary mechanism and integration of the existing routes system is through discretionary land use actions which require both review and coordination through the City Environmental Quality Review (CEQR) process, as well as the Uniform Land Use Review Procedure (ULURP). Both processes involve the review of these plans by multiple City agencies for actions such as zoning changes, street mappings and demappings, special permits, property acquisitions, etc. General information is gathered via traffic counts, projected vehicle volumes, and the identification of truck routes in the general area. However, there is no centralized source of this information, or a comprehensive citywide database of data relating to truck volumes and/or movements. There are various data collection efforts that are ongoing and done by different transportation agencies and the Metropolitan Planning Organization, NYMTC. This includes compilation of bridge and tunnel volumes, traffic counts on primary arterials and other localized data collection efforts. However, because of the nature of goods movement and truck trips in New York City, there is no single comprehensive database of truck trips and characteristics.

In addition, many developments may take place “as-of-right” and do not require environmental or other reviews. These developments may increase the number of truck trips that are accessing a site.

Many of the city agencies are reliant upon NYCDOT to provide relevant truck route information. This includes both informational materials such as maps, as well as the truck route data. Prior to the beginning of this study, the Department of Transportation had maintained a version of the Truck Route files that was dated and contained numerous discrepancies. Given the large number of agencies that use this information for mapping purposes, this database was recreated to accurately follow the citywide LION files.

At an operational level, many agencies themselves are users of the truck route system. For example, the Department of Transportation has approximately 1360 vehicles that are considered Medium (greater than 8,600 lbs. but less than 26,000 lbs.) and Heavy (greater than 26,000 lbs.) duty that would be obligated to drive on truck routes. Overall, the city and state agencies and their contractors that have truck fleets represent a large portion of truck movements in the five boroughs, and accordingly should be cognizant of the rules and regulations governing the movement of trucks and the designated route system. There are various mechanisms, varying by agency, on how drivers are informed of these rules or should follow them. In some cases, it may be part of the Standard Operating Procedures, or SOP’s, while other agencies may depend on dispatchers for actual routing information. Within the Department of Transportation, the concept of truck routes are covered during roadway maintenance training, which is provided annually. In addition, the Department has made it customary to post the truck route maps at all dispatch locations and the importance of traveling on the designated routes is discussed at the weekly muster meetings. Other agencies have similar mechanisms, but utilize a variety of tools for educating the drivers of the routes or

ensuring that the routes are followed by the drivers. The Department of Sanitation also incorporates a significant amount of truck route information into its activities, both for trash pick-up as well as the movement of municipal waste by both public and private carters.

However, for many governmental users, the overall knowledge of the route system may be limited and the understanding of the route systems are sometimes complicated by the use of non-NYCDOT map resources such as atlases.

ii. Issues and Challenges

At the planning level, truck information for agencies comes from a variety of sources. These include data efforts currently underway by City and State agencies, such as the City and State Departments of Transportation, the New York Metropolitan Transportation Council (NYMTC), the Metropolitan Planning Organization (MPO) for the New York region, and the various bridge and tunnel agencies in the region. However, the bulk of the data collection efforts comes from localized traffic counts for specified intersections and study areas. This information generally provides baseline numbers that are used in CEQR and ULURP applications. Although traffic count information is sometimes shared, there is no single source for definitive information especially relating to truck traffic, and given both the local and through aspects of truck trips, as well as the variable patterns of these trips, truck flows may not always be accurately presented.

In addition, many of these planning and operational processes undertaken by agencies do not use accessibility to truck routes as a criteria benchmark in decision-making for development studies. While goods movement factors into the general traffic impacts analysis of the environmental review process, it is factored in with other traffic issues and mitigation measures. The Truck Route Network and regulations need to move into the vernacular of City agency vocabulary, to raise the general level of awareness and improve planning and operations decisions.

From both a planning and operational viewpoint, agency personnel understanding of goods movement issues may vary greatly. As part of this study, the project team held several individual working group meetings with various agencies, whose responsibilities or actions involve the Truck Route Network, including the New York State Department of Transportation, the Department of City Planning, the Department of Sanitation, the Department of Small Business Services, the New York City Police Department, and the Administrative Law Court, as well as the New York City Economic Development Corporation and the Port Authority of New York and New Jersey. During these sessions, it was clear that some representatives were well versed in issues related to goods movement, while others had less of an understanding of both truck regulations and initiatives that affect the movement of these vehicles. Also, even when some agency personnel have significant expertise, that knowledge may not be communicated throughout that department. This constrains the ability of NYCDOT to do effective inter-agency outreach on freight issues.

Finally, from a vehicle operations and logistics standpoint, there are some limitations to the type of information that agency fleets are provided. While many of the agencies that maintain large truck fleets, such as Department of Sanitation, Department of Design and Construction, and the Department of Transportation, make some provisions and provide some information on the Truck Route Network, there is not a definitive resource that agencies use for routing. For an agency like the Department of Sanitation, drivers are instructed to utilize the truck routes to travel to the dumping location once they have completed their run, as well as using the routes to get to and from depots. In addition, some major construction projects, such as the DEP Water

Tunnel Project have truck routing elements built into the projects. However, for daily trips, adherence to truck routes may not always be commonplace. This is also true for buses, which are required when empty or engaged in private, chartered operation, to utilize the Truck Route Network as prescribed in Section 4-13 of the Traffic Rules. Throughout the study, the Department has heard on several occasions that City trucks and buses are observed traveling off-route. Accordingly, all drivers of City trucks should be aware and educated of the Truck Route Network and accountable for their travel decisions. Several recommendations concerning education at the City agency level will be discussed in the Recommendations section of this Technical Memorandum.

3. RECOMMENDATIONS

In response to the identified weaknesses and challenges facing the existing New York City truck route system and associated policies, a series of recommendations has been established. These suggested initiatives apply to a certain extent to all stakeholders; however, the specific means of implementing the recommendations vary for each stakeholder in order to ensure successful attainment. A number of educational and outreach tools are proposed for reaching the various stakeholders, including mailings, websites, public workshops, on location education programs, and other tools.

Successful implementation of the recommendations will hinge on how the “message” is structured for each stakeholder group – the message needs to be altered to the needs and sentiment of the different stakeholders. Extensive community outreach conducted as part of this study has identified similar concerns expressed by the various stakeholder groups, but often with a different perspective or vested interest. While overall goals may be similar, specific outreach methods have been selected to best match the needs of the different stakeholder groups.

This section will discuss specific education tools recommended for implementation by NYCDOT. The Education Program Plans delineate the set of recommendations to be applied for each stakeholder group.

1) Creation of the Office of Freight Mobility

It is recommended that NYCDOT establish an Office of Freight Mobility (OFM). With the growth in freight volumes and increasing pressures in New York City to manage truck traffic, this office will allow NYCDOT to have a professional staff dedicated to the overall management strategies involved in Goods Movement. This office will serve as the agency's primary point of contact on issues relating to Goods Movement, and can play a critical role in the management of freight mobility on all relevant modes of transportation, including highways, rail and air.

This office will enable the City, and more specifically, NYCDOT, to better integrate freight improvement practices with ongoing plans, programs, projects and operating practices being carried out by the Department of Transportation and other agencies in the region.

It is further recommended that the OFM establish itself as the Department's leader on issues relating to:

Improved Agency Management of Truck Routes

- Working with the New York City Police Department, the various divisions within NYCDOT and other city and state agencies, implement techniques to improve the overall enforcement and management of the Truck Route Network. This includes the development of databases to monitor truck complaints through the use of Geographic Information Systems (GIS).
- Foster an improved dialogue with other City and State agencies regarding truck issues including construction projects, long term and strategic planning and other initiatives to improve the roadway system and goods movement in New York City.

Communication and Coordination with Constituencies

- Play a critical role in the monitoring and categorizing of public input from direct correspondence and 311 calls. The Office should establish a strong relationship with the Department's Customer Service Division to ensure the appropriate response and information is provided to all relevant stakeholders. This includes direct communication from 311 transferred calls, response to direct correspondence, and other constituent driven input. Office should also directly interact with the DOT Borough Commissioners to ensure appropriate response regarding truck issues.
- Establish and foster partnerships to achieve the specified goals. The Office should work with other freight stakeholders to identify shared interests and synergies and overcome differences.
- Lead development and implementation of training and education initiatives for the public and private sectors. This would include the development and implementation of many of the materials and programs identified in this Technical Memorandum.

Program Management

- Assist in the shaping of freight mobility policies in the region, including coordination with all relevant stakeholders and governmental agencies, and ensure they are in concert with strategic objectives.
- Act as key point of contact for freight issues. As the main point of contact for freight interests at NYCDOT, interact at the city, state and federal level with other Freight Coordinators/officials, initiating dialogue as needed, as well as coordinating with economic development agencies, the private sector, and other stakeholders to create a united front for making freight transportation improvements
- Represent the Department on freight movement matters, including public interaction and with national committees (e.g., the American Association of State Highway and Transportation Officials, and the Transportation Research Board).

Planning and Analysis

- Conduct studies and provide tools that effectively address goods movement issues in planning, investment and programming decisions.
- Direct and provide technical and policy analysis, especially of the impacts of policy decisions and legislation. Provide technical support to the organizations on transportation, demographic, land use, and economic development issues.
- Assist in the daily integration of truck issues on an agency level. This includes working with operational groups on issues relating to truck routes, requests for signage, conducting of traffic studies, and other related activities, whereby the office could provide specialized information or resources.
- Investigate and integrate intermodal opportunities for improved goods movement in the region.
- Study truck volume and traffic flows as they relate to infrastructure rehabilitation and street maintenance.
- Investigate techniques and programs to improve curbside management of commercial vehicles and trucks.
- Integrate truck mobility with issues relating to street management techniques, including traffic calming practices.

2) Improved Resources and Media

It is recommended that NYCDOT improve the resources they currently print and make available for distribution. In addition to providing drivers, businesses and the general public with improved routing resources, these can also effectively promote and publicize the Truck Route recommendations.

Truck Route Maps

Central to this program is the production of a new Truck Route Map. This map, to be available in the winter of 2007, addresses the primary deficiencies of the previous maps that have been made available over the past 15 years. The new map depicts the entire Truck Route Network on a single map, eliminating the need for drivers to refer to borough level maps. This double-sided map will fold out and will be designed for ease of use by drivers while providing relevant information relating to the rules and regulations governing truck traffic and commercial vehicles

in New York City and important information for permitting and resources from other transportation providers. A portion of the map is depicted in Figure 3-1. This map will also be available online for easy reference and downloading as a PDF, although printing the entire map would be difficult due to its size. Provisions will be made to easily register and receive this resource directly from the website.



Figure 3-1: Portion of Citywide Truck Route Map

The entire arterial street network is detailed on the map, making it easier for drivers to locate specific streets and locations. In addition, major truck generator locations have been magnified to provide detailed routing instructions into and out of these areas. This includes locations such as Hunts Point, Long Island City and East Williamsburg.

This resource would be made available to all stakeholders. Distribution of the maps will be accomplished through several different mechanisms. All interested stakeholders may request a copy through 311, whereby these would be mailed directly to the requestor. In addition, interested parties such as individuals on the Truck Route Study mailing list, which includes residents, government agencies, businesses, business improvement districts, trucking

companies, industry associations, civic groups and community boards can request and distribute maps To help ensure a wide distribution of this resource.

In addition, it is recommended that the Department work to distribute these maps to locations outside of New York City at locations that are frequented by truckers. Regional examples include truck stops in the surrounding states, weigh stations, plazas at tollbooths, gas stations that sell diesel fuel and local Port Authority facilities such as Port Newark/Elizabeth. By providing useful information at locations that already have a high volume of truck traffic, a greater awareness of the network can be achieved at a relatively low cost.

The map would also be distributed to an additional number of groups that deal with development issues but are not currently on the study mailing list such as the Empire State Development Corporation (ESDC), the Dormitory Authority of the State of New York (DASNY), New York State Department of Environmental Conservation (DEC), the Health and Hospitals Corporation (HHC), the New York City Department of Buildings, and the New York City School Construction Authority (NYCSCA). Private industry groups would also be included such as the Real Estate Board of NY (REBNY), the Women’s Transportation Seminar (WTS), NYS Construction Industry, and the American Planning Association (APA).

Although the Truck Route Maps will be the primary resource made available to interested parties about the Truck Route Network, it is recommended the Department develop and distribute specific resources and brochures for various stakeholders. This includes guides on both the rules and regulations governing the Truck Route Network as well as summaries of the Truck Route Study and the proposed changes. These materials would be developed and tailored to the needs of each stakeholder group and may include the following information:

Truck Route Information

- Rules and regulations specific to the Truck Route Network and the movement of commercial vehicles. These would summarize all relevant information from the City Traffic Rules and States Vehicle and Traffic Rules into one document.
- Resources identifying dimensional restrictions. This includes weight and height restrictions for the entire city. There is no comprehensive resource for obtaining this information. While this information exists, there have not been initiatives to bring this together. This exercise would require coordination amongst a large number of transportation agencies to provide a complete database.
- Specialized or borough level information. Package information to a select group of stakeholders or areas. This may include providing specialized maps depicting access to industrial parks or certain neighborhoods, as well as routing instructions.
- Procedures for registering complaints. Highlight the appropriate responses that can be provided by the various city, state and federal agencies. Increased knowledge will provide residents with the appropriate resources available to them.
- Information from regional transportation providers. Given the wide number of agencies which operate transportation facilities in the region (e.g. NYSDOT, MTA Bridges and Tunnels, the Port Authority, NJDOT and the Connecticut Department of Transportation) or are involved in transportation management (e.g. TRANSCOM), provide handy resources to advise motorists, trucks, and the general public of the information resources available to them. This may include the development of more regional level resources to incorporate many of the routing issues throughout the region.

Truck Route Study

- Citywide Truck Route Study information. This would include a background on the initiative, recommendations, new policies either proposed or implemented, and ongoing truck management activities.
- Updates on implementation. Provide updates to relevant stakeholders on changes to the Truck Route Network and new projects. For example, the Department has utilized informational and graphical flyers to educate communities and drivers of changes in the Truck Route Network. A successful example of this was the extensive changes the Department made in the Hunts Point section of the Bronx.

It is also recommended that the Department work to provide information about City regulations and services in secondary languages, especially relating to the Truck Route system. This could include the Traffic Rules, Maps, and other resources made available to all stakeholders. Similar initiatives are currently being undertaken by other agencies to provide this information. These can also extend to the Department's safety initiatives, which they have been actively distributing in a variety of languages.

3) Web-Based “One-Stop Shop” For Truck Information

It is recommended that NYCDOT develop a “one-stop shop” online for all commercial vehicle and truck information pertaining to New York City. This resource would contain information for all relevant stakeholders, including the general public, businesses, and truckers. As indicated previously, City, State and Federal information on truck traffic and commercial vehicles is spread out on individual websites and is commonly difficult to find and understand. As such, the primary contents of this truck information portal would include the following:

- New York City Truck Route Maps – As indicated previously, improved maps depicting the Truck Route Network would be made available. A digitized version of these maps would allow users to zoom into detailed portions of the map, depicting the entire street network. Additional components to be added to these maps include the ability for users to see height, weight, and lateral constraint information as well as roadways where 55' trailers are permitted within the five boroughs. These maps would also allow users to click on a facility such as a bridge or tunnel and be directed to service advisory information for that facility. The MTA currently offers a similar map on its Bridges and Tunnels website.
- New York City Traffic Rules pertaining to commercial vehicles
- Height and lateral clearance constraints throughout New York City
- Information on Permitting
- Online mapping program
- Construction Advisory Information
- Links to all local and regional transportation agencies providing construction and traffic advisory information
- Links to local and national trucking industry associations
- Contact information about New York City truck routes (311)
- Link to NYS Department of Motor Vehicles
- Mailing List sign-up: users will be able to input their e-mail or mailing address to be added to NYCDOT's mailing list

A shorter-term strategy for streamlining the search for traffic and construction advisory information would be to place links to the NYCDOT website on other agency websites that currently provide similar advisory information. A small paragraph accompanying this link would

explain that truck route maps and regulations for commercial vehicles are located at the site. NYCDOT could also provide links back to each of these sites to make it easier to users to navigate and find the information they are looking for.

A one-page “roadmap” guide to surfing this “one-stop shop” truck route information website will be designed. A possible format for this “quick guide” would be a large-size, postcard-style mailer, with eye-catching information on the website on one side, and room for the mailing address on the opposite side.

It should be noted that 311 would not be able to fulfill the requirements of being a one-stop shop for truck information. This is due to the fact that 311 call takers are required to perform tasks for every city agency. Therefore they are unable from both a content side and knowledge base to provide the full level of detail for a single topic. However, 311 call takers will be able to create service requests about trucks or transfer the caller to an office with the appropriate level of information or refer them to the appropriate web-based resources or information.

4) 311 Enhancements

The 311 information system which was implemented in March 2003 by Mayor Bloomberg has gone a long way towards increasing the accountability and accessibility of City government. 311 allows people within New York City to dial one simple number (311) for any and all non-emergency services. From outside New York City, callers can reach the same service by calling 212-NEW-YORK. Through the use of a 24 hour live operator, callers can pose questions relating to the provision of city services, which are either answered or routed accordingly to the appropriate agency representative.

The 311 information system is one of the general resources that all stakeholders have in common. Because of the 3-1-1 technology and capabilities, it is recommended that the NYCDOT add Truck Route System information into the 311 framework. This resource can be maximized to provide the appropriate level of service to all the general truck route stakeholders. Central to this approach is creating content that 311 operators will use to provide information and enhancing the form structure to obtain the necessary complaint details needed to fulfill or address a service request.

The general public will benefit with these improvements to the 311 system which would include changes to the way Truck Route and related information is provided, truck traffic complaints are processed and how the information is received and acted upon by the agencies. By organizing and streamlining the Truck Route content, the 311 representative is better able to find information on Truck Route Systems, such as rules and regulations and other related topics and either respond to the caller’s question or direct the caller to the appropriate government entity.

In terms of the call structure, operators would determine the primary purpose of the call, request information or report a complaint. For information requests, such as a request for a Truck Route Map, the 311 representative would create a “literature request” that would direct the agency to send the caller the requested material. This process will be the same procedure that currently exists today in the 311 system for literature requests. For questions on regulations and permits, the 311 representative would search the expanded content by topic which will provide city, state and federal guidelines that govern truck traffic in New York City.

Finally, for complaints, by providing more location and complaint details to the Agency forms and developing a smartscrip, the 311 representative would ask the caller a series of questions,

whereby the caller is asked to categorize the type of complaint, location details and any other pertinent information. For truckers and other stakeholders, this system would also be content driven in providing them with the applicable information or directing them to the appropriate resources or information portals.

Overall, in terms of agency responsiveness, it is recommended that the NYCDOT and NYPD effectively share the information relating to complaints and enforcement. As indicated previously, not all complaints are routed to both of the agencies concurrently. The compilation and tracking of truck complaints and problem locations in a universal database will allow both agencies to maximize their resources and develop appropriate mitigation programs. This may include targeted enforcement, improved informational or directional signs or other mitigation strategies. This information can also be mapped through GIS programs, as well as used during TrafficStat meetings. Within NYCDOT, these can also be transmitted to appropriate operational divisions for action.

Central to the coordination and dissemination of this information is the increased role played by the Office of Freight Mobility. This office should serve as the facilitator for information exchange regarding the Truck Route Network and responding to the general public, enforcement community and other stakeholders.

To this end, it is recommended that the public be encouraged to submit any truck route complaint to 311 rather than contact the local precinct. Contacting 311 will ensure that it is logged into the database.

The following represents the general guidelines regarding the 311 process, and Figure 3-2 provides a flow chart of the typical truck route call to 311. As mentioned previously, the process for defining complaints should be expanded to provide relevant agencies with appropriate information so they can effectively respond to their constituency. The following process should be established to define and track complaints received from callers.

- a) Off Route Complaints:
 - i. On Residential Street
 - ii. On Restricted Highway
 - iii. On Restricted Bridge

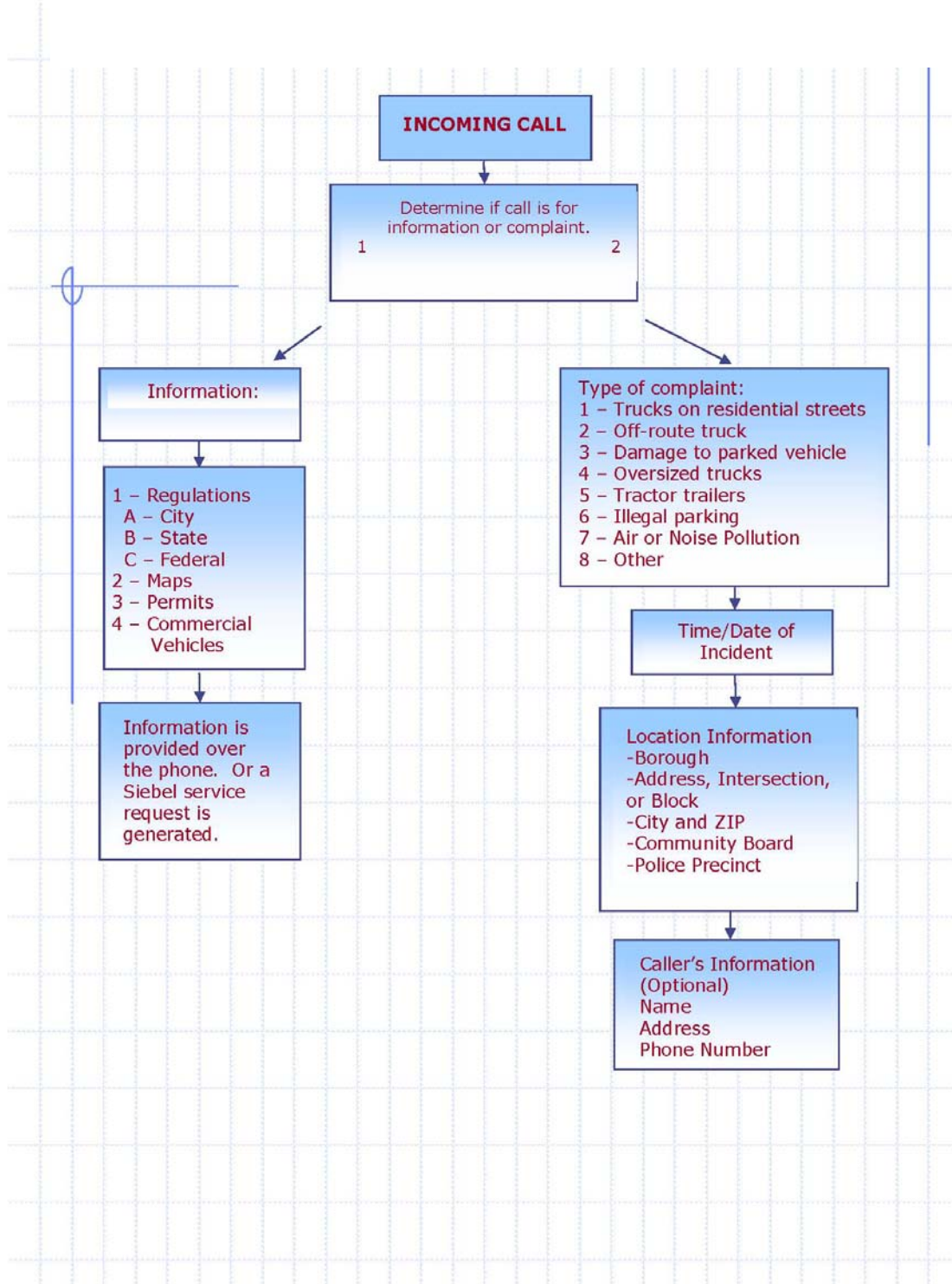
- b) Caused Damage to:
 - i. Other vehicle
 - ii. Street Furniture
 - iii. Curb or Sidewalk
 - iv. Tree or Shrubbery

- c) Signs for Commercial Vehicles and Trucks:
 - i. Damaged or Faded
 - ii. Dangling
 - iii. Missing
 - iv. Inaccurate
 - v. Request for New Signage

- d) Parking Complaints:
 - i. Double Parking
 - ii. Oversized vehicle on street
 - iii. Trailer Parked, no cab, no permit

- iv. Idling: Air or Noise Pollution
 - v. Overnight Parking in residential neighborhood
 - vi. Parking more than 3 hours in a Commercial Zone
 - vii. Other Commercial Vehicle
- e) Driving Complaints:
- i. Oversized with no flags
 - ii. Driving dangerously
 - iii. Air or Noise pollution
- f) Location Information Captured:
- i. Borough
 - ii. Exact Address, Intersection or block segment
 - iii. City and Zip
 - iv. Community Board - automatically added
 - v. Police Precinct - automatically added
- g) Caller Information Captured (optional to caller)
- i. Name
 - ii. Address (not available on all forms)
 - iii. Phone Number and or email address

Figure 3-2: Flow Chart of the Typical Truck Route Call to 311



5) Partnership with Map Companies

The Hagstrom New York City Atlas is one of the most widely referenced general routing tools used by residents, NYPD officers, businesses, and truckers in the City. The Atlas is also very popular with truckers from outside the City who make deliveries to New York City. The maps are clear and easy to read, and offer a good deal of important information to anyone using the City roadways. As a common reference material, the maps should contain as much information as possible to ensure that travelers reach their destinations in an efficient and legal manner.

Truck routes are not currently provided on the Hagstrom City maps. This omission leads to confusion for all stakeholder groups and the potential for unnecessary traffic violations for truckers. The study team has approached Hagstrom and other map companies about incorporating the New York City Truck Route Network and route information into future editions of the New York City Atlas.

This partnership could serve two important functions. While improving the visibility of the New York City Truck Route Network and making it widely accessible in bookstores and retail and online outlets, the network can improve the general awareness of both New York City residents and those traveling into the City. This strategy may also encourage other mapping and information companies and applications to incorporate the Truck Route Network information into their products and services. Additionally, this is a no-cost option for the companies and it provides them with an incentive to update their product and make their product more responsive to user needs.

To date, the NYCDOT has been in active dialogue with the Hagstrom Map Company to incorporate these resources and information into their products and will hopefully be able to integrate these resources into future versions of the map as they are produced. NYCDOT should also continue to reach out to other atlas providers to provide this information.

6) Online Mapping Program

Online mapping programs are a quick and easy way to provide maps and point-to-point directions from anywhere in the United States. These programs have increased in popularity over the past several years, and many are currently available online for consumer use. Companies offering these programs include Mapquest, Google, Mapblast, Yahoo, MSN, and Rand McNally, among others. While these programs are generally accurate for most map queries and automobile trips, they do not provide sufficient and complete information for a commercial vehicle to make a trip into the five boroughs of New York City. There is currently no Truck Route Network data or information, nor any height, weight, or lateral constraint information available on any of the free online mapping services. Truckers from outside of New York City often use these services to route their truck trip into the City, not realizing that the recommended route may be illegal for their commercial vehicle.

Long term, It is recommended that NYCDOT work to develop an online mapping application for truckers and businesses to route commercial vehicles into and out of New York City. Truckers would enter their origin, destination, and type of commercial vehicle, and the program would generate directions along through and local New York City truck routes. The shortest route following truck routes would be provided, and the truck would be directed off the Truck Route Network at the point closest to their destination in accordance with street directions and other roadway factors. This should also be integrated with other pertinent information for truckers, such as height and weight restrictions, turn restrictions and other limitations or regulations which may impact the movement of trucks.

There are several options for this type of approach. One of the private online mapping companies may be willing to partner with the City and incorporate the New York City truck route data and clearance information into their program, allowing its use by the general public. The City could then, in turn, provide links to this program on the NYCDOT website. A second option is to build a New York City-sponsored site as part of the NYCDOT website. This could be done in partnership with a mapping company that would assist NYCDOT with the necessary technology, or could be solely a NYCDOT effort.

One of the limitations of such a product entails the technology involved in the routing of vehicles. This includes the use of algorithms and other routing characteristics used to route trucks to and from their destination. Many of these programs utilize shortest route factors, which may entail a high number of trucks utilizing specific streets. These issues should be worked out in the development of such a product.

A shorter-term option to raise awareness of the truck routes is to add a disclaimer onto maps of New York City and directions to the City produced by online mapping programs. Such a disclaimer would state that all trucks must follow the New York City Truck Route Network and abide by all local laws and regulations regarding commercial vehicles, etc. A link to the NYCDOT website's truck route maps and information could also be provided as part of the disclaimer.

7) Public Agency Information

The outreach conducted by the study team has brought to light several aspects of truck route awareness regarding City agencies. The overriding issue is that there is not a high level of awareness or consideration of the truck routes across City agencies as a whole. The Truck Route Network needs to be institutionalized among all New York City agencies.

There are several actions that can help increase the consideration given to the network. A primary step is through a comprehensive mapping of the routes. NYCDOT is the holder and the creator of the truck route maps, but the routes are not displayed on any other City agency maps, such as those produced by the Department of City Planning (NYCDPC) and the New York City Economic Development Corporation (NYCEDC). In order for the routes to be given appropriate consideration when agencies are making important decisions on land use, zoning, and development, they need to be displayed as part of the City's roadway network. One major concept discussed in *Technical Memorandum 1* is the changing land uses in the City, and how this has made certain truck routes that once made sense are now impractical. These changes are attributed to several factors, including 1) the changing nature of industrial uses; 2) the relaxation of zoning regulations governing industrial and manufacturing areas to allow greater residential and mixed use; and 3) the arrival of big box retailing establishments.

An overview assessment of land use is provided in *Technical Memorandum 1*. In order to make intelligent and educated decisions about future development in the City, the truck routes must be brought into the process. One of the tasks of NYCEDC is to market and issue Requests for Proposals (RFP's) for the development of City-owned property, much of which is in industrial or formerly industrial neighborhoods. Providing potential bidders with maps of the Truck Route Network as part of the RFP package would contribute towards educated decision-making and promote a greater awareness of the network. In addition, citywide initiatives such as the designation of manufacturing zones as Industrial Business Zones (IBZs) and Industrial Ombudsmen Areas will foster high-performing business districts by creating competitive advantages over locating in areas outside of New York City. These areas will serve as target areas for several new initiatives, including creating real estate certainty in protecting the existing industrial land uses, a relocation tax credit, the Industrial Business Solution Providers which will provide financial services and most importantly planning studies to identify issues and opportunities to improve each IBZ. Recommendations will vary by IBZ, but may include improving traffic and parking regulations to increase access for goods and employees, promoting local clusters of similar industrial businesses, IBZ-specific marketing and identifying other infrastructure needs. Truck Routing issues should be at the forefront of these initiatives. Several of the Truck Generator Sites included in *Technical Memorandum 2, Truck Routing Analysis* are part of these proposed IBZ areas and should improve the movement of trucks and goods into these areas.

Additionally, several non-City agencies operate transportation facilities within the five boroughs. The Port Authority of New York and New Jersey (PANYNJ) is a bi-state agency that manages and maintains bridges, tunnels, bus terminals, airports, the PATH and several seaport facilities. The study team has worked closely with the PANYNJ on a number of issues related to goods movement, especially in regard to Airport Access to JFK Airport. The PANYNJ publishes a widely used map of its facilities and the regional roadway network. Incorporating the New York City Truck Route Network into this map would do a great service of raising awareness of the literally thousands of trucks that use the PANYNJ facilities on a daily basis. The MTA is a state agency that operates New York City's bus and subway systems, as well as two commuter railroads, a suburban bus system, seven bridges and two tunnels. If the Truck Route Network

were incorporated into MTA mapping, particularly in relation to the bridges and tunnels it operates, it would help to raise the general level of awareness in non-City agencies.

8) Public Agency/Contractor Accountability

Many City agencies maintain their own fleets of trucks that perform services for that agency. These trucks are essential for serving the function of these agencies, yet it is a community perception that these vehicles frequently violate the City Truck Route Network during non-essential and non-emergency activities. All agencies have standard operating procedures they are required to follow, which detail their responsibilities and expected code of conduct. While many agencies have increasingly taken a proactive approach in improving accountability and ensuring the least amount of impact to residential communities, agencies should work to provide increased information to all drivers. For example, requiring all City trucks to carry a map of the City containing truck routes would increase accountability and also educate drivers who may not be familiar with all five boroughs.

More importantly, it is recommended that these measures be applied to private contractors who work for City agencies. Not all projects require the contractor to establish truck routes to and from a site, although the Department of Environmental Protection does require this provision for many of the long term, large scale projects they are undertaking. These routing requirements, as well as issues relating to the size and weight of vehicles should also be included in these stipulations and permits, and could be added into their contracts with the City.

Government vehicle compliance could also be improved by encouraging the retrofitting of vehicles with Global Positioning Systems. These systems, by allowing routes to be displayed and tracked, can assist in both the accountability of the drivers, as well as assisting in the overall routing of these vehicles to avoid physical obstructions or weight limitations.

9) Trucking Industry Association Partnership

During the course of this study, the state and national trucking associations have proved more than willing to assist the City with its outreach to truckers. They provided input in the development of the trucker survey and on issues currently facing the trucking industry. It is recommended that NYCDOT continue to partner with the trucking industry associations to publicize the study recommendations and inform their membership of any future revisions to the Truck Route Network that may result. This would help to ensure the widest possible dissemination to the industry. The associations each have mass e-mailing capabilities and extensive mailing lists, and any opportunities for free truck route public relations should be taken advantage of. In conjunction with this outreach, the City should have a link to the NYCDOT truck route maps and regulations information on these industry association websites. Most have some type of section for regulatory information where text and a link to the NYCDOT website could be provided.

Regular industry publications and newsletters should also be used by the City to publicize the study recommendations and future actions that may result from the study. Land Line, The Trucker, and Pro Trucker are just a few of the dozens of print magazines serving the trucking industry. There are free publications as well those that are subscription based. Ads or stories printed in these publications will ensure the widest possible audience of trucking industry members.

10) Mailing List

It is recommended that NYCDOT expand its truck route mailing list across all stakeholder groups, Members of the general public, business interests including trucking companies, and government agencies should be included in the distribution of information and materials. NYCDOT should coordinate with regional agencies to utilize their mailing lists, especially truckers, contractors and the goods movement industry. These additional entries would be added to NYCDOT's current truck route mailing list to create a master mailing list database. Agencies in surrounding counties and states, including the New Jersey Turnpike Authority, the New Jersey Department of Transportation, and additional government agencies in New Jersey, Westchester County, and Nassau and Suffolk Counties, should be included in this outreach. This would ensure a wider dissemination of information than NYCDOT can currently reach.

The Department should also pursue working with non-traditional business groups to further disseminate truck route and commercial vehicle information to their membership. One example is the Hunts Point Cooperative Market in the Bronx, with 47 independent wholesale food businesses. As all of the goods are moved into and out of the market via truck, with many drivers coming from outside the area, this would be an appropriate party to add to the mailing list.

11) Truck Route Information At Kiosks On Highways In Surrounding Areas

As part of disseminating information to a larger group of drivers, as well as building awareness on regional roadways leading to New York City, it is recommended that NYCDOT pursue the use of and development of interactive computer kiosks along highways that lead to New York City. This could be facilitated through the existing partnership with TRANSCOM, an information clearinghouse for transportation and safety agencies in the New York metropolitan region, of which NYCDOT is a member. Other member agencies include the New Jersey Turnpike Authority, New York State Thruway Authority, Connecticut Department of Transportation, New Jersey Department of Transportation, New York State Department of Transportation, the Metropolitan Transportation Authority, and others. Kiosks should be placed at rest stops or places where trucks regularly stop along these highways, such as the Vince Lombardi rest stop on the NJ Turnpike, or the Ramapo rest area on the New York State Thruway. Installing kiosks at appropriate locations on I-95 in Connecticut and a location on the Long Island Expressway is also recommended. The kiosks would be interactive and enable truckers to view New York City truck route maps and print out routing information to their destination within New York City. Commercial vehicle regulations and contact information would be provided for future inquiries.

It is also recommended that NYCDOT work with TRANSCOM in the short-term to add truck route information to existing kiosks. Because the kiosks already have Internet access, a link to the NYCDOT website would be the easiest way for users to retrieve truck route information. There is a "Transportation" button on the main kiosk touch-screen, and according to TRANSCOM, it would merely require the addition of a button for "Truck Route Information" which would then redirect the user to the NYCDOT website. This link would be provided at no cost to NYCDOT, as TRANSCOM is continually looking for ways to make the kiosks more useful to the public.

Through a public-private partnership with Golden Screens Interactive Technologies, TRANSCOM developed the Service Area Travelers Interactive Network (SATIN) kiosk project. Interactive kiosks provide travelers with static and near real-time traffic and transit information as shown in Figure 3-3. Currently 24 kiosks are located at transit centers and highway service

areas in the New York metropolitan area, including locations in New York, New Jersey, and Connecticut. Information provided includes incident and construction information, as well as transit routing, schedules, park-and-ride information, weather, Internet access, and tourism information. In addition, there is a mapping application for roadway directions (for non-commercial use).

Kiosks are located at the following locations along the New York State Thruway:

NYS Thruway Locations:

- Ardsley
- Modena
- Plattekill
- Ramapo
- Sloatsburg



Figure 3-3: Port Authority Bus Terminal Kiosk

The current kiosks have proven very popular with users. For the first three months of 2004, more than 211,000 users accessed the 24 existing kiosks. While the kiosks located at transit centers have recorded more users, those located along the NYS Thruway have also been heavily used. For example, the kiosk located at the Ramapo service center on the NYS Thruway had 3,935 users in the first three months of 2004. It is recommended that NYCDOT work in the short-term with TRANSCOM to add their website link to the kiosk application. Once a mapping application is developed in the future, this could also be accessed via the NYCDOT website.

12) Safety Education Program

According to NYCDOT, motor vehicle accidents are the leading cause of preventable death for New York City children between the ages of 5 and 14.¹ Since the study began in Spring 2003, there have been several fatal accidents involving children and trucks. NYCDOT has been very proactive in its safety programs, particularly those targeted at children. One such program is Safety City, a program that uses a hands-on streetscape environment for children to learn how to make safer choices, whether they are walking, on a bike, a scooter, or in a car. Safety City

¹ New York City DOT website- <http://www.nyc.gov/html/dot/safety/safeCity.html>

consists of several activities, including visits to schools by safety educators and full-day children's visits to Safety City. At Safety City, children learn about safety concepts, role play, sing along with videos and create safety art work, as well as learning how to cross the street and put on safety gear.

It is recommended that NYCDOT, through its Safety City program, work with the trucking industry to improve children's awareness of trucks and truckers' awareness of children. In particular, NYCDOT should pursue making trucks available at Safety City sites and should work with the classes that visit its sites to understand what truck routes are located near their schools.

In addition, NYCDOT should utilize other partnerships to promote safety and the challenges posed by large trucks on city streets. One potential partner is the *National Safe Kids Campaign*, a non-profit organization dedicated to the prevention of unintentional childhood injuries. The *Safe Kids Campaign* offers education and awareness programs for all aspects of childhood safety, including SAFE KIDS At Home, Defeat the Heat, SAFE KIDS Buckle Up, and SAFE KIDS Walk this Way. It is recommended that NYCDOT work with *Safe Kids* to disseminate information about truck safety and support the development of additional truck safety initiatives.

13) Law Enforcement Education

It is recommended that comprehensive education plans be developed to assist the Police Department and Judicial entities charged with enforcing the truck routes and adjudicating the hearings. The program should ensure that officers are knowledgeable of the routes, and that summonses are properly handed out and adjudicated in court. In addition, the Department of Transportation should facilitate a "Truck Route Task Force" to resolve issues relating to the management and enforcement of the Truck Route Network, of which the NYPD and Law Judges are critical components.

NYPD Education

As discussed in Chapter II, there is not a great deal of attention given to truck routes at the Police Academy. Officers learn about the Truck Route Network primarily on the job, meaning that the officer may never get the appropriate level of exposure to the routes to be able to enforce them effectively. It is recommended that a training module be developed for NYPD officers. This education program, to be developed by NYCDOT, would be provided to the NYPD for easy use at the command level. It is envisioned that the Borough commander would disseminate the material to all precincts in the command. By educating the officers, they will be empowered to do their best to enforce the regulations properly and see their summonses upheld in Court.

Specific content of the training module would include the following:

PowerPoint Presentation. To be provided on a CD to all precinct commanders. Information to be presented would include:

- **Truck Route Network Facts.** Primary facts about the network, including maps, number of miles, number of streets included, percentage of City roadways that are included.
- **History.** A brief history of the network and the purposes that it serves should be discussed, as well as which types of trucks should be traveling on the truck routes.

- **Definitions and Regulations.** Differentiation between Through and Local Truck Route streets, description of the types of vehicles that are required to use the truck routes; and the regulations unique to specific boroughs and areas.
- **Signage.** Signage has been mentioned as a point of confusion for NYPD. Negative signage and the placement of positive truck route signage will be discussed. Truck route signs are regulatory signs according to the MUTCD and should be treated like speed limit signs, meaning that a sign does not have to be displayed on every block in order to be enforceable.
- **Issuing Violations.** Information will be presented to the officers regarding what to look for if they witness an off-route truck. Many summonses are being thrown out in court due to a lack of awareness on the part of the NYPD as well as the Administrative Law judges. Recommended rationale for the issuance of summonses is as follows:
 - Observation of truck traveling off a truck route
 - Failure of truck driver to produce necessary electronic or paper documents upon request
 - Lack of New York City truck route map in truck cab
- **New Policies.** Any other new policies or changes that NYCDOT decides to implement as a result of the truck route study would also be included in the presentation.
 - **Restrictions/Exceptions.** This would include issues such as relaxing the 53' trailer restriction on a portion of City highways.
 - **Thru Route Program.** Advise officers if certain types of trucks are exempted from the turn restriction at intersections.

Maps. Borough level truck route maps on boards should be included in the training module presentation. The new Truck Route Network map that NYCDOT is currently preparing would be distributed during this session.

Placards. One of the most important tools of this program is the production and distribution of a laminated placard to be issued to all precinct patrol officers. These maps, which are in the process of being produced and piloted at a few precincts are designed to contain a precinct level truck map, abbreviated regulations, and additional resources to assist in enforcing the Truck Routes and identifying operational and safety issues involving the operation of trucks and commercial vehicles.

Also included will be a “crib sheet” listing tips and steps to take when issuing a violation to increase the likelihood that the violation will stand up in court. Providing placards in a three holed punch format would allow officers to insert the placard directly into their memo books for quick reference. Placards would be distributed as part of the training module.

An example of the proposed design is shown in Figure 3-4 on the following page:

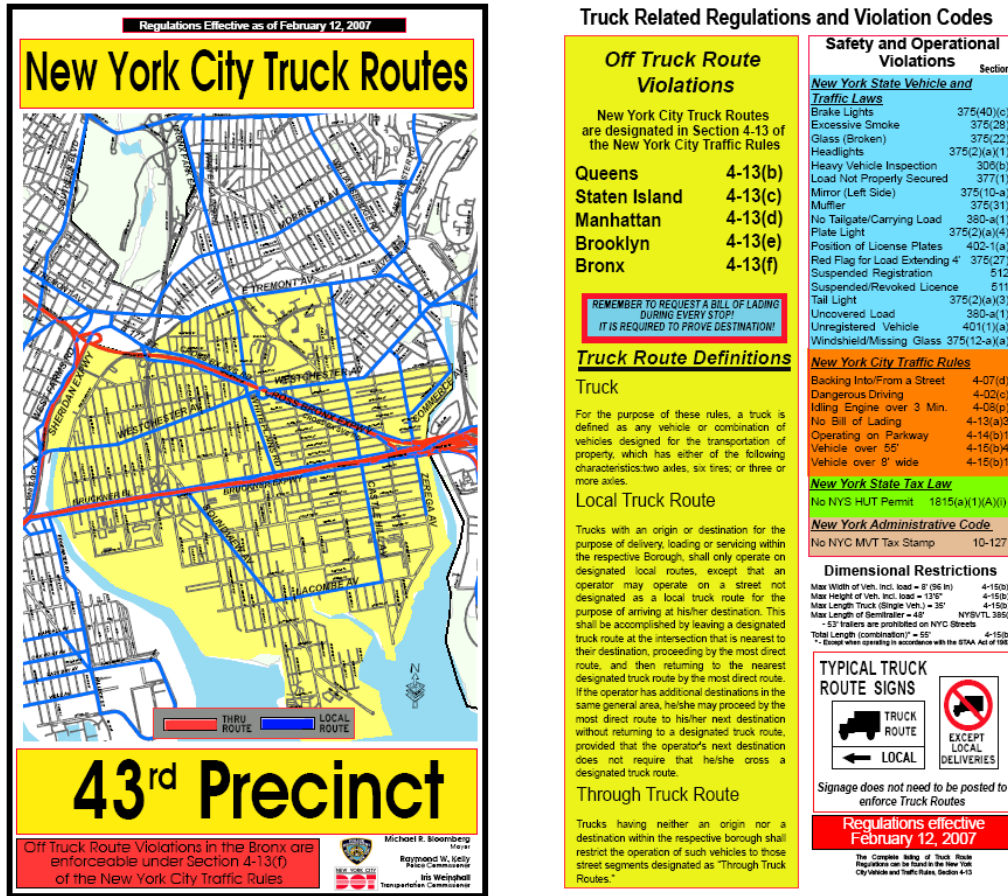


Figure 3-4: Proposed NYPD Placard Design

Administrative Law Judge Education

A disproportionate number of truck route summonses are being dismissed once they reach the Administrative Law Court. As previously stated, there are several reasons for this, including a lack of clarity on the part of the NYPD and administrative law judges regarding what determines if a summons is upheld. The regulations and criteria for issuing a summons must be clearly communicated to both parties in order to limit the flexibility during adjudication and increase the percentage of summonses that are upheld.

The precise level of understanding and current practices should be looked at further in order to develop specific materials for this stakeholder group. This includes additional discussions with appropriate judges. However, the basic components of the program are indicated below:

Truck Route Manual - Truck route information will be compiled into a booklet format (using Microsoft Word) and distributed as a PDF file to the Court to disseminate to the judges. As many judges work with laptops on the bench, the file could be easily opened on the computer or printed out as a reference. Specific information to be included in the booklet will include:

- **History.** A brief history of the network and the purposes that it serves should be discussed, as well as which types of trucks should be traveling the on truck routes.
- **Signage.** Signage has been mentioned as a point of confusion for NYPD. Negative signage and the placement of positive truck route signage will be discussed. Truck route signs are regulatory signs according to the MUTCD and should be treated like speed limit signs, meaning that a sign does not have to be displayed on every block in order to be enforceable.
- **Issuing Violations.** Information will be presented to the ALJ regarding how the NYPD determines if a summons is warranted. Many summonses are being thrown out in court due to a lack of awareness on the part of the NYPD as well as the Administrative Law judges. Specific information from the ALJ discussions will be presented and clarified. Recommended rationale for the issuance of summonses is as follows:
 - Observation of truck traveling off a truck route
 - Failure of truck driver to produce necessary electronic or paper documents upon request
 - Lack of New York City truck route map in truck cab
- **New Policies.** Any other new policies or changes that NYCDOT decides to implement as a result of the truck route study would also be included in the presentation.
 - **Commercial Vehicles.** If NYCDOT decides to implement a program where certain commercial vehicles are allowed at limited times on certain City parkways, this would be explained in such a setting.
 - **Restrictions/Exceptions.** This would include issues such as relaxing the 55' trailer restrictions on City highways.

Maps. Borough level truck route maps for the entire City should be included as part of the education booklet. The maps will be in the same format as those carried by the NYPD in their notebooks, but the NYPD placards will only show the truck routes in the precinct.

Summons Form. Consider modifying the form to add the specific types of truck route violation on the form so that it is matter of checking a box.

In addition, it is recommended that the agencies work to develop a better tracking system to monitor the adjudication of the summonses. This will allow relevant agencies to gather data and identify where problems or inconsistencies may be occurring in the adjudicatory process.

14) Utilization of Non-Traditional Partners

There are a handful of non-traditional partners the Department can utilize in educating stakeholders about Truck Routes. These include various media outlets as well as outreach and education assistance from businesses and industry associations.

New York City has literally hundreds of small local newspapers serving different communities throughout the City. These local papers are widely read within their communities and serve an important function of making people aware of what is happening in their neighborhood. Issues regarding trucks are closely tied to residents' quality of life, the study team learned through its outreach to the five boroughs. Localized issues are what matter most to the majority of New Yorkers the team heard from. Utilizing the community papers to publicize the completion of the study and recommendations through stories or ads would help reach residents unfamiliar with this study.

It is also recommended that NYCDOT tap into the hundreds of industry associations representing businesses in New York City. The study team met with several of these groups, including representatives from the JFK air cargo industry, as well as the General Contractors Association (GCA). These groups provided valuable input to the study. NYCDOT should build upon these relationships and work to develop new partnerships with industry groups to raise awareness of the Truck Route Network. Another avenue to help publicize the network and regulations is by utilizing agency local contractor lists. By and large, the industry groups are willing to help because they see benefits for their membership in less congestion on City roadways, fewer tickets, and lower transportation costs.

15) General Public Workshops

It is recommended that NYCDOT develop public workshops to keep the general public informed and educated about the Truck Route Network and any changes that may be occurring. Only 22% of respondents to the 2003 Community Survey indicated that they were very familiar with the Truck Route Network and regulations, compared to 51% who responded that they had some knowledge. Borough-specific programs should be developed through the NYCDOT Borough Commissioners to ensure that relevant information is presented. Providing targeted information to each borough will best address the localized concerns of New York City's residents.

Specific Information to be presented will include:

- **Truck Route Network Facts.** A PowerPoint presentation should be developed which details the main facts about the network, including maps, number of miles, number of streets included, and percentage of City roadways that are included.
- **History.** A brief history of the network and the purposes that it serves should be discussed, as well as which types of trucks should be traveling on the truck routes.
- **Maps.** Truck route maps on boards should also be provided, including the new Truck Route Network map NYCDOT is currently preparing as well as individual maps by borough. New and amended truck routes (where applicable) will be presented at these workshops, so residents and concerned individuals have an opportunity to speak with someone from NYCDOT staff if they have questions or concerns.
- **Commercial Vehicles.** If NYCDOT decides to implement a program where certain commercial vehicles are allowed at limited times on certain City parkways, this would also be explained in such a setting. This program, if implemented, may also require additional outreach outside of the public workshop setting. It is recommended that NYCDOT develop a specific publicity campaign directed at this effort. Seeing trucks on City parkways may cause drivers a good deal of alarm if they do not know that the trucks are there legally. Many residents throughout the City are particularly opposed to this idea, so a targeted outreach effort will be required for communities where parkways are located.
- **New Policies.** Any other new policies or changes that NYCDOT decides to implement as a result of the truck route study would also be included at this type of public meeting.
- **How to Contact NYCDOT or Report a Problem.** The 311 system will be explained during this presentation, including a typical scenario when a truck route complaint or question is called in. Directions on how to get information from NYCDOT's website will also be discussed.

16) E-Letters/Newsletters

E-letters are a new technique used to disseminate information to a wide audience. Similar in format to a newsletter, the E-letter is either a PDF or HTML-formatted document that is e-mailed to concerned parties. This is a low-cost yet useful tool because information can be updated online and is automatically reflected in the e-mail, saving time normally spent formatting a separate document. While not all of the parties on the truck route study mailing list have e-mail addresses, the majority did provide them.

It is recommended the NYCDOT keep in touch with its mailing list via periodic newsletter, either in electronic format or paper copies mailed to the entire mailing list. This will provide a mechanism for the Department to keep stakeholders apprised of its progress in implementing the study's recommendations.

17) Trucker Workshops

It is also recommended that NYCDOT work with the trucking industry associations to hold workshops for truckers regarding the Truck Route Network and results of the study. With the sheer volume of trucks traveling throughout the City on a daily basis, it is very important to have multiple and even redundant education tools for the trucking industry. This is a huge stakeholder group that will take time and continuous effort to reach. NYCDOT should coordinate with the industry associations such as the New Jersey Motor Truck Association and the New York State Motor Truck Association to determine the most appropriate format and location for such workshops, although it is recommended that several workshops be held in New Jersey, due to the high number of trucks that move goods from NJ into the City.

NYCDOT should partner with the trucking industry to sponsor an annual conference on trucking and goods movement in New York City. The conference would target trucking concerns as well as businesses and residents in the City. NYCDOT should also consider holding workshops at annual trade shows and trucker related association conferences. Such events would increase exposure through networking with attendees at the events. New York City should also play a bigger role in the regional trucking conversations. These include initiatives led in New York, New Jersey, Connecticut and Pennsylvania, all neighboring states which contribute to a significant amount of truck traffic. These initiatives may also expand to national events given the role the greater metropolitan area plays in goods movement.

As part of this program, the NYCDOT trucker workshops should include the following:

- **Truck Route Network Facts.** A PowerPoint presentation should be developed which details the main facts about the network, including maps, number of miles, number of streets included, and percentage of City roadways that are included.
- **History.** A brief history of the network and the purposes that it serves should be discussed.
- **Maps.** Truck route maps on boards should also be provided, including the new Truck Route Network map NYCDOT is currently preparing as well as individual maps by borough. New and amended truck routes (where applicable) will be presented at these workshops, in case truckers have questions about particular routes or changes being implemented.
- **Commercial Vehicles.** If NYCDOT decides to implement a program where certain commercial vehicles are allowed at limited times on certain City parkways, this would also be explained in such a setting. This program, if implemented, should be publicized in several ways. Announcing a new policy of commercial vehicles on certain parkways would be a quick and easy piece of information that could be added to the weekly industry e-mails

sent out by the trucking industry associations. A brief mention and a link to NYCDOT's website could also be provided on the industry association websites.

- **New policies.** Any other new policies or changes that NYCDOT decided to implement as a result of the truck route study would also be included at this type of public meeting.

18) Update Maps on a Regular Basis

It is very important that NYCDOT update the Truck Route Study on a regular basis. This study has had a large and comprehensive public outreach program, and all stakeholder groups should be kept "in the loop" regarding changes being made to the network. This study itself is expected to lead to regulatory and route changes over the next few years. In addition, due to the constantly evolving transportation landscape in New York City, revisions and amendments will likely occur over this time period as well.

It is also recommended that NYCDOT re-examine the Truck Route Network when major initiatives that result in changes in the highway network are implemented. Several initiatives that may be implemented in the future and would impact the flow of trucks in the City include changes to the Cross Bronx Expressway currently being examined; the proposed rehabilitation of the Alexander Hamilton Bridge; the replacement or rehabilitation of the Gowanus Expressway; and the Goethals Bridge twinning or replacement. Major land use or zoning changes may also necessitate a re-examination of the network. NYCDOT should continue to coordinate with the appropriate City agencies to ensure that the flow of goods through the City is not disrupted or altered to the detriment of businesses and residents.

One such measure to ensure updated information is to produce the "Citywide Truck Route Map" on an annual basis.

19) FHWA Freight Planning Initiative

The FHWA Offices of Planning and Freight Management and Operations conduct freight planning training. It is recommended that NYCDOT participate in this initiative, by providing information on issues and practices in New York City. NYCDOT should also send personnel to this training when it is next available. This is an opportunity for NYCDOT to learn about issues and strategies of other cities, as well as share what NYCDOT has done.

It is also recommended that NYCDOT share information on the Truck Route Study with the public via the FHWA Office of Freight Management and Operations new freight planning website, located at <http://www.fhwa.dot.gov/freightplanning>. This website contains a vast amount of useful information on freight planning and practices, including information on Freight Professional Development. The FPD site provides useful information on Training, Education, Technical Assistance, and also contains a Resources section, with links to freight and goods movement studies from around the country. This is a useful tool for sharing information and hearing about successful practices other cities have employed.

20) Establish Truck Study Comment Log

It is important for NYCDOT to continue to record public comment after the completion of the Truck Route Study. A "Truck Study Comment Log" should be developed and will be expanded on an on-going basis as comments are received. The log will be the "clearinghouse" for the wide variety of feedback that will be received, which will include:

- Website comments responses
- Letters, phone calls, and e-mails to project contacts
- 311 information system
- Meeting discussions and questions

The log will be used to keep track of comments received and how the inquiry was addressed. The comment log may also be used to identify areas that need further analysis in future efforts.

**APPENDIX A:
EDUCATION PLANS BY
STAKEHOLDER GROUPS**

Education Plans by Stakeholder Group

The following section presents customized education program plans that were developed for the general public, business community, trucking industry, law enforcement and other New York City agencies. Once the “message” is structured to address the needs of the specific stakeholder groups, then the next step will be to implement a program to deliver the messages.

This Action Plan draws upon the findings and recommendations of *Technical Memorandum 4* to create specific strategies for the implementation of education programs for the identified stakeholder groups. These stakeholders include the following:

- General Public
- Business Community
- Trucking Industry
- Law Enforcement
- New York City Agencies

PUBLIC EDUCATION PROGRAM PLAN

Cost Estimate

Task/Cost Range	Low (<\$5K)	Medium (\$5-\$20K)	High (>\$20K)
Task 1 - Mailing List			
Work Task 1.1: Create Master MS Access Database		X	
Work Task 1.2: Populate Mailing List Database	X		
Work Task 1.3: Expand General Public Database Entries		X	
Work Task 1.4: Maintain Database		X	
Task 2 - Public Information Materials			
Work Task 2.1: Create One-Stop Shop for Truck Route Information		X	
Work Task 2.2: Coordinate Truck Route Information on Transportation Websites	X		
Work Task 2.3: Creation of Maps and Brochures			X
Work Task 2.4: Hagstrom Map Company Partnership	X		
Work Task 2.5: Pursue/Coordinate Additional Map Updates	X		
Work Task 2.6: Develop/Distribute e-Newsletters		X	
Work Task 2.7: Create/Distribute Website Guide			X
Work Task 2.8: Develop Public Education Workshop Materials		X	
Work Task 2.9: Coordinate Expansion of 311 Information Line	X		
Task 3 - Media Strategies			
Work Task 3.1: Create/Distribute Information Materials			X
Work Task 3.2: Pursue Media Coverage		X	
Task 4 – Meetings and Special Events			
Work Task 4.1: Conduct Borough-Level Public Education Workshops		X	
Work Task 4.2: Truck Safety Education Campaign			X
Task 5 - Feedback			
Work Task 5.1: Establish Truck Study Comment Log		X	
Work Task 5.2: Address Feedback		X	
Task 6 - Recommendations			
Work Task 6.1: Identify Scope for Truck Route Map Updates	X		
Work Task 6.2: Establish Map Update Schedule	X		
TOTAL (RANGE)	\$200K	--	\$450K

BUSINESS EDUCATION PROGRAM PLAN

Cost Estimate

Task/Cost Range	Low (<\$5K)	Medium (\$5-\$20K)	High (>\$20K)
Task 1 - Mailing List			
Work Task 1.1: Expand Business Database Entries		X	
Task 2 - Public Information Materials			
Work Task 2.1: Create Business Page on Truck Route Web page	X		
Work Task 2.2: Coordinate with SIDs/BIDs/IBZs		X	
Work Task 2.3/2.4: Hagstrom Map Company and Additional Updates	X		
Work Task 2.5: Online Mapping Application	X		
Work Task 2.6: Creation of Maps and Brochures	X		
Work Task 2.7: Coordinate Expansion of the 311 Information System	X		
Work Task 2.8: Develop/Distribute E-Newsletters		X	
Task 3 - Meetings and Special Events			
Work Task 3.1: Business Community Education Workshops		X	
Work Task 3.2: Conduct Meetings with Largest Companies		X	
Work Task 3.3: Truck Safety Education Campaign			X
TOTAL (RANGE)	\$80K	--	\$180K

TRUCKING INDUSTRY EDUCATION PROGRAM PLAN

Cost Estimate

Task/Cost Range	Low (<\$5K)	Medium (\$5-\$20K)	High (>\$20K)
Task 1 - Mailing List			
Work Task 1.1: Expand Trucking Industry Database Entries		X	
Task 2 - Public Information Materials			
Work Task 2.1: Create Trucking Page on Truck Route Web page	X		
Work Task 2.2: Coordinate Truck Route Info on Mapping Websites	X		
Work Task 2.3: Online Mapping Application			X
Work Task 2.4: Coordinate/Distribute Info to Trucking Industry Associations		X	
Work Task 2.5: Coordinate Expansion of the 311 Information System	X		
Work Task 2.6: Develop/Distribute E-Newsletters	X		
Work Task 2.7/2.8: Hagstrom Map Company Partnership/Additional Mapping Updates	X		
Work Task 2.9: Creation of Maps and Brochures	X		
Task 3 - Media Strategies			
Work Task 3.1: Prepare Articles for Magazines/Newsletters		X	
Task 4 - Meetings and Special Events			
Work Task 4.1: Conduct Trucker Workshops			X
Work Task 4.2: NYC Trucking Conference			X
Work Task 4.3: Truck Safety Education Campaign			X
Work Task 4.4: Attend Trade Shows			X
Task 5 - Special Techniques			
Work Task 5.1: Truck Route Information Kiosks	X		
Work Task 5.2: FHWA Freight Planning Initiative		X	
TOTAL (RANGE)	\$100K	--	\$250K

ENFORCEMENT EDUCATION PROGRAM PLAN

Cost Estimate

Task/Cost Range	Low (<\$5K)	Medium (\$5-\$20K)	High (>\$20K)
Task 1 - Mailing List			
Work Task 1.1: Expand Enforcement Database Entries		X	
Task 2 - Public Information Materials			
Work Task 2.1: Enforcement Education Materials/Training			X
Work Task 2.2: Design and Implementation of Placard			X
Task 3 - Meetings and Special Events			
Work Task 3.1: Administrative Law Court Feedback		X	
Work Task 3.2: Conduct NYPD Workshops at Precinct Level			X
Work Task 3.3: Court Monitor Program	X		
TOTAL (RANGE)	\$120K	--	\$280K

AGENCY EDUCATION PROGRAM PLAN

Cost Estimate

Task/Cost Range	Low (<\$5K)	Medium (\$5-\$20K)	High (>\$20K)
Task 1 - Mailing List			
Work Task 1.1: Expand Agency Database Entries		X	
Task 2 - Public Information Materials			
Work Task 2.1: Prepare Agency Information Packets		X	
Work Task 2.2: Public Agency/Contractor Accountability		X	
Task 3 - Meetings and Special Events			
Work Task 3.1: Coordinate with DMV			X
Work Task 3.2: OEC/CEQR Coordination	X		
TOTAL (RANGE)	\$50K	--	\$120K