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Peter S. Palmer, Chairman
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New York, NY 1004-1415

Mr. Christopher Bonanti
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Dear Mr. Backlund, Mr. Bonanti and Ms Cheng:

Enclosed please find a document containing comments and questions prepared by staff of the North Jersey Transportation Planning Authority in cooperation with a working group that included staff of NJTPA member agencies relating to the Draft Environmental Impact Statement (DEIS) for the Cross Harbor Freight Movement study. A number of these member agencies are also submitting separate comments on various aspects of the DEIS.

The issues and questions raised by the NJTPA staff call for substantial additional analysis by the study team, including, in some cases, reexamining assumptions underlying the current analysis. However, the magnitude of the proposed investment and the potentially serious long term consequences for the metropolitan region resulting from making the wrong investment choices justifies these additional efforts.

It should be noted that while the NJTPA staff document raises hard questions about some of the approaches taken in the DEIS, NJTPA staff recognize the critical need to improve trans-Hudson freight movement to meet long term demand. To this end, an attached separate report presents the findings of a summary investigation commissioned by NJTPA staff into possible freight ferry systems for moving trains and trucks across the Harbor. Not only do freight ferry systems offer the prospect of achieving many of the goals of the DEIS, but they could be adapted to support development of a South Brooklyn port which is also under study by the City of New York.

The NJTPA staff trusts that the issues raised in this document and those raised separately by its member agencies will receive thorough and serious consideration and response prior to the preparation of a final EIS.

Sincerely,

Peter Palmer, Chairman
Attachments

C: NJTPA Board of Trustees

COMMENTS ON THE CROSS HARBOR FREIGHT MOVEMENT DRAFT ENVIRONMENTAL IMPACT STATEMENT

Submitted By the Staff of
The North Jersey Transportation Planning Authority

This document presents issues and questions relating to the Draft Environmental Impact Statement (DEIS) for the Cross Harbor Freight Movement (CHFM) study. It was prepared by staff of the North Jersey Transportation Planning Authority (NJTPA) in consultation with an interagency working group of staff from member agencies. A number of these member agencies are submitting separate comments on various aspects of the DEIS.

The NJTPA is the federally-authorized Metropolitan Planning Organization for the 13-county northern New Jersey region. The NJTPA Board is composed of local elected officials as well as representatives of state agencies, the Governor's office and the Port Authority of New York and New Jersey. They allocate nearly $2 billion in federal transportation funding each year on behalf of the 6 million people in the region. Based on NJTPA's federal mandate for regional planning, its interests in the CHFM DEIS focus mainly on how the alternatives presented will impact transportation in New Jersey. However, given northern New Jersey 's integration into the economy of the larger tri-state metropolitan area, the NJTPA is also vitally concerned that the alternatives contribute to an efficient freight transportation system encompassing all modes of travel supporting the metropolitan economy.

Issues and questions presented below that warrant specific response are listed alphabetically under each numbered heading. A glossary is included at the end of this document.

1. Survey & Documentation

1.1 In reviewing the DEIS, members of the NJTPA working group had an opportunity to meet with the CHFM consultant team in an attempt to clarify several issues. At the meeting, the consultants provided the working group with a document (Attachment A) responding to a number of questions previously submitted. They also indicated that they would provide the text of the Stated Preferences Survey conducted under the Major Investment Study (MIS), upon which much of the DEIS rail market demand was built. To date this information has not been received.

A. The text of the Stated Preferences Survey should be included in the final EIS.

1.2 The Stated Preference Survey on which the estimates of potential cargo diversions through the tunnel are based was conducted as part of the MIS in 1999. Although the DEIS was begun with plans to conduct a new shipper preference survey to update estimates of rail market demand East of the Hudson (EOH), this survey was never

conducted because of complications resulting from 9/11. The 1999 survey relied upon by the DEIS therefore does not accurately reflect current market conditions or shipper preferences, given the significant changes in the freight industry in recent years, including security and redundancy concerns, the implementation of the Conrail/CSX/Norfolk Southern merger-acquisition, changes in regional demand and distribution practices following the economic downturn of 2001-2003, continued outsourcing to foreign locations and growing congestion and rising costs on national rail routes, among other developments.

There are also concerns about whether the original MIS survey was representative of the potential tunnel users in the freight industry. The survey garnered only 267 responses which is a very modest, and very likely inadequate, sample size given that the survey is being relied upon as a key input for determining tunnel demand. The DEIS includes little information about the respondents -- such as their location, industry, volume and type of freight handled etc. -- that would be needed to assess whether the survey results are representative and reliable. Also, while the DEIS asserts that the survey targeted "decision-makers," it does not specify what decisions the actual interviewees made. Most consignees (receivers of freight) make decisions about levels of reliability they will tolerate in the delivery of the goods and price they will pay, but it is shippers or third party logistics firms (3PLs) from the originating point of the product's movement that generally make modal choices and select carriers to fulfill consignees' requirements. If the survey respondents were not the latter type of decision-makers -- shippers and 3PLs -- then the validity of the demand forecasts would be compromised.

The CHFM project team indicated in a private response that "the project could have been delayed by years if we had decided to wait for an opportune time to re-survey." Yet the desire to proceed quickly does not justify relying on dated or inadequate data given the magnitude of the proposed investment.

A. These factors suggest that previous respondents should be re-surveyed and that an additional survey should be conducted to insure current and accurate estimates of market demand.

B. The Final EIS should include a detailed profile of survey respondents including their location, industry, volume and type of freight handled etc.

1.3 The survey was a "Stated Preference Survey" that sought to gauge shipper preferences among several shipment cost and delivery time scenarios relating to each of the alternatives. The survey apparently did not directly ask about the support for a tunnel or companies' willingness/ability to create new operations or facilities to use the tunnel (though, as noted above, the text of the survey has not been released so the exact contents of the survey remain unknown).

Such questions no doubt were raised in the one-on-one interviews conducted with representatives of the freight industry. However, the DEIS includes little reporting on the level of support for the tunnel among specific potential users (shippers, receivers and

3PLs). It also does not indicate how the tunnel proposal is viewed by Class One railroads (Norfolk Southern and CSX) which will be depended upon to use tunnel and market the tunnel to shippers. In order for a major investment such as the tunnel to proceed, expressions of support representing a consensus throughout the freight industry serving the metropolitan region should be obtained.

The outreach meetings conducted during the development of the DEIS may have garnered some such expressions of support. However, to assess consensus of the regional freight industry, the meetings may have to be supplemented by new systematic polling or outreach efforts. It is requested that the EIS address the following:

A. What is the level of support for the tunnel proposal presented in the DEIS among a broad range of freight industry representatives serving the metro region -- shippers, wholesalers, trucking firms, third party logistics firms, trade organizations, etc. ?

B. What are the positions of the Class One railroads that will be relied upon to handle goods through the tunnel?

C. What specific companies have expressed plans for using the tunnel, how would their operations be modified and what investments will they make?

2. Freight Forecasts

2.1 The DEIS asserts that demand for freight service through a new rail tunnel will result from a projected 70 percent increase in freight volume (tonnage) between 2000 and 2025 in the metropolitan region (about equal on both sides of the Hudson). Yet the previous MIS forecast only a 27 percent increase in freight by 2020 (p. 3-2). A similar wide disparity is seen between the DEIS forecast of an 83 percent increase in truck freight volumes (Trans. Appendix, pp. 46-47) in the region compared with the forecast of a 20-25 percent increase in truck freight crossing the Hudson River by the New York Metropolitan Transportation Council (NYMTC). One would expect the two measures to grow at the same rate.

As an explanation for the divergence, the DEIS asserts that its forecasting methodology was changed and improved following the MIS. The new forecasting methodology relies on an updated Reebie Associates TRANSEARCH commodity flow database. This, the DEIS asserts, results in more accurate forecasts than relying on approaches (used in the MIS and by NYMTC) which infer truck and freight volumes from projected increases in population, employment and other factors (p. 8-2). The new methodology, the DEIS asserts, takes into account the new distribution patterns brought about by the transition to a post industrial economy in the metropolitan region. That is, freight growth will significantly outstrip population, industrial, or employment growth because goods are no longer produced locally and the population is consuming a wider range of products in larger volumes. In a private response to the NJTPA working group, the CHFM study

team defended the forecast methodology as "based on the national standard used to forecast freight demand" and consistent with "overwhelming national practice."

Yet the extreme difference in the forecasts -- 50 percentage points or more -- resulting from the different methodologies is a cause for concern. The DEIS does not present the assumptions and multipliers that account for the higher forecasts of a 70 percent increase in freight. While population will no doubt grow EOH, a recent Regional Plan Association report indicated that for the past two decades, 89 percent of *the tri-state region's* growth has been in New Jersey. If this trend holds true, demographics will only play a modest role in boosting consumption and freight demand EOH. Rather, the 70 percent increase would depend heavily on the "post-industrial" factors -- large increases in consumption per household and the need to import goods once produced locally. However, offsetting trends would also appear to be at work. Notably, the continuing fall-off of manufacturing EOH would mean substantial reductions in the inbound movement of raw materials and outbound movement of finished products (the 70 percent forecast is composed of both).

Unless the Final EIS demonstrates that forecasts of future freight volumes are based on conservative and realistic assumptions about the future, questions will remain about whether sufficient demand will be realized to justify the multi-billion dollar tunnel investment. Should these freight volumes fall closer to the MIS forecast of 27 percent, the viability of the tunnel could be significantly compromised by shortfalls in projected revenue.

Cautionary examples are provided by the Alameda Corridor and the “Chunnel” between Britain and France. Both facilities failed to attract expected traffic volumes as a result of changes in local and international freight sectors and logistics practices that were not foreseen at the time the facilities were planned.

The Alameda Corridor, a 20-mile rail cargo "expressway," was designed to handle nearly fifty percent of the traffic moving through the Ports of Long Angeles and Long Beach (LA/LB). But, as the Los Angeles Times recently noted: “In the nearly two decades it took to plan and build the corridor, the shipping business changed so dramatically that the economic assumptions underpinning the project became obsolete…” [LA Times, August 22, 2004, Metro Desk]. Today the corridor is handling only about 13 percent of port traffic. The changes that caused the shortfall involved logistical practices such as transloading of cargo from marine to domestic containers, value added services required at port of entry, higher transcontinental rail rates and other factors. Some of these changes have occurred in the very recent past (well after the 1999 Stated Preferences Survey relied upon by the DEIS). The failure to meet forecast demand has occurred despite the fact that the ports of LA/LB have instituted premium daytime pricing for trucks accessing the marine terminals which -- coupled with higher labor and diesel fuel costs, severe congestion on nearby truck routes, etc.-- should have led to higher percentages of cargo diversion from trucks to the Alameda Corridor. (Similarly, the CHFM DEIS assumes that higher trans-Hudson tolls will encourage diversion from truck to rail for freight destined to EOH.) Fortunately for the State of California, freight volumes handled by the LA/LB ports are so massive that the underestimation of demand did not jeopardize the financial

viability of the Corridor project (the proposed NY freight tunnel, handling much smaller volumes, will have no such financial leeway).

The tunnel under the English Channel, known as the "Chunnel," has also failed to meet its volume forecasts and its financial objectives, despite that fact that it is the only rail connection between England and Europe. The Chunnel handles both passenger and freight trains and is operated under a French managed agency called "Eurotunnel" with full bonding authority. When it was planned, it was thought that the Chunnel would virtually end cross-channel ferries, especially freight ferries, and that freight traffic profits would help to underwrite its passenger operations. Exactly the opposite has happened: freight hauled on ferries has increased while the Chunnel has been forced to cut costs on its freight traffic to maintain its shrinking freight market share. Noting that the Chunnel has incurred too much debt to allow for flexibility on prices, the Chunnel's recently ousted Chief Executive Richard Shirrefs stated that "There were errors in the [volume] forecasts from the beginning." [Washington Times April 8, 2004]

These examples underscore the critical need for evaluators of the proposed cross harbor tunnel to take a conservative approach in forecasting future freight volumes -- possibly including considering the impacts of high and low growth scenarios -- and to undertake updated surveys to capture the latest trends in the freight industry.

A. The wide disparities in forecasts between the MIS, DEIS and those prepared by NYMTC should be addressed in detail.

B. What were the specific assumptions and multipliers underlying the forecasts of a 70 percent increase in freight -- including those relating to the transition to a post-industrial economy --and how were these factored into the forecasts?

C. Given the great stakes involved, significant additional forecasting of freight volumes should be conducted to insure conservative and reliable estimates of tunnel demand.

2.2 Recent attempts to introduce new and expanded rail service EOH that is served by CSX Transportation and Canadian Pacific have failed to generate sufficient business to keep the services active. After extensive marketing efforts, CSX began running a new intermodal service trailer-on-flat-car (TOFC) to the Oak Point Yard/Hunts Point area of the South Bronx. The service was intended to carry primarily foodstuffs and other truckable commodities to the EOH market. These goods are destined to a first point of rest at warehouses in the Bronx. The service lasted only a short time, perhaps one month, and was discontinued due to lack of response by shippers. Also, Canadian Pacific introduced a carload transloading operation in Brooklyn. After some months of dwindling volume, this service also failed to generate a market and was recently discontinued.

Both of these EOH market setbacks have occurred despite huge surges in general rail freight traffic nationally, as well as regionally, west of the Hudson. In the case of the CSX traffic, these foodstuffs were not only packed in truck trailers, but were the type of

cargo coming from the western part of the U.S. that the CHFM has indicated would be a prime candidate for diversion from truck to rail. These setbacks cannot be ascribed to circuitous train routing through Selkirk, NY because, according to the analysis in the DEIS, the difference in delivery times to the EOH market using either the Selkirk route or a possible cross harbor tunnel would be inconsequential for agricultural goods shipped across the country from the West Coast. This points to the possibility that current rail access via EOH lines from Selkirk to NYC may be adequate to handle EOH rail service demands well into the future, given that there are generally fewer than ten freight trains per week handled EOH by CSX and CP combined. A major upgrade of EOH rail lines to handle future rail growth may be a less costly alternative to the tunnel. This also calls into question whether the robust forecasts in the DEIS of divertible rail traffic destined EOH are realistic, especially out to 2025.

A. What are the implications of the recent setbacks in new rail services EOH for demand forecasts in the DEIS?

B. Is there evidence of *current* unmet market demand for rail services EOH?

C. The Final EIS should examine the feasibility and cost of a freight-only track from Selkirk to the Bronx as an alternative to the tunnel.

3. Freight Ferry Alternative

The DEIS analyzed only a very limited spectrum of waterborne transportation options for handling freight between northern New Jersey and the New York City/Long Island regions. The No Build alternative examined by the DEIS includes the current Cross Harbor Railroad operations between Greenville, Jersey City and either its current 43rd Street float bridge barge location or New York City's renovated (but never used) 65th Street float bridge and adjacent yard in Brooklyn. The analysis of the current operation points to the fact that it is undercapitalized, using old equipment and has certain operational deficiencies (e.g. frequency and time of harbor crossings) that make the service less than reliable or suitable for shippers (it currently operates only one trans-harbor turn per day at most).

The DEIS also examined a TSM (Transportation System Management) upgrade of the current float operations, with capital costs of $31 million and a more robust "Expanded Float Operations Alternative," with capital costs of $80 million. This latter alternative includes new barge equipment consisting of three harbor float sets which would allow for service in each direction every hour over a 16 hour time period on weekdays and possible additional service on weekends.

The DEIS, however, concluded that no waterborne alternative would be viable in attracting and handling significant freight to EOH. This is due to delays in transferring containers to float barges. Overcoming these disadvantages would require an "inordinate operating subsidy" by the public sector (Transportation Appendix, p.54).

The DEIS acknowledges that other waterborne options exist, notably a "high speed loading and unloading float bridge alternative" that might overcome cargo transfer delays. It says that this would involve technology that "is new and experimental in nature" and would require the design of specialized vessels and equipment on a scale "that has not yet been realized to date." (p. 2-37)

This finding contradicts the conclusions of the previous MIS (Task 6) which found that such self propelled vessels are a feasible alternative to a tunnel. Under the direction of the NJTPA working group, TransTech Marine Co. was commissioned to undertake a summary investigation of this and other waterborne alternatives. This report, entitled *Analysis of Potential Freight Ferry Alternatives to the Proposed Cross Harbor Freight Tunnel*, is attached (Attachment B). Among the report's findings:

- A study by New York State Department of Transportation (NYSDOT) in the late-1970s found that the cost of a Jersey City to Brooklyn tunnel was "far too high to become economic in terms of operating savings contemplated." In contrast, the study found that a train ferry system -- using self-propelled vessels to transport entire trains -- "has sufficient positive economic merit" to warrant further investigation.

- Contrary to assertions in the DEIS, a train ferry system could be developed with proven, "off-the-shelf" technologies. Similar systems are in use around the world including in Canada, Europe and China. Prior to the 1930s, short-distance steam-powered train ferries were used in Detroit, Michigan; Port Costa, California and other U.S. locations.

- Many of the technologies that would be employed in a New York Harbor train ferry are now in use on the roll-on/roll-off *Williston Transporter* in British Colombia, Canada. This vessel is conceptually close to the NYSDOT design, differing only in size. It includes four diesel engines, each driving a thruster with open fixed-pitch propellers, that may be operated individually.

- Proven technologies, including less polluting engines, advanced navigation systems, computerized docking and loading systems, etc. would facilitate the development and safe operation of a train ferry system in New York harbor. It should be noted that while the train ferries could be very large -- up to 800 feet in overall length -- even larger vessels, such as cruiseships, mega containerships and Suezmax tankers -- all exceeding 800 feet -- regularly transit the harbor. Better navigation aids such as GPS, electronic charts, and the US Coast Guard's VTS (Vessel Traffic System) make the safe passage of such traffic routine in all weather conditions.

- A single train ferry vessel, costing approximately $75 million, could be put in service in the New York harbor handling eight trains a day. As demand increases, an additional vessel could be put into service to handle the estimated 14 (one way trains) forecast by the DEIS by 2025.

- The ferries could also easily handle intermodal trucks movements (roll-on/roll-off, with chassis and possibly tractors). Rapid loading RO/RO truck movements may represent a very large intermodal market that can achieve many of the objectives of the CHFM effort. Smaller dedicated RO/RO ferries could also be put into service. Such ferries are likely to be competitive in time and cost with truck transport, especially during peak periods, without causing drivers to exceed federally-required hours of service.

- The per unit throughput costs to move one freight rail car via train ferry are estimated to be one-eighth to one-twelfth the cost of moving the same rail car via the least cost tunnel alternative.

- Train ferries could be used to support the future development of a Brooklyn container port through a system allowing ten simultaneous train movements between the yard and ferry.

- The existing car float operation in the harbor should be supported and expanded as a foundation for a future train ferry operation.

- The MIS had recommended expanding the existing car float as "significant opportunity" for moving freight while the tunnel was planned and built. However, elements of the MIS car float alternative -- including assumptions about expected usage, operating costs and geographic scope-- were changed significantly in the DEIS in ways that reduced its cost effectiveness and resulted in it being dropped from further investigation.

These findings suggest not only that waterborne alternatives are feasible but that they can be constructed using readily available technology and can achieve the Cross Harbor Freight Movement study's goals including: having a positive impact on the region's goods movement system; offering a better balance between trucking and rail transport; improving air quality; and promoting economic benefits including development. Waterborne alternatives also achieve Goal #5 of the DEIS (Redundancy) more safely and effectively than a Cross Harbor Tunnel, as discussed in Section 11 below.

A. In light of these findings, it appears that a full and thorough investigation of freight ferry options should be conducted before any commitments are made to other alternatives.

B. Additional surveys and outreach to be conducted (as recommended earlier) should assess the support and potential demand for freight ferry options.

C. The issues and recommendations raised in the report prepared by TransTech Marine Co. (Attachment B) should be addressed.

3.2 While the proposed train ferry discussed above and in Attachment B may involve innovative strategies and technologies, it should be noted that the DEIS has not shied away from investigating and incorporating similarly innovative technologies in preparing its tunnel alternatives. As noted in Section 8.1, the double tunnel alternative calls for the development of a huge multi-level container storage and staging facility in Maspeth, a design which study team members indicated is based on a single facility in China and has never been attempted in the U.S. Indeed, such a container facility is a prerequisite to development of a double tunnel. It will be needed to create a type of vertical upland, given the fact that the proposed Maspeth container facility will be on a relatively small acreage footprint compared to other yards that handle normal rail intermodal operations.

Even if the technology and building design can be replicated here, it is fair to ask whether such a facility could be operated economically without the advantages of the low wage labor market. High wage, union labor will likely be required in Brooklyn and Queens.

A. The Final EIS should provide an operating plan for the Maspeth container facility including assumptions about operating costs, wages and employment levels.

4. Regional benefits

If the DEIS estimates are accurate, there will be a 5.4 percent overall truck-to-rail diversion for freight traffic crossing the Hudson by 2025 for a Single Tunnel option. Double Tunnel diversions are estimated to be 8.5 percent for all truck traffic moving across the Hudson. This would amount to a diversion of some 1,000 trucks of all sizes at peak AM periods (out of a total of 20,000), including a diversion of some 600 of the largest trucks in AM Peak out of a total of 5,100. Total diversions for a 24 hour period would be 3,000 truck trips out of 85,000 total truck trips crossing the Hudson by 2025.

These are total estimated truck diversions for all five PANYNJ Hudson River crossings (from Outer Bridge to the GW Bridge) in 2025, and as such they represent a very modest decrease in total truck traffic for an expenditure of $4-7 billion to build a tunnel.[1] It should be noted that the $2.5 billion additional required for adding a second tunnel results in only a 3 percent increase in diversion (to 8.5 percent) -- a very high cost for a small benefit increase. The practical benefit of even the highest diversion estimate to drivers is likely to be negligible in relation to the overall increases in traffic volumes expected over the next two decades.

Moreover, the diversions are unlikely to lead to an overall reduced dependence on the trucking of goods regionwide -- an overarching goal of the CHFM study. The reason is that rail freight is almost always an *intermediate move*. On either end of rail freight is a truck move to either load cargo or remove it. Intermodal cargo starts out and ends that way. Much carload traffic also ends that way, e.g. with a transloading or processing event

[1] The separate comments submitted by Hudson County raise questions about cost-benefits in terms of employment and other economic impacts.

then movement to final market by truck. For intermodal traffic going by rail to EOH, truck movements will be to and from the intermodal yard in Maspeth Queens, while rail carload traffic will result in truck movements to and from the rail car's customer at a freight site somewhere in NYC/Long Island. Truck traffic will flow to warehouses or directly to retail or manufacturing from these locations.

Thus, while truck volumes may be reduced, at least modestly, on Hudson river crossings, they will reappear to a great extent in Brooklyn, Queens or other EOH locations. While the DEIS has captured some of this increase in its analysis (for instance, identifying a 4 percent increase in Vehicle Miles Traveled -- VMT -- in Queens attributable to the tunnel), as discussed below, there are questions whether the DEIS has realistically estimated the extent of needed warehousing operations and circulation of empty containers EOH, both of which will add to truck traffic and likely offset any benefits of reduced congestion on Hudson River crossings.

As noted previously, a possible freight ferry alternative offers the prospect of accomplishing much of this same diversion on a 24 hour basis. Moreover, if such ferries were enabled to provide roll-on-roll-off truck capabilities serving multiple points EOH, significant new benefits would be achieved in relieving congestion on numerous congested roadways and creating a more efficient freight distribution system involving all modes regionwide.

A. A full analysis of freight ferry options, as recommended previously, should investigate these benefits

B. A cost-benefit analysis should be presented comparing the overall transportation benefits of the tunnel alternative to those achieved in other major freight capital projects in the region and elsewhere in the nation.

5. Circulation of Empties - Rail Backhaul Traffic

The DEIS analysis estimates that there will be twice as much inbound rail traffic (to EOH), measured by tonnage, as moving outbound (to WOH) through the proposed tunnel. This large imbalance between inbound and outbound goods raises a number concerns and questions, particularly related to the circulation of empty containers and the market for largely one-way rail moves through the tunnel:

5.1 The DEIS does not present a detailed plan for handling the potentially large volume of empty containers that will accumulate EOH as a result of the relative lack of outbound cargo (nearly 600 eastbound containers are projected to arrive each day-- Appendix 7, p. 6). In a private response to the NJTPA working group, the CHFM team indicated that "a container management program will be in place so that empty container cars will not accumulate EOH. Containers that are unloaded EOH will be placed on the first available outgoing (westbound) train returning to their point of origin on their railroad of origin."

Yet it is not clear that most of the containers that were loaded with cargo inbound will move outbound empty by rail. To move an empty domestic container back to its point of origin by rail, the shipper would have to be willing to pay for a full round trip by rail, plus a total of four lift-on/lift-off charges to get the container back to its origination point. These charges can add several hundred dollars to the cost of a rail move for what is in effect one-way cargo haulage. The Class One railroads will price their service to recover costs plus profit for the full round trip move. As discussed in section 6.1, this one way haulage -- together with constraints on the national rail system and other factors not captured in the survey relied upon by the DEIS -- will require EOH service to be priced by the Class One carriers as a “premium” service.

Rather than pay for this premium service, in many cases, it is likely that the original shipping company or 3PL controlling the move of the container will seek to contract with a trucking company to pick up the empty container and move it to the nearest location where cargo can be obtained to provide a "revenue backhaul." The reloaded container will then either be taken to a rail yard for shipment or trucked to its final destination. In the latter case, several different pick ups and deliveries by truck can occur before the container gets back to its original base.

Therefore a large share of the empty containers will move out of the EOH region by truck (either by independent operator or fleet) to the nearest location where backhaul cargo revenue can be obtained. This very likely would mean more trucks traveling through Brooklyn and Queens and to New Jersey creating new environmental and congestion impacts. It appears that DEIS has not adequately accounted for this likelihood.

A. The final DEIS should present a detailed analysis and plan for the circulation of empties.

B. How will the proposed container management program work, who will administer it and what enforcement mechanism will be employed?

C. What are the implications for truck VMT if significant truck backhaul of empties occurs, as is likely?

D. If truck backhaul of empties is restricted, isn't it likely that empty containers will accumulate in Brooklyn and Queens (similar to the "container mountains" in Newark and surrounding areas). Where will such accumulations be located?

E. If shippers or railroads are required to backhaul empties by rail what will be the impact of this requirement on the cost of shipping goods to EOH? Won't this diminish the demand for shipment via tunnel (compared to truck) and also the revenue generated to support tunnel operations?

F. How were the costs associated with the backhaul movement of containers reflected in the stated preference survey?

5.2 While the DEIS Transportation Appendix provides tables projecting commodities that will move outbound (westbound) from EOH in 2025, it does not indicate which of these commodities (and in what volumes) are projected to use the tunnel. Rather the Appendix implies (p.8) that the mix of outbound commodities would be similar to that moving inbound (with consumer goods and foodstuffs predominating). However, a detailed accounting of projected outbound traffic should be provided. If fairly substantial and reliable sources for outbound shipments cannot be identified to fill the 2.8 million annual tons projected for outbound tunnel traffic (30 percent of total tunnel volume -- Appendix P. 109), then either the tunnel will fall short of the revenues needed for operation or shipments of household garbage --"Municipal Solid Waste (MSW) -- will have to be relied upon to fill the gap. The CHFM has maintained, in response to concerns expressed by Jersey City and others, that no assumptions about shipments of MSW have been included in tunnel demand forecasts. This makes it all the more important that an accounting of projected outbound shipments be provided in the Final EIS. Given the vagaries of the market, contingency plans for shipments of MSW or other possible cargo and investigation of their potential impacts in New Jersey, as requested by Jersey City, also appear warranted.

Discussion with project consultants indicates that solid waste products such as construction debris, scrap metal, etc. may comprise a significant amount of the export tonnage. While this does not include MSW, it still may not be suitable for loading on the same containers that came inbound (given possible contamination or cleaning requirements). These products are usually shipped in dedicated containers or rail cars that are designed to handle this commodity, its tonnage and loading requirements. Solid waste is also a very low value cargo and may not generate the revenue expected by shippers for the use of general domestic containers and long distance moves. It is therefore likely that actual outbound rail traffic will be even lower than even the relatively small volume (compared to inbound traffic) projected in the DEIS.

A. Provide a breakdown of projected outbound commodities.

B. If projected outbound volumes fall short, how will this impact revenues for tunnel operations?

C. Shouldn’t MSW shipments be planned as a contingency and, if so, what will their impacts be?

D. What assumptions were made about how waste products are to be shipped?

E. How will the rolling stock for this shipment be obtained?

6. Challenges to Cross-Hudson Rail Service

6.1 Shippers will only use rail services to EOH markets if these services are provided at rates competitive to truck transport with similar or better delivery reliability and timeliness. However, it appears that the Class One railroads (NS and CSX) will confront significant complications and challenges in providing EOH rail services, prompting them to charge a premium for hauling goods to this market. Premium rates in turn could significantly reduce the competitiveness of services and undermine the demand needed to insure the viability of the tunnel.

In particular, Class Ones will have to provide "special" handling for trains crossing the Hudson including isolating and assembling EOH freight, running trains beyond their normal drop off points and getting equipment and crews back to New Jersey so that they can be put back into service serving the broader northeastern market. Inevitably, because of the logistical constraints of scheduling trains through the tunnel and the limits on the hours of service train crews can work, equipment and crews may get stranded EOH, adding to costs and reducing productivity. The railroads will also face additional complexities such as sharing some infrastructure with passenger operations, high taxes and fuel costs, etc. All of these factors reinforce the likelihood that EOH rail service will be priced as a premium by the Class Ones.

A further challenge that will lead to premium pricing of rail service EOH is the increasing capacity constraint on the West Coast and transcontinental rail lines. These long term structural constraints are having an effect on both carload and intermodal traffic, requiring longer or more numerous trains and delaying the transport of goods in many instances. At the same time, the constraints have allowed railroads to raise rates and promote their traffic preferences -- charging higher rates for types of cargo or service locations that they perceive as being less profitable. In the case of northern New Jersey, a recent study commissioned by the NJTPA found evidence that Norfolk Southern has priced traffic into New Jersey terminals at higher prices on their waybills (at least partly as a result of a preference for dropping NY/NJ metro-bound traffic in Pennsylvania terminals and trucking it in to final customers). These higher rates will certainly be extended for traffic destined to NYC, given the complications and additional costs of operating EOH as discussed above.

While the DEIS factored into its demand forecasts a $2 per ton fee on rail traffic needed to pay for tunnel operations and maintenance, the impact of the recent changes in the national rail system --increased rates and delays in delivery schedules -- were not anticipated in the Cross Harbor MIS and not analyzed in the DEIS in terms of their impact on shippers' preferences for rail service. The DEIS does not address, based on explicit statements from the Class One railroads, whether they are willing to commit to serving the smaller rail market EOH via the proposed tunnel.

Among the key issues that should be addressed in the final EIS regarding the above challenges to rail operations EOH:

A. The Final EIS should assess how rail operations will be affected by the constraints that will be faced in terminating trains EOH including the potential for equipment and crews to be tied up there.

B. Will Shippers be willing to pay a premium for rail service EOH? If so, an elasticity analysis should be provided.

C. Did the original shipper survey, conducted during the MIS, reflect additional premiums such as a per-ton surcharge on rail traffic through the tunnel to finance tunnel maintenance and operations?

7. Warehousing/Distribution

Warehousing/Distribution Centers (W/DCs) will be needed EOH to handle 587 net new freight containers projected to be shipped daily through the tunnel to Maspeth. *Appendix 7: Land Use & Economic Conditions* examines where and how these facilities can be developed. The analysis is based on a survey of vacant and available land, interviews with real estate professionals and use of the REMI economic model.

The analysis assumes that construction of a tunnel will spur freight companies to build the required W/DCs near Maspeth and along rail lines EOH. It makes special note that "the extensive warehousing & distribution infrastructure located today in northern New Jersey did not develop overnight by government edict or strategic plan. Rather, it was a market response to public and private transportation investments in ports, airports, highways and railroads." [Appendix 7, p. 7] It cites examples of public investments spurring economic activity elsewhere in the US (e.g. Alameda Corridor). It says the increased efficiency of goods movement will benefit the entire metro region and so will not appreciably draw W/DC employment away from NJ to NYC. These assertions raise a number of concerns:

7.1 Establishing W/DCs in EOH will require often drastic changes in how companies distribute goods. Containerized goods are typically taken to W/DCs in northern New Jersey (and surrounding areas) where they are broken out for shipment to a broad range of locations in the metro region and throughout the northeastern US. Value-added operations (such as packaging, kitting and labeling) are often performed in the process. These locations, along major highway and rail corridors, offer the advantages of broad one-day market reach for truck delivery, regularly scheduled rail service, opportunities for multi-product warehousing and efficiencies related to combined corporate facilities. W/DCs in Brooklyn and Queens served by the tunnel would retain few of these features. Rather they would have a narrow geographic focus (i.e. NYC and LI) and would require goods destined for them to be segregated into separate containers, creating new logistical complications for shippers and wholesalers. The narrow geographic focus would also likely affect the service charges and operations of Class One railroads as discussed above. Without substantial commitments by W/DC operators to build EOH, the tunnel will represent a huge public investment justified by only speculative assumptions that the critically needed development of the W/DC sector will take place.

A. The Final EIS should provide an assessment of the willingness of companies involved in goods movement in the metro region to create distribution facilities.

B. What companies have gone on record committing to using the tunnel and creating EOH W/DC facilities?

7.2 Currently, most W/DCs throughout the nation are being built in outlying suburban and rural areas in great part because of the cheapness of land and ability to create large facilities with relatively few complications. Indeed, these factors account for much of market-driven warehouse development in northern New Jersey at locations like Raritan Center and Exit 8A of the Turnpike. These locations bear little resemblance to the properties being targeted for W/DC development in Brooklyn and Queens. Development of extensive new W/DCs in EOH will require building in a congested area with often extremely high property values. It will also involve the often lengthy permitting and extensive capital investment required in demolishing existing buildings, decontaminating soils, creating/rehabilitating infrastructure and addressing community concerns. As such, the Brooklyn and Queens properties closely resemble the brownfield sites scattered throughout Newark and Jersey City that were the subject of NJTPA's Brownfield Economic Redevelopment study published in 2003. This study documented the often significant environmental and financial disadvantages developers face in the reuse of "close-in" industrial sites for freight related purposes.

A. How will these disadvantages be overcome EOH? Where will new W/DC operations be developed?

B. What specific commitments have been made (or will be required) by NYC government for providing tax incentives and other benefits for promoting W/DCs needed to sustain the tunnel traffic? What plan and resources are in place or envisioned to develop and underwrite the facilities that will be needed EOH?

C. Is there an estimate of the total extra cost to city government to provide these incentives as well as to subsidize road, rail, water, electricity and other infrastructure needed to attract private sector investment?

7.3 Modern W/DCs have been steadily increasing in size, surpassing 1 million square feet in many locations. However, the DEIS envisions a "more concentrated infrastructure of intermodal facilities" than is found WOH because the lack of land to handle storage of containers, chassis and other intermodal equipment will presumably lead to a more efficient use of available land (Appendix 7, p.7). Questions and concerns about whether this plan is realistic are presented in the separate analysis submitted by Hudson County. Key questions include the following:

A. Won't this require development of one or more W/DC parks (rather than scattered facilities) adjacent to Maspeth to achieve the needed concentration and

efficiency? Have plans been made to create such parks including necessary condemnation of land and financial underwriting of this development?

B. Isn't it necessary to gain community input and acceptance upfront regarding the large scale development of W/DCs needed to sustain tunnel traffic? What are the plans for gaining this acceptance?

8. Rail Capacity, Infrastructure and Operations

8.1 The Cross Harbor tunnel alternative includes funding for extensive rebuilding of rail tracks, structures and yards in New York City and other locations that are owned by New York State. Based on a cost breakdown provided privately by the CHFM consultant team (Attachment C), under the proposed double tunnel system about $2 billion out of the total project cost of $7.35 billion would be allocated to infrastructure improvements EOH -- on the Bay Ridge Line, Montauk Branch and Brooklyn waterfronts. About $800 million of this cost is for creating an intermodal rail yard at Maspeth, including a multi-level container storage facility.

In contrast, no project funds are allocated to needed improvements in rail infrastructure in New Jersey aside from construction on the Jersey City tunnel portal and a short distance of connecting track. New Jersey infrastructure improvements are assumed to be borne wholly by the State of New Jersey as part of the no build alternative. That is, the New Jersey upgrades, will be accomplished from existing funding sources without any underwriting by the tunnel project. According to the DEIS, these projects in New Jersey would have been undertaken anyway as part of the existing plans to upgrade the state's freight rail network; the DEIS includes only projects for which funding and implementation are supposedly assured in New Jersey.

This does not appear to be the case. New Jersey has planned improvements to the freight rail's system in two phases. Phase One, nearing a start now, is a 50/50 partnership between the Class Ones and the Port Authority totaling $50 million. These funds will be committed to projects such as line clearances and additional sidings. NJDOT is also planning to supply funds on a 50/50 basis (with the Class Ones) for rail system improvements under a Phase Two rail plan (approximately $80 million). However, none of the latter money has been committed by the State. Yet, the tunnel project assumes that key projects in both phases of New Jersey's rail capacity improvements will be completed. At present, there is no guarantee that these funds will be made available, given tight budget constraints and lack of progress in reauthorizing the State's Transportation Trust Fund.

A notable example of an unfunded project included as a no build assumption is the "Waverly Loop" project. It is included in NJDOT's proposed Phase Two of rail improvements. However, a second track for the Loop, referred to in the DEIS as necessary for the double tunnel, has not been considered in either phase of the rail plan for funding. Contrary to the assertion in the private responses provided by the CHFM

team (Appendix A, question 18), NJDOT has neither planned nor determined the feasibility of the second Waverly Loop track.

A. What projects are assumed to be funded in New Jersey (indicate the source and level of funding)?

B. How will assumed projects in New Jersey be funded if future funding is not made available as expected?

C. Given that New Jersey is being depended upon to underwrite a substantial portion of infrastructure upgrades needed for the tunnel, what funding matches from New York City and State will be required and have been committed towards infrastructure for the tunnel on the New York side?

D. Wouldn't a more equitable approach be to include infrastructure needed on both sides of the Hudson River in the project costs? How would this approach affect the capital costs of the alternatives?

E. Are operation and maintenance costs of the rail infrastructure in Brooklyn and Queens included in the tunnel operations and maintenance and, if so, shouldn't these costs be borne by the State of New York?

8.2 The DEIS assumes that, absent the tunnel, no growth will occur in the number of trains using the New Jersey rail network over the next 20 years. This assumption needs to be reviewed in the FEIS. Such an assumption is difficult to accept based on current activity (i.e. CSX has added at least two pairs of non-intermodal trains to the northern New Jersey rail network in the last two years).

The DEIS presents two different versions of each of the tunnel alternatives – a 'single track' version and a 'double track' version.

Single-Track Alternatives

Generally speaking the 'single track' tunnel alternatives are projected to attract lower levels of traffic than the comparable 'double track' alternative. A 'single track' tunnel will likewise have a much lower overall capacity compared to a 'double track' tunnel.

The data provided in the DEIS for the 'single track' tunnel alternative indicates a manageable increase in train traffic on rail lines in New Jersey. Presuming that this estimate is correct, and that all of the needed capacity projects are in place (see discussion in section 8.1), NJ TRANSIT does not foresee a major conflict with passenger rail operations resulting from a 'single track' alternative.

It is essential for all of the projects assumed in the No-action alternative to be in place before opening of the tunnel. As noted earlier, some of the rail freight improvement projects included in the No action alternative are not funded. The

Cross Harbor Tunnel project needs to be able to assume the cost of implementing any unfunded projects in order for the comments above to remain valid. Not having these improvements in place could result in additional rail freight traffic congestion on lines with passenger service and have a significant negative impact on these services.

Double-Track Alternatives

The data included in the DEIS was incomplete for the 'double track' version of the alternatives. Additional data was subsequently provided which helps to address some of the inconsistencies that were contained in the DEIS. However, questions remain regarding the 'double track' alternatives and it is unclear whether there would be any potential impacts on passenger rail operations resulting from a 'double track' alternative, so strong concerns remain about these alternatives.

The Double-Track alternatives also assume use of the Northeast Corridor by up to three pairs of new overnight freight trains. Further investigations are needed to determine if the Northeast Corridor can accommodate this level of freight service given potential clearance issues and current passenger train operations.

A. A revised analysis should be presented reflecting a realistic increase in northern New Jersey rail traffic over the next two decades

B. A revised analysis should detail how traffic through the double tunnel will affect NJ Transit rail operations and the Northeast Corridor.

8.3 The DEIS is unclear whether railroads will operate short trains (sprint trains) into the tunnel or wait until they have sufficient consist (assemblages of rail cars) to merit a longer train move into the tunnel. If they wait for sufficient buildup of rail car consist, it is unclear where the train blocks will be stored until ready for assemblage and movement. NJ terminals such as Kearny and Croxton face significant capacity constraints. Indeed, railroads are becoming more aggressive in imposing short demurrage charges at rail intermodal terminals due to these constraints. If trains are queued on tracks approaching the tunnel or elsewhere, this would greatly increase noise and other local impacts. These operational issues are not addressed in the DEIS.

A. How and where will train consists be assembled for movement through the tunnel? Is capacity available in northern New Jersey rail yards. What will be the potential local impacts of queuing and assemblage?

8.4 With regard to rail carload traffic, rail cars must either be transloaded at a facility or must be spotted (moved) to a rail spur or siding for direct delivery to the customer. The DEIS does not estimate the cost of providing service to new customers that do not already have sidings and main track switches. This is complicated by the fact that most EOH main tracks are also used by passenger rail operations (Metro North and LIRR). Based on examples of main track installation of siding and spur tracks on joint passenger

and freight lines in the 30 county study region, the cost of installing a switch is at least $500,000. The LIRR has removed many mainline switches to former industrial customers on Long Island. The DEIS also does not specify who would bear the cost of installing switches—the customer, the railroads or some other agency.

A. The EIS should provide an estimate of costs of installing rail spurs to carload rail customers and specify how they will be financed.

8.5 Forecasts for the volume of cargo traveling through the tunnel alternatives appear to be either flawed or below the standards for profitable rail operations. According to the DEIS, the single track tunnel is expected to run 28 trains per day carrying 13.3 million tons per year. If one assumes a five day/ week operation (260 days/yr.), the per train average would be approximately 1,800 tons per train. According to the DEIS, a double tunnel operation would carry 19 million tons per year, running 64 trains per day which (again assuming 260 days year of operation) would average 1,140 tons per train. These trains would include both heavy carload and lighter intermodal cars. These tonnage volumes fall far short of profitable size trains, which generally average 6,000 to 8,000 tons per train.

As indicated elsewhere, without premium pricing on the forecasted rail traffic using the tunnel, these low quantities of freight will require additional commodities (possibly MSW?) to make rail service through the tunnel profitable.

A. The DEIS should explain projected rail profitability in light of these forecasts.

8.6 One EOH rail service market envisioned by the DEIS is the opportunity to run "through" trains via the tunnel to Connecticut and other New England locations, capturing freight currently moving by truck, principally over the George Washington Bridge, or by rail via the rail bridge at Selkirk. Of the total projected tunnel volume, through traffic is projected to be 5 percent for the single tunnel and 14 percent for the double tunnel. Yet recent trends suggest the market for through traffic is changing. Truck traffic at some lower trans-Hudson crossings has declined in 2003, which likely reflects changes in distribution practices that have solidified into long term trends. That is, distribution facilities have relocated to outlying areas and are serving wider (often multistate) areas. The result has been a greater use of long-distance trucking. Operators of these trucks are more likely to route around the New York City crossings whenever possible and use the northern Hudson crossings at Newburg and Tappan Zee. The requirements for increased truck inspections in and around New York City as a result of 9-11 have reinforced these patterns.

A. The Final EIS should include revised forecasts of through rail traffic based on the new trends in truck routing around the region.

9. Financing

9.1 The DEIS indicates that an organization must be designated or created to bond, build and manage the tunnel project. The DEIS suggests that the Port Authority of NY/NJ is the "logical potential choice" to be the sponsoring agency. The DEIS notes that the Port Authority has bonding authority and can tap a revenue stream that could pay off bonds issued to build the tunnel. This revenue would be derived from increased tolls. All WOH-based trucks of a certain size using trans-Hudson roadway crossings would be assessed an additional $10 or more per crossing (in the tolled direction) and this revenue would be dedicated to paying the bonds over a period of 40 years. Reliance on this revenue stream raises a number of significant concerns:

- The DEIS presents no analysis as to the likely impact of substantially raised tolls on regional traffic patterns. While it may help divert some goods movement to rail, it could just as likely prompt trucks to reroute over other highways (or local roads) in northern New Jersey.

- The increased tolls would be borne by New Jersey or other WOH businesses with no direct benefit being reinvested from the revenue in these regions. This could lead to relocations to outlying areas or other states. WOH truck companies will be forced to pay tolls that will only benefit their modal competitors and a small number of shippers outside the region who use rail.

- Dedicating substantial toll increases to tunnel construction, will likely foreclose the use of future increases for other needed regional projects, possibly during the entire 40-year bond repayment period. Upgrades to airport and seaport access, improvements to the Lincoln Tunnel Exclusive Bus lane, and the twinning of the Goethals Bridge are among the major long term Port Authority projects that will depend on future toll revenue.

- Maintenance and operations of the tunnel would be paid for by a $2 per ton cargo assessment against all rail traffic that uses the tunnel. A certain volume of traffic must move through the tunnel to sustain those costs. Should tunnel traffic fall below projections -- which is a distinct possibility based on the issues raised elsewhere in this document -- Port Authority tolls would likely be depended upon to make up the shortfall. This could burden the region's transportation financing for decades to come and may affect the status of the tunnel's bonds.

Key issues that must be addressed related to these issues are the following:

A. What is the range of possible toll and tonnage assessment surcharges required to finance the tunnel?

B. What are the other major capital investments in the region that are being planned by the PANYNJ and how will they be affected by the diversion of increased toll

charges to the tunnel project?

C. If traffic volume through the tunnel is insufficient to sustain operational and maintenance costs, how would these costs be borne?

D. What will be the transportation and economic impacts of the toll surcharges on New Jersey businesses and routing decisions?

E. Freight transportation companies should be surveyed to assess the impact of the surcharge and the results included in the Final EIS.

9.2 The financial analysis in the DEIS estimates the benefits to the region of the Cross Harbor Tunnel based on an econometric model. The Total Discounted Benefits to the states are weighted approximately 6:1 favoring New York over New Jersey for either a single or double tunnel (for the latter, out of a total $10.3 billion in benefits, $9.5 billion would go to New York State and $1.6 billion to New Jersey --Volume 2, Table 20-3). This heavy weighting of benefits in New York's favor raises concerns about whether it is appropriate to rely on financial resources from the Port Authority for building and operating the tunnel, as discussed above. The Port Authority was created to serve the interests of the entire bi-state region. It's major investments have been fairly balanced between the two states. In general, New Jersey's benefits from the Port Authority's Newark airport and Newark-Elizabeth marine port are balanced by the benefits that accrue to New York from LaGuardia and JFK airports as well as the World Trade Center site. The Port Authority's bridge, tunnel and PATH river crossings have tax and economic benefits for both states. Yet, if the Port Authority becomes the primary bonding and operating entity for the freight tunnel, it will undermine this balance, creating disproportionate economic benefits for one half of the region at the expense of the other.

Adding to the potential inequity between the states of the tunnel proposal are its benefits and burdens regarding capital costs. As discussed previously (section 8.1 above), the DEIS shows that under the double tunnel scenario, nearly $2 billion worth of new and improved infrastructure (in addition to the tunnel itself) will take place in New York, mostly on NY State owned tracks, yards and structures. In contrast, the only capital expenditures in New Jersey are to build the NJ portion of the tunnel, including its portals and a possible turnout to the National Docks Branch. None of this directly benefits current NJ freight operations.

A. The final EIS should analyze whether the burdens and benefits of the tunnel are equitable between states and create revised financing plans to achieve equity.

10. Local Impacts & Environmental Justice

10.1 Separate comments have been submitted by Jersey City that raise significant concerns related to local impacts of the tunnel alternative, environmental justice (EJ) and the adequacy of the alternatives analysis. Key concerns in the Jersey City comments include the following:

- The DEIS assessment of environmental justice evaluates only two of numerous alternatives that were identified in the scoping process or MIS. All alternatives should be assessed including but not limited to ferry and a third tunnel alternative and four additional Staten Island upland routes that were not identified by the scoping process.

- The density of low income and minority population in proximity to proposed rail approaches is greater in Jersey City than in Staten Island. The fact that this Jersey City population is already disproportionately impacted by noise, congestion and pollution should be accounted for in the DEIS environmental justice assessment.

- The fact that noise and other impacts would occur regionally along the rail corridors leading to the tunnel should not (as suggested in the DEIS) lessen environmental justice concerns about impacts on predominantly low income and minority populations in Jersey City.

- The distance for judging noise impacts on residents was defined as 181 feet from the rail line in Jersey City and 450 feet from the rail line in Staten Island, skewing the analysis towards identifying greater noise impacts in the Staten Island.

- Outdated maps (from 1995-1997) were relied upon to assess local impacts.

- Key neighborhoods were neglected or mischaracterized. For instance, the Lafayette residential neighborhood was shown as being industrial and the urban neighborhood around the Greenville branch is described as low density.

- Given New York City's plan for exporting 13,000 tons per day of municipal solid waste by rail or waterborne vessel, it is likely that the tunnel will be used to transport this waste. The environmental, public health, transportation and environmental justice impacts of possible use of the Cross Harbor Tunnel to move this waste stream should be evaluated prior to the final EIS.

- The final EIS should assess the local impacts of the additional trains that would be generated by the development of an intermodal container terminal in South Brooklyn.

10.2 Other issues relating to local impacts that have not been addressed separately by Jersey City include the following:

Noise Impact Assessment: According to the DEIS, all segments of the rail lines were assessed using FTA's detailed noise assessment methodology. Table 10-6 (page 10-10) does not identify land use category 2 (residences) as potentially impacted by the tunnel system, despite the existence of multifamily apartment buildings and other dwellings within close proximity to the tracks. Table 10-10 and Figure 10-3 show the location of a single monitoring station that was placed along the National Docks Segment 2 along

Wayne Street, which is in an area of one and two family detached houses. This density and configuration is a rarity in Jersey City, and does not represent the typical higher density multi-family units that are in close proximity to the tracks in other nearby locations. Additionally, the rail line at the intersection with Wayne Street is straight. The noise level emanating from the National Docks Secondary is higher along the curves.

Air Quality Impacts: It is not clear that the DEIS examined localized air quality impacts, particularly with consideration of EJ concerns.

In regard to these issues, the final EIS should address the following:

A. Additional noise monitoring locations should be established at Lafayette Gardens and Brunswick Estates near the National Docks Secondary, and the noise impact analysis should be amended to reflect the additional data.

B. What are the specific levels of increase for air born pollutants within the EJ study areas (with comparable boundary distances) that would result from increased rail traffic due to the various alternatives?

C. What are existing childhood asthma rates for the populations within the EJ study areas as compared to the rest of the CHFM regional population? Potential increases in childhood asthma rates should be examined by the EJ section.

11. Redundancy

A new goal for the tunnel was added in the DEIS from the earlier MIS: Redundancy. Redundancy addresses security and emergency planning concerns in the post 9/11 environment. The DEIS asserts that the tunnel would offer freight redundancy to the GW Bridge and other facilities in the event of these facilities were taken out of operation. However, the tunnel itself is vulnerable to disruption by either terrorists or an accident such as the fire in the Howard Tunnel in Baltimore. Given the huge cost and time delay to repair the Howard Tunnel, a similar disruption of the much longer Cross Harbor Tunnel would likely be even more expensive and take a longer time to repair. In the event of a shutdown of the GWB, the tunnel also could not divert sufficient NJ-originated traffic headed east of the Hudson due to capacity constraints (even for a double tunnel). To handle even a portion of GWB truck traffic, the railroads serving the tunnel would need a huge number of rail flat cars, a huge rail yard marshalling areas where truck to rail lift-on/lift-off operations could be accomplished on both sides of the Hudson, much more rail motive equipment, etc. Only a dual mode tunnel (moving both rail and truck traffic) would address the capacity and equipment problems, if not the security issue, but this alternative was explicitly rejected by both the MIS and the DEIS.

However, multiple freight ferries -- especially with roll-on/roll-off truck capabilities as proposed in the attached analysis (Attachment B) -- shuttling freight traffic to multiple locations east of the Hudson would offer real security and capacity redundancy. An accident or other event that might take out a particular ferry or even a loading location

would have negligible impacts on other ferries operating as a fleet, using multiple locations for loading and unloading traffic on both sides of the river.

A. The limits on the tunnel's ability to provide freight redundancy should be objectively detailed in the final EIS.

B. A full analysis of freight ferry options, as recommended previously, should be investigated.

12. Proposed Brooklyn Port

Should transportation planners in the NY/NJ region as well as the federal agencies that review the DEIS and its responses take the "scenario" of a South Brooklyn port facility as an important element missing from the analysis of the impacts of a cross harbor tunnel? The answer is yes given that the impacts of such a facility could overwhelm the NJ's overall rail freight and passenger operations.

The proposed container port, capable of handling up to two million TEUs per year, would be built in the Sunset Park area of South Brooklyn. The DEIS asserts the Cross Harbor Tunnel is not dependent on traffic generated by the proposed South Brooklyn container port and therefore the impacts this port do not have to be addressed in the tunnel analysis. Yet there are numerous indications that if the tunnel is built the port will follow, meaning that its impacts must be considered in the final EIS:

- The South Brooklyn port facility and the Cross Harbor Tunnel were always seen as mutually interdependent because the port facility would be wholly served by rail. The port could not be served by truck because of the lack of available upland for container dwell time, the fact that the nearby neighborhoods would be opposed to truck traffic, and the major roadways serving the area—the Gowanus and Brooklyn Queens Expressways—are at or near full utilization of capacity now.
- The Cross Harbor MIS was conducted at the same time as the "companion *Strategic Plan for the Redevelopment of the Port of New York* study" (p.3-5, MIS Task 5 Draft Technical Memorandum) and was also sponsored by NYCEDC. The Cross Harbor Freight Study MIS and the *Strategic Plan* study shared data and other planning resources throughout their duration.
- NYCEDC continues to validate the planned existence of the South Brooklyn port facility through its still active *Strategic Plan* and other planning initiatives.
- NYCEDC has instructed the current Comprehensive Port Improvement Plan (CPIP) and CPIP EIS studies to model a South Brooklyn container port facility in its planning for harbor capacity on a "scenario" basis.
- The DEIS includes plans to build two sidings at New Lots in Brooklyn. These sidings are recommended in the MIS and DEIS, and would be used to accommodate reverse train movements into and out of a South Brooklyn port facility.

These facts make it necessary for the final EIS to assess the potential impacts of a South Brooklyn port facility for the New Jersey rail system and highway system. While a full analysis must be conducted, several key impacts are apparent:

Potential to overwhelm NJ rail yards: Container traffic unloaded at the Brooklyn port would have to be moved almost immediately because of the lack of dwell space. The Cross Harbor MIS says that some container trains would move into the proposed Maspeth Queens facility or through Fresh Pond yard to a possible future rail yard at the Long Island Pilgrim site. However, this volume will be limited not only by the lack of adequate yard space but the lack of warehousing support infrastructure near these locations. The overwhelming percentage of warehouse facilities are located west of the Hudson. This suggests that most of the traffic moving in and out of the South Brooklyn port facility would be moved via sprint trains (short distance unit trains) through the double tunnel into New Jersey. Yet the nearest rail yards -- at Kearny and Croxton yards as well as Oak Island and other inner satellite yards around the Port Complexes in Newark and Elizabeth -- are already heavily used. They will face even greater capacity constraints in the future as NJ rail bound traffic comes to these locations, and would therefore be unavailable for movements of numerous sprint trains to load and unload containers for warehousing and distribution services.

Potential to overburden NJ rail network: Because of its exclusive dependence on rail for movement of containers -- unlike Port Newark/Elizabeth which is served by both truck and rail -- the Brooklyn port is likely to present unmanageable demands on the NJ freight rail network. For comparison sake, the new ExpressRail facility at Port Elizabeth is expected to handle under 250,000 lifts per year in 2004, which necessitates five trains per day of service by CSX and Norfolk Southern railroads. It is expected that in 2025, ExpressRail's volume will be approaching one million lifts per year. This means that, even with improvements in operations and utilization of New Jersey's rail infrastructure, at least fifteen to twenty trains per day will be needed to handle ExpressRail's volume of traffic. The south Brooklyn port facility is being designed to handle double this volume -- two million TEUs per year. Barring extensive expansions in freight rail capacity in New Jersey, this traffic could have dramatic operational and environmental impacts in New Jersey. This includes interfering with passenger rail services throughout the region.

Potential to compound VMT and road congestion: Given the fact that more than 70 percent of all port traffic entering port facilities in New York and New Jersey is destined to markets within 260 miles of the port region, it is likely that a major portion of Brooklyn port traffic will be redistributed back to the 30-county metropolitan region from the end-point rail terminals handling the port's "sprint trains." At the receiving terminals, the containers would be lifted off the train consist and put on chassis to move by truck to warehouses or distribution centers for sorting and preparation, and then to final shipment of goods to market. This traffic would almost certainly be handled by trucks throughout the rest of its transportation journey, creating major new truck vehicle-miles-traveled (VMT) impacts in the region, especially since the likely rail yards available to handle this traffic would be located on the periphery of the region in locations such as Bethlehem, Philadelphia, Camden, or even as far as Harrisburg PA.

Neither the MIS nor the DEIS addresses these issues. It should be noted that the train ferry alternative, discussed in Attachment B, which could be adapted to support the development of the proposed South Brooklyn port and other EOH rail traffic, offers options (such as accommodating roll-on-roll-off trucks) that could help avoid many of the negative impacts on the New Jersey rail system noted above. The final EIS should respond to the following:

A. Where would trains serving the south Brooklyn port go to unload their containers for warehousing services within the 30 county DEIS analysis region? What rail lines and yards would they use?

B. What are the operational impacts of South Brooklyn port-generated rail traffic on the region's rail system, given the fact that a Cross Harbor tunnel is the necessary precursor to the fulfillment of the planned Brooklyn facility?

C. Have the Class One railroads indicated that they are interested in short distance rail moves through the region to receiving yards within a one to two hundred mile perimeter?

D. How will the South Brooklyn port impact regional VMT and New Jersey highway circulation?

GLOSSARY & ABBREVIATIONS

Backhaul - A truck or railcar returning from the destination point to the point of origin.

Carload traffic - Rail cars carrying bulk commodities, such as lumber, stone, plastic etc.

Car Float - A large flat-bottomed boat equipped with tracks which is used to move railroad cars over waterways. The car float operating in New York harbor employs barges pulled by tugboats.

Class One railroads - The largest railroad companies. Norfolk Southern (**NS**) and **CSX** are the main Class One railroads serving the New York metropolitan region. Canadian Pacific (**CP**) also operates limited routes.

Consist - Assemblage of rail cars that compose a train

Container on Flatcar (COFC). Containers resting on railway flatcars without a chassis underneath.

Cross Harbor Freight Movement (CHFM) study

East of the Hudson (EOH)

Environmental Impact Statement (EIS) - Assessment of the environmental impacts required by the federal government. A Draft Environmental Impact Statement (**DEIS**) is first prepared for public review and comment. A Final Environmental Impact Statement (**FEIS**) is published after addressing public comments.

Intermodal traffic - Cargo transported in containers that can be transferred easily between rail, truck and ship.

Major Investment Study (MIS) - A study that investigates and assesses alternative approaches to solving a transportation problem. Under federal rules (no longer in effect), an MIS was required prior to the DEIS.

Municipal Solid Waste (MSW) - Household garbage.

New York Metropolitan Transportation Council (NYMTC)

No Build alternative - A project alternative that assumes a baseline of existing conditions against which "build" alternatives can be evaluated.

Third party logistics firms (3PLs) - Companies that are hired to provide a variety of transportation, warehousing, and logistics-related services to buyers or sellers.

Train float or ferry - Self-propelled vessels to transport entire trains.

Trailer on Flatcar (TOFC) - Transport of trailers on specially designed rail cars.

Transloading - Transferring bulk shipments from the vehicle/container of one mode to that of another at a terminal interchange point.

Twenty-foot Equivalent Unit (TEU) - The common unit used in indicating the capacity of a container vessel or terminal. A 40-foot container is equal to two TEU's.

Vehicle Miles of Travel (VMT) -A unit to measure vehicle travel made by a private vehicle, such as an automobile, van, pickup truck, or motorcycle.

West of the Hudson (WOH)