

# DANA D. TURNER

440 West Forty-first Street - Apt. #4D  
New York, New York 10036

212 - 563-5150  
DanaTEsq @ earthlink.net

September 30, 2004

Robert Dobruskin  
NEW YORK CITY PLANNING COMMISSION  
22 Reade Street - Room 4E  
New York, New York 10007

Re: Public Comments Submitted by Resident of 440 West 41<sup>st</sup> Street

Dear Mr. Dobruskin:

I do hereby, in the form of this letter, submit my formal 'pubic comments' on the Draft Generic Environmental Impact Statement (DGEIS) for the Hudson Yards Rezoning and Development Program ("the Hudson Yards Plan"), and on the proposed No. 7 Subway Extension submitted by the New York City Department of City Planning (DCP), the New York City Planning Commission (CPC) and the Metropolitan Transportation Authority (MTA).

I live in the area located at the egress of the Lincoln Tunnel tubes onto Dyer Avenue, which is in the envisioned 42-block area designated for redevelopment and rezoning and I am deeply concerned about the environmental impacts of the Hudson Yards Plan on my quality of life and on my neighborhood.

According to the DGEIS, the vehicular traffic congestion will be so worsened by the Hudson Yards Plan that I and my neighbors will be unable to travel freely in our own neighborhood. Already the noise and air pollution produced by thousands of busses entering and leaving the Lincoln Tunnel daily presents a risk to the health of people living in the Hell's Kitchen South neighborhood. The greatly increased levels of air pollution will threaten people who live with respiratory illness, such as myself, with relapse, attack and acute respiratory failure. Dirt and soot cover my windowsills no matter how frequently they are cleaned.

Overflows of raw sewage generated by the massive facilities and buildings planned on these sites will cause back-ups at overtaxed water and sewage treatment plants, which will in turn allow untreated human waste to spill into the Hudson River, posing a health hazard to the entire community. And all of this is based on incomplete studies and overly optimistic predictions. I believe that an adequate, accurate and non-partisan EIS would demonstrate even greater pedestrian, traffic, and transit congestion and air, water and noise pollution than that already experienced in the area.

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ENVIRONMENTAL REVIEW DIV.

Robert Dobruskin  
NEW YORK CITY PLANNING COMMSN,  
September 30, 2004  
Page Two of Three

I am also concerned about the ways that this action will change and harm the character of my neighborhood. Massive structures will block access to and views of the waterfront to the West; and skyscraper office buildings will block views of the Empire State Building from the West Side Highway. Our neighborhood stands to lose thousands of jobs and scores of businesses - many in the already distressed theater and garment industries. New apartments in this working class neighborhood will have luxury price tags out of reach of the working-class New Yorker, and the redevelopment will encourage landlords to raise rents and squeeze lifelong tenants out of their homes. The DGEIS dismisses all of these concerns as readily mitigated at some, undetermined, later date.

Bill Cunningham, Mayor Bloomberg's Communications Director says my neighborhood is like the barren landfill upon which Battery City was constructed anew. The CPC says it wants to turn our neighborhood into a "vibrant, mixed-use neighborhood." Let me advise the CPC that our neighborhood has been a thriving, bustling, living, working, vibrant, mixed-use neighborhood for at least 150 years. In fact our neighborhood is the home to tens of thousands of residents, businesses of every description and international corporations that serve New York City and the world from their West Side locations. The Hudson Yards Plan wants to demolish the buildings those businesses have improved and maintained for decades in exchange for a pleasure palace built with public monies where admission tickets will be \$75, sodas \$5 and hot dogs \$7. The City New York has no business, and no legal authority, to employ the public fisc in support of gladiatorial blood-sports and naked consumerism enjoyed by an elite minority of New York City citizens. To build a pork-barrel project that blatantly enriches a privately-held sports entertainment complex in a time when our city cannot "afford" to enter into an equitable contract with the NYPD, is patently offensive. To finagle public finances and to gamble the future solvency of New York City on overly-optimistic projections of bond revenues, ticket sales, ridership increases, and income, property, hotel and sales taxes, is immoral.

An adequate EIS must give a true assessment of the value of the neighborhood as it is and the number and types of people that live there. An effective EIS must seriously consider how the loss of jobs and the development of luxury housing will endanger existing residents and change the character of the neighborhood. An adequate EIS must also acknowledge that loss of waterfront access and views cannot be cancelled out by the construction of overwhelming new buildings and an ill-conceived north-south boulevard and an elevated promenade.

The DGEIS mentions many new facilities that will have to be built in our neighborhood. It speaks of: a new elementary school; a new fire house; two new electrical substations; a new transmission substation; new water and sewer mains; changes to our streets, sidewalks, and crosswalks; pedestrian overpasses; new elevators and stairways in our subway stations; a new day care center; a new bus layover facility; 130 new MTA buses; a ferry terminal capable of accommodating 8,000 Jets fans in an hour; new demand for as much electricity as is produced by a mid-sized power plant; and a program to give us all new windows and air conditioning units. On top of all that, it doesn't discuss at all how the police are going to protect a new stadium, an expanded convention center, a new hotel, two new subway stations, several new landmark high-rises, and tens of thousands of new commuters. Where are all of the people using these facilities going to go and how will new infrastructure and services be paid for? What will be the environmental impact of all of these new facilities which are an integral part of this plan?

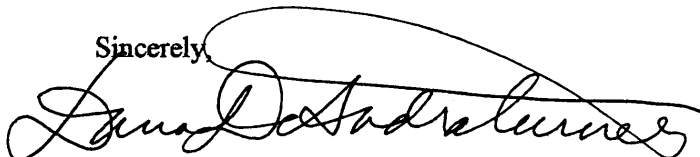
Robert Dobruskin  
NEW YORK CITY PLANNING COMMSN,  
September 30, 2004  
Page Three of Three

I am not an expert in traffic or air pollution or water pollution, but I know that Madison Square Garden and an array of environmental organizations (NYPIRG, Riverkeeper, the Tristate Transportation Alliance, the Straphangers' Campaign, the Regional Plan Association and others) have submitted comments on this proposal. I know that they share many of my concerns and have the technical expertise to really analyze the DGEIS. I would like to echo all of the concerns that they have raised about the adequacy of this report. I have also had the opportunity to review the comments submitted by Manhattan Community Board No. 4 and I share all of their concerns. In particular, I echo CB4's statements about affordable housing, and the inadequacy of the DGEIS in studying the potential loss of affordable housing units.

I want to protect the character of my neighborhood, the health of myself and that of my neighbors, and our shared environment. Any plan for the redevelopment of the West Side must meet that standard. I want Manhattan neighborhoods to continue to thrive which necessarily includes affordable housing and small businesses for daily life such as grocery stores, and schools and parks and playgrounds. This plan does none of that. No permanent affordable housing, no plan for traffic congestion, no plan to deal with the overflow from Javits Center and the stadium on Sunday afternoons.

The Hudson Yards Plan does not even adequately study the issues as required by New York State and New York City law. If the Hudson Yards Plan goes forward, the West Side of Manhattan will be turned

Sincerely,



Dana DeAndrea Turner  
Member of the Board,  
Hell's Kitchen Neighborhood Assn.

cc: M. Bloomberg, Mayor NYC  
C. Fields, MBP  
C. Quinn, NYC Council  
A. Borelli, CB4  
K. Treat, HKNA Chair

# INSTITUTE FOR RATIONAL URBAN MOBILITY, INC.

George Haikalis  
President

One Washington Square Village, Apt. 5D  
New York, NY 10012  
Tel: 212-475-3394  
Fax: 212-475-5051  
e-mail: [geohaikalis@juno.com](mailto:geohaikalis@juno.com)

DEPT OF CITY PLANNING  
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2004 OCT -6 PM 5:19  
ENVIRONMENTAL REVIEW DIV.

City of New York City Planning Commission  
22 Reade Street, 4E  
New York, NY 10007  
Attention: Robert Dobruskin, AICP

## Re: Comments on Draft Generic EIS for #7 Extension-Hudson Yards Rezoning

The Institute for Rational Urban Mobility, Inc. (IRUM) takes strong exception to the discussion contained in the DEIS on the following issues which were raised by IRUM during the scoping phase of this DEIS:

### 1. Light Rail

The vision42 light rail proposal calls for an auto-free light rail boulevard river-to-river on 42<sup>nd</sup> Street. For the northern portion of the Hudson Yards area this proposal would provide an attractive alternative to existing local surface transit and would have enhanced neighborhood open space in what has already become a dense residential community. The DEIS should have given this proposal a careful review.

### 2. LIRR shuttle to Hudson Yards area

This proposal calls for operation of frequent LIRR train service between Penn Station and a new platform developed in place of Tracks 28 and 29 in the LIRR Caemmerer Yard. LIRR trains have more than twice the capacity of #7 subway trains and Penn Station is an important transportation hub, where access to most of the region's commuter rail lines, and four of Manhattan's five north-south trunk line subways is available. This link should be considered in the no-build element of the DEIS, since it can be constructed for very little cost. With this link in place, the incremental access benefits of the #7 extension could then be more accurately compared with the extension's substantial cost, estimated at some \$2 billion.

### 3. Incremental economic gains

The City proposes to pay for the #7 subway, and other infrastructure, by capitalizing on the access gains provided by the #7 subway extension. The DEIS does not adequately demonstrate that the new office space developed in the Hudson Yards area would not have been constructed at other far more accessible sites in central Midtown. The diversion of these tax revenues to finance the #7 extension means they will be lost to the city. Furthermore, this City action results in the dispersal of activity in the core, lessening its unique global competitiveness.

George Haikalis, President, IRUM, October 4, 2004



10/2/04

Robert Dobruskin  
City Planning Commission  
22 Reade Street, 4E  
New York, NY 10007

Dear Mr. Dobruskin,

I hereby submit the following comments on the Draft Generic Environmental Impact Statement (DGEIS) for the Hudson Yards Rezoning and Development Program and the No. 7 Subway Extension submitted by the Dept. of City Planning and the Metropolitan Transportation Authority.

I live in the Hudson Yards area and am deeply concerned about the environmental effects of this proposal. According to the DGEIS, the congestion will be so bad that I will be unable to travel freely in my own neighborhood. The noise pollution will be so bad that I will be unable to open my windows. The amount of sewage generated will be so bad that more and more untreated human waste will overflow into our cherished Hudson River. Perhaps worst of all, the air pollution will be so bad that my neighbors with respiratory illnesses will be endangered by every breath they take. And all of this is based on incomplete studies and overly optimistic predictions. I believe that an adequate EIS would show pedestrian, traffic, and transit congestion and air, water and noise pollution to be even worse.

I am also concerned about the ways that this action will harm the character of my neighborhood. Hulking buildings will block my access to the waterfront and skyscrapers will block my views of the Empire State Building. My neighbors stand to lose 17,000 jobs - many in the theater and garment industries. New apartments in this working class neighborhood will have luxury price tags and the new development will encourage landlords to raise rents and squeeze people out of the neighborhood. The DGEIS dismisses all of these concerns as of no account. It says my neighborhood is an ugly slum that is already gentrifying anyway, and it says that anyone in a rent stabilized apartment doesn't have to worry about displacement. This is just wrong. An adequate EIS must give a true assessment of the value of the neighborhood as it is and the number and type of people that live here, and must seriously consider how the loss of jobs and the development of luxury housing will endanger existing residents and change neighborhood character. It must also acknowledge that loss of waterfront access and views is not cancelled out by putting hulking new buildings in our neighborhood.

The DGEIS mentions many new facilities that will have to be built in our neighborhood. It speaks of: a new elementary school; a new fire house; two new electrical substations; a new transmission substation; new water and sewer mains; changes to our streets, sidewalks, and crosswalks; pedestrian overpasses; new elevators and stairways in our subway stations; a new day care center; a new bus layover facility; 130 new MTA buses; a ferry terminal capable of accommodating 8,000 Jets fans in an hour; new demand for as much electricity as is produced by a mid-sized power plant; and a program to give us all new windows and air conditioning units. On top of all that, it doesn't discuss at all how the police are going to protect a new stadium, an expanded convention center, a new hotel, two new subway stations, several new landmark skyscrapers, and tens of thousands of new commuters. Where are all of these facilities going to go and how will new infrastructure and services be paid for? What will be the environmental impact of all of these new facilities which are an integral part of this plan?

I am not an expert in traffic or air pollution or water pollution or anything else, but I know that Madison Square Garden and an array of environmental organizations (NYPIRG, Riverkeeper, the Tristate Transportation Alliance, the Straphangers' Campaign, the Regional Plan Association and others) have submitted comments on this proposal. I know that they share many of my concerns and have the technical expertise to really analyze the DGEIS. I would like to echo all of the concerns that they have raised about the adequacy of this report. I have also had the opportunity to review the comments submitted by Manhattan Community Board No. 4 and I share all of their concerns. In particular, I echo CB4's statements about affordable housing, and the inadequacy of the DGEIS in studying the potential loss of affordable housing units.

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I want to protect my neighborhood's character, my health and that of my neighbors, and our environment. Any plan for the development of this neighborhood must meet that standard. I want my neighborhood to continue to exist, including a place for children and friends to live. This plan does none of that, no permanent affordable housing, no plan for traffic congestion, no plan to deal with the overflow from Javits center and the stadium on Sunday afternoons. It doesn't even adequately study the issues. I am extremely concerned that if this plan goes through, this part of the city will no longer be a place I and many others can still call home. I hope you can help preserve my community.

Sincerely,

A handwritten signature in cursive script that reads "M. Brunzema".

**Meta Brunzema**  
Director, Hell's Kitchen Neighborhood Association  
459 West 35th Street, 5W  
New York NY 10001

Jack Lettiere  
Board Chairman

George D. Warrington  
Executive Director

October 1, 2004

Mr. Robert Dobruskin, AICP  
City Planning Commission  
22 Reade Street, 4E  
New York, New York 10007

Dear Mr. Dobruskin,


NJ TRANSIT (NJT) is preparing a Draft Environmental Impact Statement for a series of commuter rail improvements in the vicinity of Penn Station New York called Access to the Region's Core (ARC). Construction of these improvements are scheduled to occur between 2006 and 2014. The improvements include smaller early action improvements within Penn Station, plus larger projects that will take longer to build. These improvements are needed to address current congestion on NJT's rail services into Penn Station. They will provide a one-seat ride for the large number of travelers from Bergen County in northern New Jersey and Orange and Rockland counties in New York State. They will also provide capacity for further growth in the future, including the proposed development in Hudson Yards. Transportation links across the Hudson River are mostly at capacity today. Substantial trans-Hudson travel growth is expected over the next 20 years as population west of the Hudson River grows by over 1 million people and Manhattan adds an additional 200,000 jobs. The ARC project will also help this region meet the increasingly important air quality standards set in the Clean Air Act.

The ARC project includes track improvements in New Jersey, a new two-track tunnel under the Hudson River, and a new 6 to 8 track station under 34th Street between 6th and 8th Avenues. When funded, ARC's early action improvements would allow longer trains in Penn Station, speedier access and egress to and from the station for passengers, and speedier movement of trains into and out of the station. These early action improvements will expand the station's capacity by about 4 trains during the peak hour by 2010. They will also enhance access between Penn Station and the proposed Moynihan station for NJ TRANSIT riders thus fortifying the role of the Moynihan Station. The other proposed improvements, including the new tunnel and station deep under 34<sup>th</sup> Street, will allow us to handle twice the 23 trains being accommodated today which we believe is sufficient to handle the projected doubling of daily rail travelers to about 200,000.

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Construction of the ARC improvements is scheduled to take place between 2006 and 2014, with the early action improvements advancing first. Coordination with the Hudson Yards project is essential to minimize conflicts, minimize impacts, to plan the redevelopment of this very complicated area, and to coordinate construction. Coordination has been underway since the DEIS began in 2003. Meetings have been held continuously in New Jersey and New York with elected officials, public agencies, transportation agencies, business groups, and the public. I am strongly committed to making sure that this integrated planning continues.

Sincerely,



Richard T. Roberts  
Chief Planner

CC: T. Schulze  
L. Venech, PANYNJ

File Name: C: Roberts/HudsonYardsDGEIS100104.doc



# NYPIRG Straphangers Campaign

a project of the New York Public Interest Research Group Fund  
9 Murray Street, 3rd floor - New York, NY 10007-2272 - FAX 212-349-1966 - www.straphangers.org

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ENVIRONMENTAL IN NEW YORK

September 29, 2004

Robert Dobruskin  
New York City Planning Commission  
22 Reade Street, 4E  
New York, New York 10007

Emil F. Dul, P.E.  
Metropolitan Transportation Authority  
2 Broadway  
New York, New York 10017

**Re: Comments on DGEIS for Hudson Yards Project**

Dear Messrs. Dobruskin and Dul:

This letter constitutes the written comments of the NYPIRG Straphangers Campaign on the Draft Generic Environmental Impact Statement for the Hudson River Yards Proposal.

In broad overview, the Straphangers Campaign opposes a key element of the Proposal: a controversial football stadium on the West Side of Manhattan. We are also concerned that the proposed extension of the 7 Flushing subway line might reduce available funding for more important priorities in the Metropolitan Transportation Authority's proposed 2005-2009 capital plan.

### **# 7 Line Extension**

**The 7 line extension and the overall Proposal may drain scarce transit capital resources from more the more important priority of continued investment in the city's existing transit system.**

In July 2004, the Metropolitan Transportation Authority has proposed a new five-year rebuilding plan. The MTA proposes to spend \$17.4 billion on core programs to maintain and improve the existing subway, bus and commuter rail systems for the five years between January 2005 to December 2009. The money would buy a safer, more reliable, and less crowded system. Highlights include:

- buying 959 new state-of-the-art subway cars, 1,323 low-emission buses and more than 200 commuter rail cars for the LIRR and Metro-North;
- the first phase of a bus rapid transit program to speed service;
- rehabilitating 55 stations on the subways and making 16 more stations accessible;
- expanding parking for both suburban lines and improving Penn Station, Hunterspoint Avenue and Atlantic Terminal on the LIRR, and Grand Central Terminal and Hudson and New Haven line stations on Metro-North; and
- replacing scores of miles of aging track, signals, tunnel lighting and fans, employee facilities and rail yards and depots.

The bus and subway and rail car purchases would expand the fleets to allow for less crowded and more reliable service. Refurbished stations would mean better lighting, fewer bottlenecks and a safer environment. Modern signals would make it possible to provide riders with real-time information on delays and arrivals. The infrastructure repairs would make transit safer and more secure. The five-year program also calls for \$495 million to enhance subway security in challenging times.

Why is the MTA's five-year program so important? The answer starts in 1981. Nearly twenty-five years ago, the metropolitan-area's transit system was close to collapse. The subways were notoriously unreliable, covered with graffiti, and plagued with spiraling crime, fires and derailments.

By 1981, subway ridership fell to its lowest level since 1917 and bus ridership also plummeted. Metro-North was widely viewed as the worst commuter rail service in the nation, with the Long Island Rail Road not far behind.

While transit is far from perfect today, there's been tremendous progress: Subway cars are nearly twenty times more reliable. New rail coaches turned around commuter service. Subway ridership bounced back to levels not seen since the 1950s, increasing an astonishing 41% on buses in the last eight years. Graffiti on subway cars has been largely eliminated and transit crime, fires and derailments have all been dramatically reduced. Fare collection was automated, making it possible to offer free subway-bus transfers and unlimited-ride MetroCards.

None of this happened by accident. Since 1981, more than \$30 billion (that's billion with a B) has been invested in city subways and buses and another \$15 billion in our two commuter rail lines.

The money was used to replace or rehabilitate every subway car and bus. The subway fleet was expanded by 400 cars and the buses by 800 to meet growing service demands. Many miles of eroding track and ancient signals were replaced, one-third of subway stations were rehabed and \$750 million was spent to automate turnstiles to make fare discounts possible.

Where will the money come from to invest in transit? The MTA says it only has about \$6 billion in place for the five-year, \$17.4 billion core rebuilding program, leaving it with more than an \$11 billion funding gap.

How can transit's vital rebuilding needs be met? It will take the leadership of Governor Pataki, Mayor Bloomberg and the state's legislative leaders. Since 1981, their predecessors faced similar challenges and managed to find more than \$45 billion to turn around metropolitan transit.

The governor and mayor will need to do better than they have in the past. New York State under Governor George Pataki has contributed no new funding in the last decade to rebuild the transit system. As a result, the MTA has been forced to borrow or refinance \$22 billion in bonds and now faces a huge and growing bill. Its yearly interest payments for debt service will double between 2003 and 2007, going from \$800 million to \$1.6 billion, placing huge pressure to raise fares and cut service.

At the same time, Mayor Bloomberg has cut \$90 million from the MTA's current five-year rebuilding plan. And he wants to use the MTA's valuable property on the West Side of Manhattan to build a stadium for the New York Jets and underwrite other aspects of the Proposal through sale of the development rights from the MTA's rail yards.

**In the view of the NYPIRG Straphangers Campaign, anything short of full market value for the site will shortchange the city's existing transit system and riders.**

**At the time these comments are being submitted, both the MTA and the City have hired appraisers to determine the value of the full market value of the MTA yards. We call on both the City and MTA to clearly explain the assumptions that go into determining the market value of the property.**

### **West Side Stadium**

The Straphangers Campaign believes that the arguments against a stadium are strong. They reflect our group's longstanding concerns about scarce government resources and the environment:

- **There are serious environmental concerns:** Dense Manhattan is the wrong place for a stadium; it will generate a great deal of traffic and attendant negative environmental impacts. The City says that upwards of 70% of the new stadium's patrons will get there by public transportation, compared to the 4% who now take transit to the Meadowlands stadium. But that's hard to credit. Madison Square Garden — which is actively opposing the stadium plan — says that only between 40% and 50% of attendees of garden events come by transit. And the Garden is far better served by transit (subways, LIRR and New Jersey Transit) than would be the Jets stadium.

The range of environmental problems are detailed in the following excerpt from the Citizen's Guide to the Hudson Yards Project, which was recently released by the Straphangers Campaign, along with the Regional Plan Association, Citizens Union and the Natural Resources Defense Council:

“In addition to daily traffic conditions caused by the growth of the Far West Side, unusually severe traffic congestion can be expected on days when the football stadium hosts major events. While most football games are held on Sunday afternoons, when traffic is generally somewhat lighter, other events are expected to be held on week nights, potentially overlapping with normal rush hour traffic. Absent ubiquitous mitigation measures, massive traffic delays can be expected throughout the area before and after stadium events. Week night events will adversely impact 26 intersections, while a Sunday event will mean significant delays at 35 intersections.”

“In some cases, delays are considered too long to accurately measure, lasting more than five minutes at key intersections. Stadium events are expected to use the great majority of parking spaces on the West Side of Midtown. The DEIS predicts that 91 percent of the off-street parking spaces will be filled in an area that stretches as far south as 21st Street, as far north as 51st Street and as far east as 6th Avenue.”

“Manhattan's central business district is able to hold so much office and residential space because of the extensive mass transit network that supports it. A major expansion will put significant strain on the existing system, impacting travel throughout the city. The new district will have to rely not only on the subway system, but also on commuter rail to bring large numbers of people to the area. The DEIS revealed several major impacts of the new development: The redevelopment will add thousands of daily riders to the transit system, straining the system at up to 38 different points.”

“The DEIS concludes that the proposed redevelopment would create a deficient level of pedestrian movement (a 'D' or worse on a scale of A to F) at 38 points in the subway system in the morning peak hour and 27 points in the evening. Of these, 21 in the morning and 14 in the evening were considered significant adverse impacts leading to a deficient level of service for subway riders. The #7 will create crowding at the line's existing stops in Manhattan as an increased number of people transfer en route to the Far West Side. While not stated explicitly in the DEIS, this condition would be dramatically worse at the Grand Central stop without construction of the Second Avenue Subway.”

“The DEIS fails to acknowledge that NJ Transit capacity into Penn Station is projected to be full by 2009. The DEIS assumes that nearly a quarter of workers on the Far West Side will come from New Jersey, and that thousands of them will come into Penn Station via NJ TRANSIT. This assumption is in direct conflict with NJ TRANSIT's own projections that assume capacity will run out in 2009 and call for construction of a new rail tunnel under the Hudson River.

“The DEIS fails to show a small change in its assumptions will impact its conclusions. For example, the DEIS assumes an unprecedented level of transit usage for events at the new football stadium, but doesn't reveal the level of traffic that would result if these assumptions prove to be off by even a few percentage points. The DEIS looked only at intersections individually; it did not consider the compound effect that occurs when one clogged intersection creates traffic jams behind it, sometimes for many blocks.”

• **Stadia have a poor track record generating revenue:** Many studies show that stadia subsidized in other cities have not lived up to promises. An initial review by the New York City Independent Budget Office concluded: “Research on stadiums consistently finds that there is no basis for forecasting an economic development impact beyond that generated by the local expenditures of the team and its fans. In particular, none of the studies suggest any economic rationale for assuming that building any new stadium would itself spur construction of office towers and hotels.”

A July 2004 evaluation by the IBO found that while under an “optimistic scenario... tax revenue would still be sufficient to cover the roughly \$21 million in annual debt service for the city's \$300 million investment in the project, the margin would be somewhat narrower than projected by the Bloomberg Administration.” The IBO also concluded that the “narrower margin is hardly risk free. More than two-thirds of the project's economic and fiscal impacts are expected to come from using the facility in ways beyond a traditional stadium. If the convention business projections prove too optimistic, the city could be left with insufficient revenue to cover its entire investment.”

In August 2004, the IBO issued another analysis finding that the proposed financing mechanism [for the Proposal] will cost \$1.3 billion (in 2003 inflation adjusted dollars) more than if the city simply borrowed the funds through its regular capital plan.”

• **A stadium would likely be an impediment to development:** As Newsday editorialized: “A stadium will cost a fortune and will make the neighborhood less attractive to apartment buyers.” The City argues that its proposal is not just a stadium. They argue it can be turned into a venue for conventions and concerts, active on many days of the year. Its “edges,” they say, will have attractions, like a flea market and restaurants; on the west side there would be a green deck over West Street and a connection. But in the end, the building would be a huge bulky box between the city and the river — much like the existing convention center to the north.



**Lastly, we would note that the DGEIS fails to look at any alternatives for the stadium site within the context of the existing plan.** One of the most obvious alternatives has been overlooked entirely in the DGEIS – constructing the existing plan with a different use on the stadium site. That alternative should be fully explored in the Final EIS.

Yours truly,

A handwritten signature in black ink, appearing to read 'Gene Russianoff', with a stylized flourish at the end.

Gene Russianoff  
Senior Attorney

Cc: Katherine Lapp  
Amanda Burden

Patrick M. Centolanzi, PE  
P. O. Box 1803  
Grand Central Station  
New York, NY 10163

September 19, 2004

Mr. Robert Dobruskin, Director  
Environmental Assessment and Review  
City of New York City Planning Commission  
22 Reade Street, 4E  
New York, NY 10007-1216

Dear Mr. Dobruskin:

Please include this message in the NYC City Planning Commission Public Hearing on Hudson Yards held September 23, 2004. I am unable to attend the hearing and want to leave my comments.

I compliment and applaud the NYC/DCP and the MTA/NYC Transit on the wonderful and complete job on the EIS for the Hudson Yards redevelopment.

I am in complete support of the entire Hudson Yard redevelopment, including the Flushing Subway extension, the Javits Center expansion, and the New York Sports and Convention Center (NYSCC).

I am in favor of connecting the Hudson River Park to the NYSCC by covering over the West Side Highway. I am in favor of the underground moving walkway to connect Penn Station to the West Side. I am also in favor of extending the Highline along 31st Street to MSG as an open, elevated promenade (rather than an enclosed walkway ending on the West Side of 8th Avenue as described in the EIS).

I also support the NYC Olympic Bid, and as such, I support the NYSCC to be built. The NYSCC, along with an expanded Javits Center, will allow New York City to take its rightful place as a leader in the global convention and tourism industry. The jobs and tax revenue generated by this development will benefit all New Yorkers.

The Environmental Impact Statement has addressed every impact of the entire West Side development. It will allow planners to take steps to make sure the implementation of the West Side development benefits all and has very few negative affects.

I thank you very much for your support of the entire Hudson Yards/West Side development (and the NYSCC and NYC2012 bid) for the benefit of all in our region.

Sincerely,



Patrick M. Centolanzi, PE



October 4, 2004

**VIA FACSIMILE (212-720-3219) AND FEDERAL EXPRESS**

New York City Planning Commission  
Attention: Robert Dobruskin, AICP  
22 Reade Street, 4E  
New York, NY 10007

**Re: Draft Generic Environmental Impact Statement (DGEIS) for the  
HUDSON YARDS REZONING AND DEVELOPMENT PROGRAM  
CEQR No. 03DCP031M**

Dear Commissioners:

Below please find comments submitted by Riverkeeper, Inc. on the Draft Generic Environmental Impact Statement (DGEIS) for the Hudson Yards Rezoning and Development Program ("Hudson Yards Project" or "the project"). These comments focus on three issues: (1) the project's significant adverse impacts on surface water quality resulting from combined sewer overflows (CSOs); (2) significant adverse impacts on public waterfront land uses and Hudson River Park caused by the proposed stadium; and (3) significant adverse cumulative impacts caused by the proposals to expand ferry transportation to the stadium.

Riverkeeper is an independent, member-supported, not-for-profit environmental organization. Our mission is to protect ecological, recreational and commercial integrity of the Hudson River and its tributaries, and to safeguard the drinking water supply for New York City and Westchester County.

The Hudson Yards Project for redeveloping the far west side of midtown Manhattan is an undertaking of enormous magnitude, encompassing nearly 50 city blocks and including proposals to facilitate 28 million square feet of new commercial development, 12,600 new residential units, a new boulevard, subway line extension, expansion of the Javits Center, and a new football stadium on a platform to be constructed over MTA rail yards. As such, there is the potential for causing extremely significant adverse impacts to a variety of important environmental resources.

The DGEIS states that the project's environmental objectives include "protection of significant ... park, and open space resources" and "sustainable design and development." (p. ES-8). Unfortunately, as currently proposed, the Hudson Yards

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Project fails to match this laudable ambition with respect to its impacts on water quality and waterfront uses. Indeed, the Hudson Yards Project does far too little to protect the river for which it is named from the specific harms that it would cause. Fortunately, there are existing technological solutions to some of the project's impacts that the City can and should put into place to ensure that it meets the stated goal of environmental sustainability. We look forward to working with all stakeholders to ensure that this project meets its environmental objectives.

**THE HUDSON YARDS PROJECT WILL INCREASE THE DISCHARGE OF UNTREATED SANITARY SEWAGE AND POLLUTED STORMWATER INTO THE HUDSON RIVER, WHICH WILL SIGNIFICANTLY AND ADVERSELY AFFECT AQUATIC LIFE AND RECREATIONAL USES**

The Hudson Yards Project will add approximately 7.5 million gallons per day to the City's combined sewage system, a system which is already so overburdened that it discharges raw sewage to the Hudson River and other local waterways during wet weather approximately once per week. The additional sewage generation from this project will increase the volume (and perhaps the frequency) of these polluting – and illegal – discharges, resulting in additional pathogens and oxygen demand in the Hudson River to the detriment of its aquatic life and recreational uses. The DGEIS's conclusion that such impacts are insignificant is erroneous and unsupported. By requiring and implementing available "green development" practices in the project area, the City could and should mitigate or entirely eliminate this impact.

**New York City's Combined Sewer System Suffers from a Long-Standing and Systemic Lack of Wet Weather Capacity, Which Results in Frequent Sewage Overflows that Impair Local Water Quality.**

As the DGEIS acknowledges, at full build-out, the Proposed Project will increase sanitary sewage flows by approximately 7.5 million gallons per day (mgd) from 1.1 mgd under current conditions to 8.6 million (mgd). Under the current proposal, this sewage will not be collected or treated on-site, but will be conveyed along with stormwater falling on the project area to the City's combined sewer system. Significantly, the Citywide lack of adequate wet weather storage and treatment capacity causes up to 70 combined sewer overflow (CSO) events per year (i.e., an average of more than one per week), discharging approximately 27 billion gallons of combined untreated raw sewage and polluted stormwater runoff to local waterways in an average rainfall year.

New York City's sewage system includes approximately 460 combined sewer overflow pipes, or outfalls, all around the five boroughs. Although the City's system captures both sanitary sewage and stormwater runoff, its fourteen sewage treatment plants have only enough treatment capacity to meet demand during dry weather or very

light rains. In about half of the City's rainfall events, sewage and polluted stormwater is discharged untreated as combined sewer overflow from some or all of the 460 outfalls. In some areas of the City, a rain event as small as 0.10 inches per hour can initiate overflow conditions, causing untreated sewage to overflow into the estuary. CSOs send bacteria, toxins, excess nutrients and trash into New York City's waters, impairing the human use and ecological function of the waters. See New York/New Jersey Harbor Estuary Program, *Combined Sewer Overflows in the New York/New Jersey Harbor Estuary*.<sup>1</sup> In its recent *Health of the Harbor 2004* report, the Hudson River Foundation identified CSOs as the largest single contributor of pollutants to problems such as pathogen levels, oxygen demand, and floatables (i.e., trash) in the Harbor. For example, the pathogen section of the report summary stated that "The greatest ongoing threat comes from sewer overflows when it rains."<sup>2</sup> Similarly, the NY/NJ Harbor Estuary Program reports:

In the Estuary, combined sewer overflows (CSOs) are the main source of ["disease-causing organisms, including bacteria and viruses, ... called pathogens"] as measured by coliform bacteria levels which are used to indicate harmful pathogens. Though usually funneled through sewage treatment plants, human waste is often discharged into the Estuary through CSOs without treatment during rainstorms. In addition, animal waste left on streets and roads washes into waterways when it rains. Because of suspected pathogen contamination, the Estuary's beaches are sometimes closed after heavy rains to protect swimmers from elevated bacteria levels.<sup>3</sup>

These CSO discharges exact enormous costs – health costs, financial costs, quality-of-life costs – on the City and its residents, tourists and other visitors. CSOs are an enormous environmental problem and a serious threat to human health. In its August 2003 report to Congress, *Impacts and Control of CSOs and SSOs*, the U.S. Environmental Protection Agency Explained that "because CSOs contain untreated wastewater and storm water, they contribute microbial pathogens and other pollutants to surface waters ... [and] can impact the environment and human health. Specifically, CSOs can cause or contribute to water quality impairments, beach closures, shellfish bed closures, contamination of drinking water supplies, and other environmental and human health problems."<sup>4</sup> For comprehensive information on the environmental, social and

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<sup>1</sup> Fact Sheet available at [http://www.hudsonriver.org/hep/pdf/hep\\_cso.pdf](http://www.hudsonriver.org/hep/pdf/hep_cso.pdf).

<sup>2</sup> Report available at <http://www.hudsonriver.org>.

<sup>3</sup> Fact Sheet available at [http://www.hudsonriver.org/hep/pdf/hep\\_toxics.pdf](http://www.hudsonriver.org/hep/pdf/hep_toxics.pdf).

<sup>4</sup> Report available on-line at [http://cfpub.epa.gov/npdes/cso/cpolicy\\_report2004.cfm](http://cfpub.epa.gov/npdes/cso/cpolicy_report2004.cfm).

human health costs of sewer overflows, see a February 2004 report entitled *Swimming in Sewage* prepared by the Natural Resources Defense Council and the Environmental Integrity Project.<sup>5</sup>

The City's sewage troubles are not new; in fact, its sewage system has never been in compliance with federal and state law. Until the North River plant began primary treatment (i.e., removal of suspended solids) in 1986, raw sewage from most of Manhattan's West Side flowed untreated to the Hudson. Secondary treatment (i.e., biological purification) did not begin at North River until 1991, fourteen years after the federal Clean Water Act's 1977 deadline. The City's 1988 sewage discharge permits "were inadequate under federal and state law"<sup>6</sup> and are only now being updated. Since 1992, the City has been subject to an administrative consent order from the state Department of Environmental Conservation (DEC) for violations regarding discharges from its CSOs. However, the City has missed almost every mandatory deadline in the order's 14-year schedule for abating CSOs and has failed to fund water quality programs totaling \$250,000, as was required. As a result of this non-compliance, DEC initiated a new enforcement action against the City in December 2003.<sup>7</sup> In fact, the City lacks a Long Term Control Plan for CSOs, which is required by EPA's 1994 CSO control policy<sup>8</sup> and the federal Clean Water Act.<sup>9</sup>

In September 2004, the New York State Department of Environmental Conservation ("DEC") and the New York City Department of Environmental Protection ("DEP") released for public comment a proposed new administrative consent order ("ACO") which would settle the December 2003 enforcement action and replace the 1992 consent order. But the proposed 2004 ACO, even if approved and diligently implemented, will not fully control CSOs or prevent them from causing violations of local water quality standards. Instead, the proposed 2004 ACO envisions an 18-year program under which only very modest reductions in polluted CSO discharges will result.

Perhaps most importantly, DEP's own CSO modeling demonstrates that in 2022, upon completion of the CSO abatement program set forth in the 2004 ACO, City-wide discharges of untreated combined sewage will remain at 27 billion gallons in an average rain year. Thus, the average annual polluted discharge volume to NY Harbor predicted

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<sup>5</sup> Report available at <http://www.nrdc.org/water/pollution/sewage/contents.asp>.

<sup>6</sup> NYS DEC, Supplemental Rulings of Administrative Law Judge Andrew S. Pearlstein, DEC Case No. 0026131, Jan. 27, 1993.

<sup>7</sup> December 3, 2003 Notice of Violation issued by DEC to NYC DEP.

<sup>8</sup> 59 Fed. Reg. 18,688 (April 19, 1994).

<sup>9</sup> CWA section 402(q), 33 U.S.C. § 1342(q), enacted in the Wet Weather Water Quality Act of 2000.

for 2022 is exactly the same as the average annual polluted discharge volume currently occurring in 2004. This seeming anomaly is explained by the fact that there is, at present, additional dry weather treatment capacity at NYC sewage plants of approximately 600 million gallons per day. Thus, this excess dry weather capacity is being used – on a temporary basis – to treat some of the wet weather combined sewage. But as that excess capacity is used to accommodate increases in sanitary sewage generated by development projects, CSOs will increase. In other words, because of the City-wide lack of wet weather sewage treatment capacity, every gallon of increased sewage generation caused by development directly increases the volume of raw sewage discharging in CSOs events.

**The Project's 7.5 Million Gallons of Increased Sewage Generation Will Exacerbate Polluted Discharges in the Hudson River and in Hudson River Park's Estuarine Sanctuary.**

At full build-out in 2025, the Hudson Yards Project will generate approximately 8.6 million gallons of raw sewage per day which, during dry weather, will be treated before being discharged into the Hudson River at the North River Water Pollution Control Plant (WPCP). During wet weather, however, this additional sewage poses significant problems. Today, with only 1.1 million gallons per day generated from the Hudson Yards Project area, the North River WPCP already frequently reaches full capacity during storm events, resulting in polluted stormwater mixed with raw sewage bypassing the plant and discharging into the Hudson without treatment. In addition, rainfall causes sewer pipes to back up, and, to relieve pressure in the pipes from bottlenecks, untreated combined sewage flows from some or all of the many CSO outfalls in the Hudson River that are between the Hudson Yards Project site and the plant. In sum, because the City currently lacks wet weather sewage capacity in the relevant area – a situation that will persist for the foreseeable future – the 7.5 million gallons of additional raw sewage generated at the Hudson Yards site and all of its polluted stormwater runoff (which the DGEIS fails to quantify) will add to the volume discharged in CSOs to the Hudson River.

While the impacts from CSOs on water quality in the Hudson River is not as bad as in other, more confined, waterbodies like Newtown Creek and the Gowanus Canal, the Hudson River is nevertheless impaired by CSOs. The Hudson is classified by the State of New York for swimming uses (Class SB) only north of the tip of Manhattan at Spuytun Duyvil; largely because of pathogens in CSOs, the classification for the Hudson off Manhattan (Class I) does not include a swimming designation. Even worse, CSOs are causing the Hudson to violate some of the applicable water quality standards (dissolved oxygen levels and pathogens) for its designated classes. As explained by NYC DEP's consultant, Hydroqual, on its Hudson River CSO webpage:

Dissolved oxygen levels are in non-compliance. Total coliform levels are in compliance in I and SB waters. Fecal coliform in compliance in I waters; in non-compliance in SB waters (Inner Harbor CSO Facility plan, 1993). Settleable solids and floatables are discharged by CSO's.<sup>10</sup>

Consequently, the Hudson River, which is already adversely affected by CSOs, will be polluted even more by Hudson Yards Project's additional sewage generation. The statement in the DGEIS that under existing conditions CSO discharges do not appear to result in impairment of water quality in the vicinity of the proposed action (p. 13-5) appears therefore to be incorrect and must be revised.

Moreover, much of the increased CSO discharge will occur within the Estuarine Sanctuary designated by the New York State Legislature to encompass the water area of the Hudson River Park. As the Hudson River Park Trust explains:

The Hudson River within Hudson River Park is a vital portion of the Hudson-Raritan Estuary with a thriving benthic (river bottom) ecosystem, an extensive fishery, and abundant waterfowl and seabirds. ... [T]he Hudson River Park Estuarine Sanctuary encompasses all of the inter-pier and under-pier marine environments of the Hudson River located from Battery Park City to Pier 99 at West 59th Street and from the onshore bulkhead of the Park to the offshore pier-head line. The 425-acre Sanctuary ... was established by the Hudson River Park Act in 1998 as part of the Hudson River Park.<sup>11</sup>

The CSO outfalls are located within the sanctuary and will no doubt affect recreational uses and aquatic life in the sanctuary. In fact, the CSO discharges exacerbated by the project will be most severe in the inter-pier and under-pier area covered by the sanctuary. By increasing discharges of untreated sewage into the Estuarine Sanctuary, the Hudson Yards Project contradicts the resource protection objective of the Estuarine Sanctuary Management Plan which provides: "Respect the importance of the Hudson River's ecological health by preserving, and, where possible, enhancing the marine habitats of the Sanctuary."<sup>12</sup>

The DGEIS admits that "the increased sewage volume of sewage discharged to the combined sewer system would have the potential to result in an increase in the concentration of sewage and associated pollutants (e.g., TSS, fecal coliforms) discharged

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<sup>10</sup> See Hydroqual's website, Use Standards and Attainment Project, Hudson River page at <http://www.hydroqual.com/projects/usa/projectAreaFrameset.html>.

<sup>11</sup> See <http://www.hudsonriverpark.org/policies/sanctuary.html>.

<sup>12</sup> See <http://www.hudsonriverpark.org/pdf/policies/sanctuary.pdf> at p. ES-4.



to the Hudson River during CSO events.” (p. 13-22.) The DGEIS then attempts to justify why this would not cause a significant impact to water quality in the Hudson. But the DGEIS’s misplaced discussion of discharges of treated effluent from the North River WPCP at 145<sup>th</sup> Street is not relevant to the untreated discharges from CSOs in the project area and fails to acknowledge either (1) that the City’s consultant Hydroqual has determined that the Hudson is not currently meeting water quality standards; or (2) that the impacts of additional CSOs will be felt most severely in the inter-pier and under-pier area on Hudson River Park’s Estuarine Sanctuary.

With regard to capturing stormwater runoff – which, like raw sewage, adds to polluted CSO discharges, the DGEIS states that the majority of the properties that could be affected by the proposed action within the project area currently consist of paved or other impervious areas. (p. 13-5.) It then states that because impervious surfaces are not expected to increase with the project, that stormwater flows to the combined sewer are not expected to increase. But the DGEIS entirely fails to quantify the actual pre- and post-project volumes of stormwater discharged to the combined sewer system.

While the DGEIS mentions that the stadium would be designed to capture and reuse rainwater that could supplement flushing water needed for restroom facilities, there is no quantification of how much stormwater would be captured. By contrast, the FGEIS and findings statement for the World Trade Center redevelopment project stated that its greywater system will result in an 85% annual average reduction in stormwater discharges to the combined sewer.

Moreover, it appears that the baseline conditions with regard to stormwater collection have been inaccurately set forth in the DGEIS. On page 16-7, the DGEIS states that stormwater runoff from the east and west Caemmerer Yards is currently collected and conveyed to a collection sewer at 30<sup>th</sup> Street and 12<sup>th</sup> Avenue. But this appears to be factually incorrect. The MTA has recently discovered that all of the stormwater falling on these 20-acre parcels is currently being discharged directly to the Hudson River. While this direct discharge raises environmental issues of its own, it is also a critical piece of information for establishing the proper baseline for the evaluation of CSO impacts. If all of the stormwater falling on the 20-acre railyards is not presently being added to the combined system, then the DGEIS must quantify this volume, and the project will have to develop greywater systems to capture an equivalent amount of stormwater, i.e., 20-acres’s worth, either at the railyards or elsewhere in order to keep stormwater flows from exacerbating CSOs beyond current conditions.

By redeveloping a 50-block area in the heart of New York City, the Hudson Yards Project presents an unprecedented opportunity to not only significantly reduce CSOs and their impacts but to set an example for sustainable development. Every gallon of untreated combined sewage that the Hudson Yards site adds to the City’s centralized sewage system is a gallon that will have to be removed, stored, or treated elsewhere –

likely at greater cost – in order to resolve the systemic lack of wet weather capacity. If the course of action currently proposed is followed, the Hudson Yards site is likely to exacerbate the CSO problem by contributing more raw sewage and polluted stormwater to the City's already-overloaded combined system and to the Hudson River.

We strongly advocate a different course of action, one by which the Hudson Yards Project can be part of the solution to ongoing water quality problems around the City, rather than part of the problem. As discussed in greater detail below, at a minimum, to comply with SEQRA's requirements that an EIS set forth mitigation measures for all significant adverse environmental impacts, the City should adopt a "no CSO increase" standard for this project, and demonstrate how this will be achieved. As also described below, standard technology used in other locations in NYC and around the world can achieve this goal at modest cost.

**The Hudson Yards Project Can and Should Set a Goal of "No Combined Sewage Increases" and Incorporate Readily-Available Green Development Technologies To Meet It.**

The redevelopment of the far west side of Midtown Manhattan is a prime opportunity to embrace progressive efforts to reduce water pollution while pioneering to achieve new levels of environmental stewardship. The project should adopt the goal of eliminating net increases in sewage overflows from the Project Site to the sewage system serving the North River Water Pollution Control Plant. The Hudson Yards Project should endeavor to eliminate Hudson River CSO events in the wastewater service area of the project site, significantly reduce CSOs to the Hudson triggered by stormwater flows from neighboring properties, and reduce system-wide CSO events triggered by downstream bottlenecks.

Several "off-the-shelf" technologies currently exist that should be directly incorporated into the project. For example, the Solaire development in Battery Park City, the Durst Organization's Four Times Square, Durst's nearly completed 38 floor residential development, and the planned Hearst Tower project all incorporate innovative design features that exemplify the viability and success of green development features in large New York City development projects. These projects incorporate a host of methods that collectively accomplish decentralized wastewater treatment, reducing new wastewater flows into the city's combined system. They range from green roofs to a black water purification plant serving Durst's 38-floor, 600-unit rental residential property.

Decentralized wastewater and stormwater plants are being considered for urban areas subject to CSOs in New York City and beyond. Depending on the technology applied, the scaled-down plants can collect, pre-treat, treat, discharge, recycle, and even

re-use the building's wastewater. These facilities can discharge their treated wastes outside the large, centrally located system that receives inputs from all the buildings and impermeable surfaces in the area. In this way, decentralized systems can remove large volumes of wastewater from the system, and when incorporated into any new development, can ensure no net volume or a limited volume of untreated sewage is added into an already overloaded system.

According to the EPA, adequately managed decentralized wastewater systems are a cost-effective and long-term option for meeting public health and water quality goals. The EPA defines decentralized wastewater treatment systems as onsite or clustered wastewater systems that are used to treat and dispose of relatively small volumes of wastewater, generally from dwellings and businesses that are located relatively close together.

In Hunters Point, San Francisco, engineers and officials favored a decentralized system as the outcome of a year-long feasibility study linking new development to the city's CSO problem. After technical review, the San Francisco Hunters Point project settled on membrane bioreactors (MBR) as the most effective system. MBR combines multiple treatment processes into one step where grit and nitrogen are removed from the wastewater and then microorganisms are screened out via submerged synthetic membranes or layers. The MBR scored higher than the other methods in terms of footprint, water reuse potential, highest quality effluent, capital and operational costs, and public benefits such as health, safety, and odors.<sup>13</sup>

We recommend that the City, as part of a revised or supplemental DGEIS, examine the potential use of MBR and similar technologies for the purpose of designing a system that treats all wastewater flows from the Hudson Yards Project, including providing treated water to meet reuse demand, discharging excess treated wastewater to the neighboring Hudson River, and returning all solids to the combined sewer system. As an alternative to a decentralized system treating sewage, the DGEIS should also consider detention of excess stormwater flows from the project area, with testing and treatment, before release to the Hudson.

**BUILDING A MASSIVE STADIUM ADJACENT TO THE CITY'S HUDSON RIVER WATERFRONT AND HUDSON RIVER PARK IS POOR LAND USE PLANNING AND WILL SIGNIFICANTLY DETRACT FROM THE PUBLIC'S USE AND ENJOYMENT OF THE WATERFRONT.**

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<sup>13</sup> San Francisco Public Utilities Commission, Hunters Point Shipyard Decentralized Wastewater Treatment Study, [www.sfwater.org](http://www.sfwater.org).

If built, the proposed stadium (or multi-use facility) will be an enormous structure constructed immediately adjacent to the Hudson River waterfront and Hudson River Park and will significantly interfere with the public's use and enjoyment of those public trust resources. If the stadium is used only a dozen or so days a year (for Sunday football games and a handful of other events) as is most likely, then the waterfront area around the stadium will be deserted most of the time, and the behemoth stadium structure will be an empty hulking presence on the waterfront. If, on the other hand, the stadium is regularly used for convention activities, concerts and other public events year round (as its proponents claim), then the waterfront area will be overcrowded with traffic and pedestrians attending the 75,000 seat facility. Either way, the type of development proposed is simply wrong for the waterfront. Significantly, the only alternative proposed in the DGEIS for the western rail yard is to leave it undeveloped. However, developing that area on a smaller scale, with land uses more appropriate to the waterfront would be a far better course of action for that site and could be compatible with Hudson River Park.

Most troubling of all is that the main driving force for building the stadium is to lure the 2012 Olympic Games, the effects of which are not considered in the DGEIS. Thus, the largest single component of the Hudson Yards Project, as well as the project's approval process and schedule is being driven by an extraneous event, the outcome of which remains speculative and the overall impacts of which remain unexamined. Other aspects of the stadium's impact on Hudson River Park also require further analysis, including those raised by Friends of Hudson River Park, of which Riverkeeper is an organizational member.

**THE PROJECT'S INCREASED FERRY OPERATIONS WILL EXACERBATE LOCAL AIR POLLUTION, DAMAGING WAKES, AND NAVIGATIONAL CONFLICTS IN NY HARBOR, THEREBY CAUSING UNMITIGATED – AND UNANALYZED – SIGNIFICANT ADVERSE IMPACTS.**

The DGEIS states that the project is expected to increase ferry utilization in 2010 and significantly increase ferry utilization in 2025, requiring the addition of ferries on three of six routes. (See p. ES-43 to ES-44 and further discussion in Chapter 17, Transit and Pedestrians.) While ferry transportation advocates often claim that ferry service "reduces" or "displaces" on-road travel, such claims ignore empirical data demonstrating that expanding the transportation system in crowded urban areas (such as building additional highway lanes or providing alternatives to driving) results in more overall commuting, not a re-arrangement of existing commute patterns. This effect is known as 'latent demand' or 'induced demand' and has been consistently observed in practice. Reliable evidence puts the short-term (less than three years) latent demand effect at 10% to 50% and long-term effects at higher values (nearly 100%), meaning that very little or no lasting congestion relief occurs. See Corbett, J.J., Farrell, A.E., Redman, D.H. and Winebrake, J.J., *Air Pollution from Passenger Ferries in New York Harbor*, Bluewater

Network, 2003 (hereinafter cited as "2003 Bluewater Report") at p. 12-13, citing ten empirical studies.<sup>14</sup> Moreover, even if the use of ferries for transportation to serve the stadium and other features of the project would take some vehicles off the road, the increased ferries themselves cause significant adverse impacts on air, water, and waterfront resources.

***Passenger Ferries in New York Harbor Emit More Air Pollution per Passenger Mile than Trains, Buses or Cars.***

Contrary to popular assumptions, travel by passenger ferry in New York Harbor (and likewise in the rest of the country) pollutes the air more per person-mile than do landside alternatives such as car, bus, and train. As the 2003 Bluewater Report, submitted as Exhibit A to these comments, shows, emissions of particulate matter (PM) from ferries can be over 100 times greater than from vehicles (per-person-mile) and emissions of nitrogen oxides (NO<sub>x</sub>, a major contributor to ozone) can be more than 1,000 times greater.<sup>15</sup> Ozone and particulate matter pose serious health risks to people living in the

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14 Noland, R.B., *Relationships between highway capacity and induced vehicle travel*. Transportation Research A - Policy and Practice, 2001. 35(1): p. 47-72; Goodwin, P.B., *Empirical evidence on induced traffic - A review and synthesis*. Transportation, 1996. 23(1): p. 35-54; Goulias, K.G., *Longitudinal analysis of activity and travel pattern dynamics using generalized mixed Markov latent class models*. Transportation Research Part B-Methodological, 1999. 33(8): p. 535-557; Englin, J. and J.S. Shonkwiler, *Modeling Recreation Demand in the Presence of Unobservable Travel Costs - toward a Travel Price Model*. Journal of Environmental Economics and Management, 1995. 29(3): p. 368-377; Vanwissen, L. and T.F. Golob, *A Dynamic-Model of Car Fuel-Type Choice and Mobility*. Transportation Research Part B-Methodological, 1992. 26(1): p. 77-96; Henk, R.H., *Quantification of Latent Travel Demand on New Urban Facilities in the State of Texas*. Ite Journal-Institute of Transportation Engineers, 1989. 59(12): p. 24-28; Noland, R.B. and L.L. Lem, *A review of the evidence for induced travel and changes in transportation and environmental policy in the US and the UK*. Transportation Research Part D-Transport and Environment, 2002. 7(1): p. 1-26; Hansen, M. and Y.L. Huang, *Road supply and traffic in California urban areas*. Transportation Research Part A-Policy and Practice, 1997. 31(3): p. 205-218; Johnston, R.A. and R. Ceerla, *The effects of new high-occupancy vehicle lanes on travel and emissions*. Transportation Research Part A-Policy and Practice, 1996. 30(1): p. 35-50; and Fulton, L.M., et al., *A Statistical Analysis of Induced Travel Effects in the U.S. Mid-Atlantic Region*. Journal of Transportation and Statistics, 2000. 3(1): p. 1-14.

15 The enclosed 2003 Bluewater Report studied emissions per person-mile for three representative ferry routes (Weehawken to Pier 78; Highlands to Pier 11; and the Staten Island Ferry) and two landside alternatives (average landside vehicles in 2007 and new vehicles in 2007). The study's results indicated that emissions from the high-speed Highlands and short-distance Weehawken ferries are much more polluting than substitute travel by auto, bus, and rail, and that a 98% or more reduction in ferry emissions of NO<sub>x</sub> and PM is needed to achieve pollution similar to the average landside alternatives.

New York City metropolitan region, especially children, the elderly, and those with respiratory disease.

Ferries will continue to be more polluting than land-based alternatives despite new federal regulations for ferry engines scheduled to take effect in 2007 because the regulations are significantly weaker than vehicle emission regulations. While federal automobile emission controls began in 1973, standards for marine engines were first promulgated (beginning with voluntary standards) by the Environmental Protection Agency only in 2000. As a result, federal regulation of automobile emissions of NO<sub>x</sub> will reduce allowable levels by over 99% in 2007. In contrast, mandatory NO<sub>x</sub> emission standards for ferry engines starting in 2007 will cut emissions by less than half. *See* 2003 Bluewater Report at p. 1.

Existing technologies can significantly lower ferry emissions, but the upcoming 2007 regulations do not require them, and ferries built today will still be in use 15 to 20 years from now. Thus, because ferries emit more air pollution per passenger mile than automobiles, taking people out of cars and putting them into ferries degrades rather than improves air quality, by a factor as much as 1,000 times, depending on the pollutant.

This unfortunate fact has been specifically demonstrated in New York Harbor in the 2003 Bluewater Report and also in other regions of the U.S. Several studies have determined that ferry engines must be approximately 85 percent cleaner than will be required by federal law in 2007 (85% below EPA Tier 2 -2007) to be comparable in air emissions to other modes of transit, including the following:

1. Bluewater Network's 1999 Bay Area Transit Options Emissions Report found that fast ferries are as much as 10 times more polluting per passenger mile than single-passenger cars or buses for NO<sub>x</sub>, PM and Nonmethane Hydrocarbons.
2. US Maritime Administration's 2000 Ferry Environmental Suitability Study (Draft Final, unpublished) found today's marine diesel engines to produce four times more NO<sub>x</sub> and PM per passenger mile than cars, and 4 times more NO<sub>x</sub> and 9.5 times more PM than diesel buses at rate of more than 5 grams of NO<sub>x</sub> per passenger mile and .133 grams of PM per passenger mile.
3. California Air Resources Board (CARB) found in its March 2002 draft staff report that in a best estimate scenario, uncontrolled diesel ferries would increase NO<sub>x</sub> plus HC emissions per passenger trip by more than 400 percent when compared to light duty vehicles. NO<sub>x</sub> alone would increase almost 1000 percent and PM10 more than 300 percent. The

CARB recommends that ferries must be 85 percent cleaner than currently planned EPA Tier 2 – 2007 standards require.

4. CALSTART, an independent alternative fuels research group, released a report in July 2002 that also determined that unless ferries use cleaner fuels or advanced emissions controls, overall air pollution in a region will increase.

It is also noteworthy that the San Francisco Bay Area Water Transit Authority has set the CARB emissions standard for its new fleet of 30 vessels (85 percent below EPA Tier 2 – 2007) in order to prevent a significant increase in air pollution from the project. (San Francisco Bay Area Water Transit Authority Implementation and Operations Plan, December 2002, [www.watertransit.org](http://www.watertransit.org)).

Based on this overwhelming research, and in particular the 2003 Bluewater Report of passenger ferries in New York Harbor, it is abundantly clear that the Hudson Yards Project (alone and in combination, i.e., cumulatively, with the other planned ferry projects in the metropolitan area) will significantly increase air pollution emissions in the New York metropolitan region. But the DGEIS fails to acknowledge or analyze this impact. A revised DGEIS should be prepared and recirculated for public comment to conduct detailed studies quantifying the project-specific and cumulative air pollution impacts from ferries in New York Harbor, and develop mitigation measures for those impacts. The revised DGEIS should contain an analysis of existing ferry emissions, ferry emissions increases, and an emissions comparison between buses and cars, both in total and per passenger mile, in order to adequately assess the site-specific and cumulative impacts of increased ferry service. Another approach might be for the City to prepare a generic EIS to comprehensively address the significant adverse effects of planned increases in ferry operations throughout the region, rather than segmenting the analysis into project-specific review documents.

In addition, mitigation measures to reduce ferry emissions should be analyzed and implemented for ferries serving the project, such as use of cleaner fuels (such as biodiesel or ultra-low sulfur fuels), air pollution controls (such as water injection, SCR, PM traps or oxidation catalysts) and new technologies such as hybrid-electric vessels that can turn off the diesel engines while maneuvering at the terminal.

***Wakes from Passenger Ferry Operations in NY Harbor Cause Significant Environmental Impacts on Shorelines, Wetlands, Water Quality, and Waterfront Resources and Activities.***

Despite acknowledging that the Hudson Yards Project will cause ferry operations to significantly increase, the DGEIS fails completely to discuss or analyze the significant environmental impacts caused by ferry wakes in NY Harbor. Wakes from ferries are

already causing significant environmental and economic damage in the Harbor and these impacts will greatly increase as a result of the project's additional ferry operations. Ferry wakes cause erosion of shorelines, inundation of wetland areas, increased turbidity, and destruction of wildlife habitat, as well as significant damage to sea walls, docks, moored boats, barges, and other vessels, and cleats, lines and other maritime infrastructure. While most boats cause some wake, the wakes from fast ferries are significantly greater in frequency, size and energy than virtually all other vessels in the Harbor. Mitigation measures are, however, available to reduce the impacts of ferry wakes. A revised DGEIS should be prepared to analyze the impacts of wakes and appropriate mitigation measures to address them.

Fast ferry catamarans generate wakes that are considerably different from those of conventional, slow monohull ferries due to the hull design and speed. Fast ferries, which operate at twice the speed of conventional boats (30 knots or more), tend to throw off a wake that is steeper, longer and more likely to cause erosion. The height of the fast ferry wake wave tends to increase significantly close to shore, particular in waters less than three meters deep. While catamaran fast ferry wakes may be insignificant once planing at optimum speed, the wake becomes more disruptive when these vessels slow down.

The Danish Maritime Authority was the first to evaluate the damaging impacts of fast ferry wake waves and to set wake height and boat speed limits to reduce impacts. The state of Washington required a fast ferry to slow from 35 knots to 12 knots while traveling through a narrow passage to avoid shoreline damage, following a lawsuit by property owners and a state-funded study. In British Columbia, three fast ferry catamarans were put out of service due to wake impacts that could not be prevented through operational measures. In San Francisco Bay, both catamaran and monohull ferries are required to slow down in estuaries and sensitive areas to minimize shoreline erosion cause by wakes (Golden Gate Ferry Larkspur service and Alameda-Oakland service).

The San Francisco Bay Area Water Transit Authority has set a wake standard for its new fleet, with a 16 centimeter maximum wake wave height. Operational measures require that routes stay 1,500 meters away from sensitive shorelines. Other mitigations to prevent wake damage include use of low-wake hulls and slowing speeds. (Draft Programmatic Environmental Impact Report, August 2002).

In New York Harbor, a new Safe Wakes Committee is currently meeting in an effort to track wake damages and to seek relief from past and future damages caused by New York Waterway ferries. In addition to environmental and recreational issues, wakes can also do social damage, for example, preventing educational and scientific programs from being conducted along shorelines where wakes have become so severe as to prevent safe navigation in small vessels or on foot.



The wakes impacts of increased ferry service caused by the project needs to be evaluated and mitigated through operational requirements such as routing, reduced speed and hull design. Because the DGEIS contains no discussion whatsoever of this environmental impact, it fails to pass legal muster. A revised DGEIS must be prepared which analyzes the project-specific and cumulative impacts of increased wakes from increased ferry operations.

***The Project's Increased Ferry Operations Will Cause Significant Navigational Conflicts with Other Users of the Harbor, Particularly Recreational Small Boaters.***

Despite acknowledging that the Hudson Yards Project will cause ferry operations to significantly increase, the DGEIS fails completely to discuss or analyze impacts related to conflicts with other users of the Harbor, particularly recreational small boaters such as kayakers. These conflicts are already significant and will greatly increase as a result of the project's additional ferry operations.

In New York Harbor, there is a significant, active and growing community of recreational kayakers, canoeists and other small boaters who use our public waterways regularly. In addition, there are a number of commercial businesses and non-profit community organizations which train and support these boaters. Some of the groups have innovative student education programs which teach inner city youth how to build boats and navigate them in the Harbor. These organizations include the Downtown Boathouse ([www.downtownboathouse.org](http://www.downtownboathouse.org)), Floating the Apple ([www.floatingtheapple.org](http://www.floatingtheapple.org)), New York Kayak Company ([www.nykayak.com](http://www.nykayak.com)), Manhattan Kayak Company ([www.manhattankayak.com](http://www.manhattankayak.com)), East River Apprenticeshop ([www.erashop.com](http://www.erashop.com)), Gowanus Dredgers ([www.waterfrontmuseum.org/dredgers](http://www.waterfrontmuseum.org/dredgers)), Rocking the Boat ([www.rockingtheboat.org](http://www.rockingtheboat.org)), Yonkers Rowing & Paddling Club ([www.yrpc.org](http://www.yrpc.org)), and many others. These organizations and the many citizens who are involved with them are part of an important movement which is reconnecting citizens of the New York metropolitan area to their waterways and other public trust resources.

Because the Hudson Yards Project is located in the coastal zone, it is subject to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act ("Waterfront Law"), Article 42 of the Executive Law, and its implementing regulations, 19 NYCRR, Part 600. The Waterfront Law was enacted pursuant the federal Coastal Zone Management Act of 1972, 16 U.S.C. §§ 1451-1464, and prohibits municipalities from approving land use development projects in the coastal zone, unless such projects are consistent with the 44 state Coastal Management Program (CMP) policies codified at 19 NYCRR § 600.5 or a state-approved LWRP, if one exists. The project directly contravenes a number of fundamental policies of the CMP, including but not limited to Policies 19, 21 and 22 which require the promotion and protection of public access and water-related recreational activities.

The DGEIS, however, fails to even analyze the significant impacts from ferries on recreational users of the harbor. Because of the frequent, large and powerful wakes from fast ferries, as discussed above, and because of the navigational conflicts which emerge from increased ferry operations, it will become vastly more difficult for small boaters to use local waterways. In particular, because ferries generally operate perpendicular to the shoreline as they arrive at or depart from the terminal, while small boaters typically transit north and south along the shoreline, frequent ferry operations can make it virtually impossible for small boaters to pass through the ferry terminal corridor. Thus, large areas of the Harbor may become off limits to small boaters. But relatively simple mitigation measures could be put in place to accommodate the common usage of public trust waterways. These issues need to be assessed and mitigated in a revised DGEIS for the Hudson Yards Project or in a generic EIS for all planned regional ferry operations to and from New York City.

#### **THE DGEIS DOES NOT COMPLY WITH SEQRA OR CEQR**

The State Environmental Quality Review Act ("SEQRA") and its local analogue, the City Environmental Quality Review law ("CEQR") require an EIS to be an informational document which will inform public agency decision-makers and the public generally of the significant effects of a project, identify possible ways to minimize those effects, and evaluate project alternatives. For the reasons discussed herein, the DGEIS is inadequate both in process and in product, with the result that decision-makers and the public are deprived of the information necessary to assess the project and its impacts fairly and accurately.

Specifically, the DGEIS for this project fails to provide adequate and unbiased information with respect to combined sewage flows and the other issues discussed above, and the impacts of these project components on the environment. Among other shortcomings, the DGEIS provides insufficient detail on the project and its adverse impacts; fails to consistently use current conditions as the baseline for determining the significance of impacts; fails to fully and properly analyze and determine whether impacts to water quality and aquatic biota will be significant; incorrectly assumes without evidence (and despite evidence to the contrary) that such impacts are insignificant; fails to analyze the cumulative impacts; fails to set forth measures sufficient to mitigate the significant adverse environmental impacts; and fails to consider reasonable project alternatives that would eliminate these impacts. As a result and as further set forth below, the DGEIS for the Hudson Yards Project fails to comply with the SEQRA, Article 8 of the Environmental Conservation Law, and its implementing regulations, 6 NYCRR part 617, and CEQR.

- o **Improper Baseline.** A true and accurate assessment of current conditions is necessary to identify the project's impacts in the relevant study areas and the need, if any,

for mitigation. But, as explained above, the DGEIS does not accurately set forth existing conditions with respect to the discharge of stormwater at the Caemmerer rail yards.

- o **Insufficient Detail.** The DGEIS fails to quantify the volume and flow rate of stormwater that will run off the project site into the City's combined sewage system if the project is built (a) as proposed, (b) under either buildout scenario, or (c) according to any of the project alternatives. In addition, the DGEIS provides no detailed information on the constraints of the combined sewer system infrastructure in the immediate vicinity of project site or anywhere else in the project's sewershed.<sup>16</sup>

- o **Analysis of Impacts.** The project will, by 2025, contribute 7.5 million gallons per day of additional raw sewage to the City's combined sewage system that already lacks adequate capacity in wet weather. In order to assess the effects of this increased sewage load on CSOs, the DGEIS should have quantified, but did not, any reductions in stormwater runoff which might counteract the effect of increased sanitary sewage generations. There is no assessment as to whether the net result will be an increase or decrease in combined sewer flows and CSOs from the project site under foreseeable wet weather conditions.

- o **Determination of Significance.** The DGEIS admits that "the increased sewage volume of sewage discharged to the combined sewer system would have the potential to result in an increase in the concentration of sewage and associated pollutants (e.g., TSS, fecal coliforms) discharged to the Hudson River during CSO events." (p. 13-22.) Any addition to these overflows must be deemed significant because CSOs are the single largest contributor of pollutants and pathogens to local waters, thereby causing violations of water quality standards and impairing both human use and ecological function. The DGEIS wrongly states that the Hudson is meeting all water quality standards. In the absence of evidence or analysis to the contrary, the DGEIS should have concluded, but did not, that combined sewage from the project will cause significant impacts.

- o **Cumulative Impacts Analysis.** The DGEIS is inadequate because it fails to provide a cumulative impact analysis of the significant adverse impacts caused by the project's increased ferry operations in New York Harbor. Cumulative impacts analyses are critically important because the incremental effects of many projects that overlap in time and space aggregate to collectively affect the same resources.

- o **Mitigation Measures.** The DGEIS fails to set forth and analyze measures sufficient to mitigate the project's significant impacts to surface water quality. With respect to CSOs, while there are some proposed project features that might reduce

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<sup>16</sup> The DGEIS admits that sewer system collection capacity will have to be increased to accommodate the project.

impacts, such as stormwater retention, it is unclear to what extent the former will be mandated as project requirements (rather than suggestions or goals) and there has been no quantification or analysis of the effect of the latter. The DGEIS should set forth green building practices, decentralized greywater and blackwater treatment and detention systems sufficient to meet a modest goal of "no net CSO increases" and a superior standard of no untreated sanitary sewage or stormwater contributions to City sewers.

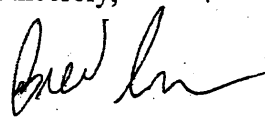
o **Project Alternatives.** The DGEIS fails to consider reasonable project alternatives that would drastically reduce or eliminate the significant impacts discussed above. Significantly, the DGEIS fails to consider any other use for the west Cammerer yard other than the stadium proposal.

### Conclusion

As explained above, the Hudson Yards Project should be modified to incorporate measures such as those described herein to minimize water pollution and other negative impacts on New York's City's marine environment and waterfront to the greatest extent feasible. The City Planning Commission and other decision makers have a once-in-a-generation opportunity to transform a large section of Manhattan in an environmentally sustainable fashion. But, for the reasons discussed herein, the proposed project has not yet achieved that goal. We hope to have the opportunity to work with all involved in this important undertaking to resolve the shortcomings of the current project and its environmental documentation, in furtherance of our shared goals.

We thank you for the opportunity to comment on the DGEIS.

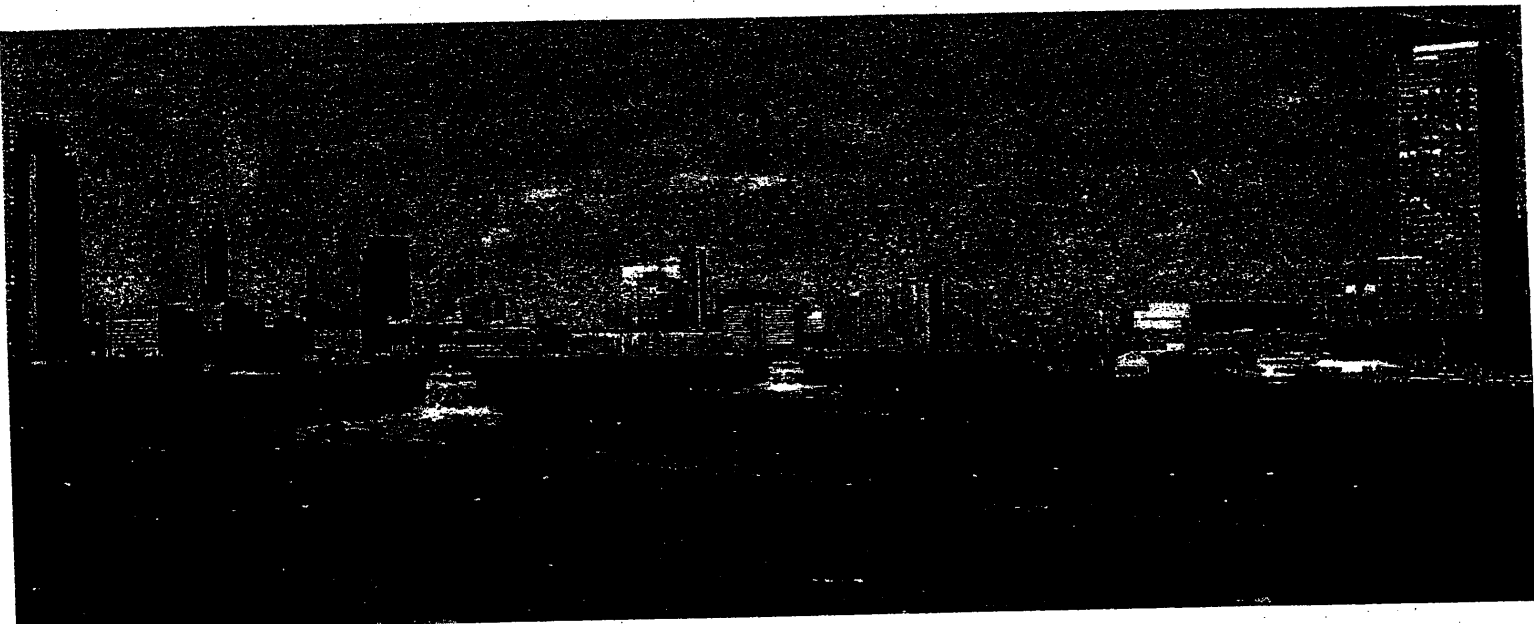
Sincerely,



Reed Super  
Senior Attorney

# Air Pollution From Passenger Ferries In New York Harbor

July 2003



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## ACKNOWLEDGEMENTS

This report was produced by a team of top researchers who are experts in the fields of transportation, air emissions and marine engines. We were privileged to have been able to call on their combined expertise to conduct this important new research on our behalf.

Before commissioning this study, we were familiar with the internationally recognized and widely published work on ship and ferry emissions by Professor James Corbett of the University of Delaware and Professor Alex Farrell of the University of California, Berkeley. We are pleased to have been introduced to Deborah Redman of Redman Consulting and Professor James Winebrake of the Rochester Institute of Technology, who bring expertise in landside transportation and emission control technologies, respectively. Together this team has used new data and improved on methodologies used in peer-reviewed publications to develop a state-of-the-art analysis of air pollution from passenger ferries in New York Harbor, and we thank them for their efforts.

In addition, we would like to thank the many individuals in local, regional, state and federal agencies, as well as representatives from the ferry industry in the New York City metropolitan area for providing data and background information to the authors of this report.

We also thank our environmental colleagues in the New York-New Jersey area for encouraging us to go forward with this endeavor, particularly Reed Super of Riverkeeper, Inc. Thanks are also due Bobby Winston, publisher of *Bay Crossings* ferry magazine, who helped us lay the foundation work for this report during a trip to ride the ferries of New York.

Most importantly, this study would not have been possible without the generous support of the Richard and Rhoda Goldman Fund.

We hope that this groundbreaking research will be the catalyst for policymakers, regulators and industry to ensure that only the cleanest possible ferries operate on New York Harbor.

Russell Long  
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Teri Shore  
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*The cover shows six ferries in New York Harbor during the middle of the workday.*

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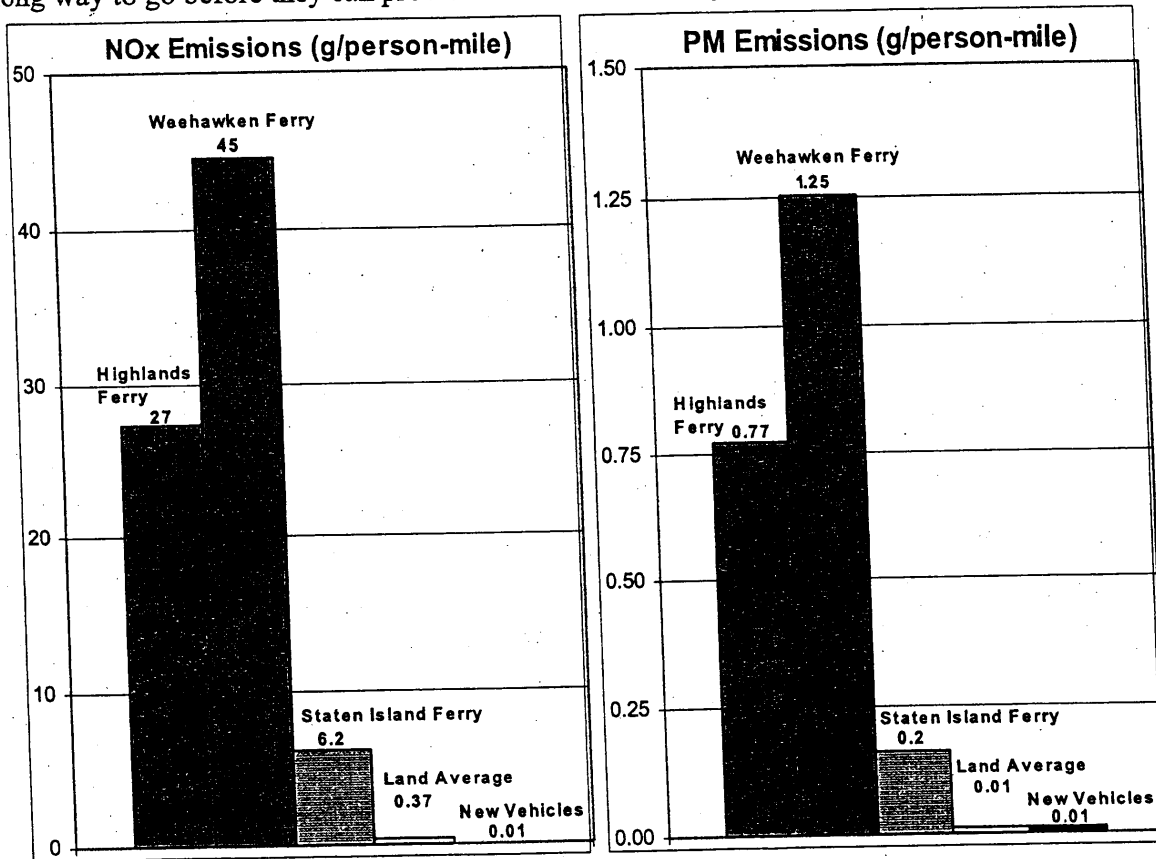
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**EXECUTIVE SUMMARY**

Passenger ferries in the New York City metropolitan area are a significant and growing transportation option, used by commuters and tourists alike. Recent increases in ferry service have been justified as a means of increasing access to Manhattan and other water-accessible locations (such as the New Jersey waterfront) in order to increase mobility and to encourage economic growth. However, travel by passenger ferry in New York harbor pollutes the air more per person-mile than do landside alternatives such as car, bus, and train. This will remain true despite new federal regulations that take effect in 2007 because these are relatively weak. To make matters worse, ferries built in the next three years will be held to even lower standards. Since they will last 15-20 years, these vessels will increase air pollution in the region for years to come. This comes at a time when ozone and particulate matter (PM) pose serious health risks to people living in the New York City metropolitan region, especially children, the elderly, and those with respiratory disease. Existing technologies can significantly lower ferry emissions, but the upcoming regulations do not require them.

The figures shown below illustrate the problem for 2007. They show emissions per person-mile for three representative ferry routes and two landside alternatives, average landside vehicles in 2007 and new vehicles in 2007. The comparison is stark. In some cases emissions of PM from ferries can be over 100 times greater than from vehicles (per-person-mile), while nitrogen oxides (NO<sub>x</sub>, a major contributor to ozone) can be more than 1,000 times greater. Passenger ferries have a long way to go before they can provide access and mobility while protecting the environment.



**Figure ES-1: Commute Emissions in New York Harbor, 2007(Tier 2 Ferries)**

This study evaluated the emissions from three passenger ferry routes to Manhattan (Weehawken-W38<sup>th</sup> St.; Highlands, NJ to Pier 11; and the Staten Island Ferry) and compared them to emissions from equivalent commutes on land, covering for five travel options. Details of the analysis and results are contained in the body of the report, while Table ES-1 and Figure ES-1 illustrate the basic findings. They compare emissions of the two most important pollutants, NO<sub>x</sub> and PM from ferries in each of the three routes using Tier 2 engines (required on new vessels in 2007) with the average emissions landside travel options. The two landside travel options are, first, the typical mix of vehicles used in 2007 for all land modes (automobile, bus, etc.), second, new vehicles in 2007, both averaged over all three routes. The table also shows the percent reduction needed to make each ferry's emissions (per person-mile) equivalent to those from the 2007 landside travel average ('parity').

**Table ES-1: Commute Emissions in New York Harbor, 2007 (Tier 2 Ferries)**

Pollutant	Commute Option	Emissions (g/person-mile)				
		Highlands Ferry	Weehawken Ferry	Staten Island Ferry	2007 Land Average	2007 New Vehicles
NO <sub>x</sub>		27	45	6.2	0.37	0.011
PM		0.77	1.25	0.2	0.010	0.010
Reduction Needed for Parity with 2007 Land Average	NO <sub>x</sub>	98%	99%	94%		
	PM	98%	99%	95%		

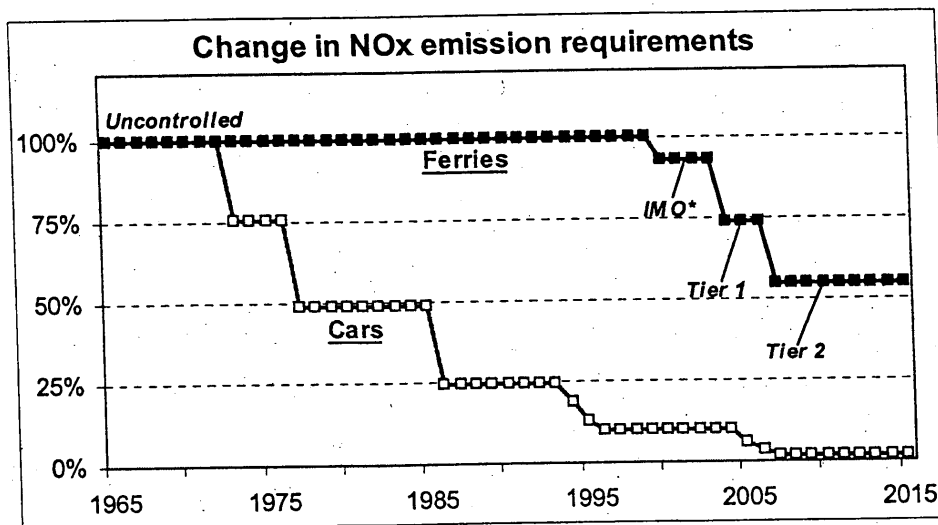
Table ES- 1 shows that significant emission reductions would be needed to make ferry and landside commutes equivalent in terms of air pollution. On average, NO<sub>x</sub> and PM emissions need to be reduced by over 95% (relative to current levels) for ferries to achieve the emission rates per passenger-mile of the landside travel options. The results of this study are similar to the findings from previous research and go a step further by including emissions from auxiliary engines, which provide the electricity onboard. This improved methodology shows that reduction in ferry emissions needed to achieve emission reductions similar to the average landside commute modes are greater than estimated earlier.

This study highlights the dilemma of modern ferry expansion nationwide. The service demands by passengers that are energizing the growth in the industry don't lend themselves to large, moderate-speed ferries or operational changes (i.e. fewer departures) that can limit emissions. The only way to make the modern expansion of passenger ferry service environmentally responsible is to use cleaner fuels and emission control technologies.

## INTRODUCTION

Evidence has mounted that passenger ferries and other marine vessels are significant sources of air pollution, and steps are being taken to control their emissions [1-6]. At the same time, urban passenger ferry service is expanding rapidly in many coastal regions as a means to add capacity to crowded transportation systems [7-9]. This trend has been accelerated by the introduction of high-speed (>30 knot) craft that can cut commute times and provide acceptable commute trips [10-12]. These trends combine to present a significant environmental problem for local air pollution managers [13-15]. Where passenger ferries have become a visible and fast-growing segment of the transportation system, emissions have become an important environmental issue.

Air pollution from marine sources has been regulated only recently. While federal automobile emission controls were first phased in for the 1973 model year, standards for marine engines were first regulated (beginning with voluntary standards) by the Environmental Protection Agency (EPA) only in 2000 [16]. Figure 1 illustrates this disparity by comparing emission requirements for one pollutant, nitrogen oxides ( $\text{NO}_x$ ). Federal regulations of automobile emissions of  $\text{NO}_x$  have caused advances in technology and significant reductions in pollution. By 2007, when the last planned standards are in place, automobile emissions will be reduced by over 99%. In contrast, mandatory emission standards for ferry engines will not come into force until 2004, and even when more stringent standards apply starting in 2007, ferry emissions will fall by less than half. Other pollutants have similar profiles. Importantly, engines that are installed onboard ferries over the next three years while less stringent Tier 1 standards apply will remain in service for 15-20 years, creating a window of opportunity for dirtier (and cheaper) engines to gain a place in New York for years to come.



\* IMO standards are voluntary but have been followed by ferry engine manufacturers.

**Figure 1: Change in emission requirements for  $\text{NO}_x$**

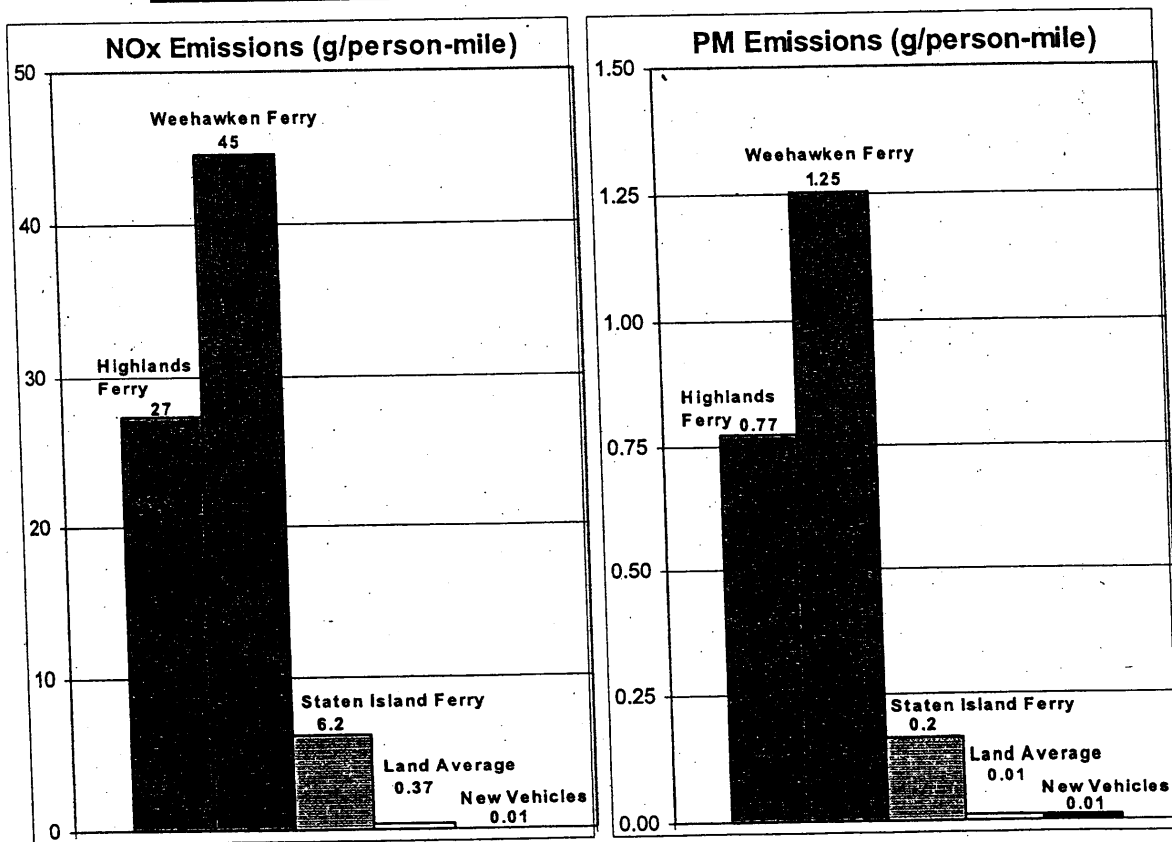
This study evaluates emissions from three passenger ferry routes to Manhattan (Weehawken-W38<sup>th</sup> St., Highlands; NJ to Pier 11; and the Staten Island Ferry) and compares them to emissions from equivalent commutes on land. The study employs a model designed to calculate emissions on a per passenger trip basis for the following pollutants:  $\text{NO}_x$ , hydrocarbons

(HC), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and carbon dioxide (CO<sub>2</sub>). (All trips in this study are one-way, so that they have the same meaning as terms common in the ferry industry, like 'boardings'.) The model employs detailed data on ferry and landside travel and technology options for the three routes studied.

Table 1 and Figure 2 summarize emissions of the two most important pollutants, NO<sub>x</sub> and PM from ferries in each of the three routes using Tier 2 engines (required on new vessels in 2007) with the average emissions landside travel options. The two landside travel options are, first, the typical mix of vehicles used in 2007 for all land modes (automobile, bus, etc.), second, new vehicles in 2007, both averaged over all three routes. The comparison is stark; emissions of PM from ferries can be over 100 times greater than from vehicles on a per-person-mile basis, while emissions of NO<sub>x</sub> (a major contributor to smog) can be more than 1,000 times greater. Clearly passenger ferries have a long way to go before they can provide access and mobility while also protecting the environment.

**Table 1. Commute Emissions in New York Harbor (Tier 2 Ferries)**

Commute Option	Emissions (g/person-mile)				
	Highlands Ferry	Weehawken Ferry	Staten Island Ferry	2007 Land Average	2007 New Vehicles
NO <sub>x</sub>	27	45	6.2	0.37	0.011
PM	0.77	1.25	0.2	0.010	0.010



**Figure 2: Commute Emissions in New York Harbor, 2007(Tier 2 Ferries)**

Cost-effective technologies exist to reduce emissions from ferries, and several vessels in Europe already use such technologies [17-19]. However, for the cases we studied, very significant emission reductions would be needed to make ferry and landside commutes equal in air pollution. On average, emissions from ferries would need to decrease by more than 95% from current levels in order for ferries to achieve landside commute values. Looking further ahead, ferry commuting generally requires more energy than on-road commuting on a per person-mile basis, especially in high-speed vessels. This will result in higher CO<sub>2</sub> emissions.

### **Air Quality and Public Health**

Air pollution in New York is a serious concern. Two key pollutants are ozone and fine particles. When ground-level ozone concentrations are high, people suffer major health effects, including chest pain, congestion, acute respiratory problems, aggravated asthma, and inflammation of lung tissue. These symptoms especially affect children, the elderly, and those with lung conditions, but even healthy people can feel the effects of ozone. There is even evidence to suggest that high ozone levels can increase the risk of children developing asthma and that long-term ozone exposure slows the growth of lungs. On high ozone days, hospital admissions, emergency room visits, and mortality related to ozone all increase. In 2002, New York City exceeded the EPA's health standard for ozone on 19 days.

Particulate matter (PM) less than 2.5 microns in diameter is referred to as "fine" particles. (In comparison, a human hair is about 70 microns in diameter.) Fine particles result from many different sources and can be formed when combustion gases are chemically transformed into particles. Individually, these particles and droplets are invisible to the naked eye. Collectively, however, they can appear as clouds or a fog-like haze. PM larger than 2.5 microns in diameter is referred to as coarse particles. Both coarse and fine particles are of health concern because they can penetrate into the sensitive regions of the respiratory tract. Fine particles are of greatest concern because they are linked to the most serious effects. Several recently published community health studies indicate that significant respiratory and cardiovascular-related problems are associated with exposure to particle levels well below the existing PM standards. These negative effects include premature death, hospital admissions from respiratory causes, and increased respiratory symptoms. Long-term exposure to PM matter may increase the rate of respiratory and cardiovascular illness and reduce life span. Children, the elderly, and individuals with cardiovascular disease or lung diseases such as emphysema and asthma are especially vulnerable. New York City does not meet the new fine particle standards.

While the city and state are working hard to improve air quality in the transportation and off-road sector through use of cleaner fuels and technologies, new fast ferries continue to operate on uncontrolled diesel engines. Two components of marine diesel exhaust are especially problematic, NO<sub>x</sub> and PM, which can sometimes be seen as smoke. Diesel PM is important because of the reasons given above and because there is evidence that diesel PM is more harmful than most. The state of California has listed diesel PM as a possible carcinogen. NO<sub>x</sub> is important because in urban areas like New York City, it is a major contributor to the formation of both ozone and fine particles. Any new transportation options, such as new ferries, should not worsen these conditions.

The next section of the report contains background information on the transportation system studied here. This background section is followed by a section on the methodology and finally a section containing the results.

## BACKGROUND

The New York metropolitan area (including New Jersey) has been a significant part of a modern revival of passenger ferries [9, 20-31]. The island of Manhattan – the region's commercial, cultural, and geographic heart – is surrounded by over nine million residents and visited by some thirty million tourists each year. The New York City area will have to rely on multiple river crossings to remain an integrated and vibrant place to live, work, and play.

Ferry service in the New York metropolitan area dates from 1700, when sailboats began service between Weehawken, NJ and Manhattan.<sup>1</sup> In 1810, 16-year old Cornelius Vanderbilt (later one of the richest men in America) introduced Staten Island-to-Manhattan ferry service. Steamship ferries from Hoboken were introduced in 1823 and greatly improved speed and reliability. Ferry lines in the New York metropolitan area began to multiply and they remained the only means of getting to Manhattan until the invention of the steel wire suspension bridge by John Roebling, and its debut in Brooklyn in 1883. Thereafter, rail bridges, roadway bridges, and subway tunnels began to supplant ferry service across the East River to Brooklyn and the Bronx. Ferries in the New York City area were all private ferry lines, with one major exception. In 1905, the City of New York took over the Staten Island Ferry service and this publicly-operated ferry service has been the largest single ferry line since then, and at one point the only one in New York Harbor.

The Hudson River was not spanned until 1927, when Clifford Holland's eponymous tunnel was built. Within a decade, the George Washington Bridge and Lincoln Tunnel also opened. Widespread adoption of the automobile after the World War II and subsequent suburbanization accelerated the decline of ferry service in the New York area, which peaked in 1927 with about 27 million passengers per year traveling between New Jersey and Manhattan, and perhaps half that many again traveling from Staten Island. By 1967, all but the Staten Island Ferry ceased operations and the elegant 1907 Beaux Arts ferry terminal in Hoboken, NJ was closed.

However, as with other cities the limits of automobile-oriented travel and urban design began to appear in New York in the last quarter of the 20<sup>th</sup> century. By the mid-1980s capacity limits on bridges and tunnels into Manhattan were being reached. Regional rail lines were also reaching capacity, and increasing cross-Hudson rail service was politically infeasible. Local transportation planners thus turned again to the rivers as a transportation route.

The modern revival of passenger ferries in metropolitan New York began when the Port Authority of New York and New Jersey (the Port Authority) issued a request for proposals (RFP) for operating ferries to cross the Hudson River from New Jersey to Manhattan. However, expansion of auto access or cross-Hudson rail service was either physically impossible or financially unsustainable. Thus, the Port Authority added passenger ferries to the options available to meet growing demand for transportation into Manhattan.

The sole response to the RFP came from a developer that eventually became New York Waterway (NYWW), now the largest private ferry operator in the country. In return for a 20-year contract (with a 10-year option for extension) for preferential access to Port Authority-provided terminals, NYWW agreed to provide minimum levels of service on specified routes. This approach suited the Port Authority since it was already expert in the development of

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<sup>1</sup> For more information, see [www.worldshipny.com/nyferries.htm](http://www.worldshipny.com/nyferries.htm), [www.hudsonriver.com/ferry.htm](http://www.hudsonriver.com/ferry.htm), [www.nycroads.com/crossings/](http://www.nycroads.com/crossings/), plus the Web sites of the Port Authority of New York and New Jersey and of the Metropolitan Transportation Authority.

transportation infrastructure (e.g. airports, bridges) used by private organizations and individuals. It also suited the owners of NYWW, who possessed considerable real estate next to one of the key terminal locations, Weehawken, NJ. Travel from this location, which has spectacular views of the New York City skyline, to Manhattan was inconvenient. Rapid waterborne access to the city would greatly enhance the desirability and value of these real estate holdings, which are currently planned to host 6,000 housing units and 1.4 million square feet of commercial space.

This "public terminals and private vessels" approach also had the advantage that private ferry operators like NYWW can set fares high enough to cover both costs and profits, ensuring the financial viability of the service. In contrast, public operators might not be allowed by political leaders to raise fares high enough to even cover costs and might therefore require constant subsidies from tax revenue (or other government sources of funds). Subsidies are required for public river crossings today in the New York City Metropolitan area, such as the Staten Island Ferry, which operates as part of the City's Department of Transportation and currently charges no fare at all, and cross-Hudson PATH trains, which is operated by the Port Authority.

The public terminals and private vessels approach seems to have been successful. Within two years of its startup, the NYWW ferry operation served over 5,000 riders daily and made a profit (although the subsidized Staten Island Ferry serves over ten times that number). By the year 2000, ferry service in New York had grown to about 100,000 commuters, two-thirds of which took the Staten Island Ferry. NYWW accounted for most of the rest, serving about 32,000 riders each workday. Other companies entered the ferry market, notably New York Fast Ferries and Seastreak.

The terrorist attack on September 11, 2001 was a transformative event for passenger ferry service in the metropolitan New York area. The collapse of the World Trade Center destroyed a key station for cross-Hudson PATH rail service and caused the temporary closure of all tunnels and bridges out of Manhattan to motorized travel. For many, the only way off the island was to take the ferry. NYWW evacuated more than 160,000 people that day, taking passengers from a terminal at West 38th Street as well as improvised landings, operating until late into the night.

Since then, private ferry service in the New York metropolitan area has continued to grow rapidly. Currently, there are over 40 passenger ferries (public and private) in New York Harbor, operating on over 50 routes with more than 1,000 departures daily, serving over 125,000 commuters on an average workday [32]. Half of this ridership is on the Staten Island Ferry, with almost all of the remainder on the NYWW system. In addition, new ferry operators have entered the market with different business strategies, such as New York Water Taxi. Moreover these vessels are used on weekends for sightseeing, sporting events (e.g. trips to baseball games at Shea and Yankee Stadiums, both of which have ferry access), Broadway shows, the circus, and private charters. Ferries are also being tried out on the East River between East 90th, 75th, 62nd and 34th Streets and stops serving the financial district in Lower Manhattan, providing a substitute for the overcrowded east side subway lines.

Part of this growth has been due to ferry trips substituting for cross-Hudson PATH rail service, which is due to resume next year. Some ferry routes will be reduced or eliminated when this happens, but this is unlikely to slow the growth of ferry commuting in New York significantly. There are essentially no other immediate options for improving access to Manhattan.

The scope of ferry terminal improvements in New York and New Jersey is expansive and the pace is very rapid. Some ferry terminals in use today are salvaged or temporary barges with fabric shelters; others are almost completely open to the elements. By next year, this will change dramatically, with the planned completion of more than \$300 million worth of projects, including: an extensively renovated terminal on Staten Island, a completely reconstructed terminal at Battery Park, a new floating terminal at the World Financial Center, and two entirely new terminals at West 39th Street and Weehawken, NJ, respectively. Smaller landings are also being developed, and the historic ferry terminal in Hoboken, NJ is being restored.

Investments of public funds in ferry terminals will make it ever easier for private operators to commercialize new routes and services. Figure 3 gives a sense of the number of ferry routes in service today. As with the initial impetus for the modern revival of ferry service in metropolitan New York, transportation system expansion and economic development are at the center of current efforts to improve New York's ferry terminals. With publicly-funded terminal improvements it is expected that privately-financed ferry service will arrive shortly thereafter, with the operative theory being "if we build the infrastructure, the ferry service will come."<sup>2</sup> Increasing ferry service in the New York City area serves many agendas. Public officials appreciate the fact that ferry terminals can be improved fairly quickly, "We don't, in the short term, have a lot of options for getting people to Lower Manhattan faster than we can with ferries."<sup>3</sup> In the medium-term both public officials and private businesses hope that ferries may be able to move athletes and spectators to remote locations as part the city's bid for the 2012 Olympics. Over the long term, new ferry terminals are now being promoted by private developers as "central features of transit-village model[s] of development similar to the old railroad suburbs."<sup>4</sup> Similarly, improved ferry service should help with the long-term revitalization of the Hudson County (NJ) waterfront and complement the planned north-south light rail system in northeastern New Jersey.

Importantly, the public terminals and private vessels approach is essentially a means of expanding transportation system capacity and as a mechanism for development. Since ferry expansion in New York harbor is seen as a way to provide more transportation to more places, emissions due to this expansion should be viewed in this light.

The advantages of passenger ferries – feasibility of expansion to provide direct service to points of interest, lack of traffic crowding (for now), speed of implementation, and suitability of the use of public infrastructure and private operating capital– mean they will continue to grow in number in metropolitan New York. The environmental impacts of ferry service have also grown, including noise, wake, and air pollution. Now is a crucial time for the air pollution issue; several ferries will soon be replaced or repowered (i.e. have their engines replaced), locking in propulsion technologies for the life of these vessels, which is often 20 years or more. This includes new Staten Island Ferries as well as smaller, faster ferries that are used by NYWW and larger ferries that travel to more distant locations in New Jersey. At the same time, new federal regulations controlling marine engines are not fully in force yet, giving ferry operators a short window to introduce new vessels with older, cheaper, and more highly polluting technologies.

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<sup>2</sup> Iris Weinshall, Commissioner of the New York City Department of Transportation, quoted in [9].

<sup>3</sup> Daniel L. Doctoroff, Deputy Mayor of New York for economic development and rebuilding, quoted in [9].

<sup>4</sup> Arthur E. Imperatore Jr., President of NYWW, quoted in [9].



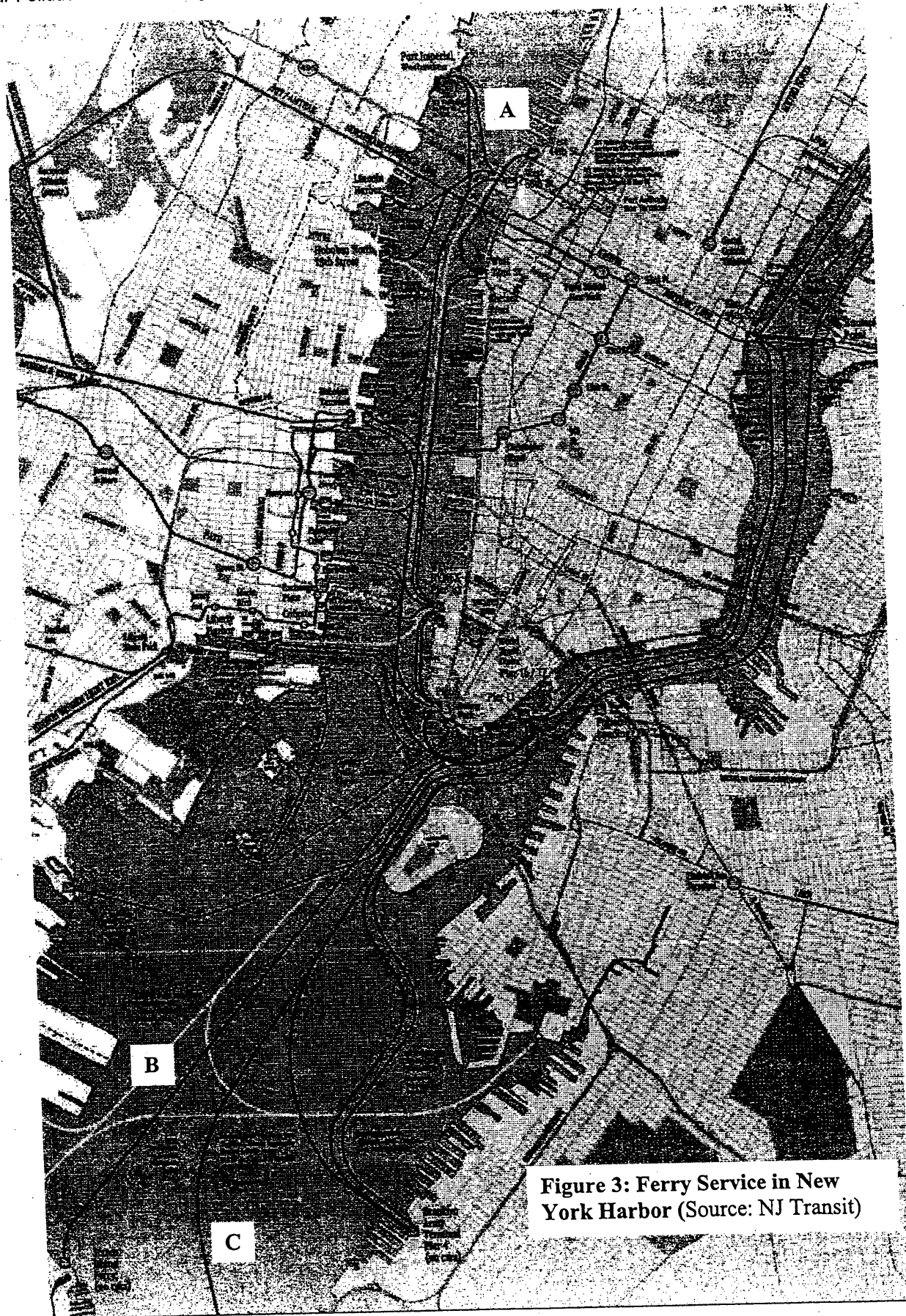


Figure 3: Ferry Service in New York Harbor (Source: NJ Transit)

## METHODS

“Activity-based” methods for estimating emissions from mobile sources are the most widely recommended approaches and are employed here [33]. Emissions of six compounds are reported: NO<sub>x</sub>, Volatile Organic Compounds (VOC), PM, carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and carbon dioxide (CO<sub>2</sub>). Only tailpipe emissions are reported since these are the relevant emissions for local regulators and because the key decisions concern the use of emission control devices, which change only tailpipe emissions. Emissions from ferries are compared to emissions from landside vehicles for a total of five travel and technology options for the year 2007:

- (1) Landside commuting assuming an average mix of modes (car, SUV, bus, rail etc.) and emission factors for 2007 (called “Land Average”);
- (2) Landside commuting in new personal vehicles (cars and SUVs) available in 2007, when new emission regulations will be in force (called “New Vehicles”);
- (3) Ferry commuting on vessels with the current engines (called “Current Ferry”);
- (4) Ferry commuting on vessels with engines that meet the 2007 federal standards (called “Tier 2 Ferry”);
- (5) Ferry commuting with vessels that have Tier 2 engines plus two emission control technologies that are already in commercial use in Europe, selective catalytic reduction and catalytic filters (called “SCR+CF Ferry”).

The year 2007 is selected based on the advice of air quality planners in the New York metropolitan area. Importantly, this year makes the full achievement of Tier 2 onroad emission standards, defining the landside emission profile that will exist for the majority of the lives of the passenger ferries being built today. “Landside” emissions are estimated for the two emission profiles based on route-specific, mode-split data and mode-specific emissions factors provided by the New York Metropolitan Transportation Council.

Three specific ferry runs shown in Figure 3 were evaluated: the 1 nautical mile (nm) trip from Weehawken to West 38<sup>th</sup> St (A, at the top of the figure), the 4 nm trip from Whitehall in Manhattan to St. George on Staten Island (B, near the bottom left of the figure) and the 18 nm high-speed trip from the Highlands in New Jersey to Pier 11 near Wall Street (C, near the bottom center of the figure). Ferry emission estimates are based on current ferry service (i.e. number, length, and speed profiles of existing commute trips).

### Landside Analysis

#### *Regional Transportation Context*

The New York-New Jersey area offers travelers one of the nation’s most well integrated multi-modal network of transportation options, notwithstanding the temporary service interruptions due to the September 11, 2001 attack on the World Trade Center. The landside routes chosen for this analysis represent alternatives to the waterside routes identified earlier: Weehawken to Pier 79, Atlantic Highlands to Pier 11 and the Staten Island Ferry to lower Manhattan. Reasonable assumptions for the three landside routes were developed from available documents and data, and are shown in Table 1.

As the Tri-State region continues its upward trend in population and job growth, expanding access to Manhattan and other water-accessible locations (including in New Jersey) will be needed. A number of constraints on landside travel expansion present potential problems,

including financial constraints for roadway improvements and transit options, various capacity constraints on river crossings and mode transfer points (e.g. New York-Penn Station), and so forth. These constraints place a great emphasis on the need to ensure ferry system expansion is possible while still meeting important social goals such as environmental protection.

*Landside alternatives to Manhattan-bound ferry transportation*

For this analysis, we compared per passenger ferry emissions (waterside commute) with per passenger emissions for an alternative landside commute route. To conduct the landside analysis, we identified a range of travel options available to landside commuters and acquired data that allowed us to characterize each landside route by vehicle-miles traveled (VMT), mode split (passenger vehicle, bus, and rail), road type, and passenger vehicle type (auto, small SUV, and large SUV). The three case studies selected for this analysis provide a range of travel options and associated traveler profiles, mode choice, trip length and road type. Data sources included:

- New Jersey Transportation Planning Authority 2002 Regional Transportation Plan
- 1997-1998 Regional Travel-Household Interview Survey (New Jersey Transportation Planning Authority, NJTPA, and New York Metropolitan Transportation Commission, NYMTC)
- Environmental Assessment Statement Negative Declaration and supporting documents for West Midtown Intermodal Ferry Terminal (Office of the Deputy Mayor for Economic Development and Finance, November 16, 2001)

Based on these sources and an assessment of likely variations from regional averages in view of case-specific factors, a set of assumptions necessary for the analysis was developed. In addition, regional agency staff at NJTPA and NYMTC made several prepublication data sources available for purposes of corroborating the assumptions made here. Table 2 summarizes the landside transportation assumptions that were used as inputs to the landside emissions analysis.

**Table 2: Landside Alternatives to Ferry Commutes**

Ferry Route	Landside Route	Distances	Mode Split*	Passenger Vehicle Type
Weehawken to Pier 79 (38 <sup>th</sup> St.)	I-495 (Lincoln Tunnel) from Weehawken to Route 9a in Manhattan	Land - 2 Mi. 2 mi. Interstate  Water - 1 Nm.	50% passenger vehicle (AVO 1.4) 40% bus transit 10% rail transit	60% automobile 30% small SUV (<6,000 lb) 10% large SUV (6-8,500 lb)
Highlands/Atlantic Highlands to Manhattan (Pier 11 and E. 34 <sup>th</sup> St.)	Garden State Parkway to I-95 to Holland Tunnel	Land - 38 Mi. 23 mi. Interstate 15 mi. Freeway  Water - 18 Nm	50% passenger vehicle (AVO 1.4) 45% bus transit 5% rail transit	60% automobile 30% small SUV (<6,000 lb) 10% large SUV (6-8,500 lb)
Staten Island	Staten Island I-278 Toll Booth to Lower Manhattan Bridge crossing	Land - 10 Miles 8 miles Interstate 2 miles Freeway  Water - 4 Nm	70% passenger vehicle (AVO 1.46) 30% bus transit 0% rail transit	60% automobile 30% small SUV (<6,000 lb) 10% large SUV (6-8,500 lb)

\*Assumes 40 passengers per transit bus (one heavy duty diesel vehicle trip); rail passengers result in no vehicle trips; AVO = Average Vehicle Occupancy; SUV = Sport Utility Vehicle. Note that ferry route lengths are approximately one-half the landside trip lengths. Mi. are statute miles, Nm. are nautical miles.

Regional planning documents indicate that transit trends before 9/11 show increases in both rail and bus ridership. Note that though the NJTPA 2002 Regional Transportation Plan (RTP) and the 1997-98 Regional Travel-Household Interview Survey predate disruption to PATH commuter rail, PATH is projected to be returned to service by December 2003, and so should be considered in the mix of available travel options.

#### *Emission Factors*

The final step in calculating landside emissions requires selecting and multiplying the vehicle type and vehicle miles traveled (VMT) categories by appropriate emission factors. A spreadsheet model was developed to best capture the comparative emissions profiles between waterside and landside travel options for the three cases analyzed. New York State Department of Environmental Conservation (NYSDEC), EPA MOBILE5b, and EPA MOBILE6 emission factors for New York County were selected for use in this application.

Emission factors for HC (summer run), CO (winter run) and NO<sub>x</sub> (summer run) were taken from MOBILE5b, currently in use in the region. PM10 (tailpipe emissions only), SO<sub>x</sub> and CO<sub>2</sub> factors derive from MOBILE6. Note that, although MOBILE6 is in the final adoption stages for use by EPA and the New York Metropolitan Transportation Council (NYMTC is the Metropolitan Planning Organization for the region that includes New York City), it was used because, unlike MOBILE5b, MOBILE6 produces emission factor outputs for tailpipe PM10, SO<sub>x</sub> and CO<sub>2</sub>. MOBILE6 produced 2007 fleet average outputs for SO<sub>x</sub> and CO<sub>2</sub> which were assumed to be equivalent for the "new 2007 vehicles only" analysis, because these factors are largely dependent on fuel consumption, which does not change significantly between the two models.

Both models provide factors in grams/mile of pollutants, differentiated by vehicle type (passenger car fleet, lighter and heavier duty sport utility vehicles (under and over 6,000 lbs. gross vehicle weight, respectively) and heavy duty diesel vehicles, which includes transit buses). Factors are further specified for road type. For this analysis, only Interstate (RT 07) and Freeway/Expressway (RT 08) were necessary.

Finally, emission factors are provided for morning (5 am to 9 am, morning peak), daytime (9 am to 3 pm), evening (3 pm to 6 pm, afternoon peak), and nighttime (6 pm to 5 am) periods, incorporating typical traffic conditions on each respective road type. This analysis uses an average of daytime, mid-day and evening periods, chosen to capture most accurately the profile of the travel population that could or would substitute ferries for their landside trips.

#### **Waterside Analysis**

For the waterside analysis, emissions are modeled using load duration curves constructed for the three vessels based on actual level of service data from published and private sources. Detailed route and vessel data are shown in Table 3. Note that occupancy rates are given as average values for all departures, they are not the occupancy rates experienced by commuters during rush hour. During peak commute periods, all mass transit (including ferries) tends to be most full in the commute direction and nearly empty in the reverse direction (for an average occupancy rate during these times of almost 50%). During non-peak travel periods (mid-day and evening) ferries are often nearly empty, resulting in low average occupancy rates. Ferry operators often find that passengers value the convenience of frequent departures and the ability to rely on service when it's convenient for them, not just during rush hour. Thus, to attract commuters they often must provide service during relatively slow periods, driving down average occupancy.

Emission factors for the engines were developed from testing and published performance data, and are shown in Table 4. Emission factors for NO<sub>x</sub> and HC, which are regulated as a total, are assumed to have the same ratio (98:2) that current diesel engines exhibit. The emission factors were applied to the load duration curves to determine overall emissions for each of the technology alternatives. Daily emissions were estimated for each pollutant in each vessel/route scenario and are shown in the Results section.

Table 3. Vessel and Route Characteristics

Highlands	Route Length (nm)	Average Speed (knots)	Passenger Capacity	Average Occupancy Rate	
	18	29	399	28%	
Vessel Name	Engine type		Engine size (kW)	Number	Total Power (kW)
Seastreak New York	Main: Cummins KTA50M2		1,454	4	5,816
	Aux: Cummins ONAN Admiral		95	2	190
Weehawken	Route Length (nm)	Average Speed (knots)	Passenger Capacity	Average Occupancy Rate	
	1	10	399	14%	
Vessel Name	Engine type		Engine size (kW)	Number	Total Power (kW)
Robert Fulton	Main: Caterpillar 3412		500	2	1000
	Aux: Detroit GM generator		35	2	70
Staten Island	Route Length (nm)	Average Speed (knots)	Passenger Capacity	Average Occupancy Rate	
	4	14	6,000	23%	
Vessel Name	Engine type		Engine size (kW)	Number	Total Power (kW)
"Kennedy" class	Main: EMD ME16G7B		2,865	2	5,730
	Aux: Caterpillar 3408C TA		399	2	798

Table 4. Emission Factors

Engine Type	Emission Factors (g/kWh)			Emission Factors (kg/tonne fuel)	
	NO <sub>x</sub> + HC*	PM	CO	SO <sub>x</sub>	CO <sub>2</sub>
Current	13	0.30	2.5	0.30	3,190
Tier 2	7.2	0.20	5.0	0.30	3,190
SCR+CF	1.4	0.021	0.094	0.30	3,190

\* NO<sub>x</sub> and HC emissions are assumed to have a ratio of 98:2 as in current engines.

Three values in Table 3 are key determinants of the results presented later: Average Speed, Passenger Capacity, and Occupancy Rate. Per-passenger emissions from ferries tend to rise when speed goes up, or when either of these other two key factors goes down. This will be discussed further in the Results section.

Load duration curves are constructed for each vessel-route pair to match reported speed and time characteristics. To do this, every route is divided into seven segments (maneuvering at

departure, precautionary speed, slow cruise speed, full cruise speed, then slow cruise speed, precautionary speed, and maneuvering at arrival). The speed for each route segment is then calculated using the ISO duty cycles (E3 or E5, see Table 5 below) or a user-defined duty cycle [34]. This approach is an advance over previous emission estimates and provides a more accurate understanding of ferry engine emissions [15].

**Table 5. ISO Standard Duty Cycles**

Type of Operation	Full Cruise	Slow Cruise	Precautionary	Maneuvering	Idle
<b>CYCLE E3</b>					
Speed (% of max)	100%	91%	80%	63%	Not applicable
Power (% of max)	100%	75%	50%	25%	Idle power (12%)
Weighting Factor	0.20	0.50	0.15	0.15	None
<b>CYCLE E5</b>					
Speed (% of max)	100%	91%	80%	63%	Not applicable
Power (% of max)	100%	75%	50%	25%	Idle power (12%)
Weighting Factor	0.08	0.13	0.17	0.32	0.30

In addition to main engine emissions, the auxiliary engines onboard vessels are accounted for here, apparently for the first time in this sort of analysis. Ferries typically carry two diesel generators for lighting, refrigeration, electronics, and other hotel loads, and usually operate one at any given time. For this analysis it is assumed that one auxiliary engine is operated at 75% load, based on discussions with ferry operators and on standard maritime procedures. Technically, the effort and cost to include emissions controls for auxiliary engines is non-trivial, because the exhaust from auxiliaries is typically separate from main engine exhaust. Previous studies have not mentioned whether auxiliary engines would be included in ferry emission mitigation. Here it is assumed they are.

The magnitude of auxiliary engine emissions depends on many factors, especially the characteristics of the route and main engines. For longer, faster routes and current (uncontrolled) main engines, emissions from the auxiliaries may be only a few percent of those from the main engines. However, the auxiliary engines on the Staten Island Ferry vessels may be more than a quarter of the emissions of the main engines. These percentages increase if only the main engines are controlled. If high-speed vessels have SCR and CF controls on their main engines and their auxiliaries have no controls, the auxiliaries may have emissions of up to 25% of the mains. For vessels like the Staten Island Ferry, uncontrolled auxiliary engine emissions may be as large as (or possibly greater than) emissions from highly controlled (SCR+CF) main engines.

### **The Reality of Latent Demand**

As indicated above, modern private ferry service in metropolitan New York has been implemented as a means of increasing transportation system capacity and spurring development while public ferries have long been considered an essential part of the existing transportation system. Thus, emissions from these vessels are simply part of or additions to the inventory of transportation-related emissions. The ferry industry and associated organizations sometimes claim (incorrectly) that ferry service "reduces" or "displaces" onroad travel. Besides ignoring the rationales given for reviving and expanding ferry service made by both public officials and private investors, these claims overlook empirical data on transportation system expansion in crowded urban areas, which show that providing more travel options results in more commuting,

not a re-arrangement of existing commute patterns [35-44]. Transportation professionals use the term 'latent demand' or 'induced demand' for this effect, which has been consistently observed in the real world. The similarity of this concept to traditional ideas of supply and demand leads some to call it 'demand elasticity'. Whatever the preferred label, reliable evidence puts the short-term (less than three years) effect at 10% to 50% and long-term effects at higher values (nearly 100%). That means that an increase of transportation system capacity leads almost immediately to an increase in travel of up to half that capacity and the congestion relief of only half of the added capacity. And over the long term, very little or no congestion relief occurs.

Nonetheless, it is useful to compare waterside and landside commute travel over substitute routes to give a sense of the relative air pollution impacts of each mode. In addition, as ferry travel continues to grow in metropolitan New York (and elsewhere), air quality planners will need to accurately model associated emissions to develop effective air quality management plans that will deliver clean air to the city's residents.

## RESULTS

Table 6 presents the results of the analysis, which are also shown in Figures 4 and 5. The table contains the emissions per person-trip and per person-mile for each of the three runs for the five travel and technology options (see page 8). The reductions required of emissions from existing ferries (both main and auxiliary engines) in order to reach parity with emissions from landside travel are shown. Finally, emission rates per person-mile are shown. The table gives absolute values while the figures show emissions normalized (i.e. the highest value is set equal to one and the others are scaled proportionally, preserving the relationship between them) to the existing ferries in order to allow all the pollutants to be compared.

Relative to their landside alternatives, emissions from the high-speed Highlands and short-distance Weehawken-W. 38<sup>th</sup> St. routes show a pattern similar to other such comparisons [15]. These ferry commutes with existing engines are much more polluting than substitute travel by auto, bus, and rail. The improved methodology shows that reduction in ferry emissions needed to achieve pollution similar to the average landside commute modes are greater than estimated earlier, from about 50% (for CO and SO<sub>x</sub>) to 98% or more (NO<sub>x</sub> and PM).

The Staten Island Ferry results are different. This very large, moderate-speed vessel has greater emissions than the average landside commute modes on a per passenger-trip basis for NO<sub>x</sub> and PM, but lower emissions for HC, CO, SO<sub>x</sub> and CO<sub>2</sub>. This is unlike other ferry-landside comparisons, and is largely due to the fact that although the Staten Island Ferry holds 15 times as many people as most contemporary passenger ferries, it does not have engines 15 times as large. It appears that large ferries may have less of a pollution problem as long as they are heavily used, as the Staten Island Ferry is. Nonetheless, focusing on the pollutants with the largest health consequences, NO<sub>x</sub> and PM, even the Staten Island Ferry requires emission reductions of 90% or more to achieve emissions similar to competing landside travel options. This figure applies to both main and auxiliary engines. If auxiliary engines are not controlled, it may not be possible to reduce emissions from the Staten Island Ferry to levels comparable to landside travel options.

These observations highlight the dilemma of modern ferry expansion nationwide, the service demands by passengers that are energizing the growth in the industry don't lend themselves to large, moderate-speed ferries or operational changes (i.e. fewer departures) that can limit emissions. The only way to make the modern expansion of passenger ferry service environmentally responsible is to use cleaner fuels and emission control technologies.



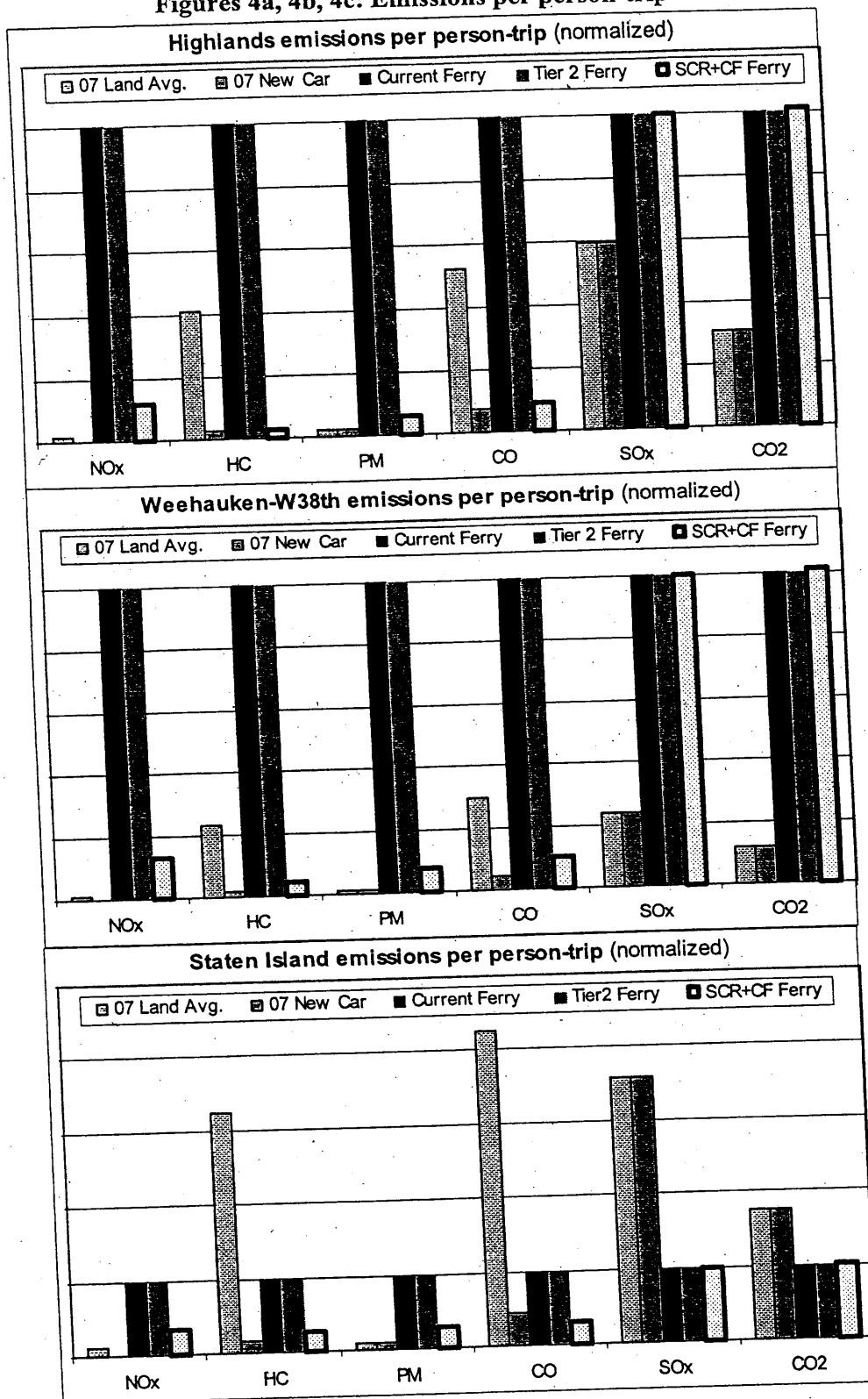
Table 6: Emissions

Highlands - Manhattan		NO <sub>x</sub>	HC	CO	CO <sub>2</sub>	SO <sub>x</sub>	PM <sub>10</sub>
07 Land Average	g/person-trip	13	7.6	0.42	90	0.12	6,600
07 New Vehicle	g/person-trip	0.43	0.5	0.42	13	0.12	6,600
Current Ferry	g/person-trip	900	19	21	170	0.20	22,000
Tier 2 Ferry	g/person-trip	490	11	14	340	0.20	22,000
SCR+CF Ferry	g/person-trip	110	0.5	1.3	15	0.20	22,000
Reduction for parity (ex/avg)		99%	59%	98%	48%	40%	69%
Reduction for parity (ex/new)		99%	97%	98%	92%	40%	69%
07 Land Average	g/person-mile	0.35	0.20	0.011	2.4	0.0032	180
07 New Vehicle	g/person-mile	0.011	0.014	0.011	0.3	0.0032	180
Current Ferry	g/person-mile	50	1.03	1.2	9.6	0.011	1,200
Tier 2 Ferry	g/person-mile	27	0.63	0.77	19	0.011	1,200
SCR+CF Ferry	g/person-mile	5.9	0.029	0.071	0.86	0.011	1,200
Weehawken - W. 38th St.		NO <sub>x</sub>	HC	CO	CO <sub>2</sub>	SO <sub>x</sub>	PM <sub>10</sub>
07 Land Average	g/person-trip	0.68	0.39	0.020	4.63	0.0063	340
07 New Vehicle	g/person-trip	0.023	0.027	0.020	0.69	0.006	340
Current Ferry	g/person-trip	80	1.7	1.9	15	0.026	2,800
Tier 2 Ferry	g/person-trip	45	1.0	1.3	30	0.026	2,800
SCR+CF Ferry	g/person-trip	10.5	0.068	0.14	1.6	0.026	2,800
Reduction for parity (ex/avg)		99%	77%	99%	70%	76%	88%
Reduction for parity (ex/new)		99%	98%	99%	96%	76%	88%
07 Land Average	g/person-mile	0.34	0.19	0.010	2.3	0.0032	170
07 New Vehicle	g/person-mile	0.011	0.014	0.010	0.3	0.0032	172
Current Ferry	g/person-mile	80	1.7	1.9	15.4	0.026	2,800
Tier 2 Ferry	g/person-mile	45	1.0	1.3	30	0.026	2,800
SCR+CF Ferry	g/person-mile	10.5	0.068	0.140	1.58	0.026	2,800
Staten Island		NO <sub>x</sub>	HC	CO	CO <sub>2</sub>	SO <sub>x</sub>	PM <sub>10</sub>
07 Land Average	g/person-trip	4.2	2.5	0.084	31	0.041	2,200
07 New Vehicle	g/person-trip	0.11	0.13	0.084	3.3	0.041	2,200
Existing Ferry	g/person-trip	38	0.78	0.87	7.2	0.0115	1,200
Tier 2 Ferry	g/person-trip	25	0.55	0.65	13	0.12	1,200
SCR+CF Ferry	g/person-trip	12	0.20	0.25	2.2	0.012	1,200
Reduction for parity (ex/avg)		89%	-220%	90%	-330%	-260%	-77%
Reduction for parity (ex/new)		99%	83%	90%	54%	-260%	-77%
07 Land Average	g/person-mile	0.42	0.25	0.0084	3.1	0.0041	220
07 New Vehicle	g/person-mile	0.011	0.013	0.0084	0.3	0.0041	220
Current Ferry	g/person-mile	9.4	0.20	0.22	1.8	0.0029	310
Tier 2 Ferry	g/person-mile	6.2	0.14	0.16	3.2	0.0029	310
SCR+CF Ferry	g/person-mile	3.1	0.051	0.062	0.55	0.0029	310

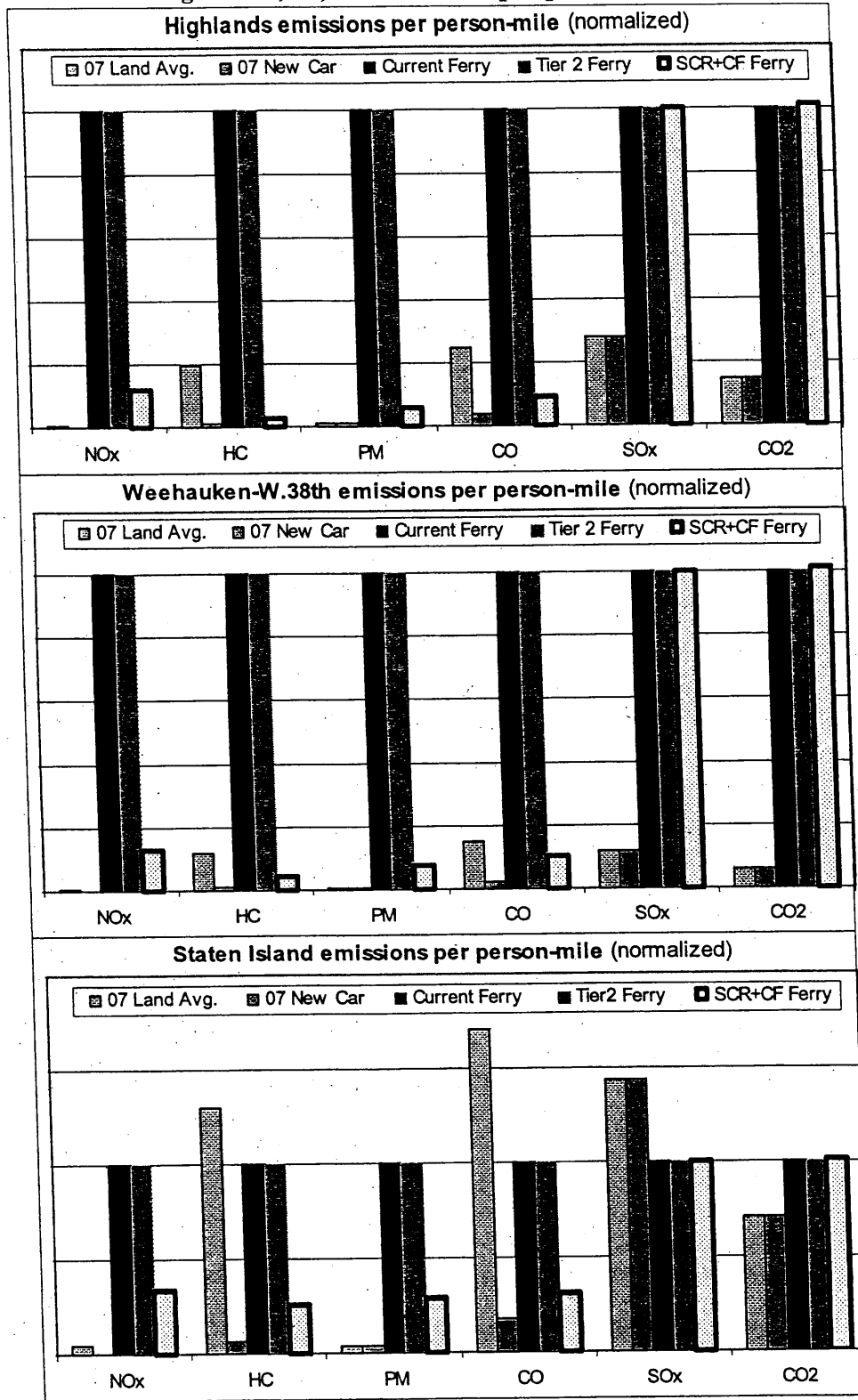
Notes: "Reductions for parity ex/avg" are the percentage reductions needed for existing vessels (both main and auxiliary engine emissions) to have emissions equivalent to those from 2007 average landside vehicles, while "ex/new" refers to emissions equivalent to those from new vehicles in 2007. Emissions of SO<sub>x</sub> and CO<sub>2</sub> are based on fuel content, marine engine efficiencies, and automobile fuel economy regulations.



Figures 4a, 4b, 4c: Emissions per person-trip



Figures 5a, 5b, 5c: Emissions per person-mile



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ROBERT SEWARD  
470 WEST 24TH STREET NEW YORK NY 10011  
SEWARD@TKK.ATT.NE.JP

DEPT OF CITY PLANNING  
RECEIVED  
2004 SEP 28 PM 1:23  
ENVIRONMENTAL REVIEW DIV.

September 27, 2004

City of New York Planning Commission  
22 Reade Street, 4E  
New York, New York 10007  
Attention: Robert Dobruskin, AICP

Subject: proposed Hudson Yards Rezoning and Development Program

Dear Mr. Dobruskin:

I am writing in opposition to the proposed Hudson Yards Plan, which was the subject of the public hearing on 23 September 2004. I was present and have attended other meetings on the matter.

While the idea of integrating this west side of Manhattan into the traffic pattern of Manhattan is commendable, the problem is a stadium (the mayor's ultimate goal) and the congestion it brings. The goal is not all that transparent—a stadium for professional sports and the Olympics.

As a public policy matter these things don't pay. This is a bait (transportation) and switch (stadium and Olympic) trick that cannot be justified on environmental, quality of living or financial terms.

Citizens in the area are organized in opposition.

After having lived through the mayor's party for the Republicans, I just don't want to have to go through that all over again on a regular basis. The result is disruptive and the benefits just don't accrue—no matter how many paid organized labor supporters shout and intimidate those opposed to the Hudson Yards Plan.

Cost weighed against benefits? The numbers don't add.

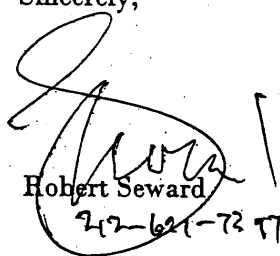
As for the proposed stadium, the quality of life in our adjacent neighborhoods will be severely impacted. Dumping 60,000 to 75,000 people every other weekend for a Jets game is

unimaginable. Has the planning department ever taken a look at the congestion on 10<sup>th</sup> Avenue as it is? The Lincoln Tunnel and adjacent traffic tie-ups, the noise, the glaring lights, the trash, the added security necessary for crowd control, impacts on parking—at a premium now, infrastructure requirements, the impact on neighborhood and community life—all of these do not favor this project. Social costs are great and social benefits are minimal. Manhattan is simply not the place for such an activity.

The Jets will have a tax break. And what about us New York tax payers. I am against subsidizing sports teams. The benefits are just not there for us New Yorkers. I imagine, as well, that my property values will decline.

I am not particularly a sports fan, but being a devotee of sports is beside the point. I do know economics and I understand about urban environments: Transportation is just a ruse to get a stadium that does not belong on the west side of Manhattan. No to the Hudson Yards Plan.

Sincerely,



Robert Seward  
212-621-7377

cc:

Thomas K. Duane, Senator

Richard Gottfried, Assemblyman

Christine Quinn, Councilwoman

September 23, 2004

Mr. Robert Dobruskin  
City of New York Planning Commission  
22 Reade Street, 4E  
New York, NY 10007

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2501 SEP 28 PM 1:23  
ENVIRONMENTAL REVIEW DIV.

Dear Mr. Dobruskin,

I am writing to you on behalf of more than 25,000 members of the New York Division of the Screen Actors Guild.

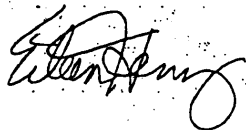
We support Community Board No. 4's argument that the NYC Department of City Planning/Hudson Yards Proposal lacks a concrete plan to create affordable housing in the rezoned area. Further, SAG supports their recommendation that no less than 30% of the housing units constructed in the rezoned area be permanently made affordable with 20% of that available to low income households (up to 80% of Area Median Income), 50% to moderate income households (up to 125% Area Median Income) and 30% to middle income households (up to 165% Area Median Income). There must be an emphasis on maintaining the economic diversity of the area and we call upon the City to modify existing affordable housing programs to create accessibility to a wide range of incomes.

SAG recognizes the critical need of our membership to have access to affordable housing. The Hudson Yards rezoning area is located in the heart of NYC's cultural and entertainment center. However, most of our members have been priced out of the neighborhood in which they work. For those in entertainment, who often work until 11pm in the theaters or start work at 5am for film and television shoots, close proximity to the worksite is a vital necessity.

Additionally, because of the episodic nature of work in entertainment, most performers have difficulty qualifying for traditional affordable housing programs. Programs like the 80/20's often disqualify performers because their income is rarely attached to single employers and they have difficulty documenting future income. The issue of qualification should also be taken into consideration if the City wishes to support the performers who help to sustain New York's entertainment industry.

SAG wishes to work closely with the City of New York Planning Commission to address the creation of permanently affordable housing for an economically diverse population as outlined in Community Board 4's proposal.

Sincerely,



Eileen Henry  
President, New York Division  
2<sup>nd</sup> National Vice-President

260

SCREEN ACTORS GUILD

360 MADISON AVENUE, 12th FLOOR, NEW YORK, NEW YORK 10017 ★ Tel. 212.944.1030 Fax 212.944.6774 ★ www.sag.org

Branch of Associated Actors and Artistes of America / AFL-CIO • Affiliate of International Federation of Actors



October 2, 2004  
Sheila Klee and Jerry Goodbody  
170 W. 74th St #214  
New York, NY 10023

2004-5 P. 10:25

Robert Dobruskin  
City of New York Planning Commission  
22 Reade Street, 4E  
New York, NY 10007

Dear Mr. Dobruskin,

As longtime residents of the west side of Manhattan, we are strongly opposed to the construction of the proposed stadium. It will bring yet more pollution and overcrowding to the area. We urge you to develop the area in an environmentally positive and sensitive way — without a stadium.

Respectfully,

Sheila Klee and

Jerry Goodbody



## THE SOCIETY FOR THE ARCHITECTURE OF THE CITY

### Comments on the No. 7 Subway Extension Hudson Yards Rezoning and Development Program DGEIS CEQR No. 03DCP031M

October 3, 2004

#### Comments on the evaluation of Historic Resources.

1. The DGEIS has identified many historic resources in certain categories, predominantly, early 20<sup>th</sup> century commercial and institutional buildings and industrial structures, and this is commendable.

However, from the correspondence in Appendix J, it appears that the consultants submitted a list of potentially eligible structures which did not include surviving examples of 19<sup>th</sup> century townhouses and enclaves of such buildings. The DGEIS seems to stress the prevalence of tenements without admitting to the existence of townhouses, thus skewing the perceived social and economic history of the area, which in fact included both building types. What was the rationale for not including distinct enclaves of 19<sup>th</sup> century townhouses that survive, as for instance, in the former Lamartine Place district (West 29<sup>th</sup> and 30<sup>th</sup> Streets between Eighth and Ninth Avenues around the former French Hospital, # 13 in the inventory)? These and other townhouses north of 34<sup>th</sup> Street—"old brownstones" (legendary in New York fiction, for instance, as home to Nero Wolfe)—are still there and are endangered. They should be examined as historic resources.

2. An area rich in historic resources which is part of the Fur District and contains admirable art deco office and loft buildings needs further consideration. It is located south of Madison Square Garden between Seventh and Eighth Avenues, and is described as Subdistrict E3 on "Proposed Subdistricts/Subareas, Figure 2-3" and as "E3" on page ES-11. It is included in the Special Hudson Yards District and is also slated for a significant up-zoning. A somewhat vague and general assertion (ES-31) that zoning incentives may not lead to extensive change—"it is unlikely that more than a few of the potential sites, if any, would be developed"—is untested in the EIS. The FAR of existing historic resources identified in area E3 should be calculated and contrasted to the FAR available with the new M1-6 zoning plus Special Hudson Yards District Improvement Bonus (DIB).

3. Similarly, in the portion of the Special Garment Center District between West 35<sup>th</sup> and 39<sup>th</sup> Streets which is to be rezoned C6-4M, the impact of the new zoning on the redevelopment potential of lots where historic resources are now located should be calculated. What is the existing built FAR as contrasted to the new potential?

45 CHRISTOPHER STREET APT. 2E, NEW YORK, N.Y. 10014 (212) 741-2628

Ronald Kopnicki, President • Matt McGhee, Treasurer • Christabel Gough, Secretary

The Society for the Architecture of the City, Inc. publishes the review, *Village Views*

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4. Sub-area E3, the above mentioned portion of the Special Garment Center District, and the APE around them, have been found to be extremely rich in historic resources. The negative impacts on historic resources could be significantly reduced if these areas were removed from a rezoning and development program that is already of an unusual magnitude. There should be a concrete appraisal of what would be lost if these relatively small areas were removed from the plan. Could the plan in fact go forward without them? Perhaps these historic resources do not have to be sacrificed.

5. There is an assumption (for instance, on page 9-63 in the discussion of St. Raphael's RC Church and Rectory) that historic religious properties are "anticipated to remain" despite an increase in available FAR for new development. What possible factual basis can there be for such an assumption at a time when so many historic churches are being closed for demolition and redevelopment? Has anyone noticed the St. Thomas the Apostle controversy as repeatedly reported in the *New York Times*, or the stated policy of consolidating parishes announced by the Diocese? Based on current performance, it is virtually certain that historic churches will be at the forefront of redevelopment with the new incentives, as a matter of policy. Statements that destruction of these historic religious properties is "not anticipated" should be substantiated with facts or else deleted and the unavoidable negative impacts listed.

LAW OFFICE OF

SLATER & BECKERMAN, LLP

61 BROADWAY, SUITE 1105, NEW YORK, NY 10006

TELEPHONE: (212) 391-8045  
FACSIMILE: (212) 391-8047

CAROLE S. SLATER  
STUART J. BECKERMAN

Delivery by hand

October 4, 2004

City Planning Commission  
22 Reade Street, 4E  
New York, NY 10007  
Attention: Robert Dobruskin, AICP

Re: ULURP Applications C040499 ZMM and N040500 ZRM  
CEQR No. 03DCP031M  
Premises: 568-570 and 574-580 Ninth Avenue, and 355 West 41<sup>st</sup> Street  
Tax Block 1032, Lots 4, 61, 63, 101, 103 and 162

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Dear Mr. Dobruskin:

This firm is counsel to the owner of the above-referenced premises (the "Premises"). This letter is submitted as written comments on the Draft General Environmental Impact Statement ("DGEIS") and in furtherance of our letter to you dated August 24, 2004. In that letter, we requested that the Department of City Planning, as the applicant for the above-referenced ULURP applications, revise the applications to exclude the Premises from properties subject to the proposed hazardous materials (E) designation.

The DGEIS proposes the mapping of an (E) designation on Development Site 35, which includes the Premises. The DGEIS indicates potential contamination arising from prior uses, including an electrical substation, a dry cleaning establishment and a trucking terminal.

**We oppose the hazardous materials (E) designation on the ground that there are no unused development rights on the Premises and the proposed rezoning will not create new development rights for the Premises. Accordingly, the Premises do not meet the criteria of either a Projected Development Site or a Potential Development Site, as defined by the DGEIS. Furthermore, the City has presented no evidence for singling out the Premises as a separate development site for the purpose of mapping a hazardous materials (E) designation.**

In determining which sites covered by the proposed ULURP actions would be mapped with hazardous materials (E) designations, the DGEIS identified specific sites that are most likely to be developed over time -- Projected Development Sites and Potential Development Sites, based on a set of criteria:

“The criteria for identifying specific development sites include the size of the site, its current utilization and land use, and the opportunity for assemblages and transfer of development rights from adjacent properties.”

DGEIS, page 3-10.

**The Premises are part of Projected Development Site 35, which should be removed from the list of Projected Development Sites because it no longer satisfies most of the criteria for a Projected Development Site as set forth in the DGEIS, page 2-19.** The former parking lot on Tax Lot 58 has been excavated and is being developed utilizing the air rights from Tax Lots 4, 54, 57, 58, 61, 63, 101, 103 and 162. As a consequence of the zoning lot merger, the remaining lots on Projected Development Site 35 -- Tax Lots 1, 5, 7 and 64 -- are split into three non-contiguous parcels, further supporting the removal of Projected Development Site 35 from the list of such sites.

Since the Premises contain no unused development rights and the proposed ULURP actions generate no additional development rights for the Premises, the Premises should not be re-classified as a Potential Development Site.

The City has presented no evidence for singling out the Premises as a separate development site for the purpose of mapping a hazardous materials (E) designation. The DGEIS analyzed the Premises as part of Projected Development Site 35, not as a separate development site.

In conclusion, no hazardous materials (E) designation should be mapped over the Premises. The Premises do not meet the criteria for either a Projected Development Site or a Potential Development Site. Nor has the City presented any evidence for mapping an (E) designation on the Premises independently of the remainder of Projected Development Site 35.

Your favorable consideration of this letter is greatly appreciated.

Very truly yours,

  
Stuart Beckerman

cc: Emil F. Dul, MTA  
Martin Sanders  
James Merani, DCP

# THOM CLAY

DEPT OF CITY PLANNING  
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2004 OCT -1 PM 1:22  
ENVIRONMENTAL REVIEW DIV.

September 29, 2004

City of New York  
City Planning Commission  
22 Reade Street, 4E  
New York, NY 10007  
ATTN: Robert Dobruskin, AICP

## **RE: DGEIS for the #7 Subway / Hudson Yards Rezoning**

Dear Mr. Dobruskin,

I attended the Public Hearing held by the City Planning Commission on September 23, 2004 and would like the following written comments to be included in the next version of the Impact Study.

I have lived on 36<sup>th</sup> Street between 9<sup>th</sup> and 10<sup>th</sup> Avenues for over five years now. I have witnessed this evolving neighborhood grow from a place to be avoided to a wonderful area that represents all that is great about New York. Great ethnic restaurants operate side by side family owned shops. Everything a person needs can be found within a few blocks. Having received my Master's Degree from Columbia University and been following this issue closely, I feel I can speak as an informed citizen who does not want to see my neighborhood destroyed and my neighbors displaced. I support reasonable growth and development but cannot support the efforts to change zoning that would permit the construction of the proposed Jets Stadium. The DGEIS calls for allowing higher density in this neighborhood than is practical.

A stadium on the proposed site would greatly impact the quality of life for me and the other residents of the Westside. The side streets are narrow and trucks and vans are constantly double and triple parked. I am certain that businesses could not afford to be closed each time an event is held at the stadium so this would continue. At most times during the day, the avenues running north and south are choked with traffic attempting to get into or out of one of the tunnels. Rush hour lasts from approximately 10AM to 8PM each weekday. There is entirely too much congestion in the area now that with the addition of 100,000 people attempting to reach the proposed stadium, the world's largest gridlock would be created. Even with public transportation near the site, my neighborhood cannot handle the volume of people attempting to reach a stadium on the proposed site.

410 WEST 36<sup>TH</sup> STREET #5FW ♦ NEW YORK, NY 10018  
TEL - 212-290-9069 ♦ FAX - 212-290-2017

I urge you to re-consider sweeping changes in zoning that allow for high density projects and the wasting of the MTA Rail Yards. My neighbors and I envision the transformation of the Hudson Yards in to the next Battery Park City, not a desolate Yankee Stadium. I think given a choice people would rather live near Lincoln Center over living next to Yankee Stadium. There are hundreds of elderly people and Hispanic immigrants in my neighborhood who I feel have no idea that such a massive project could end up in their backyard so I also must speak out on their behalf.

At the hearing, numerous business people, including Christyne Nicholas of NYC and Company argued in favor of all points of the draft. They had their own business interests in mind and no regard for the current business (such as Fed Ex) nor the residents of the neighborhood. All of this leads me to believe that those people, including Ms. Nicholas, do not live anywhere in or near Hells Kitchen. I wonder how they would feel if massive zoning changes were planned for their backyard.

Please revise the Draft to include the removed text regarding density in the area. As it has for four hundred years, New York will grow and its neighborhood will evolve organically. That's what makes New York different than planned communities like Scottsdale, Arizona. We need careful development guided by community support and input. People must be considered before profits.

Thank you for your consideration.

Sincerely,



Thom Clay

A concerned HK resident

220 West 24<sup>th</sup> Street, #3-B  
New York, NY 10011-1732

October 4, 2004

Mr. Emil F. Dul, P.E.  
Metropolitan Transportation Authority –  
New York City Transit  
2 Broadway, 2<sup>nd</sup> Floor  
New York, NY 10004 and

Mr. Robert Dobruskin, AICP  
City of New York City Planning Commission  
22 Read Street, #4-E  
New York, NY 10007

Gentlemen:

My name is Toni Adler. I have been a New Yorker for 35 years and a Chelsea resident in the same apartment for 28 years. I love this city and I love my neighborhood.

I've spoken at a couple of public forums against the proposed West Side stadium. I'm not anti-Jets or anti-sports – far from it. But I am anti-lies, greed and stupidity. My main focus in those forums had been the bottom line, i.e. money. But today, I'd like to come at this issue from another perspective.

Several weeks ago, on August 30<sup>th</sup>, there was a little-noticed event called the Ring of Hope. Sponsored by Riverside Church and joined in by many other churches, synagogues and mosques, we attempted to encircle Manhattan to pray for moral leadership, peace and all those good things. We'll be doing it again soon.

The attached card is about that effort. On one side is the purpose of the Ring of Hope; on the reverse is the Prophetic Justice Principles. I'd like to read the first one:

“Seek the common good. Does the policy represent the common good of society rather than the interest of an elite few?”

Well, a stadium does not represent the common good. So I decided to argue against the stadium on moral grounds. Allow me to read just a few more lead lines from the Principles:

“Be truthful in facts and motives.”

“Promote unity and inclusion.”

“Care for the poor.”

“Protect the vulnerable.”



Mr. Emil F. Dul and  
Mr. Robert Dobruskin  
October 4, 2004  
Page #2

The last Principle is "Provide moral leadership."

I understand that the city plans to invoke Eminent Domain in order to raze buildings that are in the way of the stadium. I didn't have time to research the doctrine of Eminent Domain thoroughly so I just looked it up in my old Webster's: a right of a government to take private property for public use by virtue of the superior dominion of the sovereign power over all lands within its jurisdiction.

I know a couple who has operated the Octagon nightclub on West 33<sup>rd</sup> Street for 17 years. They rent the space. Under the city's plan, the building would be sold right out from under them. The landlord would be compensated but the owners of the Octagon would have to kiss goodbye to 17 years of their lives. The Sunday Times of September 19<sup>th</sup> (Metro Section) recounts similar tales.

I seriously doubt that this is what the founding fathers had in mind when setting forth the doctrine of Eminent Domain. Putting people out of their homes and businesses does not pass the smell test.

It is my opinion that the stance of the pro-stadium folks is morally indefensible.

Sincerely,



Toni Adler

Enclosure

cc: Governor George Pataki  
Senate Majority Leader Joseph Bruno  
Assembly Speaker Sheldon Silver  
State Senator Thomas K. Duane  
Assembly Member Richard Gottfried

STEPHEN J. CASSIDY  
President ENG. 236  
JAMES SLEVIN  
Vice President LAD. 7  
JOSEPH MICCIO  
Recording Secretary ENG. 295  
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Treasurer ENG. 45  
PHILIP McARDLE  
Health & Safety Officer  
Sergeant-At-Arms Haz Mat 1

# Uniformed Firefighters Association



OF GREATER NEW YORK  
Local 94 I.A.F.F. AFL-CIO  
204 EAST 23rd STREET, NEW YORK, N.Y. 10010  
(212) 683-4832

JOHN KELLY  
Brooklyn Trustee  
Chairman of the Board ENG. 201  
STEPHEN HUMENESKY  
Queens Trustee ENG. 301  
RUDY SANFILIPPO  
Manhattan Trustee ENG. 76  
DONALD RWLAND  
Staten Island Trustee ENG. 157  
EDWARD BROWN  
Bronx Trustee LAD. 48  
LESTER LAYNE  
Fire Marshal Representative

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October 4, 2004

BY HAND

New York City Planning Commission  
22 Reade Street, Room 4E  
New York, New York 10007

Attention: Robert Dobruskin

Re: Draft Generic Environmental Impact Statement  
No. 7 Subway Extension, Hudson Yards Rezoning and Development Program  
CEQR No. 03DCP031M

Dear Members of the Commission:

This letter constitutes the comments of Uniformed Firefighters Association on the above-referenced draft generic environmental impact statement.

When the Jets play a game at the proposed West Side stadium, there will be serious traffic congestion in a large area both before and after the game. This traffic could pose a serious threat to the ability of New York City firefighters to respond in a timely manner to fires and medical emergencies. As a result, this will have a detrimental impact on public safety. I am writing to ask that the environmental impact statement for the stadium take a hard look at how traffic will affect the delivery of emergency services and the safety of New Yorkers.

Thank you for taking these comments into consideration.

Sincerely,

STEPHEN J. CASSIDY  
President

September 23, 2004

Metropolitan Transportation Authority – New York City Transit  
2 Broadway, 2<sup>nd</sup> Floor  
New York, NY 10004  
Attn: Emil F. Dul, P.E.

City of New York City Planning Commission  
22 Reade Street, 4E  
New York, NY 10007  
Attn: Robert Dobruskin, AICP

DEPT OF CITY PLANNING  
RECEIVED  
2004 SEP 28 PM 1:23  
ENVIRONMENTAL REVIEW DIV.

Re: Comments on the *Draft Generic Environmental Impact Statement* in connection with the Hearing held on September 23, 2004

Members of the MTA and Planning Commission:

I have lived in the Clinton District of Manhattan since 1973. It is my neighborhood and my home.

Measured development that includes affordable housing, small businesses, expansion of the Javits Center, and reasonably sized new structures in keeping with the recreational character of Hudson River Park is fine.

THE PLANNED JETS STADIUM DOES NOT FIT INTO THIS KIND OF DEVELOPMENT.

I have two major concerns regarding the impact of the proposed stadium on my neighborhood.

1. A football stadium on the West Side of Manhattan will draw an enormous number of cars from the suburbs and outer boroughs, which will require a huge commitment of space devoted to parking facilities.

Once these parking facilities are constructed, they will be used 24 hours a day, 7 days a week. Our neighborhood will cease being a neighborhood. It will become the prime parking location in Manhattan. The avenues and streets on the West Side are already overcrowded. The resulting air quality is extremely unhealthy, especially when traffic to and from the Lincoln Tunnel crawls along or comes to a standstill. The parking facilities required by the proposed stadium will make this situation unbearable, not just on game days, but every day of the year. The Planning Commission should be thinking of ways to keep cars out of Manhattan, not lure them in.

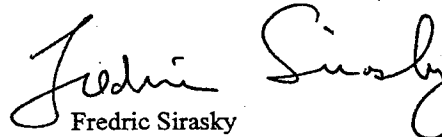
2. A football stadium will be a magnet for helicopters.

Residents of the West Side who live near Times Square and the Lincoln Tunnel are already constantly besieged by hovering and circling helicopters. This is not an insignificant matter. Unless you have lived in a neighborhood whose skies are inundated by these incredibly noisy machines, you cannot imagine the uncivilizing influence the constant "pop-pop-pop" sound has on the quality of life. A hovering helicopter can be several blocks away from a residence and still wake one out of a sound sleep. Residents of the East Side near the UN fought for years to eliminate this menace. We on the West Side are just beginning the battle to clear the air of noise. A West Side stadium will only make our cause more difficult.

Finally, I am a union member (AEA). I support jobs for union construction workers. But the same number of jobs could be generated by support for the measured development I mentioned above. Construction does not always have to be for glamour projects like a stadium which profit only a few and which drain tax monies from the housing and infrastructure that really need it.

Thank you for this hearing, and for your public service.

Respectfully submitted,

  
Fredric Sirasky



MANHATTAN COMMUNITY BOARD No. 4

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WALTER MANKOFF  
Chair

ANTHONY M. BORELLI  
District Manager

October 4, 2004

Emil F. Dul, P.E.  
Metropolitan Transportation Authority  
New York City Transit  
2 Broadway, 2<sup>nd</sup> floor  
New York, NY 10004

Robert Dobruskin, AICP  
City of New York City Planning Commission  
22 Reade Street, 4-E  
New York, NY 10007

**Re: Response the No. 7 Subway Extension – Hudson Yards Rezoning and Development Program Draft Generic Environmental Impact Statement.**

Dear Messrs. Dul and Dobruskin:

The following resolution was approved by the Executive Committee of Manhattan Community Board No. 4 on September 27, 2004 and is subject to ratification by the full board at its meeting on October 6, 2004:

**Whereas**, the Metropolitan Transportation Authority and the City of New York City Planning Commission have prepared and released for public comment a Draft Generic Environmental Impact Statement (DGEIS) for the No. 7 Subway Extension and the Hudson Yards Rezoning and Development Program (the Proposed Action); and

**Whereas**, the DGEIS purports to analyze the potential effects of the Proposed Action on land use, neighborhood character, open space, traffic, air quality, noise, shadows, historic and archaeological resources and other areas of socioeconomic and environmental concern; and

**Whereas**, the Board supports residential and commercial development in Hell’s Kitchen that balances the needs of the neighborhood, the city and the region, and agrees that parts of the neighborhood now zoned for low-density industrial use should be rezoned to allow for contextual expansion of residential and commercial uses in Hell’s Kitchen; and

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**Whereas**, in its letter to the City Planning Commission dated August 23, 2004 the Board has provided its detailed comments concerning certain of the land use applications that have been filed to implement a portion of the Proposed Action; and

**Whereas**, the implementation of the Proposed Action will profoundly affect Hell's Kitchen and surrounding areas and adequate steps must be taken to properly assess and mitigate the anticipated impacts of the Proposed Action on this community; now, therefore be it

**Resolved**, that Manhattan Community Board No. 4 hereby submits the following comments and recommendations on the DGEIS.

## **ORGANIZATION OF THIS DOCUMENT**

Manhattan Community Board No. 4's comments and recommendations on specific topics covered by the DGEIS are provided on a chapter-by-chapter basis. These comments are found after the Board's general concerns and its recommendations for expanded and/or additional analyses of areas not adequately covered by the DGEIS. Some topics covered in the DGEIS are not addressed in this document. Lack of comment on such topics should not be interpreted as an acceptance of findings; rather it should be understood that omissions are likely due to time constraints and a lack of resources needed to fully examine the complex issues presented in the 7-volume study comprising 6,000 pages of technical information.

## **GENERAL COMMENTS**

### **Timetable for No. 7 Line Extension**

Many, if not all, of the chapters of the DGEIS depend, in their analysis, on the assumption that the extension of the No. 7 subway line will be completed by 2010. Given the history of subway expansion projects in New York City, we question the likelihood of this accomplishment. The final EIS (FEIS) should analyze the effects on parking, traffic, transit, air quality, natural resources, construction impacts, infrastructure and hazardous materials if the No. 7 subway line is not operating by 2010. Similarly, the DGEIS assumes prompt completion of Second Avenue Subway and must take into account the inevitable delays associated with this project.

### **Existing Population**

The population numbers used in each chapter and even within each chapter seem to vary wildly throughout the DGEIS. Exactly what number has been used as the base population in each chapter of the DGEIS? Have the residents who have moved into the five new residential towers between 2000 and 2004 been included in all of these calculations?

Using readily available Dept. of Finance data on the number of residential units in each building in the primary study area, and multiplying that number by the average household size for the census tract the units are in, we arrive at a population of 21,331. The DGEIS often uses data from the 2000 Census which places the population of the primary study area at 11,565. Why

does the DGEIS use this number instead of more accurate data from the City's Dept. of Finance? How would the analysis in each chapter change if the larger population figure were used?

### **Misidentification of Properties**

Several properties (Block 734, Lot 13; Block 733, Lots 44 - 46) that have been notified that they will receive E designations due to hazardous materials onsite are long-occupied residential buildings that the DGEIS misidentifies as parking lots and garages. The DGEIS lists these as potential development sites. Elsewhere, Block 675 is described as being occupied by low buildings. In fact, more than half of this block is occupied by a large at-grade private bus parking facility that will be displaced by the Proposed Action. If these errors are widespread, and the false assumptions are used in other calculations, much of the analysis in the DGEIS may be flawed. For example, if this data was used to determine the amount of sewage flow or stormwater runoff currently generated by the area, or the amount of current demand for drinking water, or the likely pace of development, all of those numbers will have to be recalculated.

### **New Jersey Commuters**

The DGEIS predicts that the Proposed Action will generate 127,000 new jobs in the Hudson Yards area. Even with out Hudson Yards, the Port Authority of New York and New Jersey (PANYNJ) and New Jersey Transit (NJT) expect significant increases in future demand by commuters from west of the Hudson for bus and train service into Manhattan. To address existing capacity problems at Penn Station and to meet projected demand, Access to the Region's Core (ARC), a project of NJT and PANYNJ, proposes an additional cross Hudson River tunnel. However, the DGEIS predicts that NJT trains will accommodate only 1,477 new riders in 2025, and NY Waterway ferries from Jersey will serve only 1,256 new riders. There is no discussion of NJT buses. These numbers seem extremely unrealistic. How many people are expected to commute to the area from New Jersey, and how are they likely to get there? Does the DGEIS rely on an underlying assumption about where all commuters to the area will be living? What is it? How was it derived?

## **AREAS NOT ADEQUATELY STUDIED**

### **Mobile Source Pollution**

The DGEIS contains only a Tier 1 analysis for most sites, but relies on a yet-to-be-performed Tier 2 analysis for its conclusion that mobile source emissions will not harm public health or violate air quality standards. The Tier 1 analyses result in the exact opposite conclusion. We cannot evaluate the applicant's claim without the Tier 2 analysis data.

The DGEIS contains absolutely no discussion whatsoever of the contribution of ferries to air pollution. The Proposed Action will significantly increase the number of ferry trips on weekdays and even more so to special events. In fact, the air quality analysis relies on the assumption that 8,000 people will take the ferry to a football game. How will increased ferry services affect air pollution levels?

The DGEIS contains no discussion of NJT buses. But, the PANYNJ is currently studying ways to increase the flow of buses through the Lincoln Tunnel to address existing demand by workers commuting to Manhattan by bus. Surely some of the 127,000 new workers who will commute to the Hudson Yards area each day will come from New Jersey by bus. Surely enough of them will come by bus that NJT will have to expand service. How will these additional buses affect air pollution levels? Will these buses be retrofitted to the same standards as MTA buses?

### **Hazardous Materials**

Phase II Environmental Site Assessments and other appropriate site investigations for hazardous materials will be reported in the FEIS. We are therefore unable to comment on the contamination and its management at these sites.

### **Public Health**

The chapter on Public Health does not address the risks caused by emissions of toxic contaminants from industrial sources. The chapter on Air Quality notes that several Potential Development Sites south of Penn Station are so close to polluting industrial sites that they will have to have inoperable windows and no outside air intakes because the air is unsafe to breathe. Nonetheless, the effects of the air on people outside are not considered, and this issue is completely omitted from the discussion of public health. We understand that much of this area has now been removed from the Proposed Action. How does this removal affect air quality and public health, if at all?

### **Noise and Vibration**

For the purposes of determining noise impacts, the DGEIS assumes that traffic will be moving at posted speeds, despite findings to the contrary in other chapters. Even under this assumption, the DGEIS finds that noise will be so terrible that every residential and community facility in the Project Area would require mitigation. The FEIS will contain further study of potential noise impacts to determine the precise extent of the impacts and the level of sound attenuation required. When will these studies be completed so that the noise impacts may be properly assessed?

The DGEIS only considers noise impacts and mitigation techniques for indoor noise. Noise exposure guidelines are likely to be exceeded at many areas, including the new parks that are part of the Proposed Action, but the DEIS does not assess the noise levels at outdoor locations. Will the FEIS assess noise levels at outdoor locations?


The DGEIS only considers the effects of the No. 7 subway extension on vibration conditions in the Study Area. Will the FEIS assess the effects of vehicular traffic growth, as the current traffic levels are already responsible for vibration levels exceeding FTA Vibration Impact Criteria at several sites in the area?

### **Pedestrian Congestion**

The DGEIS does not appear to consider the effect of tailgating on the sidewalks, crosswalks, corners and other public areas around the stadium despite Mayor Bloomberg's recent comments,

delivered at a Jets game, that "You can have tailgating in New York." Instead, the DGEIS relies on the assumption that Jets fans will come and go via subway, and does not consider what will happen if any of them choose to tailgate for hours at a time. Where will stadium-goers gather before entering the facility? How will the City address tailgating? How the City will accommodate large crowds attracted by stadium events? What will this mean for others trying to traverse the area, for example anyone trying to use the new open spaces that are part of the Proposed Action?

### **Ferry Service**




The DGEIS is completely silent about how ferry service will accommodate the 8,000 Jets fans expected to take ferries from New Jersey to games. Presently, at peak of service, NY Waterway can handle barely half of this capacity. Despite this discrepancy, the Administration regularly cites ferry service to publicly explain why stadium-goers will not drive to the stadium or tailgate in Manhattan. An adequate FEIS requires an actual analysis of whether ferries and existing ferry terminals on both sides of the Hudson can accommodate all these people. Will the FEIS contain this analysis?

The promotional materials that the applicant distributes regarding the stadium frequently show a new ferry terminal that will be built to serve the stadium. This terminal is not discussed in the DGEIS, so it is unclear whether it is required to accommodate the demand generated by the stadium. We note that such a terminal would most likely require a permit from the Army Corps of Engineers and preparation of a Federal Environmental Impact Statement and possibly the reopening of the EIS prepared for the Hudson River Park.

## **CHAPTER 2 – DESCRIPTION OF THE PROPOSED ACTION**

### **Rezoning - Subdistrict A, Large Scale Plan (p. 2-5)**



The DGEIS describes the proposed rezoning of the eastern half of the Caemmerer Yard, but it fails to mention that the act of decking over the yard is also part of the Proposed Action. How will the decking be accomplished? Will the relocated Quill Bus Depot sit underneath the deck or above it? What uses will be located below the decking? What will be the environmental impacts of the decking? Was any of this studied?

### **Convention Center Expansion (pp. 2-32, 2-33 - 2-34)**

The DGEIS mentions that the block bounded by Eleventh Avenue, Twelfth Avenue, 33<sup>rd</sup> Street and 34<sup>th</sup> Street would be used for truck marshalling, LIRR train storage, and "other transportation functions." What functions are those? Are their environmental affects studied anywhere in the DGEIS?

### **Multi-Use Facility (pp. 2-42 - 2-44)**

The description of the stadium omits any mention of what the Jets call, in their promotional materials, the "Hudson Terrace." This is the open space that extends over Route 9A to the west of the stadium, and connects to the Hudson River Park. The attached depiction of the proposed



Jets stadium obtained from the Jets' Web site on September 30, 2004, is notable for the inclusion of the Hudson Terrace (aka "promenade over 12<sup>th</sup> Avenue"). This is a depiction of the normal stadium, not the stadium in its Olympic configuration.

The stadium that the Jets and the City are proposing clearly includes a "terrace" or "promenade", so this feature must be studied as part of the Proposed Action, not as a rejected alternative. The Open Space and Air Quality analyses are clearly defective without discussion of this element. Will the FEIS assess the impacts of "Hudson Terrace" on open space and air quality? Will the FEIS discuss any regulatory approvals that the Hudson Terrace would require?

Similarly, City and Jets promotional materials have often included depictions of a new pier immediately to the west of the stadium. The appendices linked to the chapter on Transit state that 8,000 people are expected to arrive at the stadium via ferry, but there is no discussion of whether they would arrive at the existing ferry terminal or at this proposed new pier. If this new pier is part of the stadium or the Proposed Action, then it must be studied in the EIS. The EIS must address the effect that this pier would have on aquatic life in the Hudson, and must detail the regulatory permits and processes that the pier would require. Will the FEIS cover this new pier?

The stadium description and environmental analysis also omits more than passing reference to a cogeneration facility that will be integrated into the building. In recent conversations with City Planning, we have been told that this facility will indeed be part of the stadium. Therefore, it must be studied as part of the Proposed Action.

#### **PANYNJ Bus Garage (pp.0 2-45 - 2-46)**

The DGEIS assumes that the PANYNJ is going to build a new bus garage on Projected Development Site 21 by 2025 (it's unclear what is assumed to be the actual date of completion). This assumption is unrealistic and should not be included in the Reasonable Worst Case Scenarios. The relocation is not part of the Port Authority's Capital Plan and there is no reason to believe that this project is actually moving forward. What impacts will the Proposed Action have on the area if the new bus garage is not constructed by 2025 or at all?

#### **Construction Schedule (pp. 2-47 - 2-48)**

The DGEIS assumes that construction of the subway running tunnels would begin during the first half of 2005, that construction of the Terminal Station would begin in April 2006, and that the No. 7 Extension would begin service in 2010. This is unrealistic. The traffic, transit, parking, hazardous materials, pedestrian, air quality, and construction analyses must be entirely redone for 2010, using a more realistic timetable for the construction and operation of the No. 7 subway line. As an example, we suggest the applicant consider the history of the Second Avenue Subway, as well as the delays and cost overruns related to the construction of the MTA headquarters at 2 Broadway. Although we admire the applicant's optimism, this timetable is entirely fantastic and cannot serve as the basis for a serious environmental assessment. What impacts will the Proposed Action have on the area if the No. 7 extension is not completed on schedule?

Why is the deck over the eastern portion of the Caemmerer Yard omitted from the discussion of the construction schedule? When do you expect its completion?

## CHAPTER 5 – SOCIOECONOMIC CONDITIONS

### General Concerns

The DGEIS works on the premise that the community is steadily gentrifying and that the proposed action will have little or no effect because it will only continue that trend. First, the history of the community is as a low, moderate and middle income community. The higher income households are more recent residents. Clearly, the Proposed Action would accelerate gentrification significantly and on a much grander scale that would significantly affect the character of our mixed-income community. Significantly, the people most likely to be displaced are lower income households and would constitute a significant loss to the area's mix of households. A mixed-income model that includes housing that is affordable to low, moderate and middle-income households is necessary for the future vitality and health of Hell's Kitchen. The Proposed Action may not be the originator of the trend, but it must be recognized that the Proposed Action will cause an acceleration of the trend. What impacts will a 30% affordable housing model, as proposed by CB4 in its August 23, 2004 submission to the City Planning Commission regarding the Hudson Yards land use applications, have on the area?

The DGEIS does not sufficiently lay out a plan to assist businesses that are directly and indirectly displaced by the Proposed Action. Commercial displacement caused by rising rents, by condemnation or by pressures resulting from incompatibility with new uses will occur as a result of the Proposed Action. Many of these businesses cannot be relocated elsewhere on the West Side because zoning is too restrictive or because there is too little space available in nearby areas where they are allowed by zoning. Will the FEIS cover the full extent of commercial displacement and a plan to address relocation assistance?

### Study Area (Figure 5-1)

The Study Area for Chapter 5 only extends as far north as 50<sup>th</sup> Street, which is an arbitrary boundary in the middle of the Special Clinton District. We believe the Proposed Action is likely to affect neighborhood character throughout the Special Clinton District. The study area must be expanded so that it reaches the northern boundary of Community District No. 4.

### Methodology (pp. 5-11, 5-107 - 5-108)

In estimating the effects of the proposed stadium on development in the surrounding neighborhood, and on the larger economy, the DGEIS referred only to a study prepared by Ernst & Young on behalf of the New York Jets. We question the use of only this study, given the large number of studies of other similar facilities that have reached very different conclusions about the economic effects of stadiums, even those also used as convention centers. Will the FEIS consider studies performed by independent economists in their assessment of the economic and development impacts of the proposed stadium?

In particular we question whether stadiums encourage or discourage development in the surrounding area and whether or not a stadium would attract the type of high-end development called for by the City's plan on development sites across the street from the stadium site and throughout the project area. We also ask for detailed information about the kind of jobs likely to be created by the stadium, in terms of wages, benefits, hours, and seasonality, as compared to existing jobs likely to be displaced by the proposed action.

**Existing Conditions: Population** (pp. 5-18 - 5-22)

The DGEIS states that the "primary study area has a population base of 11,565 residents" but then recognizes that residential development completed since 2000 probably houses an additional 3,579 residents. The FEIS analysis therefore requires, at the least, that 15,144 be used as the population base number throughout analyses. Furthermore, we believe based on our own analysis that even this number severely undercounts the actual population, which we believe is 21,331. How would use of Department of Finance Real Property Assessment Data, rather than Census data, affect the analysis?

**Residential Displacement: Assessment of Indirect Displacement** (pp. 5-28 - 5-30, 5-33)

The DGEIS assumes that all residential buildings constructed prior to 1974 with six or more units are subject to rent stabilization and that tenants of those buildings are not vulnerable to indirect displacement. The DGEIS also takes account of Mitchell-Lama buildings and those that have entered rent stabilization through tax abatement and exemption programs. The DGEIS does not take note of vacancy decontrol, luxury decontrol, the expiration of limitations imposed via tax abatement and exemption programs, and the ability to opt out of Mitchell-Lama, Section 8, and other housing programs. According to a June, 2003 study prepared by the Rent Guidelines Board (RGB), 105,421 units lost rent regulation between 1994 and 2002. Given the massive hemorrhaging of apartments from rent regulation, it is unrealistic to assume that all of the rent regulated units in the Hell's Kitchen area will remain regulated for the next 20 years. It is also unlikely that all pre-1974 apartment buildings are still in rent regulation. Will a more realistic analysis of indirect displacement, with these factors taken into account, be included in the FEIS?

The DGEIS assumes that rent regulated tenants are safe from displacement. This rosy prediction ignores the reality that landlords in gentrifying areas, motivated by the promise of massive rent hikes, often harass their tenants into leaving. The RGB study notes the Manhattan-centric phenomenon of High Rent/Vacancy Decontrol, wherein a landlord will significantly improve an apartment after a tenant has moved out, in order to raise the rent above \$2,000 and thereby deregulate the apartment. Though the departure of the tenant may be innocent, often it is a result of either active harassment or deliberate disinvestment on the part of the landlord. Will this sad but undeniably real consequence of gentrification be considered in the FEIS?

It must also be recognized that even law-abiding landlords may, under certain circumstances, demolish rent-regulated buildings and replace them with new construction. Will the FEIS analysis take this practice into account?

The study fails to mention that many currently rent-regulated tenants in lower-priced neighborhoods pay less than the on-book value of the apartment. As these neighborhoods

gentrify, landlords will likely stop providing these discounts to tenants, some of whom will be displaced as a result. Will the FEIS take this phenomenon into account?

The study must consider the loss of affordable housing units to luxury and vacancy decontrol, to the extent that loss is accelerated by the Proposed Action, to be a form of indirect displacement. Will the FEIS consider luxury and vacancy decontrol as a result of the Proposed Action by taken into account?

Will the FEIS identify mitigations for all of the above? Will the FEIS include statutory protections against building demolition and tenant harassment? Will the FEIS reflect a real commitment by the City to construct affordable housing as proposed in CB4's August 23, 2004 submission regarding the Hudson Yards land use applications?

**Direct Business and Institutional Displacement** (pp. 5-4, 5-16, 5-42 - 5-52, 5-64 - 5-65)

The DGEIS states at first that the businesses likely to be directly displaced by the Proposed Action do not "define neighborhood character," but then goes on to admit that these 225 businesses "are characteristic of the larger neighborhood," but argues this is unimportant because the intent of the action "is to transform the existing community." We note that the loss of hundreds of businesses and thousands of jobs will substantially change the character of our neighborhood, and demand that this transformation be taken seriously. We consider the loss of these businesses to be a significant adverse impact, and believe these businesses do define the character of the neighborhood.

It has recently been reported that a contractor has been hired to provide relocation assistance to businesses and residents that will be directly displaced by the Proposed Action. What form will that assistance take?

The suggestion that displaced industrial firms could relocate elsewhere in Clinton/Hell's Kitchen, or even on the West Side, is unrealistic. This overlooks the fact that only 15 blocks of Clinton remain zoned for manufacturing use outside of the Clinton Urban Renewal Area and pressure for conversion to commercial zoning is intense. Will the FEIS must reflect this situation?

**Adverse Effects on Specific Industries** (pp. 5-4 - 5-5; 5-17 - 5-18; 5-74 - 5-95)

According to the DGEIS, the proposed action will result in loss of jobs in the Garment Industry and in displacement of businesses that support the Theater Industry. We are concerned that the loss of these important blue-collar jobs threatens the socio-economic diversity of our community. We request a more thorough examination of the jobs likely to be lost and the characteristics of those job-holders, including their average salaries, their places of residence, and their ethnicity.

The DEI S notes that the Proposed Action will result in additional traffic and parking demand in areas adjacent to the Theater District, but concludes without further study that this will not have a significant adverse impact on the theater industry. A more detailed analysis of the effects of project-related traffic congestion and parking demand on the theater industry, both under normal

conditions and at periods of peak demand, is necessary for proper evaluation of the Proposed Action. Will such an analysis be included in the FEIS?

#### **Indirect Business and Institutional Displacement, Primary Study Area (p. 5-67)**

We disagree with the DGEIS conclusion that the 17,000 jobs that stand to be lost in our neighborhood are insignificant. The replacement of thousands of manufacturing, transportation and communications jobs with office jobs would result in a serious and significant change to neighborhood character. There are significant differences between the blue collar workers who will be displaced and the white collar workers who will be brought in. We expect the new mix of employees to be less diverse than the present mix. We expect more workers to commute from outside our community. This significant impact cannot be dismissed by saying that some manufacturing jobs would be lost anyway, because the loss will be much more severe in the future with the Proposed Action. Will the FEIS compare the average wages, ethnicity, and place of residence of the existing and expected workers?

#### **Indirect Business and Institutional Displacement, Secondary Study Area (pp. 5-67, 5-73)**

The DGEIS notes that the No. 7 extension will make the project area more accessible, thereby contributing to an increase in rents. The study does not mention that the increased accessibility will also make the area more crowded. Will the FEIS consider changes in community character due to the influx of large crowds into our neighborhood?

The DGEIS predicts that the construction of new office and retail space in the Hudson Yards area will “reduce the upward pressure of rents” in the secondary study area. This statement is conclusive and unsupported by any evidence. The New York City experience suggests the exact opposite - as neighborhoods become more desirable and rents go up, upward pressure on rents is also felt in neighboring areas. We are therefore concerned that the project will cause significant indirect business displacement in the secondary study area.

#### **Projected Socioeconomic Benefits of the Proposed Action, Introduction (5-95)**

The DGEIS states that the goal of the project is to accommodate residential and commercial development. We note that the commercial white collar jobs that will be attracted by this kind of development differ significantly from those presently available in our community, and could well undermine our racial and economic diversity. Will the FEIS assess the impact of thousands of new white collar jobs in the project area on neighborhood character?

## **CHAPTER 6 – COMMUNITY FACILITIES AND SERVICES**

### **General Concerns**

Throughout this chapter there is discussion of need for community facilities. Will the FEIS discuss where such facilities will be sited or how they will be paid for?

### **Outpatient and Emergency Health Care Facilities (pp. 6-2 6-23)**

The DGEIS considers the additional need for emergency and outpatient health care and determines that no new health care facilities will be needed to serve the new residents or workers of the Hudson Yards area. However, the study does not include a detailed analysis of the available capacity at existing facilities. To properly evaluate the impacts of the Proposed Action, more information about the capacity of the emergency and primary care facilities closest to the neighborhood, and the effect the additional population will have on those facilities is needed. Will the FEIS take these concerns into account?

### **Fire Protection and Emergency Services (pp. 6-4 - 6-6)**

The DGEIS states that the Proposed Action will require the construction of a new firehouse. Given the City's projected budget deficits in coming years and the recent closing of several firehouses due to economic constraints, how likely is it that the City will be able to afford construction of a new firehouse in the area? Where is the firehouse likely to be located? Have any sites been considered? What would be the cost of constructing and operating a new firehouse? What is the projected date for a new firehouse to come online? What will be the average emergency response time in the area if a new firehouse is not completed by 2010 or by 2025?

The DGEIS says that Emergency Medical Service (EMS) is included in the Fire Department analysis, but beyond that statement there is no discussion of EMS services. All discussion is limited to the provision of fire protection services and the need for a new firehouse. We would like more information about the affect of the Proposed Action on non-fire emergency response. Will there be an increase in emergency response time? Will a new emergency battalion or station be required? The DGEIS also specifically excludes any discussion of private emergency medical response units. Do any of these units currently serve the area? Will the Proposed Action likely lead to an increase in the use of private units in the area? What are the projected capital and expense costs of providing additional non-fire emergency services in the area?

Discussion of fire and non-fire emergency response must reflect the increase in population in the area, and the predicted traffic conditions during the reasonable worst case scenarios. What will emergency response times be like during regular rush hour traffic? What will they be like during a special event?

### **Public Schools (General) (pp. 6-2, 6-6 - 6-16)**

The DGEIS predicts that 1,680 new public school students will be introduced into the project area because of the Proposed Action, including 1,097 elementary school students. The study considers the need for new public schools generated by these students, but does not examine the need for new after-school programs. More information is needed about the demand for after-school programs generated by the increase in school-age population, about the predicted capital and expense needs of these programs, and about plans to fund these programs. Will the FEIS provide this information?

**Elementary and Intermediate Schools** (pp. 6-6 - 6-16; 6-27; Appendix S-1)

The DGEIS predicts severe overcrowding of area's public elementary and intermediate schools and district-wide overcrowding of intermediate schools as a result of the Proposed Action. It predicts that this will require a change in the school District boundaries and/or construction of a new school, construction of additional capacity at existing schools, or leasing of additional school space. We note that this need for more school capacity comes at a time when more than 50% of the City's public school students attend overcrowded schools. According to the Dept. of Education's 5 Year Capital Plan, the City is already planning to spend billions of dollars to increase school capacity and repair and upgrade existing schools. However, the Independent Budget Office has expressed concern that the funding for this already ambitious plan is in question, depending on how the State allocates money to the City in response to the Campaign for Fiscal Equity lawsuit.

Given the existing uncertainty about the Dept. of Education's capital plan, we question whether new capacity in the Project Area will be provided quickly enough to meet the projected demand. More information is needed on which mitigation option is most likely to be chosen, where physical capacity can be added to the system, which sites are under consideration, and how much mitigation measures will cost. Will the FEIS provide this information? How school construction projects will be prioritized if funding is not sufficient for all of them?

Despite the uncertainty expressed in Chapter 6, the DGEIS predicts in Appendix S-1 that a new 56,800 square foot elementary school, accommodating 500 children and 60 staff members, will be built as a result of the Proposed Action. Is this indeed the plan? Why is this not discussed further in Chapter 6? Was a location for the school assumed for purposes of the traffic analysis? If so, where?

**Day Care Centers (Publicly Funded)** (pp. 6-23 - 6-28)

The DGEIS notes that the Proposed Action will increase the demand for publicly funded daycare within the Project Area to nearly double the number of available slots. As mitigation, it suggests increasing the number of publicly funded day care vouchers, building a new day care facility, or adding capacity to existing facilities. Will the FEIS provide more information about the projected cost of these mitigation options, and the potential location of additional capacity?

We also note that the DGEIS is largely dismissive of the need for the mitigation, suggesting that parents will bring their children to facilities outside of the project area, near their workplaces. This argument seems strange given the thousands of new jobs inside the project area that the Proposed Action is meant to create. What proportion of the low- and middle-income families expected to live in the project area are expected to work outside the area? The DGEIS also assumes that that additional slots in home-based daycare will exist to meet the additional demand. How will these slots be created and at what cost? What is the expected cost of training new providers? Is there a significant difference in level of care provided at facility-based versus home-based day care?

### **Police Protection** (pp. 6-2 - 6-4)

The DGEIS states that the new worker, residential and visitor populations, as well as the No. 7 extension, would lead to increased demand for police protection services. However, it gives no figures at all on the expected need. The DGEIS instead states that the NYPD only “adjusts its allocation of personnel as the need arises.” The fact that the NYPD does not plan its staffing levels in advance does not excuse City Planning and the MTA from considering the effect of the new development on police services. Will these considerations be covered in the FEIS?

In this time of heightened terror alerts, the proposed siting of a 75,000 person sports venue, a major expansion of the convention center, a convention center hotel, a new subway station, and multiple new skyscrapers (some likely to be landmark buildings given the proposed FAR) requires a **much** fuller discussion of policing needs. Aside from terrorism concerns, surely some estimate can be made of the day-to-day policing needs of a much-changed neighborhood, home to tens of thousands of new residents and workers. Finally, we note that the pedestrian, auto, and transit rider congestion predicted in Chapters 19 and 20 will surely give rise to the need for more officers to direct traffic and enforce regulations. Will the FEIS estimate the extent of these needs?

## **CHAPTER 7 – OPEN SPACE AND RECREATIONAL FACILITIES**

### **General Concerns**

The DGEIS concludes that there will be no significant adverse impacts on open space and recreational facilities because the ratio of open space to population will improve. This may be true, but only because the area already suffers from an extreme open space deficit. The Proposed Action will not provide enough open space to meet the needs of the thousands of new residents and workers that it will bring to the area, and it should be judged by its failure to meet the City’s open space goals. - *Sander?*

The DGEIS assumes that all the parks proposed will be constructed and constructed well. However, financing for the parks depends upon the willingness of developers to pay for height and bulk bonuses. We are concerned that the predicted development will not materialize, and that the proposed open space network will suffer as a result. Will the FEIS consider the effect on open space ratios if development occurs, but not at the maximum level?

The DGEIS does not address the cost of maintaining and operating the additional open spaces and recreational facilities. Will the FEIS estimate of the annual cost of maintenance, operation, and programming of the new spaces? How will annual expenses be funded?

### **Adequacy of Open Space** (p. 7-16)

The DGEIS notes that “several private recreational facilities... would augment the amount of active and passive open space available to residents and non-residents.” We agree with the decision not to include these spaces in the open space ratios, as they are in fact barely accessible to the population. The “34<sup>th</sup> Street Community Garden” is actually worked only by a single



resident and has little to no access for residents. The “plaza at 345-347 West 48<sup>th</sup> Street” is a sterile courtyard with planters but no benches. The “private gated playground at 349 West 50<sup>th</sup> Street” serves only the children who live in the building.

#### **Study Area Open Spaces, 2010 (pp. 7-21 - 7-22)**

We are concerned that the full-block open space between 33<sup>rd</sup> and 34<sup>th</sup> Streets and Eleventh and Twelfth Avenues would act primarily as a holding area for visitors to stadium events, and would be desolate at other times. Without seeing the design for this space, we are not able to determine whether it will attract residents or be as empty as the existing Javits plaza. We wonder whether any design can accommodate both large crowds coming and going from a special event and regular neighborhood use. If any, what design plans for this space will the FEIS study?

We are also concerned that the “green space” on convention center roof will not be attractive to neighborhood residents as it is above grade and likely to be in an area that is underused and, frankly, scary, when a special event is not being held. Again, without more information about the design, we are hamstrung in our ability to analyze the effect of this proposed space. If any, what design plans for this space will the FEIS study?

The FEIS should study the effects of wind sheer and shadows on the new open spaces. We are concerned that shadows and high winds may discourage any use at all of these spaces, as was the case at the World Trade Center. Will the FEIS cover these concerns?

#### **Study Area Open Spaces, 2025 (p. 7-29, Figures 7-3 and 7-4)**

The open space provided by the proposed Mid-Block Boulevard will contribute little to the passive or active recreational enjoyment of residents and visitors. If it is no more than a planted median akin to the Park Avenue Malls, it will hardly be recreational space. Even if it is more like Sara D. Roosevelt Park, it will be narrower than that park and will be shaded by surrounding very tall buildings. Without yet having a plan for this space, Figures 7-3 and 7-4 offer an unrealistic picture of the width, sunshine, and likely amenities to be available in this space. Figure 7-3 does not even show the automotive use of the boulevard. Will the FEIS provide more information about the width of the boulevard and how space will be allocated for streets, sidewalks, and open space? Will the FEIS provide more information about pedestrian access to the open space portion and whether any pedestrian barriers are planned?

## **CHAPTER 8 - SHADOWS**

### **General Comments**

The analysis shows that the full-block open space between 33<sup>rd</sup> and 34<sup>th</sup> Streets and Eleventh and Twelfth Avenues, as well as the open space on the convention center roof will be in shadow all day during much of the year. This further undermines the attractiveness of these open spaces.

**Potentially Affected Open Spaces (Table 8-1)**

The list of open space resources likely to be affected by shadows created by the Proposed Action omits the outdoor plaza in the Eastern Rail Yard Subarea and the proposed Mid-Block Boulevard. The Shadow Analysis figures clearly show that these areas will be affected by new shadows. Will the FEIS include shadow analysis for both of these resources?

- No, no EIS  
doesn't analyze  
project - n =  
project impact

**CHAPTER 9 – ARCHITECTURAL HISTORIC RESOURCES**

**General Comments**

Our recommendations concerning preservation of certain of architectural historic resources is set forth in detail below and in our letter dated August 23, 2004 to the City Planning Commission. We have not here included the attachments that were part of that letter, but they are hereby incorporated by reference.

good a complete

The DGEIS includes a thorough and careful analysis of the area's architectural historic resources. The information in the DGEIS highlights the extent to which the physical fabric of the Clinton/Hell's Kitchen and Chelsea community represents a unique opportunity to preserve elements of the neighborhood's immigrant history. This history is embodied in the rich mixture of buildings that have served immigrants as places to live, work and worship in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The lack of major development on some of the blocks has frozen in time significant examples of tenements (pre- and post-Civil War), immigrant churches, garment and printing trade architecture, and other examples of early 20<sup>th</sup> century commerce and industry.

Future development offers an opportunity for major improvement and restoration of these structures, the context of which will be improved by new construction to come. The area has a unique juxtaposition of buildings that retains their historic integrity while being adjacent to development sites. Preservation of such historic buildings while adjacent parking lots or garages are developed will enable balanced development to proceed. Development rights from landmarks and historic areas will easily transfer to new development sites, thereby allowing the preservation of neighborhood fabric and architectural integrity.

We therefore urge consideration of the landmark designation of the following list of architectural resources (each item is followed by the DGEIS ID number). The list is preliminary, and further study will be required by the Landmarks Commission before landmarking can be recommended.

*Hell's Kitchen Tenements*

- 523-539 Ninth Avenue – State/National Register (S/NR)-eligible; (DGEIS ID No.: 65)
- 500-506 West 42<sup>nd</sup> Street<sup>1</sup> – NY City Landmark (NYCL)-eligible and S/NR-eligible (72)

Tenements are not usually landmarked. However, the historical nature of tenements in Hell's Kitchen makes them a vital architectural connection to the past. As noted in the DGEIS, the

<sup>1</sup> Development rights for this building already have been transferred.

tenements listed below represent an important architectural connection to the history of immigrants in Hell's Kitchen. They also represent two ends of the spectrum of tenement history: one representing pre-old law tenements, and other of the first examples of the model tenement movement. 523-539 Ninth Avenue represent a rare, fully extant row of pre-old law tenements dating from 1885. 500-502 and 506 West 42<sup>nd</sup> Street are examples of the architect, Ernest Flagg's model tenement housing. A high society architect, best known for the Corcoran Gallery in Washington, D.C. and the Singer Building on lower Broadway in New York City, Ernest Flagg designed a group of eleven model fireproof tenements with courtyards providing adequate light and air. These are the last four surviving buildings of the eleven building complex.

### *Hell's Kitchen Immigrant Churches*

- Holy Cross Roman Catholic Church, Rectory and School, 329-333 West 42<sup>nd</sup> Street, 330 West 43<sup>rd</sup> Street<sup>2</sup> – NYCL-eligible and S/NR-eligible; (9)
- St. Raphael Roman Catholic Church and Rectory, 502-504 West 41<sup>st</sup> Street – NYCL-eligible and S/NR-eligible; (82)<sup>3</sup>
- Glad Tidings Tabernacle, 325-39 West 33<sup>rd</sup> Street – NYCL-eligible and S/NR-eligible; (86)

These churches represent the main focal points of the immigrant community and have retained their role as centers of community life well into the 1970's and the present. Glad Tidings was built in the mid-19<sup>th</sup> century and is a last remnant of that era of brownstones giving way to tenements. The Holy Cross complex served Irish immigrants and includes the church, a school and a rectory. Holy Cross Church is the oldest building on 42<sup>nd</sup> Street from river to river. St. Raphael Church served a thriving Italian immigrant area that diminished following the demolition of hundreds of tenements to make way for the construction of the Lincoln Tunnel. The architecture of the church is significant, as contains many Gothic elements including rose windows within arches and a gabled façade.

### *10<sup>th</sup> Avenue Industrial Row*

- Hill Building, 469-475 Tenth Avenue – S/NR-eligible; (56)<sup>4</sup>
- 500 West 37<sup>th</sup> Street – S/NR-eligible; (93)
- Former Pinehill Crystal Spring Water Company, 500-504 West 36<sup>th</sup> St. – S/NR-eligible; (94)

These building along Tenth Avenue between 36<sup>th</sup> and 37<sup>th</sup> Street represent the architectural character of a commercial and industrial past that thrived on Tenth Avenue during the late 19<sup>th</sup> and early 20<sup>th</sup> century. It is significant that this grouping of three industrial buildings has remained intact. They are survivors of area demolition for the Lincoln Tunnel and the West Side improvement. The Hill is a predecessor to the McGraw Hill Building at 42<sup>nd</sup> Street. Within the context of the Pinehill and 500 West 37<sup>th</sup> Street it is more than fortunate that all three remain and are available for adaptive reuse and transfer of development rights. Their retention would not

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<sup>2</sup> Parts of the development rights for this building already have been transferred.

<sup>3</sup> Adjacent development site, ability to transfer development rights.

<sup>4</sup> Adjacent development site, ability to transfer development rights.

compromise the proposed rezoning and would complement a successful commercial or residential future for the area.

#### *Christ Church Memorial Row*

- Former Barbour Dormitory, 330 West 36<sup>th</sup> Street – S/NR-eligible; (75)
- 346 West 36<sup>th</sup> Street – S/NR-eligible; (76)
- Christ Church Memorial, 334-344 West 36<sup>th</sup> Street – S/NR-eligible; (NA)

Designed as a memorial to the Reverend Doctor Maltbie D. Babcock, pastor of Brick Presbyterian Church on 5<sup>th</sup> Avenue and 37<sup>th</sup> Street, Christ Church Memorial and the two adjacent properties located on 36<sup>th</sup> Street form a link to the immigrant community once predominant in Hell's Kitchen. The dirt on the façade hides the beauty of the Tudor style church. Along with the dormitory, which once served as settlement house, the rectory and the tenement building, form a remarkably intact example of immigrant religious and working class life. Among high-rise garment center loft buildings, the extant low-rise grouping represents the historic layering of the area.

#### *Garment Center Buildings*

- 300 West 38<sup>th</sup> Street – NYCL-eligible; (11)
- The Harding Building, 440-448 Ninth Avenue – S/NR-eligible; (37)<sup>5</sup>

These two highly significant garment center buildings to the west of Eighth Avenue were built in the early 20<sup>th</sup> Century. The unique setbacks of the Harding Building are a result of the 1916 zoning resolution. Located at the corner of Ninth Avenue, the building provides a rare view of the terra cotta ornamented setbacks from both the side street and the avenue. The building also exceeds existing zoning limitations. 300 West 38<sup>th</sup> Street is a unique 3-story gem and a rare example in the city of art nouveau architecture.

#### *Printing Industry Buildings*<sup>6</sup>

- 344-348 West 38<sup>th</sup> Street – S/NR-eligible; (61)
- Underhill Building, 438-448 West 37<sup>th</sup> Street – S/NR-eligible; (62)
- 424 West 33rd Street – S/NR-eligible; (63)
- 406-426 West 31<sup>st</sup> Street – S/NR-eligible; (64)

These four buildings are prime examples of printing industry buildings typology. Each has façades that rise straight from the street without setbacks – a design that reflects the printing industry's need for wide floor plates. The buildings are characterized by a base, a shaft and upper floors are ornamented with extensive terra cotta intended to lighten the appearance of the sheer facades. At the top of each are shallow cornices. Three are clad in yellow brick. 344-48 West 38<sup>th</sup> Street and the Underhill building have been converted to residential condo ownership. 406-26 West 31<sup>st</sup> Street is undergoing conversion to an FIT dorm. 424 West 33<sup>rd</sup> Street serves as an office building. All of these buildings are overbuilt as per existing and proposed zoning.

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<sup>5</sup> Current bulk exceeds current and proposed zoning..

<sup>6</sup> All buildings are adjacent development sites, and have ability to transfer development rights.

*State Bank and Trust Company*

- State Bank and Trust Company, 681-685 Eighth Avenue<sup>7</sup> – NYCL-eligible; (15)

The bank is a three-story building with art-deco elements. It is currently used as a theater. Adjacent to Eighth Avenue development sites, it represents another opportunity in which preservation and development can be reconciled with the transfer of development rights to an adjacent site to the north.

*Carnegie Library, Former 40<sup>th</sup> Street Branch*

- Former NYC Public Library, 457 W. 40<sup>th</sup> Street – NYCL-eligible; S/NR-eligible; (87)<sup>8</sup>

One of the original Carnegie libraries, the former NYPL 40<sup>th</sup> Street Branch, this is the only branch that is not still used as a library. It was closed after Lincoln Tunnel demolition reduced the local population. The building is an important architectural and historic resource that should be preserved. It is recommended that it be returned in the future for use as a library.

*Early 20<sup>th</sup> Century Corridor of Commerce and Industry Historic District:  
34<sup>th</sup> Street from 8<sup>th</sup> Avenue to 10<sup>th</sup> Avenue*

- Master Printer's Building, 406-416 Tenth Avenue – NYCL-eligible; (57)<sup>9</sup>
- William F. Sloan Memorial YMCA, 360 West 34<sup>th</sup> Street – NYCL-eligible; (79)<sup>24</sup>
- Webster Apartments, 419 West 34<sup>th</sup> Street – S/NR-eligible; (80)<sup>10</sup>
- West Side Jewish Center, 347 West 34<sup>th</sup> Street – S/NR-eligible; (84)<sup>25</sup>
- St. Michael's Roman Catholic Church Complex, 414-424 W. 34<sup>th</sup> St. – NYCL-eligible; (85)<sup>25</sup>
- Former Manhattan Opera House (interior and exterior), 311 West 34<sup>th</sup> Street – NYCL-eligible; (88)<sup>25</sup>
- New Yorker Hotel, 481-497 Eighth Avenue – NYCL-eligible; (108)<sup>24</sup>
- Former J.C. Penney Building, 330 West 34<sup>th</sup> Street – S/NR-eligible; (110)<sup>24</sup>

This corridor along 34<sup>th</sup> Street represents commerce and industry in the early part of the 20<sup>th</sup> century. In the 1920's, the construction of many of these buildings dramatically transformed the area's low-rise character into a formidable center of commerce and industry. The collection of its significant structures merits consideration for designation as an historic district.

Each significant building within this corridor represents an aspect of the commercial, residential, and religious aspects of life for working class residents of the 1920's. The 43-story Art Deco tower of the New Yorker Hotel stands sentinel as a point of entry into the area. Built during the Great Depression as one of two main hotels serving the demolished Penn Station, the massive

<sup>7</sup> Adjacent development site, ability to transfer development rights.

<sup>8</sup> Adjacent development site, ability to transfer development rights.

<sup>9</sup> Current bulk exceeds current and proposed zoning.

<sup>10</sup> Adjacent development site, ability to transfer development rights.

building has 8 levels of basements and now has been returned to hotel use. In 1901, Oscar Hammerstein constructed The Manhattan Opera House, to compete with Metropolitan Opera. The New York Freemasons later altered the building for their use in 1923. The West Side Jewish Center, built by Congregation Beth Israel, served immigrants working in the Garment Center. In 1925, the J.C. Penney Company built a Renaissance palazzo at 330 West 34<sup>th</sup> Street to house its department store and company operations. Adjacent to the Penny's palazzo is the Memorial Sloan YMCA, another building built in 1929-30 during the Great Depression to serve a central housing facility for men in the Armed Services passing throughout the City, it originally housed 1600 rooms.

Crossing Ninth Avenue, the centerpiece of West 34<sup>th</sup> Street is St. Michael's Church. In 1906, the Pennsylvania Railroad, as part of the construction of Pennsylvania Station, demolished the original on West 32<sup>nd</sup> Street. As a condition of the sale of the original church, the railroad built a new church complex to serve as a religious center for the core immigrant community at the turn of the century. The new St. Michael's complex was built in a unique mixture of Gothic and Romanesque; it includes a rectory, a school, and a convent extending to the 33<sup>rd</sup> Street side of the block. Across the street, The Webster Apartments building was built as a gift from Charles B. Webster, a former senior partner of R.H. Macy & Company, as an apartment hotel for working women. Webster Apartments continues to serve as a residence for "working women with modest salaries" in accordance with the fund set by Webster. Dominating the Tenth Avenue end of 34<sup>th</sup> Street, the Master Printers Building is a monument to the printing industry on the West Side. At the time of its construction in 1927, the Master Printers Building was the tallest concrete structure ever built and was the largest printing building in the world.

The buildings within the district connect with the pre- and post-war mid-rise apartment houses that are intermingled along 34<sup>th</sup> Street. Together they create a formidable district representing the City's rich commercial and industrial past.

The New Yorker Hotel, the JC Penny building and Webster Apartments all exceed existing and proposed zoning. Others, including the Manhattan Opera House, the Westside Jewish Center and the St. Michael's Church complex, are under existing zoning limitations and are adjacent to significant development sites. This district is a singular opportunity to combine substantial new development with preservation to form a two-block gateway to the new commercial area of the Hudson Yards. The proposed district will be evidence that the city can achieve a balance between preservation and new development.

#### *43<sup>rd</sup>/44<sup>th</sup> Street Historic District – West*

- Actor's Studio, 432 West 44<sup>th</sup> Street – NYCL-eligible; (16)
- 446-448 West 44<sup>th</sup> Street – S/NR-eligible; (67)
- 454 West 44<sup>th</sup> Street – S/NR-eligible; (68)
- 417-419 and 421 West 43<sup>rd</sup> Street – S/NR-eligible; (70)
- 435 West 43<sup>rd</sup> Street – S/NR-eligible; (71)
- Former Second German Baptist Church, 407 West 43<sup>rd</sup> Street – S/NR-eligible; (81)

#### *43<sup>rd</sup>/44<sup>th</sup> Street Historic District – East*

- Film Center Building, 630 Ninth Avenue – S/NR-eligible; (14)
- 347-353 West 44<sup>th</sup> Street – S/NR-eligible; (66)

This proposed historic district is comprised of a mix of brownstones, exceptional tenements and religious institutions within Hell's Kitchen. It represents the residential past of the neighborhood and includes brownstones for wealthier residents and fine examples of historic eclectic tenement design. The Film Center building served the early film industry and continues to serve the entertainment industry. These buildings are some of the significant buildings within the proposed district. The boundaries of the district are made up on the north side of 43<sup>rd</sup> Street from 407 West 43<sup>rd</sup> Street to 435 West 43<sup>rd</sup> Street and on the south side of 44<sup>th</sup> Street from 454 West 44<sup>th</sup> Street to the (get address), New Dramatists. Also significant within the study area to the north side of 44<sup>th</sup> is the model tenement building at 437 West 44<sup>th</sup> Street.

#### *Chelsea Waterfront Historic District*

A Chelsea Waterfront Historic District including the waterfront warehouses around the designated Starrett Lehigh Building and extending eastward to Tenth Avenue close to 26th Street would preserve many of the handsome buildings associated with the industrial past of the area. This proposal will be treated fully in the Board's response to the West Chelsea Rezoning.

To mitigate the impact of the Proposed Action on these resources, the City should provide assistance in securing historic register listings for the identified historic districts and/or individual buildings. This will allow owners to use tax and other funding incentives to restore and reuse buildings. In addition, the Landmarks Preservation Commission should be required to hold expedited proceedings on buildings eligible for landmark designation.

## **CHAPTER 10 – ARCHAEOLOGICAL RESOURCES**

### **Mitigation (pp. 10-13)**

The DGEIS reports that Projected Development sites 11 and 41 may contain historical period archaeological resources. These sites should receive (E) Designations requiring the mitigation protocol described on Page 10-13.

## **CHAPTER 11 – URBAN DESIGN AND VISUAL RESOURCES**

### **Visual Resources (pp. 11-3, 11-22 - 11-23, 11-40 - 11-41, 11-56 - 11-57)**

The DGEIS maintains that the loss of views of the Hudson River and the Empire State Building caused by the Proposed Action is insignificant because the Action will create equally attractive new buildings. We strongly disagree with this opinion. No building can compare with the Hudson River. And though many important buildings have been constructed in the 74 years since the Empire State Building joined Manhattan's skyline, none has yet displaced it as New Yorkers' favorite building to look at it. No new building will have the history and cache of the ESB. Loss of these views is indeed significant.

The DGEIS also argues that views of the Hudson River that will be available from elevated open spaces can replace views currently available at street level. We also disagree with this assumption. Far more people use New York's streets and sidewalks every day than use its parks. Street level views and elevated park views are simply not equivalent.

We are particularly concerned that the super block construction planned for the convention center expansion will block three existing view corridors to and from the Hudson River, thus cutting New Yorkers off from their waterfront even more than they already are. The plan for development of the Caemmerer Yards, though it does not cut off existing view corridors, squanders an opportunity to introduce new street level river views. This is contrary to other efforts by the City and State to enhance our connection to the waterfront.

Finally, we take issue with the repeated characterization of our entire neighborhood as an "unappealing context" for what would otherwise be nice views.

**Urban Design: Primary Study Area (p. 11-39)**

We question whether the stadium will enhance the urban design of the waterfront area. This is a very large building that is not at human scale, does not relate to the waterfront, and is not pedestrian-friendly. The large plazas that will act as the stadium's lobby may become vast, lonely, unpopulated expanses of concrete when the stadium is not in use. It is unclear why the open space planned north of the stadium will not be as underused as the similar plaza associated with the Javits Convention Center has been and as the World Trade Center plaza was.

**Urban Design: Clinton District/42<sup>nd</sup> Street Corridor (pp. 11-2; 11-13, 11-53 - 11-54)**

The DGEIS states that the construction of new residential towers in this neighborhood would be contextual with existing buildings. Existing buildings have an FAR of 10 that can be increased to 12 with bonuses. Buildings taller than that would not be in context.

**Urban Design: Large Scale Plan (pp. 11-8, 11-29 - 11-30, 11-44 - 11-46, 11-52)**

The DGEIS notes that the streets in this area are currently "lined with buses parked during midday, waiting for use during rush hour." It argues that the area will be far more attractive in 2025 and omits any reference to buses parking on the streets in the future. We would like to know where the commuter buses that currently serve the surrounding area are going to park in 2025. We also note that commuter bus service to the area is likely to increase dramatically in the future with the Proposed Action, and we would like to know if any provision has been made for their parking needs. The DGEIS assumes that the Port Authority will construct a bus garage on Projected Development Site 21. The Port Authority has not yet agreed to this plan and may prefer a different site. The FEIS must study the possibility that this garage will not be built. The FEIS must also account for the planned displacement of the large bus parking facility now located on block 675.

We question the decision to require ground floor retail on the Mid-Block Boulevard, Tenth Avenue, and the northern sides of each side street, while reserving the southern side of each block for building services. Pedestrians generally seek out streets that are lively on both sides,



rather than active on one side and desolate on the other. At the pedestrian level, both sides of the street matter. What are alternatives to this arrangement?

**Existing Conditions: Convention Center Corridor (p. 11-15)**

The DGEIS fails to note that Block 675 is now substantially occupied by private bus parking facilities operated by Greyhound and other bus carriers serving the Port Authority Bus Terminal. The land use, urban design, traffic, parking, and other impacts of displacing these facilities must be analyzed.

**Existing Conditions: Primary Study Area: Clinton (p. 11-17)**

The DGEIS states that Clinton's narrow east-west streets between 43<sup>rd</sup> and 49<sup>th</sup> Street "serve a local function." Although this is indeed the use for which they are intended, their actual use is more complex. These streets carry through traffic to midtown and serve as staging areas for commercial vehicles, taxis, and limousines. Local residents have to compete with these other users for limited parking spaces. The FEIS should study of the actual use of the streets in the primary study area, and an assessment of how the Proposed Action will affect those streets and the people who live on them.

**2010 Future Without the Proposed Action: Clinton (p. 11-26)**

It seems overly optimistic to include Studio City in the 2010 Future Without the Proposed Action, given that the project is not currently moving forward. Studio City should not be included in this analysis.

## **CHAPTER 12 – NEIGHBORHOOD CHARACTER**

### **General Concerns**

The DGEIS uses a dismissive tone toward our neighborhood. Our neighborhood is described as "drab" and "characterless." We disagree. Although the applicants may not appreciate the industrial character of the western end of the neighborhood, or the low-rise low- and middle-income character of Hell's Kitchen, it is dishonest to refer to these areas as "characterless." The neighborhoods do indeed have character.

Furthermore, we question the assumption that bigger is always better, and ask how specifically the increased bulk, density, traffic, and noise will enhance the existing residential communities. On Page 12-1, the EIS states that the Proposed Action would "promote new, dense, mixed-use development with substantial open space, thus creating a strong new neighborhood character." How is "strong character" defined in this context?

### **Methodology (pp. 12-3 - 12-4)**

Noise pollution is expected to be so bad that the entire Hudson Yards area will receive an E Designation requiring mitigation for noise. Specifically, existing residential and commercial buildings will have to be retrofitted so that they won't have to open their windows for ventilation

and cooling, and new buildings must be constructed so as not to rely on open windows. Chapter 12 of the DGEIS does not consider noise because the E Designations will supposedly resolve the noise problems. We disagree with this methodology for two reasons. First, the E Designations will not ameliorate the noise pollution experienced by people outside on streets, sidewalks, and in open spaces. Second, because changing a neighborhood so that residents and workers can no longer open their windows is a significant change in character. Will the FEIS study the effect of noise on neighborhood character?

#### **Convention Center Corridor (pp. 12-1, 12-28 - 12-31)**

The DGEIS states that the area around the convention center and stadium will be “lively”, “active,” “vital” and “24-hour.” We question this assumption. Although we appreciate that the plan includes new open space and ground floor retail, we wonder how these large facilities, which are designed to attract large masses of people to indoor special events, will create 24-hour, active, everyday communities. We note, for example, the recent New York Times article (Polgreen, Lydia, “A Carnival in Suspended Animation,” August 1, 2004) on the behavior of Brooklyn Cyclone fans, who rarely spend time or money outside the stadium before and after games. There are many studies available on the effects of stadia and convention centers on their surrounding communities. The FEIS should refer to these studies in its assessment of the “vitality” that the new facilities will bring to the Project Area.

### **CHAPTER 13 – NATURAL RESOURCES**

#### **General Comments**

We are not scientists, and therefore defer to Riverkeeper, the Natural Resources Defense Council, and other environmental organizations that have commented on this section. However, even as laypeople reading this DGEIS, we are concerned about several things. The effects of combined sewer overflows on Hudson River species have not been adequately studied. The deck over Route 9A, that is clearly an integral part of the stadium, is not adequately studied. New ferry trips and possibly new ferry terminals are not adequately studied. Shortnose sturgeon, winter flounder, loggerhead sea turtles, green sea turtles, leatherback sea turtles, Kemp’s Ridley sea turtles, that are found in the Hudson River could all be affected by this action, as could bald eagles and a breeding pair of peregrine falcons that nests nearby. Furthermore, the Corona Yards area is within a waterfowl wintering area. We are concerned that the DGEIS does not adequately study the effects of this action on these species and environments.

### **CHAPTER 14 – HAZARDOUS MATERIALS**

#### **General Concerns**

The DGEIS states that Phase II Environmental Site Assessments or other appropriate site investigations will be reported in the Final EIS. We are therefore unable to comment on the contamination and its management at these sites. Will the FEIS reveal what actions will be necessary at these sites prior to development?

### **Existing Conditions (pp. 14-17 - 14-27, 14-43 - 14-47)**

We are concerned about the accuracy of the DGEIS's reporting of existing conditions, and by the discrepancies in the DGEIS between the uses listed for development sites on pages 14-17 - 14-27 and those listed in the charts on pages 14-43 - 14-47. For example, there are currently four residential buildings located on Block 733, Lots 43, 44, 45 and 46 (Potential Development Site Number 58). These are old law tenements, with DOB records dating back to the 1930's. Immigration records found on the Internet show residential use of 410 West 36<sup>th</sup> Street in 1876. On page 14-45, the EIS claims all four of these lots are currently used for motor vehicle parking. On page 14-23, the EIS says this site is currently occupied by vehicle parking and residential uses. On both pages, the EIS says the site was formerly occupied by a machine shop. We do not know the history of this site, but we are concerned by the lack of accuracy in reporting what is there now. We are worried that the Phase I analyses that have been done are inaccurate and will unfairly saddle clean properties with undeserved E Designations. The FEIS should include a more thorough assessment of each property be done before E Designations are assigned.

### **Future with the Proposed Action, Projected and Potential Development Sites (pp. 14-42 - 14-48)**

The DGEIS assumes that the placement of E Designations on 99 projected and potential development sites will have no effect on the pace of development. It fails to discuss the effect that the E Designations will have on the property values of these sites and on the costs of construction. It does not consider the effect seen so often with brownfields, that contaminated sites often languish undeveloped due to the costs of clean-up. There is no discussion of whether these sites will be eligible for State brownfields programs and the financial burden they will place on those programs. There is no discussion of how much a property owner will have to spend to prove that an uncontaminated site that receives an E Designation is indeed uncontaminated. There is no discussion of how much additional funding and staff DEP will require in order to carry out the monitoring responsibilities assigned to it in this section. The FEIS should address each of these items.

## **CHAPTER 15 – WATERFRONT REVITALIZATION PROGRAM**

### **General Concerns**

The relocation of the NYPD Tow Pound and the Gansevoort sanitation garage are mentioned throughout this section as a "related action." We agree that it is in the interest of waterfront revitalization these projects should be a definite part of the Proposed Action. However, the possibility that the construction of these facilities will be delayed or that they will located elsewhere exists. Will the FEIS analyze these possibilities?

The extension of the Convention Center across 39<sup>th</sup>, 40<sup>th</sup>, and 41<sup>st</sup> Streets is inconsistent with the requirement that if a development blocks waterfront access, it should be sited to as to allow access later. The use of Pier 76 as a partially publicly accessible extension of the Convention

Center by a bridge or as a dedicated part of Hudson River Park should be studied as possible mitigation. .

No commitment is made in the EIS concerning the relocation of the Sanitation Trucks from Gansevoort, which would improve the Hudson River Park. Half of Pier 76 behind the Convention Center is to be part of the park; the rest is a possible development site. These issues should be addressed by requiring mitigation by DSNY relocation of the trucks from Gansevoort and linking development on Pier 76 to the Convention Center expansion by a bridge, meeting rooms, and restaurant that would improve waterfront physical and visual access or simply adding the excluded half to the Hudson River Park.

**Access to Coastal Waters (pp. 15-13 - 15-15)**

**Protection of Scenic Resources (pp. 15-15 - 15-16)**

The closure of 33<sup>rd</sup>, 39<sup>th</sup>, 40<sup>th</sup> and 41<sup>st</sup> streets reduces physical and visual access to the river. This is also in conflict with Waterfront Revitalization Principle 8.1, which requires current physical access to be maintained. Elevated views of the waterfront from the roof of the stadium, convention center, tow pound, and High Line, do not make up for closing streets and what that means for cutting people off from the waterfront. A passageway through the convention center is not an adequate substitute. The area's working and residential population makes waterfront access routes even more important to the area's future vitality and will harm the public's enjoyment of the waterfront.

**Protection and Restoration of Ecological Systems (pp. 15-8 - 15-10)**

**Protection and Improvement of Water Quality (pp. 15-10 - 15-12)**

Future Combined Sewer Overflows, even assuming they do not happen more frequently that they do today, will be worse. The DGEIS is dismissive of this problem by saying only that the number of CSOs won't increase. A serious analysis of waterfront revitalization requires that the severity of the CSOs be studied. How severe will predicted CSOs be? What effect are they likely to have on water quality and ecological systems?

It is also unclear whether the North River Wastewater Treatment Control Plant (WTCP) can accommodate the additional sewage capacity that will be generated by the Proposed Action. The official capacity numbers for North River have changed over the years, and this has never been explained to our satisfaction. Although we have been told by DEP that the volume of water treated by the North River plant has decreased in recent years, the solid content of sewerage has increased. The FEIS should explain how much sewage is treated at North River now? How much additional capacity does North River have?

We are unable to fully assess this section of the DGEIS as it relies upon completion of amendments to the Manhattan Drainage Plan. Without this information, it is impossible to know what improvements to wastewater infrastructure are planned and whether or not they will be adequate.

The effect of the Proposed Action on stormwater runoff has not been adequately studied. The argument that the green areas will reduce the runoff from the existing paved surfaces is not based

on a real analysis. It was discovered during the construction of Route 9A that there is a special drain into the river from the Caemmerer Yards. This drain is unconnected to the diversion tunnel and thus the sewer system, but there is no analysis of this, only general statements. Roofing the cuts would in general increase runoff, since the cuts/yards are not paved and therefore absorbent, and some are connected to existing sewers, although there is no study of this. The FEIS should reflect these considerations.

## **CHAPTER 16 - INFRASTRUCTURE**

### **Water Supply (16-4, 16-8 - 16-9, 16-14 - 16-15)**

The FEIS must consider that additional developments in the rest of New York City (particularly Lower Manhattan, Long Island City, and Downtown Brooklyn) will affect the water supply that the Hudson Yards area must also draw from. The FEIS should also consider how expected development in the Hudson Valley will affect the amount of water available to meet the demands of Hudson Yards. The amount of water available to us is not inexhaustible and development in all of these areas is drawing on the same supply of drinking water.

The DGEIS only considers water supply in an average year. The FEIS should also look at conditions in a drought year.

The opening of the lower Manhattan segment of Water Tunnel No. 3 in 2020 (Phase 2) is represented as presenting a supplemental water source to the proposed Hudson Yards area. However, it was designed to, "allow for the inspection and necessary repair of the century old Water Tunnels No. 1 & 2," which will be put off-line for considerable periods of time to make this work possible. Not mentioned in the DGEIS is the fact that while Water Tunnel No. 3, will be an extraordinary asset, it will be doing the work of three water tunnels, for a considerable amount of time during the repair process of leaky Water Tunnels No 1. & 2 – a process that can easily take years and possibly a decade, making water shortages a distinct possibility. The FEIS should take these possibilities into account.

### **Wastewater (pp. 16-3, 16-5 - 16-6, 16-8, 16-12, 16-14, 16-16 - 16-17)**

It is entirely unclear whether the North River plant has sufficient capacity to accommodate the additional 7 million gallons of sewage per day that would be generated by the Proposed Action. The official capacity numbers at North River have changed over the years, and this phenomenon has never been adequately explained. Furthermore, the DGEIS does not take into account the effect on North River of development in other parts of Manhattan served by the plant. The FEIS should adequately explain capacity changes in the North River plant. The FEIS should assess the combined impact of the Proposed Action and other recently completed or planned developments in Manhattan on the North River plant.

## **CHAPTER 17 – SOLID WASTE AND SANITATION SERVICES**

### **General Concerns**

The communities across the US that receive New York City's garbage have grown more reluctant to receive it. Tipping rates keep increasing, and the cost of landfill disposal of all of the waste generated by the Proposed Action is likely to be quite large. The FEIS should consider the costs of the additional solid waste and sanitation services required by the Proposed Action. Given the diversion of incremental tax revenues to repay billions of dollars in bonds, we are concerned about the effect of added capital and expense items on the City's budget.

## **CHAPTER 18 – ENERGY**

### **Electricity, 2025 (pp. 18-9 - 18-10)**

The DGEIS predicts that we will need two additional substations by 2025 - one by 2013 and the other by 2021. The Proposed Action will also require an additional transmission substation, but the proposed rezoning of the area will leave no place in the project area where new substations are allowed as-of-right. What are the proposed locations for these facilities? How much will they cost and how will they be paid for?

The Proposed Action will generate additional electric demand equivalent to the output of a mid-sized power plant. The DGEIS discusses how this electricity will be distributed, but is silent regarding generation. Will the Proposed Action require construction of a new power plant? Where will this plant be? How much will it cost? Is there any plan to finance it?

### **Railcuts (Appendix R)**

The DGEIS notes that DOT and Amtrak have proposed new bridges over the Amtrak tracks that would limit Con Edison's ability to deliver service to its customers. The design process for these bridges has not always been fully informed by large scale plans for the area. What differences will the FEIS consider between the type of bridge reconstruction that would be required under a future scenario without the Proposed Action and the type required by demands generated by the Proposed Action?

## **CHAPTER 19 – TRAFFIC AND PARKING**

### **General Comments**

Even using extremely optimistic assumptions, the Proposed Action will significantly adversely affect 130 intersections during a typical afternoon commute in 2025. The proposed level of commercial density simply cannot be handled by the City's street network. It is clear that, as early as 2010, with or without a stadium, the density proposed by the city combined with the convention center expansion cannot be supported by the proposed upgraded infrastructure.

The construction phase lasting for 5 years (2005 to 2010), presents immense challenges in traffic, noise and pollution for which no comprehensive, enforceable mitigation is offered. Major access routes to and from the Lincoln Tunnel will be impeded by lane or street closings, including sections of 42<sup>nd</sup>, 41<sup>st</sup> and 40<sup>th</sup> streets. Truck routes for construction overlap with areas of extreme traffic congestion at peak hours. The FEIS must consider how traffic will be affected by the construction of two new subway stations, a stadium, the mid-block boulevard, the convention center expansion, the new hotel, and all the new office towers.

### **Peak Traffic Hours (p. 19-3)**

We disagree with the limited choice of times for the Special Event peak hour. We believe that departures from the stadium should also be studied because of the fact that departures occur in a more compressed time period than arrivals, and also because a night-time football game and a concert at Madison Square Garden are likely to end at about the same time. The FEIS should study departures times of stadium events as part of its peak hour traffic analysis.

### **Traffic Study Area (pp. 19-4 - 19-5)**

Severe traffic congestion on the West Side will cause traffic backups across town and across the Hudson River. Game day traffic should be studied all along 42<sup>nd</sup> Street and 34<sup>th</sup> Street. East side intersections should be studied more thoroughly, particularly along the streets north and south of 42<sup>nd</sup> Street and 34<sup>th</sup> Street that motorists are likely to use as alternate routes to avoid congestion when the main thoroughfares are backed up. Hudson River crossings must also be studied, as should their major approach routes in New Jersey. Though the action itself may be limited to Manhattan, traffic congestion caused by both special events and the weekday commute will have major impacts on New Jersey.

The DGEIS does not study any unsignalized intersections during a Special Event peak hour. In other words, it does not adequately address traffic backing up on 12<sup>th</sup> Avenue as people come and go from Jets games, conventions, and concerts. The FEIS must rectified this serious oversight.

### **Trip Generation (pp. 19-6 - 19-21, Appendix S-1)**

There is simply no way that 75% of Jets fans are going to use public transportation to get to the stadium. Even at Madison Square Garden, which sits on top of a rail hub and which hold most of its events on weekdays when many of its attendees are already in Manhattan, only half of Knicks and Rangers fans use public transit. A West Side stadium would be accessible by one subway line and no commuter rail, and is going to sit next to Route 9A and the Lincoln Tunnel. Although it will be near a ferry terminal, the DGEIS includes no data to prove that the existing terminals and ferry operator have sufficient capacity to meet the projected demand. It is also unrealistic to expect stadium-goers to get out of their cars and get onto ferries on the cold winter days when many football games are played. Based on surveys of existing facilities, we believe that no more than 40% of Jets fans will use public transit. We also believe that vehicle occupancy rates will be comparable to what they are now, not to the rosy picture predicted for the future. Given the price of football tickets, it is unclear why anyone going to the game would be daunted by the cost of a bridge toll. The DGEIS traffic analysis must reflect these more

realistic numbers. We note that surveys of existing facilities are a far more appropriate source of data than asking fans to predict their future behavior.

We also question the modal splits for office uses. The percentage of New York City workers who live in New Jersey has increased dramatically in recent years. It is likely that many commuters to new jobs in the Hudson Yards area will live in New Jersey. The modal split numbers predict that twice as many office workers will come by subway than by rail, bus and ferry combined. The FEIS must be reconsidered the modal split to reflect the development and expected growth of New Jersey's bedroom communities.

We disagree with the decision not to consider peak attendance days at the convention center. If football games occur often enough to be studied, than high volume events at the convention center certainly do as well. It is also unclear to us why public shows that are able to grow 84% in floor space will not similarly increase in attendance. Growth estimates should be based on a real analysis of similar facilities, not the assumptions of Convention Center management. The FEIS must analyze traffic generated by a peak attendance event that is able to grow by 84%.

It is also disingenuous to say that peak attendance events are unlikely to coincide with a football game. Any year that the Jets make the playoffs (or that the regular season runs late, as it does this year), their schedule will coincide with the boat show. The FEIS must study the impact of this "coincidence."

We also question the modal splits for convention center attendance. Although we agree that the No. 7 line will have some effect on how people travel to the convention center, we note that most convention center visitors are not New York City residents used to riding the subway. We also note that exhibitors must bring their wares and promotional materials with them to shows. As it is, three times as many people come by car and taxi as by subway. It is simply impossible that an 85% increase in the size of the convention center will generate only a 2% increase in the number of vehicles arriving at the center on a weekday morning. As with the stadium, we believe the numbers for transit use are much too optimistic. Using more realistic numbers, the FEIS must be redo the trip generation analysis conducted for the DGEIS.

#### **Traffic Assignment (p. 19-23, Appendix S-2)**

The DGEIS uses 1990 census data and assumes that the percent of workers coming from New Jersey is less than 19.5% (this figure includes commuters from Rockland County) while RPA analysts suggest that 25% is a more realistic figure given the development of New Jersey's commuter communities over the past 15 years. We note that 89% of all increase in commuters in the city over the last 20 years came from areas west of the Hudson. The location of the new office space in west Midtown will reinforce this trend. The traffic analysis must be redone to reflect the actual numbers of New Jersey commuters. As it is now, the travel route assignment seriously underestimates traffic on Route 9A and through the Hudson River crossings. There is no discussion of the George Washington Bridge at all. Nor is there any discussion of traffic in New Jersey itself. The FEIS must rectify all of these omissions.

#### **Reasonable Worst Case Scenarios (pp. 19-24 - 19-25)**



The reasonable worst case scenarios used in the FEIS must include the likely coincidence of a football game with boat show, must account for a more realistic increase in attendance at public shows at the convention center, must consider simultaneous departures from a night game and Madison Square Garden, and must use a more accurate modal split for stadium and convention center attendees. The reasonable worst case scenarios must also consider the likelihood of tailgating, and its effect on traffic flow. There must also be consideration of a Saturday special event that coincides with normal Broadway theater schedules as well as cruise ship arrivals and departures from the Passenger Ship Terminal and events at the convention center and Madison Square Garden.

We also expect that some attendees at football games and other special events are likely to arrive early on weeknights in tailgate, to have dinner in the City, or to avoid the traffic. How many are likely to arrive early and how will they affect rush hour commuters?

#### **Traffic Data Collection (pp.19-25 - 19-26)**

The DGEIS does not consider the recent changes to Eleventh Avenue and Lincoln Tunnel traffic patterns. Intersections affected by recent changes include locations on Ninth Avenue and Dyer Avenue. Full or partial street closures have affected 39<sup>th</sup> Street and 41<sup>st</sup> Street. We expect that the FEIS will rely on more recent data, as the DGEIS says that it will. In the mean time, we note that we are unable to fully review this traffic analysis due to the omission.

The DGEIS severely undercounts commuter buses traveling to and from the Port Authority Bus Terminal and surrounding streets because it analyzes only one intersection likely to have any commuter bus traffic at all. Some buses leaving layover parking do pass through the intersection at West 39<sup>th</sup> Street and Tenth Avenue, but the vast majority do not. This analysis completely misses the buses that travel from the Lincoln Tunnel straight to the Port Authority Bus Terminal. Given that vehicle classification was performed in order to study air quality, this omission is dangerous and must be rectified. The FEIS must study more appropriate intersections, particularly those along Dyer Avenue.

We also note that there is no indication that the DGEIS acknowledges in any way the many buses and vans that use our neighborhood streets as daytime parking between commuter trips. Do the parking, noise, traffic, and air quality analyses take this phenomenon into account? If not, they must be redone accordingly.

The Port Authority and the Economic Development Corp. are currently performing an inventory of bus parking and storage as part of their plan to build a new bus garage. The results of this study should be used in the FEIS to more accurately estimate bus traffic in the area.

#### **River Crossings (pp. 19-26 - 19-27)**

The DGEIS relies on river crossing data from 1998 and then increases it by the background level of traffic growth for Manhattan. As discussed earlier, this is likely to significantly underestimate the use of Hudson River crossings due to recent growth in New Jersey bedroom

communities and related increase in commuting from New Jersey. The FEIS must account for real growth in the region and not rely on generic projections.

**Mid-block Park and Boulevard System (pp. 19-30)**

According to the DGEIS, the Midblock Park and Boulevard System will lie on top of a 950 space public parking garage with vehicular ingress and egress at 35<sup>th</sup> and 36<sup>th</sup> streets. The traffic on this boulevard is omitted from the discussion of 2010 and 2025 conditions, presumably under the theory that if it didn't exist before, it can't be adversely affected. That is unacceptable. Traffic on the Boulevard at peak hours must be studied in the FEIS. Given that it will be used as a thoroughfare for those parking in the area, the street is likely to be severely congested and this congestion will undoubtedly affect the existing streets that pass through it.

**Relocation of DOS Facility and Tow Pound; PANYNJ Bus Garage (pp. 19-30 - 19-31)**

The traffic analysis of the DGEIS assumes that Block 675 will be developed as a DSNY facility and NYPD tow pound. If this does not occur, it assumes that block will be developed as at-grade open space. There is no discussion whatsoever of the current use of the space, which is substantially occupied by several privately operated bus parking lots. The FEIS must consider what will happen if the bus parking stays where it is, and must also consider where it is likely to be relocated if the development does occur as planned. The DGEIS also assumes that Projected Development Site 21 will be developed as a Port Authority parking garage, but the Port Authority has not committed to this project or to this site. The traffic analysis in the FEIS must reflect the possibility that the bus garage is not built or is built in a different location than that proposed.

**Future with the Proposed Action, 2010 and 2025 (pp. 19-47 - 19-88, 19-97 - 19-176)**

The DGEIS analyzes each intersection individually and does not consider the cumulative effect of traffic backlogs. For instance, it seems impossible that one intersection will have a ten minute delay, while the next one down the line will only have a 6 minute delay. The FEIS must consider how the intersections will affect each other. Without this, the traffic analysis is wholly inadequate.

We cannot accept the DGEIS prediction that there will be no back-up whatsoever on major crosstown thoroughfares during football games. It defies logic that 75,000 people attending a Jets game will have no significant adverse impact on 34<sup>th</sup> Street, or 42<sup>nd</sup> Street or the Hudson River crossings. We suspect that the error is due to a combination of factors, including overestimating how many people will use mass transit, not considering the interplay among intersections, not adequately accounting for the effect of masses of pedestrians in the streets, not adequately accounting for street closures, not adequately accounting for the masses of people dropping off and retrieving cars at the Midblock Boulevard parking garage, ignoring the likelihood of tailgating, choosing inappropriate peak periods, minimizing projected attendance at the convention center, and overestimating the occupancy of each car. An adequate FEIS must correct for all of these errors and consider their cumulative effect.

Similarly, the DGEIS assumes that 800 additional vehicles using the Lincoln Tunnel will have no backup effect on the overall system. This seems extremely unrealistic to us. We also question the ability of the Lincoln Tunnel to handle thousands of new commuters from New Jersey leaving work at the same time that attendees to stadium events from New Jersey and elsewhere begin to arrive for a special event.

#### **Proposed Mitigation (pp. 19-61 - 19-63, 19-116 - 19-118)**

The DGEIS highlights possible mitigation measures for traffic congestion but provides little detail and indicates that their effectiveness has not been studied. We are unable to fully assess the DGEIS in the absence of these studies. We question the effectiveness and feasibility of the proposed mitigation measures. In particular, we ask how likely is it that parking will be barred at intersections? How much will all the mitigation measures cost? Do some of the mitigations ease one intersection while worsening the situation at another? How many parking spots will be eliminated through the proposed mitigations and has this been accounted for in the parking analysis? How many more police officers will be needed in order to provide adequate enforcement? What will this cost?

We also note that Route 9A was recently given wider sidewalks in order to reduce crossing distance and thereby increase pedestrian safety. The Proposed Action would require the reversal of that improvement and widening the street. The planned pedestrian overpasses do not really make up for this, and are emblematic of the low priority that is given to at-grade pedestrian access to the waterfront. (It should go without saying that if they do get built, they must be accessible to the handicapped, and to the elderly who just don't want to have to go up and down stairs to reach the waterfront.)

## **CHAPTER 20 – TRANSIT AND PEDESTRIANS**

### **General Concerns**

The level of pedestrian congestion that will be caused by the Proposed Action is completely unacceptable. The DGEIS predicts both every day congestion caused by the excessive commercial development of the area and special event congestion caused by the stadium. At many intersections and sidewalks where the DGEIS finds no significant adverse impact, the area will have an “unacceptable” level of service. The FEIS should not accept these conditions as acceptable. The FEIS should address the phenomenon of tailgating.

The DGEIS admits that the Proposed Action will fill many subway stations to overflowing by 2025. Nothing can be done to mitigate stairs, escalators, passageways and turnstiles that will have to serve many more people than they are able. There will be lines at the base of stairs and escalators, and subway platforms that are jam packed. And this is even after turnstiles have been added, stairways widened, and escalator speed increased by 30 feet per minute. The applicants consider it to be “acceptable” when every square foot of an escalator or a subway car is filled by passengers. Measurements of acceptability must reflect a general human desire for breathing room.

Furthermore, the analysis of subway station elements assumes that the Second Avenue Subway and East Side Access projects will be completed on schedule. It also assumes that all of the suggested mitigation measures will be undertaken, but it notes that a feasibility analysis has not been performed. What happens if these assumptions are wrong?

This chapter assumes that there will be money forthcoming to significantly alter subway stations, streets, and sidewalks, to add bus service, to purchase new buses, and to expand bus storage and maintenance facilities. How much are these measures likely to cost? Does the Hudson Yards financing plan include allocations for these projects? Is there any other plan to finance them?

This section omits any reference to commuter bus and van service not run by the MTA. At the very least, the EIS must study the effect of the Proposed Action on New Jersey Transit bus service and the bus-related elements of the Port Authority Bus Terminal.

#### **Analysis Hours (p.20-6)**

According to the Appendix S-1 memorandum on the stadium, departures from football games and rock concerts both cause worse congestion than arrivals. The memo discusses the likelihood of multiple events with overlapping arrivals, but does not consider at all the possibility of overlapping departures. Given that arena concerts and Monday night football games both often end between 11:30 and midnight, we are surprised that this issue is not addressed. The DGEIS must consider the impact of overlapping departures. The FEIS should use the 11:30 p.m. to 12:30 a.m. peak period for study, using a worst case scenario of a football game and concert letting out at the same time.

#### **Capacity Analysis Methodology, Pedestrian Analyses (pp. 20-12 - 20-13)**

The DGEIS only considers severe congestion of pedestrian elements to be a significant adverse impact. It does not consider that pedestrians often feel unsafe when sidewalks are not adequately used. The FEIS should include a discussion of the likely level of use of the widened sidewalks along the side streets between 10<sup>th</sup> and 11<sup>th</sup> Avenues, 34<sup>th</sup> - 38<sup>th</sup> Streets, at non-peak hours. The FEIS should include a similar analysis of the usage of the Mid-Block Boulevard. What will these areas be like on a Tuesday night or a Saturday afternoon, when offices are closed and the stadium is not holding an event? What methods exist to measure under-use of pedestrian elements?

#### **Capacity Analysis Methodology and Transit Impact Criteria, Escalators (pp. 20-10 - 20-11, 20 - 20)**

Although the DGEIS acknowledges that the nominal and maximum capacity for escalators are significantly different, it uses the maximum capacity to determine level of service criteria. A significant impact is only determined to exist when the escalator goes from below maximum capacity to above maximum capacity. The problem with this is that maximum capacity would require New Yorkers to share escalator steps with strangers, which we rarely do. Full utilization of an escalator means being packed onto it, shoulder-to-shoulder, much too close for comfort. Surely going from a comfortable ride to that level of closeness should be considered a significant adverse impact.

**Capacity Analysis Methodology and Transit Impact Criteria, Line Haul Capacity (pp. 20-11 - 20-12, 20-21)**

We are amazed by the subway car guideline capacity numbers in Table 20-5. A subway car with 34 to 44 seats is expected to serve 110 people - in other words, about three times as many people as there are seats. We've been on subway cars packed that tightly, and we know that it's far from pleasant. A subway car that's "at capacity" is a miserable place to be. The DGEIS only finds a "significant adverse impact" when a car is filled beyond capacity. The morning commute becomes unacceptable way before that line is reached, and the FEIS should reflect that reality. In its Spring 2004 assessment of transportation needs and impacts of far west Midtown, the RPA used a more comfortable standard to determine when a subway car is full: 83 persons per car. The FEIS should consider crowding of subways cars above 83 persons per car as a significant adverse impact.

**Determination of Significant Adverse Impacts, Crosswalks (pp. 20-13, 20-21, 20-44, 20-59, 20-150 - 20-155, S-5)**

The DGEIS only considers a significant adverse impact to occur when the pedestrian flow rate at a crosswalk drops to Level of Service E -- 15 square feet per pedestrian or below. However, the DGEIS also defines Level of Service D (24 square feet per pedestrian or below) to be unacceptable. We are particularly confused because Table 20-7 defines LOS C as 24 - 40 square feet per pedestrian and LOS D as 15 - 24 square feet per pedestrian, but on page 20-59, the DGEIS states that 15 square feet per pedestrian is the threshold between LOS C and D (according to the table and page 20-21, it's the threshold between D and E). What exactly is an acceptable level of service at a crosswalk?

There are many locations where the Level of Service drops from A, B or C to D, in other words, changes from free movement to unacceptable congestion. Why is this not considered a significant adverse impact? We certainly think that it is.

The DGEIS, by only discussing the change from conditions without the Proposed Action to conditions with the Proposed Action, does not adequately describe the pedestrian congestion that will be created along the new Mid-Block Boulevard. For example, of the 32 crosswalk elements along the boulevard, 15 will have Level of Service E at mid-day in 2025 and another 7 will have Level of Service D. In other words, the Boulevard is expected to be mobbed. The EIS should discuss the pedestrian conditions that will be created along the Boulevard.

**Determination of Significant Adverse Impacts, Corners (pp. 20-13, 20-21, 20-43, 20-59, 20-144 - 20-149)**

We have many of the same concerns about the corner analysis as the crosswalk analysis. It is unclear what level of service is considered acceptable due to discrepancies in the DGEIS. We do not understand why drops of service to Level D are not considered significant adverse impacts. This discrepancy makes a huge difference in the analysis. For instance, the DGEIS notes that 19 corners will drop to LOS E at mid-day in 2025 (or, for those already that bad, will remain at the same level but get nominally worse). There are another 22 corners that will drop to LOS D at

mid-day in 2025 (or, for those already that bad, will remain at the same level of service but get nominally worse.) Any drop in service from acceptable to unacceptable must be reported as a significant adverse impact.

**Determination of Significant Adverse Impacts, Sidewalks** (pp. 20-13, 20-21, 20-42, 20-86, 20-141 - 20-143)

As with crosswalks and corners, we do not understand why a drop in level of service from acceptable to unacceptable is not considered a significant adverse impact. There are many sidewalk locations that meet this criteria, but which are not discussed in the DGEIS. Although Table 20-21 uses LOS C as the minimum acceptable, all sections dealing with future conditions seem to use LOS D as the minimum acceptable. We strongly disagree with this practice. The FEIS should consider any drop in LOS from acceptable to unacceptable should be considered a significant adverse impact.

**Data Collection, Pedestrian Conditions** (pp. 20-23, S-5)

Although we are not experts in pedestrian movement, we have all spent many years walking through New York City, and the 2003 data for pedestrian volume completely baffles us. We have noticed that at some intersections, pedestrian volume increases and decreases in bizarre ways over 15 minute intervals. For instance, at Broadway and 34<sup>th</sup> Street during the AM peak hour, the pedestrian volume at crosswalk A-B-C falls from 1,015 to 0 in 30 minutes. This seems highly unlikely. Similarly at Sixth Avenue and 34<sup>th</sup> Street, pedestrian volumes go from 0 to several hundred on both corners in the course of a half hour in the AM, MD, PM, and Special Event peak hours. Also at Sixth Avenue and 34<sup>th</sup> Street, sidewalks B and C host thousands of people in the course of a day, while Sidewalks A and C serve not one single soul. This just seems impossible. There are countless intersections with similarly curious data.

The DGEIS does not sufficiently explain how pedestrian movements are measured, and this makes it extremely difficult for laypeople to understand. We also question the accuracy of much of this data. The FEIS must provide more information on how pedestrian volume was measured.

**Existing Conditions, Transit Network** (pp. 20-23 - 20-31, S-4)

We are completely baffled by the 2003 Existing Conditions data provided in Appendix S-4. Throughout the appendix, presumably different elements have the exact same utilization numbers. For example, of the seven stairways at 35<sup>th</sup> street and 6<sup>th</sup> Avenue in the Herald Square station, three of them had exactly 284 people climbing each of them during a 15 minute interval in the morning, two were used by exactly 696 people each, and the other two were used by exactly 416 people each. These repetitions can be found on every page of the 2003 tables. Why is this? Are these numbers observed or estimated? If they are estimated, what is the margin of error? Why does the appendix say the analysis is based on pedestrian counts? Given that these numbers are the baseline upon which the entire analysis depends, if they are inaccurate, the entire analysis must be redone. These unexplained repetitions lead us to question the accuracy of the data.

We also note that we are unable to understand where these elements are located or how they relate to one another, as the diagrams provided in the appendix have very small, blurry, illegible type. The diagrams can be read neither on-line nor in hard copy, so we have no idea where these stairways, corridors, and turnstiles are located. This information should be made accessible.

#### **Existing Conditions, Ferry Service (p. 20-41)**

The DGEIS does not contain any data at all on existing weekend and evening ferry service. Given that the applicant expects almost 8,000 people to travel to Jets games via ferry, this omission is completely unacceptable.

#### **Subway Station Elements, 2010 and 2025 (pp. 20-63 - 20-67, 20-109 - 20-113, S-4)**

According to the DGEIS, fully 22% of Jets fans (almost 17,000 people) are expected to use the new Number 7 subway station to get to the game in 2025. However, fewer than 5,000 of them are expected to try to use the turnstiles at the new 34<sup>th</sup> Street station during the peak 15 minute period before a Monday night game. This despite the fact that the turnstiles can handle twice that many. This seems highly unlikely. Surely the station will be busier if so many people are trying to use it. Odder still, the DGEIS predicts that fewer than 700 people will use those subway turnstiles to get to the same game in 2010. Why the discrepancy? If the assumption is that Jets fans will not be using the subway in 2010, does the traffic analysis reflect this?

Furthermore, the DGEIS only considers how the new stations will be affected by arrivals and does not consider departures, even though departures will be more congested. Again, we request an analysis of how these stations will function when 75,000 people try to leave a football game all at the same time.

#### **Ferry Service, 2010 and 2025 (pp. 20-19, 20-73, 20-120, S-1)**

The DGEIS states that ferry service to special events is expected to be sufficient in 2010, but provides not one shred of information to back up this conclusion. Worse, there is not one sentence in Chapter 20 that mentions special event ferry service in 2025. Appendix S-1 notes that the Jets and NY Waterway have discussed the matter and that 20,000 riders could be accommodated, but gives absolutely no information about how this could be done. At the absolute peak of service on a weekday, NY Waterway can currently accommodate about 4,300 passengers traveling from Hoboken, Weehawken and Jersey City to New York. But the applicant expects almost 8,000 people to use ferries to reach the stadium for a game. How is this going to happen? The discussion of ferry usage during special events is entirely inadequate.

We note that in order to find this discrepancy, we had to comb through the appendices. Table 20-9, which gives trip generation rates for each expected new facility, reports that 6,960 people will travel to and from the stadium by "other" means. Presumably this is the number that refers to ferry ridership, although it is significantly lower than the actual 7,950 predicted to arrive by ferry (10.6% of 75,000). Why is ferry usage not included in this table? How was the "other" figure derived?

It is also odd that the discussion of ferry service does not refer to the new stadium ferry terminal that appears in all of the promotional materials about the stadium that the applicant regularly distributes. Does the NY Waterway statement repeated in the appendix about 20,000 riders rely on this new terminal? Do the 8,000 riders predicted by the applicant rely on this terminal?

As for weekday ferry service, the DGEIS predicts that 1,256 new riders will use the ferries in 2025 due to the Proposed Action. How was this number derived? The modal splits used for office workers in Appendix S-1 (who account for the vast majority of the 127,000 new workers that the DGEIS anticipates) do not account for ferry riders. Rather, they predict that 100% of trips generated will be by auto, taxi, bus, train, subway and walking.

**Bus Service, 2025** (pp. 20-115 - 20-119, 20-135 - 20-140)

According to the DGEIS, 130 new buses will need to serve the Hudson Yards area in order to avoid unacceptable crowding. The area will also need articulated buses. What are the plans to purchase, store, and maintain these buses? Have they been included in the traffic and air quality analyses? On the flip side, does the transit analysis consider the effect of traffic congestion on bus service?

## **CHAPTER 21 – AIR QUALITY**

### **General Comments**

We are very concerned about the air pollution likely to be caused by the Proposed Action. Even using extremely optimistic (and we believe unrealistic) assumptions, the DGEIS predicts PM10 exceedances at five sites, PM2.5 exceedances at six sites, carbon monoxide exceedances at three sites, and sulfur dioxide and toxics exceedances at the Quill Bus Depot. Although the DGEIS assures us that mitigation measures and further study will solve the problems, we question this assumption. As Tier II analysis and a study of the mitigation measures has not been done, we are unable to fully comment upon them.

The analysis of stationary sources of air pollution does not include any discussion of the proposed cogeneration facility for the stadium. In recent conversations with City Planning, we have been told that this facility will be included in the stadium. Its environmental effects must therefore be studied along with the rest of the Proposed Action.

### **Principal Conclusions** (pp. 21-1 - 21-2)

Because the mobile source analysis relies on the traffic analysis performed in Chapter 19, it is equally flawed. By underestimating the number of auto trips to a special event, choosing peak periods that do not represent the worst conditions, ignoring the presence of commuter buses and vans in the area, underestimating the number of commuters coming from New Jersey, not considering the interplay among intersections, not adequately accounting for the effect of masses of pedestrians in the streets, not adequately accounting for street closures, not adequately accounting for the masses of people dropping off and retrieving cars at the Midblock Boulevard parking garage, ignoring the likelihood of tailgating, and minimizing projected attendance at the



convention center, the DGEIS severely underestimates traffic congestion. This also leads to a severe underestimate of mobile source pollution. These flaws must be rectified in the FGEIS.

Furthermore, given that there has not yet been a feasibility and effectiveness study on the proposed traffic mitigation measures, it is extremely optimistic to assume that changing the timing of traffic lights etc. is all that is required to lower dangerous levels of air pollutants. It is also a bit ridiculous to make assumptions about federal emissions standards in 2025 given that this is a highly politically charged issue on which there has not been easy compromise. Mitigation must be seriously studied before we assume it will make all the air pollution problems disappear.

We also note that relying upon a Tier I analysis and reserving the Tier II analysis for later in the process deprives the community of its ability to fully comment upon the DGEIS. When a Tier II analysis is done, it must consider the actual traffic speeds and congestion that are likely, rather than assuming that traffic will move at posted speed limits as is done in Chapter 22. We believe that a more realistic picture of the likely traffic will show worse levels of air pollution, not better. Furthermore, the discussion of likely bus retrofitting by the MTA completely ignores the presence of Greyhound, New Jersey Transit, and other commuter buses in the area. These bus fleets must be analyzed separately rather than assumed to have the same emission levels as MTA buses.

Does the parking facility analysis account for the proposed new bus garage? Does it account for existing private bus garages and layover zones? Does it account for the fact that the proposed new facility is not part of the Port Authority's capital plan and may very well not be built, or be built in a different location?.

#### **Mobile Source Analysis, Vehicular Emissions (pp. 21-12 - 21-13)**

The DGEIS does not consider emissions from idling vehicles other than buses and heavy duty trucks. This methodology is likely to severely underestimate the air pollution caused by cars and particularly light trucks that are mired in traffic during special events and rush hours. As for buses, the DGEIS appears to apply MTA bus emissions data to all buses present in the area, which completely ignores the Greyhound, New Jersey Transit, and other bus fleets that serve the area, primarily using the Lincoln Tunnel and the Port Authority Bus Terminal. Proper mobile source analysis must consider these other bus fleets and must properly account for idling vehicles.

#### **Mobile Source Analysis, 2010 and 2025 (pp. 21-15, 21-22, 21-25 - 21-28)**

The DGEIS assumes that carbon monoxide emissions rates will be affected by decreases in future year emissions due to more stringent regulations. What does the DGEIS assume will be the average fuel efficiency of the cars, light trucks, buses, and heavy trucks that are expected to be present in the Project Area? How is the total fleet assumed to be allocated among each type of vehicle? Does the DGEIS assume that the 2010 and 2025 fleets will be allocated among vehicle types the same way that they are now, or does it take account of the continuing growth in SUV sales? If it does not, it should, for both carbon monoxide and particulate matter analysis.

The 2025 Future with Additional Bus Service only considers additional MTA buses, it does not include buses in other fleets, such as New Jersey Transit and Greyhound. This omission must be rectified. We are also surprised that the bus service additions are only included in this special section, rather than in the standard 2025 analysis. Why was this separated out? Are additional sanitation trips included in the standard analysis? Are additional truck trips to the expanded Convention Center? Is there anything else that has been omitted from the standard analysis?

**Truck Marshalling Path** (pp. 21-33 - 21-34)

The DGEIS does not consider the air quality effects of the truck marshalling path because the Convention Center is “not publicly accessible.” This is an unacceptable omission, given that many shows at the Convention Center are open to the public and the Convention Center itself is a facility to be built with public money for public purposes. Given that much of the rationale for the Proposed Action is to expand attendance at the Convention Center, we certainly need to know whether the air at the Center will be safe to breathe.

**Air Toxics Analysis - Health Risk Assessment** (p. 21-49)

We are concerned that the analysis considers only the carcinogenic effects of toxic air pollution, and does not address other health concerns such as respiratory illness and risk to fetal development. What non-carcinogenic health risks are related to the pollutants found in the study area, and will any of the pollutants be present in high enough quantities in 2010 or 2025 (with the Proposed Action) to trigger these effects?

**Air Toxics Analysis - Impact on Potential Development Sites** (p. 21-50)

The EIS notes that the existing industrial uses south of Penn Station, coupled with the possibility of further industrial development of the area, could generate air pollution bad enough that new buildings on nearby Potential Development Sites must be built with inoperable windows and no air intakes. What will be done to protect workers and residents in existing buildings in this area? Might pedestrians in this area be harmed by the air pollution? What about outdoor workers, such as newsstand operators and street vendors? Must they be barred from this area?

**CHAPTER 22 – NOISE AND VIBRATION**

**Methodology** (pp. 22-2, 22-4, 22-24, 22-26, 22-29, 22-31)

Complete information about the extent of noise impacts and the amount of mitigation required will not be available until the Final EIS is released. The DGEIS’s noise assessment assumes that traffic will be moving at posted speed limits despite the findings in other chapters. Without information about the noise generated when traffic is backed up, we are unable to fully review the Proposed Action. We can only assume that noise will be much worse than is reported in the DGEIS.

We also note that this noise analysis relies on the assumption that most Jets fans are going to take public transit to reach the stadium, and that they will travel with more people in each car than

they do now. The analysis must be redone using more realistic modal splits and vehicle occupancy numbers.

### **Noise Impacts Avoidance and Mitigation (pp. 22-30 - 22-31)**

Due to the extreme noise pollution caused by higher traffic volumes, the City is planning to place E Designations on every potential and projected development site in the Project Area. These E Designations essentially mean that buildings must provide alternative means of ventilation as workers and residents will find open windows unbearable. The EIS also mentions, in passing, that the City will have to provide mitigation to existing residential and commercial developments - basically giving out thick windows and air conditioning units. How many existing residents and businesses will be affected by the noise pollution caused by the Proposed Action? What is the potential cost of the mitigation project? How and when will it be implemented? Does the City plan to pay for the increased electricity bills of existing residents and businesses who will have to increase their air conditioning usage?

Although the DGEIS lists the acceptable noise levels for outdoor spaces in Table 22-2, nowhere does it study what the noise levels will be at the public open spaces that are part of the Proposed Action. Given that outdoor noise levels will exceed 80 dba at many locations, and that the acceptable noise level in many public parks is only 55dba, it is clear that the noise at these new parks could well be unbearable. There is absolutely no discussion of how noise will be mitigated at outdoor locations. This issue must be discussed in the FEIS.

### **Vibration - Existing Conditions (pp. 22-36 - 22-37)**

The DGEIS concludes that only two locations - V1 and V4 - currently experience vibration levels that exceed FTA criteria. However, the study done by the applicant found that vehicles frequently hit the curb when entering the Lincoln Tunnel at site V7, and that this generates vibration levels up to 95 VdB - far in excess of the FTA criteria. Why was this site not included in the list of those currently experiencing vibration problems? Furthermore, the study found that when buses enter the Port Authority Bus Terminal near site V3, they generate vibration levels at 77 VdB. If buses enter the terminal at this location more than 70 times per day, which is likely, this too would exceed FTA criteria. Why was this site also not listed?

### **Future With the Proposed Action, 2010 and 2025 (pp. 22-37 - 22-38)**

Although the DGEIS study shows that existing vehicular traffic already causes FTA Vibration Impact Criteria to be exceeded at several sites within the Study Area, the DGEIS does not consider the effect of additional vehicular traffic on vibration conditions. Instead, it considers only the effect of the Number 7 subway extension. The FEIS should study the effect of traffic growth on vibration conditions experienced throughout the Study Area, and particularly along the major thoroughfares.

## **CHAPTER 24 – PUBLIC HEALTH**

### **General Concerns**

Despite the finding on Page 21-50 that several Potential Development Sites are so close to polluting industrial sources that they will have to have inoperable windows and no outside air intakes, the effects of these toxic emissions are not discussed in the chapter on Public Health. The FEIS must contain an analysis of how these toxic emissions will affect people on the streets and sidewalks south of Penn Station, including people who work outside. The Public Health chapter should include a discussion of the health risks posed by toxic industrial emissions.

### **Construction Impacts, 2010 (pp. 24-8 - 24-9)**

The DGEIS states that there will be no significant adverse impact on public health due to peak construction activities even though PM 2.5 standards will be exceeded. We are particularly concerned about the effects of spikes in PM 2.5 on those with asthma and other respiratory illnesses, given that it can aggravate asthma, increase respiratory symptoms like coughing and difficult breathing, cause chronic bronchitis, decrease lung function and hasten death. Although the DGEIS discusses 24-hour and annual averages, we request a discussion of spikes and their likely health effects. We also ask for an analysis of how the increased PM 2.5 levels will affect particularly vulnerable populations, including the elderly and those with asthma.

### **Mobile Source Pollution (pp. 24-9 - 24-11, 24-13 - 24-14)**

The DGEIS states that the massive traffic congestion caused by the Proposed Action will not have any significant adverse impact even though the Tier 1 analysis that is has done shows that PM 10 and PM 2.5 models would exceed recommended levels. The reasoning is that a Tier 2 analysis, which has not been done, will generate better results. This is a huge and dangerous assumption given the adverse health affects of particulate matter. Without seeing the results of the Tier 2 analysis, we are unable to adequately comment on this issue.

The DGEIS, in its discussion of Solid Waste Management Practices also notes that hundreds of additional tons per day of solid waste will be sent to the 59<sup>th</sup> Street Marine Transfer Station. Have traffic and air quality studies taken into account the additional truck traffic due to solid waste removal?

In its analysis of mobile source pollution, the DGEIS assumes that 70% of Jets fans are going to use public transit to get to the stadium and that they are going to pile more friends into their cars than they do now. That is ridiculous. The analysis should be repeated using more realistic modal splits and vehicle occupancy numbers.

### **Noise and Vibration (pp. 24-11, 24-14)**

We disagree with the conclusion in the DGEIS that E Designations that require inoperable windows and no outside air intakes will adequately address the public health concerns related to noise. The E Designations will do absolutely nothing to mitigate noise and vibrations outside on the City's streets and sidewalks and in all of the new public spaces that the applicant expects to

create. The FEIS should address the effects of noise on people outside - including those walking to and from work and shopping, those who work outside like street vendors and traffic officers, and people using City parks and playgrounds. Also, the FEIS must contain more information about how windows and air conditioners will be paid for and provided to existing residents.

We are also concerned that the DGEIS does not adequately study the effect of noise on public health, as it is based on the assumption that traffic will be moving at posted speed limits. The actual noise levels generated by the Proposed Action are likely to be much greater than those predicted in the DGEIS.

## **CHAPTER 23 – CONSTRUCTION IMPACTS**

### **General Comments**

The DGEIS calls for a long list of mitigation measures, many of which involve significant construction work. Given that these measures are a necessary consequence of the Proposed Action, their construction impacts must be studied as well. What will be the effect on subway riders of construction in four heavily used subway stations? (The DGEIS calls for installation of nine new escalators, eight new staircases, and one new turnstile, and widening of six additional staircases.) What will be the traffic, noise and vibration effects of installation and widening of so many water and sewer mains? Where are the new electric substations, firehouse, and school likely to be located, when are they likely to be built, and what will be the effects of their construction? How will traffic and pedestrians be affected by the widening of so many sidewalks, crosswalks, and corners? What about the installation of the new pedestrian crossing on Eleventh Avenue and the construction of the two new pedestrian overpasses on Route 9A?

### **Neighborhood Character (pp. 23-47 - 23-48, 23-90 - 23-91)**

We refer you to our discussion of Chapter 12 regarding the DGEIS's mischaracterization and underestimation of our neighborhood.

### **Historic and Archaeological Resources (p. 23-91)**

See response to Chapters 9 and 10.

### **Socioeconomic Conditions (p. 23-49)**

The DGEIS predicts that there will be significant lane and sidewalk closures along West 40<sup>th</sup> Street and West 41<sup>st</sup> Street, nearby to residences, stores, and community facilities. The closures would obstruct pedestrian, resident, and truck access and obstruct signage. Nevertheless, the DGEIS concludes that this would result in no significant adverse impacts to these homes, businesses, and facilities. It is inconceivable that a four years of construction and lane and sidewalk closures would not negatively affect residents and businesses (see for example the Time Warner Center construction project) and the FEIS must admit this.

**Open Space** (p. 23-50)

The DGEIS fails to consider the effects of construction on non-Parks-owned community open spaces: HKNA's Bird Park, Bob's Park and the 39<sup>th</sup> Street Dog Run and the 34<sup>th</sup> Street Community Garden. It also fails to consider the effects of construction on the Hudson River waterfront. The FEIS must include an analysis of these elements.

**Traffic** (pp. 23-51 - 23-62, 23-91 - 23-93)

By limiting the study area to an area bounded by 24<sup>th</sup> Street, 43<sup>rd</sup> Street and Eighth Avenue, the DGEIS fails to study the effects of construction on traffic further north, south and east. This is inadequate, given that traffic jams can cause backups miles away. At the very least, the DGEIS must consider longer stretches of Route 9A, 34<sup>th</sup> Street, and 42<sup>nd</sup> Street. It must also consider the effects on river crossings, given that all construction material deliveries will originate outside of Manhattan and all rock spoils must be taken out of Manhattan. We remind the applicant that construction of just one building, the Time Warner Center, required special regulation of river crossings and use of a temporary concrete mixing facility because security at river crossings made timely delivery of construction materials exceedingly complicated.

The traffic analysis does not consider the effect of construction in Lower Manhattan. The DGEIS must analyze how massive construction projects both downtown and in the Hudson Yards area will together affect the river crossings and Route 9A.

Again, we note that it is utterly fantastic to believe that the No. 7 train will begin operation in 2010. The traffic analysis must be redone using a more realistic timetable.

The DGEIS assumes that private development will be evenly spread out over a 15 year period. It seems more likely that development will occur in cycles, and that some years will have more construction than others. The applicant must consider how many buildings are likely to be under construction during a peak development year, and use that number for its analysis. We believe that the bond financing does not presume even, steady development, but expects highs and lows. Why are the same assumptions not used for the DGEIS?

See also our response to Chapter 19.

**Impacts, Air Quality** (pp. 23-63 - 23-74, 23-94)

The DGEIS analysis of air quality related to construction activities does not consider the cumulative effect of other sources of air pollution, including the increased traffic in the area due to the Hudson Yards development, and the concurrent construction activities in Lower Manhattan. For the DGEIS to be adequate, it must add together the effects of various sources of air pollution. In particular, there must be an off-site mobile source analysis performed for the locations likely to suffer the worst combined effects, which we suspect will be the Lincoln Tunnel entrances and exits.

We are very concerned that the construction activities, even with all the proposed mitigation measures and without considering cumulative impacts, will still cause an unacceptable increase

in PM 2.5. The DGEIS notes that the applicant will consider further mitigation possibilities, but there is no reason to believe there is anything they can do that they haven't already come up with. We also note that we are unable to fully analyze the DGEIS without these promised studies.

We echo the request of Manhattan Community Board No. 1, expressed in its response to the DEIS for the Fulton Street Transit Center, urging that ongoing air quality and contaminated materials be constantly monitored during the years of construction in order to insure that proper steps are actually taken to minimize mobile and stationary source pollution. We also support on-site emissions testing of diesel machinery to ensure compliance with contracts and with the law. Air quality and emissions data should be posted on a website and frequently updated. The applicant's plan relies heavily on the assumption that low-sulfur fuel will be used and a variety of steps will be taken to reduce emissions. This will require constant monitoring.

We also echo the request of Manhattan Community Board No. 1 that the City enforce the idling laws with respect to construction vehicles and trucks and manage the construction schedule to avoid idling.

See also our comments on Chapter 21.

#### **Impacts, Noise and Vibration (pp. 23-74 - 23-84, 23-94)**

Again, the DGEIS fails to consider the cumulative impacts of all the different aspects of the Proposed Action that contribute to noise pollution and vibration. The DGEIS must add up the effects of regular traffic, construction activity, and construction vehicles.

It is not enough that the applicant is "considering" noise mitigation measures such as using walled enclosures, muffling devices, doing noisy work during the day, and using alternative construction methods. Rather, these mitigation measures must be required when construction is to take place near noise sensitive receptors. As the applicant notes, construction will go for many years and will be extremely noisy. Without appropriate mitigation, our neighborhood will become unliveable.

See also our response to Chapter 22.

#### **Impacts, Natural Resources (pp. 23-84 - 23-85)**

We disagree with the applicant's conclusion that there is no alternative that would limit construction within the floodplain. This is only due to the extremely narrow and specific crafting of the project goals. We believe that there are clearly alternative development paths for this neighborhood, and that these would require less construction in the 100 year flood hazard zone. In particular, we take issue with the applicant's conclusion that the stadium could not be built anywhere in New York other than the Hudson Yards area, especially given that NYC 2012 has considered numerous alternative locations throughout the five boroughs.

Thank you for this opportunity to provide comments and to submit recommendations on this very important study. We look forward to a final EIS document that addresses the concerns raised herein.

Sincerely,

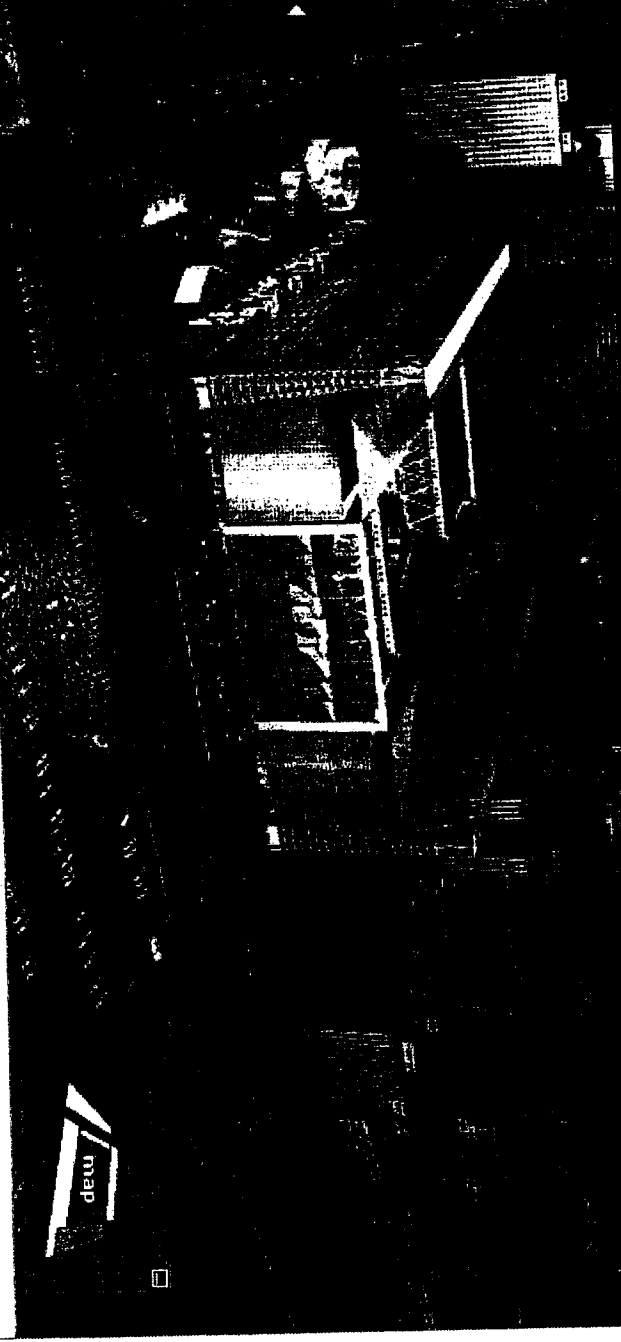
A handwritten signature in black ink, appearing to read "Walter Mankoff". The signature is written in a cursive style with a large, sweeping initial "W".

Walter Mankoff  
Chair



# NY SPORTS AND CONVENTION CENTER

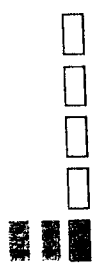
- Information
- Riverfront Views
- Design Process
- Public Spaces
- Lighting
- Transparency
- Open Studios
- Contact



map

## Public Spaces

**The Hudson Terrace**  
Riverfront views, restaurants, landscaping, and a café reminiscent of the 70th Street Boat Basin in Riverside Park combine to create a scenic new spot to watch bikers, kayaks and boats stream past. The promenade over 12th Avenue also gives the neighborhood an



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# **HELL'S KITCHEN/HUDSON YARDS ALLIANCE**

**212-541-5996 / Info@hkhyalliance.org / www.hkhyalliance.org**

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## **Testimony before the City Planning Commission on the proposed Hudson Yards plan for Hell's Kitchen South:**

This testimony is being submitted on behalf of the Hell's Kitchen/Hudson Yards Alliance. I want to thank you for the opportunity to speak with you today. We appreciate your appearing with us this evening to more fully investigate the ramifications of the Hudson Yards plan for West Siders and the people of Manhattan, and we know that our membership appreciates the opportunity to speak with you and people from your office about the plan.

Today, we are here to ask you to vote No to the ULURP's pending before you unless the City makes serious changes to their plans to redevelop Hell's Kitchen South.

The Hell's Kitchen/Hudson Yards Alliance was formed to provide a balanced community response to the New York City Administration's plans to redevelop the West Side of Manhattan from 28th to 42nd streets, west of Eighth Avenue. The Alliance brings together hundreds of community members, civic and business organizations, your entire local elected officials from Hell's Kitchen/Clinton and Chelsea, and others from across the city.

The Alliance is committed to maintaining and expanding the strong residential community on the West Side. To achieve this the Alliance seeks to:

- Encourage residential and commercial development at rational and balanced densities.
- Preserve and produce affordable housing
- Create and enhance open space, parks and waterfront access.
- Provide for social infrastructure such as schools and libraries.
- Expand the Jacob K. Javits Convention Center.
- Implement comprehensive traffic management and transportation plans

The Hell's Kitchen/Hudson Yards Alliance supports residential and commercial development in Hell's Kitchen that balances the needs of the neighborhood, the city, and the region. Parts of the neighborhood now zoned for low-density industrial use should be rezoned to allow for contextual expansion of residential and commercial uses in Hell's Kitchen and to facilitate affordable housing opportunities. While we appreciate the Mayor's desire to rezone Hell's Kitchen South, he fails to get our priorities right. However, the Lower Density Alternative provides for a density that is closer to what the Alliance seeks for this community with much more affordable housing. The following is the Alliance position on the future development of Hell's Kitchen. The Draft Environmental Impact State is so deficient, that it has failed to provide the public sufficient information to be able to adequately comment on the plan. The city agreed to study the traffic noise, pollution but in their 6,000 pages of documents, they never disclose the impacts or failed to study them. In addition, this is far from a well-constituted plan as required by law. There is more commercial than they can prove they need, not enough residential as the low vacancy rates have proven and a total lack of a plan for decent affordable

### Transportation

The city should consider alternatives to the proposed route of the No. 7 line extension. Alternatives to consider include a shuttle west from Penn Station to Eleventh Avenue partly along existing rights of way or a moving sidewalk, light rail, and expanded bus services.

If the City makes the above commitments, the ALLIANCE would accept the following changes in our neighborhood:

### Density & Use

The substantial upzoning in this plan, particularly the enormous bonus density available to developers, is extremely problematic for our community. The proposed rezoning without any bonuses are the type of rezoning this community needs. Therefore, we ask that all rezoning be limited to the density proposed and prohibit any upzoning bonuses beyond the development of new affordable housing. Mid-blocks should be zoned purely residential, and no portion of the area should be zoned solely for commercial development. (The indicated FAR include bonuses).

### Residential

- Maintain medium density with a maximum building height of 95 feet along 9<sup>th</sup> Avenue, the "Main Street" of Hell's Kitchen, from 41<sup>st</sup> to 35<sup>th</sup> Streets; this will be a residential zone with ground floor local retail use (FAR 6).
- Maintain the lower density with a maximum building height of 85 feet between 9<sup>th</sup> and 10<sup>th</sup> avenues, from 41<sup>st</sup> to 35<sup>th</sup> Streets; this will be a residential zone (FAR 5).
- Increase density with a maximum building height to 125 feet on 10<sup>th</sup> Avenue, from 41<sup>st</sup> to 35<sup>th</sup> Streets; this will be a residential zone and ground floor local retail use (FAR 7.5). This zoning would also apply on each street up to parks over the Amtrak right-of-way.

### Commercial & Residential Use

- Increase to a maximum density along the 30<sup>th</sup> to 35<sup>th</sup> street corridor from 8<sup>th</sup> Avenue to 12<sup>th</sup> Avenue as a mixed-use zone, with FAR limited unless issues of traffic, air pollution and water pollution raised in the Environmental Impact Statement are resolved. This higher density mixed-use designation allows for commercial, hotel, institutional, and residential use.
- Allow high density on 11<sup>th</sup> and 12<sup>th</sup> Avenue from 41<sup>st</sup> Street to 35<sup>th</sup> Street for mixed-use zone structured in a way that preserves maximum light and air to the neighborhood: above a 13-story base, the towers will have floor-plates no larger than 8000 square feet and horizontal dimension facing 11<sup>th</sup> avenue and the Hudson river of no more than 80 feet. The total building height will not exceed 37 stories. This allows for commercial, hotel, institutional, and residential use (FAR 12).

### Conclusion

I want to thank you for the opportunity to speak to you today and appreciate the commitment you have made to our community. We hope that you will continue to be an ally to the West Side and join us in saying "no" to the Hudson Yards plan, unless the City is willing to excise the stadium and include a genuine plan for affordable housing. The West Side has a vibrant residential and commercial community, one that can expand with further development in our neighborhood—but we need that development to be rational, productive and human-scale, which the current Hudson Yards plan is certainly not.

9/22/2004

Page 3 of 4

My name is [redacted] an urban designer and consultant to the Hell's Kitchen Neighborhood Association

~~My name is [redacted] an urban designer and consultant to the Hudson Yards Plan~~

~~My name is [redacted] an urban designer and consultant to the Hudson Yards Plan~~

- ~~The stadium and stadium plaza are not used for development and the~~  
~~potential for high density office development is lost~~
- Because the stadium and stadium plaza are not used for development, it forces high density office development in the Hudson Yards Plan to go on between 10<sup>th</sup> and 11<sup>th</sup> avenues ~~in a north-south direction~~

- The location of the stadium also forces the Javits convention center to expand north - eliminating waterfront access. ~~As a result, the convention center expansion~~  
~~is forced to be located north of the west rail yard~~  
~~is a massive wall of tall office buildings~~

- The stadium also requires substantial amount of parking - leading to the ~~the~~ ~~proposed~~ ~~under~~ ~~ground~~ ~~garage~~ ~~under~~ ~~the~~ ~~mid~~ ~~block~~ ~~boulevard~~ ~~between~~ ~~33rd~~ ~~and~~ ~~36th~~ ~~streets~~ ~~as~~ ~~well~~ ~~as~~ ~~on~~ ~~top~~ ~~of~~ ~~the~~ ~~deck~~ ~~at~~ ~~the~~ ~~east~~ ~~rail~~ ~~yard~~ ~~plaza~~ - causing the plaza to be 10 feet above street level

- The stadium also requires that the construction of the #7 subway start immediately. The #7 is otherwise not necessary right now - because the proposed office buildings on 11<sup>th</sup> avenue are only expected to be developed 15-20 years from now. In fact, the stadium is driving the timetable for the public infrastructure.

The net result is that by putting ~~these~~ office buildings and the Convention center expansion to the north ~~creates~~ a massive wall of tall office buildings that prevent the expansion of a real residential neighborhood to the waterfront. The north convention center expansion closes west 39<sup>th</sup>, 40<sup>th</sup> street and 41<sup>st</sup> streets to the waterfront. This cuts off access of the neighborhood to the river and cuts off the access from the new and expanded 39<sup>th</sup> ferry terminal to the proposed office development.

The north-south orientation of the Hudson Yards plan is all wrong!  
 Show: the boulevard and high density building form a wall to the river and limit the expansion of the south hell's kitchen neighborhood  
 Show: the north convention center expansion closes west 39<sup>th</sup>, 40<sup>th</sup> street and 41<sup>st</sup> streets to the waterfront.

IN FACT, THE STADIUM IS DICTATING THE PUBLIC INFRASTRUCTURE INCLUDING THE TIMETABLE FOR #7 SUBWAY AND THE CONSTRUCTION OF PUBLIC PARKING GARAGES

I am Kathleen Treat, chair of the Hell's Kitchen Neighborhood Association. We are 400 strong and our membership is growing every day.

~~Skyscraper office towers will take our sky and our life away from us.~~  
The Hell's Kitchen Hudson Yards Alliance  
Our plan for the forty square blocks of the Hudson Yards includes much more green space, much more open space. It's a user-friendly plan for rational growth, with equal parts housing to commercial space.

Yorkville and Gramercy Park used to be real New York neighborhoods, with their own distinctive character. Hell's Kitchen is still a real neighborhood. We have a shoe repair that's been on 9<sup>th</sup> Avenue since the second world war. For fifteen years I've bought my fish from the same shop, and I have a favorite butcher, too. ~~When I walk down the street I see shops with fronts that are real. I have coffee at the Cupcake Cafe - a one-of-a-kind treasure - not a faceless franchise.~~

~~We have a great history.~~  
Hell's Kitchen is New York City's history.

communities

We don't reject growth - we want it to be on a human-scale, and we want what all neighborhoods need: mixed-use buildings, playgrounds, genuinely affordable housing, good schools, a soccer field, streets safe for pedestrians.

We don't ~~need~~ <sup>need</sup> a stadium.

Daniel Gutman  
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New York, N.Y. 10036  
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October 4, 2004

Emil F. Dul, P.E.  
Principal Engineer, MTA-NYCT  
2 Broadway, 2nd Floor  
New York, New York 10004

Robert Dobruskin,  
22 Reade Street, Room 4E  
Director EARD, NYCDCP  
New York, New York 10007

Dear Messrs. Dul and Dobruskin,

I submit the following comments on the draft generic environmental impact statement (DGEIS) regarding the Hudson Yards proposal (CEQR No. 03DCP031M).

Air Quality Analysis

1. According to the EIS, air pollutant emissions from the Lincoln Tunnel portals contribute minimally to concentrations at sidewalk level. As the EIS puts it: "Since the portals are below street level, their impact at street-level sidewalk receptors would be minimal" (DGEIS, p. 21-33). This conclusion is apparently an interpretation of modeling results, rather than a consideration based on the physics of the situation. The problem, however, is that the modeling results are wrong.

The Lincoln Tunnel ascends to an exit plaza that varies from about 30 to 20 feet below street level (not 40 feet as claimed by the EIS). The 38th and 39th street sidewalks are atop of the walls of the exit plaza. Vehicles leaving the tunnel create jets of air that carry pollutants into the exit plaza. The walls of the exit plaza confine the pollutants, permitting them to rise to street level before being dispersed by the wind. Pollutants are thus at the same level as the sidewalks when they are picked up by the wind, causing relatively high concentrations on adjacent sidewalks.

The dispersion model chosen for the task, Industrial Source Complex (ISC3), is unsuited for this situation because it was developed for industrial sources, not highways. The ISC3 model was not designed for and cannot correctly portray the physical relationship between the Lincoln Tunnel portals and nearby sidewalks. Using ISC3, the EIS modeled sidewalk receptors as elevated points in space, failing to account for the walls of the exit plaza. In

doing so the EIS assumes that pollutants can bypass the adjacent sidewalks by traveling through the walls of the exit plaza and then through the ground under the sidewalks. That obviously absurd assumption led to the incorrect results and “explanation” quoted above..

The EIS should have used a more appropriate dispersion model, one designed for depressed sections of highways, such as EPA’s HIWAY model or CALINE3, the prototype for CAL3QHC, the dispersion model the EIS used for all other street and highway segments.

2. The EIS does not use DEC’s guidance value for significance of annual PM 2.5 impacts of  $0.3 \mu\text{g}/\text{m}^3$ . Rather for stationary sources the EIS uses a value of  $0.1 \mu\text{g}/\text{m}^3$  averaged over a one square kilometer area, a criterion that is likely to be less stringent than the DEC standard for sources with short stacks and little plume rise. Since most of the stationary sources the EIS examined are in that category, the EIS fails to disclose the full extent of risks to public health.
3. The Lincoln Tunnel ventilation building analysis is seriously flawed. The Javits Convention Center expansion will envelop two of the ventilation buildings, and the roof the Javits Center expansion will be almost as high as the ventilation building smokestacks, creating essentially one structure. Nevertheless the ISC3 modeling of ventilation building exhaust does not include the downwash effect of the Javits Center building on the plumes from the ventilation buildings. Also receptors on the Javits Center roof are modeled not as locations on a building, but as points in space, an obvious mischaracterization that underestimates pollutant concentrations on a roof next to a smokestack.
4. The stationary source analysis examined receptors on future residential buildings, but not on future commercial buildings (DGEIS, p. 21-35). But commercial buildings have air intake vents that are, in fact, receptors for air pollutants, and those must be examined as well (CEQR manual, p. 3Q-17). If the locations of air intake vents on future commercial buildings are unknown, then an (E) designation should be entered for each commercial site and the DGEIS should state that any future commercial buildings would be subject to an environmental review, possibly requiring a supplemental environmental impact statement.
5. The wall separating the truck marshalling tunnel exhaust from the Twelfth Avenue sidewalk (DGEIS, p. 21-34) would divert the plume either north or south, and there is no wall separating the exhaust from the 41st Street sidewalk. Impacts on the 41st Street sidewalk should be evaluated.

#### Socioeconomic Impacts and Public Policy

6. The EIS dismisses all concern about secondary residential displacement with the claim that “the Proposed Action would ameliorate increases in rents and property values by substantially increasing the supply of housing” (DGEIS, p. 5-33). This analysis fails to acknowledge the potential demand for nearby residences by the 112,000 workers in the new commercial space. Surely some of those workers will want to live nearby, and it won’t take many to overwhelm any “amelioration” and add substantially to development pressure in Clinton and Chelsea.
7. The State of New York has previously recognized that commercial development in nearby

portions of Midtown, such as Times Square, “will undoubtedly accelerate development pressures in Clinton” (see Times Square FEIS, pp. 2-53, 10-101). The State cannot credibly deny that the Hudson Yards proposal, with over three times the commercial space of the Times Square Redevelopment project, will not have commensurably larger negative impacts on Clinton.

8. Higher rents and gentrification in Clinton as a result of development pressure from the Hudson Yards project would also be contrary to public policy (see DGEIS, p. 4-4, and Zoning Resolution §96-00 (b)), an impact the EIS does not examine.

### Traffic

9. The EIS appears to have used full attendance at a football game on Sunday or another event on a weeknight, combined with 85th percentile events at MSG and the convention center. The EIS then claims that an 85th percentile event at MSG or the convention center would be unlikely to coincide with a football game. That assumption might be reasonable if all events were randomly distributed. But events are not randomly distributed; for example football games always occur in the fall and winter. Some of the biggest events at the Javits also occur in the winter. The biggest — the Gift Show — takes place in January and could coincide with a football game (see EIS, Appendix S-1).

The Boat Show is also held in January in combination with two or three trade shows (see EIS, Appendix S-1). The combined Sunday attendance is higher than the 85th percentile convention center event (43,000 vs. 38,000). The same kind of analysis should be applied to events at MSG. For example hockey and football occur in the same season, and both the Rangers and Jets are playing home games this year on November 1, a Monday evening.

10. Future base traffic volumes are derived from existing traffic volumes. Existing traffic volumes are based on counts taken in June, 2003, which probably did not represent an 85th percentile, or higher, day at either the convention center or MSG. Quite possibly nothing was happening at either venue. Thus adding only the incremental changes in 85th percentile convention center and MSG trips to base traffic does not represent simultaneous “major” events, as claimed. The full traffic from 85th percentile events should have been used instead, after subtracting the actual traffic, if any, at MSG and the convention center on those particular June days.
11. The EIS increases background traffic by 0.5% per year up to the assumed build-year of 2025, increasing base traffic by 10.5% over the twenty year period. The analysis was termed “conservative,” but in this respect is not conservative at all. In reality EDC expects that the amount of office and residential space projected will be built over a thirty-year period from 2005 to 2035. Over that period background traffic will grow by 16%, not 10.5%. Hudson Yards traffic added to the larger base traffic volumes in 2035 would cause devastating traffic impacts throughout the area. By choosing an early build-year, not supported by economic projections, the EIS failed to disclose the actual traffic impact of the Hudson Yards proposal.
12. The EIS traffic analysis is flawed because it does not fairly portray the extent of current traffic congestion. It is well known that traffic congestion, largely due to the Lincoln Tunnel, currently causes extensive queuing on area streets. Yet the EIS portrays most



intersections as operating well below capacity. For example the intersection of 42nd Street and Ninth Avenue is portrayed as having a level of service of "C" in the p.m. peak hour, with a southbound volume-to-capacity ratio of 0.88, even though it is well known that the intersection operates well over capacity (in modeling terms), causing backups into upstream blocks. Thus there is no spare capacity at that intersection for future increases in traffic. Additional traffic will simply extend the Ninth Avenue queue north of 50th Street.

To take another example, it is absurd to think that northbound Eighth Avenue in front of the Port Authority Bus Terminal at 42nd Street operates at a volume-to-capacity ratio of 0.71 in the p.m. peak hour. There are many more equally ludicrous examples.

13. Although speed runs were promised, the EIS does not disclose the comparison of existing delays with speed runs.
14. Pedestrian safety is an important consideration. The EIS shows that many intersections are already dangerous for pedestrians and bicyclists. To handle additional vehicular traffic generated by the Hudson Yards project, the EIS proposes adding traffic lanes at many intersections. But the EIS does not consider the likely impact on the safety of pedestrians and bicyclists of adding traffic lanes at already dangerous intersections.

#### Route 9A deck

15. According to the EIS, the Route 9A deck "would result in exceedances of the 24-hour and annual PM2.5 DEP STV guidance for both analysis years at locations along Route 9A near the portals of the covered roadway that would be created by development of the deck." The EIS then speculates that "significant adverse air quality impacts could be avoided through the incorporation of a mechanical ventilation system into the design of the deck, by shortening the deck or by developing two shorter decks rather than one longer deck," but fails to actually do the analysis.
16. According to the Deputy Mayor, the Route 9A deck is an integral part of the stadium proposal. Thus the environmental analysis of the stadium is not complete without the missing air quality analysis of the Route 9A deck. The EIS also fails to provide a complete analysis of the impact of the Route 9A deck and berm on Hudson River Park.

#### Parking

17. The proposed parking requirement, along with construction of new public garages, would reverse a twenty-year policy originally adopted for traffic control and environmental reasons.<sup>1</sup> The rationale for the current parking policy is the conviction that requiring more parking spaces would simply encourage more traffic to enter the Central Business District, an undesirable result. The EIS failed to consider the full impact on traffic conditions and the environment of abandoning the existing Midtown parking regulation in the entire Hudson Yards area.
18. The Hudson Yards proposal would allow up to 25,000<sup>new</sup> parking spaces.<sup>2</sup> This is an enormous

<sup>1</sup> NYC Zoning Resolution, Article 1, Chapter 3, Section 13-00.

<sup>2</sup> The calculation is as follows: 28 million square feet of commercial space, at one parking space per 2,500 square

number, considering that there are only about 140,000 off-street spaces in all of Manhattan south of 60th Street. More parking means more commuter traffic entering and leaving the area, adding to traffic congestion. The EIS based its traffic analysis on the minimum number of parking spaces required by proposed zoning. The EIS thus failed to consider that the maximum allowed number — 25,000 parking spaces — will in fact be built, and it failed to consider the impact that these <sup>new</sup> spaces would have in attracting even more traffic to the area.

19. On the other hand, the EIS failed to consider that limiting future parking in line with the current Midtown parking regulation would limit traffic in the area. There is no doubt that many vehicular trips have their endpoints at proposed parking garages. Constrain the number of parking spaces and you reduce the number of vehicular trips to the area. Vehicular trips would either be diverted to other areas with spare parking or drivers would be induced, both by scarcity of parking and consequent price rises, to shift to other modes of transportation.
20. The current parking regulation should be viewed as a traffic mitigation measure; it would substitute for proposed mitigation measures that increase the number of traffic lanes at many intersections. The current regulation limits accessory residential parking spaces to 20% of residential units and accessory commercial parking spaces to 100 per commercial building. However the regulation does not prevent conversion of accessory spaces to valet parking, increasing the actual number of parking spaces, and also allows public parking garages by special permit.
21. The EIS failed to correctly count existing parking spaces in the area. Many facilities that use valet parking, and those that add mechanical lifters, actually have higher capacities than the licensed capacity.
22. The following table lists parking facilities that exist, but were not counted.

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feet, or 11,200 spaces; residential accessory spaces equal 50% of 12,600 dwelling units, or 6,300 spaces. The total number of accessory self-park spaces is 17,500. After construction, developers typically convert garages to valet parking, increasing capacity by 50%. Thus the actual total number of new parking spaces could reach 25,000.

### Uncounted Parking Facilities

Name of Facility	Address	License No.	Licensed Capacity	Actual Capacity
Edison Parking	601 West 41st Street	1078818	194	197
Central Parking System	800 Sixth Avenue		45	50
Icon Parking LLC	58-70 W. 37-59-61 W. 36	3429528	150	150
	161-165 10th Avenue	1006124	80	80
	535 W. 19th Street	1026615	70	70
Central Parking of NY	550 W. 37th Street	1099321	37	43
Enterprise 30th Street	505-509 W. 29th Street	1154257	130	70
Parking Corp.	139 West 35th Street	917272	24	30
Cosmo Park	360 W. 43rd Street	1130474	105	120
	476-490 11th Avenue	927315	158	158
Central Parking System	485 10th Avenue	1183132	55	65
Theater Parking	413-419 W. 45th	1001638	100	100
<b>TOTAL</b>				<b>1,133</b>

Sincerely,

  
Daniel Gutman

September 20, 2004

Mr. Robert Dobruskin, AICP  
NYC Dept of City Planning  
22 Reade Street #4E  
New York, N.Y. 10007

William C. Ashe  
Owner Block 706, Lot 48

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ENVIRONMENTAL NEW YORK

re: ULURP No. 040507 MMM  
CEQR No 03DCP031M  
SEQRA Classification Type 1  
Hearing Date 9/23/04  
DGEIS Written Public Hearing Comments

Dear Sir or Madam,

I would like to go on record as being opposed to the construction of a stadium above the West Side Rail Yards, for many reasons. As a property owner and landlord, I depend on my property for my livelihood. The plan for redevelopment would condemn my property and take from me my primary source of income, for which I have worked most of my life. In addition it would displace my tenants, who have recently installed their corporate headquarters in my renovated property.

When I hear political officials refer to the "blighted, underdeveloped" west side of today, I think back to the 1970s when young businesspersons like myself bought property in the "Way-West" Hudson Yards area. Back then descriptions of this as a blighted, seedy neighborhood were certainly true. Soon after the Javits Center was built, there were many proposals for rezoning and bureaucratic help for the neighborhood. Sadly, these changes never materialized.

Even so, the neighborhood slowly improved as small business pioneers, like myself, bought property and ran businesses in the area. Their faith in the neighborhood created this improvement. For example, when the parks department planted trees on my block some of the truckers complained it made it difficult to make deliveries. But I was all for the trees, and after the first one planted in front of my building was destroyed by a truck, I had another one planted at my expense. When that one was mowed down I again replaced it at my expense, and that time installed barriers to protect it. It's still there and looks great!

Now the city subsidizing a Stadium for a football organization seems fiscally irresponsible. The big winner in this deal will be the N.Y. Jets and the losers will be the vast majority of tax paying New Yorkers. I am not opposed to progress and redevelopment on the westside,

560 W 43rd St., Suite 43A NY, NY 10036 212 695 6473  
www.billashe.com

however building a rarely used football stadium on some of the most valuable ground left in Manhattan is a grave mistake. It would not encourage development, but rather create sporadic traffic nightmares. And where would all these football fans have their tailgate parties? On the

2

surrounding streets? Or would they simply abandon their beloved team for one that allows them this essential football tradition.

Why not use this site for some mixed use towers, similar to what you have in mind for my block? It wouldn't use taxpayers money, and if you throw in some subsidized housing everyone might be happy (with the exception of one or two individuals and the Jets organization.)

The hosting of the 2012 Olympic games in NYC, however important to some individuals, should not be the keystone in the redevelopment of a vast area of the greatest city in the world. Should the Olympic Committee select New York, I am sure we can create the necessary facilities without the burden of a sports arena in the middle of Manhattan. The recent hosting of the Republican Convention brought midtown to a halt, paralyzed traffic, and gave NYC, for it's residents, the feel of a police state. If a few thousand visitors can do that, what will happen when tens of thousands of visitors from around the world arrive at a midtown facility. In planning the redevelopment of such a large area of New York, it seems very short sighted to connect such development to the dreams of hosting a single event in Midtown.

In conclusion, I do favor redevelopment. I feel re-zoning of the west side is essential. I think creation of open space is also essential. However I am fearful of losing my property where I ran a successful business for over 20 years and now depend on it for my livelihood. I have invested a great deal of money in its renovation and through a lifetime of hard work have created a valuable asset upon which I depend. I do oppose the construction of a stadium on one of the most valuable parcels left in one of the, already, most congested urban centers on earth. This project will enhance the fortunes of a limited few at the expense of many hard working small businesses. I favor rethinking the project without the stadium.

Sincerely,

William C. Ashe

cc Emil F. Dul PE

Bernard Flaton Esq.

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470 WEST 24TH STREET 19B  
NEW YORK NY 10011-1240  
1 212 691 7397

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26 September 2004

City of New York Planning Commission  
22 Reade Street, 4E  
New York, NY 10007

Attention: Robert Dobruskin, AICP

RE: DGEIS for proposed Hudson Yards Rezoning and Development Program

Dear Mr. Dobruskin:

I am writing about the proposed Hudson Yards Plan, which was the subject of the public hearing on 23 September 2004, and which I was present at.

It's an ambitious plan, and integrating this western side of Manhattan into the larger flow of city would seem to be based on good intentions. In its sweep, however, the plan seems to gloss over—"bulldoze" might be a more apt word—other considerations important to the life of city and its residents. I speak of quality of life, stability of community, sustainable development, and proper attention to the environment.

In any public policy decision, cost must be weighed against benefits. How beneficial is a decision going to be, and at what cost? And over what time period? If the cost is too high, if they go on for years and years, then obviously the benefits are diminished. And then there is basic matter of who pays for the cost. And who benefits.

Specifically, my concerns have to do with the proposed stadium. First, on a practical level, the quality of life in adjacent neighborhoods—as well as midtown Manhattan—would be

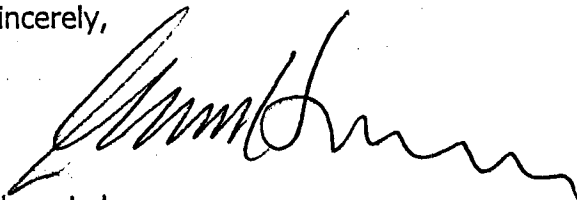
severely impacted by the presence of such a stadium. Imagine the deluge of 60,000 to 75,000 people every other weekend for a Jets game. Consider the traffic tie-ups, the noise, the glaring lights, the trash, the police necessary for crowd control. Consider the burden on electricity, water and sewage, roads and transportation. Think about the loss of parking, the inevitable crime, the mess, the repeated invasion into neighborhood and community life. The social costs are terrible. Would anyone on the Planning Commission want a stadium in his or her neighborhood? I don't think so.

On an economic level, the costs are huge. Who will pay? Not the Jets, after they drop their initial contribution. It will be New Yorkers who will foot the bill, year upon year upon year—not only for the actual construction but also for the maintenance and repairs and police and congestion, roadwork, infrastructure. All this outlay takes away from money that could be better invested in education, which would benefit New Yorkers much more. The Jets will have their tax break; what tax break will New Yorkers get? This is not intelligent, sustainable development. Nor can I imagine that my property values will rise with the presence of a stadium in the neighborhood.

Finally, on an environmental level, a stadium puts dangerous strain on an urban environment already under strain. A stadium would be an environmental insult—to neighborhoods, communities, the borough of Manhattan. It will make huge demands on city infrastructure, electricity, water supply, the sewer system, roads, bridges, and tunnels, and, I repeat, quality of life. Noise, lights, crowds, trash, the influx of rowdies into neighborhoods, the loss of already scarce parking spaces. Things will not be better for this stadium; things will be frighteningly worse. And the costs will only grow year after year.

A stadium does not belong in the city proper. I am a sports fan, but to foist my sports enthusiasm on an unsuspecting neighborhood that will have to pay for it does not seem fair or just or socially responsible. Construct a stadium where it is appreciated by all.

Sincerely,



Elmer Luke



SHAPING PUBLIC POLICY

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TESTIMONY PRESENTED BY  
BARBARA ZUCKER, CHAIR  
HOUSING AND PLANNING COMMITTEE

BEFORE THE CITY PLANNING COMMISSION  
REGARDING HUDSON YARDS ULURP APPLICATION

DATE: SEPTEMBER 23, 2004

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The Women's City Club of New York is an 89-year old nonpartisan advocacy organization concerned with a broad range of public policy issues in New York City. Our hundreds of members are dedicated to making New York City a better place in which to work and live. We recognize that the development of Hudson Yards is a unique opportunity to create a vibrant mixed-use community in mid-Manhattan fronting on the Hudson River. Because of the scarcity of large potential development sites in Manhattan, and the major capital investment involved, it is essential that we "get it right."

Affordable Housing. One of the Women's City Club's long-standing concerns is the lack of affordable housing in New York City. In June 2004 we published a report, "New York City's Affordable Housing Crisis, What Can Be Done?" We noted that while there are a number of programs with various incentives to encourage development of affordable housing, these are voluntary and temporary.

We believe that affordable housing must be made an integral and mandatory element of all residential developments constructed with government assistance, whether the assistance is in the form of tax subsidies or abatements or Brownfield cleanup or upzoning.



Only 3% of the Hudson Yards area is currently zoned for residential use. The zoning amendment in the ULURP application proposes that density in Hudson Yards be greatly increased. If adopted, the Department of City Planning projects that it would result in a likely 30-year build-out of 12 million square feet of residential development, in the form of 12,600 new residential units. However, not one single housing unit of those 12,600 need be affordable. That is left entirely up to the developers. Those who choose to build so called 80/20 houses will receive an additional benefit – greater density through an increased FAR. But it is entirely voluntary, and the affordability is for a limited period of time. We submit that the upzoning should mandate that a portion of the housing be affordable to low and middle income residents.

**More Flexible Zoning.** The major portion of Hudson Yards, some 28 million square feet, is to be zoned for commercial use. Even taking into account the extended build-out period, some economists question whether the area can really support this much additional commercial space. In view of the uncertainty, we suggest that a portion of the rezoning be sufficiently flexible that it permit either commercial or residential use, depending on future demand.

**Financing.** The original agreement between New York City and the Battery Park City Authority provided for payments to the City to be used for affordable housing. Nevertheless, most receipts have gone into New York City's general revenue fund. Now the City is proposing to use reserve funds from the Battery Park City Authority for its share of the infrastructure improvements in Hudson Yards. We oppose such diversion of funds.

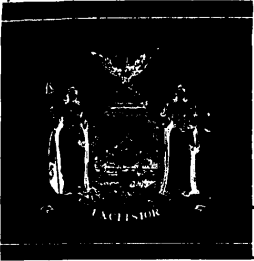
**Football Stadium/Convention Facility.** The Women's City Club does not believe that a stadium belongs in midtown Manhattan where it would create traffic, noise and air pollution. Moreover, a structure equivalent to a 30-story building would block both visual and physical access to the Hudson River. There are other possible locations for an Olympic Stadium in New York or New Jersey. There are no other vacant waterfront locations of similar size in mid-Manhattan.

In addition to the very substantial cost of the infrastructure for the multi-use facility, there is a quality of life cost for our residents. The proposed financing plan includes sale of development rights in return for permitting developers to build with greater density. Absent a stadium, a redeveloped Hudson Yards would likely still include a platform over the rail yards. However, without a need for \$225 million to pay for a retractable roof, the Department of City Planning might be less generous with density bonuses.

**Javits Convention Center.** We do support expansion of the Jacob K. Javits Convention Center. For many years there have been complaints that the existing convention center is too small to attract large meetings and multi-day events. Conventioneers bring needed revenue to New York City. With the planned adjacent hotel and more convenient subway access, the expanded Javits Center should attract additional convention business.

As a State project built on State land, there is little provision for public comment on the particulars of the Javits Center expansion and little oversight on its implementation. Despite the lack of input, New York City is expected to contribute \$350 million towards the cost of the Javits Center project. As previously noted, we particularly object to the use of Battery Park City funds for that contribution since Battery Park City surplus was supposed to be earmarked for affordable housing.

**Transportation.** Lack of public transportation has been a major impediment to the development of Hudson Yards and full use of the Javits Center. We believe that the proposed two-step extension of the #7 subway line would improve access and is likely to speed up development. As an interim solution, we suggest the MTA provide more frequent bus service on the 42<sup>nd</sup> Street corridor, such as bus-only or express bus lanes. And to improve access from the west, we support plans to increase ferry service from New Jersey.



News from ...

~~Due~~ (Rec'd 20 Oct 04)  
→ Kong (Lundy  
J Brown (PB Team)

# SENATOR THOMAS K. DUANE

29TH SENATORIAL DISTRICT • NEW YORK STATE SENATE

## Testimony by New York State Senator Tom Duane At the City Planning Commission Hearing

Thursday, September 23, 2004

I am the New York State Senator for the area affected by the proposals before you today. Many have already highlighted the flawed elements of the Mayor's proposal. I have already presented testimony before the Economic Development Committee of the New York City Council and at the Borough President's hearing on this important topic (which I have attached), so today I will simply highlight the most important reasons why this proposal should be rejected.

- Twenty-eight million square feet of office space is excessive, especially with the new construction and development in Lower Manhattan and Downtown Brooklyn. These potentially enormous office towers will create a wall that prevents residents and visitors from enjoying the many wonderful things on the West Side. Office space should be included in the rezoning, but it should be part of a mixed-use plan that includes space for small and emerging businesses as well.
- No comprehensive plan exists for developing affordable housing. Temporary 80-20 deals are not acceptable. While 421A and J51 type proposals are flawed, they can be used as a starting point for providing permanent affordable, low income and special needs housing. Penn South provides one excellent blueprint. I would ask Mayor Bloomberg: *where is your housing plan?*
- The plan displaces my constituents--residents and business people who, sadly, the Mayor thinks are expendable for a stadium and

excessive office space. Many of the small and medium-sized businesses that provide essential products and services to Midtown either own their property outright or pay reasonable rents and they have invested heavily in their spaces. These important businesses would be forced to leave. In addition to the spaces and buildings being well-suited for either their industrial or commercial uses, because they have been designed and renovated over the years to maximize their efficiency and economy, the costs to these businesses to relocate would be too great. This uprooting of local businesses is unacceptable. We will be losing them and the jobs they have created forever.

- Some of the buildings should be considered for landmark protection.
- The traffic and pollution is already terrible in Midtown and the West Side. Under the Mayor's proposal, which revolves around a stadium and not smart, responsible development, the environment will only get worse. And already, choking traffic prevents businesses from bringing materials into the City and exporting products out of the City. In addition, the serious environmental effects of all that traffic will have to be dealt with.
- There is no public oversight of government spending and public financing. If we are going to spend all this money, let's improve our sewage treatment plants, schools, and parks. Also, our firefighters, teachers, and police officers, etc., should not be used as collateral for a loan to advantage the Jets. We should be able to pay these valued public servants a fair wage, deal with the City's infrastructure needs, and not pay the bills for a wealthy sports team.
- The Javits Center should be expanded and I support that aspect of the plan, but the Stadium is completely unacceptable.
- By far, more important than building a stadium, is creating work and living spaces for artists and those working in the fields of art, theatre, dance, etc. Also, venues for performances and artistic expression deserve public support.

- I want to express my agreement with Community Boards 4 and 5 that the scale of the Mayor's proposal is too big.
- The Sanitation and Tow Pound facilities must be placed below ground!
- Building an extension of the #7 line is of secondary importance to creating the Second Avenue subway.

In conclusion, the stadium is unacceptable and the Mayor's proposal should include lower density and mixed zoning, not unneeded mammoth office towers. The Mayor's proposal should also include affordable and low-income housing, open spaces, and parks across the area. I urge you to vote no.



October 4, 2004

The Honorable Amanda Burden  
Chair, City Planning Commission  
Director, Department of City Planning  
22 Reade Street, 6th Fl. West  
New York, NY 10007-1216

Dear Ms. Burden:

The Newman Real Estate Institute hereby submits the attached comments with respect to the Draft Environmental Impact Statement for the Hudson Yards.

The Institute is primarily engaged in real estate education and research. Typically, we do not participate at this level of detail in a specific planning project. However, the breadth of the City's goals and the scope of its proposals for the Far West Side embody a boldness and vision that we have long urged as necessary for the future of real estate and development in New York. We are therefore anxious to see the City's efforts succeed and offer these comments in support of those efforts.

We propose an alternative design approach focused primarily upon relocation of the Javits Convention Center in an east-west orientation. Guided by this concept, we have developed a series of alternative scenarios demonstrating that this approach can work with and without the Olympic sports stadium and with and without a relocated Madison Square Garden.

It is our conclusion that, if one critical element of the City's proposal is changed -- i.e., the orientation of the Convention Center -- the prospects for a win-win outcome on the Far-West Side are very good indeed.

The problem is not, as some have argued, that the City has proposed building an Olympic quality sports stadium. There are both pluses and minuses to such a stadium. However, the City's current proposal makes the stadium the centerpiece and driver of Far-West Side development. In our view, no sports stadium has ever successfully played such a role, and we are not persuaded that the current stadium proposal will be the exception to that rule.

As proposed, the stadium further walls off the Hudson River waterfront. It boxes in the Convention Center, forcing it to expand two directions that, however successful, will still leave the City with an aging and relatively inaccessible 1970's monolith that will negatively impact nearby development.

Moreover, focus on the stadium discourages more efficient and beneficial use of the MTA Hudson Yards site, including the potential for the stadium. Because the

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**Henry Wollman**  
DIRECTOR  
Steven L. Newman Real Estate Institute



City's current design does not provide for the more sophisticated transport links embodied in our proposal, it mandates the immediate construction of an extension of the #7 Flushing line, dramatically increasing funding risks.

The City's current proposal also falls short in meeting the need for a world-class convention facility. The design flaws in the existing structure, including the lack of large column-free spaces, are not addressed. While the total amount of exhibition space would be increased, this total would still fall short of competing facilities. And, since the basic location would not change, the facility would remain isolated from the New York urban experience. In addition, the facility would be a construction site for years, rendering its utility during that period marginal at best.

Instead, we propose an alternative that makes a new Convention Center, rather than a new stadium, the centerpiece of Far-West Side development, while still preserving the option to build an Olympic quality sports stadium in a timely manner. We propose to build the new Convention Center over the MTA Yards, running east to west from the new Moynihan Station on 9th Avenue to 12<sup>th</sup> Avenue. Commercial development at the street level, and major new office and hotel space, would be an integral part of the project. Transportation would be provided by an automated rapid transit loop running between 7<sup>th</sup> and 12<sup>th</sup> Avenues along 30<sup>th</sup> and 34<sup>th</sup> Streets, with a moving walkway link to 6<sup>th</sup> Avenue, providing direct access between the Penn Station transportation hub, the three west side subway lines, and the new Convention Center and stadium.

During construction of the new Convention Center, the existing Javits facility would be fully available for use. After the new Convention Center is completed, the existing Javits Center would be torn down, opening up the Hudson River waterfront in the 30's and enabling the entire neighborhood between 10<sup>th</sup> and 12<sup>th</sup> Avenues to be redeveloped in a rational and appropriate manner.

This approach provides significant incremental benefits to the City. It provides a 21<sup>st</sup> Century convention facility combined with extensive retail and commercial development that will be an integral part of the urban fabric of the West Side. The east-west axis of development organically links the Far-West Side to Midtown. It provides efficient, economical and superior transportation connections, allowing the No. 7 line extension to be viewed in the context of the overall MTA capital program.

In addition, the proposed alternative offers a more sustainable program of commercial development with less market risk and a more neighborhood-compatible program of residential development. Opening up the West Side waterfront between 30<sup>th</sup> and 42<sup>nd</sup> Streets would add billions of dollars of development potential to adjacent real estate and create a dramatic new urban amenity for the City.



Finally, the benefits of the proposed alternative will come on line faster, cost less, present less risk to public finances, pose less development risk, and will have less adverse impacts on the environment than any other action or alternative currently being considered. In our view, the proposed alternative is the best way to meet all of the City's goals for the Far-West Side.

With respect to the stadium, our alternative includes a potential site on the skypark level of the new LandBridge infrastructure. This location would remove it from the at-grade street grid, minimizing the potential for negative effects on nearby development, take advantage of the new rapid transportation loop, clarify the division of funding responsibility between the public and private sectors, and avoid management conflicts between stadium and convention uses inherent in the City's current proposal. The proposed alternative offers options with and without a stadium, allowing the stadium decision to be made independently of the fate of the entire Far-West Side.

In closing, we believe that the alternatives included herein have a practical boldness that suits the strategic boldness of the City's development goals. Currently, none of the numerous alternatives in the Draft EIS includes a different use of the MTA Yards site. Consideration of the alternative approach proposed in these comments would address that issue and offer a benchmark against which to weigh the City's current proposal. By considering an alternative use of the MTA Hudson Yards site, we believe this approach offers a true win-win solution that can turn the City's vision for the Far-West Side into reality.

We know that you will give our comments your most careful review and consideration. If the alternatives proposed herein better meet the City's goals and objectives, they should be selected as the preferred alternative.

Thank you for the opportunity to comment on this most important planning initiative.

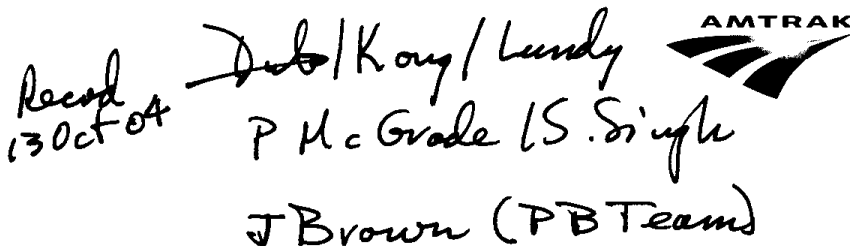
Yours truly,

Henry Wollman  
Director



Floor 5S, Box 25

October 8, 2004

*Rec'd  
13 Oct 04*


Emil F. Dul, P.E. Principal Engineer  
 MTA NYC Transit  
 MTA Capital Construction  
 2 Broadway, 8<sup>th</sup> Floor  
 New York, NY 10004-2207

Robert Dobruskin  
 Director Environmental Assessment and Review Division  
 NYC Department of City Planning  
 2 Broadway, 8<sup>th</sup> Floor  
 New York, NY 10004-2207

Re: Final Scoping Document for the Proposed No. 7 Subway Extension- Hudson Yards  
 Rezoning and Development Program Draft Generic Environmental Impact Statement

Gentlemen:

Please refer to your letter dated May 26, 2004 to Walter Ernst, General Superintendent of Amtrak's New York Division. Please be advised that I have circulated copies of the Final Scoping Document/ Generic Environmental Impact Statement, which was attached thereto, to the various departments here at Amtrak.

I have compiled their various responses and comments, and they are listed on the attached pages.

I hope you find this information helpful. I can be reached at (215) 349-1959, if you require additional information.

Sincerely,

*Sheila Mary Sopper*

Sheila Mary Sopper  
 Project Director  
 Amtrak Real Estate Development Department

Amtrak Comments to the Final Scoping Document for the Proposed No. 7 Subway Extension- Hudson Yards Rezoning and Development Program Draft Generic Environmental Impact Statement:

AMTRAK PROPERTY DESCRIPTION

Note: All references to streets are to “West”, i.e. “32<sup>nd</sup> Street” means “West 32<sup>nd</sup> Street”

Westside Connection (Empire Line)- Hudson Yards- NYC Project

Amtrak has a perpetual easement for its Railroad Right of Way, the width of which varies from block to block and has certain upper limiting planes in the general area of the proposed Hudson Yards Project, additionally, between 33rd Street and 34th Street it has an upper and a lower limiting plane.

At 32nd Street (a paper street), between 10th Avenue and 11th Avenue, Amtrak owns two parcels of land in fee. These parcels are referred to as Amtrak’s 11<sup>th</sup> Avenue Shaft.

The first parcel is on the north side of 32nd Street, approximately 125 feet east of 11th Avenue. This parcel has fifty feet of street frontage and a depth of forty feet. This parcel is subject to certain overhead rights as held by others.

The second parcel is also on the north side of 32nd Street, approximately 111 feet east of 11th Avenue. This parcel has fourteen feet of street frontage and a depth of forty feet. This parcel is also subject to certain overhead rights as held by others.

Following are the widths and the upper limiting planes of Amtrak’s ROW.

Width of Amtrak ROW

33<sup>rd</sup> to 34<sup>th</sup> - 24’- 6” width, and then a variable width

34<sup>th</sup> to 35<sup>th</sup>- variable width

35<sup>th</sup> to 36<sup>th</sup>- 44’-11.75 ”

36<sup>th</sup> to 37<sup>th</sup> - 56’ wide

37<sup>th</sup> to 38<sup>th</sup>- 56’ wide

38<sup>th</sup> to 39<sup>th</sup>- 56’ wide

41<sup>st</sup> to 42<sup>nd</sup> - 74.5' wide

### Upper Limiting Plane of Amtrak ROW

At the North line of 33<sup>rd</sup> Street Amtrak's Easement contains an envelope of property that, at its highest point, is at "Plus 5.82, according to NYC Datum"; and at its lowest point is at "Negative 18.88, according to NYC Datum". This is a Tunnel.

At the South line of 34<sup>th</sup> Street Amtrak's Easement contains an envelope of property that, at its highest point, is at "Plus 7.12, according to NYC Datum"; and at its lowest point is at "Negative 17.58, according to NYC Datum". This is a Tunnel.

From the North line of 34<sup>th</sup> Street to the South line of 35<sup>th</sup> Street, the Amtrak easement is presently overbuilt with suitable clearance.

Amtrak has an easement from the Convention Center, referred to as "The Easterly Easement" in Amtrak's records. At the north line of 35<sup>th</sup> Street, this easement grants Amtrak an upper limiting plane of 18'6" above top of rail.

At the North line of 36<sup>th</sup> Street, Amtrak's upper limiting plane is at "Plus 27.86, according to NYC Datum".

At the South line of 37<sup>th</sup> Street, Amtrak's upper limiting plane is at "Plus 26.14, according to NYC Datum".

Note: clearance at south side of 37<sup>th</sup> Street is at 19.22' above top of rail.

At the North line of 37<sup>th</sup> Street, Amtrak's upper limiting plane is at "Plus 25.66, according to NYC Datum".

At the South line of 38<sup>th</sup> Street, Amtrak's upper limiting plane is at "Plus 23.99, according to NYC Datum".

Note: clearance at south side of 38<sup>th</sup> Street is at 18.79' above top of rail.

At the North line of 38<sup>th</sup> Street, Amtrak's upper limiting plane is at "Plus 23.61, according to NYC Datum".

At the South line of 39<sup>th</sup> Street, Amtrak's upper limiting plane is at "Plus 21.86, according to NYC Datum".

Note: clearance at the north side of 39<sup>th</sup> Street is at 18.28' above top of rail.

41<sup>st</sup> to 42<sup>nd</sup>- has been overbuilt at approximately 18' to top of rail.

Note: overhead clearance at south side of 41<sup>st</sup> Street is 18.26' to top of rail and at south side of 42<sup>nd</sup> Street is at 18.08' to top of rail.

Clearance information was taken from West Side Connection grading & drainage track construction plan dated 8/1/1988 W. 37<sup>th</sup> to Harlem River.

In addition, according to power point presentation sent to Amtrak by NYC, a planned pedestrian ramp will run beneath Amtrak ROW in the bed of 41st Street (for new subway).

Note: 11<sup>th</sup> Ave. & 10<sup>th</sup> Ave are 100' wide streets, also 34<sup>th</sup> and 42<sup>nd</sup> Streets are 100' wide. All other existing streets intersecting the Hudson Yard project are 60' wide streets.

### GENERAL COMMENTS

Concerning the elimination of 32<sup>nd</sup> Street from 10<sup>th</sup> to 11<sup>th</sup> Avenues (paper street) Amtrak's Northeast Corridor is located under and within the lines of the street. Amtrak's continued rights within the former street lines must be protected. Amtrak has fee ownership of a parcel on the north side of 32<sup>nd</sup> Street east of 11<sup>th</sup> (11<sup>th</sup> Ave shaft parcel); see Amtrak Val map 295 for location. The elimination of 32<sup>nd</sup> Street would technically land lock this parcel. The LIRR yard was developed at this location and an evacuation tunnel was built leading from the 11<sup>th</sup> Avenue shaft parcel to a set of stairs which leads to the street level at 33<sup>rd</sup> Street (located on south side of 33<sup>rd</sup> Street approximately 299' west of the westerly line of 11<sup>th</sup> Avenue).

Another issue is the proposed new stadium proposed between 12<sup>th</sup> and 11<sup>th</sup> Avenues located between 31<sup>st</sup> and 33<sup>rd</sup>. Amtrak's Northeast Corridor Mainline is in a tunnel within the lines of 32<sup>nd</sup> Street (not physically open between 12<sup>th</sup> and 11<sup>th</sup> Avenue).

The proposed grade changes on West 33<sup>rd</sup> Street will affect Amtrak's access to the present evacuation tunnel from the Northeast Corridor Mainline. The City's preliminary plans show a physical elevation of approximately +21.00 as top of curb opposite the street level entrance to this evacuation tunnel. The plan shows a proposed elevation of 31.50. This represents raising the existing street 10.5 feet at this location. Access to Amtrak's evacuation tunnel must be preserved.

Important item: Amtrak vehicular access across Convention Center property to the Empire Line Ventilation Shaft, to the C & S Electrical Substation, and to the Westside ROW must be preserved. This access is thru a gate located on the north side of 33<sup>rd</sup> Street East of 12<sup>th</sup> Avenue.

In addition, Amtrak's existing tunnel easement between 33<sup>rd</sup> and 34<sup>th</sup> along westerly side of 11<sup>th</sup> Avenue contains special provisions for any construction that is closer than 20 feet to the existing tunnel easement.

The elimination of 35<sup>th</sup> Street between 10<sup>th</sup> and 11<sup>th</sup> below a certain plane appears to have no affect on Amtrak ROW. An underground garage is planned in the area of the proposed park and a new street from the north line 34<sup>th</sup> and the south line of 36<sup>th</sup> Street. Additional information is needed to see if the entrances to the parking garage will have any impact on Amtrak ROW.

Amtrak has legal access to its ROW from the south side of 38<sup>th</sup> Street under an agreement dated 4/23/1990 that preserves access when and if the property is developed (i.e. overbuild of r/w). This access must be preserved. The City's preliminary plans do not address this issue.

Amtrak is also affected between 41<sup>st</sup> and 42<sup>nd</sup> Streets. This parcel has been overbuilt for some time but the City's project will impact Amtrak by apparently taking down the existing structure and building a park above Amtrak's ROW.

There is no indication in the proposal as to how any construction will affect railroad operations in and out of Penn Station. Any work adjacent to or over the rail lines leading to and from Penn Station must be undertaken in a manner that is least disruptive to rail traffic and is acceptable to Amtrak.

Amtrak's Empire Line, running in a north-south direction, is not shown on the mapping. The alignment for this line is somewhat hampered by adjoining properties and should be improved, if possible. The Empire Line must be included on the mapping. It is important to recognize that utilizing the space adjacent to the Empire Line could restrict any future expansion of this important rail passenger line.

Regarding the proposed Convention Center's use of a portion of the existing Amtrak ROW of the Empire Line; Amtrak needs this area to remain open for Amtrak's access to the ROW for maintenance and repair, etc. Some form of joint use may be possible.

Regarding the proposed Multi-Use Facility & Convention Center expansion, Amtrak will require various agreements with the Convention Center; most importantly to preserve Amtrak's access.

Regarding the proposed Truck Tunnel adjacent to Amtrak's Empire Line and in the Wye Track area under the Mercedes Benz property, Amtrak requires this property for its own access to the railroad ROW for maintenance and repair purposes, and emergency ingress and egress. Furthermore, it is not clear that Amtrak can grant permission for use by the Convention Center as Amtrak's perpetual easement is for "railroad purposes".

Regarding the proposed underground garage, we do not have enough information to determine any impact on the Amtrak ROW.

All Amtrak and third party cables and conduits must be identified, protected and/or relocated by the developers. Amtrak to retain any and all easements and licenses relative to any and all fiber optic, cable or pipe and wire occupancies.

In general, Amtrak does not object to the concept of public and private construction over its railroad right-of-way, as embodied in the Hudson Yards plan. Provided that Amtrak's requirements regarding various issues are adequately addressed in appropriate agreements, we believe that development over Amtrak's railroad right-of-way in the Hudson Yards area can proceed consistent with the Commission's planning objectives.

These issues that must be addressed in appropriate agreements include clearance, access (both to the railroad right-of-way and to the pedestrian evacuation tunnel that currently leads to a stairway on the south side of West 33<sup>rd</sup> Street between 10<sup>th</sup> and 11<sup>th</sup> Avenues), ventilation, emergency access and egress, security systems, lighting, design, construction, maintenance, indemnification (including environmental indemnification), insurance, payments (e.g., for engineering design review, temporary permits to enter, railroad protection and standard Amtrak Engineering charges), fire detection/suppression and other fire and life/safety (F&L/S) issues (including F&L/S expenses that may arise due to the right-of-way being covered). With specific regard to F&L/S, the F&L/S systems must comply with guidelines of the National Fire Protection Association, be coordinated with the New York City Fire Department and Amtrak, and be designed and installed so that control is integrated with Amtrak's planned and existing F&L/S control system.

- Amtrak's Empire Connection tracks are main tracks, not side tracks. The standard minimum horizontal clearance distance from centerline of track to a permanent structure is 18'-0" for tangent level track plus additional clearance for track curvature and superelevation per Amtrak Standard Track Plan Minimum Roadway Clearances AM 70050G.
- The project to provide Amtrak standard horizontal and vertical clearances within the limits of the Amtrak's perpetual easement. Plans must clearly define the horizontal and vertical limits of Amtrak's perpetual easement relative to all proposed minimum horizontal and vertical clearances in both Plan and Elevation views.
- Life safety measures including lighting, fire protection standpipe, egress and mechanical ventilation must be included per NFPA Standard 130 and Amtrak Engineering Practice 4006, Overbuild of Amtrak Right-of-Way Design Policy.
- Two-way radio coverage for railroad operations must be maintained. This includes train to wayside, police and maintenance of way systems. The current radio coverage will be affected by "closing in" the tracks by the overbuild. The developers must design and implement a system to ensure R-F coverage.

- Plans must show the existing and proposed drainage adjacent to the railroad tracks. All storm water and any de-watering operations must be directed away from the railroad right-of-way.
- Amtrak's Empire Connection tracks are electrified from Penn Station New York to approximately W. 42<sup>nd</sup> Street. The developers must retain a qualified Electrification Consultant to design details of any required modifications to Amtrak's overhead catenary system through the overbuild. Design must comply with Amtrak Specification AED-1, Procedures and Design Criteria to be Employed by Electrification Consultants Engaged in the Design of Electrification Facilities on the National Railroad Passenger Corporation.

As is the case with regard to any complex construction proposed over its right-of-way, Amtrak will require reimbursement for project management. A project manager will be required to monitor construction, coordinate operations, manage Amtrak's work force and insure that all required documentation is submitted to Amtrak upon completion of the project. Discussions with the City or private developers concerning specific design and construction issues associated with individual projects, and negotiation and execution of appropriate agreements, can proceed once such projects are proposed in accordance with the new zoning and land use regulations.

October 4, 2004

Received 04 Oct 04  
Kong/Dul / J. Brown BB

City Planning Commission  
22 Reade Street, 4E  
New York, New York 10007  
Attn.: Robert Dobruskin, AICP

Metropolitan Transportation Authority  
2 Broadway, 2nd Floor  
New York, New York 10004  
Attn.: Emil F. Dul, P.E.

Re: Hudson Yards Draft Environmental Impact Statement

Dear Messrs. Dobruskin and Dul:

These comments on the No. 7 Subway Extension Hudson Yards Rezoning & Development Program Draft Environmental Impact Statement ("DEIS") are submitted on behalf of Madison Square Garden LP.

Though these comments are being written within the announced comment period, it is not possible to submit an adequate set of comments at this time. There are two reasons for this. First, the DEIS is so inadequate and deficient, and so lacking in the material required by the Final Scoping document "(Final Scope)" that was adopted in May 2004 by the joint lead agencies, that a fully informed set of comments is not possible. The joint lead agencies should have completed the DEIS as per the Final Scope before releasing it, and they should now prepare a supplemental draft environmental impact statement that fully conforms to the Final Scope and circulate it for another round of public hearings and written comments before proceeding to prepare the final EIS.

Second, my office filed extensive requests under the Freedom of Information Law in July 2004. The City and the MTA did release certain traffic data, but they did not release other documents until 2 p.m. on Wednesday, September 29 – just two and one-half business days before the expiration of the comment deadline. A very small number of documents were released, and most of them were so heavily redacted that little relevant information was provided. We were told that additional documents would be forthcoming, but we were not told when that would occur. On Friday afternoon, October 1, at about 4:30 p.m., we received another slender packet of documents -- every one of them completely redacted except for the "From", "To" and "Re" lines. This appears to be an attempt to shield important information from public review during the public



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comment period. We reserve the right to submit additional comments after the comment period to the extent that additional documents are provided and they shed light on this adequacy or contents of the DEIS.

## **Traffic**

The DEIS presents tables (not described in the text) showing that traffic congestion will be off the charts – worse than ever predicted for a project in New York City. Even after implementing all mitigation measures, numerous intersections will have “> 300” seconds of delay, meaning that motorists will have to wait more than five minutes to get through. Gridlock conditions will go as far as the Queens Midtown Tunnel. The worst times are before Monday night football games, and after Sunday afternoon football games.

These projections of extreme congestion in fact underestimate the congestion that will occur. For one thing, they are based on a complete misrepresentation of the modal split that would characterize travel to and from the stadium. Enclosed as Exhibit 1 is a report by Sam Schwartz LLC concerning the modal split at Madison Square Garden, which is the best indication of the likely modal split at the stadium.

The DEIS also greatly underestimates the extent to which, especially on football game days, the parking capacity of Manhattan will be consumed, and parking will be unavailable for other users. The principal methodological errors in the traffic and parking analyses are discussed in the accompanying Exhibit 2, a report from Orth-Rodgers & Associates Inc. The FEIS should address and correct each of these errors.

The DEIS assumes that all streets in the study area are open and available to traffic. Especially on Sundays, many streets are closed because of street fairs, parades, foot or bicycle races, and other such events that form an important part of the fabric of life in New York City. Much road maintenance work is also performed on Sundays. The DEIS should analyze traffic conditions taking account of all these kinds of street closures. If the plan is to prohibit such street closures on football game days, the number and nature of events and roadway maintenance that would have to be cancelled or rescheduled should be disclosed. The extent to which football fans will be allowed to “tailgate” on Manhattan streets, and the effect on traffic conditions, should also be explained.

The DEIS assumes that many people will travel to and from the stadium by bus, including many private, commuter and charter buses, but it ignores where those buses will park during games. The number of buses that would be utilized (consistent with the DEIS projections) should be stated, and where they will park should be revealed.

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The Final Scope (page 27) promised "[i]dentif[ication] and evaluat[ion of] feasible measures to mitigate significant adverse traffic impacts." Only a very incomplete set of mitigation measures was provided in the DEIS; full mitigation was deferred to the FEIS.

The Final Scope (pages 26-27) promised a presentation of "travel speed and delay runs," which are conducted by driving vehicles along "selected routes." This was not provided in the DEIS.

Additionally, the FEIS should provide this information:

1. Describe the traffic conditions that will occur at the New Jersey approaches to the Lincoln Tunnel, Holland Tunnel and George Washington Bridge, and at and near New Jersey ferry terminals, before Jets games.
2. State the number of stadium users who will exit the stadium by utilizing the High Line and the time period when they will do so. Explain how the number of such persons compares to the capacity of the High Line to handle this degree of pedestrian flow.
3. Describe the effect of Sunday football games on the ability of persons attending Sunday matinees in the Theater District, or other entertainment events in midtown Manhattan, to find parking spaces.
4. State how many visitors are expected at the largest events at the Convention Center after its expansion is completed.
5. Analyze the traffic and parking conditions that would occur when a football game coincides with the largest events at the Convention Center (subsequent to the expansion), sold-out events at Madison Square Garden and Radio City Music Hall, and other sports and entertainment venues in the study area.
6. Describe the environmental impacts of any traffic mitigation measures, such as reversing the direction of avenues or streets, restricting other uses of streets (such as street fairs and other events), altering the lane configuration of Route 9A, or otherwise.
7. Describe the effect of traffic congestion during peak hours on the response times of emergency vehicles, and the safety effects of associated delays.

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### **Transit Congestion**

According to the DEIS, subway congestion will cause long lines to get up and down stairs at many subway stations, including Times Square and Grand Central, even after the MTA has added stairways and sped up escalators. Many areas would be operating at more than twice the volume/capacity ratio, meaning that long lines would develop for riders seeking to go up or down a stairway or through the turnstiles.

The FEIS should provide this information:

1. A quantitative analysis of the queues that will occur at subway stations, including but not limited to the Times Square and Grand Central stations, during peak hours in the analysis years.
2. The capacity of the MTA to finance the construction of both the No. 7 Line extension and the Second Avenue subway. This analysis should describe the capital expenditures that would be required each year, from 2005 through 2025, for each project, and the anticipated sources of these funds. To the extent that these funds are derived from bonds or other long-term instruments, the annual debt service for the years 2005 through 2050 should be stated.
3. The effects on traffic and transit conditions in the event that: a) the No. 7 Line extension is not completed; b) the Second Avenue subway is not completed; and c) neither is completed.
4. The costs and feasibility of mitigation measures to reduce subway congestion, such as construction of stairways and escalators, and the approximate time frame in which this mitigation would be provided.

### **Air Pollution**

The DEIS predicts that levels of particulate matter (PM10 and PM2.5), which are major causes of asthma, will increase. Many of the numbers exceed the primary National Ambient Air Quality Standards, meaning they are unhealthy. The DEIS states that a more refined methodology will show levels that comply with the standards, but figures are given for only one of the many locations where violations are shown. Moreover, though the DEIS analyzes both mobile sources (such as cars and trucks) and stationary sources (such as power plants and factories), it does not add them up. Thus it conceals the possibility of far worse air pollution conditions. A cumulative analysis of the combined effect of stationary source air pollution and mobile source air pollution should be provided.

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The FEIS should explicitly state how the project achieves general conformity with the requirements of the Clean Air Act, how it achieves transportation conformity with the requirements of the Clean Air Act, and whether it is consistent with or will require modifications to the State Implementation Plan. Any communications on these subjects with the U.S. Environmental Protection Agency (EPA) or the New York State Department of Environmental Conservation (DEC) should be discussed.

The FEIS should specify how heating and cooling will be provided, and whether any facilities (such as boilers) will be installed that will require air pollution permits under Title V of the Clean Air Act or air pollution permits from DEC or from the New York City Department of Environmental Protection. If any such permits are required, the emissions of these facilities should be discussed and should be included in the cumulative air pollution impact analysis. The timing and nature of the Title V permit and any other air pollution permits should be discussed, together with the anticipated conformance of the facilities to the applicable permit requirements.

A map identifying the parcels that have received or will receive "E" designations as a result of air pollution conditions should be provided.

Air pollution and water pollution issues are further discussed in the accompanying comments from ENVIRON International Corporation, Exhibit 3.

### **Ferries**

The DEIS traffic analysis states that many of the people travelling to and from the stadium will use ferries. The FEIS should provide this information:

1. The total number of people who will use the ferries to travel to and from the stadium
2. The number and sizes of ferries that will be utilized
3. The locations, on both sides of the Hudson River, where these ferries will dock
4. The estimated loading time for the ferries, and their round-trip travel time
5. Estimates of the air pollution that will be emitted by these ferries, and inclusion of these ferry emissions in the cumulative air quality analysis.

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### **Water pollution**

According to the DEIS, the amount of sewage generated in the area will go from 1.1 million gallons per day to 8.6 million gallons per day. All of it will be piped to the North River Water Pollution Control Plant in Harlem. That plant has sufficient capacity during dry weather, but not during wet weather. When it rains as much as one/eighth an inch an hour, the plant and the pipes to it lack the necessary capacity. At those times, untreated sewage and other effluent will overflow into the Hudson River at multiple outfalls between the project site and the Harlem plant.

At a time when the City is already out of compliance with federal and state requirements for the elimination and/or minimization of combined sewer overflows (CSOs), the failure to address and mitigate the potential for an increase in CSO events under the Hudson Yards plan is patently inconsistent with the federal Clean Water Act, EPA and New York state policy, and the consent orders that the City has signed with DEC.

The FEIS should state:

1. The average annual number of combined sewer overflow events in the area served by the North River Water Pollution Control Plant.
2. The locations of the combined sewer overflows in the area served by the North River Water Pollution Control Plant.
3. The total number of gallons of sewage generated by the project that will annually be discharged into the Hudson River without treatment in connection with combined sewer overflow events due to the proposed project.
4. The efforts that will be undertaken to mitigate the effect of the proposed project on combined sewer overflows.
5. The minimum rainfall amount that will lead to a CSO event in the area served by the North River Water Pollution Control Plant.
6. The quantity of stormwater that will be stored on-site; the capacity and location of the holding tank(s); and the magnitude of storm whose rainfall the storage system would be capable of holding.

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7. The amount of water that will be needed to heat and cool the stadium; where that water will come from (e.g., potable water supply or Hudson River); environmental and infrastructure impacts of this water withdrawal.

8. The conformance of the project to federal and state requirements for management of stormwater and erosion during construction, and the timing and procedures for associated permit applications.

### **Water distribution**

The Final Scope (page 25) promised an assessment of the "effects of the incremental demand of the Proposed Action on the sewer system to determine if there will be a significant adverse impact" and "identif[ication of] mitigation strategies, where appropriate and feasible." This was not provided. There was reference to a "hydraulic assessment" "being prepared" by the City, presumably to be used to identify the areas of the wastewater infrastructure in need of improvements, meaning mitigation strategies could only be determined thereafter. (DEIS at 16-13; 16-18). However, no details were provided.

The Final Scope (page 25) promised an estimate of "the capacity of the distribution system serving the area," but the DEIS did not furnish this and it provided no information about interceptors, elevations, pipe friction, or other factors that bear on capacity. Information was given only about the width of various pipes and certain limited water pressure data, despite admissions that daily water demand will increase from 1.1 million gallons per day to 8.6 million gallons per day, and up to 13 million gallons per day during peak air conditioning periods. (DEIS at 16-1; 16-3 to 16-5).

The FEIS should discuss the costs of providing water service to the project area.

### **Noise pollution**

According to the DEIS, many blocks will be so noisy that, in commercial buildings, openable windows will be banned, and in residential buildings, the City will install double-glazed windows and air conditioners. Most of this noise will come from the added traffic.

The FEIS should provide:

1. A map indicating the locations of areas that have received or will receive "E" designations as a result of noise conditions

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2. An estimate of the cost of carrying out the identified measures to mitigate noise impacts, and the sources of these funds.

3. An explanation of the traffic speeds assumed in the noise analysis, and a discussion of how the noise effects would vary if speeds are considerably lower. The noise of honking hours should be included in this analysis.

### **Hazardous Waste**

The long industrial history of the rail yards and the entire area means that many toxic chemicals will be disturbed during construction. Almost no physical sampling has been performed (this has been deferred to the final EIS), but paper records show that many industrial uses once stood at the site of the development.

Current owners of nearly 100 nearby properties will be saddled with notices in their title records, called "E" designations, saying their land is probably contaminated. That will make it very difficult for owners to sell, finance, or insure their properties. The owners will be obligated to spend large sums investigating and cleaning up the land. To the extent that the City condemns these parcels, it will be liable for their cleanup. The costs of this cleanup have not been included in the DEIS.

The FEIS should provide:

1. A map showing the location of the areas that will receive "E" designations as a result of suspected hazardous waste contamination. (A map we have prepared is attached as Exhibit 4.)

2. Estimates of the costs of remediating this contamination.

3. Identification of whether the City or another project proponent will pay for the costs of remediating the contamination, or whether current or former owners or operators of the sites will have to pay these costs.

4. Phase II reports for all the parcels that will be utilized or condemned in connection with the proposed action.

Additionally, a map should be provided identifying all the properties that have received, or will receive, an "E" designation for any reason (hazardous waste, air pollution, noise, or otherwise).

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### **Hudson River Park and Route 9A**

The DEIS assumes that the western boundary of construction of the stadium is just east of Route 9A, also known as the West Side Highway. However, in numerous public presentations, the City and the Jets have displayed renderings and made statements indicating that a deck will be built over Route 9A in conjunction with the stadium. The renderings also depict a pier constructed in the Hudson River in conjunction with the stadium. Examples of these renderings and statements are attached as Exhibit 5. The FEIS should present the status of plans to build a deck over Route 9A. The FEIS should disclose the environmental impacts of building a pier, and discuss the permits that it will require.

The traffic analysis assumes that the "neckdowns" in Route 9A will be eliminated, thereby creating a new lane of traffic. This is inconsistent with the plans for Route 9A as analyzed in the environmental impact statement for the construction of that road. The exact alterations contemplated for Route 9A should be disclosed, and the governmental approvals and further environmental analysis required in order to implement them should be discussed.

The DEIS should disclose the impact of the stadium, the proposed deck, and ferry access on the appearance, design and operation of Hudson River Park. The plans for the stadium appear to be inconsistent with the requirements of the New York State statute concerning Hudson River Park.

### **Electricity**

According to the DEIS, the project will consume 309 megawatts of electricity, the equivalent of a medium-sized power plant. No site has been identified for this plant, nor for the two new Con Ed electric substations that will be needed. Utilizing available projections as to the supply of and demand for electricity in New York City, the FEIS should state whether a new electric generating plant is anticipated to be required for this project, and if so where it is likely to be sited, and its air pollution impacts.

The FEIS should discuss the approximate physical dimensions of the required substations and the parameters for their location. In view of the difficulties that Con Ed has recently experienced in locating a new substation in the Chelsea area, the issues that will be posed in siting these substations should be discussed.



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### **Visual Impacts**

The FEIS should provide renderings of the appearance of the stadium from various vantage points, as is customary for environmental impact statements for large construction projects in New York State.

### **Incompleteness of the DEIS**

The DEIS indicates that much additional work will be performed in time for the FEIS. Many of these items were included in the Final Scope. The DEIS is the document provided to the community boards, the borough board, the City Council and the other participants in the ULURP process, and it is the basis for the only public comments that will be accepted; by time the FEIS comes out, all opportunities for public comment will have passed.

Exhibit 6 is a document entitled "Promises Made, Promises Broken," listing various items that the Final Scope stated would be in the DEIS, but that were not found there. Each of the items on this list should be provided in the FEIS.

Exhibit 7 is a document entitled, "Quotations From the DEIS Admitting That Critical Information Concerning Significant Adverse Impacts is Missing and Will Not Be Disclosed Until the Final EIS or Later." For each of the items identified here, the missing information should be supplied in the FEIS, and the relevant page number(s) should be identified.

Though the DEIS has Appendices A through Z, there is no appendix B, C, E, F, H, L, or M. Please provide an explanation of what became of these appendices.

### **Hidden Costs**

The financing plan for the Hudson Yards District calls for devoting almost all the new tax and other City revenue resulting from new development on the West Side to the construction of the No. 7 Train extension, new roads and new parks. This means that revenues that the City normally relies on to pay for basic services and facilities will not be available and these costs will have a major impact on City budgets for decades to come.

Because of the diversions, there will be less revenue generated by the project. The revenue streams from new development that have been diverted and will not be available include:

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- Real property taxes.
- Sales taxes on building materials.
- The District Improvement Fee.
- Proceeds from the sale of City and MTA property, including development rights and sites on the West Side Rail Yards.

There will be ordinary costs associated with this development, such as infrastructure, for which there will be no new money. New costs that will have an impact on the City budget and on fees paid by City taxpayers include:

- The DEIS speaks of the need for a new elementary school to accommodate the thousands of new families in the Hudson Yards District. There is no mention of how much it will cost and where the money will come from.
- When 50 million square feet of space are developed, including over 12,000 apartments, there will be a need for new police and fire facilities. These facilities and the operating costs associated with them will not come cheaply.
- The DEIS indicates there will be a need for an additional 309 megawatts of power and new substations to accommodate 50 million square feet of new development. These facilities will be expensive to build and the cost will be paid by Con Ed customers throughout the city.
- The expense of building new sewer and water mains will contribute to the City's escalating water and sewer charges. Any effort to build holding tanks for storm-water run-off or to add sewage treatment capacity will come at a heavy cost that has not been calculated or disclosed.
- The City will build the Midblock Park and Boulevard System. This will require acquisition of three residential buildings, one family shelter, and 26 retail, commercial or industrial uses.
- Because of added enrollment from the new development, the DEIS says that "the Proposed Action would result in significant adverse impacts to public elementary and intermediate schools, requiring mitigation."
- The City and other project sponsors will have to acquire numerous properties for the Midblock Park and Boulevard System; the Tenth Avenue station of the

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No. 7 line; the site where the Tunnel Boring Machine for the subway will be assembled; and the properties needed for Convention Center expansion. Many of these properties are contaminated with hazardous waste.

- To mitigate overcrowding in subway stations, many staircases, passageways, and corridors would be widened, and many escalators would be replaced with higher-speed models.
- The City would make available double-glazed windows and alternative means of ventilation (e.g., air conditioning) to existing residential and community facilities that would experience excessive noise levels.

There will also be extraordinary costs associated with this project that are still not accounted for and for which there is no money. These include:

- A platform over West Street that would connect the stadium to the waterfront. This platform is shown in all the Jets images of the stadium. The City's cost estimates suggest that the platform will cost \$55 million, but this may not include the cost of landscaping the platform and of stairs and elevators. This is not part of the stadium budget.
- Javits Center estimates show a \$66 million cost for the park, stairs, elevators and other improvements on the north side of the stadium. These improvements would be built over the Javits Center marshalling yards. In the Jets images of the stadium, this area is described as the "Game Porch" and includes one of the major entrances to the stadium, information kiosks, a sports museum, a theater and retail. Without this improvement it may not be possible to enter the stadium along the sideline to the north. Again, this is not part of the stadium budget.
- Javits Center documents list a \$30 million cost for the pedestrian tunnel linking Javits to the stadium and the No. 7 train. This is not part of the stadium budget.

The City has made it clear that any cost overruns from the extension of the 7 Train will be paid for by the MTA. History has established that there are always cost overruns on a major subway project. This expense would further tax the MTA at time when it faces a multi-billion gap in keeping the transit system in a state of good repair for the next five years.

The FEIS should enumerate and add up all the costs the City will have to bear in connection with this project, and compare them to the \$600 million it has publicly stated

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it would spend on the stadium. All the costs to be borne by the MTA should also be set forth.

## Conclusions

For the reasons stated above and in the accompanying documents, the DEIS provides an inadequate basis for public comment and for ULURP review. The lead agencies should prepare a supplemental draft environmental impact statement and submit it for full review under the ULURP and SEQRA/CEQR processes.

Whatever the form of the next environmental review document, it should address all the issues that were identified in the Final Scope, and all of the issues that the DEIS indicated would be addressed in the FEIS or subsequently. The issues in the latter category are enumerated in the accompanying list of quotations from the DEIS, and the next environmental review document should explicitly state where each of these promised pieces of information is being provided.

The accompanying technical reports from Sam Schwartz LLC, Orth-Rodgers and Associates Inc. and ENVIRON International Corporation are incorporated by reference.

Finally, the FEIS should include an executive summary that fairly describes the impacts described in the FEIS's text and appendices. The executive summary in the DEIS concealed many of the revealed impacts.

Sincerely,



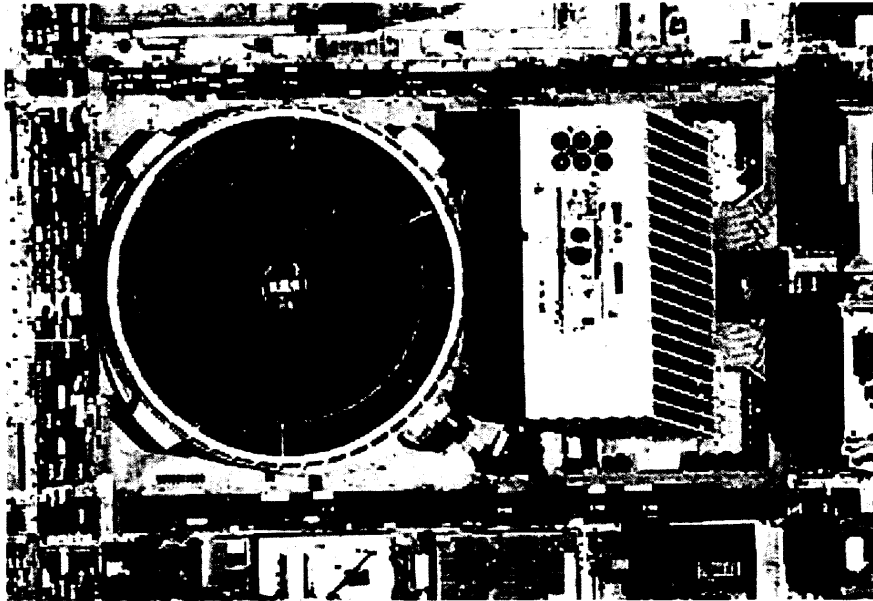
Michael B. Gerrard

## Exhibits

1. Sam Schwartz LLC report ✓
2. Orth-Rodgers & Associates Inc. report ✓
3. ENVIRON International Corporation comments ✓
4. Map of E designations for hazardous waste ✓
5. Renderings/descriptions of deck over Route 9A and pier ✓
6. "Promises Made, Promises Broken" ✓
7. Quotations from DEIS admitting missing information ✓

*MLL*

# MADISON SQUARE GARDEN Modal Split Analysis



July 22, 2004



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# Madison Square Garden Modal Split Analysis

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## Introduction

To determine the travel patterns and modal share of Madison Square Garden (MSG) patrons, Sam Schwartz LLC (SSC) analyzed survey data collected by MSG. Surveys were administered at nine MSG events between March 2003 and February 2004, including three Rangers hockey games, four Knicks basketball games, the Ringling Brothers Circus and a Red Hot Chili Peppers Concert. Surveyors questioned attendees in-person at the main Seventh Avenue entrance to MSG. A total of 5,046 interviews were conducted.

Surveys at two of the Rangers games took place on weekday evenings (Wednesday, March 26, 2003 at 7:30 pm against the Pittsburgh Penguins and Friday, April 4, 2003 at 7:30 pm against the New Jersey Devils), and one took place on a Sunday (November 23, 2003 at 5:00 pm against the Ottawa Senators). Knicks surveys were performed on two Sundays (March 16, 2003 at 7:00 pm against the Milwaukee Bucks and February 22, 2004 at 1:00 pm against the Cleveland Cavaliers) and on two weekday evenings (Monday, March 24, 2003 at 7:30 pm against the Toronto Raptors and Friday, March 28, 2003 at 8:00 pm against the New Jersey Nets). The circus survey was conducted on a Saturday afternoon (March 29, 2003 at 3:30 pm) and the concert survey occurred on a weekday evening (Tuesday, May 20, 2003 at 8:00 pm).

## Summary of Findings

### How People Travel

#### *Weeknight Sports Events*

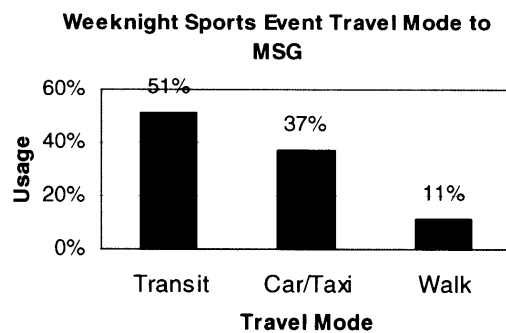
- On average, 51% traveled to The Garden by transit, 37% by private car or taxi, and 11% walked.

#### *Sunday Sports Events*

- At a Sunday night event, transit usage drops to 45%, while car/taxi usage rises to 48%, and walking comprises 8%.
- At a Sunday afternoon event, transit usage increases to 52%, while car/taxi usage drops to 36%, and walking comprises 10%.

#### *Non-Sports Events*

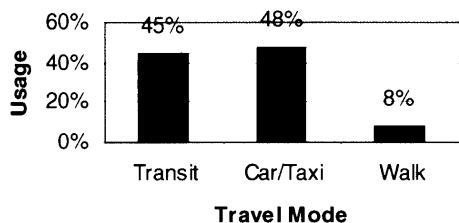
- The circus and concert drew the most people by transit (59%) and, in the case of the circus, a high number by car (40%). This seeming contradiction is explained by the fact that almost no one, just 2%, walked to the circus. The concert has just under a third arriving by car/taxi.



Sample size: 2,318

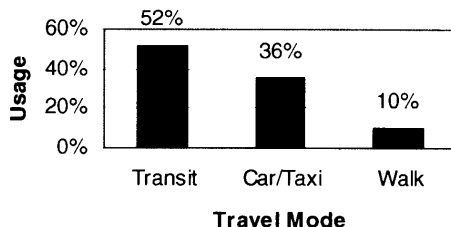
## Madison Square Garden Modal Split Analysis

**Sunday Night Sports Event Travel Mode to MSG**



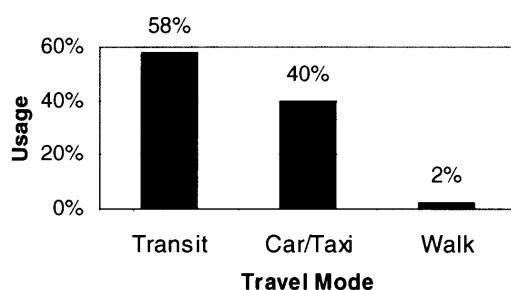
Sample size: 1,049

**Sunday Afternoon Sports Event Travel Mode to MSG**



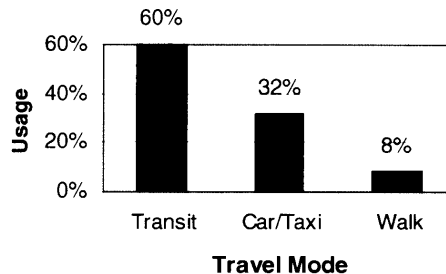
Sample size: 622

**Circus Travel Mode to MSG**



Sample size: 527

**Concert Travel Mode to MSG**



Sample size: 530

### Where They're Coming From

#### *Weeknight Sports Events*

- Over 40% of Knicks fans and about a third of Rangers fans come from Manhattan. After Manhattan, New Jersey is the single largest origin of trips with 15% of Knicks fans and 24% of Rangers fans crossing the Hudson River. More than half the sports fans are from New York City's five boroughs.

#### *Sunday Sports Events*

- On a weekend night 29% of Knicks fans and 15% of Rangers fans come from Manhattan.
- One-fifth of Sunday night Knicks fans and more than one-fourth of Sunday Rangers fans come from New Jersey. Long Island and Westchester contribute another 20% of Knicks attendees and 27% of Rangers fans.
- During a Sunday afternoon game, 26% of Knicks fans come from Manhattan.
- Almost one-fifth of Sunday afternoon Knicks fans come from New Jersey. Long Island and Westchester contribute another 25% of Knicks attendees.

#### *Non-Sports Events*

- 29% of concertgoers start out in Manhattan.
- Only 11% of circus goers originate in Manhattan. The single largest origin for circus goers is New Jersey with 24%. Brooklyn is second at 16% just ahead of Long Island with 15%.



## Transit Usage

### *Weeknight Sports Events*

- For those arriving by transit, 46% take the subway, 20% take the LIRR, 14% take New Jersey Transit, 6% take PATH trains, 4% take the bus, 7% take Metro-North, 1% take Amtrak and 1% take other.

### *Sunday Sports Events*

- On Sunday nights, 34% of transit users take the subway to get to MSG, 26% use the LIRR, 21% take New Jersey Transit, 4% take PATH trains, 4% take the bus, 8% take Metro-North, 0% take Amtrak and 2% take other.
- During a Sunday afternoon event, 31% of transit users take the subway to get to MSG, 24% use the LIRR, 15% take New Jersey Transit, 5% take PATH trains, 9% take the bus, 11% take Metro-North, 2% take Amtrak and 4% take other.

### *Non-Sports Events*

- Of Circus attendees, 43% of transit users use the subway, while 21% use the LIRR, 20% use New Jersey Transit, 5% use PATH trains, 4% take the bus, 5% take Metro-North, 2% take Amtrak and 2% take other.
- Concertgoers who use transit take the subway at a rate of 35%, the LIRR at a rate of 27%, New Jersey Transit at a rate of 15%, PATH trains at a rate of 5%, the bus at a rate of 2%, Metro-North at a rate of 13%, Amtrak at a rate of 2% and other at a rate of 2%.

## Comparisons with Previous Studies

In 1987 there were three separate survey efforts conducted of MSG patrons. Vollmer, retained by MSG, conducted surveys as part of a study to consider relocating the Garden. Parsons, Brinckerhoff, Quade and Douglas (PB) surveyed attendees on behalf of the MTA in its analysis of potential uses for the West Side Rail Yards.

Vollmer surveyed three events in 1987: the "Cars" concert on Thursday, October 29 at 8:00 pm, a Knicks game against the Boston Celtics on Monday, November 9 at 7:30 pm, and a Rangers game against the New Jersey Devils on Tuesday, November 10 at 7:35 pm. Interviews were conducted before the event and during intermission.

Parsons Brinckerhoff surveyed six events in 1987: a "Squeeze" concert on a Friday night, two Knicks games (one weeknight game and weekend game), a weeknight tennis match, a weeknight wrestling match and a Sunday Rangers game.

MSG itself performed surveys on three events in 1987: a Saturday Knicks game, a Sunday Knicks game and a Sunday Rangers game. No weeknight events were analyzed. It should be noted that MSG's surveys were limited in nature and focused most often at Hall of Fame Box users.

## Madison Square Garden Modal Split Analysis

Tables 1 and 2 summarize the results. The principal findings were:

- Weeknight sports patrons in 2003-4 vs. 1987 used transit at similar levels to arrive at the Garden: 50-53% in 2003-4 and 46-58% in 1987. Auto usage in 2003-4 was 37%; in 1987 it ranged from 39-44%.
- On weekends 46-50% of sports fans in 2003-4 used transit to go to MSG while in 1987 the range was 30-53%. Auto usage in 2003-4 was 44% while in 1987 it was 46-66%.
- In 2003-4, 60% of concert-goers used transit to arrive at MSG; transit rates were 51-60% in 1987.
- The highest transit share for any Sunday sports event was 53% reported by MSG in 1987 for a Knicks game. The highest car share was 66% reported by PB in 1987 for a Rangers game.
- On weeknights the highest transit share for a sports event was 58% reported by PB in 1987 for a Knicks game. The highest auto share on a weeknight was 44% reported by Vollmer in 1987.

**Table 1. Comparison between 2003-4 and 1987 Surveys  
Transit usage by attendees at an MSG event**

Event	MSG 2003-4	Vollmer 1987	PB 1987	MSG 1987
Knicks Weeknight	50%	51%	58%	--*
Rangers Weeknight	53%	46%	--	--
Knicks Weekend	46%	--	46%	--
Knicks Sunday	46%	--	--	53%
Rangers Sunday	50%	--	30%	36%
Concert	60%	51%	60%	--

\* Indicates that no survey was performed for such event.

**Table 2. Comparison between 2003-4 and 1987 Surveys  
Auto usage by attendees at an MSG event**

Event	MSG 2003-4	Vollmer 1987	PB 1987	MSG 1987
Knicks Weeknight	37%	39%	29%	--*
Rangers Weeknight	37%	44%	--	--
Knicks Weekend	44%	--	48%	--
Knicks Sunday	44%	--	--	46%
Rangers Sunday	44%	--	66%	57%
Concert	32%	42%	35%	--

\* Indicates that no survey was performed for such event.

**Overall Modal Share Results**

Frances Bauman Associates, which has over 20 years of experience conducting intercept interviews, administered a scan questionnaire to arriving event attendees. Ten (10) interviewers per event conducted the intercepts and completed at least 50 interviews each. A total of 5,046 interviews were conducted at nine events between March 16, 2003 and February 22, 2004.

An industry standard of a 4.4% margin of error for a sample of approximately 500 was achieved by each individual event survey. All margins of error fell within the acceptable ranges for surveys of this type. For this sample of approximately 500 surveyed attendees per event the accuracy is within  $\pm 4.1\%$  at a 95% Confidence Level.

MSG attendees average a 52% transit share to all events. Public transit was the most popular mode of travel to MSG at every event except a weekend evening Knicks game (March 16, 2003). The Knicks average transit use on weeknights is 50%, Rangers fans average 53%, and concert attendees average 60%. On average, 22% of event attendees used the subway system to travel to MSG, 12% used the Long Island Rail Road, 9% used New Jersey Transit, 4% used Metro North Rail Road, and 3% used PATH trains. Significant portions of weekday event attendees walk directly to MSG. An average of 13% of Knicks fans walk to weeknight events, 10% of Rangers fans, and 8% of concert attendees. Just 2% of circus goers walked to the event.

Less than half of all weeknight event attendees use private vehicles or taxis for transportation to and from MSG. However, private automobile and taxi usage was highest for weekend sporting events. The only surveyed event that drew a minority of transit users was a Sunday evening Knicks game (March 16, 2003) that had a transit usage of 40% and a private automobile/taxi usage rate of 51%. In contrast, weekday Knicks games average 37% automobile usage. It is likely that higher rates of attendees arriving at MSG directly from their workplaces in Manhattan on weekdays account for the higher transit share for the weekday evening Knicks games.

The highest auto/taxi rate (51%) was found at a Sunday evening Knicks game on March 16, 2003. Vehicle occupancy rates were highest among circus attendees, averaging 3.72 people/auto. This is likely due to the large numbers of families who attend the circus. Occupancy rates were lowest at a Monday Knicks game, dipping to 1.85 people per vehicle.\*

**Table 3. Modal Split Breakdown by Event & Time of Day**

TRAVEL MODE				Sample Size	Margin of Error (+/-)	Transit	Walk	Car/Taxi	Other
<b>Rangers</b>	Wednesday	7:30 pm	3/26/2003	569	4.1%	51%	12%	36%	1%
	Friday	7:30 pm	4/4/2003	597	4.0%	54%	8%	37%	1%
	Sunday	5:00 pm	11/23/2003	595	4.0%	50%	5%	44%	2%
<b>Knicks</b>	Monday	7:30 pm	3/24/2003	566	4.1%	50%	13%	36%	1%
	Friday	8:00 pm	3/28/2003	586	4.0%	50%	12%	38%	0%
	Sunday	7:00 pm	3/16/2003	454	4.6%	40%	10%	51%	0%
	Sunday	1:00 pm	2/22/2004	622	3.9%	52%	10%	36%	2%
<b>Circus</b>	Saturday	3:30 pm	3/29/2003	527	4.3%	58%	2%	40%	1%
<b>Concert</b>	Tuesday	8:00 pm	5/20/2003	530	4.3%	60%	8%	32%	1%
<b>Overall Average</b>				<b>561</b>	<b>4.1%</b>	<b>52%</b>	<b>9%</b>	<b>39%</b>	<b>1%</b>

\*Figures have been normalized to equal 100%.

## **Weeknight Mode Analysis**

### **Weeknight Auto Usage to MSG**

Fewer than half of all weeknight event attendees use private vehicles or taxis. The usage rate among Knicks fans arriving to MSG averages 37% on weeknights; Rangers fans average 37% auto usage; and concert attendees average 32% (see Figure 1, Weeknight Travel Modes to MSG). Auto and taxi usage tends to increase slightly *after* an event.

### **Weeknight Auto Usage from MSG**

Auto usage by Knicks fans leaving the Garden on a weeknight increases to 41%; Rangers fans average 42%; and concertgoers average 36% (see Figure 2, Weeknight Travel Modes from MSG). The increase in auto and taxi usage after an evening event is attributable to the fact that patrons are less likely to take transit late in the evening.

### **Weeknight Transit Usage to MSG**

The majority of weeknight event attendees, both arriving and leaving the Garden, use mass transit. Knicks fans average 50% transit use on a weeknight to MSG; Rangers fans average 53% transit use to MSG; and concert attendees average even higher rates, or 60% (see Figure 1, Weeknight Travel Modes to MSG).

### **Weeknight Transit Usage from MSG**

The transit share for Knicks and Rangers fans as well as concert attendees leaving the Garden during a weeknight remains relatively consistent with arrival rates (see Figure 2, Weeknight Travel Modes from MSG).

### **Weeknight Walk Rate to MSG**

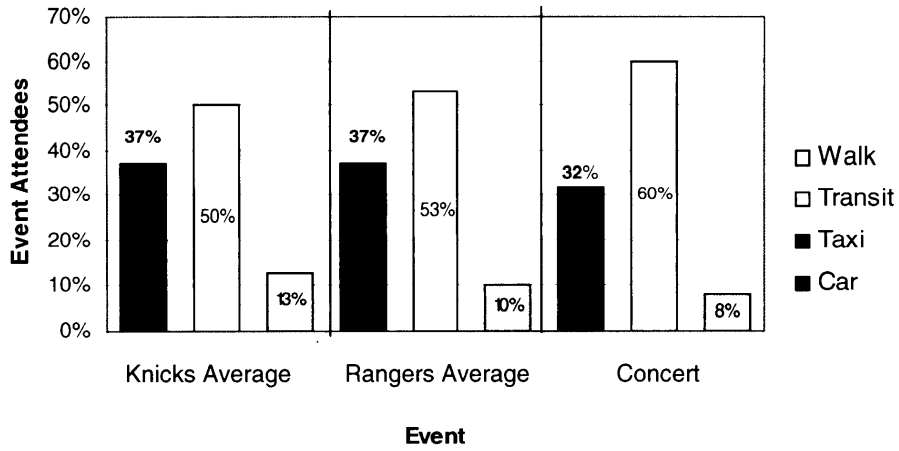
An average of 13% of Knicks fans walk to weeknight events at MSG; 10% of Rangers fans walk to MSG; and 8% of concert attendees walk to the Garden (see Figure 1, Weeknight Travel Modes to MSG).

### **Weeknight Walk Rate from MSG**

As expected, less people leaving the Garden after a weeknight event are likely to walk home. In fact, the walk share drops by approximately 50% for all events: 7% of Knicks fans walk from MSG; and 4% of Rangers fans and concertgoers walk home (see Figure 2, Weeknight Travel Modes from MSG).

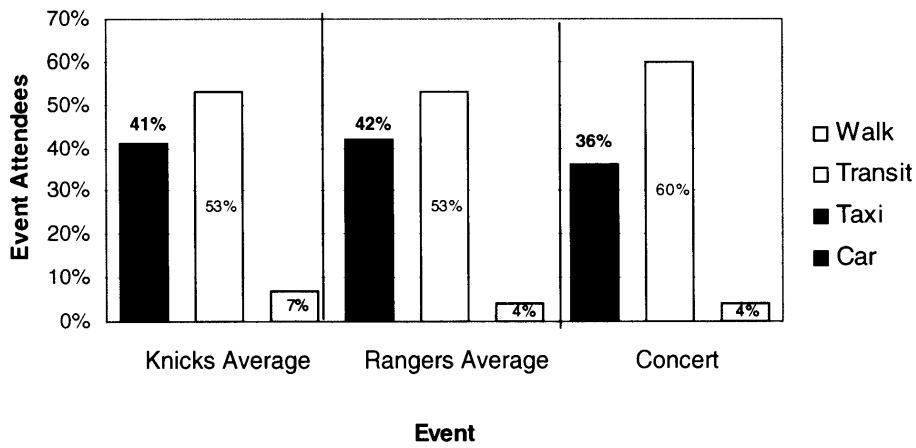
# Madison Square Garden Modal Split Analysis

## Figure 1. Weeknight Travel Modes to MSG



Sample size: 2,848

## Figure 2. Weeknight Travel Modes From MSG



Sample size: 2,848

## Weekend Mode Analysis

### Weekend Auto Usage to MSG

Attendees at four events (two Knicks games on March 16, 2003 at 7:00 pm and February 22, 2004 at 1:00 pm, a Rangers game on November 23, 2003 at 5:00 pm, and the Circus on March 29, 2003 at 3:30 pm) were surveyed on a weekend. The Knicks and Rangers fans were surveyed on Sundays; Circus attendees were surveyed on a Saturday. On a Sunday, 44% of Knicks fans and 44% of Rangers fans arrived at MSG via auto or taxi; 40% of circus attendees arrived on a Saturday via auto or taxi (see Figure 3, Weekend Travel Modes to MSG).

### Weekend Auto Usage from MSG

Auto/taxi usage rates remained almost the same for attendees leaving both events. The auto share among Knicks fans remained at 44%; the auto share for Rangers fans dropped slightly to 43%; and the auto share for circus attendees increased slightly to 41% (see Figure 4, Weekend Travel Modes from MSG).

### Weekend Transit Usage to MSG

The transit share among weekend sports fans is slightly lower than weeknight rates. Among surveyed fans, 46% of Knicks attendees and 50% of Rangers attendees used transit to travel to weekend games. However, 58% of circus attendees traveled to the venue using transit (see Figure 3, Weekend Travel Modes to MSG).

### Weekend Transit Usage from MSG

The transit share decreased slightly among Knicks fans and circus attendees leaving the Garden on a Saturday or Sunday. 46% of Knicks fans and 48% of Rangers fans left using transit, while transit usage dropped by 3% for circus attendees to 55% (see Figure 4, Weekend Travel Modes from MSG).

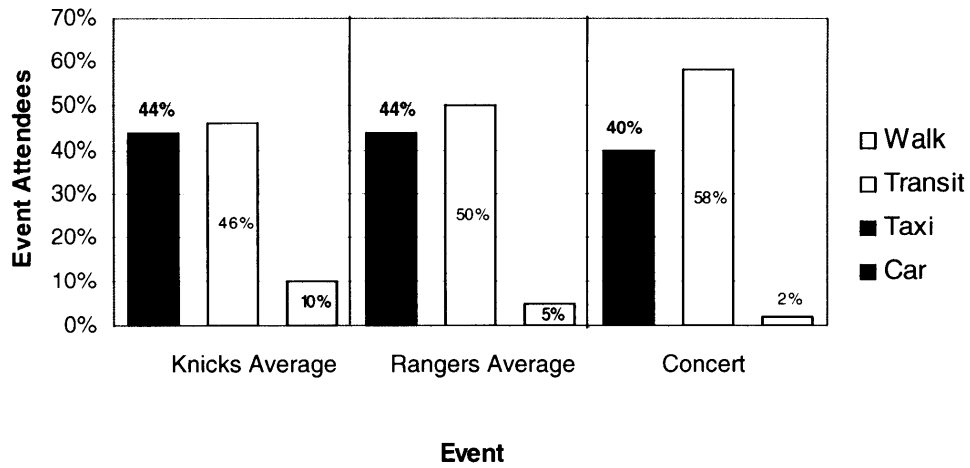
### Weekend Walk Rate to MSG

Walk rates among Knicks and Rangers fans to weekend games are similar to rates for weekday evening games. 10% of surveyed Knicks fans and 5% of Rangers fans walked to MSG while only 2% of circus attendees walked to the (see Figure 3, Weekend Travel Modes to MSG). The lower walk rates among circus attendees may be attributed to the fact that this group includes a greater proportion of families with young children.

### Weekend Walk Rate from MSG

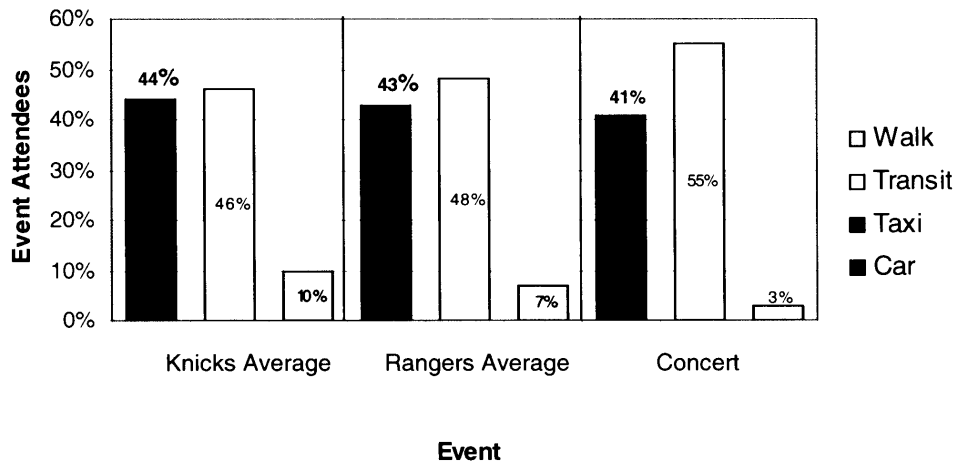
The walk rate for Knicks fans leaving a weekend game remained the same at 10%. The Rangers fans' walk rate increased 2%, to 7%. Circus attendee walk rates increased 1%, to 3% (see Figure 4, Weekend Travel Modes from MSG).

Figure 3. Weekend Travel Modes to MSG



Sample size: 2,198

Figure 4. Weekend Travel Modes From MSG



Sample size: 2,198

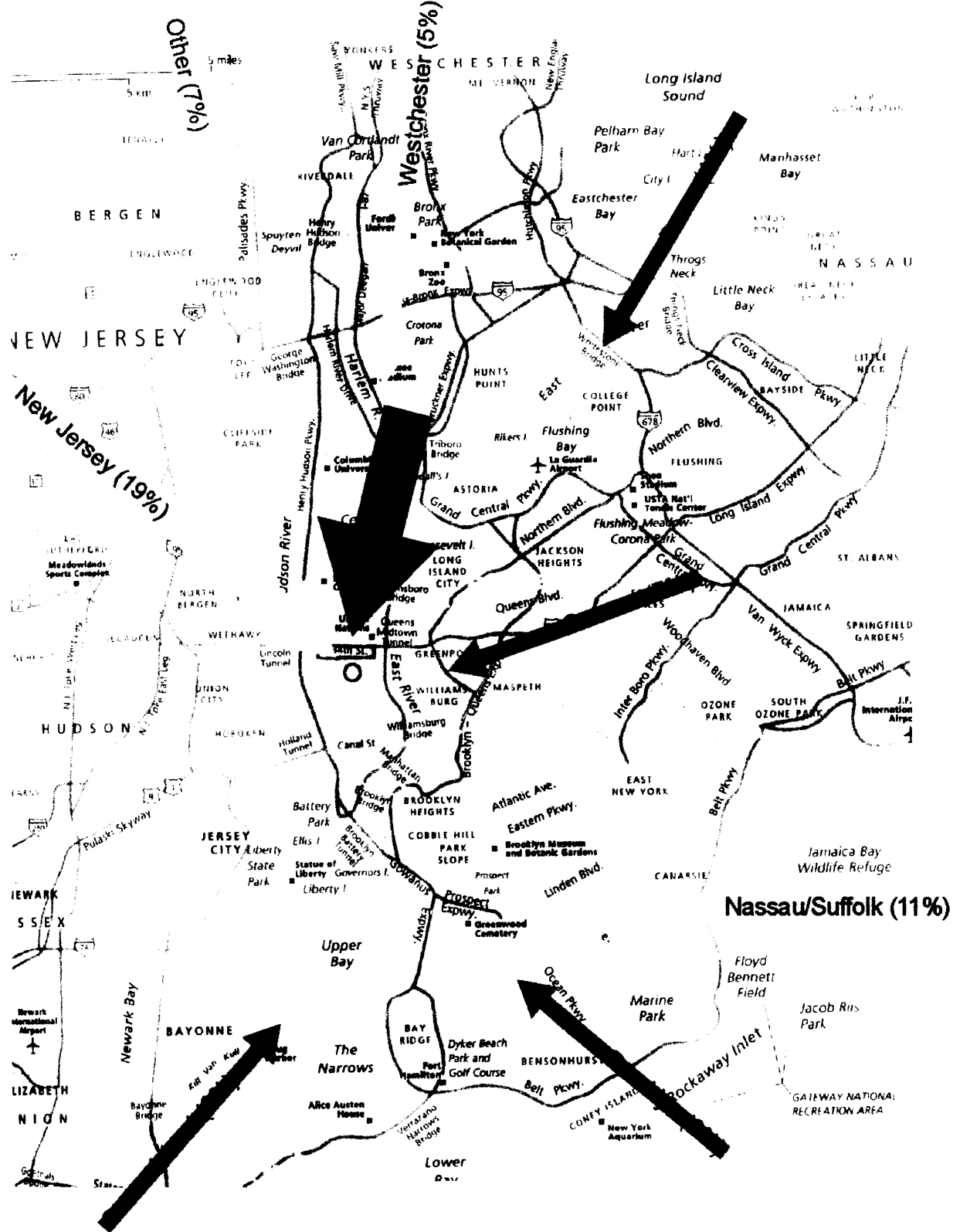
### Visitor Origins

At most events, the largest group of attendees arrived from Manhattan. Manhattan origin rates range from 37% for an average weeknight sports event to 29% for a weeknight concert, and 23% for a Sunday sports event. (The lowest Manhattan origin rate was 11% for the circus on Sunday, March 29, 2003 at 3:30 pm, and the highest was 46% for a weeknight Knicks game on Monday, March 24, 2003 at 7:30 pm). These figures can be attributed to the high numbers of people traveling directly to The Garden from work for weeknight sports events, a rate that is directly proportional to the Manhattan origin rate. For example, the circus that had an 11% Manhattan origin rate also had a 0% work origin rate (see Figures 5-9).

New Jersey consistently draws a rate averaging 20% for all surveyed events. New Jersey drew the most attendees for the circus (24%) and for the Sunday Rangers game on November 23, 2003 at 5:00 pm (26%). Nassau and Suffolk Counties are second to New Jersey in terms of drawing attendees outside of the five boroughs, drawing an average of 14% of all attendees. The highest Long Island rate occurred at the Sunday, November 23, 2003 Rangers game, to which 19% of fans arrived from Nassau and Suffolk Counties. In fact, at nearly all events, the number of Long Island attendees surpassed the combined rate of Westchester and Bronx attendees. The high percentage of Long Island visitors may be attributed to MSG's convenient location above Pennsylvania Station, which serves as a terminus for the Long Island Rail Road.



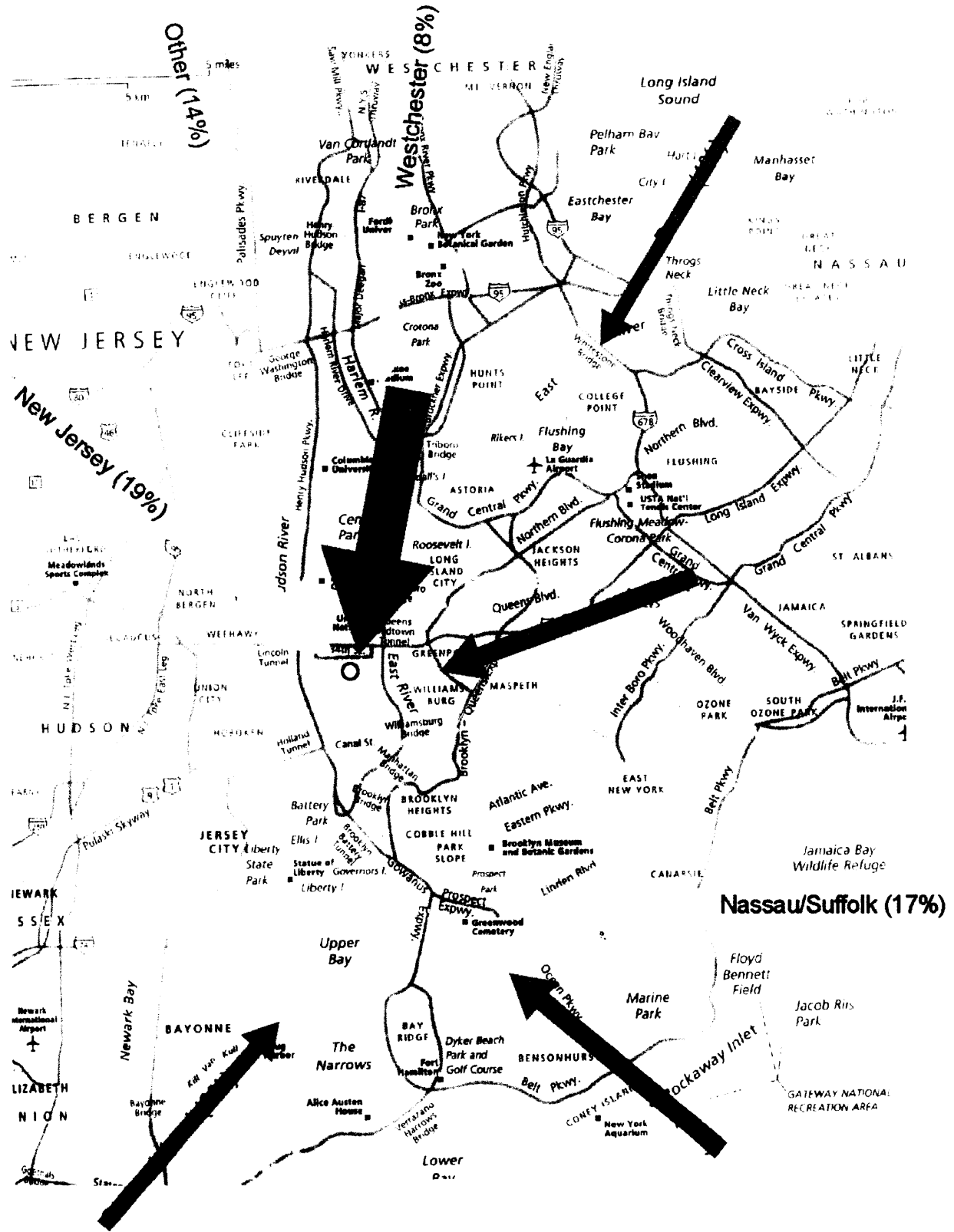
Figure 5. Origin of MSG Weeknight Sports Event Attendees





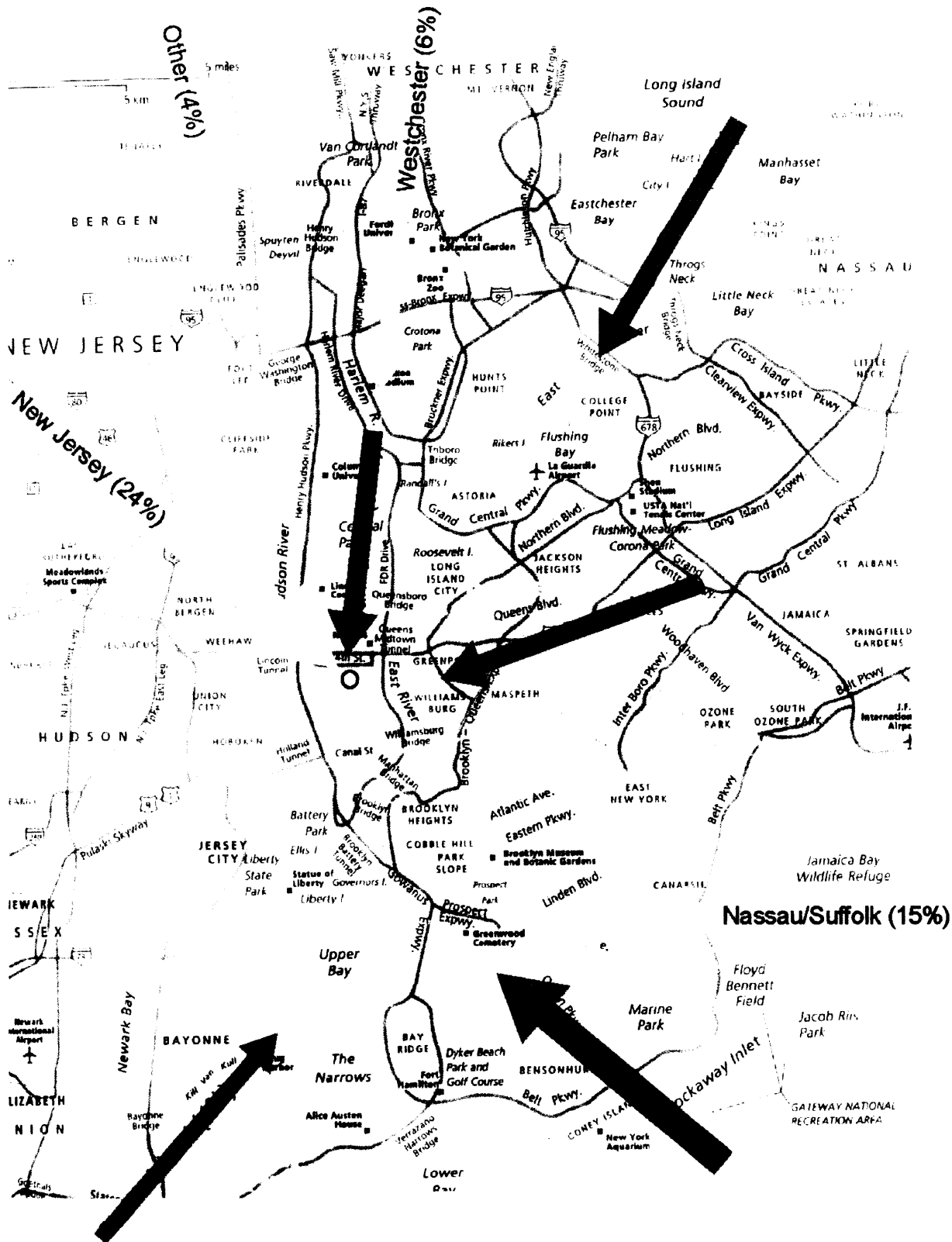
# Madison Square Garden Modal Split Analysis

## Figure 7. Origin of MSG Sunday Afternoon Sports Event Attendees



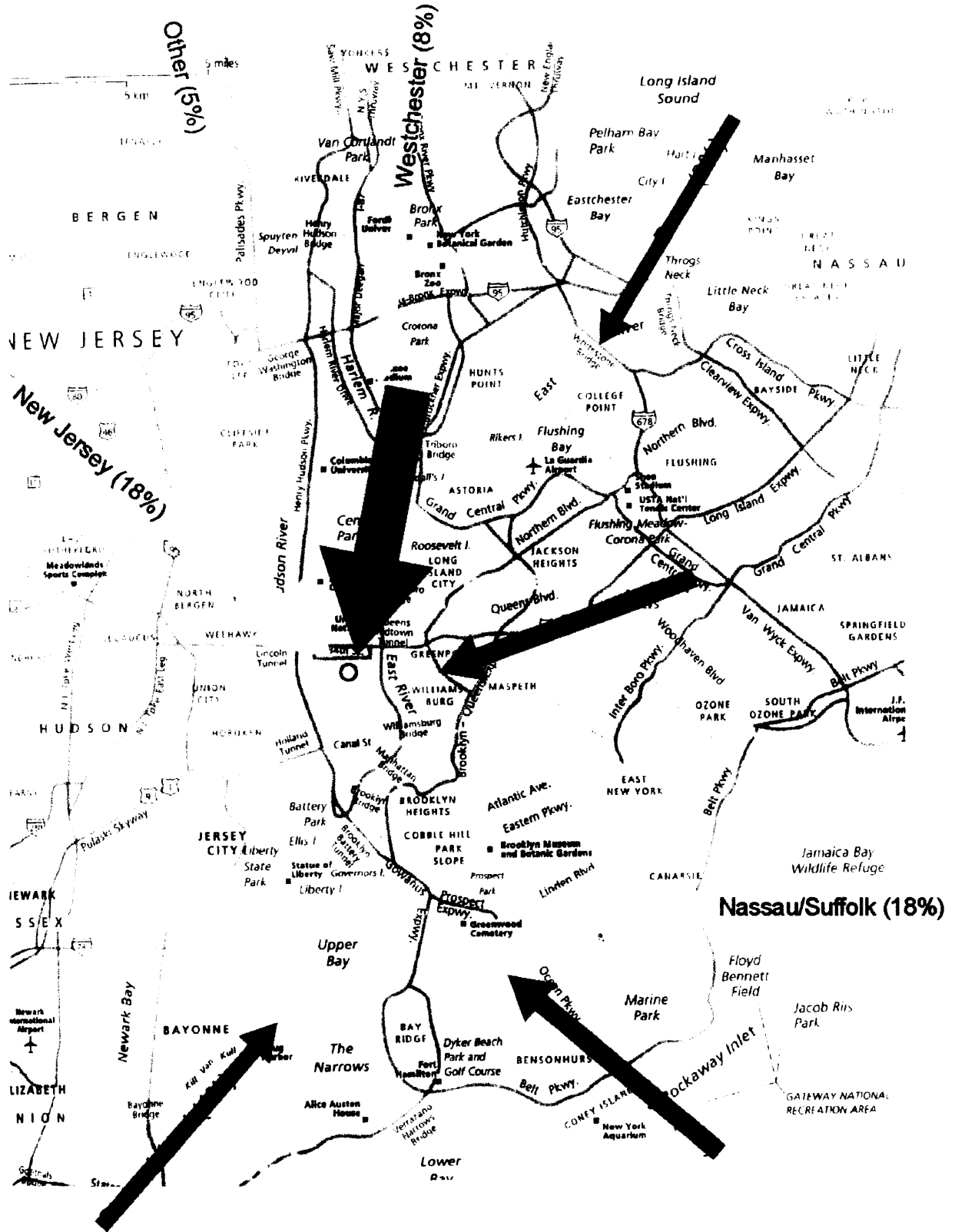
# Madison Square Garden Modal Split Analysis

Figure 8. Origin of MSG Circus Attendees



# Madison Square Garden Modal Split Analysis

## Figure 9. Origin of MSG Concert Attendees



## Transit Share Breakdown

Among weekday sports fans, the most popular mass transit routes to MSG are the Seventh Avenue (1, 2, 3, 9) and Eighth Avenue (A, C, E) subway lines. Together, these lines transport 20% of Knicks fans to a weeknight game and 16% of weeknight Rangers fans. However, among concertgoers, the Long Island Railroad (LIRR) was the most popular transit option, bringing 17% of attendees to MSG. New Jersey Transit also transported a large share of attendees to MSG -- an average of 9% of Rangers fans.

Weekend events at MSG saw a similar breakdown amongst transit users. The Seventh and Eighth Avenue subways remained a popular choice, transporting 13% of Knicks fans and 16% of circus attendees. The circus also saw 13% of attendees arrive via the LIRR and 12% arrive via New Jersey Transit. The top choice of Rangers attendees was the LIRR, carrying 14% of fans, followed by New Jersey Transit with 12%.

An average of 1% of respondents chose "Other" as their transit mode to and from the Garden. It is assumed that these travelers utilized transit options not listed on the survey, including the "7" subway line at 42<sup>nd</sup> Street and Seventh Avenue as well as various ferries from New Jersey at 34<sup>th</sup> Street and the Hudson River.

The high transit share is attributable to MSG's location above a major transit hub, Pennsylvania Station, which provides access to the A, C, E, 1, 9, 2 and 3 subways lines as well as the Long Island Railroad, Amtrak and New Jersey Transit trains. Additional access is provided via MSG's proximity to the Sixth Avenue/Herald Square transit complex, which includes the PATH trains as well as the B, D, F, V, N, R, Q, and W subway lines (see Figures 10-13).

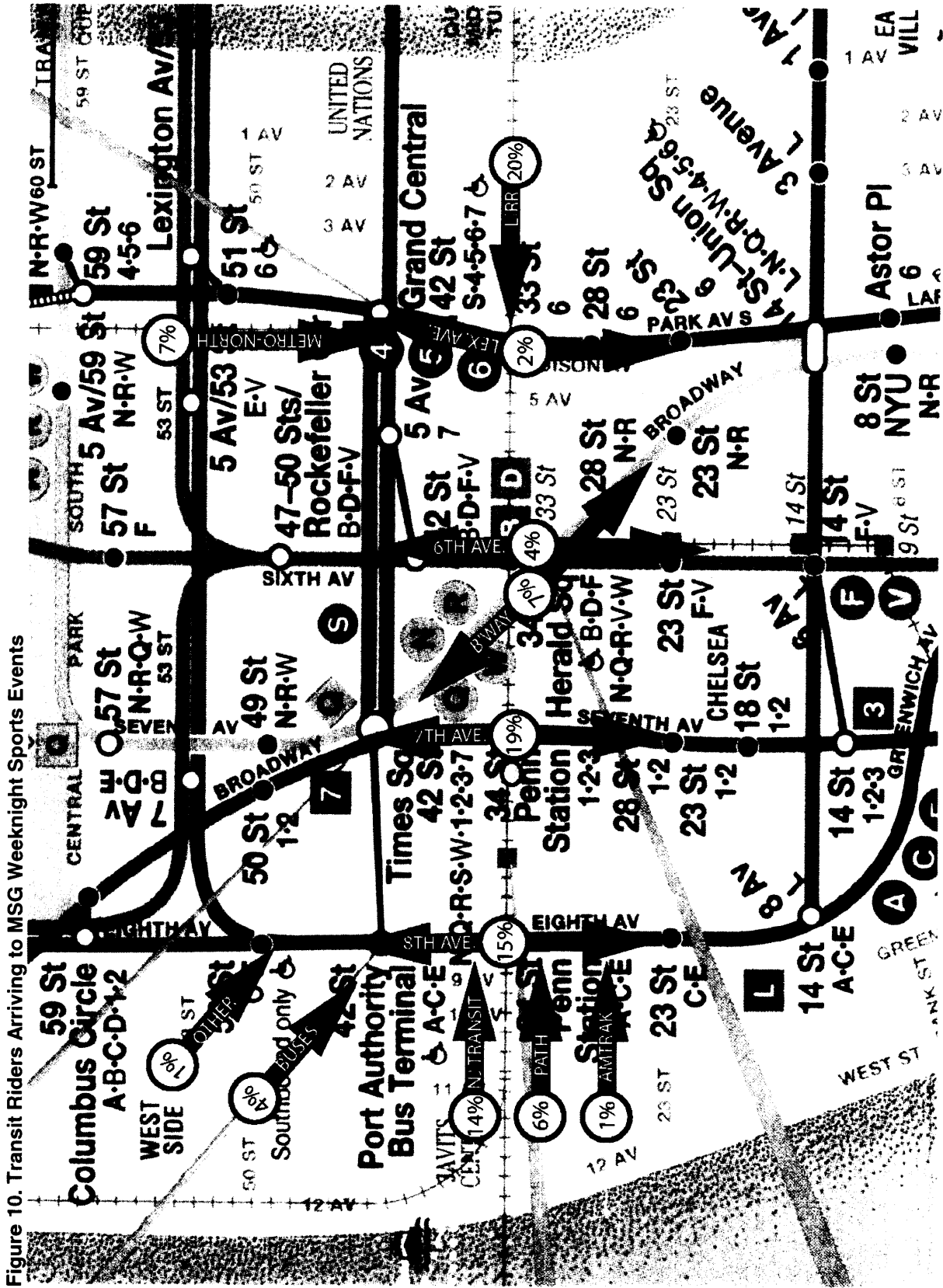
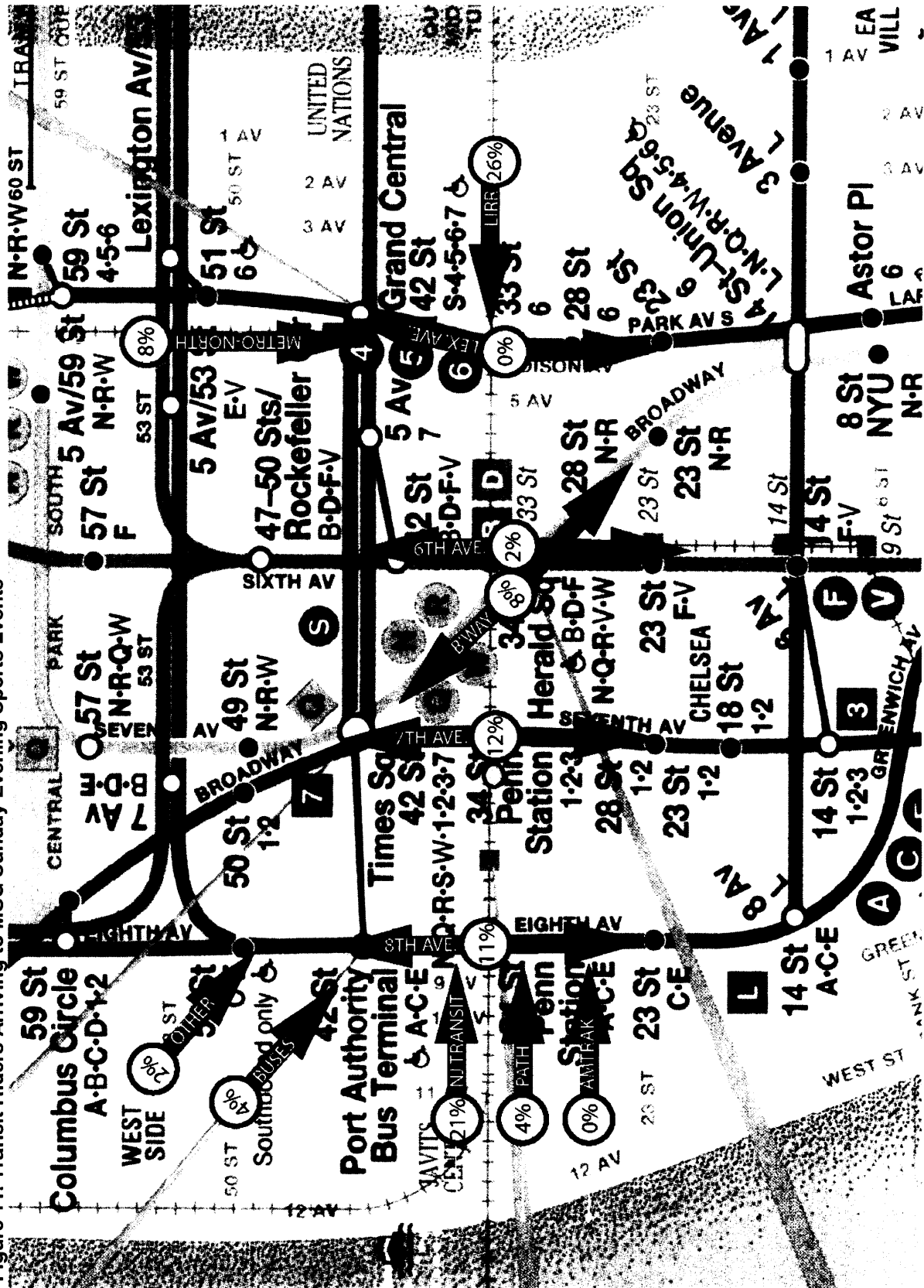
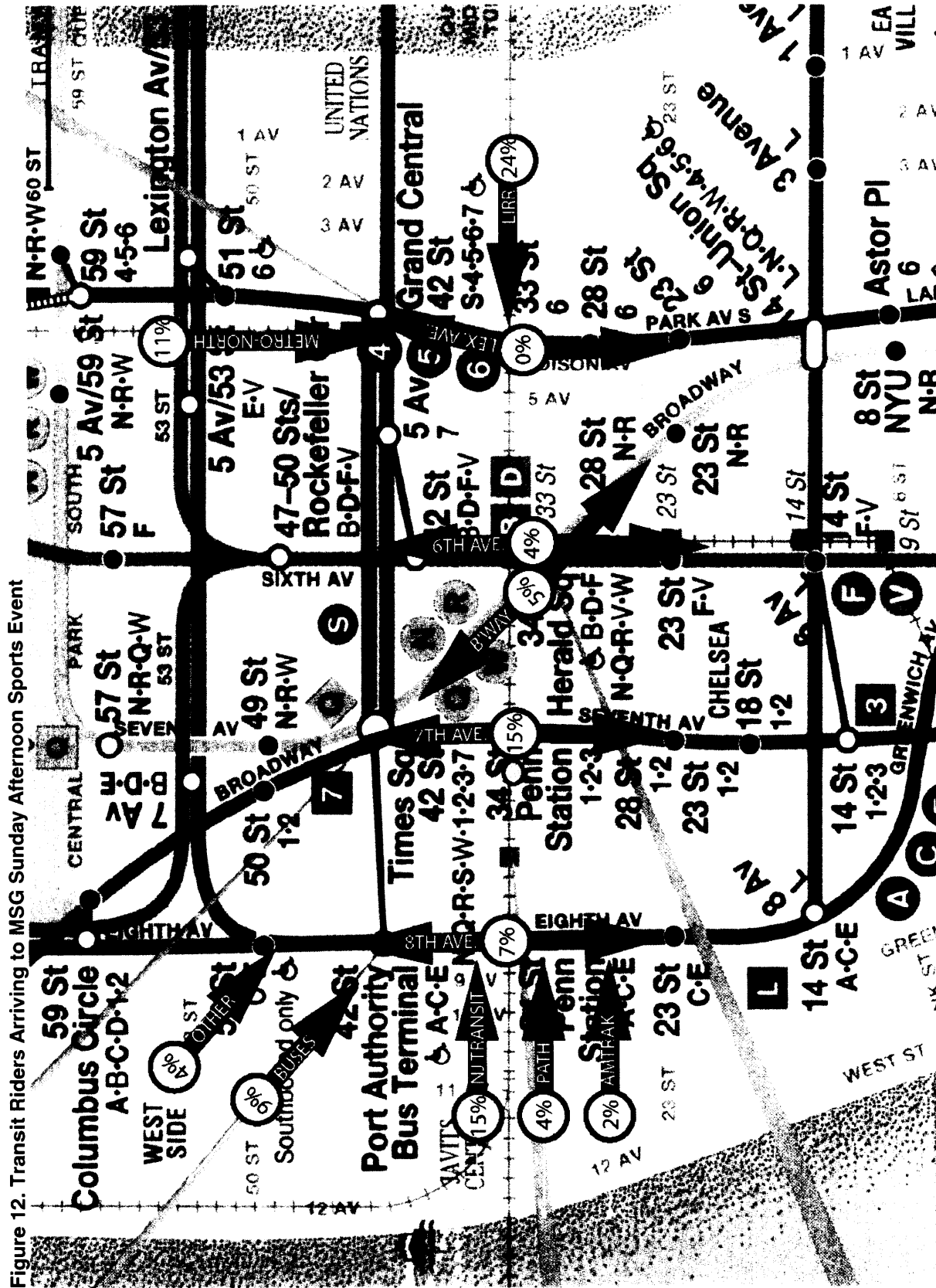


Figure 10. Transit Riders Arriving to MSG Weeknight Sports Events

Figure 11. Transit Riders Arriving to MSG Sunday Evening Sports Events











## Madison Square Garden Modal Split Analysis

### Vehicle Occupancy

While survey results from the circus on March 29, 2003 reflected an auto/taxi usage rate (40%) close to the average (39%), the event also had the highest occupancy rate, likely because most circus patrons are families with children. This resulted in a below-average number of vehicles generated. The Knicks game on March 24, 2003 also had an average auto/taxi usage rate, but its low vehicle occupancy rate (1.85 ppv) generated a high number of vehicles.

**Table 4. Vehicle Occupancy Rates by Event**

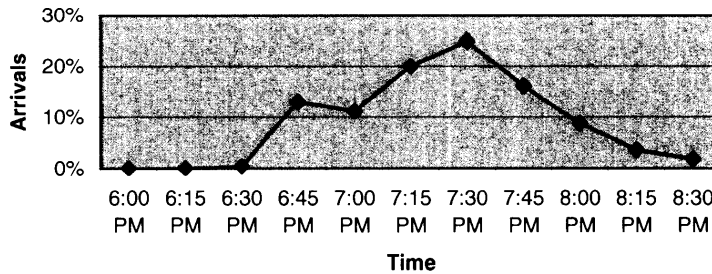
<b>AUTO/TAXI USAGE</b>				<b>Total Attendance</b>	<b>% of Auto/Taxi Users</b>	<b>Total Auto/Taxi Users</b>	<b>Average Vehicle Occupancy</b>	<b>Estimated Total Vehicles</b>
<b>Rangers</b>	Wednesday	7:30 pm	3/26/2003	18,284	36%	6,582	2.40	2,745
	Friday	7:30 pm	4/4/2003	18,283	37%	6,765	2.48	2,731
	Sunday	5:00 pm	11/23/2003	19,605	44%	8,626	2.76	3,121
<b>Knicks</b>	Monday	7:30 pm	3/24/2003	19,074	36%	6,867	1.85	3,708
	Friday	8:00 pm	3/28/2003	20,003	38%	7,601	2.17	3,499
	Sunday	7:00 pm	3/16/2003	19,605	51%	9,999	2.76	3,624
	Sunday	1:00 pm	2/22/2004	18,581	36%	6,689	2.19	3,055
<b>Circus</b>	Saturday	3:30 pm	3/29/2003	12,802	40%	5,121	3.72	1,377
<b>Concert</b>	Tuesday	8:00 pm	5/20/2003	20,000	32%	6,400	2.46	2,599

\*Taxi and limo drivers are not factored into vehicle occupancy rates.

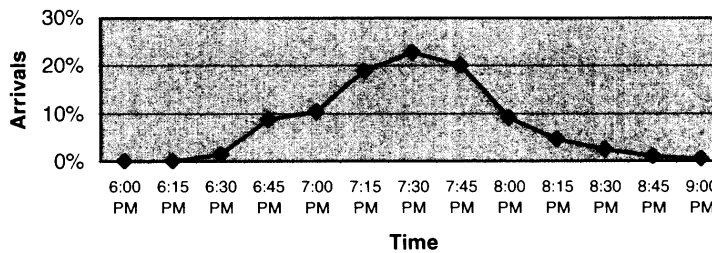
**Arrival Rates**

The rate at which attendees arrive at MSG events tends to peak around the event starting time. At a Friday night Rangers game (April 4, 2003 at 7:30 pm against the New Jersey Devils), 25% of fans arrived in the 15 minutes immediately preceding the game start (7:30 pm) and 61% of fans arrived within a thirty-minute period around the start time (between 7:15 and 7:45 pm). At a Monday night Knicks game (March 24, 2003 at 7:30 pm), 23% of fans arrived in the 15 minutes immediately preceding the game start (7:30 pm) and 62% of fans arrived within a thirty-minute period around the start time (between 7:15 and 7:45 pm). The concert (Tuesday, May 20, 2003) saw a more consistent arrival rate, with 12% of attendees arriving just prior to starting time (8:00 pm) and 37% arriving within the thirty-minute period around start time (between 7:45 and 8:15 pm). This steady stream of arrivals may be due to queuing, or backups, at entry gates. This would be consistent with the fact that only 60% of concert attendees arrived during the 60 minute period around start time (7:30 to 8:30 pm) while other events saw arrival rates around 80% for the same time period. The circus (Saturday, March 29, 2003 at 3:30 pm) saw a similar arrival pattern, as patrons arrived at steady rates beginning 45 minutes before the show began (see Figures 15-18).

**Figure 15. Rangers Arrival Rate-Friday 04/04/03  
(Start Time 7:30 PM)**

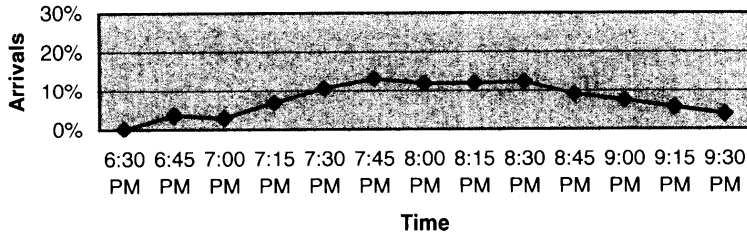


**Figure 16. Knicks Arrival Rate-Monday 03/24/03  
(Start Time 7:30 PM)**

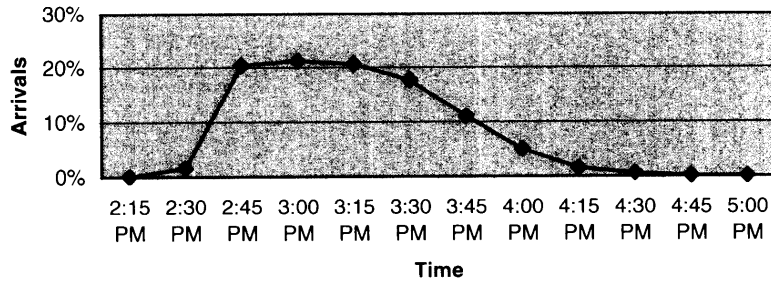


# Madison Square Garden Modal Split Analysis

**Figure 17. Concert Arrival Rate-Tuesday 05/20/03  
(Start Time 8:00 PM)**



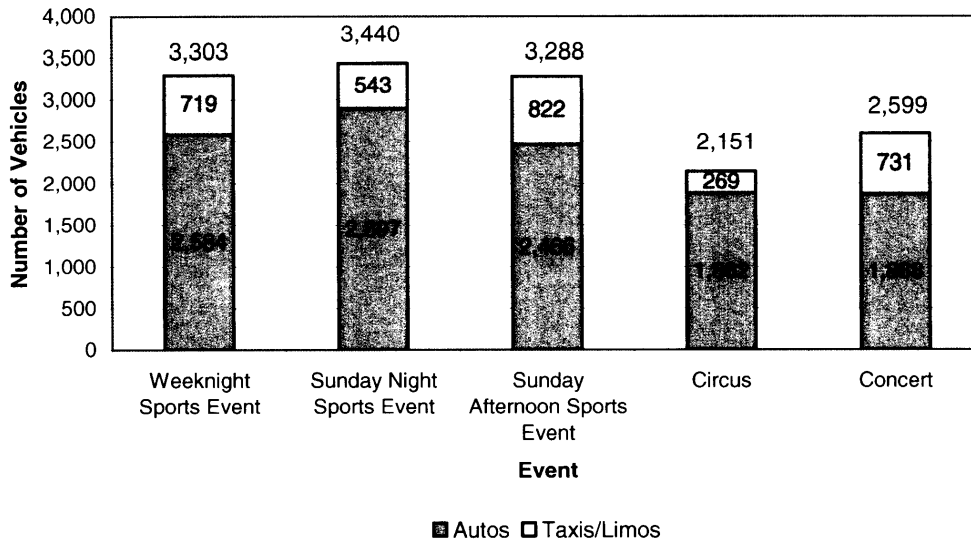
**Figure 18. Circus Arrival Rate-Saturday 03/29/03  
(Start Time 3:30 PM)**



### Where People Drive From

To estimate the maximum number of vehicles generated by each event, a capacity of 20,000 people was assumed per event. Modal splits and vehicle occupancy rates, as described earlier in this report, were used to produce Figures 20-24. As shown in Figure 19, a Sunday night sports event generates the highest number of vehicles (3,441 autos/taxis) while the circus generates the fewest vehicles (2,091 autos/taxis). Although the circus has an average share arriving by automobile, this event generates the fewest automobiles because of its high vehicle occupancy rate—averaging 3.72 people/car versus between 1.8-2.8 people/car for sports events and concerts.

**Figure 19. Automobiles Generated by Event**  
(Assuming 20,000 Persons/Event)



As expected, Staten Island and Westchester drivers are most likely to use a car to get to an event. Surprisingly, Bronx and Brooklyn residents had the next highest auto shares for most events with 58% and 52%, respectively, using private automobiles to arrive at weeknight sports events. Long Island residents had the lowest private auto usage rate, after Manhattan residents -- only 21% arrived at a weeknight sports event via car. Manhattan, with the overall lowest rates of private car usage, had the highest rate of travelers using taxis/limos to arrive at MSG. During weeknight sports events, 18% of fans originating from Manhattan arrived via taxi/limo. During the concert event, however, private auto usage among visitors from Manhattan and Long Island dropped to single digit percentages – 6% and 9%, respectively.

## Madison Square Garden Modal Split Analysis

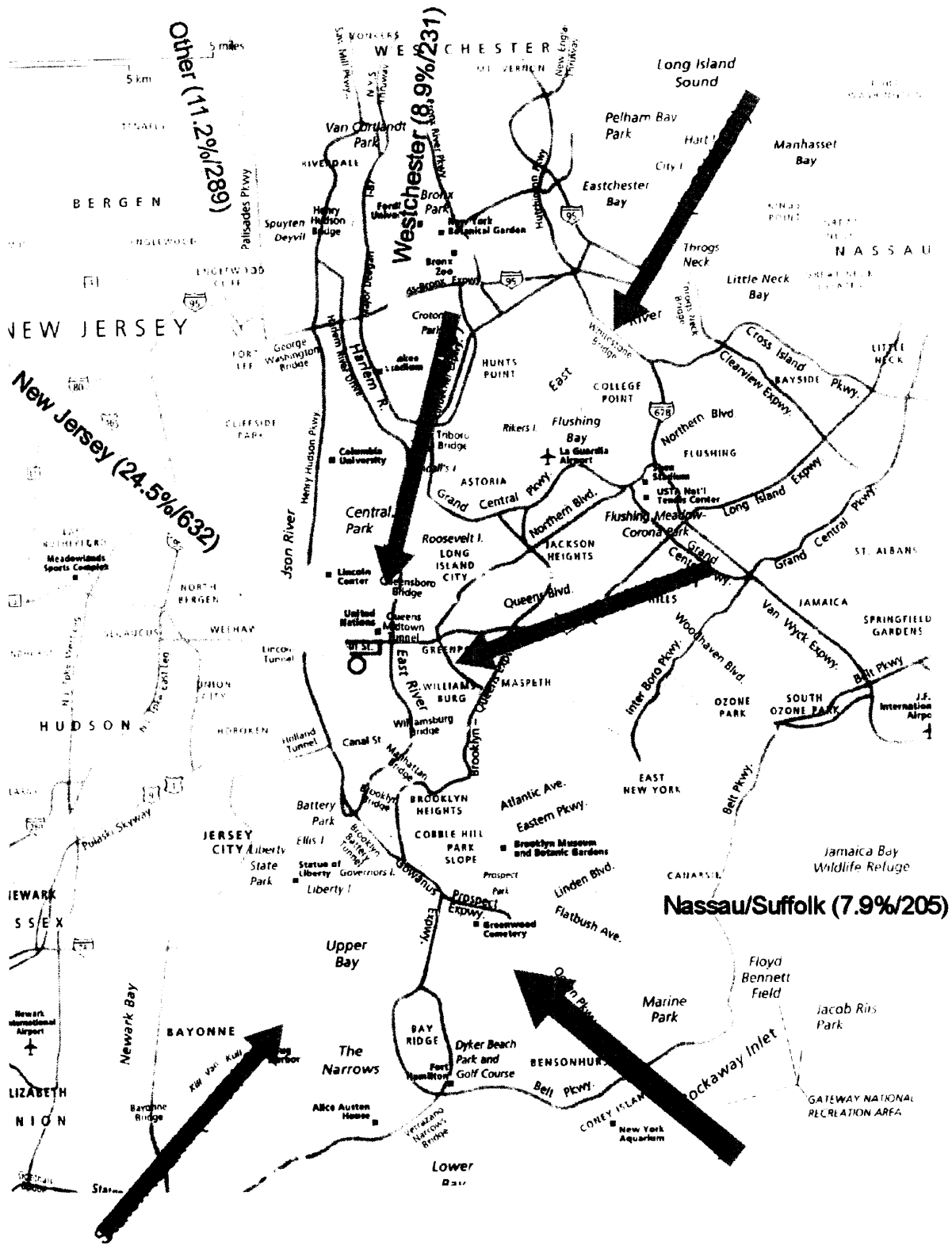
Figures 20-24 refer to the share of private automobile drivers and the number of cars per geographic location arriving to MSG for a specific event. For each event the percentage of overall drivers coming from New Jersey is the highest. For weeknight sports events, 24.5% of private automobile users originate from New Jersey (it should be noted that the Rangers game on Friday, April 4<sup>th</sup> and the Knicks game on Friday, March 28<sup>th</sup> were both against teams from New Jersey). For a Sunday night sports event this figure increases to 28.8%. For a Sunday afternoon sports event the figure is 27.8%. The circus and concert had a private automobile share from New Jersey of 24.6% and 21.7%, respectively.

With regard to other geographic locations within the New York City Metropolitan Area, the results varied by event. For weeknight sports events, the next highest share belonged to Brooklyn with 13.4% and the lowest share belonged to the Bronx and Staten Island at 7.3%. For Sunday evening sports events, the next highest share belonged to Westchester with 14.6% and the lowest share belonged to the Bronx at 3.7%. For Sunday afternoon sports events, the next highest share belonged to those who identified themselves as "Other" at 22.5% and the lowest share belonged to the Bronx at 2.2%. For the circus, the next highest share belonged to Brooklyn with 20.3% and the lowest share belonged to Manhattan at 2.9%. For the concert, the next highest share belonged to Queens with 13.6% and the lowest share belonged to Long Island at 7.2%.



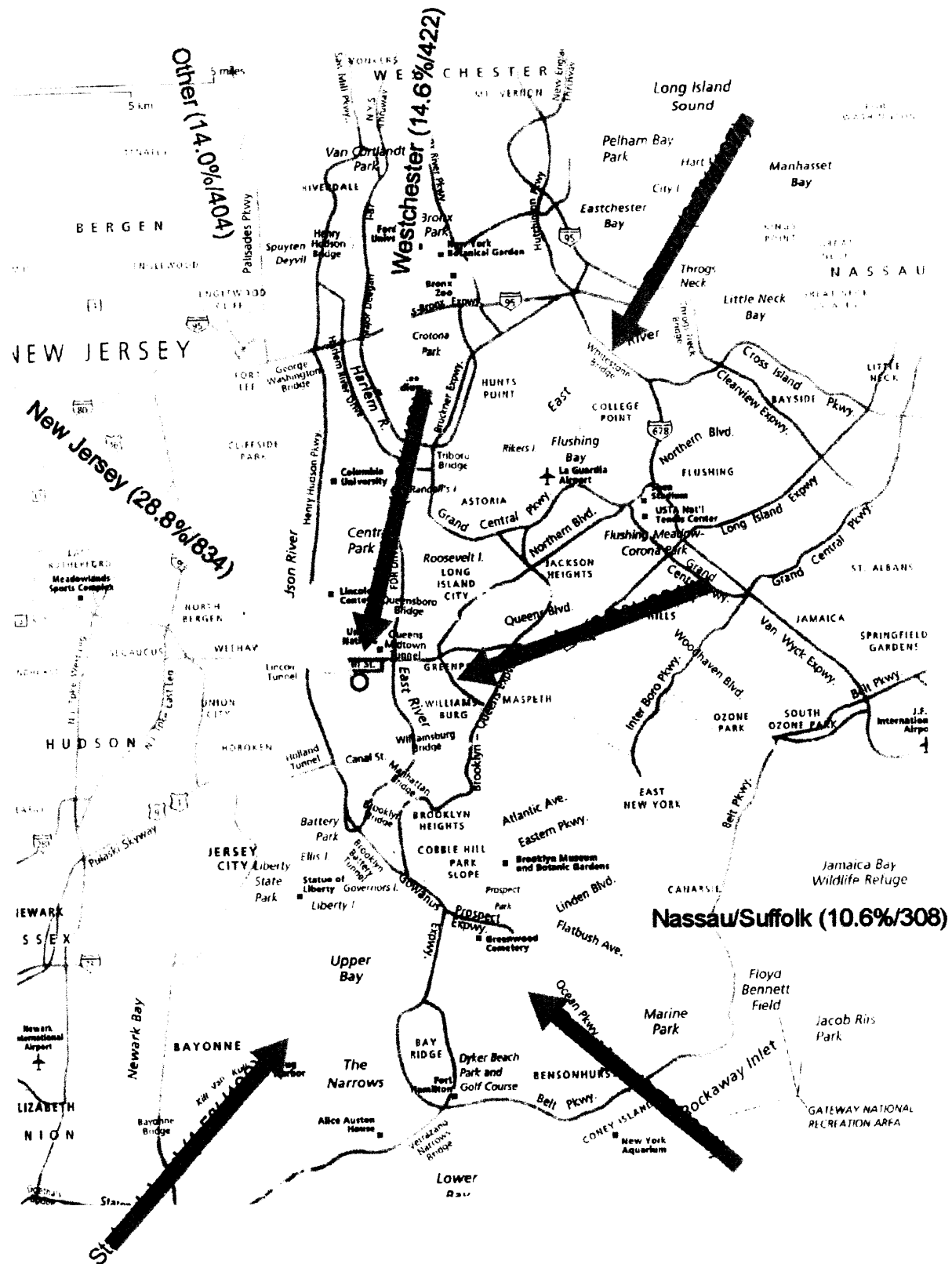
# Madison Square Garden Modal Split Analysis

Figure 20. Private Automobile Origins at Weeknight Sports Events (Percent Share/# of Cars)



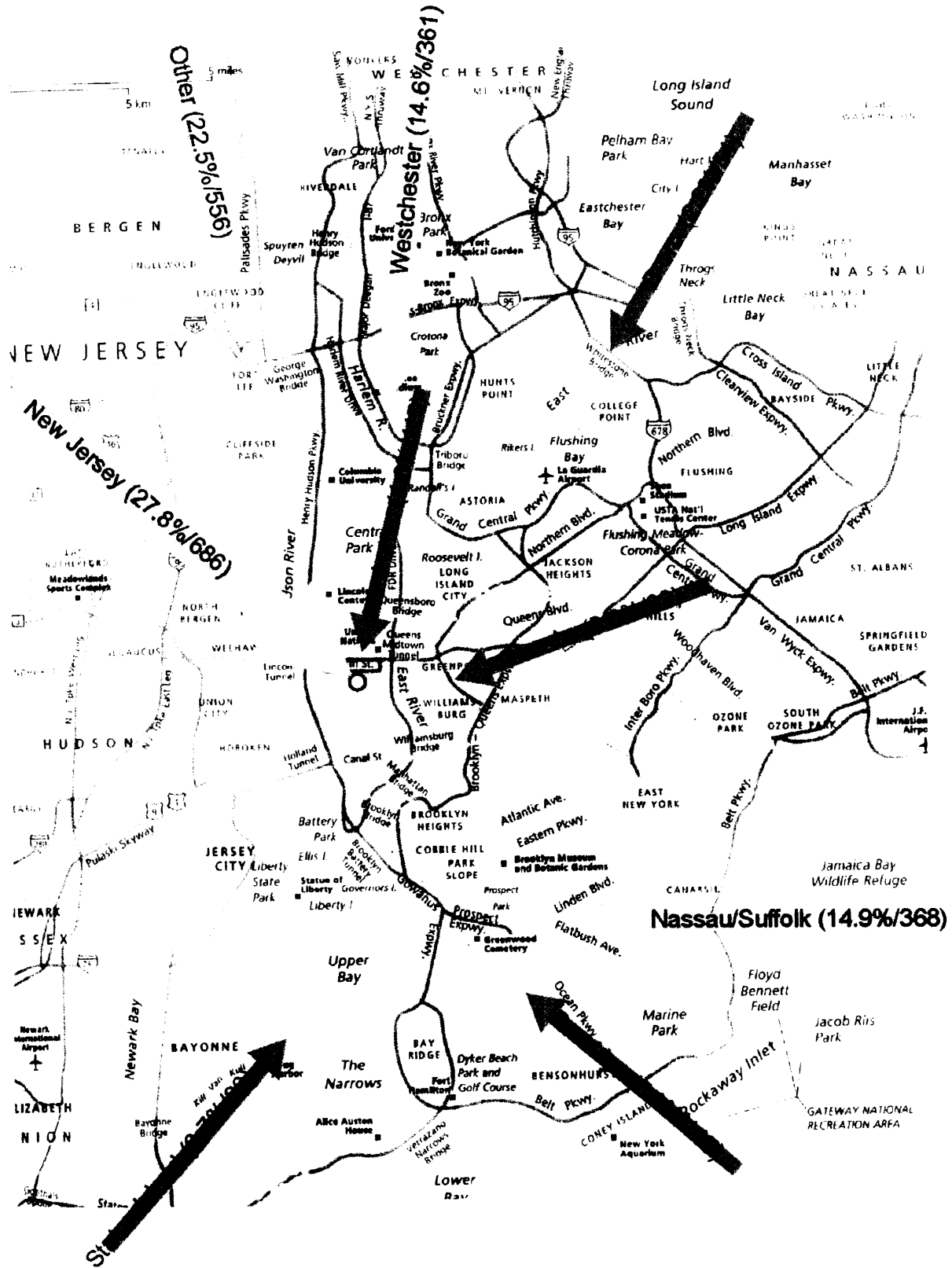
# Madison Square Garden Modal Split Analysis

Figure 21. Private Automobile Origins at Sunday Night Sports Events (Percent Share/# of Cars)



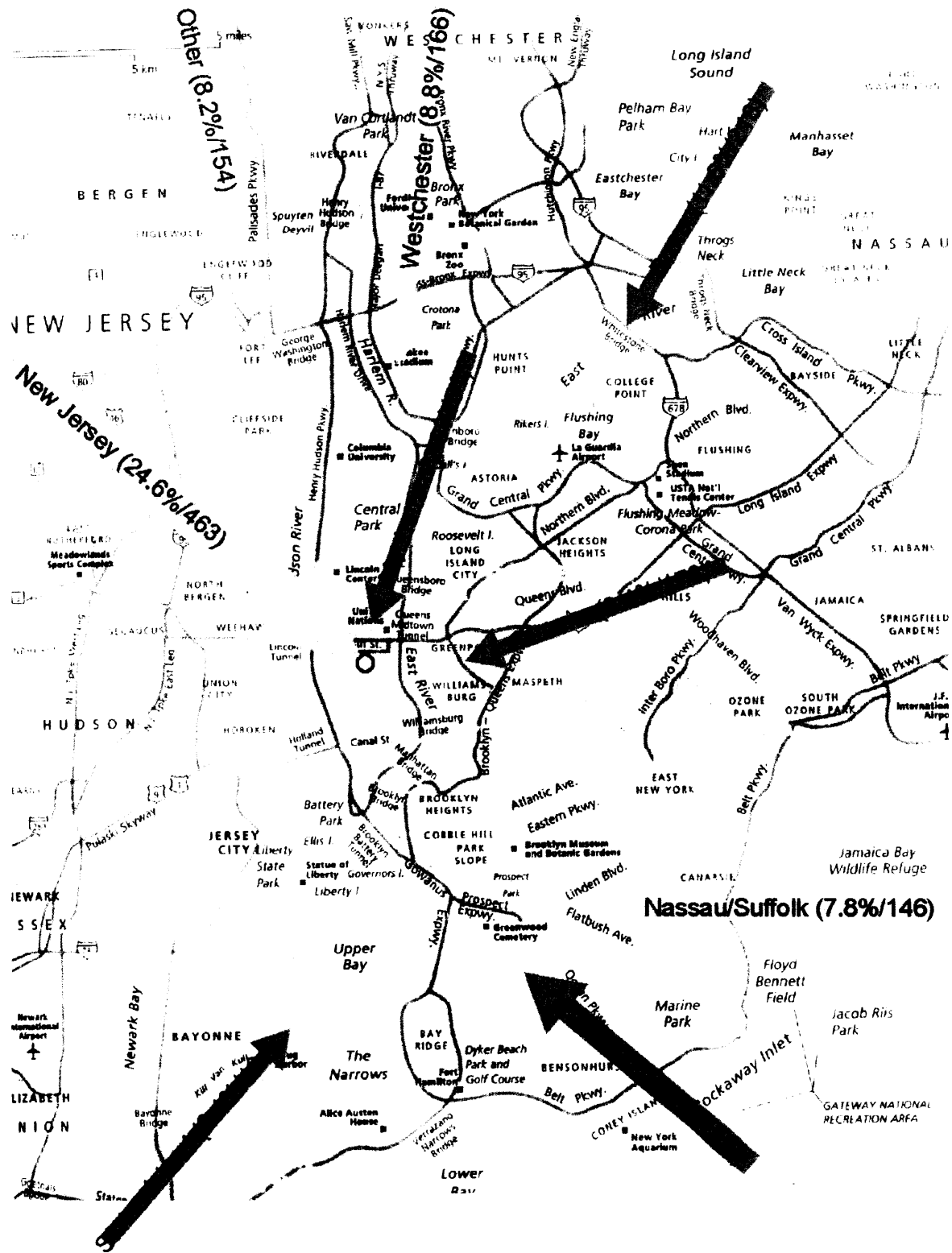
# Madison Square Garden Modal Split Analysis

Figure 22. Private Automobile Origins at Sunday Afternoon Sports Events (Percent Share/# of Cars)



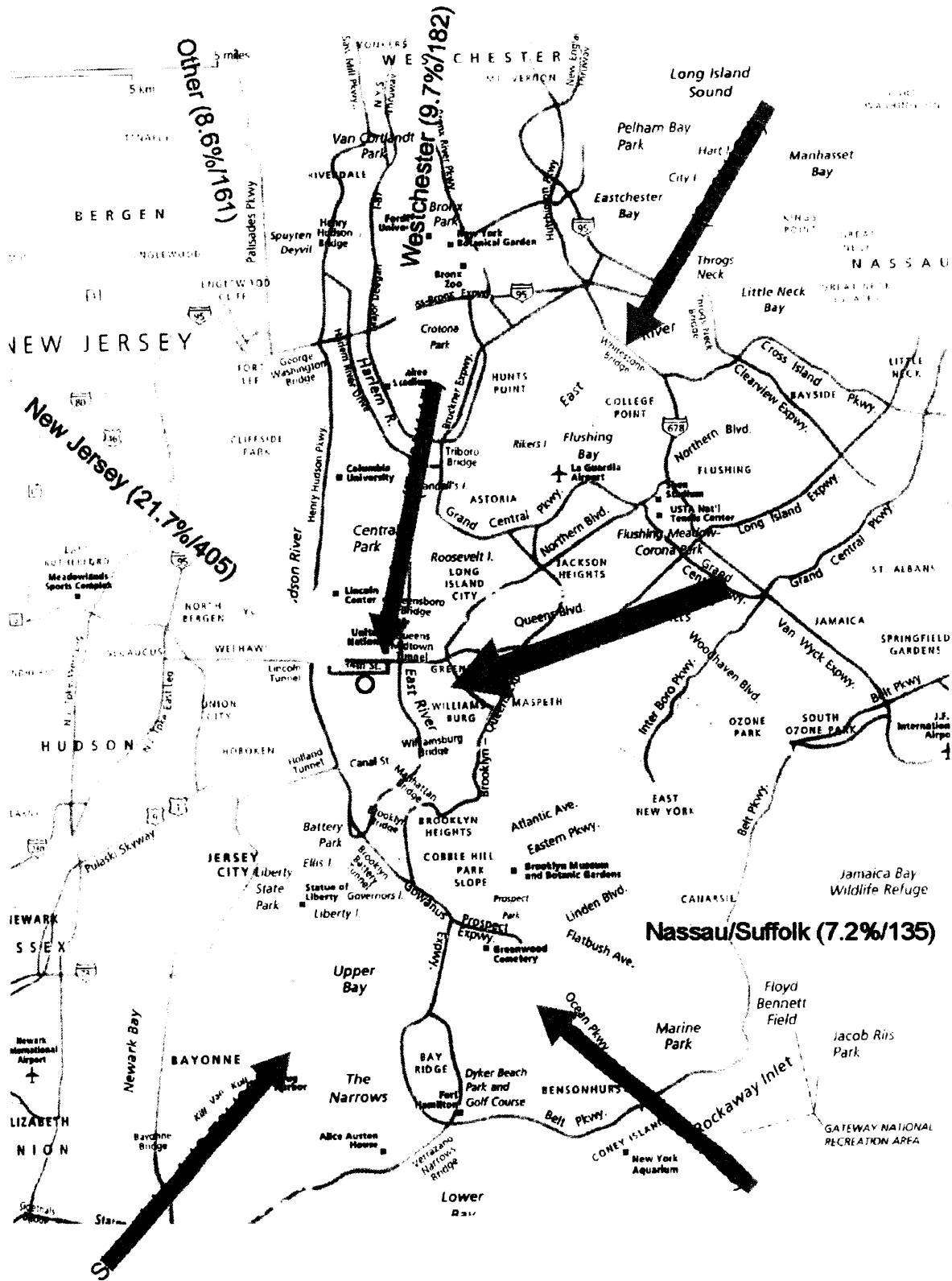
# Madison Square Garden Modal Split Analysis

Figure 23. Private Automobile Origins at Circus (Percent Share/# of Cars)



# Madison Square Garden Modal Split Analysis

Figure 24. Private Automobile Origins at Concert (Percent Share/# of Cars)



### **Conclusion**

Slightly more than 50% of Madison Square Garden patrons use public transit to arrive at the arena, making it the most common mode of travel. This is so for a number of reasons, the primary reason being MSG's unique and convenient location above Pennsylvania Station, a major regional transit hub. However, the transit and auto/taxi shares tend to fluctuate based on the following factors: type of event, geographic origin of attendees, time of day, and weeknight/weekend event occurrence. Even with such good transit access, almost 40% of fans use a car or taxi. Future planning must maximize transit usage while still programming for substantial vehicular traffic.

## TRIP ORIGINATION OF MSG ATTENDEES

Trip Origin		Work	Home	Shopping	Restaurant	Other
<b>Rangers</b>	Wednesday 7:30 pm	41%	54%	0%	1%	4%
	Friday 7:30 pm	31%	64%	0%	2%	3%
	Sunday 5:00 pm	1%	85%	3%	1%	10%
<b>Knicks</b>	Monday 7:30 pm	40%	52%	1%	3%	4%
	Friday 8:00 pm	31%	61%	1%	1%	6%
	Sunday 7:00 pm	3%	82%	1%	3%	11%
	Sunday 1:00 pm	1%	86%	1%	2%	10%
<b>Circus</b>	Saturday 3:30 pm	0%	99%	0%	0%	1%
<b>Concert</b>	Tuesday 8:00 pm	18%	77%	1%	2%	2%
<b>Average</b>		<b>18%</b>	<b>73%</b>	<b>1%</b>	<b>2%</b>	<b>6%</b>

TRIP ORIGIN AND TRAVEL MODE CROSSTABULATION

	Auto	Taxi/Limo	Walk	City Bus	Charter Bus	8 Ave Subway	7 Ave Subway	Bdwy Subway	6 Ave Subway	Lex Ave Subway	NJ Transit	PATH	LIRR	Metro North	Amtrak	Other
<b>Weeknight Sports</b>																
<b>Bronx</b>	58%	0%	0%	3%	1%	9%	19%	1%	3%	5%	0%	0%	0%	1%	0%	0%
<b>Brooklyn</b>	52%	3%	3%	1%	0%	16%	13%	10%	3%	0%	0%	0%	0%	0%	0%	0%
<b>Queens</b>	37%	0%	0%	1%	4%	17%	10%	8%	9%	1%	0%	0%	13%	0%	0%	1%
<b>Staten Island</b>	72%	2%	0%	10%	0%	2%	7%	3%	2%	2%	0%	0%	0%	0%	0%	0%
<b>Manhattan</b>	9%	18%	29%	3%	0%	13%	18%	6%	3%	1%	0%	0%	0%	0%	0%	1%
<b>Westchester</b>	56%	2%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	38%	0%	0%
<b>Nassau/Suffolk</b>	21%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	77%	0%	0%	0%
<b>New Jersey</b>	38%	2%	2%	0%	0%	0%	1%	0%	0%	0%	39%	15%	0%	0%	1%	1%
<b>Other</b>	48%	3%	3%	1%	2%	2%	1%	1%	0%	0%	2%	1%	15%	16%	3%	3%

	Auto	Taxi/Limo	Walk	City Bus	Charter Bus	8 Ave Subway	7 Ave Subway	Bdwy Subway	6 Ave Subway	Lex Ave Subway	NJ Transit	PATH	LIRR	Metro North	Amtrak	Other
<b>Weekend Sports</b>																
<b>Bronx</b>	33%	2%	0%	13%	2%	4%	29%	2%	7%	4%	0%	0%	0%	0%	0%	2%
<b>Brooklyn</b>	35%	1%	2%	0%	0%	18%	12%	26%	7%	0%	0%	0%	0%	0%	0%	0%
<b>Queens</b>	44%	6%	0%	1%	0%	23%	3%	7%	4%	0%	0%	0%	11%	0%	0%	0%
<b>Staten Island</b>	64%	8%	0%	10%	0%	0%	8%	5%	3%	0%	0%	0%	0%	0%	0%	3%
<b>Manhattan</b>	8%	24%	34%	3%	0%	7%	15%	5%	2%	0%	0%	0%	0%	0%	0%	1%
<b>Westchester</b>	66%	5%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	26%	0%	2%
<b>Nassau/Suffolk</b>	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	74%	0%	0%	0%
<b>New Jersey</b>	46%	1%	0%	0%	2%	0%	0%	0%	0%	0%	41%	8%	0%	0%	1%	1%
<b>Other</b>	49%	4%	2%	1%	10%	1%	2%	1%	0%	0%	2%	2%	2%	23%	3%	2%

	Auto	Taxi/Limo	Walk	City Bus	Charter Bus	8 Ave Subway	7 Ave Subway	Bdwy Subway	6 Ave Subway	Lex Ave Subway	NJ Transit	PATH	LIRR	Metro North	Amtrak	Other
<b>Circus</b>																
<b>Bronx</b>	41%	0%	0%	0%	0%	7%	25%	2%	16%	7%	0%	0%	0%	2%	0%	0%
<b>Brooklyn</b>	45%	3%	0%	0%	0%	14%	12%	18%	8%	0%	0%	0%	0%	0%	0%	0%
<b>Queens</b>	33%	2%	0%	0%	0%	23%	10%	15%	8%	0%	0%	0%	8%	0%	0%	0%
<b>Staten Island</b>	57%	9%	0%	13%	0%	9%	9%	0%	0%	0%	0%	0%	0%	0%	0%	4%
<b>Manhattan</b>	9%	26%	15%	4%	2%	17%	11%	2%	2%	7%	0%	2%	0%	0%	0%	4%
<b>Westchester</b>	52%	7%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	37%	0%	0%
<b>Nassau/Suffolk</b>	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	82%	0%	0%	0%
<b>New Jersey</b>	36%	3%	0%	0%	3%	0%	0%	0%	0%	0%	46%	10%	0%	0%	2%	1%
<b>Other</b>	72%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	6%	11%	6%	0%

	Auto	Taxi/Limo	Walk	City Bus	Charter Bus	8 Ave Subway	7 Ave Subway	Bdwy Subway	6 Ave Subway	Lex Ave Subway	NJ Transit	PATH	LIRR	Metro North	Amtrak	Other
<b>Concert</b>																
<b>Bronx</b>	65%	12%	0%	12%	0%	6%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Brooklyn</b>	38%	9%	0%	0%	0%	6%	9%	38%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Queens</b>	38%	5%	0%	0%	0%	26%	2%	14%	7%	0%	0%	0%	7%	0%	0%	0%
<b>Staten Island</b>	60%	7%	0%	7%	0%	7%	7%	7%	7%	3%	0%	0%	0%	0%	0%	0%
<b>Manhattan</b>	6%	21%	28%	3%	0%	13%	14%	7%	4%	0%	0%	1%	0%	0%	0%	1%
<b>Westchester</b>	27%	0%	0%	0%	2%	0%	9%	0%	0%	0%	0%	0%	0%	59%	0%	2%
<b>Nassau/Suffolk</b>	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	90%	0%	0%	1%
<b>New Jersey</b>	27%	2%	0%	0%	0%	0%	0%	0%	0%	0%	51%	18%	0%	0%	0%	2%
<b>Other</b>	38%	12%	0%	0%	0%	8%	0%	0%	0%	0%	0%	0%	4%	27%	12%	0%

\* Values are normalized.



# Madison Square Garden Transit Survey

## 1. What mode of travel did you use to come to Madison Square Garden today/tonight?

Car	6th Ave Subway	* analyzed as a multiple
Yellow taxi	Lexington Ave Subway	response question
Limo	NJ Transit	
City Bus	PATH	
Charter Bus	LIRR	
Walk	Metro North	
8th Ave Subway	Amtrak	
7th Ave Subway	Other (please specify)	(open-ended)
Broadway Subway		

## 2. What time did you arrive at The Garden today/tonight? (open-ended)

## 3. If you traveled by car, taxi, or limo, how many people arrived with you?

No one else

- 1
- 2
- 3
- 4
- 5

## 4. Where were you before coming to The Garden?

Work  
 Home  
 Shopping  
 Restaurant  
 Other (please specify) (open-ended)

## 5. In what borough or county were you before coming to The Garden?

Bronx Westchester  
 Brooklyn Nassau/Suffolk  
 Queens Any county in NJ  
 Staten Island Other (please specify) (open-ended)  
 Manhattan (GO TO Q6)

## 6. If you were already in Manhattan, what part of Manhattan did you travel from?

Lower Manhattan (south of Houston St. to the Battery)  
 North of Houston St. - South of 34th St.  
 Midtown (34th St. - 59th St.)  
 Upper Manhattan (north of 59th St.)

Note: Percentages may be greater than or less than 100% due to rounding.

# Madison Square Garden Transit Survey

**7. When you leave The Garden, will you return to the same place that you traveled from?**

Yes (SKIP TO Q11)

No

**8. (IF NO TO Q7) Where will you go after leaving The Garden?**

Home

Restaurant

Shopping

Other (please specify)

*(open-ended)*

**9. (IF NO TO Q7) What borough or county will you go to directly after leaving The Garden?**

Bronx Westchester

Brooklyn Nassau/Suffolk

Queens Any county in NJ

Staten Island Other (please specify)

*(open-ended)*

Manhattan (GO TO Q10)

**10. (IF NO TO Q7) If you are staying in Manhattan directly after leaving The Garden, what part of Manhattan will you go to?**

Lower Manhattan (south of Houston St. to the Battery)

North of Houston St. - South of 34th St.

Midtown (34th St. - 59th St.)

Upper Manhattan (north of 59th St.)

**11. What mode of travel will you use when you leave The Garden?**

Car 6th Ave Subway

Yellow taxi Lexington Ave Subway

Limo NJ Transit

City Bus PATH

Charter Bus LIRR

Walk Metro North

8th Ave Subway Amtrak

7th Ave Subway Other (please specify)

Broadway Subway

\* analyzed as a multiple response question

*(open-ended)*

**12. Is this the same mode of travel that you used to travel to The Garden?**

Yes

No

**Total Respondents**

**Margin of Error**

Note: Percentages may be greater than or less than 100% due to rounding.

**TECHNICAL MEMORANDUM A-4****MADISON SQUARE GARDEN ATTENDANCE PROFILE**

The existing Madison Square Garden consists of the Arena, Felt Forum, Rotunda and Bowling Center. This memo describes the attendance characteristics of these facilities and predicts future characteristics of the New Madison Square Garden Arena and Forum.

Our study reveals that the events whose attendance is most likely to be affected by the increased capacity of the New Arena are primarily concerts and Ranger hockey games. Surveys have been conducted at two concerts, two Ranger hockey games, and several Knickerbocker basketball games. A summary of the results and estimated average modal split is included in this memo.

**Existing Arena and Forum**

The existing Arena has a maximum seating capacity which varies with the type of event scheduled. This capacity for concerts ranges from 15,000 to 20,250 seats (depending on the act). Knickerbocker Basketball games have a maximum seating capacity of 19,190 while Ranger hockey games have 17,690 seats at capacity. The Forum has a maximum seating of approximately 5,000.

Madison Square Garden Corporation, the operator of Madison Square Garden, provided Vollmer Associates with information on Arena and Forum attendance for an analysis year beginning 5/1/86 and ending 4/30/87. This information includes all events that occurred in both facilities during the analysis year for a total of 534 events: 347 held in the Arena and 187 held in the Forum. Over the course of a year, 72 dark days occurred at the combined Arena/Forum facilities, 22 of these dark days occurred on weekends or holidays and 50 dark days occurred on weekdays. For each event, the day, date, event title, start time, end time, attendance and ticket sales was provided. This information was entered into a database file which was then analyzed.

Figure IV-1 summarizes the combined Arena/Forum attendance for each day of the week. Weekdays include Monday through Thursday, while weekends and holidays include Friday through Sunday as well as any holidays that fall on a weekday. Attendance was divided into three ranges: events with attendance between 0 and 9,999, events with attendance between 10,000 and 14,999, and events with attendance of 15,000 or more. During the weekdays, Wednesdays and Thursdays have the greatest number of events occurring. On the weekends, Saturday has the greatest number of events occurring. Sunday has about the same number of events with attendance greater than 10,000 as Saturday. However, since underlying traffic volumes are higher on Saturday than on Sunday, it is the more important weekend day to be studied.

A similar summary of attendance is shown in Figure IV-2. Instead of categorizing by the day of the week, attendance is categorized by the type of

event. On weekdays as well as weekends and holidays, four events are significant: concerts, Rangers hockey, Knickerbocker basketball and the circus.

Concerts have the highest attendance of all events. Only 1 (2%) concert had attendance below 10,000 during the analysis year while 16 concerts had attendance in the range 10,000-14,999, and 40 (70%) concerts had attendance greater than 15,000. Total concert attendance for the analysis year was 902,462 with an average attendance of 15,833. The median attendance of 16,597 is approximately five percent higher than the average attendance.

Ranger hockey games also have high attendance. Five (10%) games had attendance below 10,000, 30 (61%) games had attendance in the range 10,000-14,999, and 14 (29%) games had attendance over 15,000. Total attendance during the analysis year was 634,196 with an average attendance of 12,942. The median attendance was 12,383.

There were 44 Knickerbocker basketball games during the design year. Twenty-three games had attendance below 10,000, 17 games had attendance in the range 10,000-14,999, and 4 games had attendance greater than 15,000. Total attendance for the analysis year was 417,179 with an average attendance of 9,481. The median attendance was slightly above the average at 9,764.

The circus appears significant because it had the greatest number of events scheduled during the analysis year, however most of the events had low attendance. Seventy-three circus performances had attendance below 10,000, ten performances had attendance in the range 10,000-14,999, and four performances had attendance over 15,000. Total circus attendance for the analysis year was 548,566 with an average attendance of 6,305. The median attendance was 5,714.

At the Felt Forum during the analysis year a total of 187 events were held. Maximum seating capacity is about 5,000. During the analysis year, a total of 51 (27%) events had attendance less than 2,000, 94 (50%) events had attendance between 2,000 and 4,000 and the remaining 42 (23%) events had near or at capacity attendance with 4,000 or more in attendance. The total attendance for the year is estimated at 520,038 with an average attendance of 2,780. The median event was a Sesame Street show with 2,856 persons in attendance.