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June 2007
Framing the Issues

- Scale
- Measurement
- Examples
- Approaching Solutions
The Core and Adjacent Areas
Lower Manhattan is a small part of a regional network
Yet a critical element in Regional growth strategies

- The Core – NYC below 60th St
  - 3.5 million entries
  - 1.8 million jobs
  - 2 million enter by subway
  - 180,000 enter by commuter rail
  - 260,000 enter by bus
  - 1.1 million enter by motor vehicle
  - 800,000 motor vehicles

Source – NYMTC – Hub Bound Travel 2004
June 2007
TRANSPORTATION – SCALE

- Transportation orders of magnitude
  - Regional transit ridership: 8.5 million trips/day
  - Roads – 37,000 miles
  - Roads – 240 million VMT per day
  - Freight – total through region, 475 million tons/year
  - Freight – within region – 170 million tons/year
The Core – NYC below 60th St
3.5 million weekday entries
1.8 million jobs
2 million enter by subway
180,000 enter by commuter rail
260,000 enter by bus
1.1 million enter by motor vehicle
800,000 motor vehicles
Criteria: Must meet complex criteria

- Must serve residents
- Must serve businesses and firms
- Must serve large numbers of tourists
- Must optimize use of existing infrastructure

Must make additional investments assuring:
- The benefits far outweigh the costs
- Meet development and environmental objectives
Urban Freight
In a typical urban area

- Intra-regional trips represent the vast majority of truck trips (70-80%)
- Inter-regional trips (with origin or destination in metro area) represent 20-25% of truck trips
- Thru trips (traversing metro area en route to other destinations): 1-3%
- Not all truck trips are transporting cargoes, maybe as much as 20% are service related trips
- 20-30% are empty trips
- Load factors are low: about 15%-20% of capacity

Source: Jose Holguin-Veras
A Coast to Coast Crisis that is exacerbated in Lower Manhattan

Economic Boom in Lower Manhattan has exponentially increased demand for space.

Photos: Sam Schwartz PLLC
Barriers Particular to The Core and Lower Manhattan

- Off-loading facilities in commercial buildings inadequate
- Loading docks start closing at 5 PM
- Security systems/procedures heightened
- Large numbers of Free Parking Permits issued to city employees monopolize curb/off-load space
- Continuous construction clogging streets

IMPACTS
- Increased dwell times on streets and in buildings
- Increased on street congestion
- Increased emissions
- Increased cost of delivery
I-78 from Jersey City drops trucks directly onto Canal Street from the Verrazano Narrows Bridge-toll free
Transportation and Access: What is needed:

- New West Side access To Midtown
- Redesign of West Street
- Redesign of Canal Street
- Design of LM Pedestrian Pathways
- Freight Strategy
- Auto Restrictions
- Bus Routes (BRT)
- Parking Strategies (especially for tourist buses)
- Local Circulators and Vans
- Coherent System of Ferries/Use of our Waterways
Approaching solutions

- Regulation
- Pricing
- Capital Investments
- Innovation
- Understanding benefits and costs
Actions to minimize truck generated traffic disruptions

- Private sector
  - Voluntary standards for loading docks/freight elevators
  - Off peak deliveries

- Public Sector
  - Bridge/tunnel pricing
  - New parking strategies for commercial vehicles, and other vehicles
  - Congestion pricing
  - Coordinated street rehab management
Why congestion pricing in NYC

- **KEEP THE COSTS OF DOING BUSINESS IN NYC REASONABLE**
- Multiple objectives – what are the weights
  - Pure congestion relief, to be realized by higher LOS, or greater average speeds
  - Air quality
  - Energy savings
  - Improved access for higher priority vehicles – (goods)
  - Improved amenities for non motorized means of transport
  - Income from pricing
Truck Toll Elasticities

MTA B&T Facilities

- Less than 2% decline in traffic for 10% increase in tolls over MTA B&T facilities.
- Brooklyn Battery Tunnel and Queens Midtown Tunnel have highest elasticities – especially for large trucks – as there are free alternatives.

Source: “Optimal Toll Strategies for the TBTA”, UTRC, 1992, C. McKnight et.al.
Provide tax incentives to receivers willing to accept deliveries during off-hours

- The data show that this could generate a shift of 15-25% of truck traffic to the off-hours (several times the shift induced by the 2001 toll increases)
- Politically attractive/economically sound because:
  - It targets the key decision makers
  - It will improve economic competitiveness
  - It will reduce urban congestion
  - It will increase sustainability
  - The carriers will support it (28% cost savings if all operations are switched to off-hours)
- See NYSDOT “Potential for Off-Peak Deliveries” report
- Source: Jose Holguin-Veras
City Logistic Schemes

- Joint Delivery Service (JDS): A group of carriers form a neutral company that is in charge of making the last leg of deliveries. This:
  - Increases truck utilization (remember the 15% load factor?)
  - Reduces truck trips
  - Already in use in some Japanese and German cities

Diagram:
- Current condition: Multiple carriers delivering to Downtown.
- With JDS doing the last leg of deliveries: Carriers deliver to JDS, which then delivers to Downtown.
Conclusions

- Trucks are a way of life for New Yorkers – for businesses and for personal deliveries.

- The time has come to develop goods movement and delivery policies that will meet explicit growth and sustainability objectives – this addresses trucks, rail, and their supporting infrastructure – up through the last mile!

- It will take a combination of new institutional capability, partnering with private interests, technological investments, regulations and leadership to have a rational policy evolve.