Changing Behavior in Passenger Transport: A Governmental Perspective

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OECD International Transport Forum
May 28, 2008
Lowest CO$_2$ Source
Lowest CO$_2$ Source
Lowest CO$_2$ Source
Lowest CO$_2$ Source
Lowest CO₂ Source
Per capita CO$_2$e emissions

<table>
<thead>
<tr>
<th>Location</th>
<th>Metric tons CO$_2$e</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>5.9</td>
</tr>
<tr>
<td>New York</td>
<td>7.1</td>
</tr>
<tr>
<td>Toronto</td>
<td>9.6</td>
</tr>
<tr>
<td>San Diego</td>
<td>11.1</td>
</tr>
<tr>
<td>San Francisco</td>
<td>11.2</td>
</tr>
<tr>
<td>United States</td>
<td>24.5</td>
</tr>
</tbody>
</table>
Per Capita Vehicle Miles Traveled (VMT)

- U.S.
- NY region
Investment Choice
Mean Distance Between Failures, NYC Subway
NYC Annual Subway Ridership

Investment Choice
Investment Choice

Changes in Auto Ownership and Subway Ridership

- Auto ownership
- Subway ridership

Pct. change

1950s 1960s 1970s 1980s 1990s 2000s
most effective form of transport interventions will be a **coherent overall package** whose elements are all consistently pulling in the same direction, and sustained for a number of years. ... both sticks and carrots are effective in changing behavior of the individuals concerned. **Carrots alone are popular**, but a large part of the effect may be offset by the responses of other people, and **sticks alone are effective but cannot maintain the public acceptance** which enables them to continue. -- Phil Goodwin “Policy Incentives …”
Coherent Overall Package

Agenda
- Comprehensive approach

Issues
- Traffic congestion
- Double-parking
- Truck deliveries
- Taxi cruising
- Gov’t parking permits
- Construction impacts
- Parking pricing
- Subway crowding
- Revenues for transit
Agenda
- Comprehensive approach
- Strengthen non-auto modes

Specific measures
- Bus rapid transit
- Bus lanes
- Traffic signal priority
- Walk access to subway and bus stops
- Bicycle lane network
- Bike parking/showers
- Ferry network
Coherent Overall Package

Agenda

- Comprehensive approach
- Strengthen non-auto modes
- Reduce drivers of demand for auto use

Specific measures

- Land use -- focus development in areas served by transit
- Parking supply in downtown areas
- Government parking permits
- Parking requirements for new developments
- Neighborhood walkability
- Taxi/livery availability
- Car-sharing
Coherent Overall Package

Agenda
- Comprehensive approach
- Strengthen non-auto modes
- Reduce drivers of demand for auto use
- Align pricing signals with policy objectives

Specific measures
- Congestion pricing
- Parking pricing (autos)
- Graduated commercial parking rates
- Transit fare incentives
Strategic Approach

Elements

- Vision

New York City Population Growth

<table>
<thead>
<tr>
<th>Years</th>
<th>Population (millions)</th>
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<tbody>
<tr>
<td>1950</td>
<td>7.00</td>
</tr>
<tr>
<td>1960</td>
<td>7.25</td>
</tr>
<tr>
<td>1970</td>
<td>7.50</td>
</tr>
<tr>
<td>1980</td>
<td>7.75</td>
</tr>
<tr>
<td>1990</td>
<td>8.00</td>
</tr>
<tr>
<td>2000</td>
<td>8.25</td>
</tr>
<tr>
<td>2010</td>
<td>8.50</td>
</tr>
<tr>
<td>2020</td>
<td>8.75</td>
</tr>
<tr>
<td>2030</td>
<td>9.00</td>
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Elements

- Vision

1. Create enough housing for growing population
2. Ensure all New Yorkers have parks within a 10-minute walk
3. Clean up all contaminated land
4. Develop water network back-up systems
5. Open 90% of our waterways
6. Improve travel times
7. Achieve “State Of Good Repair” on our transportation system
8. Clean Energy
9. Cleanest air of any big city in America
10. Reduce global warming emissions by 30%
Sustainable Streets
Strategic Plan
for the New York City
Department of
Transportation
2008 and Beyond
Strategic Approach

Elements
- Vision
- Build awareness of the problems
- Consensus that something needs to be done

[headlines]
- Economic costs of congestion
- Drivers have viable transit choices
- Human cost of traffic
- Need for transit improvements
- Need for funding
Strategic Approach

Elements
- Vision
- Build awareness of the problems
- Consensus that something needs to be done
- Public consultation on solutions

Consultation process
- Community forums on City’s sustainability plan
- 14 public hearings by Congestion Mitigation Commission
- Wide range of alternatives
- Numerous meetings with Community Boards, civic groups, elected officials, etc.
Strategic Approach

Elements
- Vision
- Build awareness of the problems
- Consensus that something needs to be done
- Public consultation on solutions
- Interagency partnerships

Agencies
- Metropolitan Transportation Authority
- Port Authority of NY & NJ
- New York State Dept. of Transportation
- U.S. Dept. of Transportation
- NY regional planning organization
Strategic Approach

Elements
- Vision
- Build awareness of the problems
- Consensus that something needs to be done
- Public consultation on solutions
- Interagency partnerships
- Broad coalition of support

Support
- Newspaper editorial boards
- 130+ civic, advocacy, labor, business and environmental organizations
- Governor
- Community Boards
- City Council approved 30-20
- By 59% to 38%, public supported congestion pricing if revenues used for transit improvements
Strategic Approach

Gained

- Public understanding
- Support for traffic reduction, transit improvements and financing
- Governmental partnerships
- City in leadership position
- Expectation for action on rest of the agenda
Beyond Congestion Pricing: Virtuous Circle

Identify opportunities → Initiatives
Beyond Congestion Pricing: Virtuous Circle

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Beyond Congestion Pricing: Virtuous Circle

Identify opportunities → Initiatives

Select Bus Service
Beyond Congestion Pricing: Virtuous Circle

- Identify opportunities
- Initiatives
- Create additional opportunities
- Alter traveler choice set & incentives
- Build public support
- Evaluate and show results
- Behavior changes