Outline

Current Status and Recent Trends

Significant Influences

A Critical Assessment

Arguments Supporting Public Transport

Future Influences

Ingredients for Future Success
Current Status

• Ridership increasing moderately but remains small
• Strong financial support from all levels of government
• Significant growth in number of new rail starts in past 25 years
• Major rebuilding of many older systems over past 20 years
• Slow institutional or technological innovation, but growing recognition that fundamental change may be necessary for survival well into 21st century
## US Urban Transport Today


<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>81.8</td>
<td>83.7</td>
<td>82.0</td>
<td>87.1</td>
<td>86.5</td>
<td>86.4</td>
</tr>
<tr>
<td>Transit</td>
<td>3.2</td>
<td>2.6</td>
<td>2.2</td>
<td>2.0</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Walk</td>
<td>n/a</td>
<td>9.3</td>
<td>8.5</td>
<td>7.2</td>
<td>5.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Bicycle</td>
<td>n/a</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Other</td>
<td>5.0</td>
<td>3.7</td>
<td>6.5</td>
<td>3.0</td>
<td>5.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>


*Eno Transportation Foundation, Inc., Washington, DC.*

Transit Share of Commute for Metropolitan Areas Over 2 Million in Population (2000)


<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Car</th>
<th>Transit</th>
<th>Non-Motorized</th>
<th>Work at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY-NJ-CT-PA</td>
<td>65.7</td>
<td>24.9</td>
<td>6.4 ↓</td>
<td>3.0 ↑</td>
</tr>
<tr>
<td>Chicago</td>
<td>81.5↑</td>
<td>11.5 ↓</td>
<td>4.2 ↓</td>
<td>2.9 ↑</td>
</tr>
<tr>
<td>San Francisco-Oakland</td>
<td>81.0</td>
<td>9.5</td>
<td>5.5</td>
<td>4.1 ↑</td>
</tr>
<tr>
<td>Washington DC-Baltimore</td>
<td>83.2↑</td>
<td>9.4 ↓</td>
<td>3.9 ↓</td>
<td>3.5 ↑</td>
</tr>
<tr>
<td>Boston</td>
<td>82.7</td>
<td>9.0</td>
<td>5.1 ↓</td>
<td>3.2 ↑</td>
</tr>
</tbody>
</table>

↑↓ indicates change of more than 0.5% from 1990-2000

*Source: Journey to Work Trends in the United States and its Major Metropolitan Areas 1960-2000*
Significant Influences

- Suburbanization of homes, employment and attractors
- Low costs for car ownership and operation
- Extensive urban road infrastructure
- Government policies towards roads and public transport
# Suburbanization: 2000 Journey to Work

## A. Total Trips (in millions of daily trips)

<table>
<thead>
<tr>
<th>Homes in:</th>
<th>Jobs in:</th>
<th>Total Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central City</td>
<td>Suburbs</td>
</tr>
<tr>
<td>Central City</td>
<td>28.2 (27%)</td>
<td>9.2 (9%)</td>
</tr>
<tr>
<td>Suburbs</td>
<td>20.8 (20%)</td>
<td>44.6 (43%)</td>
</tr>
<tr>
<td>Total Jobs</td>
<td>49.0 (48%)</td>
<td>53.8 (52%)</td>
</tr>
</tbody>
</table>

## B. Share of 1990-2000 Increase

<table>
<thead>
<tr>
<th>Homes in:</th>
<th>Jobs in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central City</td>
</tr>
<tr>
<td>Central City</td>
<td>5%</td>
</tr>
<tr>
<td>Suburbs</td>
<td>16%</td>
</tr>
</tbody>
</table>

## C. Public Transport Mode Share

<table>
<thead>
<tr>
<th>Homes in:</th>
<th>Jobs in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central City</td>
</tr>
<tr>
<td>Central City</td>
<td>14%</td>
</tr>
<tr>
<td>Suburbs</td>
<td>6%</td>
</tr>
</tbody>
</table>
The Car-Road System*

High car ownership levels

• 600 cars per 1000 population

High car usage

• 10,000 veh-km per capita annually

Low taxes, fees and user charges for car ownership and use

• Sales taxes range from 5-8%
• Users pay only 60% of road infrastructure costs in US
• Fuel taxes are from 10-20% of European levels

* Source: The Urban Transportation Crisis in Europe and North America, by John Pucher and Christian LeFevre, 1996.
Urban parking supply is relatively widely available and often free

- 380 parking spaces per 1000 central city workers in 10 largest US cities
- 95% of car commuters enjoy free parking

Highly developed urban road system

- 6.6 metres of road per capita in 10 largest US cities; 3 times European levels

*Source: The Urban Transportation Crisis in Europe and North America, by John Pucher and Christian LeFevre, 1996.*
### Public Transport Funding by Source (2007, in $ billions)

<table>
<thead>
<tr>
<th>Source</th>
<th>Capital</th>
<th>Operating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fares</td>
<td>---</td>
<td>11.1 (31.4%)</td>
</tr>
<tr>
<td>Other directly generated</td>
<td>4.8 (33.5%)</td>
<td>2.7 (7.6%)</td>
</tr>
<tr>
<td>Local</td>
<td>2.1 (14.4%)</td>
<td>8.3 (23.4%)</td>
</tr>
<tr>
<td>State</td>
<td>1.6 (11.2%)</td>
<td>8.4 (23.6%)</td>
</tr>
<tr>
<td>Federal</td>
<td>5.9 (41%)</td>
<td>2.7 (7.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>14.3 billion</td>
<td>35.5 billion</td>
</tr>
</tbody>
</table>

Source: American Public Transportation Association, Transit Facts 2009 (for 2007)
A Critical Assessment

- Public transport has been stabilized
- Many new rail initiatives in operation or under construction (Phoenix, Denver)
- Some real success stories: New York City, Houston, Seattle
- Institutional change is occurring slowly
- Retention of political support
Traditional Arguments Supporting Transport

• Equity: access for those who cannot or do not choose to drive

• Congestion: the need for a high-quality alternative

• Land use influence: public transport is necessary, but not sufficient to change trends

• Environmental: car technology strategies are more effective

• Energy: car technology strategies are effective
Other Arguments Supporting Transit

• Economic: expenditures for private autos may be alternatively used to improve local economies and quality of life

• Transit allows agglomeration of economic activity in cities:
  • New York, Boston, San Francisco, etc. could not have developed without transit
  • The contribution of earlier investments in heavy rail is not valued appropriately
  • New investments will have a lasting impact – thus the need for a long view (Economic analysis of CrossRail in London)
Other Arguments Supporting Transit

- Transit is contributing to decreasing external costs of transport in cities:
  - accidents
  - impacts on human health
  - congestion
  - noise
  - global warming
Other Arguments Supporting Transit

• The key is the enhancement of the quality of the urban space
• Public Transport can be a catalyst for this process
Future Influences on Public Transport

- **Urban form**
  - continued growth on periphery is likely

- **Demographics**
  - rapid increase in numbers of elderly

- **Technological change**
  - telecommunications advances
  - ITS impacts on car/road system performance

- **Higher public expectations**
  - better service quality needed to attract choice riders
  - greater return for public support
Ingredients for Future Success

• Maintain supportive coalition
  -- expand base benefiting from public transport: rural, suburban, big cities
  -- demonstrate that real change is occurring in response to changing needs and expectations

• Expand the definition of public transport
  -- greater variety of services with more flexibility in use of funds

• Greater private sector involvement
  -- greater use of partnerships and connections with private sector (e.g., employers and activity providers)
  -- more reliance on innovative financing and procurement techniques
  -- competition in the provision of services
Ingredients for Future Success

- Aggressive implementation of new technology
  - better information provision: pre-trip and en route
  - more effective real-time operations control
  - improved vehicle design

- Organizational change
  - greater operating staff responsibility and inclusion, and accountability
  - increased customer orientation