PUBLIC TRANSPORTATION
INTRODUCTION
• Current Status and Recent Trends
• Significant Influences
• A Critical Assessment
• Arguments Supporting Public Transport
• Future Influences
• Ingredients for Future Success
Current Status

- Ridership stable but market share is small and continuing to decline
- 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 15 years
- Little institutional or technological innovation, but growing recognition that fundamental change may be necessary for survival well into 21st century
### US Public Transport Today


<table>
<thead>
<tr>
<th></th>
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<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>na</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>na</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>


Percentage of Workers Using Public Transportation in Urbanized Areas Over 1,000,000 Population (2000)
Percentage of Workers Using Public Transportation in Urbanized Areas Over 1,000,000 Population (2000)
Significant Influences

• Suburbanization of homes, employment and attractors
• Low car ownership and operation costs
• 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></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central City</td>
<td>Suburbs</td>
<td>Total Homes</td>
</tr>
<tr>
<td>Central City</td>
<td>28.2 (27%)</td>
<td>9.2 (9%)</td>
<td>37.4 (36%)</td>
</tr>
<tr>
<td>Suburbs</td>
<td>20.8 (20%)</td>
<td>44.6 (43%)</td>
<td>65.4 (64%)</td>
</tr>
<tr>
<td>Total Jobs</td>
<td>49.0 (48%)</td>
<td>53.8 (52%)</td>
<td></td>
</tr>
</tbody>
</table>
## Suburbanization: 2000 Journey to Work

### B. Share of 1990-2000 Increase

<table>
<thead>
<tr>
<th>JOBS IN:</th>
<th>Central City</th>
<th>Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOMES IN:</td>
<td>Central City</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Suburbs</td>
<td>16%</td>
</tr>
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</table>

### C. Public Transport Mode Share
(1990 figures)

<table>
<thead>
<tr>
<th>JOBS IN:</th>
<th>Central City</th>
<th>Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOMES IN:</td>
<td>Central City</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Suburbs</td>
<td>6%</td>
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</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
  – Petrol taxes are from 10-20% of European levels
The Car-Road System

• 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 meters of road per capita in 10 largest US cities; 3 times European levels
### Public Transport Funding by Source
(2002, in $ billions)

<table>
<thead>
<tr>
<th>Source</th>
<th>Capital</th>
<th>Operating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fares</td>
<td>---</td>
<td>8.6 (33%)</td>
</tr>
<tr>
<td>Directly Generated</td>
<td>3.6 (28%)</td>
<td>4.6 (17%)</td>
</tr>
<tr>
<td>Local</td>
<td>2.6 (20%)</td>
<td>5.3 (20%)</td>
</tr>
<tr>
<td>State</td>
<td>1.5 (12%)</td>
<td>6.7 (25%)</td>
</tr>
<tr>
<td>Federal</td>
<td>5.2 (40%)</td>
<td>1.3 (5%)</td>
</tr>
<tr>
<td>Total</td>
<td>12.8 billion</td>
<td>26.6 billion</td>
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</table>
A Critical Assessment

- Public transport has been stabilized
- Many new rail initiatives in operation or under construction
- Some real success stories: New York City, Houston, Seattle
- Institutional change is occurring slowly
- Retention of political support
Arguments Supporting Public 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 effective
- **Energy**: car technology strategies are effective
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 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
  – greater customer orientation