Making Public Transport Financially Sustainable: Lessons from Germany

John Pucher, Rutgers University
http://policy.rutgers.edu/faculty/pucher/

Ralph Buehler, Virginia Tech
http://ralphbu.wordpress.com/

For presentation at the UCLA Lake Arrowhead conference

Percentage of operating costs covered by passenger revenues in German vs. American public transport systems, all modes combined, 1992-2010

Opposite trends in the financial sustainability of public transport in Germany and the USA

Sources: USDOT, APTA, DIW, VDV, and Buehler and Pucher (2011)
Highway user taxes and fees as share of road expenditures by all levels of government (combined) in Germany and the United States

Big surplus in Germany

Big deficit in USA
Divergent trends in transit operating costs, revenues, and subsidies per linked passenger trip in Germany and the USA, 1998-2010 (relative to 1998 at 100%)

Sources: USDOT, APTA, DIW, VDV, and Buehler and Pucher (2011)
Productivity, cost, and subsidy indicators for public transport in Germany and the USA, all modes, 2010

For every indicator, public transport is far more efficient in Germany than in the USA.
Trends in public transport use in Germany and the USA, all modes, 1945-2010

- Millions of trips per year in Germany
- Millions of trips per year in USA
- Trips per capita per year in Germany
- Trips per capita per year in USA

Sources: USDOT, APTA, DIW, VDV, and Buehler and Pucher (2012)
## Socioeconomics of Transit Riders in Germany and the USA, 2001-2009

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No car</td>
<td>25.2</td>
<td>8.4</td>
<td>23.8</td>
<td>6.6</td>
</tr>
<tr>
<td>0.01-0.49</td>
<td>15.3</td>
<td>9.8</td>
<td>12.5</td>
<td>8.3</td>
</tr>
<tr>
<td>0.50-0.99</td>
<td>6.6</td>
<td>6.4</td>
<td>6.6</td>
<td>4.5</td>
</tr>
<tr>
<td>1.00</td>
<td>2.3</td>
<td>4.5</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>&gt;1.00</td>
<td>0.707</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Employed</td>
<td>5.7</td>
<td>2.4</td>
<td>5.7</td>
<td>1.71</td>
</tr>
<tr>
<td>Not employed</td>
<td>6.5</td>
<td>7.9</td>
<td>7.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Lowest quartile</td>
<td>11.1</td>
<td>2.8</td>
<td>11.1</td>
<td>2.8</td>
</tr>
<tr>
<td>2nd quartile</td>
<td>10.4</td>
<td>4.2</td>
<td>10.4</td>
<td>4.2</td>
</tr>
<tr>
<td>3rd quartile</td>
<td>6.8</td>
<td>6.8</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Highest quartile</td>
<td>6.5</td>
<td>8.0</td>
<td>8.4</td>
<td>8.4</td>
</tr>
</tbody>
</table>

- High level of transit use even among German households with one or more cars per licensed driver.
- Highest-income Germans use transit twice as much as lowest-income Americans.

Source: Buehler and Pucher (2012)
Incomes of Bus and Rail Transit Riders in Germany and the USA, 2001-2009
Summary of measures taken by German public transport to increase productivity and reduce costs

• Organizational restructuring
• Outsourcing to newly founded subsidiaries
• Cutting employee benefits
• Increased work hours
• Salary freezes
• Early retirement programs
• Cooperation agreements with other agencies to share employees, rolling stock, and facilities
• Cutting underutilized routes and shifting resources to the most profitable services
• Evaluating long term operating and maintenance costs resulting from any planned investments before making them

Source: Buehler and Pucher (2011)
Summary of measures that have increased revenues of German public transport systems

- Largest fare increases for single-fare tickets used by infrequent riders
- Region-wide monthly, semester, and annual tickets that provide deep discounts compared to single trip fares
- Increased ridership from improved and expanded service, with customer-oriented focus to attract choice riders
- Regional, multi-modal coordination of timetables, fares, ticketing, and policies in metropolitan areas
- Full integration of public transport with walking and cycling to increase access rail stations and bus stops

Source: Buehler and Pucher (2011)
Lessons from Germany

• Competition and private sector involvement can help reduce costs
• Limited federal and state subsidies force local governments to be innovative, pursuing greater productivity and cost-effectiveness
• Focus on profitable services and eliminate underutilized services
• Cooperate with labor unions to achieve productivity gains and ensure fairness for workers
• Coordinate services and fares among all transit systems in region
• Provide safe and convenient pedestrian and cyclist access to rail stations and bus stops
• Cluster new development around transit stops, with neighborhood community centers, while sharply restricting new suburban development.
• Raise price—and reduce convenience—of car ownership, parking, and use to limit car use while increasing demand for public transport
And now for your questions . . .

John Pucher, Rutgers University
http://policy.rutgers.edu/faculty/pucher/
Ralph Buehler, Virginia Tech
http://ralphbu.wordpress.com/


URL: http://policy.rutgers.edu/faculty/pucher/PublicTransport_JTRP_BuehlerPucher.pdf
URL: http://policy.rutgers.edu/faculty/pucher/PublicTransport_TRV_2012_BuehlerPucher_FINAL.pdf