Urban Form in America and Europe

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Fundamentals

- Space

Source: Center for International Earth Science Information Network, Columbia University
Land Use Categories
- Urban/Suburban (>2 units per acre)
- Low Density Suburban (1 unit per 0.5 to 10 acres)
- Exurban (1 unit per 10 to 40 acres)
- Rural (less than 1 unit per 40 acres)
- Unbuildable (public land, open water, too steep)

County Line
Major Highway
Demography

- Population Growth

Source: OECD

The chart shows the population growth rate over the years 1980 to 2000 for the United States, France, Italy, Germany, and the United Kingdom. The x-axis represents the years (1980, 1990, 2000), and the y-axis represents the population growth rate in percent per year. The lines indicate the growth rate trends for each country, with the United States having a higher growth rate overall compared to the others.
Demography

Age Profile

Source: OECD
Demography

- Mobility

Over one in ten Americans moved in 2008 (38.7 million people)

Mobility patterns:

- Within County (65%)
- New County, Same State (19%)
- Different State (13%)
- International (3%)

Source: US Census Bureau
The Economy

GDP

Per Capita Gross Domestic Product (inflation adjusted USD)

Source: OECD
Policy Distinctions

- Agricultural Subsidies

Source: OECD
Transportation Policy

Allocation of Transportation Spending (as share of total ground transportation spending)

United States
- Public Transit
- Roads and Road-Related Expenses

Untied Kingdom
- Roads and Road-Related Expenses
- Public Transit

Source: US Department of Transportation, UK Department for Transport
Unleaded Gas Prices and Taxes (2008, Q1)

*Or latest available

Energy Prices and Taxes

Automotive Diesel Prices and Taxes (2008, Q1)

*Or latest available

Source: The Brookings Institution
Energy Prices and Taxes

Electricity Prices for Households (U.S. Dollars per Kilowatt-hour)

Source: OECD
## Percent of Trips Taken by Various Modes of Transportation

<table>
<thead>
<tr>
<th>Country</th>
<th>Auto</th>
<th>Public Transit</th>
<th>Bicycle</th>
<th>Other (includes walking)</th>
<th>Auto Trips Per Transit Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>89</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>44.5</td>
</tr>
<tr>
<td>Great Britain</td>
<td>65</td>
<td>14</td>
<td>4</td>
<td>17</td>
<td>4.6</td>
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<tr>
<td>France</td>
<td>56</td>
<td>13</td>
<td>5</td>
<td>25</td>
<td>4.5</td>
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<tr>
<td>Germany</td>
<td>49</td>
<td>16</td>
<td>12</td>
<td>23</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Source: Sprawl in Europe and America, Michael Lewyn, 46 San Diego L. Rev. 85
Vehicle Kilometers Driven (per capita, 2003)

- United States: 8829
- United Kingdom: 6286
- Germany: 6299
- France: 6313

Education

Per Capita Education Expenditure
(Annual expenditure per student, in USD)

Source: US Department of Education
High School Math and Science Scores
International Comparisons

Source: The Programme for International Student Assessment (PISA), 2006.
The Urban-Suburban Education Gap in America


Class of 2005 Graduation Rates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
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<tbody>
<tr>
<td>Cleveland</td>
<td>42.6</td>
<td>39.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Baltimore</td>
<td>39.2</td>
<td>38.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Columbus</td>
<td>38.1</td>
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<tr>
<td>Milwaukee</td>
<td>35.2</td>
<td>33.3</td>
<td>1.9</td>
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<tr>
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<td>33.3</td>
<td>29.4</td>
<td>3.9</td>
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<tr>
<td>Tulsa</td>
<td>29.4</td>
<td></td>
<td></td>
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<tr>
<td>Oklahoma City</td>
<td>29.2</td>
<td>28.6</td>
<td>0.6</td>
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<tr>
<td>New York City</td>
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<td>0.4</td>
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<tr>
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<td>0.3</td>
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<tr>
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<td>27.1</td>
<td>23.0</td>
<td>4.1</td>
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<tr>
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<tr>
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<td>0.4</td>
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<td>21.6</td>
<td>0.0</td>
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<tr>
<td>Detroit</td>
<td>21.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacksonville</td>
<td>20.1</td>
<td>19.9</td>
<td>0.2</td>
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<tr>
<td>Denver</td>
<td>19.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L.A./Long Beach</td>
<td>19.7</td>
<td>18.1</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: Editorial Projects in Education Research Center, “Cities in Crisis 2009: Closing the Graduation Gap”

MCAS Composite

- Over 95%
- 90-95%
- 80-89%
- Under 80%

Sources: The New York Times, Mass. State Board of Education
So What?

- Big Foot

Energy Consumption: Total energy consumption per capita
Units: Kilograms of oil equivalent (kgoe) per person

Carbon Footprint: International Comparison
Carbon dioxide emissions (CO2), metric tons of CO2 per capita (UNFCCC)

Source: United Nations
What To Do?

- Shopworn “Solutions”
- Emulate Europe? No and Yes