Passenger Transport Mode Shares in World Cities

The “Passenger Transport Mode Shares in World Cities” reported in November 2011 (LTA Academy, 2011) have been widely referenced by transport professionals worldwide. An update is presented here for the cities listed in Table 1. There are changes in the geographical coverage of some cities due to the availability of data.

Passenger transport mode share refers to the percentage of passenger journeys or trips by the main mode of transport and is typically reported through travel surveys. Travel surveys are often conducted and hence the mode share is reported by local governments. The definition, classification, data collection and computation methods may not be consistent cross different cities. In addition, the mode share is affected by household incomes, land use patterns, and many other economic and social factors. Hence, the figures shall not be compared directly and should be analysed together with the historical, social and economic situation of the city.

Table 1: List of selected cities

<table>
<thead>
<tr>
<th>Region</th>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>Ahmedabad, Bangalore, Beijing, Delhi, Guangzhou, Hong Kong, Mumbai, Osaka, Seoul, Shanghai, Singapore, Taipei, Tokyo</td>
</tr>
<tr>
<td>Australia</td>
<td>Sydney</td>
</tr>
<tr>
<td>North America</td>
<td>Chicago, New York City, Toronto</td>
</tr>
<tr>
<td>South America</td>
<td>Bogota, San Paulo</td>
</tr>
<tr>
<td>City</td>
<td>Population</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>AHMEDABAD</td>
<td>6.1 million</td>
</tr>
<tr>
<td>BANGALORE</td>
<td>8.6 million</td>
</tr>
<tr>
<td>BARCELONA</td>
<td>1.6 million</td>
</tr>
</tbody>
</table>

**Figure 1: Mode share in Ahmedabad (2007)**

- Walk & Cycle: 32%
- Public Transport: 30%
- Private Transport: 38%

**Figure 2: Mode share in Bangalore (2010/11)**

- Walk: 32%
- Public Transport: 27%
- Private Transport: 31%
- Cycle: 3%
- Para-Transit: 7%

**Figure 3: Mode share in Barcelona (2012)**

- Walk & Cycle: 44%
- Public Transport: 35%
- Private Transport: 21%
### BEIJING²

Population: 12.3 million  
Area: 1,368 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 44% of all journeys.

**Data Sources:**  
Beijing Yearbook 2013  
Beijing Transport Report 2013 (in Chinese only.  
2013 年北京交通发展年报)

### BERLIN

Population: 3.5 million  
Area: 892 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 26% of all journeys.

**Data Sources:**  
Berlin Statistics Time Series  
Berlin Mobility in the City 2013

### BOGOTA

Population: 7.4 million  
Area: 1,587 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 53% of all journeys.

**Data Sources:**  
National Administrative Department of Statistics DANE  
Demand for transportation in Bogota 2010 (in Spanish, Cámara de Comercio de Bogotá Observatorio de Movilidad)
CHICAGO

Population: 2.7 million
Area: 590km²

Mode share
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 16% of all journeys.

Data Sources:
US Census
Chicago Regional Household Travel Inventory: Mode Choice and Trip Purpose for the 2008 and 1990 Surveys

Figure 7: Mode share in Chicago (2008)

DELI

Population: 16.3 million
Area: 1,114 km²

Mode share
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 31% of all journeys.

Data Sources:
Statistical Abstract of Delhi, 2012
RITES Transport Demand Forecast Study for Dept. of Transport, GNCTD, 2010

Figure 8: Mode share in Delhi (2008)

GUANGZHOU

Population: 11.2 million
Area: 3,842 km²

Mode share of motorised journeys
Based on the number of journeys by main mode of transport. It includes only motorised modes for all purposes. Mass public transport constitutes 49% of motorised journeys.

Data Sources:
Guangzhou Yearbook 2013
### HONG KONG

Population: 7.2 million  
Area: 1,104 km²

**Mode share of motorised journeys**  
Based on the number of boardings. It includes motorised trips only. Mass public transport constitutes 81% of boardings.

**Data Sources:**  
Hong Kong Statistics, Census and Statistics Department  
Travel Characteristics Survey 2011, Transport Department, Hong Kong, 2014

### LONDON

Population: 8.4 million  
Area: 1,595 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 27% of all journeys.

**Data Sources:**  
Land Area and Population Density, GLA  
London Travel Demand Survey (LTDS) 2013, Transport for London

### MADRID

Population: 3.3 million  
Area: 604 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 39% of all journeys.

**Data Sources:**  
Informe del Estado de la Movilidad de la Ciudad de Madrid 2011

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**Figure 10: Mode share in Hong Kong (2011)**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>30%</td>
</tr>
<tr>
<td>Bus/Tram</td>
<td>51%</td>
</tr>
<tr>
<td>Private Transport</td>
<td>12%</td>
</tr>
<tr>
<td>Others</td>
<td>1%</td>
</tr>
<tr>
<td>Taxi</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Figure 11: Mode share in London (2011/12)**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>32%</td>
</tr>
<tr>
<td>Walk &amp; Cycle</td>
<td>12%</td>
</tr>
<tr>
<td>Cycle</td>
<td>1%</td>
</tr>
<tr>
<td>Bus/Tram</td>
<td>15%</td>
</tr>
<tr>
<td>Private Transport</td>
<td>38%</td>
</tr>
<tr>
<td>Taxi</td>
<td>1%</td>
</tr>
<tr>
<td>Others</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Figure 12: Mode share in Madrid (2011)**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>30%</td>
</tr>
<tr>
<td>Walk &amp; Cycle</td>
<td>18%</td>
</tr>
<tr>
<td>others</td>
<td>1%</td>
</tr>
<tr>
<td>Bus</td>
<td>26%</td>
</tr>
<tr>
<td>Taxi</td>
<td>21%</td>
</tr>
<tr>
<td>Others</td>
<td>4%</td>
</tr>
<tr>
<td>Private Transport</td>
<td>3%</td>
</tr>
</tbody>
</table>

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Reference
MUMBAI

Population: 12.7 million
Area: 603 km²

**Mode share**
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 52% of all journeys.

**Data Sources:**
Census India 2011
Indian Cities Transport Indicators

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NEW YORK

Population: 8.4 million
Area: 784 km²

**Mode share**
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 33% of all journeys.

**Data Sources:**
Population and Land Area, Department of City Planning, New York
New York State 2009 NHTS Comparison Report

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OSAKA

Population: 2.7 million
Area: 223 km²

**Mode share**
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 38% of all journeys.

**Data Sources:**
Osaka 5th Travel Survey Report 2012 (in Japanese, 平成22年第5回近畿圏パーソントリップ調査集計結果から)
<table>
<thead>
<tr>
<th>City</th>
<th>Mode Share in Main City</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARIS (Main City)</td>
<td>Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 34% of all journeys.</td>
<td>INSEE, Population Travel survey report (in French, La mobilité des Français, panorama issu de l’enquête nationale transports et déplacements 2008)</td>
</tr>
<tr>
<td>PRAGUE</td>
<td>Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 43% of all journeys.</td>
<td>Prague Transportation Yearbook 2013, Prague</td>
</tr>
<tr>
<td>SAN PAULO</td>
<td>Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 37% of all journeys.</td>
<td>San Paulo Household Mobility Survey 2012 Main Result (in Portuguese, PESQUISA DE MOBILIDADE DA REGIÃO METROPOLITANA DE SÃO PAULO, PRINCIPAIS RESULTADOS PESQUISA DOMICILIAR, DEZEMBRO DE 2013)</td>
</tr>
</tbody>
</table>
### SEOUL

Population: 10.4 million  
Area: 605 km²  

**Mode share of motorised journeys**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 65% of all journeys.  

**Data Sources:**  
Seoul statistics - Population Trend  
Seoul Statistics 2013

### SHANGHAI

Population: 16.4 million  
Area: 2,141 km²  

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 33% of all journeys.  

**Data Sources:**  
Shanghai Yearbook 2011  
Shanghai Construction and Transport Commission 2009  
(data provided directly)

### SINGAPORE

Population: 5.5 million  
Area: 718 km²  

**Mode share of motorised journeys**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 50% of motorised journeys.  

**Data Sources:**  
Population & Land Area, Department of Statistics, Singapore  
Household Interview Travel Survey 2012
STOCKHOLM (Metropolitan)

Population: 2.2 million
Area: 6,526 km²

Mode share
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 25% of all journeys.

Data Sources:
Facts about SL and the metropolitan area in 2012

Figure 22: Mode share in Stockholm (2011)

SYDNEY

Population: 4.8 million
Area: 12,368 km²

Mode share
Based on the number of unlinked trips, except for trips by walking only. It includes all modes for all purposes. Public transport constitutes 12% of all trips.

Data Sources:
Australian Bureau of Statistics
2011/2012 Household Travel Survey - Key Indicators for Sydney

Figure 23: Mode share in Sydney (2011/12)

TAIPEI

Population: 2.7 million
Area: 272 km²

Mode share
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Mass public transport constitutes 35% of all journeys.

Data Sources:
Taipei Yearbook 2013
Travel Survey 2013 (in Chinese, 102年民眾日常使用運具狀況調查)

Figure 24: Mode share in Taipei (2013)
**TOKYO (23-Ward)**

Population: 9.1 million  
Area: 623 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 51% of all journeys.

**Data Sources:**  
Tokyo Statistics Population Estimates  
Tokyo Metropolitan Travel Survey 2008 (第5回東京都市圏パーソントリップ調査（交通実態調査），平成20年, in Japanese)

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**TORONTO**

Population: 2.6 million  
Area: 634 km²

**Mode share**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 26% of all journeys.

**Data Sources:**  
2011 Transportation Tomorrow Survey

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**VIENNA**

Population: 1.8 million  
Area: 415 km²

**Mode share of motorised journeys**  
Based on the number of journeys by main mode of transport. It includes all modes for all purposes. Public transport constitutes 39% of all journeys.

**Data Sources:**  
Vienna Wiener Linien Facts and Figures 2013
Notes

1. Population and area of Bangalore includes 11 zones, covering Bruhat Bangalore Mahanagara Palike (BBMP) and Bangalore International Airport Area Planning Authority (BIAAPA).

2. Population and land area of Beijing include main districts only.

3. Population and land area of Guangzhou include 10 urban districts only.

4. Population and land area of Shanghai include main districts only: huangpu, xuhui, changning, jingan, putuo, zhabeing, hongkou, yangpu, minghang, pudong.