The Performance of London Buses Compared to Other World Cities

Presentation to TfL’s Independent Investment Programme Advisory Group
Fourteen Bus Benchmarking Group Member Cities, Fifteen Members
Seven Operators in the IBBG for 13 Years Now
Commercial Speed is a Key Driver of Performance

World Trends Show Speeds are Decreasing

Commercial Speed
(Indexed to 2015 Group Average = 1.0)

Range of 2x Speed

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<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<th>Latest Year Average</th>
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KPI Structure: Balanced Scorecard Approach

Key topics to measure how organisations perform against each other:

1. Growth and Learning
2. Customer
3. Financial
4. Safety and Security
5. Environment
6. Internal Processes
Percentage of Capacity Filled by Passengers

How occupied are the buses on our network?

Passenger km per Actual Revenue Vehicle Planning Capacity km (Indexed to 2015 Group Average = 1.0)

Better
Worse
Growth: % Change in Passenger Boardings and Vehicle Kilometres (2010-2015, 5 year change)

% Change Over 5 Years in Passenger Boardings, Actual Revenue Vehicle Km and Actual Revenue Vehicle Hours (2010-2015)

- % Change in Passenger Boardings
- % Change in Actual Revenue Vehicle Km
- % Change in Actual Revenue Vehicle Hours

Better ➔ Worse
How satisfied are customers with their bus services? (trends of absolute scores)

Note: International comparisons not advised due to known cultural bias
Financial Efficiency: Cost per Vehicle Hour

How do costs of running services compare?

Service Operation Costs per Actual Revenue Vehicle Hour (2015 US$ PPP, Indexed to 2015 Group Average = 1.0)

Worse

Better

INTERNATIONAL BUS BENCHMARKING GROUP
Balancing Affordability and Cost Recovery

How does the average fare per journey compare?

Total Fare and Fare Compensation
Revenue per Passenger Km (2015 US$ PPP, Indexed to 2015 Group Average = 1.0)

Better
Worse
Commercial Recovery Ratio

How does the level of income generated vs. operated costs compare?

This graph highlights that London has 4th lowest subsidy requirement of IBBG members

Total Commercial Income per Total Operating Cost (Indexed to 2015 Group Average = 1.0)
Collisions per Vehicle km

How does the collision rate compare?

Number of Vehicle Collisions per Actual Total Vehicle Km (Indexed to 2015 Group Average = 1.0)

Worse
Better

‘Grid-iron’ street layout

INTERNATIONAL BUS BENCHMARKING GROUP
Lost Vehicle Km (Internal Reasons)

How does lost km due to internal reasons, such as driver shortages, compare?

Lost Vehicle Km due to Internal Reasons per Scheduled Revenue Vehicle km (Indexed to 2015 Group Average = 1.0)

Worse
Better

INTERNATIONAL BUS BENCHMARKING GROUP
CO2 per Passenger Km

How do CO2 emissions per passenger km compare?

CO2 Emissions of Vehicles per Passenger km (Indexed to 2015 Group Average = 1.0)

Worse

Better

INTERNATIONAL BUS BENCHMARKING GROUP
How does London perform against other members? Where does London do well and where do we need to improve?

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Worst Performer</th>
<th>25%</th>
<th>Median</th>
<th>75%</th>
<th>Best Performer</th>
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<tbody>
<tr>
<td>Vehicle collisions per vehicle km</td>
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<td>11</td>
<td>15</td>
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<td>Average commercial speed</td>
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<td>% change in passenger boardings (over 5 years)</td>
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<td>9</td>
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<td>% change in actual revenue vehicle km (over 5 years)</td>
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<td>Passenger km per planning capacity km</td>
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<td>Fare revenue and compensation per passenger km</td>
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<td>15</td>
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<td>Service operation cost per revenue vehicle hour</td>
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<td>% of buses on time (Punctuality)</td>
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<td>4</td>
<td>12</td>
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<td>Total commercial income per total operating cost</td>
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<td>Lost vehicle km due to internal reasons</td>
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<td>Operating cost per total vehicle hour</td>
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<td>CO2 emissions per passenger km</td>
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<td>Revenue vehicle km per total vehicle km</td>
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Conclusion: London Buses Continue to be a Good Performer Against Peers, With Above Average Levels in Many KPI’s

- **Key Performance Driver, Commercial Speed Further Reduced** (*roadworks, traffic, etc*)
  - Bus speeds are 12% below group average, affecting internal and relative performance

- **Good Asset Utilisation and Availability:**
  - Vehicle utilisation is at a good level, 4% above the group average. IBBG agreed to work on development of a Peak Crowding KPI
  - Lost kilometres due to internal reasons generally show long term reduction, apart from industrial action spikes (such as in 2014), and is 3rd best in 2015.

- **Good Financial Performance:**
  - 4th lowest subsidy requirement compared to other publicly owned international peers, helped by relatively low cost and reasonable fares.
  - Service operating cost per vehicle hour is very good, 5th lowest and 14% below group average.

- **Good Environmental Performance:**
  - London performs 3rd best. CO2 emissions per passenger km has remained relatively stable over the past three years, which is good given reduction in passenger km.

- **Vehicle collisions per Km have increased to above average level:**
  - IBBG KPI development improved vehicle collision data comparability studies in 2015
  - Safety is a key focus area for IBBG Members, including London Buses. The IBBG continues work on increased comparability of safety data and further benchmarking opportunities this will create.