The Performance of London Buses Compared to Other World Cities

IBBG Phase 2019/2020
(2018 data summary)
Fifteen Bus Benchmarking Group Member Cities, Sixteen Operators of which seven in the IBBG for 16 years.
Commercial Speed is a Key Driver of Performance

World trends show speeds are decreasing

Commercial Speed (Indexed to 2018 Group Average = 1.0)

Range of 2x Speed
Key topics to measure how organisations perform against each other:

- Growth and Learning
- Customer
- Internal Processes
- Safety and Security
- Financial
- Environment
Vehicle Capacity Filled by Passengers

How occupied are the buses on our network?

Passenger Km per Actual Revenue Vehicle Planning Capacity km (Indexed to 2018 Group Average = 1.0)

How occupied are the buses on our network?

Better

Worse

London

Passenger Km per Actual Revenue Vehicle Planning Capacity km (Indexed to 2018 Group Average = 1.0)
Growth: % Change in Passenger Boardings and Vehicle Kilometres (2013-2018, 5 year change)

% Change in Over 5 Years in Passenger Boardings, Actual Revenue Vehicle Km and Actual Revenue Vehicle Hours (2013-2018)

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

Better ➔ Worse

Note: 5 year trend data available for 14 of the 16 operators
Customer Satisfaction (Overall)

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

1=very dissatisfied, 5=very satisfied

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 (2018 US$ PPP, Indexed to 2018 Group Average = 1.0)

Worse

Better

INTERNATIONAL BUS BENCHMARKING GROUP
How does the average fare per journey length compare?

Total Fare and Fare Compensation Revenue per Passenger Km (2018 US$ PPP, Indexed to 2018 Group Average = 1.0)

Balancing Affordability and Cost Recovery
Commercial Recovery Ratio

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

Total Commercial Income per Total Operating Cost (Indexed to 2018 Group Average = 1.0)

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

Number of Vehicle Collisions (regardless of damage, including with objects or the kerb, and with or without injury) per Actual Total Vehicle km (Indexed to 2018 Group Average = 1.0)

**Worse**

**Better**

Star indicates ‘Grid-iron’ street layout.

**London**
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 2018 Group Average = 1.0)

Worse
Better

INTERNATIONAL BUS BENCHMARKING GROUP
How does CO2 emissions per passenger km compare?

CO2 Emissions of Vehicles per Passenger Km (Indexed to 2018 Group Average = 1.0)

Worse

Better
Performance Dashboard (absolute): How Does London Buses Rank Relative to Other Group Members on Several Dimensions in 2018?

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>
<th>Ln</th>
<th>Total Count</th>
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</thead>
<tbody>
<tr>
<td>% change in passenger boardings (over 5 years)</td>
<td>13</td>
<td>14</td>
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<tr>
<td>% change in revenue vehicle km (over 5 years)</td>
<td>12</td>
<td>14</td>
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<tr>
<td>Vehicle collisions (per vehicle km)</td>
<td>13</td>
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<tr>
<td>Average commercial speed</td>
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<td>Capacity utilisation</td>
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<td>Fare revenue and compensation (per pax km)</td>
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<td>Service operations cost (per vehicle hour)</td>
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<td>Punctuality</td>
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<td>Commercial income (per total operating cost)</td>
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<td>Lost vehicle km due to internal reasons</td>
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<tr>
<td>Cost efficiency (per vehicle hour)</td>
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<tr>
<td>CO2 emissions (per passenger km)</td>
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<td>Network efficiency (km)</td>
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Index Score (0 - 100)
Conclusion - 1: London Buses Continue to be a Good Performer Against Peers, With Above Average Levels in Many KPI’s

- Key Performance Driver Commercial Speed is Below Average, But Recent Improvements
  - Bus speeds are now 9.5% below group average, affecting internal and relative performance
  - Reduction in roadworks has helped average speed improve in the last two years

- Average Asset Utilisation and Good Availability:
  - Vehicle utilisation has dropped below the group average due to a reduction in boardings, but as speed and journey time variability improve, utilisation is expected to improve again.
  - London Buses performs the 4th best in terms of service availability, e.g. low lost vehicle kilometres.

- Good Financial Performance:
  - Service operating cost per vehicle hour is very good, 5th lowest and 16% below group average.
  - 4th lowest subsidy requirement compared to other international peers, helped by relatively low cost and reasonable fares.
Conclusion -2: London Buses Continue to be a Good Performer Against Peers, With Above Average Levels in Many KPI’s

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

- Vehicle collisions reduced, but more opportunity for improvement
  - 2018 saw the first reduction in collisions/km in five years, a 6% drop compared to 2017 levels.
  - While collisions per vehicle km for London Buses remain 25% above IBBG’s group average, the collisions per vehicle hour are now at the IBBG group average level. This is due to the relatively slower bus speeds in London compared to IBBG peers and hence less vehicle kilometres are produced for one vehicle hour.
  - London Buses has established a bus safety programme: [https://tfl.gov.uk/corporate/safety-and-security/road-safety/bus-safety](https://tfl.gov.uk/corporate/safety-and-security/road-safety/bus-safety) which was partly informed on lessons learned through the IBBG.
  - Safety is a key focus area for IBBG Members, including London Buses. The IBBG continues work on increased comparability and understanding of safety data and continues to benchmark safety programs and policies to help improve safety in all IBBG member cities.