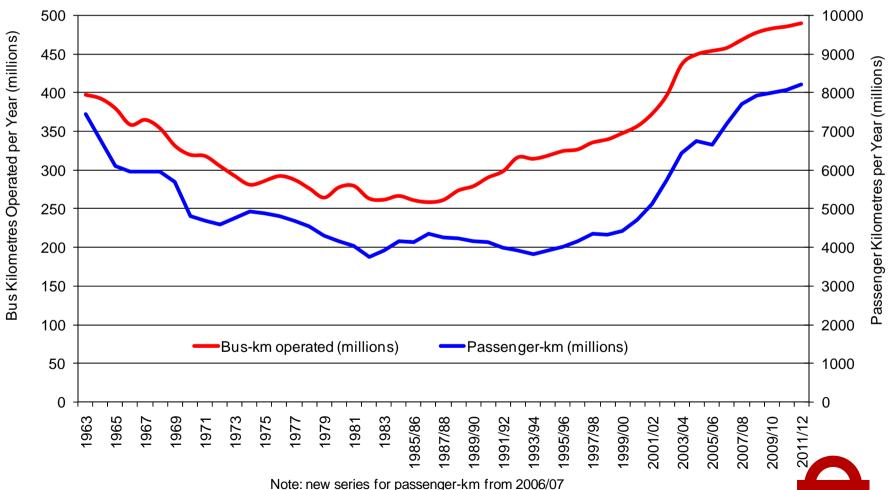


Developing the bus network

John Barry Head of Network Development TfL-London Buses



Service volume and usage since 1963



London bus network: service volume and usage 1963-2012

The Mayor's Transport Strategy

Support economic development and population growth

Support delivery of the 2012 Games and their legacy



Reduce transport's contribution to climate change and improve resilience

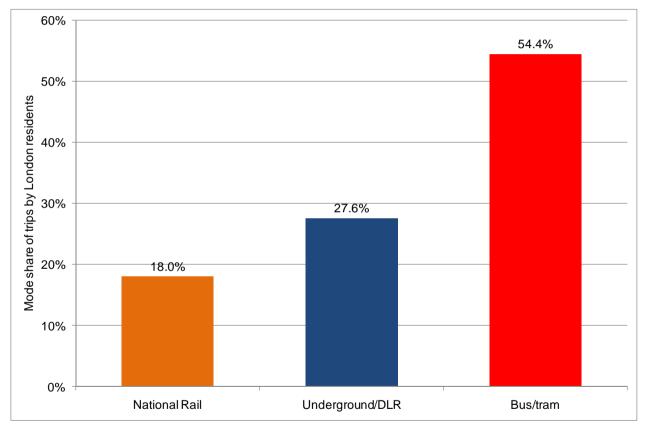
Improve safety and security for all

Improve transport opportunities for all

Enhance the quality of life for all

Bus usage in London

• Buses account for around half of all public transport use by London residents.



• The network provides "main mode" service, and also extends the reach of London's rail network, with around a quarter of rail commuting trips also having a bus stage.



Transforming London's bus service



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Transforming London's bus service

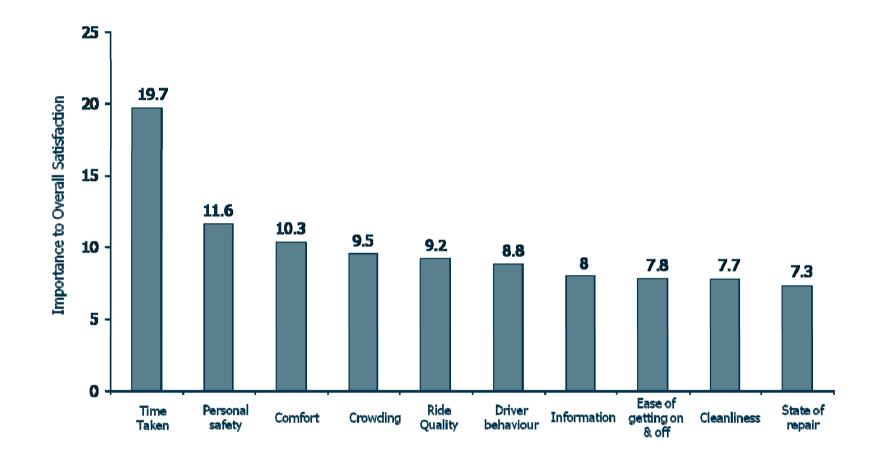


Understanding passenger requirements

- The bus network is there to support London's social and economic requirements. Through research, engagement and measurement, we seek to understand:
 - What passengers value in their bus services, from various perspectives including market research, surveys, operational monitoring, and consideration of the wider travel market.
 - The forces shaping bus demand, working with councils, other public service providers, developers, etc.
- All parts of the network are regularly reviewed, with over half the services having some level of scrutiny each year.
- We also seek to influence the development of the road network and other infrastructure affecting bus passenger experience (eg land owned by Network Rail).



What drives customer satisfaction?





Responding to Passenger Priorities

A comprehensive network

Systematically plan the way in which the network serves residential areas and key destinations. Ensure integration of services between different times of the day, and days of the week. Take full account of other modes.

A simple network

Complexity is a barrier for many. The route pattern is necessarily complex. So, routes and schedules should aim for simplicity.

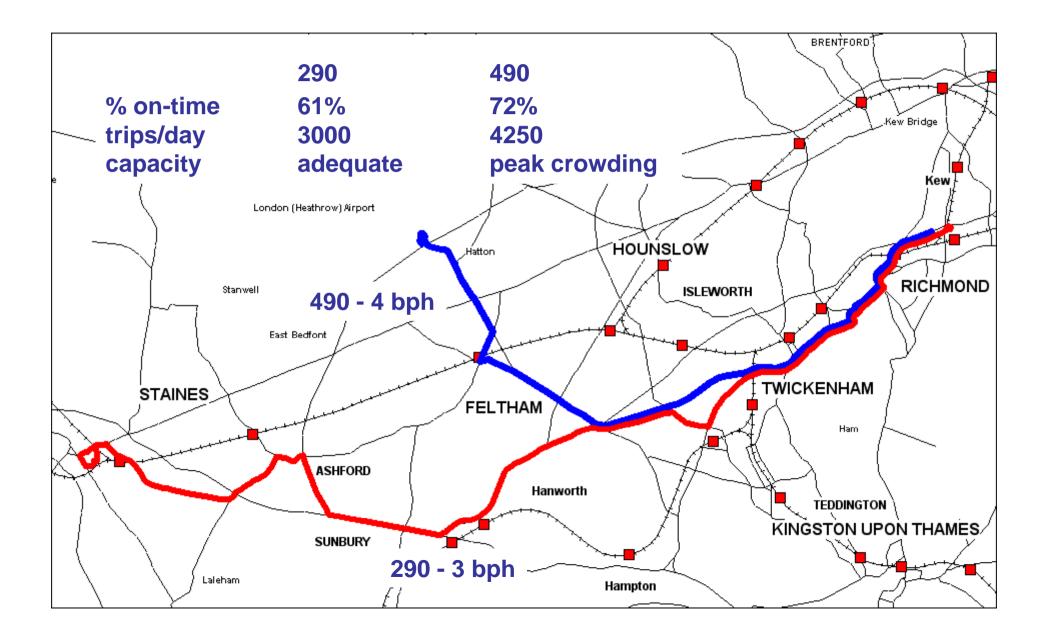
Frequent services

Passengers should be confident of an acceptable wait time. Avoid the dilution of resources into very many low-frequency services. Aim to have "turn up and go" schedules. Provide sufficient capacity.

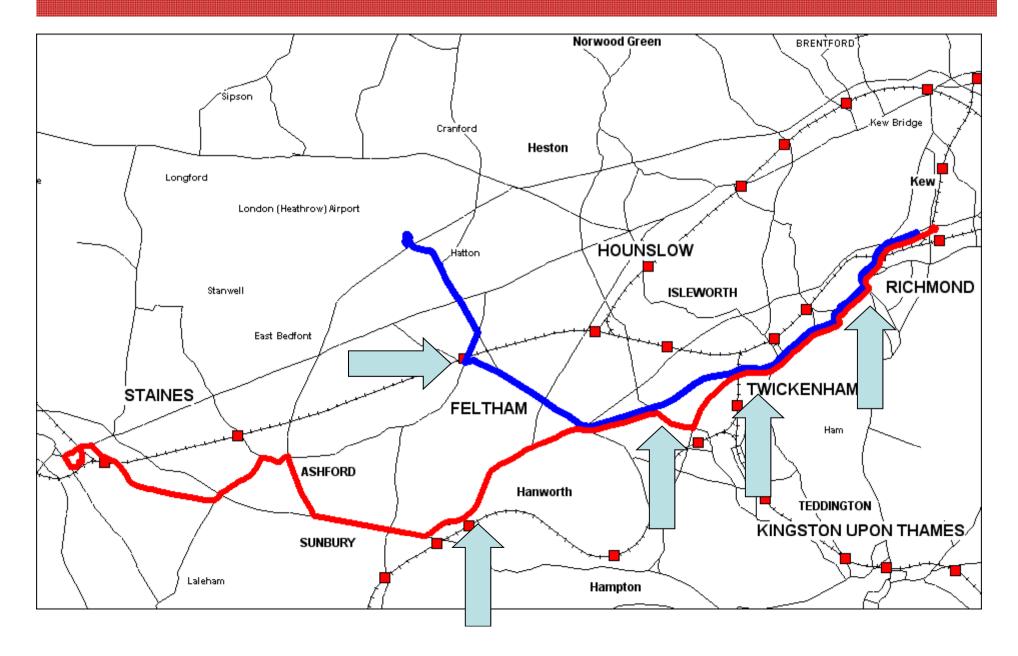
Reliable services

Take account of the effect of route length on reliability. Ensure that bus trip timings are set at appropriate levels. Schedule time between trips to help reduce the impact of unpredictable en-route delays.

Example: routes 290 & 490



Loadings



Stakeholder observations

• Both routes

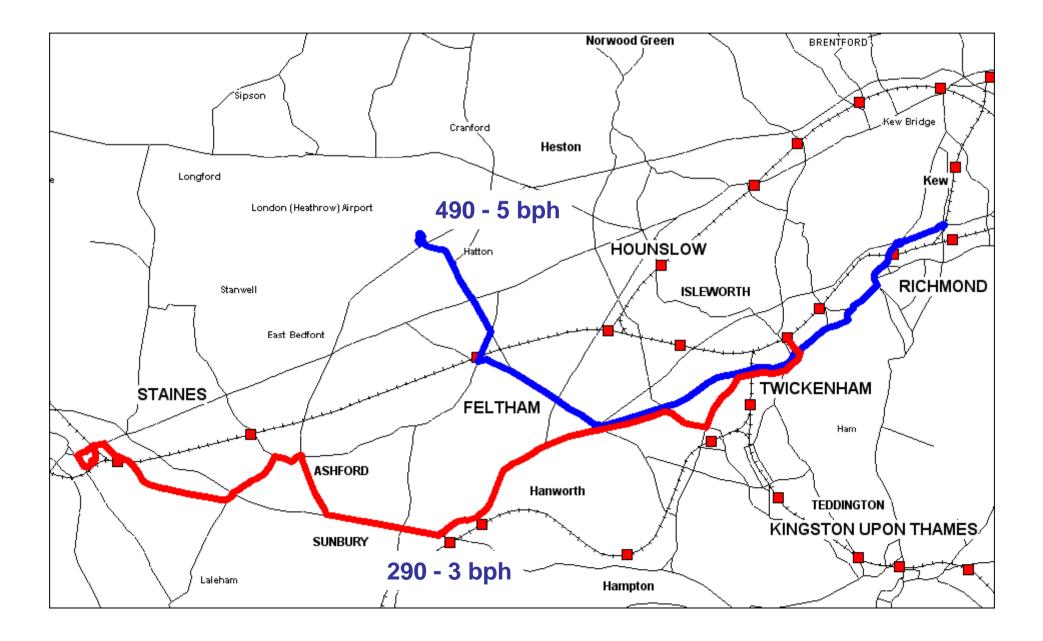
- reliability needs to improve
- 290
- provides a cross-boundary link into Surrey
- 490
- part of the Heathrow area network
- environmental impact at Richmond terminal



Detailed passenger trip matrix - routes 290/490

Total	zone	Staines	Ashford	Country Way	Hatton Cross	Feltham	Hanworth	Fulwell	Staines Road	Twick'm	Richm'nd
		1	2	3	4	5	6	7	8	9	10
181	1	181									
605	2	483	122								
256	3	68	155	33							
217	4	0	0	0	217						
592	5	0	0	0	347	245					
172	6	7	28	25	30	78	4				
193	7	22	45	74	0	0	35	17			
327	8	0	0	0	118	149	49	0	11		
1431	9	20	111	102	128	381	227	91	300	71	
3274	10	32	101	73	209	366	217	143	375	939	819
7249		813	562	307	1050	1219	532	251	686	1010	819

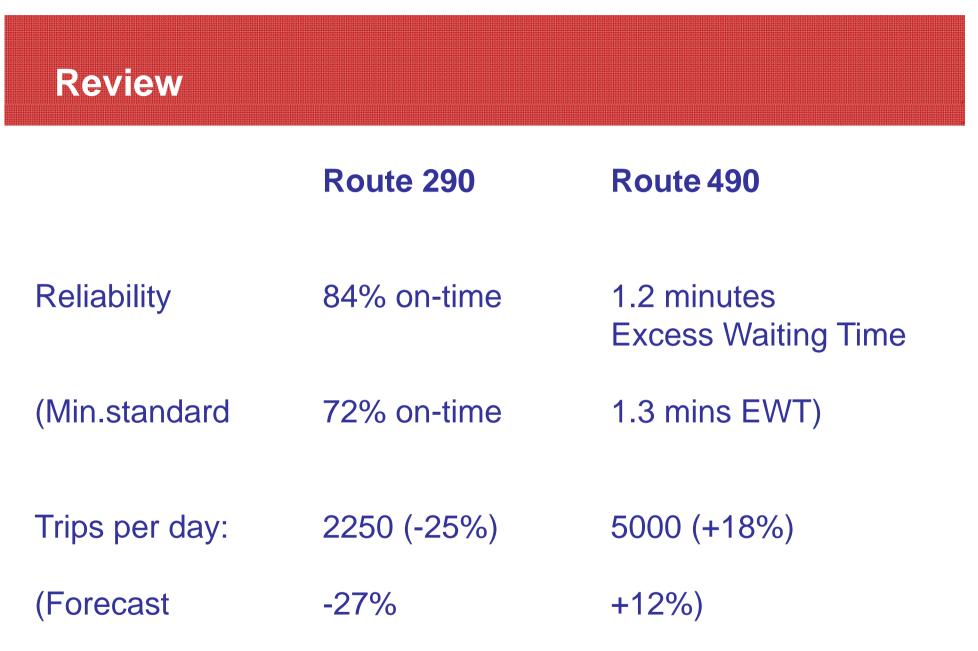
Option



Gross Cost: $+\pounds69,000$ (compared to service as now)Revenue: $+\pounds38,000$ Net Cost: $+\pounds31,000$ Net Benefits: $+\pounds87,000$ (users)

- Worthwhile (benefit to net cost ratio of 2.8 to 1).
- Meets stakeholder aspirations on reliability, capacity.
- Improves connections to Heathrow Airport.
- Retains substantial cross-boundary link to Staines.
- Some broken trips (206/day).
- Continues use of the Dee Road stand in Richmond.









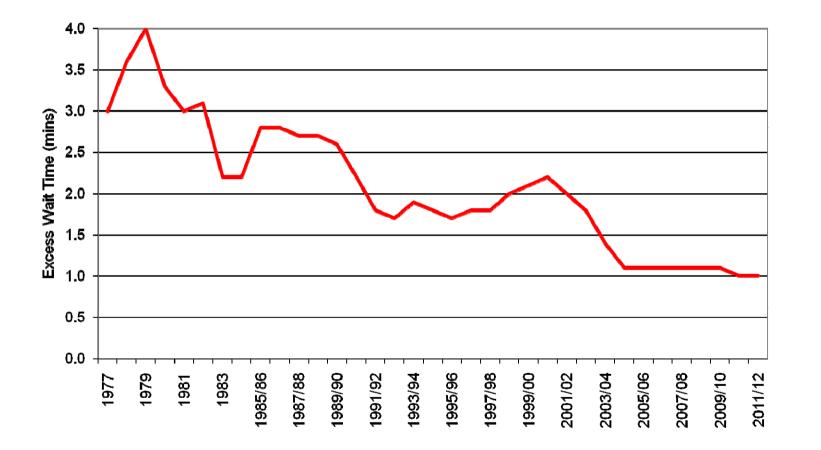
The bus network serves all of London and is vital to its development.

There is constant change to the pattern of services, managed through interlocking programmes of consultation, measurement, analysis and review.

Stakeholders influence all the stages of the process.



Reliability (Excess Wait Time)



lower "Excess Wait" = better reliability



Access to the bus network





Some challenges



Support population and employment growth, maintaining quality of service without increasing subsidy.

Contribute to the quality of life in London - regeneration, air quality, accessibility, healthcare, education,





Manage the impact of London's renewal and development on service reliability and cost.

