

Sutton Link: Comparison of Trams and Bus Rapid Transit

Have
your
say



What is the Sutton Link project?

We are consulting on proposals for a new, direct and quicker transport link between Sutton and Merton. We have called this the Sutton Link.

The Sutton Link would create a high-capacity route for people travelling between Sutton town centre and Merton using zero-emission vehicles. It would connect with other major transport services into central London and across south London, including National Rail, London Underground, existing tram and bus services. It would make journeys by public transport quicker and more attractive, and reduce the need for trips by private car.

Many of the neighbourhoods along the proposed routes have limited public transport options. The Sutton Link would support new homes being built and would improve access to jobs, services, major transport hubs and leisure opportunities across both boroughs and beyond.

We are considering a tram or 'bus rapid transit' (BRT) for the Sutton Link.

Trams and Bus Rapid Transit

A tram or BRT service would be suitable for both street-based options (route options 1 and 2). A tram would also be suitable for route option 3, but this route is not suitable for a BRT service as it could not operate into Wimbledon station.

The existing London Trams network provides a quick, frequent, fully accessible and reliable tram service. An extension of the network to Sutton would be operated to the same standards as the existing network, including passenger facilities and high quality, spacious vehicles. Trams are electric so passengers switching from cars to use trams could help address poor air quality along the route. We would purchase new trams to operate a Sutton extension. Additional depot facilities would also be needed to keep and maintain these new vehicles. We are assessing potential locations for providing additional depot facilities across the tram network.

Figure 1 – Tram vehicle on the existing London Trams network



Figure 2 – Example BRT vehicle being assumed for the Sutton Link from Metz, France



The possible BRT for the Sutton Link would be a 'tram on rubber tyres', with vehicles very different from the types currently used on the local bus network. It would be a modern, high quality system with the same level of separation from other traffic as a tram. This would enable similarly fast journey times and overall capacity of service as a tram extension. Like trams, the BRT proposed for the Sutton Link would have platforms at stops to provide step-free access and stops would be further apart than standard bus stops. The vehicles would be zero emission so passengers switching from cars to use BRT services could

help address poor air quality along the route. A new depot facility would be needed to keep and maintain the new BRT vehicles. We are assessing potential locations along the route of the Sutton Link for a new depot facility.

BRT and Tram mode comparison

Many elements of a tram and BRT service would be similar, but there are some key differences. Overall we would be looking to provide the same level of service, in terms of the number of passengers per hour each option could carry.

Similarities:

- Stop infrastructure, facilities and information for passengers
- Level of separation from general traffic and priority at junctions with general traffic
- Interchange provided with existing tram line
- Quality of vehicles and smoothness of ride
- Overall number of people carried each hour
- Zero emission vehicles (electric or equivalent)

There are also some differences between a tram extension and a BRT system.

Differences:

- Each tram would be longer and would carry around 220 people, compared to 120 for BRT.
- Each tram would come around every eight minutes, whereas the BRT would need to run more frequently at potentially every five minutes, because each vehicle can carry fewer passengers.
- BRT is expected to have a greater negative impact on traffic congestion because of the more frequent services.
- The tram would run on rails with overhead electric lines. BRT would run on the road surface, segregated from traffic where possible, needing less fixed infrastructure.
- BRT may have less impact on utilities buried underground, reducing costs and disruption during construction.
- A BRT scheme could open sooner.
- Constructing a tram route is more expensive initially, but the operating cost over the long term could be lower as fewer vehicles and drivers would be needed.

A comparison of some of the key features assumed for the tram and BRT systems is shown in Table 1 (note that these are current assumptions as a decision on the exact BRT or tram vehicles that would be used has not yet been made).

Table 1 – Comparison of BRT and Tram

	BRT	Tram
Length of vehicle	18m	32m
Passengers per vehicle assumed	49 seated, 120 total	72 seated, 220 total
Potential frequency	12 per hour	7.5 per hour
Capacity per hour	Similar	
Segregation from general traffic	Similar – dedicated lanes	
Level of priority at junctions	Similar – priority traffic signals for tram/BRT	
Overall journey time	Trams are marginally faster	
Power type	Zero-emission	Overhead electric

Find out more and have your say

This consultation gives you the opportunity to comment on proposals for the Sutton Link project. Visit tfl.gov.uk/Sutton-link to leave a comment or provide a response to the consultation questions. The consultation will close on 6 January 2019.

On the website you can also view and download a range of factsheets, maps, and other information about the scheme. The proposals are still at an early stage. There will be more opportunity to provide feedback on the Sutton Link as the scheme develops.

Alternatively, come along to one of our drop-in events where you will have the opportunity to view our proposals and speak to members of the Sutton Link team. More details about drop-ins are also on the website.

Please contact us to request a copy of this leaflet and other Sutton Link consultation material in hard copy, large print, audio or another language.

- Email: consultations@tfl.gov.uk
- Telephone: 0343 222 1155*
- Post: FREEPOST TFL CONSULTATIONS

*Service and network charges may apply. See tfl.gov.uk/terms for details