

Critique by WPRA of NGT Trolleybus Proposals for the A660

The opinions expressed here represent a considered response by the committee of the West Park Residents' Association to the NGT proposals.

Summary

1. West Park Residents' Association supports efforts to improve public transport along the A660, but after careful consideration we are opposed to the present NGT trolleybus scheme.
2. WPRA believe that if the scheme goes ahead, those who live on or near the A660 will have paid a heavy price in damage to their local environment, with no compensating benefits.
3. Local traffic will suffer more congestion, many will experience longer overall journey times than now, and the unique environmental attractions of the area will be damaged.

Valuable Heritage at Risk

As well as being a transport corridor, the route from Leeds University to the Ring Road is cherished living space for a lot of people and represents a unique and valuable heritage. The streetscape is attractive and diverse and traverses at least five conservation areas. Anything we do should enhance rather than damage it.

We feel that the promoters of NGT undervalue what we have here. Forcing large trolleybuses and their power cables onto this route will destroy much that makes it attractive merely to save a few minutes in transit time for commuters. To minimise damage we should adapt the vehicles to the route, not adapt the route to the vehicles as NGT will do.

What NGT Will Mean for West Park and Other Local Communities

1. Fewer bus stops and longer walks to get to them. Time spent on this will offset any reduction in vehicle transit time.
2. Access to the Kepstorn part of West Park will be badly affected by altered junction priorities at the current access points from Otley Road.
3. Restricted access to side roads at junctions means that non-NGT traffic will suffer extra delays and be forced to use alternative routes, such as Spen Lane or Weetwood Road. This will increase congestion and emissions on roads off the NGT route.
4. Loss of features such as old walls, buildings, and wide pavements with consequent loss of continuity with the local heritage.
5. Loss of mature trees such as those on the central reservations adjacent to the Lawnswood roundabout and along the A660 going into town. Many of these define the look of the neighbourhood and have taken many decades to grow to their present stature.
6. Some loss or damage to local shops and businesses due to demolition and restricted parking.
7. Attractive street spaces which have matured and developed naturally over many years will be replaced by inferior substitutes.
8. A less people-friendly environment due to a wider road and barriers at the NGT stops.
9. Probably higher bus fares to compensate for the high cost of the scheme.

Why NGT is Bad for the A660 Route

1. Trolleybuses need overhead power cables which are intrusive and ugly. (Those who remember the trams of Leeds and the trolleybuses of Bradford will confirm this).
2. The roads are narrow, winding, and congested, but the proposed three-section (bi-articulated) vehicles can only manage long gradual curves. This means that the path of the trolleybus has to be artificially straightened out by building a bypass behind the Arndale Centre and adding multiple sets of extra traffic lights to give the trolleybus free passage back and forth over the other traffic lanes.
3. Straightening will also require removal of 'a significant number of mature trees', pavements, stone walls, frontages, and even buildings [Ref 1]. Yet these are the very things that make the route charming and interesting and a valued feature of the designated Conservation Areas that it traverses.
4. The proposed bi-articulated vehicles will require very long lay-bys at the stops. These and their associated railings will act to split the communities that straddle the road.
5. The altered road layouts and the priority that the trolleybus would have over other traffic means that the latter will have to stop and start more and travel further than otherwise, thereby increasing pollution and exporting congestion into rat-run streets.

Journey Times - Slight Improvement

WPRA feel that the only credible benefit of the NGT is that it will give a *more predictable* journey time. However we don't think this justifies the scheme.

NGT claim a journey time from Bodington to City Centre of only 21 minutes, and current peak journey times are slightly longer than this. However current bus services on Otley Road are already more frequent than every six minutes as promised for NGT and it seems likely that the journey time difference would disappear if buses had the same privileges as NGT, viz.:

- On-board ticketing by a conductor,
- Fewer stops than current buses,
- Segregation of 44% of the route from other traffic, with priority above all other traffic on the rest.

Convenience - No Improvement

NGT literature refers to 'improvements' in public transport but for some people things may get worse. Here are some reasons why.

1. For people who prefer to use buses because they live closer to a bus stop than to one of the more widely spaced NGT stops, the services will be less frequent and will take longer (because buses will have to yield priority to NGT).
2. Those tempted by the (slightly) faster NGT vehicles will have a less frequent service than they currently receive from buses and will, on average, have to walk further to the stop.
3. Because bus and NGT stops will not be co-located, users wanting to catch the first arriving service will have to gamble in advance on which stop will be serviced first.
4. Bus operators may withdraw some services that they consider no longer economic.

We note also that the promoters expect NGT to reduce the extent of cycling and walking on the route. (The table on page 32 of Ref 3 shows that about 7% of demand for NGT will originate from 'active modes').

Significant Modal Shift Unlikely

A major claim for NGT is that it will entice a substantial number of people away from cars and onto public transport. However there are several flaws and inconsistencies with this assumption.

The Business Case Submission for NGT assumes that only around 15% of NGT passengers will transfer from cars including park-and-ride, with over 2/3rds shifting from buses (Tables 8.3 and 8.4 of Ref 3). Given the extremely high cost of the project, this is a very small shift. Moreover this figure can only be a guess because there are no other UK trolleybus schemes to provide comparisons.

In this context we note that after queries from DfT the promoters *halved* their original estimate of the number of people who would be using the scheme by 2031 from 27 million in December 2011 to 15 million in March 2012.

We think that a significant switch from cars to NGT on Otley Road is unlikely without complete segregation of NGT from other traffic. Even with complete segregation, car travel would remain very attractive now that cars are also mobile phone booths, offices, and entertainment centres. Our opinion is that the only way to make a commuter forsake his/her car is to have either no parking available or a congestion charge in the city.

The NAO report in Ref 6 states that 'For car owners, a light rail journey [considered to be more attractive than trolleybus] will rarely match the convenience of going by car, however good the light rail service on offer. The impact of light rail on congestion contrasts with the impact of Transport for London's congestion charging scheme in central London, where the charge acts as a financial disincentive for motorists and has reduced the number of vehicles being driven in the charging zone by 60,000 a day or 16 per cent.'

More Congestion and Fuel Wastage

Despite some claims to the contrary in other NGT literature and by representatives at recent drop-in sessions, the promoters state explicitly in Ref 4 that the NGT will 'increase highway trip lengths' and cause 'additional congestion' for non-NGT vehicles.

This seems entirely plausible because the NGT will be sharing 44% of its route with ordinary traffic and will always have priority over it. The vehicles are very long and other traffic will have to be held up at every one of the multiple points where the trolleybus has to cross other traffic lanes.

We note that this prediction is substantiated by a NAO report [Ref 5] stating that results from five 'major light rail systems' in the UK have shown that 'while there has been a modal shift from cars to light rail of up to 20 per cent, *the impact on congestion has been a lot less or nil* [our italics]. A trolleybus system is likely to fare worse than this.

Non-NGT vehicles will waste fuel while they idle in stop-start driving and because they will have to travel further to achieve their destination. Surprisingly this side-effect of the NGT is mentioned almost as a virtue in the NGT document at Ref 4 under 'Indirect Tax Revenues'. The duty collected as a result of 'additional fuel consumption [by other traffic] from additional congestion/ increased highway trip lengths' is shown as offsetting the cost of the project by no less than £1.3 million.

This effect reduces the net pollution advantage of NGT vehicles over hybrid diesel-electric buses, and makes NGT a worse source of pollution than battery powered buses or non-articulated trolleybuses.

Conclusion

By 2019 when NGT is assumed to begin operating, battery powered buses are likely to be available, in which case NGT and its overhead cables will be obsolete before it starts.

WPRA take the view that real improvements on the A660 route could be achieved sooner and at far lower financial and environmental than the NGT trolleybus scheme.

We favour:

1. The gradual introduction of hybrid diesel-electric buses followed by fully battery powered buses when these become available.
2. Making relatively modest improvements and extensions to bus lanes but without confiscation of house frontages and land.
3. Introducing faster ticketing methods. (At present ticketing adds considerably to journey time).

References

Ref 1. "The loss of trees, particularly on the North Line along Otley Road, will lead to a loss of visual amenity due to the significant number of mature trees that will have to be removed." paragraph 1.7, NGT Appendix 38, 'TAG Unit 3.3.8 – Townscape', <http://www.ngtmetro.com/NR/rdonlyres/560DE020-38E9-41C7-9265-32E7D9750BF6/0/TAGUnit338Townscape.pdf>.

Ref 2. About the Scheme, <http://www.ngtmetro.com/FrequentlyAskedQuestions/Aboutthescheme>.

Ref 3. NGT-New Generation Transport, Programme Entry Business Case Submission, <http://www.ngtmetro.com/NR/rdonlyres/8FAE7136-6988-44D8-85B9-ADA0806D79E8/0/NGTProgrammeEntryBusinessCasesubmissionMarch2012.pdf>.

Ref 4. Appraisal Summary Table, dated 30-03-2012, available at <http://www.ngtmetro.com/NR/rdonlyres/7301209C-0C54-4107-8A0D-A0CF81CFF535/0/Appendix16NGTMarch2012ASTv2.pdf>.

Ref 5. Page 29, paragraph 2.27, 'Improving public transport in England through light rail', 23-04-2004, http://www.nao.org.uk/publications/0304/improving_public_transport.aspx. See also <http://assets.dft.gov.uk/publications/light-rail/green-light-for-light-rail.pdf>.

Ref 6. Ibid. Paragraph 2.29.

Ref 7. Public transport gets smart, <http://www.guardian.co.uk/public-leaders-network/2013/jan/09/centro-public-transport-travel-systems>. "Some of these systems, particularly the Oyster card, have become so commonplace that many people in the capital barely stop to consider just how much it has simplified their daily commute. But experts are becoming increasingly concerned that, outside of London, local authorities are failing to recognise the potential benefits of deploying IT to improve their transport networks".

Note: This document is available for download here:

<http://www.westparkresidents.org.uk/docs/misc/WPRA%20Assessment%20of%20NGT%2017-01-2013.pdf>.

This is a revised version of the original document that was first posted on 17-01-2013.