

New Generation Transport (NGT) – Fact or Fiction?

The Claims

The New Generation Transport scheme (NGT) presents itself as a “modern trolleybus network” and claims it will bring to Leeds the following benefits:

1. Fast & reliable journeys into and across Leeds with exclusive lanes and roads and special equipment to give NGT vehicles priority at traffic lights and junctions.
2. High frequency journeys served by high quality stops and shelters with real-time information showing passengers when NGT services are due to arrive.
3. Zero emissions on route from new, comfortable fully accessible vehicles that are better for the environment.
4. Over 2,300 Park & Ride spaces for people wanting to avoid the jams by swapping from the car to NGT.
5. £160m boost to local economy each year, helping to create 4,000 permanent new jobs.

Community Groups Are Not Convinced

If these claims are justified, then why is it that so many community organisations in North Leeds are raising concerns and objections to the scheme?

The answer is that these organisations recognise the importance of improving the transport infrastructure for Leeds, and the need to tackle issues of traffic congestion. However, they are not confident that the proposed solution will provide real value in terms of cost and improvements in traffic flow, community life, and the character of the city.

In the circumstances, and since there seems to be widespread ignorance of both the scheme and its potential impact on the communities around the A660, these organisations feel justified in challenging the NGT in its current form. Let's consider the five claims to see how they stand up.

Claim 1: Fast & reliable journeys into and across Leeds with exclusive lanes and roads and special equipment to give NGT vehicles priority at traffic lights and junctions.

- Journey time savings are estimated to result in a 21 minute journey time into the city centre from Bodington. But if current bus services on Otley Road had the same road privileges as NGT will enjoy, they could do pretty much the same.
- **Part of the saving comes from fewer trolley bus stops**, meaning less stopping and starting; but is it good customer service to make passengers walk further to their trolley bus stop? Also bus stops and NGT stops will not be adjacent so the user will have to gamble in advance on whether to wait at a trolley stop or a bus stop.
- **Part of the time saving comes from ticketing schemes and bus conductors.** NGT intends to use a mixture of an off-vehicle ticketing system, such as Oyster cards or a contactless 'wave and pay' scheme, and on-board ticketing by a conductor. But these measures would be equally effective if introduced on the current bus system.
- **Part of the time saving comes from dedicated lanes and priority at traffic lights.** On the A660 section, except for a new Headingley by-pass which will take only the trolley bus behind the Andale Centre, special lanes will be shared with buses, and there will be well-separated bus and trolley stops set back into lay-bys. Where the trolleybus has to cross other traffic lanes, complex sets of traffic lights will ensure it

always has priority. But again similar priority measures could equally be applied to buses to achieve similar journey time savings.

Claim 2: High frequency journeys served by high quality stops and shelters with real-time information showing passengers when NGT services are due to arrive.

- At peak times NGT is planning to operate a service from Holt Park running every 12 minutes linking into the Bodington Park & Ride to give a service every 6 minutes from Bodington. Current bus services on Otley Road are already more frequent than every six minutes.
- As yet no specifications are available of the “high quality stops”, but real-time travel information is already available in many bus stops along the A660 and in new bus shelters such as those on the A65 new bus corridor. “High quality” stops are an irrelevance, since the objective is to spend as little time as possible at them while waiting and none at all when alighting.

Claim 3: Zero emissions on-route from new, comfortable, fully accessible vehicles that are better for the environment.

- **Emissions:** It's true that trolley buses produce no roadside emissions, but this is because the emissions have been relocated to the place where their electricity is generated. The same is true of electric battery-powered buses. Hybrid diesel-electric buses also produce less on-road emissions than diesel buses because the diesel engine switches off at stops.
- **There will be extra pollution from other traffic.** This is because the NGT trolley bus priorities will cause queues of other traffic through Headingley while they idle in stop-start driving. This side-effect of the NGT is mentioned almost as a virtue in the NGT document 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 is in spite of a projected reduction in the total number of vehicles using the route!
- **NGT promises new, comfortable fully accessible vehicles.** These appear to be articulated or bi-articulated vehicles which require long lay-bys at each stop. Unfortunately for 'comfort' however, most passengers on the articulated trolley buses will not have seats – they'll have to stand. The seated/standing ratios for the singly- or bi-articulated options are 53/60 and 68/124. The proportion of seated passengers on buses is considerably better than this. In effect comfort is being sacrificed for quicker journey times, as demanded by the Business Case, which mandates minimal boarding and alighting times at each stop, and which in turn means more doors and less seats.

Claim 4: Over 2,300 Park & Ride spaces for people wanting to avoid the jams by swapping from the car to NGT.

- Park & Ride schemes work well in many cities and are usually serviced by buses. For example, Bath has what it describes as “The new, eco-friendly hybrid diesel/electric buses offering a luxurious travel experience with individual leather seats, free on-board Wi-Fi, next-stop displays, and climate control on the upper deck”.
- The trolley bus proposal is modelled around the experience of tram/light rail systems, which typically show 18-20% of drivers switching from car to public transport (modal shift). Because trolleybuses are not as attractive to users as vehicles on rails, the Business Case Submission for NGT assumes that only around 15% of NGT

passengers will have transferred from cars. However it assumes over 75% will have shifted from buses, and that 7% of passengers will be former walkers and cyclists.

- The loss of up to half the passengers from existing bus services will have a dramatic effect on these services; even the NGT business case expects the No. 1 and No. 6 services to halve in frequency. The loss of profitable full-bus services during peak times also raises fears that outlying services will close or become very infrequent.
- Interestingly, 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.'

Claim 5: £160m boost to local economy each year, helping to create 4,000 permanent new jobs.

- The National Audit Office (NAO) in 2011 evaluated the economic and development impact of the Sheffield Supertram, a project which has about twice the "line length" of the NGT proposal. The NAO states that there was no established methodology for identifying the regeneration benefits at the planning stage and they did not know how the jobs estimate had been made. Their evaluation of the Sheffield scheme estimated that 1,600 jobs had been created, the report also goes on to add "Of course, in measuring regeneration and social inclusion benefits retrospectively it is difficult to separate the impact of light rail from other regeneration programmes or from changes in the local or national economy". Incidentally, for the Sheffield tram, which opened in the mid-1990s, the total annual patronage for 2010/11 was still 32% below the original forecast usage figure.
- Leeds has an excellent record in attracting inward investment, with ongoing initiatives including: Trinity Quarter, Eastgate, EASEL, and South Bank. The regenerative, or so-called "Sparks", effect of installing new transport networks to attract new businesses is unproven for trolley bus systems. Also only 5% of total traffic going into Leeds city centre is from the A660. Furthermore, the A660 is already the route with highest bus usage. Buses on the A660 carry 2.5 passengers for every car passenger; elsewhere in Leeds the figure is 1.5.
- NGT seem to ignore the negative impact on local businesses, such as those at West Park or Far Headingley, who are faced with the loss of customer parking and reduced frontage. The potential impact on these businesses would diminish the quality of life within the adjacent local communities.

The concerns felt by residents extend even beyond the above issues

Environmental

The A660 runs through five conservation areas and has significant numbers of mature trees, all contributing to the character of north Leeds. Current plans require removal of 'a significant number of mature trees', pavements, stone walls, frontages, and even some buildings. Yet these are the very things that make the A660 route charming and interesting and are part of the reason why most of the route passes through designated Conservation Areas. Road widening to accommodate prioritised trolley bus routes will dramatically and detrimentally alter the streetscape. Trolleybuses need overhead power cables which, together with the associated supports/gantries are intrusive and ugly.

Community Access

The whole thrust of NGT is to drive a particular form of public transport down A660, with all advantages that can be given to it by precedence systems of road space and signalling.

The ensuing advantages to the users of NGT are marginal, but there will be very considerable disadvantages to everyone else.

The priority measures include limiting or preventing traffic flow onto or from side roads, seemingly with no regard to residents and the communities along the A660. For many, the new wider roads, pedestrian unfriendly crossings and new railings will act as barriers splitting one side of the street from the other. This is often referred to as the 'York Road effect', and it acts to split the community apart.

Traffic flow

Current plans seem to give scant attention to any likely “rat-runs” or changes to traffic flows caused by NGT traffic alterations or priorities. These are likely to be felt across the wider communities, not just those adjacent to the A660.

The Business case even makes the following statement:

“Lawnswood Roundabout: proposed traffic signal layout results in some reassignment of traffic to avoid this junction. The increased flows are on roads with little residential frontage.”

A similar assertion is made about Hyde Park Corner/Woodhouse Moor. The problem is, of course, that virtually all the roads in the area have *considerable* residential frontage.

The Lawnswood roundabout will become a junction which, during peak times will assign the trolley bus priority across it about every 3 minutes to give the six minute peak-time service. One wonders just how long the traffic queues will become around the Ring Road.

Funding for NGT

The scheme has been given access to £173.5 million of Central Government funding, leaving Metro and Leeds City Council (LCC) to make a local contribution of £77.1 million over a six year period. Apparently a number of funding sources are being investigated to fund the local contribution, and it is not proposed that council tax payments will be changed as a result of building or operating this scheme.

Accepting these words at face value, it is still difficult to see how council tax payers will not be affected either directly or indirectly. Lessons from other schemes are not encouraging. For example, costs for the new Edinburgh tram system have risen from £375Million to over £1Billion, and the Sheffield tram suffered from lower than expected revenue in the early years.

The money is on offer solely to construct a trolley bus scheme, with much of the planning deriving from the previous “super tram” proposal. Many residents see NGT as blindly forcing through a particular traffic “solution” regardless as to whether it would actually suit the A660 situation or bring any actual benefits. It also seems to rely on “milking” the revenue from existing A660 bus services to provide the monies to operate the scheme.

Conclusion

It is often quoted that in terms of traffic congestion and the future “doing nothing is not an option” but it ought to be the “right something”, or if that contradicts the offer of government funding then it should be the “right nothing”.

Note: Data quoted are taken from NGT, Leeds City Council, or National Audit Office sources