

**From:** adrian jones  
**Sent:** 22 October 2018 17:33  
**To:** Robinson, Richard  
**Cc:**  
**Subject:** Re: Timing of the extension of the NET system to Kimberley, Eastwood and Langley Mill

Upon further reflection, there is no reason a relatively simple 3.3km extension should not be targeted for an even earlier implementation day 2023.

More ambitious but why not?

best regards,

Adrian Jones  
ForwardRail Consulting  
CEng, MSc (ENG),  
BSc. MIET.

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**From:** adrian jones

**Sent:** 22 October 2018 12:09  
**To:** Robinson, Richard  
**Cc:**  
**Subject:** Timing of the extension of the NET system to Kimberley, Eastwood and Langley Mill

Dear Cllr Robinson, as discussed please find below my input on the proposed extension to Nottingham Tram to Kimberley, Eastwood (KE) and a transport hub at Langley Mill (KELM) connecting to Toton HS2 station.

First of all just a brief update of my experience and interest.

- I am a professional railway engineer with over 40 years' experience. I was raised at Swingate Kimberley and have lived at Awsworth and Eastwood before embarking on an international career until recently returning to my new home in Newthorpe. I still work internationally railway projects.
- I hold electrical qualifications originally from the Coal Board as I started work at Moorgreen Colliery then Gedling. I worked as a supervisory engineer on the Channel Tunnel project before joining the Eurostar team in London to launch the now familiar service. I have worked in operations and maintenance, as a Maintenance Manager at Sheffield Tram then for an international consultancy in Derby finishing on the Taiwan High Speed Rail project in the certification team. I have specialised in light rail and high speed rail around the world on such projects as Auckland Light Rail reference design, Gold Coast light rail design, Kelana Jaya light rail systems design and high speed rail projects in Kuala Lumpur and Singapore. My most recent decade has been spent in the design, planning and development of rail systems and infrastructure in a multi-disciplinary environment. I currently work for the Government of Dubai as an advisor for the certification and regulation of all their rail systems including driverless metro, monorail, Airport people movers and their wireless light rail system. In August I carried out a review of maintenance facility of the HS2 project.

- My interest in the tram extension is both professional (as my expertise matches the current design and planning stage) and personal as I know the area for the extension well, live within its catchment area and my family regularly commute to Nottingham for work and leisure (as do I).

I am aware and have reviewed the Mot MacDonald Report (The Report) into reducing the traffic impact along the A610 corridor (NET Phase Two, Extension to Kimberley and Giltbrook Retail Park, August 2015, 305248-AC-DOC-001) commissioned by the Nottingham City Council.

I am also aware of the public debate, political support and proposals extending the system (to that developed in The Report) to Langley Mill and providing a rapid 7 minute connection to the HS2 mega Hub at Toton.

Having experienced the issues along the A610 corridor in peak hours and during even minor disruption, I would support the extended tram system to Kimberley and Eastwood (as proposed in The Report) and the further sensible extension to a transport super hub at Langley Mill.

However, I am aware of the timing for Toton HS2 station which is currently proposed to commence in 2033. I am also aware that the purchase of new rolling stock may need to be aligned with the expiring NET franchise and the life expiry of the original Incentro Trams, both around 2030 to 2034.

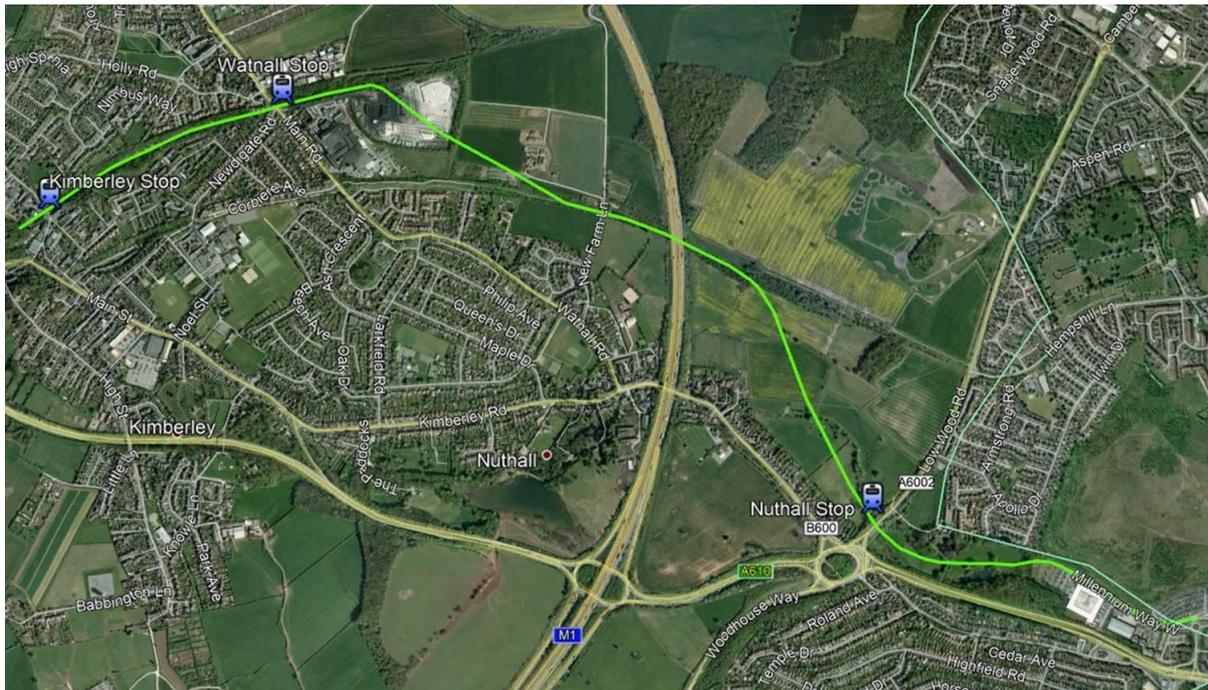
If the KELM funding drives implementation to a date early in the 2030s, then the worsening traffic congestion along the A610 will become totally unacceptable to users and will likely stall the attraction of business to the region. It is clear to me after years of overseas working that the region has suffered from a desperate lack of investment and appropriate transport funding which needs to be rapidly corrected.

I would make the following points:

1. The A610 corridor right continues to attract more businesses and I am aware of the new Amazon facility currently being built. While this is good news for the regions economy, it will only serve to add to the congestion along the A610 that can see a 1 hour plus journey into the city even using the tram park and Ride facility at Phoenix Park.
2. The continued congestion on the A610 corridor will ultimately dissuade further investment by business and stifle economic growth in the KELM area.
3. The Phoenix Park tram Park and Ride (PnR) provides 657 spaces and is currently overflowing into the surrounding minor roads. They must have more than 700 cars currently parked there and the Forest Fields is similar.
4. Any minor delays on the M1 immediately spills out onto the A610 and further adds to congestion.
5. Currently the only option for rapid transit into the City of Nottingham from KELM area is to drive into the tram PnR at either Hucknall or Cinderhill, to use the pretty inadequate train service from Langley Mill or Ilkeston, take the rainbow one bus service (which despite some segregated lanes is still stuck in much the same traffic) or drive into the city. Many I know choose the tram or just drive.
6. I would also comment that the transport provision to the Giltbrook retail park and Langley Mill industrial Parks does not appear adequate, particularly out of peak hours for shift workers.

It would seem incomprehensible that the KELM areas are not provided with a rapid mass transit option until 2033 as the frequent peak congestion issues and over subscription at the current tram PnR facility will only get worse.

- A. I would propose that a shortened version of the scheme developed in The Report be implemented with an advanced timing to be operational by 2024/25. This would be stage one of the eventual scheme to Eastwood and LM timed for the Toton Connection.
- B. I would propose that the scheme is considered to either Kimberley (as a sensible Anchor at the old Brewery development site) or to the rear of the bakery in Watnall as a PnR and in either case the stop at Nuthall as a PnR as proposed in the report. See concept map below.
- C. It would be better to take the initial service to Kimberley as this provides the best anchor for users but if cost prohibits this then Watnall with a good PnR facility should be implemented.



This has the following advantages:

1. Brings earlier benefits for commuters, workers and businesses in the KELM area.
2. Provides the capacity (conservatively) to take more than 1500-2,000 cars off the A610 corridor during a 2 hour peak period. While this is a simple estimate, the number of single occupant car journeys I have observed could drive this figure up much further. A 33m Tram has the capacity of around 220 passengers.
3. Provides a journey time of around 25 minutes from the Kimberley/Watnall area to Old Market Square and 29 minutes to the train station.
4. Relieves the PnRs of the current tram system by providing 2 x new PnRs at Nuthall and Watnall.
5. Brings earlier relief to the commuters from the KELM area reducing lost time driving and more time with families for those residents.
6. Reduces the capital cost burden of the initial scheme to into the region of **£69-88M** for the Watnall PnR and **£92-117M** for the Kimberley stop (see below, have added 3% CAGR for 3 years to the costs produced in The Report). It is possible that this will be reduced given the relative simplicity of the system to Watnall.
7. The construction to Watnall would not produce major construction disruption given the more rural setting and the use of old rail alignments.

8. Good integration of cycling and walking provisions into the tram right of way would further encourage a reduction of car use.
9. The extended service can most likely be provided by the current rolling stock so no purchase of new trams is required.
10. Provides early confidence to the benefits of connecting to Toton for the eventual scheme and allows forward planning that encourages development and investment in the KELM area.
11. HS2 investment could and should still be sought but if this timing does not support an early implementation then alternative capital funding sources should be sought including development opportunities that might subsidise the cost through innovative Transit Oriented Developments at both Watnall and Nuthall where a developer is given land in exchange for building the stops and the civil engineering elements of the tram right of way.

Whilst I completely support the extension of Nottingham Tram to Kimberley, Eastwood and to Langley Mill to connect to HS2 at Toton, I would urge you to identify ways of bringing forward the potential implementation date of 2033 to ensure that congestion along the A610 corridor does not get worse and that businesses continue to invest in our region.

Cost development:

All £M			
Cost Range Developed in The Report	3% CAGR for 3 years	minus 4*2.8 for rolling stock	£per KM
135	148	136	21
168	184	172	27

	KMs in the shortened scheme	Capital Cost Range £Ms	
Phoenix Park to Kimberley	4.4	92	117
Phoenix Park to Watnall	3.3	69	88

**Adrian Jones**

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