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16<sup>th</sup> May

JASON SMITH CROSS-EXAMINATION

[09:45]

MRS FAHI OBJECTOR 1558

Whitfield in Hunslet

F – why has it has been decided to run the trolleybus route in a housing estate pedestrian area

Js – need to get to hunslet road through church street – options looked at to go through main road.

We looked at 4 options – all had pros and cons

the current scheme comes through by the school and down here through the whitfield area – onto what is the pedestrianized area on the bottom end here. It continues through the pedestrianized precinct – it doesn't affect the operation of church st junction here and allows it to form a plaza – integrating into the stop on penny hill centre. As it's not traffic we will have good ngt run time and gives us opportunity to integrate and do urban uplift of the whole plaza area. Walker will come to what the proposals area. Also requires the minimal highway requirements. We are conscious that there are houses backing down to it – we looked at one way running through one area but that wasn't possible as we'd have to put a signalised junction on the ends. The one way system would mean there would be a constraint on how the network operates – and timetable things from that point. It would be a constraint on capacity. It would also be required to remove a few trees from the whitfield area.

We looked at staying on the main road – that had issues too – we'd be transiting through a major junction which is low road church street – risk of decreased punctuality and also means that rather than integrating with hunslet district centre we would transit around the edge of hunslet and wouldn't integrate as well with the district centre. The stop would be on church st and not the plaza area so less well integrated. As I said it will also be less punctual – and the stop would displace other bus stops on church street

We also looked at it coming up to hunslet road and continuing through to whitfield way – residential properties on their as well. In order to take the space we'd have to do substantial planting and remove the screening barrier – so that would open up views of the main road to whitfield way.

Walker has done a visualisation of that to show the screening being moved – visual intrusion/not attractive for those residential houses. We'd have to form a new junction between whitfield way and church street – which introduces potential delay etc for ngt and other traffic.

Final option – still continues along whitfield way and have those screening barrier issues and creating an 8 lane highway – but moving on from whitfield it would then come down to whitfield avenue – the thought behind it was we could avoid the residential bit and still have the plaza in it and integrate it – but there were disadvantages...there would be tight turns/sight line issues.

All in all we looked at those 4 options – we've got several issues mentioned above

Local issues – it is intended to be a shared space area – the speed limit will be 15 miles an hour. Also just where we pass the houses and there are other facilities – where we come through here the arrangement is that we have a min of 2m footways (2.1m) on either side here...as we move along pass the houses the footway widens (2.5m) – so we achieved more than the min. the layout will have curb (15mm) – we have worked with the ngt equality access group for recommendations to keep it safe. They are generally outlined in my proof at 6.9 (doc app 3-2).

F – the preferred route will be outside the precinct and it will be a double lane

Js – that's correct

F – just to make you aware of a few things about the area – as the trolleybus enters the estate you're happy that the trolleybus to run in front of a primary school before entering whitfield

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Js – yes we have discussed that – we’ve told them what will happen e.g. the alignment etc... they’ve been fully discussed

F – because you’re offering to buy the land?

Js – I don’t know. It will be fenced off and a reconfigured car park. As I said it will be at low speed.

f- it is a low speed but with the weight of the trolley I do think it will be an issue

f- are you aware that a lot of children and parents walk along the precinct to get to the school

js - yes

f- is it safe to walk on that small width area?

js- yes the footway width is around 2m. 7.3.12 of my proof sets out how shared space areas are configured and where they are. It’s a safe arrangement with footways, curbs, delineators...

f- how often do they run?

j s- one every 6 minutes in each direction

f – Elderly residents who are less mobile – with scooters – will they fit?

js– pedestrians and other users share space - v. limited with vehicles running so it’s ok. The design has had input by the ngt equality access user groups – we have had input from representatives of wheelchair users etc.

f – I live in the second house from the end on the precinct – what will happen when a ngt crosses the road on whitfield avenue – it won’t be stopped by a controlled light?

J s- it is at low speed and there are stop lines here on either side and adequate visibility for that

F – there is a blind spot though

J s- we have looked at sight line there but we have reinforced that with the stop line

F – between the houses and the job centre – the shortest distance in speed – 40ft area in which you want to fit in the curb and the two trolleybuses – I’m telling you there is a blind spot there...we drive in the car every day we know.

inspector – have you got any detail showing visibility?

Js – not on me but we have looked at it there and there isn’t a problem due to the low speed and the stop line. It is appropriate for this location. This issue hasn’t been picked up in the stage one road safety order by leeds city council

f- are you willing to look at the problems I’ve highlighted

js – a concept design has been done – detailed design has been developed – part of that was discussions with lots of groups and other groups can be involved – we are more than happy to work through with local residents – if things can be reconfigured, we could look at that

f – alternative route would be ideal. Do you think I can’t give u more accurate advice as a resident for 27 years?

js- we have taken that into consideration and I appreciate you have local knowledge

f – do you know how many traffic queues in one day?

Js – we’ve done survey in all the locations – we’ve dealt with flows – GR looked at it

F – have you included the continuous license deliveries – e.g. nursery/

Doesn’t include the bottom half of whitfield avenue which includes job centre staff etc. using the health centre car park

Js – those aren’t really affected by the proposals – we’re taken into account access to Morrisons, for examples

f- it’s a continuous flow of traffic all day long – when they come to the stop line – before you know it there will be a backlog all the way across whitfield avenue

js – it’s one vehicle crossing in each direction in every 6 minutes – they will be less than 10 sec through that area – I don’t think it will cause disruption to the flow

f – apart from that, when morrisons are waiting to go into their loading area – they block the stop junction

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js – we have had discussions with morrisons (they put in an objection) – it was a discussion as to where they park their vehicles and the TROs and how it applies to them

f – 2 or 3 vehicles down will physically block it – because morrisons are objecting they won't be helpful – you could wait 20 minutes until these gates are open.

Js – one thing we've put in there is a no waiting no loading – in discussions with morrisons we're clear that their deliveries would be schedules and timed

F – that's the ideal situation. I'll give you a more accurate description – we've had long running problems with morrisons – we actual know all about the traffic there – even with signs they don't carry out those promises. What happens when they arrive after their scheduled time – it's not set in stone. And then your trolleybus can't cross either way.

Js – on A-13 updated TRO plans (to restrict waiting and parking) – sheet 18 – towards the right hand side you'll see whitfield avenue – all the way through on the avenue up to the morrisons service yard is covered by a TRO restriction 'no waiting no loading' – that is part of the basis of morrisons objection as they wanted to park there but we said that that would block the highways and the streets. Therefore the vehicle can come in and it can stop as long as it doesn't wait and the gate can be open to morrisons during that delivery slot. That will improve the traffic flows in the area. At the minute it is limited waiting and they wait for some time there –that's what we wanted to avoid.

f- what about the constant flow of ppl going to the nursery behind whitfield avenue and clients to the job centre (3000 ppl)

js- as I said this area – all will be covered by the no waiting and loading

f – I'm on about the physical flow of moving the car to drop the children etc. and actually turning around before the morrisons parking area. There are double lines which are not enforced at the moment. It's the flow of traffic up that row constantly during the day when you look at what is in the area.

[inspector interrupts]

F – issue of turning the precinct into a through road – do you think the trolleybus alone will use this road and not a shortcut for other cars – even putting cameras on won't stop joy riders etc.

Js – it will be signed and clear that you shouldn't use this road – on sheet 18 there is a TRO on it for trolley vehicle and cycle only – an offence to drive down there and enforcement in the usual way

F – what about quad bikes etc. with no number plates?

Js – it's an enforcement matter for the police

f- at the end of the precinct opposite the job centre- directly behind us in an access road to the nursery – four car spaces for the houses at the end (we have nowhere else to park)–what will happen to those spaces?

Js – [don't know where the map is – please show me]

[cannot find the map]

F – when you're actually carrying out the work – our gardens will be taken when you're doing the work , won't it be?

Js – the work doesn't go beyond the boundary – in walker's evidence he sets out that the boundaries could be retained but it does suggest that new boundary walls could be provided – he has done some work on that – there is no increased width of the road through there. There are temporary powers taken within the order to allow the walls to be reconstructed if that's what the owners want?

F – do we have a say on the land?

[Inspector – it's worth discussing this outside on issues on the CPO powers etc.]

Jones – the witness does know the case she just wants to confirm

Inspector – if you want more detail on these boundaries then you can discuss externally

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F – we never get told of any information, any meetings – we are in the dark – one meeting I did attend because neighbour told me – when I went I was told that this was one of the biggest problems on the ngt route so obviously it's not in your interest to tell me any information Inspector – do you know anything of these meetings mr smith?

Js – haskins might know – he dealt with the consultations

Cameron – there's somebody from mott mcdonald who's here – who outside the inquiry can speak on the engineering and case managing details to mrs fahi. if it's a freedom of information request we can have a discussion outside

f- that would be good as the only info is the CPO of the property.

f- would you consider one of the alternative routes after all this information?

Js – we've determined this is the best route and that's before the inquiry – so no

f- so even morally you are quite happy to go ahead to put two vehicles outside a housing estate community

js – for the reasons that we've began with we believe this is the preferred route. I'm more than happy to discuss some of the detail with you and offer has been made.

F – saving 3 minutes off the journey time at the cost of a child's life is ok?

Inspector – that is a statement

BREAK

[10:55am]

CHRISTOPHER FORIN A660 joint council

Cf – stopping distances of a trolleybus at 15 miles an hour

Js – I need to work it out and are happy to do so for you (refers to a doc)

Cf – do you have a general notion, something you considered?

Js – yes, e.g. Almer road – available sight line there, and worked out that max speed should be 15miles an hour because it is only 10s of metre a short sightline

Cf – there are two relevant stopping distances – in the dry and wet – Yorkshire rains quite a bit

Cf – in answer to mrs Fahi's question – you said running the trolleybus through is a safe arrangment

Cf – you said there would be 4 options

Js – it doesn't necessarily improves run times but it idoes improve punctuality – ability to put a stop in the plaza area and general up life. Run time difference between those options are not huge – it is an urban design and integration etc.

Cf- but I wrote down better run times

Js – the key point is punctuality – and the shortest and most direct route

Cf – your reasons for discarding other three options is because they require minimal highway amendments – you refer to implications of punctuality and constraints to the network if you ran it along one of the major roads

Js – that was in relation to the single direction option

Cf – another reason for rejecting the other three options was because staying on the road wouldn't integrate the plaza and displace other bus stops. but numerous other bus stops have been moved

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J s-yes, but we are trying to get bus stops and ngt stops as close as possible and also at the heart of hunsllet district centre. Displacement of bus stops is not an usuprable problem is it  
Js – you can move the bus stops but then it wouldn't be in front of the district centre

Cf – wonder if possible to get the googel satellite picture where it runs between the housing  
[Cameron: this is not part of the a660 case]

[cf – but it includes the residents of both side of the river etc.]

Cf – what you have here is a fairly narrow strip in the whitfield area – turning to your proof of evidence at page 72 – 6.9.1 point d – you say that gardens back onto the route of ngt although standard 2 m footways can be provided. The situation is that we are running trolleybuses through this pedestrianized areas with physical barriers to motor vehicles

Js – correct

Cf – proposal is the trolleybus goes through this area and then will be 2m either side of the trolley track for pedestrians. Now it's right isn't it that at present numerous local children are safe to play in that pedestrianized area

Js – it's pedestrianized – whether it's safe or not...

Cf – there's no traffic there

J s- yes

Cf – in the scenario that the inspector has to contemplate is that every three min a large and heavy trolley will run through this area just over 6ft away from the back gate of a garden where children live. You accept that children don't have the same discretion as aadults?

Js – that is why there is a speed restriction

Cf- we don't know how long it takes to stop from 15 miles an hour when its been raining, do we

Js – we'll get a figure for you – it's a few tens of metres

Cf – if a child runs out of his or her back garden – the trolley bus which weights from 18 to up to 29 tonnes full –[you are telling me] it will take a few tens of metres.

J s- if someone is on the road then the trolley will pull up to a halt – there are good sight lines

Cf – 'left hand runner' describes scenario where children run out between parked cars thus giving the driver almost no notice

Js – yes

Cf – isn't that a likelihood here because of proximity of gardens – running out of the garden in to the path of a vehicle that takes several metres to stop

Js – that could happen at any road apart for those at30 miles per hour – it's got mitigation compared to a standard road where you may have the same arrangement with a house and children.

Cf – it's not safe is it – you may be right that it is no more dangerous than other streets but especially when ppl are used to having a pedestrianized area – for them to get used to this new environment is not safe

Js – I do get to this on the shared space section – there would be an awareness campaign, driver training and warning system on the vehicle and consultation with local residents to make them aware.

Cf – this part of your mitigation of the dangers?

Js – yes

Cf – according to your own evidence you had 4 choices and rejected three because of punctuality issues and issues about slowing down other traffics

Js- that's not what I said – also the location of the stops and other factors

Cf – move onto millennium square – in your evidence in chief – you sort to distinguish the square from the streets in Liverpool. You said that the square didn't have shops and not a busy area.

Js – I said it wasn't comparable to these streets in Liverpool which are busy shopping streets.

Cf – what bout when the xmas market is on in the square

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J s- yes there are – but I wouldn't compare it to a busy shopping street in a major city

Cf – leeds is a major city

Js – but this doesn't have the same amount of activity – the route through the square is open to service vehicles – it is a 90m long stretch and it is a highway

Cf – a lot of things can happen in 90m

Js – in terms of highway it is a short stretch

Cf – have you visited it at xmas market at night? they sell german beer etc. a lot of people drink too much, is that right?

Js – yes a lot of people do have a drink

Cf – it's crowded

Js –yes

Js – but if you compare it to other environments e.g. Liverpool – you've got trams going through there in both cities – I've been there when the tram driver will see the pedestrian, come to a stop and sound a horn – they won't proceed unless it's safe to do so

Cf – mr mckinnon obj 1622 proof – I want to refer to a doc in there – page 16 table 1 – are you familiar with this table

Js – not looked at it in detail

Cf – are you familiar with the conclusions drawn at para 5.4?

Js – yes

Cf – [reads final sentence] 'trolleybus is more likely to injure pedestrians than other vehicles'

Js – it does not provide a like for like comparison between conventional and trolleybus. Trolleybuses will be often found in city centres etc. with parking whilst other vehicles are in suburban environments as well.

Cf – you think the injury figures are higher as they tend to run in narrow streets

Js – yes

Cf – like whitfield way

Js – its not narrow – its got 2m + footways on either side. I said that it is in a congested area of city centres.

Js- trolleybuses have got to meet stringent requirements e.g. wing mirrors, braking of the vehicles. They need type approval and operator needs a license and there will be spot checks when the vehicles are in service – braking is checked. The regulatory environment is completely different from the uk and us

Cf – its right isn't it that the regulatory environment is in many ways tougher – e.g. the speed limits are lower

Js – the environment is different in the usa – you can't compare it like for like. It is an aggregate account in this table – not fair to compare. In the scheme, lots of design has gone through to change the infrastructure for an articulated vehicle and its movements – unlike London. We are also widening the bus lanes to at least 4.2m. all these things help improve it

Cf – mr mckinnon's evidence says that the trolleybus safety record all of the world is bad – isn't that right.

Js – wouldn't accept for the reason that's just given

Cf – page 18 – Melbourne – as far back as 1937 there was an alert to the fact that the national safety council the trolleybus was the most dangerous vehicle on the road

Js – I don't think something from that time is anyway comparable to a modern vehicle manufactured today... there is no comparison

Cf – there are, human beings haven't evolved to be tougher

J s- vehicles change – safety measures, braking systems

Cf – but the children haven't. – and the drivers haven't evolved – better training but reaction times are reaction times. evidence as to reaction times changing in the years?

Js – there is training ...

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Cf – ?

Js – if the driver is well trained as to where the people are...they will know to be more alert

Cf – the stopping distances in the highway code has not changed over many decades – the laws of physics apply as however efficient they make the brakes it still comes to down to the friction coefficient, weight of vehicle etc. despite the numerous advances those advances can't overcome the laws of physics

Js – but braking distances have come down since the 1930s

Cf – well we'll have a look at the highways code outside – or maybe not

Cf- you've agreed that it will take several metres to cross even if running at 15 miles an hour

Js – yes

[NB/ actually agreed that it was 'several tens of metres' – G Jones has confirmed with Smith this is correct]

Cf – you proof at para 7.2.10 – table there – what does the 'cycle only' lane mean.

Js – it means either advisory or...?

Cf – those aren't segregated physically are they?

Js – no they're not

Cf – they don't have to share with buses/trolley etc.

Js – yes

Cf – the next column is the ngt/cycle lane – where they have to share with trolley/bus/taxis?

Js – yes

Cf – then in the segregated off highways – at the moment there is 600m and there will be 1.12km – that highway is principally what is called the headingly bypass

Js –yes

Cf – the shared footpath and highway – that's where cyclists and peds share

Js – yes

Cf – para 10.2.4 – page 132 – you say 'it is considered not generally possible to provide 4.5m cycle lanes due to boundary routes etc.'

Js – yes

Cf – there are many places in your proof e.g. 10.2.5 where you say that it isn't considered possible during boundary constraints – there are numerous places where you say there are things that are not possible because the road isn't wide enough

Js- yes

Cf- there are different sorts of impossibility aren't there. What you're saying there is that its not possible if we're going to have space for motor vehicles and trolleys? It would be logically possible to put in a cycle way but its not possible because of the motor vehicles

Js – it is a competing balance of interests – a660 has got a strategic function and we need to accommodate public transport/pedestrians and other vehicles.

Cf – we'll come on later as to whether an approach from the point of view of balance is appropriate or not.

Cf- go to 6.5.2 a) of your proof – elsewhere in the doc we see an acknowledgement that in general terms there is no sig reallocation of space between motor traffic and other users

Js – that's not correct – to achieve the 4.2m the general highway lanes have been reduced to 3m – there is a reduction in lane width and therefore reallocation of road space to public transport and cyclists

Cf – information paper B-8 – g-4-45 – page 5 'how will ngt impact on general traffic' – second para says that ngt will broadly maintain road capacity for gen traffic – whilst you say you've reduced the

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lane widths to city council's rec minimum you still broadly speaking don't do anything that inhibits the traffic there – there share of the space isn't really affected is it

Js- there is road space re allocation towards public transport and cyclists – the highways capacity is maintained as those are affected by the junctions - its really about signalling and not about the width of the lane.

Cf – so you're saying that the width of the lane doesn't affect highway capacity – if that were true we could take out the dual carriageways

Js – in narrowing the lane from 3.65 to 3m doesn't affect capacity – changing junctions affect it

Cf – there haven't been any adverse effects for motorists

J s- not in terms of capacity for the route

Cf – was that part of your design brief – a criteria you were given to not make things worse for motorists?

Js – this is a traffic modelling and junctions' analysis – GR from leeds city council – it was to certainly make sure the junctions worked within capacity and other road users weren't disadvantaged – that has been achieved along the route

Cf- it was part of the design brief that motorists weren't adversely affected?

J s- it was part of the design brief to minimise adverse-affects to motorists

Cf – at the expense of people in the whitfields? – you considered 3 other options which would have adversely affected other motorists but you decided to put their interests above those of the people in whitfield

Js – that was to advantage those people in those areas – e.g. urban uplift/integrate with the district centre etc.

Cf – well the district centre is where the morrisons is etc. – that's not going to move is it – its currently quite accessible by road isn't it

Js – the opportunity was to put in a nice plaza area in there and upgrade a fairly tired area

Cf – but it doesn't up life the quality of life for people living in the formerly pedestrianized part – people will be able to look into their houses – even if the ngt isn't that high still elevated...

Js – as it would for a conventional bus.

Cf – how is it to the advantage of those people to be under three minute surveillance by people on the bus

Js – it's a bus going along a road with standard width footways

Cf – so shouldn't be a problem

Js – it's a fairly usual arrangement

Cf – it's a v. small footway and in fact the gardens there are not long gardens are they

Js – equally in other areas people don't have gardens on the frontage.

Cf – cycle lanes – apart from the headingley bypass which is fully segregated the rest of the time cyclists will be obliged to share with trolley/bus/taxis

Js – also another segregated area ... Saner Lane it's a shortcut through that area

Cf – how long is that

Js – a couple of hundred metres – td 33 of a-11. Around 280m long

Cf – so out of a length of around 14km for the whole route. you're satisfied that's an increase of provisions for cyclists.

Js – I am, certainly in many areas like west park area the existing bus lanes are narrow e.g. three metres – we've widened them considerably so buses can pass more easily.

Cf – when you add up the distances... of how much space a cyclist needs to stay out of a gutter and in centre of cycle lane – have you looked at this?

Js – yes

Cf – g-4-75, design of cycle lanes – page 18 – can you see the diagram there of a car and a cyclist.

That is a 300mm to keep the cyclist out of the gutter – cyclist width of 750mm and a 600mm clearance – the width of the trolleybus is 2550mm.

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Js – yes

Cf- what is the min clearance then in your proposals?

Js – in terms of adding on to that we do need to add on wing mirrors as well – makes a difference – the max predicted extent of wing mirrors is 20cm. that is the max. that gives you your max vehicle width of 2.55m + the wing mirrors (at a higher level above 2m) of 2.95m. 1.25m space between.

Cf – but what this shows is that a cyclist needs 300mm clearance, his own width of 750mm and a clearance space of additional 600mm.

Js – what we're following are the national ltm 2-8 standards rather than local standards. In the London cycle design guide it does note that the min cycle lane width is required 1.5m – that is what we have provided. I note that the min distance for the cycle wheel to the curb is 0.5m – that is in table 2.1 on page 16. It is for curbs over 50mm (that is in doc g-4-74).

Using that national guidance that states the min distance is 0.5m and we already said that the space is 1.25m therefore that leaves 0.75m on the other side including the cyclist themselves but in this we are following this doc and the widths for bus lanes are considered at 6.2.2 where it recommends 4.5m but it shouldn't be under 4m. we are in accordance with the national guidance – we would like more space but it is a balance of the interests.

Cf – your bus lane shared with cyclists is 4.2m – the bus itself excluding wing mirrors is 2.55m. how much space does that leave the cyclists and the clearance.

Js – 650mm.

Cf – and of that, the cyclist is 1050mm – (300mm clearance and 500mm of the cyclists in g-4-75) – this is appropriate as there will be a moving object next to them?

cf – proposal of this inquiry envisaged there would be 600mm between edge of trolleybus and body of cyclist. That's right isn't it

j s- if we have the 4.2m and take of the 2.55m, we then the 750 and 300mm than then leaves 600mm

cf – this is a piece of wood 600mm long this is the distance between a 18tonne trolleybus travelling down the a660 at 30 miles an hour (not 15!) and the soft body of a cyclist

js – yes, it conforms with the longer cycle guidance you cited and also conforms with national guidance

cf – you think it is safe – do you expect that parents of children and teenagers will allow them to use the trolleybus lane when they are only 600mm from being hit by a trolleybus.

Js - I do – it provides sufficient room, it complies with standards and a huge improvement with what is there now. That widening will encourage greater use.

Cf – if you had a 12 year old daughter you would be happy to use it

Js – I'd be happier...yes I would allow it

Cf – you're telling this inspector that you believe that you will encourage wide spread cycle use

Js – already widespread but given the improvements and also as well as the southbound we are providing a bus lane which is again that sort of width – much wider than existing bus lane and will encourage cycling

Cf- you don't see children on those roads

J s- it is only 3m now –doesn't' surprise me

Cf – you think additional space will result in encourage existing non-cyclists to become cyclists

Js – yes – there are other factors but certainly yes

Cf – I have to suggest to you that this is optimism.

Cf- look at national planning policy framework folder 17 – doc B-4-21 – turn to para 29, page 9 – itssays that balance of interests should be given to sustainable transport modes that reduce congestion. Ngt plans don't claim to reduce emissions does it

J s - no

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Cf – so not in compliance of this policy

Js- that s for another witness

Cf – para 35 of same doc – plans should protect and exploit opportunities of using sustainable transport mode. [reads out the para] – creating safe layouts. You're plans don't do that do they? Cycle lanes would be segregated in the whole route if it did conform

Js – I don't agree at all – I want to refer you to doc g-4-74 page 9 table 1.1 – cycle infrastructure design – in the second row this looks at the type of cycle facility. In terms of segregation there are areas where it is and isn't appropriate – this is an area where it isn't as it would create more conflicts at side road accesses – I have dealt with 6.1.1 page 32, of the same doc which says that 'preferred over off road facilities due to remaining on carriageway' – in relation to this and national planning policy framework cyclist have got bus lanes and also at side road junctions we have continued that lane through to make sure those priorities continued.

Cf – this is a doc 6 years old

Js – this is the relevant current guidance

Cf – we'll be submitting that it has been superseded by the NPPF.

Cf – return to the NPPF – para 35 – ngt does not give priority to pedestrians and cyclists does it? Not in terms of precedence at junctions but the overall scheme does not put these at the top of the hierarchy do they. Ppl at the top are still motorists.

Js – I've gone through the fact we have – re-allocation of highway space. In terms of priority its made clear in 6.1.1 that cyclists do have priority at junctions.

Cf – folder 10, doc d-1-1 – core strategy – page 57 policy cc3 of this strategy. The status of the doc – it's an important policy doc

Js – yes

Cf – policy 3 – make walking/cycling easier /safer – is it your evidence that providing cyclists in cycle lanes 600mm from the ngt vehicle is safe, easier and more attractive

Js – it is far more attractive than current situation which is only 3m.

[missed 3 minutes around 12:15pm – not relevant]

Cf - g-4-16– manual for streets 2 (hard copy only book) – actually I'll come back to it

Cf – go to local transport plan – folder 13, d-6-11 – page 33 – the consultation found that lack of infrastructure, safety etc as discouraging cycling and walking – do you see that thee lack of insfracstructure which discourages cyclists is the lack of segregation?

Js – no I don't recognise the segregation as discouraging – we've talked a bout this already. I recognise a lack of infrastructure and that is why this scheme proposes to improve it – e.g. the number of advance stop lines increases by 28 at junctions and a further increase of signal controls at pedestrian crossings (b-9, page 197, 202).

Cf – no one is disputing this but what I want you to accept is that the ngt proposals effectively stymie any genuine and sig improvement in the cyclist objective and perceived safety

Js – these proposals do sig do that already – inherent within them that the widened lanes are a keen safety feature. It's not to say there can't be follow ons and improvements but it goes a long way to improve that.

Cf – page 44 – perceptions of poor safety in relation to the transport network can act as barriers to ppl changing to lower carbon modes. Clearly the authors of this plan are concerned about perceptions to poor safety in relation to cycling and walking. Again you think these proposals address these.

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Js – yes I do, if it helps I could give an example. We've had extensive consultation with the Leeds cycle forum etc. and we've made a lot of changes in conjunction with them in design freeze 7 – it's been going on for a year and half. We've changed the design in some areas in response to them – where it would increase the perception of safety.

Cf – I was going to come to the doc 'understanding walking and cycling' – you mentioned your discussions with the Leeds cycling campaign/forum. The point I want to make is that consultation with existing cycle groups does v. little to encourage non-cyclists.

Cf – page 50 of the transport plan – it established hierarchy doesn't it. The top is the active travellers – what that hierarchy means is that you consider there means first.

Js – correct

Cf – you haven't done that with the NGT have you

Js – this is a hierarchy of consideration not necessarily an order in which things must be prioritised – we have considered all the things I've described. We have looked at it in specific areas, in the context of this hierarchy of consideration.

Cf – I return to the point that the proposals don't take any sig space for motorists...

[inspector – this is the same question]

Cf – your views of the hierarchy consideration is what Mr Smith

Js – we have used it and we have gone a long way to consider it. It is not a prioritised order but just a hierarchy of consideration – we have achieved an awful lot for active travellers.

Cf – you consider them first but you don't necessarily in the outcome of your plans put them first.

Js – that depends on the situation and the constraints.

[inspector – we are going around in circles again]

Cf- are you aware there is a considerable body of emerging opinion who view this matters differently from your view? Were you aware of the space for cycling campaign before the A660 joint council submitted the doc

Js – there are a lot of docs that are aspirational docs to get the best facilities for cyclists

Cf – if we turn to A660-106 please. Page 2 – protected space etc. – authors say 'main roads are often the worst place for cyclists – this organisation is calling for protected cycle lanes'

Js – yes

Cf – something that NGT does not in the main propose

J s- yes for the reasons I've been through. But in relation to this actually all the junctions have been redesigned to accommodate cyclists and feeder lanes configured to assist cyclists

Cf – A660 107 doc – Cambridge cycling campaign doc – none of the scenarios indicated in those photos are similar to what you've contemplated for NGT?

Js – no, this is showing segregated routes and wider routes with a raised strip. We are not proposing that

Cf – [omitted to copy page 15 of the original doc] – that review does not resemble what is proposed by you where there is no segregation

Js – we've been through this segregation issue – I don't think it's appropriate to have segregated lane on the A660 as it will increase conflict with other traffic. It really depends on the context – if you're in a rural area then it makes more sense but not a lot of sense with all the various side road accesses.

Cf – how is it that these things could be managed in the Netherlands/Denmark where they also have side roads leading off the main roads in the same way as the A660 (possibly more) – they can be managed there but not here?

Js – it could be managed here in the right context but this isn't it

Cf – your proof at 10.2.3 – you say that Leeds cycle policy is not to provide a separate cycle lane where a bus lane is provided

Js – that's correct

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Cf – I may have missed it but what doc is this policy contained within?

Js – I consulted with the Leeds cycle officers and also in the London cycle design standard (g-4-75, section 4.3.4) it does specifically say that if width of lane is less than 4.5m then you shouldn't mark out a separate cycle lane in a bus lane

Inspector – sorry let's clarify - this Leeds policy is based on you consulting with Leeds City Council rather than anything written down? You've taken it from their own officers?

Js - yes

Cf – if it was a policy then it should be written down in a policy doc – as this env is awash with policy doc

Inspector – but Mr Smith says it isn't written down.

Js - I don't know whether it is but what I'm saying is that they told me that that is the policy. That is the view of Leeds City Council cycling officers.

Cf – you don't point to any policy doc

Js – no I've referred to the consultation we had with the city council

Cf – that sentence it says 'its not policy to have segregation so we won't provide it'

Js - it doesn't say that its not policy to have segregation - this is in relation to marking out a cycle lane in relation to a bus lane– its not in relation to wider segregation at all

Cf – its just below a heading in bold about the lack of segregated space for cyclists.

Js – its quite clear ... the words points out that it's in relation to a separate cycle lane within a bus lane

Cf – so we would need to cross examine the highways staff at the council to get to the bottom of this. Who did you consult?

Js – Tim Parry

Cf – I'll ask him that

Cf – confirm – north of the Lawnswood roundabout the speed limit is 40 miles an hour at the moment

Js - yes

Cf – proposals to change that

Js – yes the scheme proposes to change it to 30 and also the southern park of the old road as well (south of open lane)

Cf – is there any proposal to reduce the speed limit down the A660 as it comes through via Headingley Hill

Js – no, remains at 30

Cf – you said in your ev in chief – you said that the A660 is a major strategic road

Js – yes

[12:50]

LUNCH BREAK

[13:37]

Docs going in – app 107 (existing parking and loading restrictions on the A660 Otley Road between Drummond Road and Avenue), app108 (seating facilities analysis produced by Chadwick), app109 (summary of a hearing held by the Competition Commission of first group June 2011), app 110 (various appendices to the Competition Commission investigation on the bus market – the report in g-4-72)

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GREG JONES

Gj – you recall earlier to today you were asked about your design brief by mr forin but is that something can be supplied outside of inquiry

Js – no formal design brief – more in relation to GR junction capacity, but my understanding is that the junction will be...

Gj – I understood that you had one

Js – there isn't a formal design brief written down

Gj – any set of instructions

Js – through guidance docs, the instructions were to look at the corridors for these options and reported the the council

Gj – if those docs could be made available outside ...

Inspector – nothing in writing

Js - yes

Gj – so he can record that you were instructed without any formal written instructions at all

Js – yes, the original project tender had the design brief in it and that's what we followed

Gj – thank you

Cameron: I'm told the relevant extracts can be disclosed

Gj – one anticipates that matters that were in a sense set by your instructions are the roots (of the scheme) – also again we know not just from your evidence that one of the objectives is to maintain existing highway capacity along the scheme?

Js – yes

Gj – again, in terms of consideration overall of the transport hierarchy of considerations between the modes of transport that again is set in the terms of the brief? You weren't being asked to look at alternatives to ngt?

Js – yes

Gj – your role is to design a system within those broad parameters?

Js – correct

Gj – you've set out your experience and you've had experience in the Nottingham tram – can you help me with this, are you aware of Nottingham council's review of the scheme in terms of risk awareness?

Js – my involvement in Net2 finished in 2007.

Gj – so in terms of views expressed before 2007 in risk awareness is not a matter you are aware of?

Js – that's correct – not aware

Gj – you referred to **Metro Zone Infrastructure standards doc 2008** – in the context of your explanation that there was a rule in that doc you couldn't have more than 20 buses at a bus stop in an hour – not referred to in your proof?

Js – no it isn't

Gj – we've had difficulty locating it, is it an inquiry doc

Js – no, I don't believe so

Gj – is that a doc that you have?

Js – I'm sure we can get a copy to you. The relevant section was 6.

Gj – it related to the question of the possibility of sharing bus stops. Curb side capacity – for the first time in your oral evidence ref was made to metro's own capacity rules. Was that something you knew about when you wrote your proof/rebuttal

Js – when writing my rebuttal I became aware of

Gj – but not in your rebuttal

Js – no

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Gj – looking at this, your original evidence wasn't based on any metro capacity rule

Js – based on other things

Gj – but at time you wrote your original evidence it wasn't because you knew of this standard

Js – I knew that the bus stops were extremely busy on a660 – guidance I became aware of at time of the rebuttal

Gj – in terms of a 20 bus capacity you were saying that there were more than 20 buses per hour currently through headingley departing from stops in headingley...

Js – yes along various parts of it

Gj – lets look at the various parts – are you aware of the statistics of the use of bus stops or general observation

Js – from the timetabled services at each stop

Gj – look along the ngt route – along ottley road between holt park and junction with otley road – ngt services per hour – how many trolleybuses will be used in this section?

Js – that will be every 12 min – 5 per hour

Gj – if we look at the same stretch – how many buses currently using this stretch? Route 6? There are 6 buses per hour every ten minutes.

Js – yes sounds right

Gj – that is excepted that the ngt doesn't need to be segregated from general traffic along that stretch as no congestion

Js – yes

Gj – but if you add the 5 ngts to the current 6 – you're only at 11 there

Js – yes

Gj – much less than the 20

Js – this is the least busiest part of the network – far more buses – ngt is halved. I'd agree with your figures

Gj – I'll test it with examples. I can't go through the whole of headingley. So so far as this example is concerned there is no reason why the number 6 and ngt couldn't have shared a bus stop

Js – I set out three main reasons – one is curb side capacity, you're right that it isn't that busy here, second was geometry straight here, brand identity is important too though

Gj - Brand identity yes, but one thing that is important is integration – in the transport and highways policy. So there are currently over 20 buses per hour running along the headingley corridor

Js – yes

Gj – providing a bus every 3 minutes and using the same stops – v. good so far as integration concerned?

Js – it is – can lead to problems whereby buses may begin to arrive at the same time and block each other

Gj – we'll come on to that e.g. at the university. Do you know how many outbound bus stops at the university currently? in the context of your evidence in chief do you know how many outbound bus stops are currently at the university? There are four. With ngt there will just be the two ngt stops.

Drawings 24-25 a-11

Inspector – it looks from this they will be relocating the existing bus stops

Gj – in the ngt world they'll be two bus stops moved down onto woodhouse lane on plan 25. You will have one ngt stop. (there are three in front of the uni steps, if you look at the uni library development that's the fourth stop). We see four bus stops there in the existing provisions?

Js – yes, in the northbound

Gj – in so far as other issues affecting dwell times of buses, maybe not a matter for you, are you aware of the evidence before the inquiry about the Atkins report post-super-tram about the work done in America indicating that newer designs of buses (e.g. seamless ticketing) can improve dwell times

Js – I recognise the point

Gj – if we go back to headingley and see if we can reach an agreement. Currently there is over 20 buses per hour every 3 min – they use the same stops. The ngt scheme overall is designed deliberately to segregate the ngt and bus stops for at least 75% of the route – it's away from conventional buses.

Js – it is designed to provide separate stops

Gj – and segregation as well

Js – in terms of bus stop provisions or something else?

Gj – that and in terms of the route use- not open to all buses only trolleys

Js- some is segregated but much of the route is shared with the buses

Js – (it's about 57% segregated) my evidence 3-2 para 3.1.8 – that para sets out degrees of segregation and ngt exclusive is 37%.

Gj –is it said in the design that any design delivers a sufficient degree of segregation to ensure that coupled with the prioritisation system (e.g. signalling) that sufficient savings in journey time and punctuality will be delivered for the trolleybus. That sets a parameter which you would have had to work around

Js – the parameters were to maximise a degree of segregation from general traffic, not necessarily other buses

Gj – and also one would need to achieve the requisite amount of punctuality and journey times

Js – correct

Gj – and its against all of those constraints that you've come in to design the scheme. By reference to your para 5.3.2 – wherever possible bus stops along the ngt corridor will utilise laybys

Js – yes

Gj – to allow trolleys to pass

Js – and other buses

Gj – are you aware of the constraints of trolleys passing each other

Js - yes

gj – a design constraint you need to work with

js – yes a consideration

gj – in terms of the trolleybus stops, those will not have laybys (or vast majority)

js – none have laybys

gj – we have the bus stops designed without laybys so trolley buses can get by – with the trolleybuses they don't have laybys so in so far as a bus is stuck behind a trolley it will have to wait for a trolley before going

js – not possible to have a trolley in a conventional lay by cus it will need to be huge – articulated buses will require a longer length to pull up. So either you have huge laybys or no laybys – certainly better to have straight geometries for trolleybuses

gj – it's a sig constraint of its manoeuvrability – one has difficulties with these trolleybuses and there size –

js – not unique to any trolley buses, also applies to other articulated buses

gj – but applies to ALL trolleys

js – that's correct

gj - there are articulated buses running on the headingley route

js – yes

gj- they manage laybys don't they

js - to dock at a layby successfully you will need to have a longer than standard one

gj – in respect of trolleys the constraints of these vehicles means for this scheme that its not been possible to provide laybys for the trolleybuses for these bus stops

inspector – is it your case that an articulated trolley bus would be virtually the same as an articulated bus?

Js – geometrically they are the same

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Gj – in so far as that is not an issue with non-articulated buses (it means they can use laybys)

Js – that's correct

Gj – I won't ask you unless you say you're involved – questions relating to why trolleybuses should get a degree of priority in terms of lay bys – they're not matters I address you?

Js – that's correct

Gj – its not your expertise to make a choice as to whether having priority to conventional or trolleybus

Js – we have drafted designs which were put to the promoters

Gj – para 5.3 dealing again with bus stops – 5.3.1 key locations – and you refer to 10.3 – there you respond to prof griffith's statement of case. you point to those bus stops being 100m or less from ngt stops. Integration – you don't set out or refer to any particular guidance or work done in respect of what sort of distances one would look in order for the interchange regarded as practical.

Js – that's a matter for modelling

Gj – you are not suggesting that a 100m is integrated

Js – trying to demonstrate those stops in proximity rather than any modelling interchange

Gj – it would be wrong to suggest sthat merely if one was between trolley and bus stop that 100m would be regarded as 100m

Js- that is a matter for the modelling team

Gj – it seems to be suggesting in the para that the inspector consider 100m as integrated

Js –in respect of where the 100m comes from give that you need to walk several 100m to a stop in the first place it's not unreasonable to have a stop within 100m. also many are in sig less distance than that.

Gj – well that's not a reliable, or integrated interchange distance.

Js – I'm simply setting out the basic facts of the proximity between those stops

Cameron – mr smith's evidence goes into the physical detail – Henkel to answer about the modelling

Gj – so he's just noting what another person has drawn attention to in their statement of case as to the physical distance. Nothing more than that

Js – that's correct

[14:20]

Gj – you'll recall in your evidence in chief in respect of the Merseyside decision – was that something you were aware of when you were writing your proof?

Js – it was

Gj – it doesn't appear in your proof

Js – yes

Gj – you don't address it in your rebuttal

J s- yes

Gj – you address it first time in oral submissions. You seek to make a point – sought to draw a distinction between the situation in Merseyside (level of pedestrian use) and millennium square. You've known it for at least some period of time...you've had some time to think about it. You say that it's much less busy but do you have any foot fall figures for the ped zones in Merseyside that were an issue and those for the square?

Js – I don't – I was describing the context which was different – e.g. lots of shops and ppl in Merseyside

Gj – when the inspector was weighing up your evidence you don' actually have any evidence about the levels of peds using the zone in Merseyside compared to the square?

Js – generally in the square I don't have a survey (it is v. few apart from in events) whereas the Merseyside is one where there is regularly high usage.

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Gj – just focus on my question, can I just note that you don't have any foot fall figures at any time?

Js – that's correct

Gj – did you go to Merseyside specifically to look at the level of pedestrians using it and when it was you went?

Js - I've been on that street and that was in 2002

Gj – for what purpose –

Js – I was aware of the decision and wanted to look at the street

Gj – which month

Js – summer

Gj - again, you made clear you don't have the same for millennium square.

Gj – can you take up please the designer's response stage 1 road safety audit that was put in by you on Wednesday app 106– chapter 2 – as I understand it the vehicles are expecting to go at 15 miles an hour –

Js – at millennium square yes

Gj – is this prepared by you

Js - prepared by a colleague and I reviewed it

Gj – 2.1 – ngt route runs through a number of ped zones some of which vehicle free for many years. "Our experience suggests there will be issues cus of near silent trolleys – we urge that ngt be limited to a speed to no more than 10 miles an hour – pref by new tech developed by leeds uni". Is this something you were aware of? Speed limit and risk of accidents

Js – I am aware

Gj – you could have drawn to the attention of mr forin and lay people and the lady in the morning as it is of particular relevance. You didn't suggest at all that your experience of ped accidents that there will be safety issues and if there are serious accidents are to be avoided the speed should be reduced to 10 miles an hour.

Js –so the issues raised by leeds city council, we then get the designer's response (comes with what guidance should be followed and what mitigation and the action to take) there is further mitigation that we have responded with as part of this audit doc. You can see there on the designer's response 2.1.1 the actions taken.

Gj – I see the action taken. So there is no issue about the first two paras about the issues raised

Js – they are valid issues raised

Gj – they're raised by leeds city council...no issues taken by you as to validity of their experience of accidents within the city centre?

Js – that was their view perhaps not understanding what the mitigation to be applied would be

Gj – I hear your response about mitigation – but the designer's response is that you haven't understood the scheme you are promoting, is it?

Js – the road safety team was independent from the project so they might not be aware of the full mitigation we made

Gj – this is leeds city council raising these issues and you've got the designer response – the response is to the guys designing the scheme – that's you guys. You don't so that you don't understand or that you take issue with these things - it doesn't say there is a misunderstanding on the part of leeds city council.

Js – it informs the council as to the response and what the guidance is. It also goes through what the mitigation is – e.g. about speed etc.

Gj – there's an issue isn't there because if a view was taken that the response should be to ensure safety – if for example a view was taken that the prudent design response is to follow to urging these 'auditors' from the council that the speed should be 10miles per hour, that would of course have a knock on effect in terms of journey times and the modelling would have to be redone. Your input into the modelling would then have to change?

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Js – yes it would affect the run times – but these are relatively short distances and a difference of 5 miles wouldn't make much difference at all...

Gj – so as a result of this as we sit now no remodelling has been done on the basis of 10 miles per hour

Js- I don't believe so (mr chadwick deals run time modelling)

Gj – ngt will also involve trolley buses running through the city square at the rail station

Js – yes

Gj – 5.8.15 of your proof you refer to a de-electrification period for maintenance. It is a likely monthly planned period for maintenance – help me with further details as to when during the day that is likely to take place and for how long

Js – based on Nottingham express transit – on a Sunday. Varies...can be a period of as short as 6 hour and as long as 24 hours. Once a month.

Gj – if its 24 hours on a Sunday, can the vehicles run without the electrics?

Js – if its overnight then they may not be running anyway – during an operational period they can operate offline –

Gj – for how long would that be, 24 hours

Js – running on batteries and super capacitors – running on a section – then go back on a live section or the depot where they can recharge batteries

Gj – what that means – has any sensitivity testing been done about difficulties arising from these de-electrifications and its impact on the service?

Js – need to speak to mr chadwick as to any doc. I haven't seen such a document/test.

Gj – 5.8.5 – standard arrangements for building fixings is a stud anchor. In terms of the overhead line equipment its right isn't it that a distinction between trams and trolleybuses is that you need two sets of overhead

Js – yes

Gj – in terms of weight – are we roughly looking at double the weight of a single tram one?

Js – the overall catenary system (including support wires) - Compared to a tram system overheads a trolley system will be less than double.

Gj – are we looking at 80%??

Js – difficult to say – maybe rather than doubling it would be 1.5...that sort of range

Gj – would I be fair it is somewhere between 1.5 and 2

Js – it will depend upon the area – if it's a junction or lots of support then the predominance will be largely support wires rather than the contact areas – it will be around that sort of figures. At least 1.5 but not 2.

Gj – power supply and sub stations – 5.9.3 – 10 needed – are you the witness who can deal with power supply?

Js – yes

Gj – you say there are 10 required to be robust and reliable – in terms of power station failure –how many sub stations are required in order for the system to remain fully functional. Is there any capacity for any substation to fail without affecting the system

Js- its nine. The modelling assumes there is an outage at any of the sub stations and services must continue without it.

Gj – power issues – if one has 2 sub stations fail then there will be an impact on the service.

Js – depends on where they area – if opposite ends they will be able to continue or if next to each other than the line voltage would drop and service would have to back down (maybe continue at a lower level)

16/05/14

Gj – you discussed impacts on utilities of the project – in terms of the meetings you have had with the utilities. Utilities diversion not on the same scale as with a tram and you have had responses from some but not others. Outside of this inquiry can you supply to us the latest record of where you are with the utilities?

Js – yes

Inspectors – number of utilities still objectors of the scheme

Js – yes

Inspector – why

Js – legal issues (I think it's to do with interference with their equipment and who can do that)

Inspector – rather than the design?

Gj – e.g. northern power. As matters stand they remain objectors. You stated that not utilities needed to be moved for ngt you said – what remains?

Js – those where we're not widening or where we've not got new construction. When we're just resurfacing and using existing carriageways no diversions will be made.

Gj – the principle of where conflict arises – and where you're digging up things and you don't know where they all are (and you don't know where the conflicts will arise), I didn't see any evidence showing a map of where utility conflicts are expected...

Js – we do have that – part of what we did by meeting with the utilities - we put the info from utilities companies in plan and went through the plans in relation to the scheme designs and we've highlighted what the conflict points are

Gj – which plan docs?

Js – it's not before the inquiry - it was part of the design process but not in the inquiry doc

Gj – please supply that outside. Some people have not replied to you – there remains the difficulty and risk of e.g. – first of all discovering things you don't know about – it's not an unusual situation

Js – we have done an independent estimate of the costs based on the info that we have. You're right in terms of once you have those estimates there will still be unknowns. It is to estimates as best we can from the info available.

Gj – we have seen the difficulties in the Edinburgh tram scheme – you aware of those?

J s- it's a completely different scheme with different stat undertakers diversion ethos

Gj – except that the thing that's caused the problem is not knowing where the utilities are – those issues still arise as a matter of principle

J s- I've described what we've done to make it a robust process

Inspector – where you're going in pedestrian areas, would the utilities want further protection in those areas bearing in my they were designed with pedestrians in mind

Js – depends on how deep those utilities are - may be protection OR diversion.

Inspector – you're taken that into account?

Gj - yes

Gj – you'll helpfully provide that doc outside of the inquiry, I'm grateful

Gj – 5.10.1 – what is the range of the auxiliary power unit to which you refer?

Js – it's not straightforward, depends on what vehicle you buy and balance between batteries and super-capacitors – if you would assume a generic type vehicle it would depend on gradients it runs on and speed it runs at and also traffic conditions. The first claims from manufacturers are that you'll get a km, maybe several kms. Different claims from manufacturers – but I note that there are steep hills in these areas e.g. Belle Isle etc. Also depends on which way you're going.

Gj – 5.10.3 – warning bell for ngt approach in ped zones. Help me with the disability audit that has been done on that.

Js -Part of the ngt equality access user group they are aware of all that – in terms of that bell it has been considered in the environmental assessment.

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Gj – I'm not asking about the noise impact. There is a bell to warn ppl but with ppl who are hard of hearing that doesn't do anything for them and I have in mind the evidence you've recently given in terms of the auditors highlighting their suggestion that you go down to 10 miles – you've said you will stay on 15 –

Js – we have other mitigation measures we've gone through

Gj – but the biggest mitigation is to lower the speed

Js – we've done that

Gj – you haven't the audit says 10 miles

Js – in terms of where there is an existing speed limit its been lowered, where there isn't its been set at 15

Gj – road safety – the clearest way to minimise risks in safety is to minimise the speed. That's the best way (e.g. reaction time etc.) when we look at your evidence you only refer to the acoustic device but that is an issue to those that are hard of hearing

Js – it's not the only thing I refer to e.g. 7.3.13 I refer to the other mitigations. Let's test the robustness of this. If you're a visitor to Leeds going to visit these German Xmas fairs – unlikely you'll be aware of those – are they going to be ongoing awareness campaigns?

Js – I imagine there will be a refresh...

Gj – when

Js – every six months...

Gj – driver training – isn't that something that should happen for any bus

Js – they'll make use of the horn etc.

Gj – the stopping distances (which you put in several 10s of metres) could be 30m – I suggest that is a fairly long time to stop when you are looking at something that could range 18-28 tonnes.

Js – there is stopping which is used in the normal service brakes – he will apply the normal service brakes when he sees someone step out. If someone were to JUMP out at him he would apply the emergency brakes stopping more severely

Gj – can you also do this stopping distance calculation for 10 miles per hour speed please

Js – yes we can do that for you

Gj – we think you have a factual error at 7.5.4 – criticism about failing to miss traffic commission's targets on bus punctuality - you say this a long way short of the traffic commission's target bus punctuality of 95% - the traffic comms target is related to the scheduled time per journey not the average time – not correct to link the two. E.g. from the ring road to the bus station on the no. 6 the schedule time varies from 25-38min. also services bus 1-6 offers services at a frequency service basis. I want to put it to you...and we can agree outside the inquiry.

Js – we will check that out. It wasn't intended to be a dig at your client. Punctuality is an issue – e.g. look at headingley centre is grid locked. Extremely Hard for bus to be punctual through there. The service interval will deteriorate because of the grid lock.

Gj – those later statements are not accepted. what is right though, is that no part has been made clear that this scheme is designed to limit the road capacity? – and so, it's not been designed to relieve road congestion on the a660, correct?

Js – correct, it's been designed to put in a RTS that will be punctual

Gj – we take issue with both the rapidity and punctuality. so in the light of that we need to look carefully at what you say at 7.8.7 – “benefits for occupants of motor vehicles are expected to arrive due to changes in the highways infrastructure” - the capacity will stay the same – there's no evidence on improvements on overall congestion over the scheme, is there.

Js – that is not what this is saying

Gj – when you say there are benefits, what sort of benefits do you have in mind for the occupants of motor vehicles?

Js – I have in mind safety benefits e.g. almer road un-signalised with not v. good sight lines at the moment.

Inspector – that para gives those examples

Gj – if that's right – that's not going to in any way do anything other than encourage ppl to use their cars

Js – not necessarily but it would provide benefits as to reducing collisions

Gj – you say benefit are expected to arise due to traffic signalling – increasing road space, reducing conflict with other users (not really collisions but irritation and stress) – in so far as that is concerned there is nothing in that that would encourage ppl to leave their cars?

J s- this is not in relation to that but to road safety and those benefits

Gj and you say “and where the trolley vehicle results in modal shift away from cars then the no. of vehicles are expected to reduce collisions” – that's not right is it? – it's not suggested at all as part of the case that you've agreed that congestion and road capacity will be reduced?

J s- so in relation to the no. of collisions, I dealt with this in chief – we know if the no. of cars went up or down, the predominant factor would be the road safety measures

Gj – I understand that point but this is in reference to modal shift

[inspector – this is to do with modal shift]

Gj – it doesn't seem consistent with the promoters own evidence

Js – if there's shared space areas e.g. uni – there is potentially less conflict but the overriding factors is the safety improvements

Gj – that's another argument, as I read the last bit though it's a suggestion that there will some sig modal shift – e.g. now you are driving along spacious and sunlit avenues in and out of leeds without having to crash, that is the only relevance talk of modal shift would have

Js – it wasn't endeavoured that it would have that extreme an effect...

Gj – when you get to the ppl that actually know about the scheme such as yourself (unlike mr Farrington)- this was not promoted as having a huge modal shift

J s- I'd agree

Gj – how much new south bound bus lane will be put in for conventional buses on the north section of the ngt

Js – I don't have it to hand

Gj – if there is some we would like to see it.

Js – there is sig widening of that bus lane to improve safety for all.

App 112 – local bus services – competition commission analysis report

App 113 – mr henkel's orata.

App 114 – bus stop standards (20 buses per hour guidance on page 15)