

## **BATH AND NORTH EAST SOMERSET**

### **MINUTES OF COMMUNITIES, TRANSPORT AND ENVIRONMENT POLICY DEVELOPMENT AND SCRUTINY PANEL MEETING**

Monday, 22nd January, 2018

Present:- **Councillors** John Bull, Brian Simmons, Neil Butters, Alan Hale, Richard Samuel, Peter Turner, Patrick Anketell-Jones, Ian Gilchrist and Michael Evans

#### **57 WELCOME AND INTRODUCTIONS**

The Chairman welcomed everyone to the meeting.

#### **58 EMERGENCY EVACUATION PROCEDURE**

The Chairman drew attention to the emergency evacuation procedure.

#### **59 APOLOGIES FOR ABSENCE AND SUBSTITUTIONS**

There were none.

#### **60 DECLARATIONS OF INTEREST**

There were none.

#### **61 TO ANNOUNCE ANY URGENT BUSINESS AGREED BY THE CHAIRMAN**

There was none.

#### **62 ITEMS FROM THE PUBLIC OR COUNCILLORS - TO RECEIVE DEPUTATIONS, STATEMENTS, PETITIONS OR QUESTIONS RELATING TO THE BUSINESS OF THIS MEETING**

The following people made statements to the Panel:

David Redgewell – Transport South West made a statement regarding the Great Western Rail consultation, bus summit and bus station. *A copy of this statement is attached to these minutes.*

Councillor Butters asked if WECA are responding to the GWR consultation, Mr Redgewell stated that he had concerns about different fares in different areas if GWR is broken up. Councillor Hale asked whether Avon Valley railway at Bitton could be used by commuters, Mr Redgewell stated that in theory it could. Regarding Bath Bus Station, he explained that this needs effort and investment and maybe WECA will get involved.

Hal Macfie made a statement regarding changes to the traffic arrangements in Wellsway, Keynsham. He thanked the Panel for the answers to his questions on this subject (*a copy is attached to these minutes*) and added that residents also asked for 20mph flashing lights in both directions.

David Andrews referred to the Tram Study and he congratulated officers on the report.

Adam Reynolds made a statement regarding the Tram Study report. *A copy of this statement is attached to these minutes.*

Councillor Butters asked that, if we did have Trams, what should the priority route be. Mr Reynolds stated that he thought it would be Twerton/Newbridge area and also Lansdown and Weston.

The Panel noted two questions from Mr Hal Macfie and the answers circulated. *A copy of this document is attached to these minutes*

## **63 MINUTES**

The Panel confirmed the minutes of the previous meeting as a true record and they were duly signed by the Chairman.

## **64 CABINET MEMBER UPDATE**

The Cabinet Member for Transport and Environment, Councillor Mark Shelford updated the Panel on the following:

- Public Transport – he encouraged people to respond to the Bus consultation.
- Parking Services – the parking and coach strategies would come to Cabinet soon.
- Passenger Transport – continued work on ‘Getting from A to B Strategy’ with a view to working on the roads around Queens Square.
- Highways and Traffic – not withstanding budget pressures, this is very positive. Work planning on Tog Hill Lane with South Gloucestershire.

*(A copy of his full statement is appended to these minutes)*

Panel members asked the following questions and made the following points:

Councillor Shelford confirmed that Councillor Hale’s request for funding for a consultation on traffic calming on Park Road Keynsham was in the programme.

Councillor Gilchrist asked about the subway in his ward, it was confirmed that there is money set aside for refurbishment.

Regarding the GWR consultation, the Cabinet Member explained that he had not had the meeting about his yet and would report back.

Councillor Bull asked if the bus consultation is available for people to respond who do not have digital access. The Cabinet Member stated that he would report back on this.

The Cabinet Member for Development and Neighbourhoods, Councillor Bob Goodman updated the Panel on the following:

- River Safety – officers are working with Avon Fire and Rescue and with the Student Safety Partnership.
- Air Quality – there is a report on the agenda.
- Refuse – since the roll out of the new system there have been some challenging times but it is likely that the new recycling figures will put BANES in the top 10. He reported that the push now is to reduce side waste and this is being tackled in a number of ways – waste doctors, waste diaries, contacting homeowners and if necessary issuing fines. The vast majority of residents are complying.

Councillor Samuel stated that there are 123 non-collected bags along London Road outside 40 properties which are mostly flats. He stated that he supports the policy but non-collected bags are a public health issue. The Cabinet Member explained that waste on the streets cannot be allowed and stated that a lot of non-collected bags contain recyclable materials. He stated that we are not there yet and London Road is a particular problem but numbers will go down gradually with the measures put in place (listed above).

Councillor Bull asked if there was a particular problem with students as they are sometimes only at properties in term time. The Cabinet Member explained that he has worked with student groups and they are compliant.

Following a query from Councillor Anketell-Jones, the Cabinet Member explained that the authority does not send recycling to China.

Councillor Anketell-Jones stated that there was a perception that operators' attitudes are problematic, the Cabinet Member explained that it is a very hard and taxing job.

The Cabinet Member for Transformation and Customer Services, Councillor Karen Warrington updated the Panel on the following:

- Bath Library – there is continued engagement with groups. In May the design phase begin and work will start the following March. Staff functions are being looked at. Regarding The Hollies – design drawings will be sent out.
- Community Libraries – none have been closed, negotiations are getting close to transfer in some areas as people are coming forward. All local forums are being informed.

Councillor Bull asked if other methods are being used to get information out as forums are not always well attended. The Cabinet Member explained that there are posters in libraries and ward members have been informed.

Following a question from Councillor Turner, the Cabinet Member explained that volunteers will have access to professional advice from the Council, some libraries will be able to hire a part time librarian.

Regarding Bath Central Library, Councillor Samuel asked if the work will go on while the Library is open and working. Ian Savigar, Divisional Director for Customer Services explained that it is a bit early for full details but talks with the architects is ongoing regarding the transformation, it is hoped that there will be a continued service.

## **65 TRAM STUDY**

Kelvin Packer, Group Manager Highways and Traffic introduced the report and gave a presentation to the Panel on 'The Potential Introduction of Trams to Bath' which covered the following:

- Strategic Evidence – Commuting by car/Commuting by bus/Bus accessibility/Key Corridors
- Technology
- Corridor Arrangements – Highway widths/Highway Gradients/City Centre Highway Width/Summary of Constraints
- Summary
- Issues to be considered
- Next Steps

The officer introduced Ian Brown from UK Tram who commented that there is nothing about Bath that precludes a tram scheme but that it is a big commitment and must be subject to a proper procurement procedure. He added that there were five considerations – economy, regeneration, environment and air quality, agglomeration effect and alleviating congestion.

Councillor Bull commented that members must serve all residents, not just those in the city of Bath. Ian Brown stated that people from all around the area travel into the centre for work and leisure so would be affected.

Panel members asked the following questions and made the following points:

Councillor Bull asked what the added value of a tram scheme would be if there is already a Park and Ride in the area. Ian Brown stated that he had never seen a tram scheme that works from a Park and Ride and that it was unlikely it would be justified in that circumstance.

Councillor Butters asked about rail alignment and also which other cities of a similar size are going down this route. Ian Brown commented that if rail alignment is in place

a tram scheme would be a lot cheaper. He mentioned that Birmingham built a scheme that stopped outside the city centre and was not widely used. He further explained that there could be a tram solution in Cambridge where science parks are being built.

Councillor Hale asked how much the study has cost and where the land would be found. He also stated that he had visited Croydon when the trams system was being installed and there was a degree of travel chaos. Ian Brown stated that Croydon serves as an example to others in terms of disruption but there is more technology in place now.

Councillor Gilchrist asked what provision there was in the budget regarding trams. The Strategic Director stated that there was a regional approach so this would be discussed with WECA, she explained that there is not a specific mention in the budget.

Following a question from Councillor Turner, Ian Brown commented that the first question is whether the authority wants a tram scheme and if so, the specification must be very clear - it takes 7 years to the paperwork, 3 years to build and 1 year to commission.

It was **RESOLVED** that a Task and Finish Group be set up with a view to looking at detailed issues regarding a Tram Scheme which covers the points mentioned in the 'Next Steps' slide (set out below):

- *Set up Officer Client Group to include an expert from UK Trams.*
- *Undertake a detailed assessment on one corridor (subject to expert advice).*
- *Investigate opportunity to progress the study further/develop a business case with support from WECA.*

Members of the group – John Bull, Neil Butters, Alan Hale, Peter Turner and Brian Simmons. The Chairman explained that it was a future aim to hold a Scrutiny Inquiry Day on the issue to bring in bodies/experts.

## 66 BATH AIR QUALITY ACTION PLAN UPDATE

Cathryn Brown, Team Manager for Licensing and Environmental Protection and Aled Williams, Environmental Protection Manager, gave a presentation to the Panel which covered the following:

- National Air Quality Plan Background
- The Bath AQAP Consultation
- The Headlines
- Relationship between BAQAP and NAQP
- The NAQP timeline
- NAQP governance
- NAQP funding opportunities
- NAQP progress since July 2017

- NAQP next steps until March 2018
- NAQP communications and stakeholder engagement
- Real-time air pollution dials

Panel members asked the following questions and made the following points:

Councillor Bull asked if there was an explanation for levels falling. The officer explained that engine technology is improving and vehicles are being updated but 3 years of low level data is needed to confirm an improvement. Councillor Hale pointed to the improvement in air quality as a result of the one way system in Keynsham.

Following a question from Councillor Samuel, the officer explained that the project board is attended by Cabinet Members and action points are noted, a project manager runs the meetings and takes the notes. Councillor Samuel asked that if the plan was in place by December 2018 and there was a change of administration in May 2019 – can elements of the plan be changed. The officer stated that she would take advice but she believes that the authority would have to comply with the plan.

Councillor Samuel asked if there would be any special measures put in place around primary schools, the officer stated that the mandate is to bring all areas within the standards.

Following a query from Councillor Gilchrist, the officer explained that by the end of December 2018, the option must be agreed and before 2021 it has to be implemented.

Councillor Bull stated that the only way to create a significant reduction is to look into prohibiting certain vehicles. Anti-idling measure would need constant enforcement. The officer noted the comment.

Councillor Bull asked if there are lessons to be learned from clean air zones in other areas, the officer stated that this information is shared at DEFRA workshops.

Councillor Anketell Jones asked if the Air Quality Action Plan would conflict with the Parking Strategy as it seeks to encourage short stay visits and discourage commuters. The officer explained that the consultants working on Air Quality are also working on the Parking Strategy and parking services representatives are on the Air Quality project team.

Councillor Bob Goodman, Cabinet Member for Development and Neighbourhoods stated that he was confident that compliance would be delivered in the timescale and he thanked the team.

The Panel noted that there would be a report on 'Air Quality (regarding A37)' to the May meeting of the Panel and that Panel members would be sent an email briefing on the strategic outline case for the National Air Quality Action Plan.

## **67 COUNCIL OPERATIONAL PLAN**

The Chair explained the aspects of the plan that were within the remit of the Panel. He explained that the Strategic Director for Place, Louise Fradd and Divisional Director for Environmental Services, Martin Shields were present to answer questions.

Panel members asked the following questions and made the following points:

Regarding 'Transport Planning' (page 99, Appendix 1) Councillor Bull asked that if reliance on consultants is reduced, is there capacity within existing staff to carry out the work. The Divisional Director explained that, following a restructuring across the Highways Team, there are now staff who can do the work that had been done by consultants.

Councillor Butters asked (regarding 'Parking and Transport') if customers would be able to pay directly by card under the new proposal or will they have to download an App. The Divisional Director explained that the plan was to reduce payment by card (and the additional transaction fee). The Strategic Director explained that other areas use this model and there will be a phased approach. The Divisional Director explained that with the App customers can adjust their stay period.

Councillor Bull asked (regarding 'Transport and Parking Services Review') if the £707k saving had been made as a result of the parking review. The Strategic Director explained that this had already been agreed as part of the previous budget process but at this time the parking review was still under consideration. However there had already been additional income from parking charges, particularly around the Christmas period and it was felt that the income target was realistic and may even be exceeded.

Councillor Bull asked (regarding 'Transport – moving people from A to B') if the proposals result in changes to eligibility for transport and asked if future service users will be disadvantaged by the proposal. The Strategic Director explained that the review has been ongoing and savings are now coming. She added that personalised budgets have had a positive impact on costs and discussions are ongoing with local dial a ride groups. In addition she added that the programme of safe routes to school would further reduce the need for transport to be provided and that the Council was looking at how it could use its vehicles to move patients to and from hospital more cost efficiently.

Regarding 'Waste and Parks' Councillor Turner asked if Parks Groups are aware of the service review. The Divisional Director explained that the service will be looking to work with friends of groups and any other partners who can contribute and that the service will become more commercial in the way it does business with fee paying customers.

Councillor Bull asked (regarding 'Refuse Collection') if it is anticipated that there will be resistance to reducing garden waste collections in winter months as people pay for this service. The Strategic Director explained that the reduction in collections during winter months (when there is less garden waste) was preferable to increasing the fees.

Regarding 'Modern Libraries and Customer Services Review' Councillor Bull asked if it was wise to withdraw funding from community libraries when there is more emphasis on digital communication and many people only access computers in their library. The Cabinet Member for Transformation and Customer Services, Councillor Karen Warrington explained that people are coming forward and discussions are ongoing, if people want an internet connection then that will be factored in. The Panel will be kept informed.

Councillor Simmons asked about the 3 month vacancy freeze (page 116) and if this could cause a problem in audit. The Strategic Director explained that if there is a need for a post to be filled then it is possible to fill a post before 3 months. She added that this policy has been applied for the last 6 months and it represents due diligence in assessing if there is a need for the post.

Regarding 'Management Arrangements and Staffing' Councillor Bull asked if the reduction in 300 staff was in addition to the staff reductions shown in this report. The Strategic Director explained that the 300 figure was made up of the staff reductions shown in the budget papers and other posts which have not been identified yet. This will be phased over 2 years. The Cabinet Member for Finance and Efficiency, Councillor Charles Gerrish added that smoothing reserves could be used in the phased period.

Councillor Hale asked if there is any work to be done with University's, the Cabinet Member reported that there is a lot of work being done on this.

Councillor Gilchrist asked if the Gulls nest removal programme was going ahead, The Cabinet Member confirmed that this was in the budget proposals.

Councillor Gilchrist asked if there was any provision in the budget regarding residents parking zones, the Divisional Director reported that arrangements regarding residents parking zones would be reviewed as part of the parking review but in the meantime there is no change to the current process.

## **68 PANEL WORKPLAN**

The Panel noted the workplan and the following updates:

- Transport – Getting from A to B update – March 2018
- Parish Charter – March 2018
- Air Quality – A 37 – May 2018
- Waste Collection Review – May 2018

The meeting ended at 7.45 pm

Chair(person) .....

Date Confirmed and Signed .....





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## **Statement from David Redgewell to CTE Panel – 22<sup>nd</sup> January 2018**

**This statement is for the following meetings BANES Transport Committee 22nd January 2018 to add my booked in verbal statement**

### **Light Rail around Bath and East Bristol**

We would like to support the principles of light rail around Bath especially from Lambridge across the City to Newbridge which could then make use of the light rail corridor to Bristol through Bitton, Saltford, Kelston, Warmley to Yate and East Bristol via Mangotsfield, Staple Hill and Fishponds as well as linking into the RUH at Weston and Park & Ride sites which need to be co-ordinated with the Bristol Mayor's rapid transit project. The two schemes must link to Warmley and Emersons Green. Retention of Avon Valley Railway steam services at weekends. Provision should be made for a continuous cycle/walkway between Bristol and Bath.

The corridor to Odd Down is welcomed however the majority of the traffic is to the Somer Valley at Peasedown, Radstock and Mid Somer Norton and therefore an extension of a rapid transit system to this area would be beneficial. What evaluation of the Somerset and Dorset railway corridor has been carried out as Norton Radstock is an enterprise zone and needs public transport improvement.

The route to Bath University seems to have gradient constraints and requires considerable engineering works and it should also be noted that all LRT schemes approved in the UK have been conurbation wide eg Midland Metro (Birmingham - Wolverhampton), Greater Manchester, Nottingham and Croydon and will require DFT funding and approvals in the long term and in the short term to be in the Metro Mayors joint transport plan.

### **Bus/Rail integration**

This is required at Bath Spa station and a number of sites where light rail connects with bus. Across Europe and Greater Manchester/London rapid transit is fully integrated into the bus network.

Light rail in Bath must not be used as an excuse in the short term not to invest in MetroWest between Westbury, Bath and Bristol out for consultation with the DFT at present as part of the GWR franchise consultation with First Group as the operator to 2022 and BANES/WECA need to have their comments in by 21st February 2018. This could include a business unit for Bristol and Bath, Somerset, Gloucestershire and Wiltshire & Greater Bristol.

Bus proposals can be included as can future schemes eg light rail integration and the Overground rail project in Bristol but the DFT needs WECA's immediate rail plans for the next 10 years.

With the Bus Summit in London on 8th February 2018 the Minister Jesse Norman expects BANES to invest in the local bus network with the Metro Mayor and these issues must be addressed alongside any light rail proposals in Bristol and Bath.

We urgently request that updates on the Bath and Bristol rapid transit project are presented to the WECA board on 2nd February 2018 and Scrutiny on 31st January 2018.

With regards to buses we would recommend the retention of services 20A/C Bath circuit, 82-82A Paulton - Radstock, 172 Bath - Paulton - Wells via Peasedown and Mid Somer Norton, 179 Bath - Writhlington via Timsbury/Paulton, 672 Blagdon - Bristol, 768 Clutton - Bath via Clandown and A4 Chandag Road - Bath (early morning journeys).

Bath City services 2, 6A, 8/9 and 265 evening services to Bathampton/Trowbridge.

### **Bath bus station issues**

The issues are broken doors, pidgeon invasion, deep cleaning of platform area of pidgeon droppings, signage covered in pidgeon droppings, broken lighting, bus departure signs removed, clear signage to the station removed.

As this is a gateway to Bath, Wiltshire and Somerset it is important that BANES lead with WECA and the Mayor to restore the high quality public transport interchange with First Bus and Rail and the shopping centre developer.

The station was well managed on bus/rail replacement by First Group but the passenger image was poor. An urgent meeting of interested parties is required to address this problem.

Regards  
DAVID R

Questions from Mr Hal Macfie to the Communities, Transport and Environment Panel 22<sup>nd</sup> January 2018 (& answers shown below)

- 1) Please confirm that funds are available to increase the number of speed roundels at the northern entrance to Wellsway to encourage drivers to slow down to 20mph as there is a very high rate of speeding in this area where the road and pavements are extremely narrow.? Can you also confirm when this work will be completed?

There are no funds available in the remainder of the current financial year. However, I have asked the highways team to include this work in next financial year's lining programme. The works will be undertaken in Spring 2018.

- 2) Please confirm that following on from a residents survey in September 2017 indicating that flow rates exceed national guidelines for establishing pedestrian crossings, funds are available to establish a pedestrian crossing from Steel Mills across the Wellsway in the 2018 calendar year?

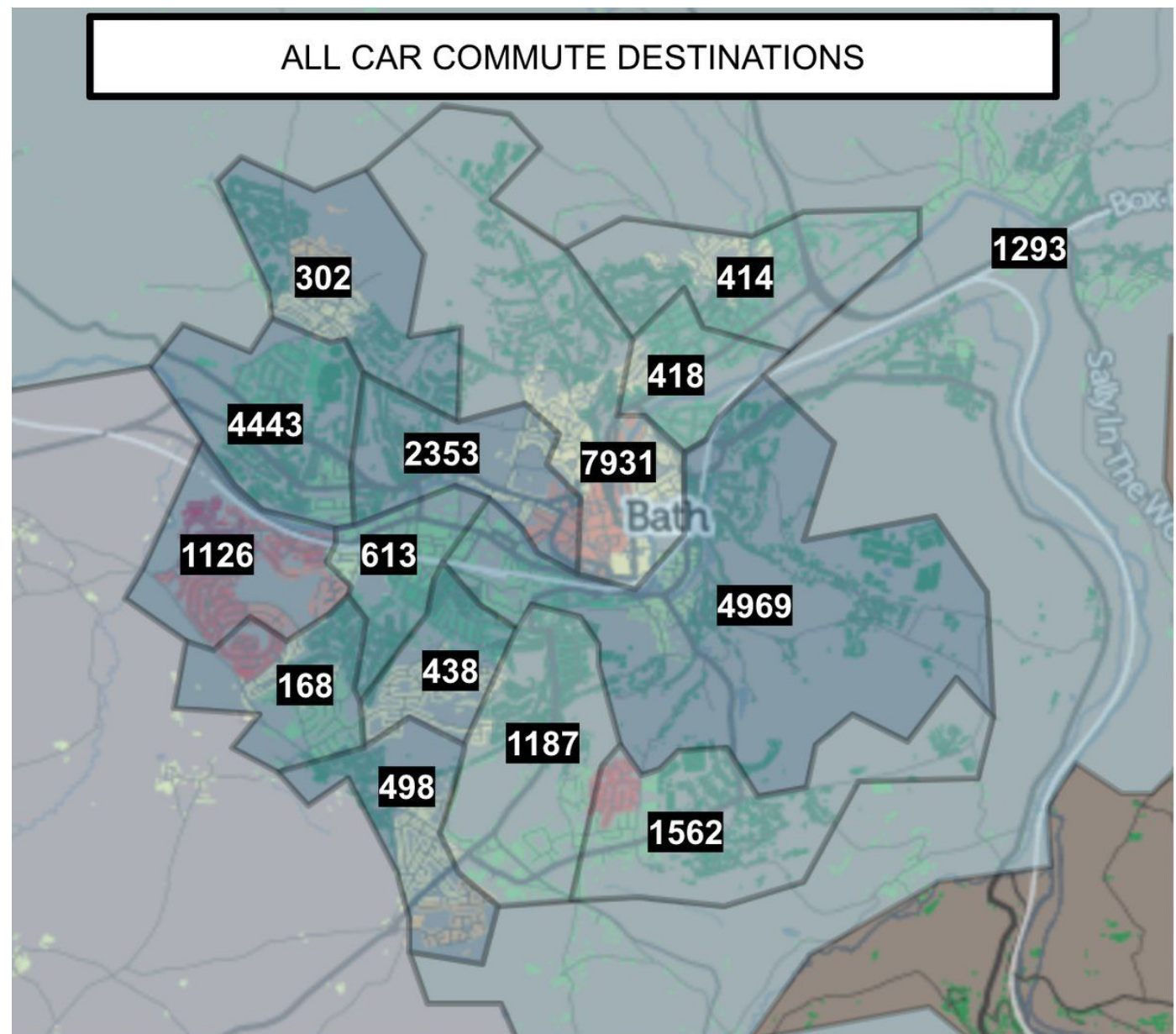
It is proposed to undertake the feasibility study and associated design work as part of the Highways Capital Programme in 2018/19. This programme is subject to approval by Council when it meets to set the budget. Due to the high level of demand for traffic and safety schemes a successful study would result in the works being included in the 2019/20 Capital Programme

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The Tram Report really is a recognition that a tram network in Bath is viable and if the money can be found, be it public or private, then we can establish a good network.

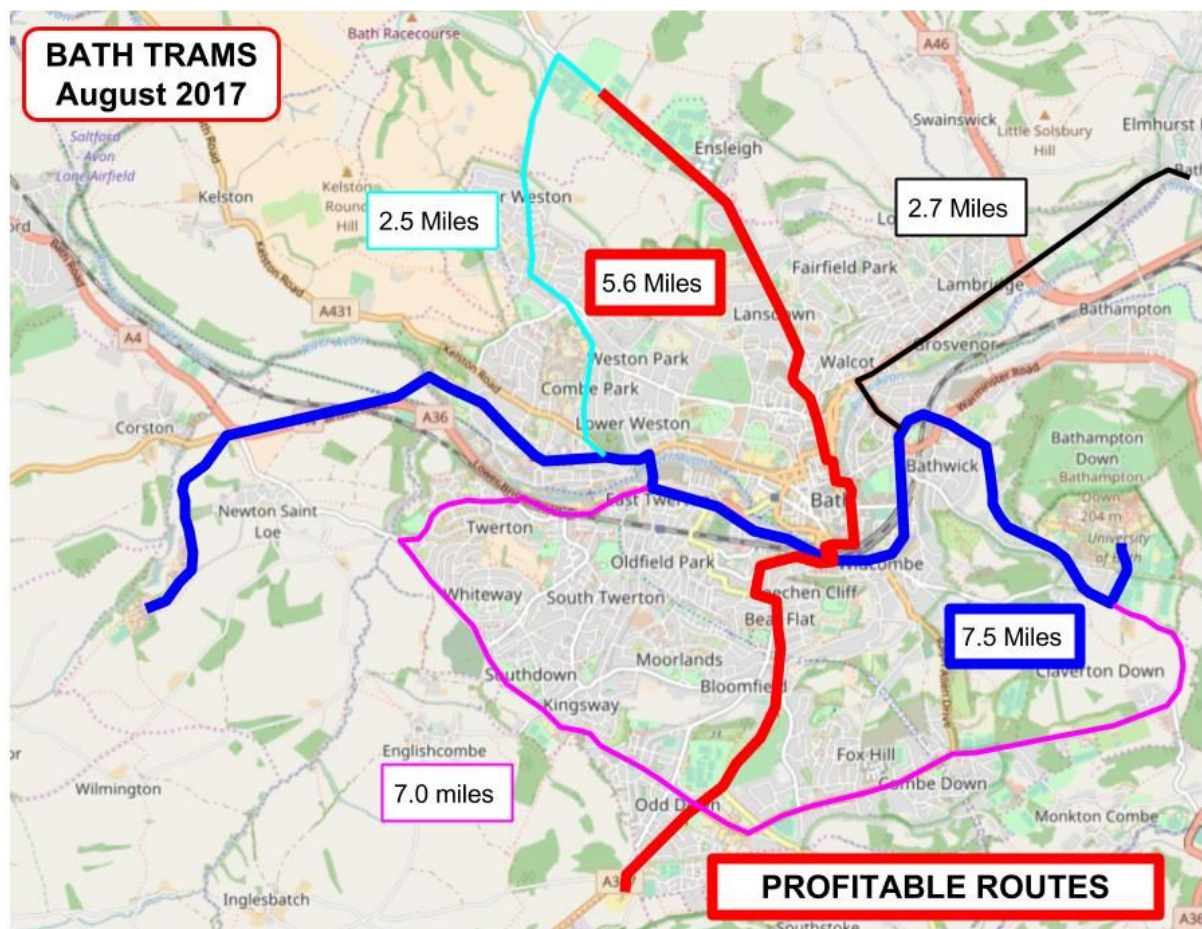
There is however, a major piece of the puzzle missing from the report. As somebody that has studied in detail, the Census travel to work data that is analysed in this report, it should be recognised that the four routes and a inner circular ring fails to address the needs of the residents of the city, not just the external car commuters to the city.

Yes we need connections from the Park and Ride sites, but we have to recognise that only 7,931 car commuters come to the city centre out of 27,714



There is no consideration to give residents a good connection to the RUH or to provide a tram network that passes within reach of secondary schools.

In August 2017, I came up with a tram network that focused on enabling residents living in Bath to get to work, school, and connecting local communities.



Trams provide the capacity to move significantly more numbers than a bus network can ever achieve, but trams simply cannot be about commuters. It absolutely must be about connecting communities and schools. We have a huge congestion problem in Bath, and with the work Transition Larkhall has done, we know that the school run is around 30% of rush hour traffic.

The proposed tram network does nothing to alleviate this unnecessary traffic from our roads. A route on along the southern plateau connecting Twerton, via Odd Down to Combe Down connecting over 13 schools is vital. A route from Lansdown Park and Ride through Weston to the RUH with a tram interchange on Windsor Bridge is key, while a tram going up Bathwick Hill rather than North Road simply avoids creating a good connection to Bathwick St Mary and King Edward's School.

The report is a good start, but we need to recognise that the data sets use, do not enable the creation of a tram network that serves the best interests of the city of Bath and its residents.



## Transport: Cabinet Member Update – January 2018

### Public Transport

- I would like to make you aware of the consultation that is currently underway on bus services. We fund a number of supported bus services under contracts that are due to end during 2018. The management of these contracts is jointly undertaken with the West of England Combined Authority, although all funding is currently provided by B&NES.

Whereas bus operators are under no obligation to consult users before making changes to their commercial route network, the Council is keen to hear the views of users on the services it supports financially, to help inform its decisions.

To help us make decisions on the future of these services we are seeking the views of residents and users of the services as to the best and most appropriate way to proceed. The responses will help us develop the detail of specifications for any contracts that are re-tendered.

The consultation closes Wednesday 31<sup>st</sup> January 2018.

- Work is also continuing with WECA to develop clear plans in regard to the shared areas of responsibility for supported bus services and how these should be funded in the long term.

### Parking Services

- Work is continuing on the Parking Strategy and Coach Parking Strategy which we are proposing to adopt at Cabinet shortly. Feedback from the public was on the whole positive and we are pleased to consider the comments to be included in the final versions.
- The strategies place residents and air quality at the front of the decision making processes and ensures that those who could use alternative transport modes do so whilst protecting the ability for those who have no alternative to park in the most appropriate location.
- We also continue to install the new ANPR cameras to replace the obsolete technology previously in place over the next quarter. This allows us to improve the evidence provided for enforcement and increase system security. We will also be able to gather further data on the emissions of the vehicles using the London Road as part of this upgrade which will feed into the air quality action plan.

### Passenger Transport

- Work is continuing on the “Getting from A to B” strategic review with trials involving shared resources commencing with partner organisations shortly. We are hopeful that these will result in long term agreements being developed for the benefit of the wider public and reduce the number of vehicles on the road duplicating roles.

- Work is also continuing on the use of new software systems to ensure that we are moving all school children in the most efficient way. This work will allow us to develop new routing plans ensuring we fulfil our statutory duties whilst working with individuals where possible to make them independent travellers.

## **Highways and traffic.**

- As part of the West of England work officers across the Councils have continued with the drafting of a new Joint Local Transport Plan this should be put to public consultation this summer, prior to adoption by our Councils
- The Department for Transport has launched a national consultation on the creation of a Major Road Network. This would recognise the most important local roads that do not have motorway or trunk road status. The consultation runs until the end of March and if introduced as suggested Council's such as our would be able to bid for new funding for schemes on the MRN
- Great Western Rail Franchise –DfT is running a number of public consultation events across the South West and is asking for views on proposals for improving train services on the Great Western rail network from April 2020. The consultation covers a range of issues for both the medium and longer term. The consultation ends in February.
- In recent weeks some parts of the country have experienced snowfall. Within our own Council area (up to 19 January) we have completed 38 gritting runs this winter, treating nearly 10,000 miles of road. We continue to maintain a good salt stock level, currently around 900 tonnes to respond to bad weather.
- Somerdale development, Keynsham. The Developer, Taylor Wimpey, has been granted technical approval for the new traffic signal junction access required by their planning consent. These works will impact on the travelling public from the end of January and delays are likely. A local community engagement event took place before Christmas to inform the community of this work. I have asked officers to take all reasonable measures to mitigate the impact on the travelling public.
- The current term Contract for Highways Maintenance with Skanska is due to expire in March 2019. Due to the lead in periods for procurements I will be reviewing the options for our next contract in the near future and will report progress to a future Panel meeting
- The current energy supply contract also expires in September this year and during the summer officers will re-procure a new contract/supplier through a competitive tender procedure.

# The potential introduction of trams to Bath

Initial evidence-based study

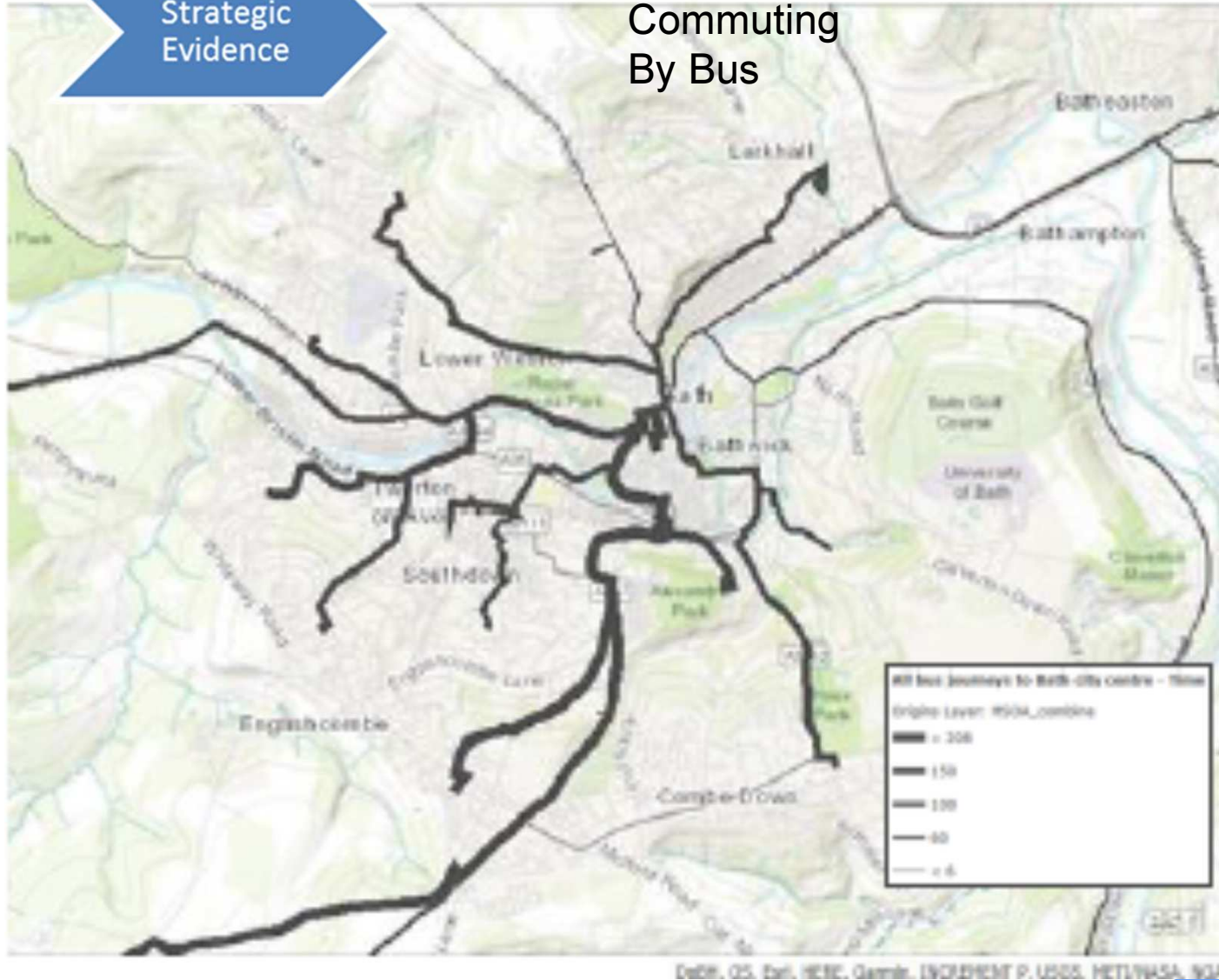
**ATKINS**



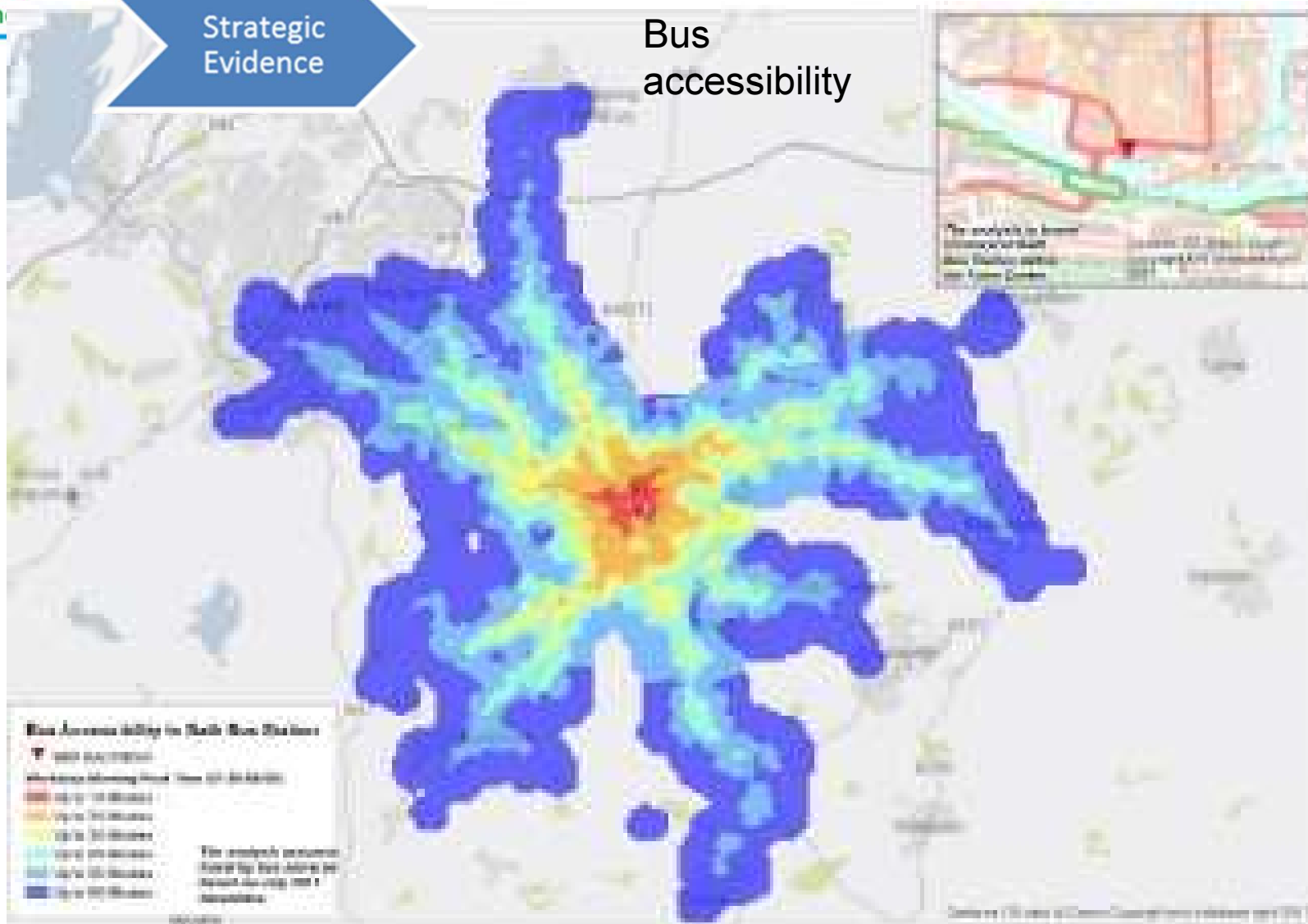
## Commuting By Car



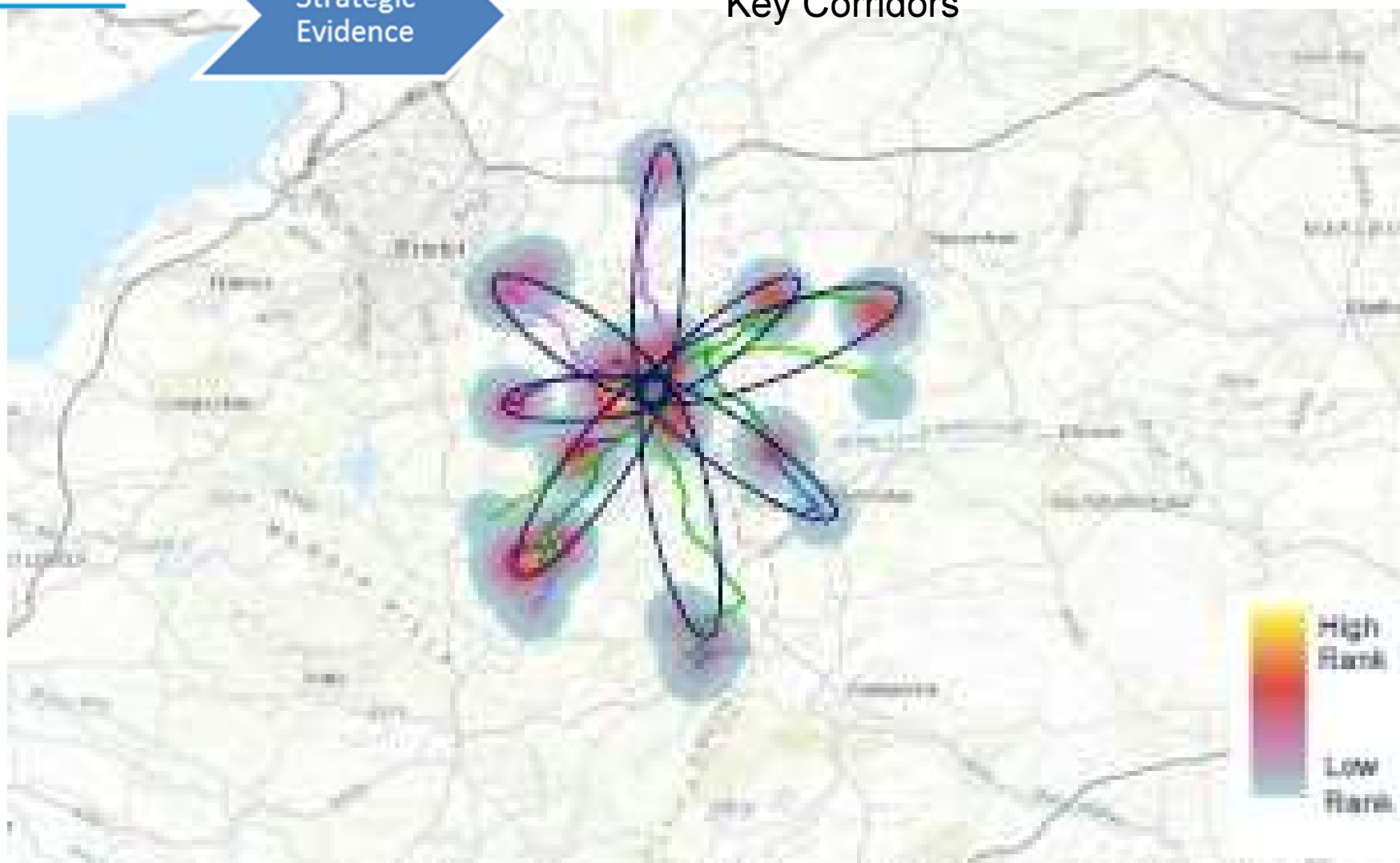
## Commuting By Bus



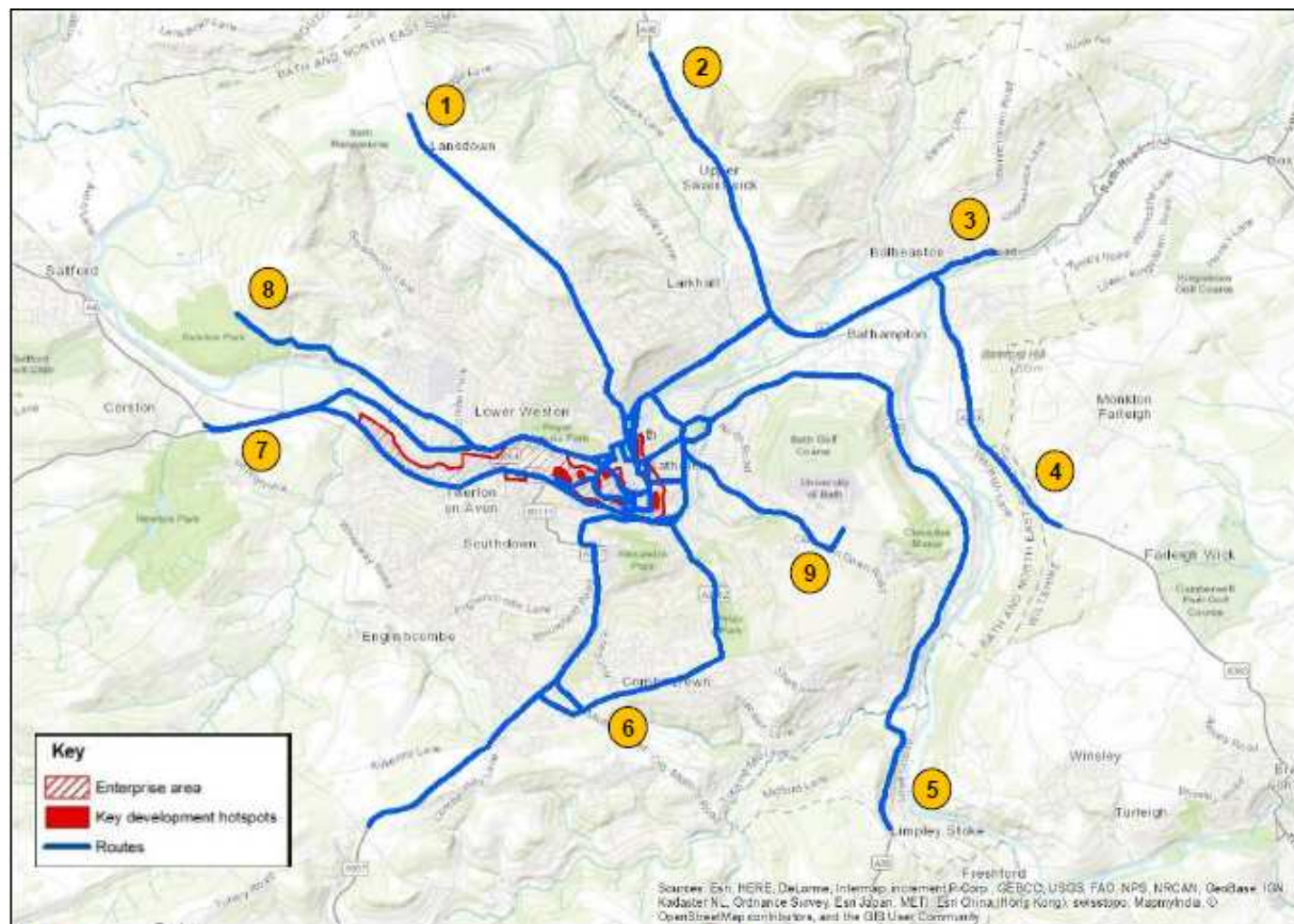




## Key Corridors





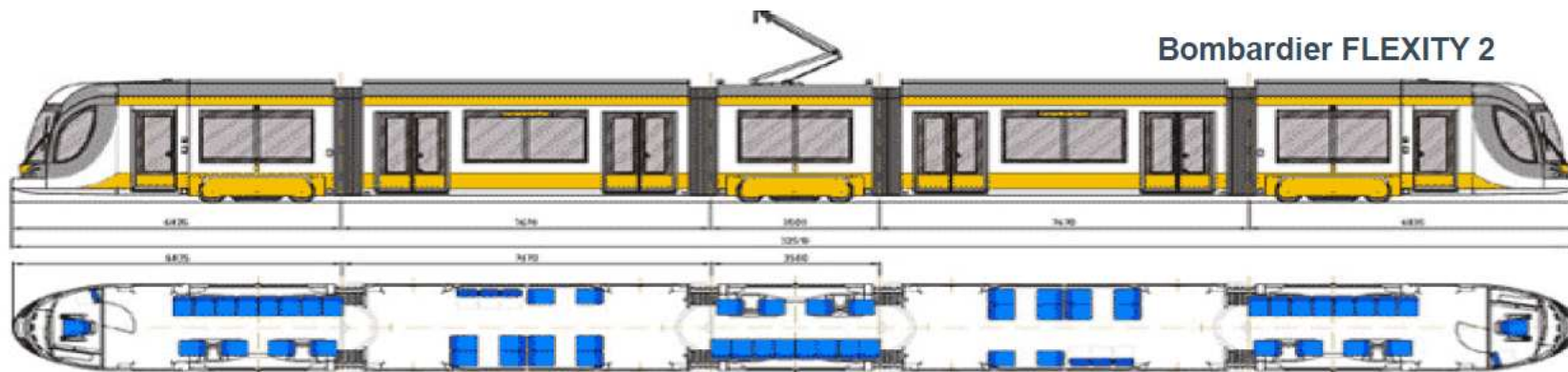


- |   |                              |   |                              |
|---|------------------------------|---|------------------------------|
| 1 | Lansdown - Centre            | 5 | A36 Warminster Road - Centre |
| 2 | A46 Gloucester Road - Centre | 6 | A367 Odd Down - Centre       |
| 3 | A4 Batheaston - Centre       | 7 | A4/A36 Newbridge - Centre    |
| 4 | A363 Farleigh Wick - Centre  | 8 | A431 Kelston - Centre        |
|   |                              | 9 | Bathwick Hill - Centre       |

Note: For the purpose of this study, the centre of Bath has been defined as Stall Street, adjacent to the Roman Baths.

Technology

- Power Systems
- Ultra Light rail
- Gradients
- Structural
- Stops
- Track

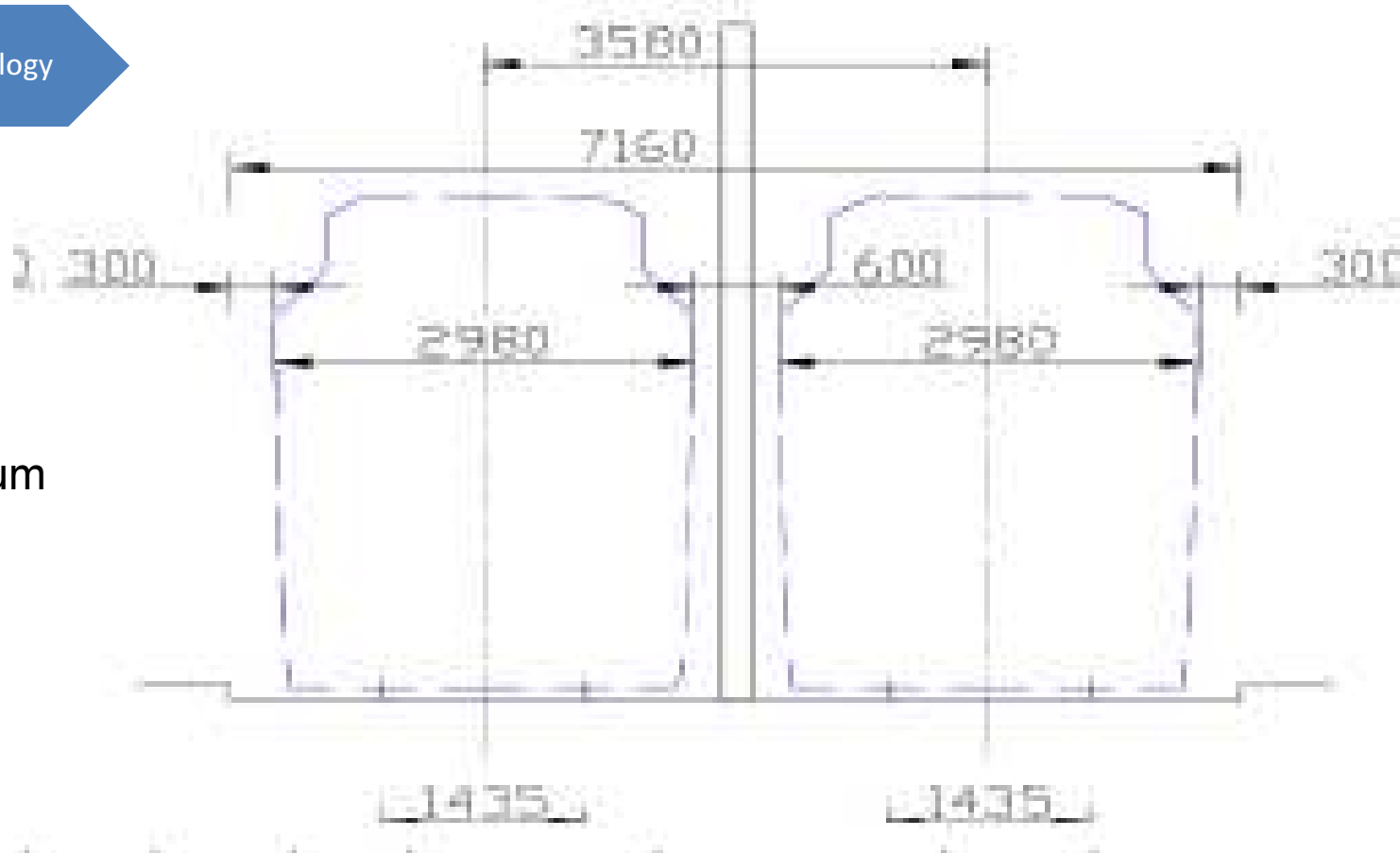


## Depots



Technology

Road  
space  
minimum  
10.2m



System	Date Opened	Actual construction cost (£ millions)	Construction cost at (2017 Prices) (£ millions)	Length of track (kilometres)	Construction cost per km (2017 Prices) (£ millions)
Manchester Metrolink	1992	150	210	31	7
Sheffield Supertram	1994	240	340	29	12
Midland Metro	1999	150	180	21	9
Croydon Tramlink	2000	200	240	28	9
Nottingham Express Transit	2004	180	200	14	14

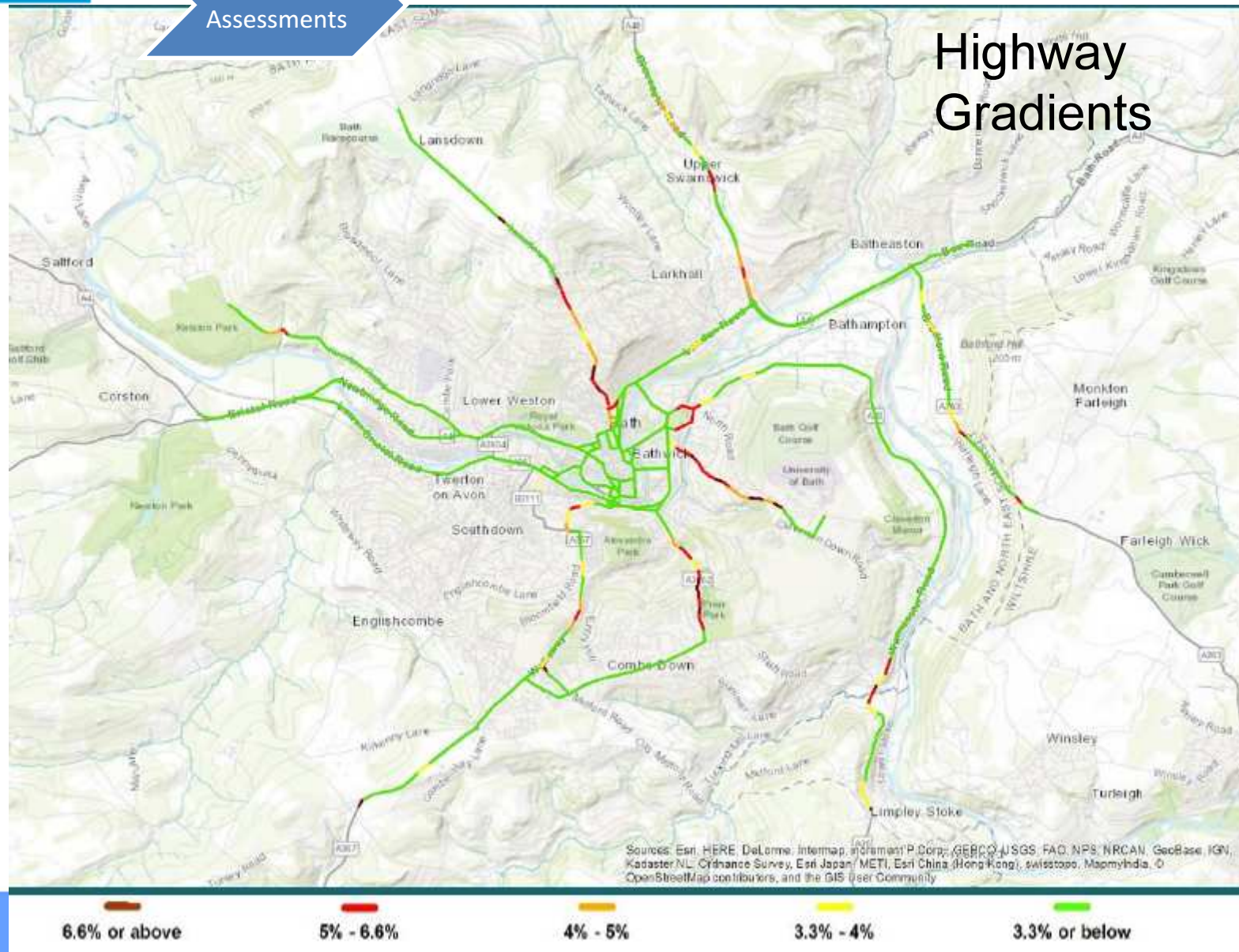
Extensions	Date Opened	Actual construction cost (£ millions)	Construction cost at (2017 Prices) (£ millions)	Length of track (kilometres)	Construction cost per km (2017 Prices) (£ millions)
Manchester Metrolink	2000	150	150	8	24
Nottingham Express Transit	2015	570	570	18	33
Midland Metro	2015	40	45	1	39
Manchester Metrolink (Airport)	2014	400	410	15	28

Manchester 1992, £7m/km  
 Manchester 2000, £24m/km  
 Nottingham 2015, £33m/km  
 Midland Metro 2015, £39m/km





# Highway Gradients

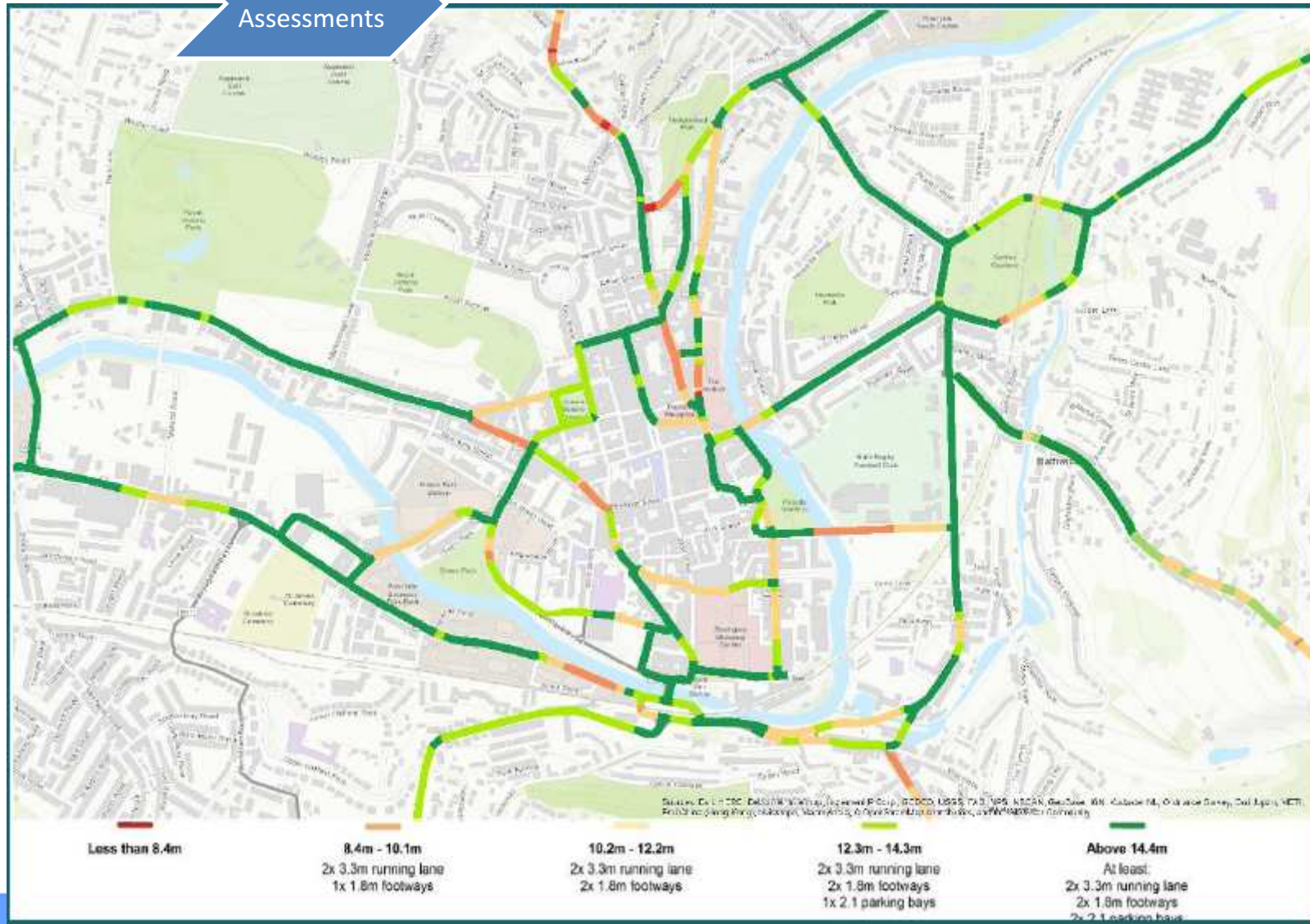


Bath & North East Somerset - *The place to live, work and visit*



## City Centre Highway Width

Corridor  
Assessments



Bath & North East Somerset - *The place to live, work and visit*



## Summary of Constraints



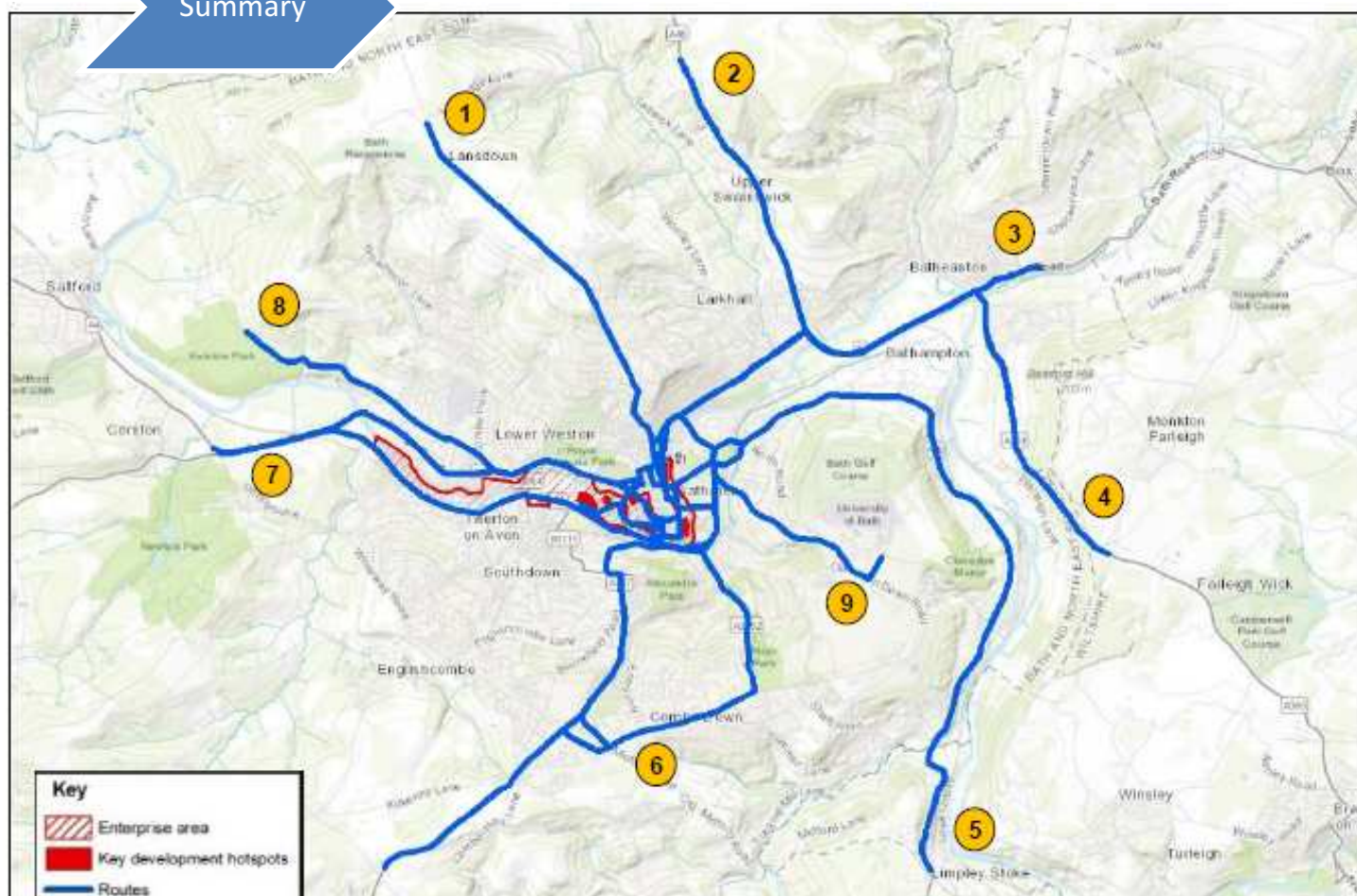
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## 5.1 Indicative RAG assessment

Corridor	Demand	Existing Park & Ride site on corridor	Width constraints	Gradient constraints	Environmental constraints	Potential for depot along corridor
1 – Lansdown to Centre	High demand	Lansdown Park & Ride	Some constrained areas	Some constrained areas	Green Belt and AONB throughout	Location near to existing Park & Ride site could be considered
2 – A46 Gloucester Road to Centre	Relatively low demand	No current Park & Ride site	Some constrained areas	Some constrained areas	Green Belt and AONB throughout	Unlikely to be viable
3 – A4 Batheaston to Centre	Relatively high demand	No current Park & Ride site	No width constraints	Relatively few gradient constraints	Flood risk and Green Belt	Potential site options on A4 at Batheaston
4 – A363 Farleigh Wick to Centre	Relatively low demand	No current Park & Ride site	Limited widths	Some constrained areas	Flood risk, AONB and Green Belt	Potential site options on A4 at Batheaston
5 – A36 Warminster Road to Centre	Relatively low demand	No current Park & Ride site	Some width constraints	Some constrained areas	Green Belt and AONB throughout	Unlikely to be viable
6 – A367 Odd Down to Centre	Very high demand	Odd Down Park & Ride	Significant constraints on A3062, few on A367	Significant constraints on A3062, few on A367	Green Belt and AONB on A3062, none on A367	Location near to existing Park & Ride site could be considered
7 – A4/A36 Newbridge to Centre	High demand	Newbridge Park & Ride	Few width constraints	Few gradient constraints	Green Belt and AONB on edge, flood risk throughout	Location near to existing Park & Ride site could be considered
8 – A431 Kelston to Centre	Relatively low demand	No current Park & Ride site	Significant width constraints	Slight gradient concerns	Green Belt and AONB	Unlikely to be viable
9 – Bathwick Hill to Centre	Expected high demand	No current Park & Ride site	Significant width constraints	Significant gradient constraints	World Heritage Site; no flood zone, AONB or Green Belt	Unlikely to be viable



Summary



- **Recommendation - Initial assessment has demonstrated that there is a case for further consideration of the potential introduction of trams on corridors 6,7,1 and 3**

# Issues to be considered

- Requires mode shift from cars, buses and P&R. Bus services would need to compliment not compete.
- How to create a system that will not be delayed by congestion.
- Vaults and utilities will need detailed assessments to reduce risk.
- Impact on heritage.

# Next Steps

- Set up Officer Client Group to include an expert from UK Trams.
- Undertake a detailed assessment on one corridor ( subject to expert advice).
- Investigate opportunity to progress the study further/develop a business case with support from WECA.

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