Project Lifecycle – Full Business Case

Project Name: Sprint – A34 Walsall to Birmingham

Revision History (to be completed by the Applicant)

Please keep record of the document's Revision History using the table below:

	Version Number	File Name	Date submitted	Summary of changes made compared to previous version (please refer to previously received feedback and how issues have been addressed)
Current Version				
	2.0	WMCA Sprint A34 WB FBC Final v2.0	14/10/2019	Updated following TAP comments
Previous Versions				
	1.0	WMCA Sprint A34 WB FBC Final v1.0	9/9/2019	

Review History (to be completed by the Reviewer/Approver)

Name of Reviewer	Role	Date Business Case Reviewed	Summary of decision – whether approved or not – if not approved please explain the reason for non-approval and the additional evidence that would be needed for approval

Applicant Details

Applicant Details			
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Ward (base location of lead organisation):	Aston		
Other organisations involved in project bid:	Birmingham City Council, Walsall Metropolitan Borough Council, Sandwell Metropolitan Borough Council		

Content of the Business Case

Content of the Business Case	
Section A	Status of Business Case Development
Section B	Project Description and Background
Section C	Strategic case and fit to Strategic Economic Plan Themes
Section D	Economic case – Options Appraisal
Section E	Commercial case – External Procurement (if appropriate)
Section F	Financial Case – Financial Analysis of the recommended Option
Section G	Programme Management Case – Achievability of Project Components
Section H	Recommendation
Section I	Appendices – ➢ Appendix A: Full route descriptions ➢ Appendix B: Full route drawings ➢ Appendix C: Stakeholder and communication strategy ➢ Appendix D: Birmingham City Council Letter of Support ➢ Appendix E: Full Project Plan ➢ Appendix F: Risk and Issues Registers

	➢ Appendix G: WMCA programme and Project Risk Management Strategy ➢ Appendix H: Monitoring and Evaluation Plan ➢ Appendix I: Micro-simulation modelling results ➢ Appendix J: Demand - PRISM reports ➢ Appendix K: Procurement Strategy ➢ Appendix L: A34 FBC - Cost Budget ➢ Appendix M: A34 FBC - 30 Yr Life Costing ➢ Appendix O: BCC Housing Capacity Study ➢ Appendix S: PVC Calculation ➢ Appendix T: Economic Assessment Report
Section J	➢ Monitoring and Evaluation Plan

Purpose of the FBC

The key purpose of the FBC is to:

- Revisit the OBC and new assumptions (e.g. resulting from the procurement);
- Confirm that the recommended solution continues to optimise VfM; and,
- Establish that the management arrangements for successful delivery are in place.

The aim of the Full Business Case (FBC) Stage is to provide a mechanism for appraising projects against a comprehensive set of criteria for each of the Five Business Cases. The FBC Stage will revisit the assumptions and main findings from the OBC which may have changed for example due to procurement arrangements, but will also bring forward new evidence on issues such as procurement and management strategy.

Section A: Status of Business Case Development

Section A1: Status & Progress to-date

1. Present status of the Project. i.e. is the project at a fledgling/early stage, or is the project part-way through and needs additional funding or is it more developed than that?

The Sprint - A34 Walsall to Birmingham Outline Business Case was approved by the West Midlands Combined Authority in February 2019. This outlined the scheme and further established the strategic case for change, as well as providing developing details on key commercial, management, financial and economic considerations.

The project has been developed to a high stage of maturity, with numerous key milestones and outputs achieved including Detailed Design, strategic and detailed traffic modelling, and public consultation. There is widespread support for the scheme from local authorities and the business community (including the Chamber of Commerce and Business Improvement Districts).

This Full Business Case considers the scheme interventions proposed, the impact on public transport usage and highway network, the delivery model, the scheme costs, and key risks. As stated in the Outline Business Case (OBC), the 2022 Commonwealth Games in Birmingham has accelerated sections of the programme plan and strengthened the strategic case further.

This Full Business Case revisits the assumptions and main findings of the OBC, particularly those that have changed, as well as bringing forward new evidence to inform the process of securing approval from WMCA for the funding for delivery of this scheme.

The total scheme value is £50.3m. £39m of WMCA funding is required at FBC for scheme delivery, which includes project and programme management. £19.3m will be required in 2020/21, with £13m in 2021/22, and £6.7m in 2022/23. The largest costs are £27.3m construction costs, £8.4m statutory diversions, and £2.8m road surfacing. The vehicle purchase costs will now be covered by the service operator, with no contribution sought from public funding.

2. Progress achieved prior to Bid. What has been achieved so far within the project?

Following submission and approval of the OBC in early 2019, project development and detailed design work has been ongoing. Public consultation on project proposals was conducted in 2018, further scheme development following consultation has been undertaken, with supplementary strategic and more localised modelling carried out to inform the detailed design proposals and the economic case.

The design has been updated following public consultation, specifically to retain residential parking in the Perry Barr area and business/retail parking on Ablewell Street. Bus priority has still been retained on these sections. The detailed design process has also allowed for refinement of the designs and increased confidence.

The Early Contractor Involvement at Phase 1 and Phase 2 has provided a robust cost budget, with the contractor providing a detailed breakdown of construction costs. They have also strengthened the programme plan to give assurance of delivery timescales and identify

The £3.1m funding contribution has been approved by Department for Housing, Communities and Local Government as part of the Housing Infrastructure Fund.

The decision to proceed with an Enhanced Partnership operating model has been confirmed by the WMCA Board, which confirms the intention for the service to operate commercially with no subsidy. This will mean the operator will be responsible for vehicle purchase and states the infrastructure requirements to be delivered by WMCA.

The Sprint Programme Board has also confirmed the intention to operate the service with electric zero emission vehicles.

At a programme level, management, procurement, contract, and landowner requirements have all been confirmed.

Section B: Project Description and Background

Please refer to the Initial Proposal Q.1 for project description – update if necessary

Sprint is a Bus Rapid Transit (BRT) service that delivers predictable journey times and high frequency, dependable timetables.

Sprint is part of the vision for the future network of world class public transport in the West Midlands. Sprint is an innovative mode of transport that replicates the spacious feel and speed of tram, whilst maintaining the flexibility, lower cost and simplicity of a bus system.

Sprint means faster journeys, improved reliability, higher quality public transport environment, greener environment, and easier access to transport and our communities.

BRT is used across the world as part of an integrated transport system. As a form of public transport, it has a proven track record of attracting increased public transport use when implemented.

Sprint services along the A34 offer the potential to reduce journey time variability. Both junction re-alignment and the introduction of signal prioritisation will help to alleviate problematic bottlenecks. Furthermore, the following standards proposed by Sprint will encourage mode-shift away from car transport to bus use:

- **High frequency service**. Sprint services will run at a high-frequency with a target reliability rate of 95% of services on time. Peak services will run at least every 10 minutes.
- **High quality vehicles**. Sprint services will run using high quality articulated BRT vehicles with multidoor boarding to ensure short dwell times. Vehicles will have free Wi-Fi, on-board CCTV, on-board real time journey time information, and next stop announcements. Services will be easily identifiable through prominent branding on the exterior of the vehicle.
- **High quality shelters**. Sprint shelters will provide waiting passengers with real-time departure times, and CCTV.
- **Ticketing**. Kerbside ticketing machines will be used on Sprint services. This eliminates the need for passengers to interact with the driver to buy tickets, therefore speeding up boarding times. Passengers will be encouraged to pay for their tickets using cashless payments such as contactless cards, although there will be mechanisms to pay with cash.
- **Highways and priority**. Sprint services will use dedicated bus lanes on a significant proportion of their routes and will benefit from priority at signals. Bus stops will have a clean approach to allow close docking and easy boarding.
- **Environmental credentials**. Vehicles will employ zero-emissions technology.
- **Intelligent transport systems**. Vehicles will be installed with automatic vehicle location identification to manage headway between vehicles. Traffic signal priority will be provided at junctions using magnetic vehicle profiling.
- **Customer service.** Regular customer satisfaction surveys, continuous specialised training programmes and an on-board presence will help to deliver high levels of customer satisfaction.

The A34 North is an important connection to Birmingham and Walsall, serving residents and businesses in Aston, Perry Barr, and Great Barr. The route also serves as a diversion route for traffic from the M6 and is susceptible to significant congestion as a result. The existing services on the route suffer from journey time variability and the express services available do not serve many of the key locations on the corridor. Sprint aims to address this journey time variability whilst reducing the overall length of time it takes to travel between key areas. This will improve the connectivity along this route and support the expected growth in both Perry Barr and Birmingham City Centre, linking people to new jobs, homes, facilities, and onward connections.

Since the initial proposal and outline business case, the route and proposed infrastructure has been confirmed, and is detailed below. Full route descriptions and drawings can be found in **Appendices A and B.**

Figure 1: Proposed Sprint vehicle

The proposed route is approximately 14.5km in length, running along the A34 from Birmingham to Walsall via Great Barr. In Walsall, the route circulates the Town Centre sharing Darwall Street with pedestrians before heading south on Bridge Street and Ablewell Street towards Birmingham. As well as serving the Town Centre, the route also passes the Blue Coat Academy and numerous local facilities. Priority towards Walsall is included on this section of the route.

Continuing south, Sprint subsequently links through the Broadway and Walstead Road junctions, heading towards the M6. Priority towards Walsall is provided at both of these junctions. Predominantly residential, this section of the route also serves the University of Wolverhampton's Walsall Campus, and the Aston University Recreation Centre. At the southern end, on approach to the M6, the adjacent land usage becomes less dense.

Having utilised the M6 flyover, the Birmingham Road is bounded by residential and local retail facilities, with the Scott Arms district centre featuring numerous amenities. The Scott Arms junction is a strategically important junction and regularly congested throughout the day. Extended bus lanes are provided either side of this junction to alleviate delays for Sprint, along with an extended right-turn lane northbound from the A34 onto the A4041 Queslett Road.

The route continuing south towards Birmingham is dual carriageway between Scott Arms and Perry Barr. On street parking is retained in most locations with some widening into the central reserve, which will allow bus lanes to be introduced on congested sections of the route. Sprint will serve Alexander Stadium in this location.

The Perry Barr centre is the confluence of numerous strategic links, also incorporating the One Stop shopping centre and interchange with Perry Barr railway station. This section of the route will be designed and promoted separately by Birmingham City Council as part of their highway proposals (recently out for consultation), Sprint and bus priority is included within these designs. This will improve bus priority on the A34 and compliment the delivery of Sprint.

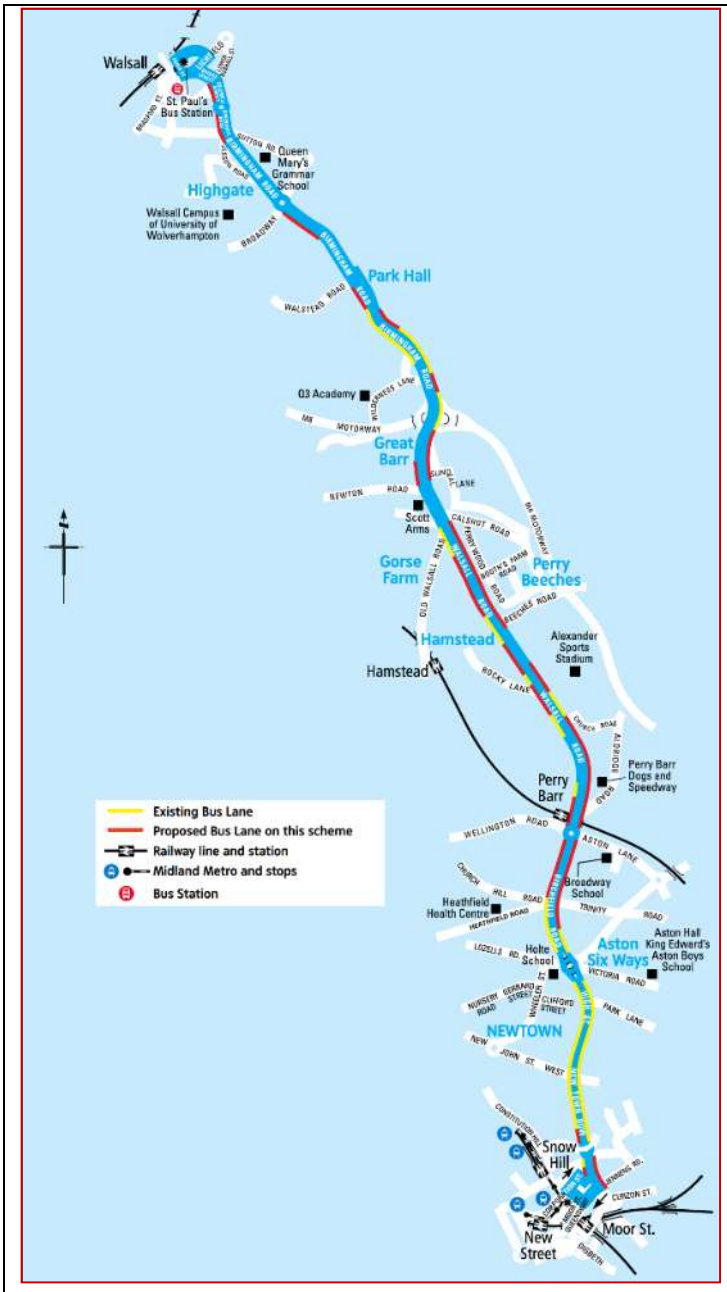

Figure 2: Proposed A34 Sprint corridor

Between Perry Barr and the A4540 (Birmingham Ring Road), the route is predominately at-grade. Adjacent usage is a combination of residential, light industrial and retail. A large proportion of this length features existing bus lane. Bus priority is introduced at all the key junctions served by Sprint.

Following consultation feedback and updated modelling, the scheme will not serve Aston Six Ways, instead using the underpass to access Newtown.

Within the Birmingham Ring Road, the route utilises New Town Row towards Lancaster Circus, before James Watt Queensway towards the Moor Street Queensway area, where it terminates. Sprint is proposed to use the underpass instead of traversing Lancaster Circus at-grade as buses currently do. The proposed route is shown above. The Sprint scheme route has been designed to complement the Birmingham Cycle Revolution route and any further future upgrades to cycling infrastructure are not be precluded along the corridor.

The detailed design has been developed with Local Highway Authority Officers to ensure it incorporates feedback received during the public consultation. A summary of feedback received is provided in section C4.

Advanced works have been identified that can be delivered quickly, those that were uncontentious during public consultation, and benefit existing bus services. By delivering these measures earlier in the programme, initial benefits can be realised and the risk of delays prior to the Commonwealth Games are mitigated.

The route will operate as a limited stop service with less frequent stopping than conventional buses and a focus on serving key destinations. There are proposed to be 20 stops in each direction of the route. Some conventional stops, which are not served by Sprint, will be positioned in lay-bys to allow the Sprint service to avoid delay from other bus services.

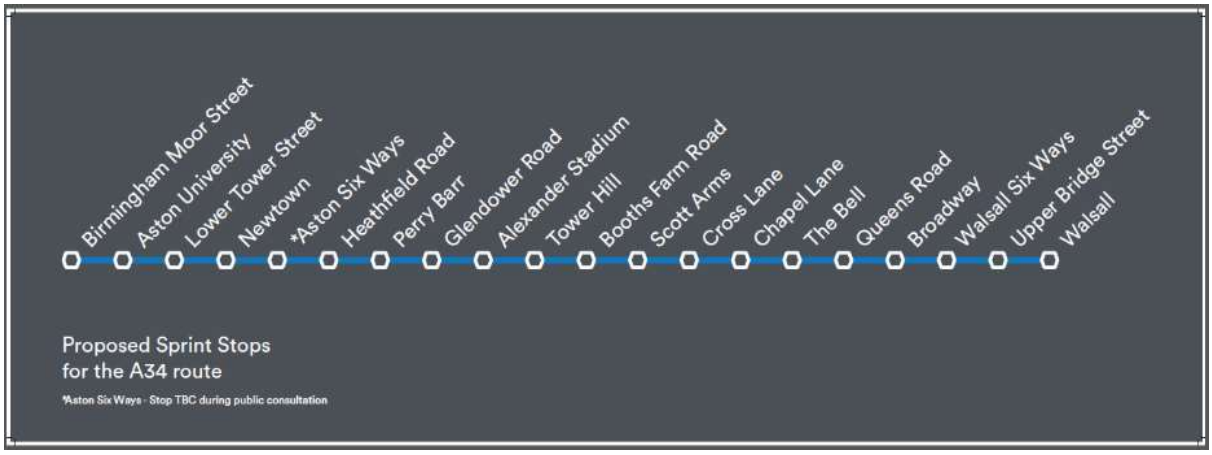

Figure 3: Proposed Sprint stops for the A34 route

The stops served will be:

- Birmingham Moor Street – serving the city centre and connections to rail, tram and bus interchange
- Aston University – serving Aston University and Birmingham City University
- Gun Quarter – serving student accommodation and local business
- St Stephens Street – serving Royal Mail Delivery Office
- Newtown – serving Newtown Shopping Centre and Newtown Pool and Leisure Centre
- Heathfield Road – serving Lozells residents and places of worship
- Perry Barr – serving One Stop, new housing development, and interchange with bus and rail services.
- Glendower Road – serving local residents and business
- Alexander Stadium - serving local residents, retail, Perry Hall Park, and Alexander Stadium complex
- Tower Hill – serving local residents and retail
- Booths Farm Road – serving local residents
- Scott Arms – serving local residents and business
- Great Barr – serving local residents
- Chapel Lane – serving local residents and local nature reserve
- The Bell – serving local residents
- Queens Road – serving local residents
- Broadway – serving local residents
- Walsall Six Ways – serving local residents and schools
- Upper Bridge Street – serving local residents
- Walsall – serving the town centre and connections to rail and bus interchange

The nature of the vehicle, shelter, and ticketing arrangements are important elements of the project. Off-board ticketing and multi-door boarding is assumed to save an average of 5 seconds per stop as there is no interaction with the driver required and less conflict between passengers boarding and alighting. In peak times, the single-door boarding and onboard ticketing can delay services by over a minute at bus locations. Sprint will improve punctuality as there will be less variation in vehicle dwell time.

Figure 4: Visualisation of Sprint stop

The Sprint corridor will provide a reliable journey time of less than 38 minutes for Walsall to Birmingham during peak times, which is 5 minutes quicker than the current timetabled journey time. The scheme will also provide a reliable journey time of less than 15 minutes for Perry Barr to Birmingham during peak times, which is 10 minutes quicker than the current timetabled journey time. Real journey time information shows that current bus trips frequently take longer than the timetable information and there is significant fluctuation in journey times that will be addressed by Sprint. In particular, the scheme will reduce the impact of congestion when there are issues on the M6 which can currently cause additional delays of over 15 minutes above the timetable.

The Sprint corridor will complement the existing bus network as part of an integrated transport system, other services that will benefit include:

- X51 - Cannock to Birmingham, 5-minute saving
- 33 - Pheasey to Birmingham, 7-minute saving
- 934, 935, 936, and 937 – Kingstanding to Birmingham, 4-minute saving
- 997 – Aldridge to Birmingham, 4-minute saving

The A34 Sprint scheme forms a significant part of the Metropolitan Rail and Rapid Transit Network which is outlined in the West Midlands Strategic Transport Plan - Movement for Growth (2016). This network is based on suburban rail, metro - light rail, tram-train, very light rail and Sprint Bus Rapid Transit lines running on suitable routes of one single network. It will be integrated with local bus services and underpinned by high quality passenger information, promotion and ticketing. This system will be easy to understand, use and be provided with high standards of customer care. The wider Sprint network is shown below, which highlights how the network is planned around expected growth across the region and ensuring this growth is inclusive by better connecting areas.

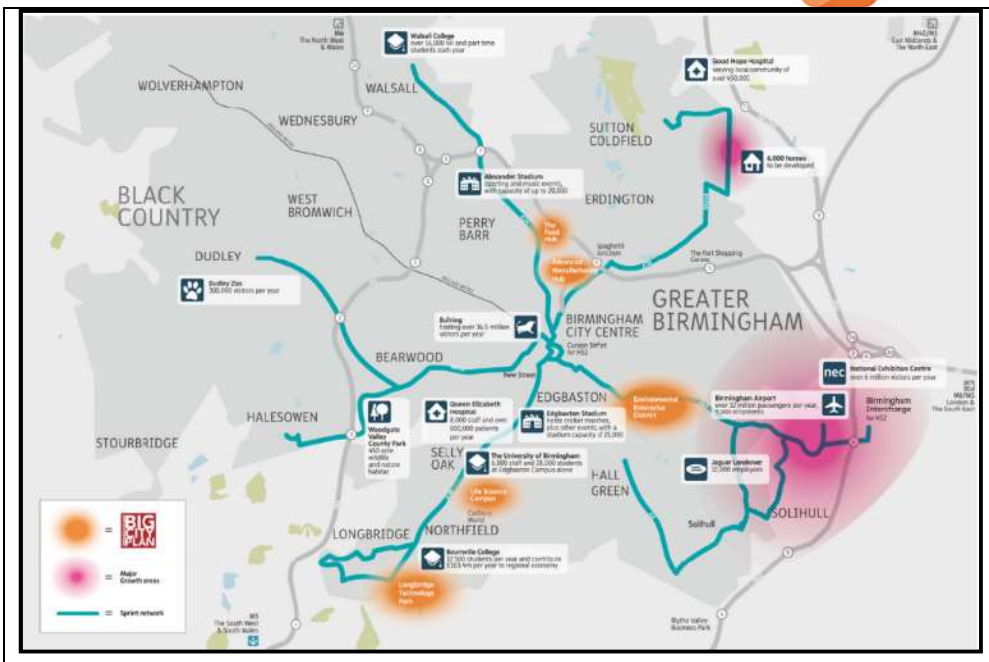

Figure 5: Wider Sprint network

The area served by A34 Sprint will be subject to significant development and regeneration, including within the Birmingham City Centre Enterprise Zone, HS2 Curzon Street Station and surrounding Masterplan area, the main location for the Birmingham 2022 Commonwealth Games at Alexander Stadium, the regeneration of Perry Barr, and Walsall Town Centre. In addition, the route will be in close proximity to 'The Food Hub' site identified in Birmingham's 'Big City Plan', with the recent relocation of the Birmingham Wholesale Market to Witton/Perry Barr. This project will serve these locations and support sustainable travel by encouraging mode shift away from private vehicles onto public transport.

Bus priority measures will be delivered in two phases to support the Commonwealth Games. The first phase of the scheme focuses on infrastructure improvements between Birmingham City Centre and the M6J7. These measures are scheduled to be delivered by December 2021 and are the most critical for supporting public transport during the Games. The second phase will be delivered the following year to complete the route between M6J7 and Walsall. For the purpose of the FBC, it is assumed the Sprint service will be introduced at the end of the second phase.

Interchange with the strategic rail network, at Birmingham Moor Street, Perry Barr, and Walsall railway stations, and future High Speed 2 services at Curzon Street, together with local bus (in particular at Perry Barr Interchange and Walsall Bus Station) and West Midlands Metro services (at Curzon St), will increase the wider connectivity of the corridor. The links to Curzon St at Eastside will also support regeneration in an area where existing public transport provision is poor. This public transport improvement is an essential part of the HS2 Connectivity Package, Birmingham Connected, and the Strategic Transport Plan.

The A34 corridor Sprint services will run through Birmingham City Centre to join the A45 Birmingham to Birmingham Airport and Solihull Sprint route, providing important cross-city connections to Digbeth, Yardley, Sheldon, the Airport and Solihull. Transport for West Midlands continues to investigate potential Park & Ride sites to coincide with the delivery of this route, which would be progressed as a separate business case.

As a consequence of the interventions, the project will:

- Increase the proportion of West Midlands' residents who are able to access three or more strategic centres within 45 minutes by public transport, not just through Sprint but other services that use bus priority measures.
- Ensure Sprint passenger satisfaction is significantly higher than regular bus satisfaction
- Create modal shift from car to Sprint and other public transport in the corridors

The overall project budget includes high quality bus stops, upgraded traffic signals and highway infrastructure, and project management. Funding is requested for scheme delivery, project and programme management. The funding

sought for this project does not include the cost of purchasing BRT vehicles or the operation and maintenance of the vehicles. These costs will be met by the partnership operator.

Strategic Case

Section C: Strategic Case for Change and fit to WMCA Strategic Economic Plan Themes

Section C1: Overview and Rationale

Please refer to the Initial Proposal Qs 2-4 for Overview and Rationale and include any updates or changes here.

The need for Sprint within the local planning policy framework context

The Initial Proposal and OBC contains detail of the strategic fit and context of the A34 Sprint scheme, including how the proposal links to local policy documents. The following section restates the strategic case and details any updates or changes to the local policy fit. The overall rationale for investment, strategic benefits and 'place' focus of the A34 Sprint scheme has not changed since the Initial Proposal.

Walsall Town Centre Area Action Plan

The Transport, Movement and Accessibility section of the Walsall Town Centre Area Action Plan (AAP)[1] states how the A34 Sprint scheme will enhance the image of public transport and further improve the connectivity between Walsall and Birmingham.

Since the OBC was submitted, the Walsall Town Centre AAP has been adopted in January 2019.

Of the AAP's objectives, focus is given specifically to transport improvements that "improve accessibility to and within the centre for all sectors of the community, through the provision of integrated transport and enhanced cycling and pedestrian links"

The Transport, Movement and Accessibility section of the AAP states how Sprint will enhance the image of public transport and further improve the connectivity between Walsall and Birmingham.

Sprint also will assist in delivering the AAP's objective to "Transform the experience and perception of Walsall town centre for those who shop, work, visit, invest and live in Walsall through measures such as improved public realm, civic spaces, quality of place, new homes, pedestrian access and security alongside the active promotion of the centre and organisation of community events".

Birmingham 2022 Commonwealth Games

Birmingham was awarded the 2022 Commonwealth Games in December 2017[2]. The main hub of the games will be along the A34, incorporating the Alexander Stadium, and a redeveloped area in the immediate vicinity to create the Athletes Village at Perry Barr. The Commonwealth Games will transform north-west Birmingham, with upgraded world-class sports facilities, and 1,396 new homes following conversion of the Athletes Village post-games.

1 https://go.walsall.gov.uk/walsall_town_centre_area_action_plan

2 https://www.birmingham2022.com/

Figure 6: Illustration of the 2022 Commonwealth Games Athletes Village

Sprint was included in the Commonwealth Games Transport plan bidding documentation and will provide vital bus priority to serve Alexander Stadium. The Athletes Village and Alexander Stadium will be adjacent to the Sprint stops.

The masterplan[3] for the upgrade of Alexander Stadium was published in draft form in June 2019. The proposals include increasing the capacity of the stadium from 12,700 to 18,000, as well making changes to the layout of the stadium to facilitate the addition of temporary seating (increasing the capacity of the stadium to 40,000) during the Commonwealth games.

Parking spaces are limited within the stadium development, so additional public transport provision will be key to allowing spectators to make their way to and from the games. Current estimates are that the majority of spectator trips will be made by bus during the Games.

A34 Perry Barr Infrastructure Works Package

Perry Barr is identified in the Birmingham Development Plan[4] as an area of growth in the city, and the Commonwealth Games provides a catalyst to accelerate this planned growth. 5,000 new homes are planned in total as part of the regeneration of Perry Barr. The first phase of the regeneration plan will be delivered on the former Birmingham City University teaching campus and will deliver 1,400[5] new homes including a mixture of apartments, town houses and extra care accommodation, commercial elements at ground floor and significant new public open space. The second phase of the regeneration plan received planning permission in August 2019, with proposals for a further 400 to 500 new homes, including a secondary school for over 1,200 pupils[6]. Sprint is vital to providing the connectivity for this housing growth in the area, and the masterplan for the corridor highlights the proximity of developments to the Sprint network.

The proposed development will be constructed ready for the 2022 Commonwealth Games, to provide accommodation for the competing athletes. Following the completion of the Games, the development will be converted to provide new homes for sale, for rent and for social and affordable rent. Parking will be limited to 25% of properties meaning that the development will create additional demand on the public transport network in the area.

3 https://www.birmingham.gov.uk/news/article/434/plans_revealed_for_alexander_stadium_redevelopment

4 https://www.birmingham.gov.uk/download/downloads/id/5433/adopted_birmingham_development_plan_2031.pdf

5 https://www.birmingham.gov.uk/info/20054/planning_strategies_and_policies/1894/perry_barr_regeneration/2

6 https://www.birmingham.gov.uk/news/article/459/perry_barr_regeneration_phase_two_planning_consent_is_secured

The planned growth at Perry Barr will be supported by a number of improvements including:

- Upgrade of Perry Barr railway station
- A new public transport interchange
- Significant highway improvements
- Improvements to the public realm
- Improved sport and leisure provision
- A new school
- New commercial development opportunities

The highway proposals for the area[7] will also support the delivery of bus priority. Perry Barr currently has limited residential parking, therefore the A34 Walsall to Birmingham Sprint scheme is an essential element of the development plan for Perry Barr and underpins the public transport offer for the area. Sprint infrastructure proposals will also benefit the wider network of express and local bus services on the A34 and accessing the A453 Aldridge Road.

Aston, Newtown and Lozells Area Action Plan (AAP)

Adopted in July 2012, the Aston, Newtown and Lozells AAP[8] covers approximately 900 hectares of Birmingham, lying immediately north of the city centre. It stretches from Salford Circus (Spaghetti Junction) in the east to Hamstead in the west, and from Perry Barr One Stop/Holford Drive in the north to Newtown Middleway in the south. The A34 and A38 form two major radial routes transecting the area.

The AAP encompasses many local communities and industrial areas, as well as retail, health, education, leisure and employment zones. It also includes two Conservation Areas and sites of archaeological importance.

Designed to support a regeneration process, the AAP is intended to improve the attractiveness for current and potential users of the area. Its vision includes: -

- An improved housing market which attracts new residents and accommodates sustainable growth;
- A successful economy providing accessible jobs to local people, allowing businesses to flourish;
- A network of thriving local centres, green spaces and community facilities; and
- Well-connected sustainable and integrated neighbourhoods.

The Plan is for the 2012-2026 period and aims to deliver 1,700 new homes and 5,160 new jobs, of which 3,000 will be on the Regional Investment Site. This will be supported through the Commonwealth Games Village site.

Growth and development of the centre will be supported in line with the levels of floor space set out in the Birmingham Development Plan[9] (Policy GA3):

- 20,000 sqm of additional comparison floor space (up to 2026); and
- 10,000 sqm of additional office floor space (up to 2026).

Much of the proposed development would be delivered by the private sector but supported by public sector bodies such as the City Council, Housing Associations, the Homes and Communities Agency and Birmingham City University.

Regeneration of the housing stock has been continuing, most relevant to this study with the demolition of the 1950s/60s flats and maisonettes on the western side of Birchfield Road, and their replacement with a variety of property types.

New employment developments are progressing around Holford Drive, including the site of the new Birmingham Wholesale Markets as part of the 18-acre site at The Hub development in Witton.

7 https://www.birminghamupdates.com/consultation-to-begin-on-perry-barr-highways-scheme/

8 https://www.birmingham.gov.uk/downloads/download/150/aston_newtown_and_lozells_area_action_plan

9 https://www.birmingham.gov.uk/info/20054/planning_strategies_and_policies/78/birmingham_development_plan

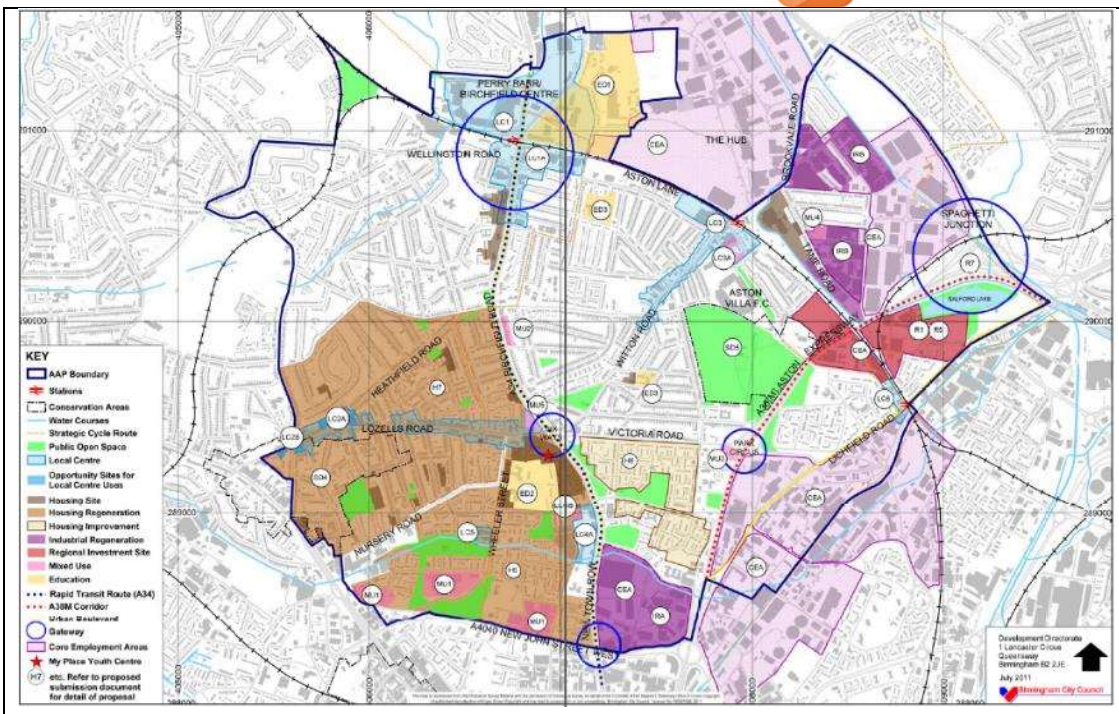

Figure 7: Map of Aston, Newtown and Lozells Area Action Plan

The AAP includes a rapid transit route on the A34 which is necessary in order to deliver the plans required for the area's development.

In addition to the AAP, the Birmingham Development Plan is now adopted, and the Perry Barr and Birchfield District Centre Masterplan (PBBDCM) is being developed as part of this. The work will focus on a number of key development sites, including Birmingham City University's teaching campus site, Perry Bar Stadium and Gailey Park, and also looking at the wider regeneration potential of the district centre, and improvements to roads and transportation, and streets, parks and paths etc. This level of growth requires improved accessibility, which would be achieved through the proposed Sprint service.

The need for Sprint from a business strategy perspective

Birmingham Connected (Birmingham Mobility Action Plan)

The Birmingham Development Plan (BDP) sets out Birmingham's strategy for jobs and growth, meeting housing needs and sustainable progress. Birmingham Connected[10], published in November 2014 is directly linked to the strategies and policies of the BDP.

The five core objectives of Birmingham Connected are:

- **Efficient Birmingham** – Birmingham Connected will facilitate the city's growth agenda in the most efficient and sustainable way possible, strengthening its economy and boosting jobs.
- **Equitable Birmingham** – Birmingham Connected will facilitate a more equitable transport system; linking communities together and improving access to jobs and services.
- **Sustainable Birmingham** – Birmingham Connected will specifically reduce the impacts of air and noise pollution, greenhouse gas emissions and energy consumption.
- **Healthy Birmingham** – Birmingham Connected will contribute to a general raising of health standards across the city through the promotion of walking and cycling and the reduction of air pollution.
- **Attractive Birmingham** – Birmingham Connected will contribute to enhancing the attractiveness and quality of the urban environment in local centres, key transport corridors and the city centre.

10 https://www.birmingham.gov.uk/info/20013/roads_travel_and_parking/498/birmingham_connected

Key to the approach will be to not focus on one particular mode or solution; instead providing an opportunity for everyone to have access to the transport options they require, whatever their need. In relation to the mass transit network, Birmingham Connected presents a comprehensive, integrated system where interchange between modes is seamless, pricing is fair and clear, vehicles are a high standard and using it is a clear choice for everyone.

The document sets out the initiative to "complete a £1.2bn integrated public transport network within 20 years which will allow people to travel across the city in high-quality vehicles, feeling safe and secure and enable fast movement through some of the most congested sections of the network. This will include a minimum of three more Metro lines and up to nine cross-city bus rapid transit lines. Whilst delivering this network we will also invest in the urban realm of our local centres, helping to create vibrant community spaces across the city."

The Birmingham Connected Public Transport Study determined that a number of corridors are best suited for a bus rapid transit (Sprint) system for a number of reasons; including the physical space available. Sprint is envisaged to be the primary, 'transformative' public transport mode for Birmingham over the next 20 years. It is stated that "this mode strikes the optimum balance between quality improvements, deliverability and cost and is therefore the most able to be rolled out as a mass network within the shortest period."

The "Technical Work Package 2 - Public Transport"[11] looked in more detail at the public transport aspect of the Birmingham Mobility Action Plan. While rail-based Metro is considered to be the long-term aspiration for certain key corridors, the emerging mass transit network is still envisaged to be delivered predominantly by Sprint as a mass transit mode capable of more widespread and quicker implementation. The A34 Walsall to Birmingham route was prioritised as joint first for delivery in the document and acknowledged as supporting the city's growth through Sprint and complementary services.

Transport for the West Midlands' Movement for Growth Package

TfWM is part of the West Midlands Combined Authority (WMCA) and is responsible for coordinating investment to improve the region's transport infrastructure to create a fully integrated, safe and secure network. It is also responsible for assessing and planning the region's future transport needs so the network can meet the demands of businesses and a growing population.

TfWM's long-term transport strategy is set out in its Local Transport Plan – known as the Movement for Growth plan. Movement for Growth was adopted by the WMCA in June 2016, and sets out how TfWM will deliver a modern, effective, efficient and reliable transport system capable of helping to achieve one of WMCA's key objectives, namely closing the West Midland's GVA gap with the rest of the country and the target of creating 500,000 new jobs. The scheme considered in this business case will help to address the five challenges set out in Movement for Growth, which are: -

- Economic growth and economic inclusion
- Population growth and housing development
- Environment
- Public health
- Social well-being

Within Movement for Growth, Sprint forms a key aspect of the Metropolitan Tier of transport delivery in the plan. The Movement for Growth states that: -

"…Sprint Bus Rapid Transit lines form an important part of the Metropolitan Rail and Rapid Transit Network."

There is a strong level of support for the A34 Sprint within Movement for Growth. The scheme has been refined over a number of years through prioritisation and optioneering so that it meets the goals identified in Movement for Growth, as well other strategic transport planning documents.

The need for Sprint from an economic perspective

The area covered by the WMCA is the main driver of the UK economy outside of London. The latest figures available from the ONS show that its GVA was almost £67bn[12] in 2017.

The region has established itself as one of the largest professional and financial centres[13] outside London as evidenced by HSBC's decision to relocate its European headquarters to Birmingham[14] and Deutsche Bank's on-going front office presence in the city. Already boasting the largest professional, financial and commercial hub

outside of London, the city is fast becoming a magnet for new commercial opportunities, showcased by the number of active businesses in Birmingham increasing by 13.5%, three times the average UK growth rate. Of course, with this comes an influx of new jobs. Throughout 2017 alone, 148,000 new jobs were created in the West Midlands and over the last decade, Birmingham has held the third-highest jobs growth rate in the UK, sitting at 30%. As the number of jobs continues to outgrow housing, it is increasingly important to improve public transport access to the city centre.

Going forward, the West Midlands is likely to continue to enjoy significant economic growth. The Midlands Engine is proving to be a successful conduit in enhancing this position within the UK economy by providing development and direct business funding through its Strategic Programme Development Fund (SPDF)[15] and the Midlands Engine Investment Fund (MEIF)[16]. Furthermore, the inclusion of the West Midlands in the first phase of HS2 has the potential to improve the economic performance of the region, but only if regions such as Walsall have fast and reliable connections to the station at Curzon Street.

The population living along the A34 corridor is served by the existing highway (on which it is proposed this Sprint service will run), plus the local rail service on the Chase line between Rugeley and Birmingham New Street (recently electrified to Rugeley). Both are heavily congested at peak times; the rail service operates with limited spare capacity, meaning that many passengers have to stand in peak periods. 2017 statistics show that in the three-hour AM peak, passengers travelling on West Midlands Trains (who operate the services between Walsall and Birmingham) have an average of 18% of passengers standing[17]. In the PM peak, the equivalent figure is 14%[18]. Furthermore, services run by West Midlands Trains do not call at as many points as the proposed Sprint service with only Perry Barr and Walsall stations directly on the corridor.

The existing highway has numerous constraints which create congestion on a regular basis. This results in fluctuation in car and bus journey times, particularly during peak time. Average express bus journey times across the entire route vary by 20 minutes during the day, with a range of over 40 minutes between the maximum and minimum times. This unreliability means commuters cannot accurately plan travel times, leading to unproductivity and restriction in work areas.

11 https://www.birmingham.gov.uk/download/downloads/id/1929/birmingham_connected_technical_package_2_public_transport.pdf
12 https://www.ons.gov.uk/file?uri=/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedbalanceduk/1998to2017/431869ba.xls
13 https://www.pwc.co.uk/who-we-are/regional-sites/midlands/press-releases/West-Midlands-named-as-key-financial-services-hub.html
14 https://www.about.hsbc.co.uk/news-and-media/new-green-hsbc-uk-birmingham-hq-opens-its-doors
15 https://www.midlandsengine.org/funding/
16 https://www.british-business-bank.co.uk/midlands-engine-investment-fund-launches-100million-sme-equity-fund/
17 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/728192/rai0214.ods
18 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/728192/rai0214.ods

Figure 8: Examples of A34 current congestion

Without the addition of further capacity, it is likely that the local transport system could act as a constraint to the realisation of the regional benefits of HS2, by preventing the effective supply of labour to new businesses who could in future be attracted to re-locating to the city and region more generally.

In addition to encouraging inward investment, Sprint will also benefit local residents, through better access to jobs, training and education. It also has the potential to increase the number of people able to access HS2 services, thereby increasing both local support and demand for the scheme. It also supports regeneration of brownfield sites and the development of new sites through the provision of high-quality transport links to development sites currently in receipt of planning permission and may also unlock new sites for development where planning permission has been refused on the basis of unmitigated impacts on the current transport network.

The high level of investment proposed for the area will have a positive impact both jobs and housing. However, the proposed investments are likely to generate a significant amount of additional traffic along the corridor which will need to be met by investment in high quality public transport such as that provided by Sprint.

Figure 9 highlights the wider macro-economic challenges faced by the region. Throughout this decade, labour productivity in the West Midlands has been persistently lower than both the UK and national averages. By reducing journey times (a key outcome from Sprint), investment in the A34 Sprint scheme has the potential to increase the density of the local labour market. Guidance from WebTAG unit A2-1[19]T suggests that increases in the density of the local labour market have the potential to increase productivity. Improved public transport journey times will also improve productivity as people's time is spent more efficiently rather than in congestion. Therefore, the A34 Sprint scheme has the potential to contribute towards meeting the TfWM's objective of promoting "economic growth and economic inclusion" (as set out in the Movement for Growth document) as well as BCC's objective of "an efficient Birmingham" (as set out in the Birmingham Connected document).

19 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/712878/tag-unit-a2-1-wider-impacts-overview-document.pdf

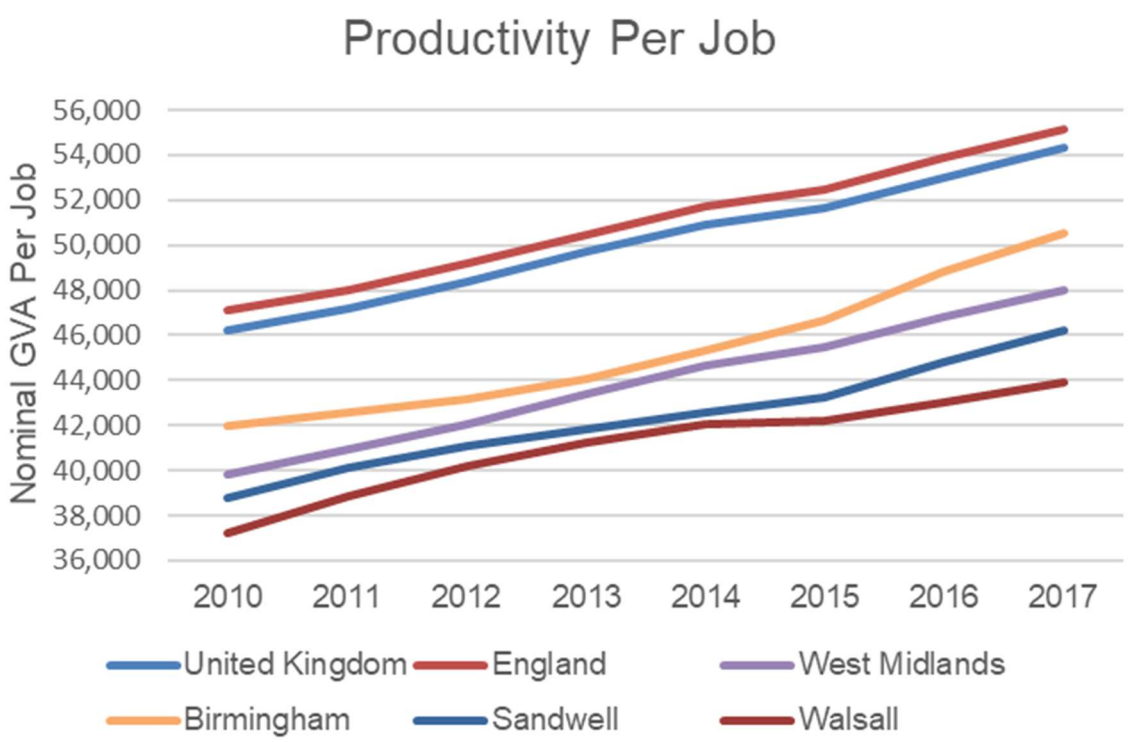

Figure 9: Gross Value Added per job, Birmingham, Sandwell and Walsall versus comparators, 2010 – 2017

The need for Sprint from a transport perspective

HS2 Connectivity Package and HS2 Curzon Street

As the largest infrastructure project in Europe, HS2 will be an economic catalyst for the Midlands. The HS2 Connectivity Package supports the HS2 Growth Strategy's vision to harness the unrivalled connectivity and investment of HS2 to create a step change in the Midlands' economic performance, driving growth and significantly improving outcomes for people, businesses and places.

The purpose of the HS2 Connectivity Package is to ensure the benefits from HS2 are spread as far as possible across the region, enabling existing businesses to expand and providing opportunities for new businesses. Providing new or enhanced connections to HS2 stations, bringing wider populations to within 45 minutes of one of the two regional HS2 stations at Curzon or Interchange, the schemes proposed within the Connectivity Package also improve public transport opportunities across the West Midlands. Supporting regeneration opportunities and boosting links to employment and education, these transport services will contribute to regional growth ambitions.

This route from Birmingham to Walsall has been identified as one of a number of links in the HS2 Connectivity Package looking to improve public transport provision in the Midlands and providing connections to the proposed high-speed rail services. The route will directly serve the proposed bus interchange at HS2 Curzon St and provide a direct link to the HS2 investment for Walsall, Sandwell, and North Birmingham residents.

The initial route feasibility study outlined that within 1km of the proposed route there was a significant population of approximately 105,000. This means that there are significant opportunities for public transport usage in the area.

The proposed route passes through a number of network pinch points, where congestion is a problem. This means that current bus users (and other users along the A34, such as cars) suffer from unpredictable journey time variability, which acts as a constraint to growth in the region. The key pinch points along the route are:

- Birmingham and Fazeley Canal Bridge
- Newtown Middleway / New Town Row junction
- Perry Barr
- Birmingham Road / Newton Road junction (Scott Arms)
- Birmingham Road / Broadway junction

The proposals for Sprint along the A34 corridor include interventions to alleviate congestion at each of these pinch points.

The need for Sprint from an Environmental Perspective

Levels of air pollutants in Birmingham are currently higher than legal limits. Concentrations of NO2 emissions are 50% higher than the levels currently allowed20. In order to address this problem, BCC will introduce a Clean Air Zone in Birmingham City Centre from 2020 onwards[21]. Current proposals for the Clean Air Zone are to charge non-compliant vehicles (Euro 4 Petrol or Euro 6 diesel) £8 per day for entry into the City Centre. The introduction of Sprint forms part of the BCC Clean Air Strategy[22] (alongside the introduction of the Clean Air Zone) as it has the potential to mitigate increases in commuting costs as a result of Clean Air Zone charges, and also has the potential to improve air quality through modal shift away from cars.

The West Midlands Bus Alliance (50 deliverables)[23] outlines a deliverable to improve bus emission standards by May 2020 through requiring all buses operating across the region to be at least Euro V. Sprint is proposing to improve on this deliverable by utilising zero-emission full electric vehicles from implementation.

The West Midlands Low Emission Bus Delivery Plan (2016)[24] outlines as part of the alternative fuel buses and their refuelling infrastructure, that a low carbon option would include a Power Purchase Agreement for the supply of low carbon electricity for the electric buses.

The impact of not changing

There are significant impacts from not proceeding with this scheme. Firstly, it is likely that not proceeding with the scheme will reduce the benefits of HS2 to residents in the north of Birmingham, as they will continue to have poor access to the Curzon Street area. Secondly, the A34 is currently congested due to a number of pinch-points along the route. Reducing these pinch points will allow the introduction of a new bus rapid transit system, but also will reduce journey times for other road users, including the users of existing bus services. These levels of congestion act as a constraint to the ambitious development proposals outlined in the Walsall Town Centre Area Action Plan, A34 Infrastructure Works Package and the Aston, Newtown and Lozells Area Action Plan. Furthermore, not funding this proposal could also hinder the strategic objectives for the area as set out in Birmingham Connected and the Movement for Growth Package.

Birmingham will host the Commonwealth Games in 2022. A large number of the events (athletics and the opening and closing ceremonies) are due to be held at the Alexander Stadium. The athletes' village will be constructed at Perry Barr. Both of these sites sit along the A34 corridor. Bus priority improvements will play a key role in moving staff working at the games, and in providing spectators with access to the stadium. If A34 Sprint were not to proceed, this could cause a reputational risk to the West Midlands if it is perceived that the region was unable to provide sufficient transport to deliver a successful Commonwealth Games.

Section C2: Strategic Economic Plan

Please refer to the Initial Proposal Qs 5-7 for Strategic Economic Plan and include any updates or changes here.

As detailed within the Initial Proposal and OBC document, this project directly supports many WMCA SEP25 priority programme areas such as 'HS2 Growth', 'Housing', 'Skills' and 'Exploiting the Economic Geography'.

20 https://www.birmingham.gov.uk/info/20076/pollution/1276/air_pollution/2

21 https://www.birmingham.gov.uk/info/20076/pollution/1763/a_clean_air_zone_for_birmingham

22 https://www.birmingham.gov.uk/info/20076/pollution/1280/what_else_is_birmingham_doing_about_air_pollution

23 https://www.tfwm.org.uk/media/38960/bus-alliance-50-deliverables.pdf

24 https://www.wmca.org.uk/media/1366/west-midlands-low-emission-delivery-plan_elementenergy-for-transport-for-west-midlands_july2016.pdf

25 https://www.wmca.org.uk/what-we-do/strategy/

HS2 Growth – the connectivity package is a core component of the HS2 Growth Strategy. This project is included within the package as one of 23 schemes. The importance to HS2 is emphasised by the scheme's link to HS2 Curzon Street. The scheme will provide invaluable connections to an expanded workforce and user base through enhanced journey times. There are 129,273 jobs within 500m of the route that will be better connected to the

Environmental Technologies – Sprint will use zero emission vehicles and support the growth of improved environmental technologies in public transport. Furthermore, Sprint will support the Clean Air Zone within Birmingham through a more attractive public transport offer and a reduction in congestion for public transport users. The West Midlands Low Emission Bus Delivery Plan (2016) also states that having a high quality, attractive bus network is integral to improving urban air quality, and only by transforming bus fleets and reducing emissions will the true potential of the bus be unleashed.

Housing – this scheme will provide transport infrastructure to support the delivery of housing on the corridor and improve connectivity linkages with areas of higher residential density along the corridor. In particular, this scheme will support growth in Perry Barr and Walsall. Additionally, the scheme will support a number of the new housing developments identified in Birmingham City Council's Strategic Housing Land Availability Assessment[26] (see **Appendix O**) which identified the potential for over 60,000 new completions across the city by the end of 2031.

Skills – this scheme will link residential and education areas to key economic sites including HS2 Curzon St, Lozells, Perry Barr, Great Barr, and Walsall.

Exploiting the economic geography – reduced travel disruption, ease of access, reliable journey times, and improved connectivity, will support the economic growth of the WMCA, combined with measures to improve emissions and support active modes.

The scheme will support several of the WMCA's growth objectives:

- *Economic Growth* - To improve GVA for the region in line with the UK Average

Businesses will be confident to invest, remain, locate or start up in the region if they have confidence in the transport infrastructure, as such the successful delivery of the A34 Walsall to Birmingham Sprint project will support the delivery of this WMCA objective.

- *Infrastructure* - improve the quantity of high quality, readily available development sites; turning brownfield sites to high quality locations that meet our housing and business needs.

It is acknowledged by Birmingham City Council improved public transport on this corridor will allow Perry Barr to achieve higher density of housing with a lower percentage of parking provided.

- *Accessibility* - To improve the connectivity of people and business to jobs and markets

The A34 Walsall to Birmingham Sprint project is looking to improve connectivity as its core objective. In particular, the provision of an express service for residents in North Birmingham will support inclusive growth as Sprint will offer a significant improvement in the current transport provision.

- *Health & Wellbeing* - We will have reduced our health inequalities and improved the health and wellbeing of our population including mental health

People will also have improved access to places where people can exercise, including:

  - Improved training and competition facilities at Alexander Stadium (including the Gymnastics and Martial Arts Centre)
  - Perry Hall Park
  - Aston University Recreation centre

Sprint will also improve at-stop facilities for people with disabilities and vehicles will provide access for all.

26 www.birmingham.gov.uk%2Fdownload%2Fdownloads%2Fid%2F10390%2Fbirmingham_development_plan_-_strategic_housing_land_availability_assessment_2018.pdf

- *Sustainability* - To improve competitiveness through energy and resource efficiency and stimulate new technology and business

Supporting and promoting greener travel solutions is a key part of the A34 Walsall to Birmingham Sprint project. The wider Sprint programme will also lead to increased investment and stimulation of new technology in these fields, such as Real Time Information, ticketing, and travel planning.

The project continues to support these objectives, particularly as a result of Birmingham's successful bid to host the 2022 Commonwealth Games. The Games will introduce a global audience to Birmingham and the Games' hub of Perry Barr and will also see 6,500 competitors and officials accommodated in the vicinity of the A34 Sprint scheme, providing a positive, long term economic impact in terms of housing and jobs. The Commonwealth Games bid also sought to emphasise and exploit the geography of the West Midlands, with other venues located in Birmingham, Coventry and Smethwick.

As noted in Section C1, the area around the Athletes Village will be transformed into up to 5,000 homes after the games, contributing towards 'Housing' objectives. Sprint has been allocated space within the housing development to ensure there is a convenient link to the service for residents. The importance of Sprint to the housing offer is demonstrated by the contribution from the Housing Infrastructure Fund towards the delivery of the project, which will improve bus journey times for all services from Perry Barr.

Section C3: Public Service Reform

Please refer to the Initial Proposal Q. 8 for Public Service Reform.

The project will seek to support the employment and skills initiatives, supporting the ambitions of getting those with poor access to the workplace into education or employment through access to reliable public transport. There have been no changes to the Public Service Reform benefits of the project since the Initial Proposal.

The project will support the WMCA's Social Value Policy. This policy provides a consistent and collaborative approach to social value within the West Midlands with the vision to create, deliver and sustain greater community benefits through the use of social value within the region. This will primarily be achieved by creating social value through the objectives of the WMCA Procurement Strategy 2017-2020 and sustaining social value outcomes through alignment and delivery of funding and capacity, with Combined Authority priorities focused on service delivery to communities. These priorities would for instance, include those outlined within the Strategic Economic Plan, such as WMCA Public Service Reform (PSR).

The WMCA's Strategic Economic Plan[27] sets out a specific goal under the SMART "public sector reform" objective of reducing the WMCA's £3.9bn deficit (based on 2015 levels of tax and income) so that it becomes a net contributor to the UK's finances by 2030. The proposed investment along the A34 has the potential to attract both new businesses and home buyers to the area, which will in turn help to increase business rate receipts and council tax receipts, thereby contributing to the goal of eliminating the WMCA's deficit.

The Public Services (Social Value) Act 2012[28] requires all public bodies in England and Wales to consider how the services they commission, procure and deliver might improve the economic, social and environmental well-being of the area.

Under the WMCA Social Value Policy[29], the WMCA has set out its ambitions to make the most of its spending to ensure it meets the goals and aims of the Public Services (Social Value) Act. WMCA's objectives that will achieve the outcomes as set out in the act are: -

- **Growth, Skills and Employment:** We will promote growth and development where we operate and ensure that our communities develop new skills and gain meaningful employment. We will also encourage employers in the region to invest into new jobs and skills for everyone.
- **Promoting Local Businesses:** We recognise the importance that local businesses play within the community in terms of job creation and wealth generation. We also recognise that from 2020 our income is directly linked to their success through their ability to pay business rates. We are therefore committed to ensuring local businesses are not only provided with the skills to compete but are also offered the opportunity to work within our supply chain.
- **Creating Healthier, Stronger Communities:** As our budgets are cut and our services restricted, we recognise that we need to build stronger and deeper relationships with the voluntary sector whilst continuing to engage and empower citizens. We will therefore promote the use of the voluntary and social enterprise sector within our supply chain and help build local knowledge and resilience.
- **Protecting and Improving our Environment**: We will work hard with local businesses and communities to ensure the places where people live are cleaner and greener and we will continue to promote sustainable procurement that protects the long-term future of our planet for our children.
- **Social Innovation:** We recognise that we do not have all of the answers and we should not prescribe new approaches to solving old problems. We will promote innovation amongst our suppliers and look to show case best practice where it works
- **Planning and Development**: Through the implementation of this policy, it is the intention that WMCA will support and enable Constituent and Non-Constituent Authorities where they require assistance in the consideration of social value within the early stages of project planning and development.

As the value of the contracts to be awarded to deliver Sprint will exceed EU procurement thresholds, WMCA Procurement Officers will guide specifications and tender documents to ensure that considerations are made at commissioning stage and that social value criteria are included within the tender process. Businesses bidding for contracts under Sprint will be expected to respond fully to the social value criteria set out in tender documents and will be scored against these criteria.

Section C4: Stakeholder Involvement

Please refer to OBC Qs 4-5 for Stakeholder Involvement.

Stakeholder Involvement: List the Key stakeholders and their Interest areas?

As a project across multiple local authority areas, effective stakeholder engagement and management is critical to successful delivery of this project. The Sprint team has worked across the WMCA and local authority partners to identify all those with an interest in the project and how communications will take place.

Table 1: Stakeholder list

Who	Interest High (H)/ Medium (M)/ Low (L)	Interest Area	Output required	How (methods)
Key Local Authority Officers Birmingham Sandwell Walsall	H	Scheme design, delivery and strategic links	To ensure their support and understanding of scheme implications.	Meeting Ongoing Programme Board
Transport Cabinet Member (TCM) **Birmingham** Waseem Zaffar Cabinet member for Transport and Environment **Sandwell** Jackie Taylor Cabinet member for Sustainable Travel **Walsall** Adrian Andrew Cabinet member for Regeneration	H	Strategic links and impact	To gain approval to proceed to route and engagement and to ensure officer support.	Meeting including information Monthly updates include meetings/calls/emails
Media Through WMCA	M	Publicity opportunities	To ensure understanding of scheme and benefits. To have the right message	Emails 1-2-1s Telephone calls
West Midlands Mayor Andy Street	H	Strategic links	To keep informed as a key influencer for the WMCA	Meeting including information Monthly updates meetings, email, reports, briefing notes
Ward Councillors **Ladywood** Kath Hartley	M/H	Local impacts	To get their support and commitment to the scheme. To ensure they are aware of the	Councillor drop in sessions.

27 https://www.tfwm.org.uk/media/3187/wbhe-d8-making-our-mark-wmca-strategic-economic-plan-2016.pdf

28 http://www.legislation.gov.uk/ukpga/2012/3/enacted

29 https://www.wmca.org.uk/media/1921/social-value-policy.pdf

Sir Albert Bore **Birchfield** Mahmood Hussain **Lozells** Waseem Zaffar **Newtown** Ziaul Islam MBE **Aston** Muhammad Afzal Nagina Kauser **Perry Barr** Jon Hunt Morriam Jan **Great Barr with Yew Tree** Christopher Worsey Steve Melia Gurdesh Kaur Gill **Newton** Keith Allcock Joyce Underhill Richard McVittie **Paddock** Waheed Rasab Gurmeet Sohal Rose Martin **St Matthew's** Farhana Mazhar Abdus Samad Nazir Aftab Nawaz			scheme should they be approached by their constituents.	Follow up meeting for ward councillors or 1-2-1. If there is the opportunity meeting for ward councillors. Quarterly updates during the project – appropriate method including emails, telephone or meetings Ad hoc meetings for areas with specific impacts
Transport Delivery Committee (TDC)	M	Strategic links	To get their support and commitment to the scheme. To help explain benefits of Sprint to fellow councillors. To ensure they are aware of the scheme.	Attend TDC meeting. Quarterly updates during the project – appropriate method including emails, telephone or meetings
MPs **Ladywood** Shabana Mahmood (LAB) **Perry Barr** Khalid Mahmood (LAB)	M	Local impacts	To get their support and commitment to the scheme. To ensure they are aware of the scheme should they be approached by their constituents.	1-2-1 meeting Quarterly updates during the project – appropriate method including emails, telephone or meetings

West Bromwich East Tom Watson (LAB) **Walsall South** Valerie Vaz (LAB)				
Schools/colleges Chilwell Croft Academy Lozells Infants and Junior School Holy Name Catholic Primary School St Margaret's C of E Primary School Mayfield Preparatory School Blue Coat CE Junior School Blue Coat Academy Holte School	M	Impacts and benefits	Taster to inform of Sprint delivery and engagement opportunities.	Taster – email or letter
Emergency Services WM Fire Service WM Ambulance Service WM Police	M	Impacts and benefits	To inform them of our proposals and get their views.	Email/telephone/meetings as required
Businesses affected with a direct change (land take)	H	Impact and compensation	To buy the land and have a positive experience with the owner.	1-2-1 meeting Ongoing communications
Businesses affected with a direct change (e.g. change to parking outside business/loading arrangements etc)	H	Design and impact	To inform them on the proposal to change the highway outside their property and to get their views and have a positive experience with the owner	Letter inviting to business event plus information on how to find out more Business event Ongoing communications – appropriate method including emails, telephone or meetings
Homes affected with a direct change (e.g. change to parking outside home)	H	Design and impact	To inform them on the proposal to change the highway outside their property. To promote the benefits of Sprint and encourage use.	Letter inviting to drop in sessions and information on how to find out more Ongoing communications – appropriate method including emails, telephone or meetings, quarterly newsletter

Utilities Severn Trent Water Western Power Distribution South Staffordshire Water Virgin Media BT Openreach Cadent Gas	M	Requirements and timing	To liaise with them about works/moving of utilities	Email/tel/meetings as required.
Highways England	L	Strategic Route Network	To understand any impact to motorway network	Email/telephone/ meetings as required.
Businesses along the route	M	Benefits and timing	To inform them about the scheme and obtain views. To promote the benefits of Sprint and encourage use.	Leaflet (detailing about Sprint, events and link to website)
Homes along the route	M	Benefits and timing	To inform them about the scheme and obtain views. To promote the benefits of Sprint and encourage use.	Leaflet (detailing about Sprint, events and link to website)
Stakeholders e.g. BIDs, Chambers, LEPs **BIDS** Retail BID: Steve Hewlett Colmore BID: Mike Mounfield **Chambers** Greater Birmingham and Solihull Chambers of Commerce Black Country Chamber of Commerce **LEPs** Greater Birmingham and Solihull LEP Black Country LEP	M	Benefits and timing	To inform them about the scheme and obtain views. To promote the benefits of Sprint.	Email with link to newsletters and website (Website will have details about the routes, benefits, maps, events) Ongoing depending on stakeholders' requirements
Groups along the route e.g. Residents Groups	M	Impact and benefits	To inform them about the scheme, promote the benefits of Sprint, obtain views and encourage use	Email with link to newsletters and website (Website will have details about the routes, benefits, maps, events, questionnaire) Ongoing depending on groups' requirements

General groups e.g. Bus Users UK, cycle and walking groups	M	Impact, benefits, and interaction with cycling	To inform them about the scheme, promote the benefits of Sprint and obtain views	Email with link to newsletters and website (Website will have details about the routes, benefits, maps, events, questionnaire)
Specific needs groups e.g. Visually impaired, disability groups	M	Impact, benefits, and possible changes	To inform them about the scheme, promote the benefits of Sprint and obtain views	Talking News Email with leaflet through regular contact Ongoing depending on groups' requirements Invitation to view Sprint prototype shelter.
Bus Users along the route	H	Benefits and timing	To inform them about the scheme, obtain views, promote the benefits of Sprint and encourage use	At-stop interviews at relevant bus stops Posters at key stops RTI messages along the route
Wider area to the route – where passengers are likely to walk to the route	M	Benefits and timing	To inform them about the scheme and obtain views	Facebook Advert linking to the website
Internal WMCA staff	M	Impact, benefits, and announcements	To inform them about the scheme, obtain views and have ambassadors for the scheme	Lunch and Learn Email Website
Public	M	Benefits and timing	To inform them about the scheme, obtain views, promote the benefits of Sprint and encourage use	Leaflet Email Posters Postcards Door drop Facebook advertising Social media Media releases/interviews Presentations At-stop interviews Events Email lists Information at the travel information centre Partners communications e.g. Birmingham Connected Websites

				RTI messages Adverts on electronic screens Internal updates Questionnaires

A stakeholder matrix below highlights the level of influence exerted by each stakeholder within these groups.

Level of Interest	Level of Influence: HIGH	Level of Influence: MEDIUM	Level of Influence: LOW
HIGH	**KEY PLAYERS** **NEED BUY-IN/ADVOCATES** • Transport Cabinet Member • West Midlands Mayor • Ward Councillors • Transport Delivery Committee • MPs • Partners • Local Authority Officers • Media	**NEED BUY-IN/SHARING OF INFORMATION** • Stakeholders, eg BIDS, HS2 Growth Board, Midlands Connect, Bus Operators • Emergency Services • Bus users along the route	**ENGAGE CLOSELY & ACTIVELY INFLUENCE** • People signed up on marketing list
MEDIUM	**BUILD RELATIONSHIPS** • Businesses affected with a direct change (land take) • Home owners/tenants affected with a direct change (land take) • Home owners/tenants without parking available, affected with a direct change (change to parking on highway)	**ENGAGE CLOSELY & ACTIVELY INFLUENCE/SHARING OF INFORMATION** • General groups, eg Bus Users UK, cycle and walking groups • Specific needs groups, eg visually impaired, disability groups **BUILD RELATIONSHIPS** • Businesses affected with a direct change (change to parking/loading on highway) • Home owners/tenants with parking available, affected with a direct change (change to parking on highway)	
LOW		**BUILD RELATIONSHIPS** • Groups along the route, e.g. resident associations **ENGAGE CLOSELY & ACTIVELY INFLUENCE** • Internal Staff • Car drivers • Businesses along the route • Home owners/tenants living along the route (not affected) • Home owners/tenants living within the area of the route (not affected)	**INFORM** • General Public • Utilities • Schools and Colleges

Stakeholder Involvement: What stakeholder consultation has been undertaken/support received? What stakeholder consultation remains to be undertaken?

The stakeholder and communication strategy has been developed to:

- Help us achieve our main objective to support the delivery of priority Sprint routes before the Commonwealth Games and as part of the HS2 connectivity package
- Engage effectively with our target audience
- Ensure people understand the benefits of Sprint
- Change behaviour and perceptions to encourage people to use Sprint
- Help raise awareness of the wider transport network
- Raise awareness of the Commonwealth Games
- Demonstrate the success of our work

Using the stakeholder map above, key stakeholders have been heavily involved in the development process to date. Local authority officers have supported the optioneering phase and attend the A34 Sprint Project Board. There have been briefing sessions with Cabinet Members from Birmingham, Sandwell and Walsall. Ward Councillors have also been engaged through Council House drop-in sessions. Cabinet members and ward councillors have mainly been supportive of the objectives of the project, whilst ensuring that local issues are supported by delivery. A letter of support from Birmingham City Council has been are provided in **Appendix D**.

A visit to Belfast's 'Glider' Bus Rapid Transit Service was undertaken in July 2018 and attended by numerous key stakeholders: Councillor Waseem Zaffar (BCC Cabinet Member for Transport & Environment), Councillor Chaman Lal (BCC), Phil Edwards (BCC Asst. Director, Transport & Connectivity), Councillor David Hosell (Sandwell MBC Cabinet Member for Highways & Environment and Councillor for Newton Ward), Councillor Shirley Hosell (Sandwell MBC), Talvinder Sandhu (Sandwell MBC Senior Transport Planner), Councillor Adrian Andrew (Walsall

MBC Portfolio Holder for Regeneration), Councillor Rose Martin (Walsall MBC), Councillor Lee Jeavons (Walsall MBC), Councillor Aftab Nawaz (Walsall MBC), Simon Tranter (Walsall MBC Head of Regeneration & Development), Matt Crowton (Walsall MBC Transportation Major Project & Strategy Manager), Derek Lawlor (Solihull MBC UK Central – Delivery Group Manager), and Lynda Waltho (Confederation for Passenger Transport UK Area Director). The trip was used to show the benefits of introducing BRT, travel on an 18m vehicle, and explain some of the challenges that will be faced during delivery. Attendees completed a questionnaire to assess the overall level of senior support:

- 100% of respondents agreed that the visit helped them understand how Sprint will work in the West Midlands
- 100% understand the benefits it will bring to passengers
- 100% found the trip informative
- 91% are supportive of Bus Rapid Transit (1 non-response)
- 82% know enough about BRT to explain the benefits to their peers
- 82% know enough about BRT to explain the benefits to members of the public

Public consultation took place between 22nd August and 5th October 2018. This was advertised via social media channels, letter drops on the route, local authority websites, bus stop posters, and in local media articles. There were also exhibitions in the key local centres on the route: Walsall Town Centre, Scott Arms, and Birmingham City Centre – these were attended by over 600 people. 569 responses were received on the A34 scheme during the consultation, with 73% fully supporting or partially supporting the scheme. 24% did not support the Sprint proposal for the A34 Walsall to Birmingham. The map below shows most responses were from people who lived near the route.

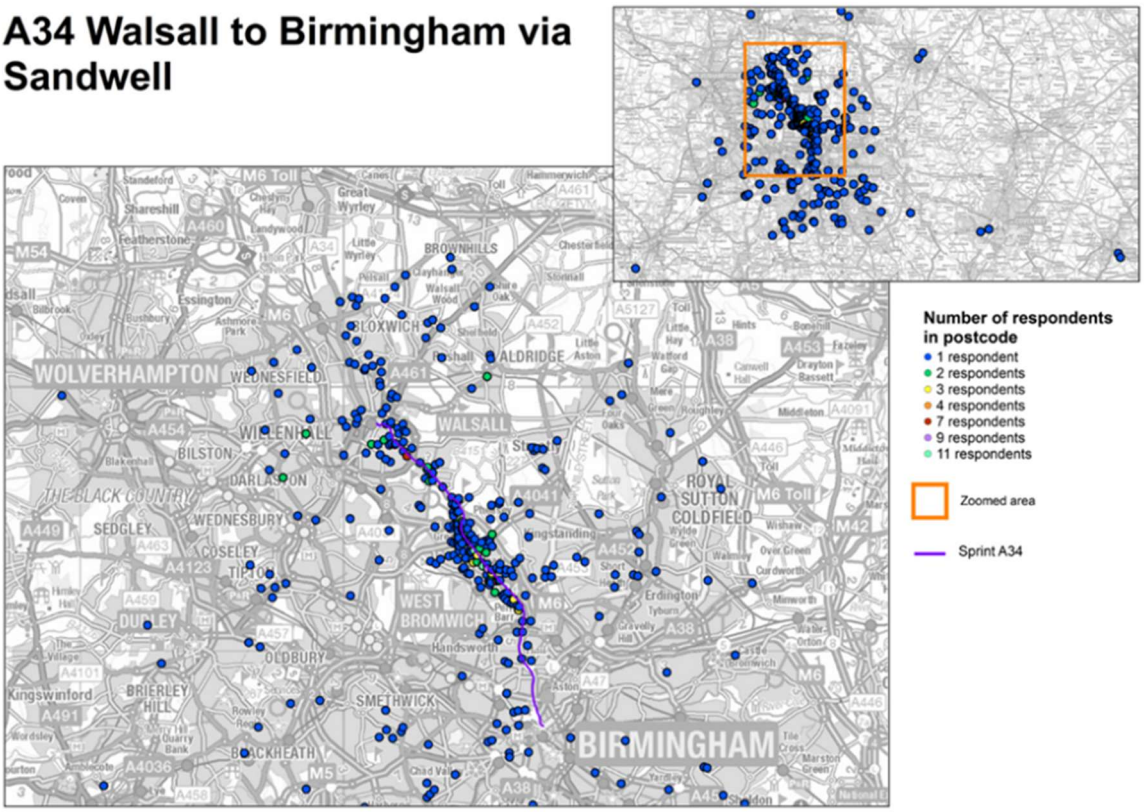

Figure 10: Stakeholder responses from 2018 public consultation

The consultation showed that 81% of responders agreed with the need to provide reliable bus journey times on the route. The top five reasons for agreeing or disagreeing were:

- Route is already well/adequately/excellently served by public transport
- Will improve journey planning/Help me plan where I need to be and at what time
- Will improve bus reliability/Turn up on-time

- Reduce volume of traffic/Traffic at peak-school times/less congestion on A34
- Quicker/faster journey times

The main objections were from residents between Scott Arms and Perry Barr (where the proposal is to remove parking laybys) whose issues related to loss of parking combined with safety and comparison to the current X51 service. A separate petition was received from residents in this area, whose main objections to the scheme relate to these issues.

The full consultation results were published in December 2018. A further update was made by TfWM in March 2019[30], which detailed how TfWM will address stakeholder concerns as part of the detailed design of the scheme, this is set out in Table 1 below.

Table 2: Summary of TfWM response to stakeholder concerns about A34 design

Issue	Resolution
Parking. There were several concerns raised by residents regarding the loss of parking laybys between Perry Barr and Scott Arms.	The scheme design has been amended to retain the majority of parking between Perry Barr and Scott Arm while still providing bus priority. This has been achieved through highway widening into verges and central reserve. Only c10% of parking (c40 spaces) is now removed and this is spread evenly across the route. Over 80% of parking laybys are retained with no restrictions. The remaining parking has restrictions for different parts of the day depending on the location. On this section of the route there are 378 houses (352 with driveways) and 27 businesses (27 with driveways). There is no impact on existing driveway parking.
Safety. Some residents questioned the safety of the scheme as their driveways are on the Sprint route.	A stage 1 Road Safety Audit considered various aspects of the proposals, including junction layouts, visibility, pedestrians, cyclists, emergency vehicles, signage, road markings, access, and lighting. This did not highlight any significant issues. There are similar schemes where a bus lane already exists in front of properties, such as sections of the A34 near Perry Avenue and Beeches Road. Additional examples within the Birmingham include Bordesley Green East and the A38 Bristol Road in Selly Oak.
Environment. Environmental impact of changes to the use of highway space as a result of creating a dedicated BRT lane alongside properties:	The Environmental Impact Assessment was undertaken during the detailed design process and considered the impact of the project across various assessment areas, including noise, greenhouse gases, landscape, townscape, historic environment, biodiversity and water environment. The work also included an assessment of the impact on air quality.

30 https://www.tfwm.org.uk/media/3446/sprint-update-report-a34.pdf

Scott Arms. The existing congestion at Scott Arms was highlighted as a concern.	An extended right turn has now been included at Scott Arms to address capacity and congestion issues. This improves northbound traffic flow through the junction.
Park and Ride. The need for Park and Ride facilities for Sprint users was raised by some respondents.	Park and ride facilities will encourage more people to choose Sprint over car and may also support the reduction of traffic on routes. We have made significant progress with plans to deliver a strategic park and ride site on the A34 Walsall to Birmingham Sprint route. A concept design proposal has been produced and we are now in positive dialogue with landowners in a preferred location. The preferred location is not within Birmingham.
Tower Hill. There were a number of comments regarding the proposals at Tower Hill, with some suggestions for improvements.	The changes to Tower Hill have been removed, an extended right-turn has now been included.
Cycling. There were a number of requests for cycling improvements alongside Sprint, notably for an extension to the Birmingham Cycle Revolution scheme.	The A34 has been identified as a priority cycling corridor within the West Midlands Local Cycling and Walking Infrastructure Plan and we are actively seeking funding to deliver our cycling aspirations on this route. The Sprint scheme has been designed to allow future provision for segregated cycling for large sections of the route.
Aston Six Ways. The consultation proposed a stop at Six Ways Aston. Most respondents were not in favour.	The detailed design for bus priority at Aston Six Ways will continue to be developed, as this will benefit existing bus services. However, the final decision on Sprint's stopping pattern will be taken with the operator and Birmingham City Council prior to the service commencing.
Loading. There were some concerns regarding changes to loading arrangements and timings, particularly between Perry Barr and Scott Arms.	We have reviewed loading arrangements for businesses, and provided off-peak provision.
Commonwealth Games. There were a number of comments during the consultation which questioned the relationship between Sprint and the Commonwealth Games.	The Sprint programme is not being delivered solely for the Commonwealth Games (CWG). It was in fact identified in West Midlands Combined Authority's (WMCA) strategic transport plan, Movement for Growth (2016), which in turn supports the Strategic Economic Plan for the region. The Sprint programme was also included in the Birmingham City Council's transport vision, Birmingham Connected (2014).

	The A34 scheme, as a constituent part of the Sprint programme, is described in the HS2 Connectivity Package, approved by the WMCA Board in February 2017. Following the region's successful bid for the Commonwealth Games, the A34 scheme was prioritised in December 2017 so that it is in place to meet increased transport requirements in the area.
Existing services. There were a number of comments regarding the impact of the proposals on the existing X51 and 51 bus services, with some enquiring as to why Sprint's proposed changes are needed.	The A34 provides an important connection between Birmingham City Centre and Walsall, serving residents and businesses in Great Barr, Perry Barr, and Newtown that currently do not have access to reliable forms of public transport. In addition to this, existing bus services on the route, including the X51 and 51, suffer from journey time variability, while expected population growth in the region is expected to exacerbate the issue. Sprint aims to address this journey time variability while reducing the overall length of time it takes to travel between key areas. Connectivity will thereby be improved along this route, supporting the expected growth in Birmingham City Centre and Perry Barr, while linking local people to new jobs, homes, facilities, and onward connections.
Existing service improvements. There were a number of comments requesting improvements to existing services and other locations.	The proposed highway changes will improve the reliability and speed of other bus services that use the route, including those that serve Perry Beeches, Streetly, Kingstanding, Aldridge, and Pheasey.
Perry Barr flyover. There were a number of comments related to potential changes to the Perry Barr flyover.	Any changes associated with the flyover in Perry Barr are part of the Birmingham City Council highway scheme and are not being delivered by TfWM. However, complementary bus priority forms part of the proposed Birmingham City Council highway scheme.

During detailed design different options were considered to mitigate the loss of parking:

1- Highway widening into verges and central reserve;

2: Reallocate a general traffic lane to provide bus priority.

Following traffic modelling, the preferred option (Option 1) was presented in September 2019 to the public through a series of targeted engagement events to show how feedback from the consultation had been incorporated - these events were attended by around 200 people. The proposed scheme now retains 80% of all parking, with over 90% of parking outside residential properties permanently retained.

The potential for Park and Ride has been progressed through the Transport for West Midlands Park and Ride team, a site has been identified and demand study undertaken. The business case for this scheme will be progressed separately if a strong case can be established.

The phasing decision has allowed additional time to engage with businesses in Ablewell Street. This section of the route has now been agreed at a local level, and there will be an additional information event in November.

Engagement will continue throughout the project with all the stakeholders listed in Q4 to ensure there is awareness of the impact of the scheme and that the benefits continue to be shared. The local highway authorities have submitted the scheme for local approval in October 2019, which will provide permission for WMCA to deliver works on the highway and provides another opportunity to express support of the proposals.

Appendix C contains more information on the stakeholder and communication strategy.

Section C5: Strategic Issues/Risks

Please refer to OBC Qs 6-9 for Strategic Issues/Risks.

What are the Strategic Issues preventing successful delivery of the project? What is being done to mitigate and/or manage these issues?

Table 3: Strategic issues and mitigations on A34 Sprint project

Register ref	Issue	Description	Impact	Owner	Mitigation	Fall-back
Programme Register and 2812	Park and Ride	The opportunity for Park & Ride on the A34 corridor is currently unfunded for further development and/or delivery of sites.	There is political support and a strategic case to provide a location close to the M6 Junction 7.	Head of Park and Ride, TfWM	The Park and Ride Team at Transport for West Midlands have identified a potential site and are undertaking demand analysis to establish the business case.	The demand for Sprint has been modelled without the inclusion of a Park and Ride, so the scheme can operate as a stand-alone intervention. The impact of a Park and Ride would benefit the Sprint corridor if introduced.
2114	Commonwealth Games	The timescale of delivering Sprint for the commonwealth Games has accelerated the schedule.	There is a risk that delivery by 2022 may not be achieved. Leading to damaged TfWM reputation for delivery and poor transport links to	Director of Development and Delivery, TfWM	Early Contractor Involvement has confirmed timescales are realistic. The scheme has been phased to ensure Commonwealth Games critical elements are	If work is not complete to schedule, temporary lane restrictions would be implemented to support Games time movement. This was introduced in London during the

			Alexander Stadium.		delivered first.	2012 Olympics.
Programme register	Cycling	The introduction of Sprint has the potential to impact on cyclists who use the route.	Changes to road layouts, where land availability is limited, could lead to the reduction of bike lanes.	Sprint Technical Manager, TfWM	Sprint design to allow bike users to use bus lanes. Bike lanes to be removed only when absolutely necessary to facilitate scheme. Segregated cycle scheme has been designed to complement Sprint, with funding sources identified.	Introduction of additional shared spaces to be considered where cycle lanes are removed or reduced in length. An independent peer review of the scheme has stated that existing cycle measures are substandard and should be removed.
Programme register	HS2	Enabling construction works for HS2 cause delays in Sprint construction.	Delay to the introduction of Sprint.	Sprint Technical Manager, TfWM	Co-ordination with HS2 construction works to ensure that these do not impact on Sprint timelines.	Accelerated Sprint construction to ensure HS2 construction does not impact on Sprint timelines.

What are the Strategic Risks that could prevent successful delivery of the project? What is being done to mitigate and/or manage these risks?

Table 4: Strategic risks and mitigations on A34 Sprint project

Register ref	Risk	Description	Impact	Proximity	Owner	Mitigation	Fall-back
Programme Register	Operating model	The Enhanced Partnership model and Voluntary Partnership Agreement are yet to be confirmed, and there is	This will lead to a delay in the delivery of the full Sprint service.	March 2020	Director of Customer Experience TfWM	An operator has confirmed they are willing to operate the service and purchase	Bus priority measures are delivered on the route and existing vehicles are utilised. This will reduce some of the

		a risk they will not be agreed.				the vehicles. They have provided a letter of support and negotiations are ongoing. This is being managed by Martin Pyne and will be agreed in March 2020.	journey time reliability and attractiveness of the service, but still deliver significant benefits to the bus network.
Programme Register	Operator agreement	There is risk that infrastructure committed as part the Voluntary Partnership Agreement is not delivered to schedule.	This may result in a compensation event for the operator who is negatively impacted by delays to the scheme.	August 2022	Director of Development and Delivery, TfWM	Delivery timescales included within the Heads of Terms include substantial float for risk. This is being managed by Martin Pyne and will be complete in February 2020.	There is a contingency plan to delay the operation of Sprint until the works are complete
2811	Athletes Village and Perry Barr Highway	Due to the Athletes Village that will be constructed for 2022, and the associated highway changes, there is a risk the delivery of this scheme will delay the delivery	This may result in delays to the Sprint programme, and interim operation arrangements with an impact on journey times.	Dec 2021	Director of Development and Delivery, TfWM	There is a need to collaborate with the Perry Barr contractors to ensure delivery is coordinated and there is a detailed understanding of the construction	There is a contingency plan to delay the operation of Sprint until the works are complete.

		of Sprint highway improvements and that the significant Perry Barr highway measures are not completed prior to 2022.				schedule. Workshops have already taken place across the different teams to ensure this is factored in to the early plans. This action is being managed by Duncan Fry and schedules will be confirmed in March 2020.	
Programme Register	Brexit	Due to the uncertainty, future trade deals, and the economic effect, there is a risk that the impact of Brexit may further affect the price of materials.	This will result in a funding gap for the scheme and may reduce scheme benefits.	Jan 2020	Director of Development and Delivery, TfWM	The operator will purchase the vehicle which was previously the area most likely to be affected by the exchange rate. This is being managed by Martin Pyne and action is ongoing.	Contingency has been included to reflect the possible change in material prices.
2118	Local elections	Many local elections in the region are carried out annually and can result in political changes in all boroughs	There is a risk that this results in change to the priorities and aims of the local councils and	May 2020	Managing Director, TfWM	This risk is being managed through continued engagement with members of all political	The Full Business Case has been submitted prior to the Mayoral election of May 2020, which will

		that the A34 Sprint routes through and to the Mayor of the West Midlands. This includes changes to the overall control of the council in Walsall, and changes to the councillor with control of the transport portfolio in Walsall, Sandwell and Birmingham.	councillors. Consequently, Sprint may receive less local support.			parties, and also through support of the Sprint programme by the WMCA, providing higher levels of confidence and certainty of delivery. This is being overseen by Laura Shoaf and briefings will continue until May 2020.	ensure that the scheme has full approval.
Programme Register	Bus service competition	There are already bus services on the corridor and these will benefit from the Sprint priority measures, which will create competition with the Sprint operation.	This will reduce the benefit of the service and increase journey times due to bus congestion	August 2022	Director of Customer Experience	The operator market sounding exercise helped inform how the Bus Services Act will be used to mitigate bus operator conflict on the route. New network will be agreed in early 2022.	Engagement with the West Midlands Bus Alliance to maximise the benefit of bus priority improvements for the wider network and support arranging the various services along the corridor to serve the various travel markets

2117	Public protest	There is local opposition to the scheme between Perry Barr and Scott Arms, and previously there have been threats of civil disobedience	There may be protests during delivery that disrupt construction.	March 2020	Sprint Delivery Director	The Sprint Engagement Manager will continue to update residents of delivery. Ongoing.	Measures could be delivered on this section of the route at a later date, although this would damage the overall attractiveness of the service.	

Summarise any project dependencies that the project has or if there are other projects/initiatives that are dependent on this delivery. State the impact to the project if these are not met. What is being done to mitigate and/or manage these dependencies?

It is not considered that the A34 Sprint route is dependent on other schemes, although there are clear interdependencies with some of the other major schemes throughout the West Midlands.

The A34 Perry Barr Infrastructure Works Package will see significant modifications to A34 / A453 junction, Birchfield Road roundabout and public realm improvements. This scheme will be delivered by BCC alongside the Athlete's Village. If this scheme is delayed or not progressed, bus priority around Perry Barr will not be enhanced, and this will impact on Sprint journey times and reliability in the area. The changes to Perry Barr (with over 1,000 new houses) will also create additional demand for the service, particularly as a low level of parking provision is included within the proposals. There are fortnightly meetings with BCC and developers to ensure the construction plans are aligned and that appropriate provision is provided. The Perry Barr Housing Infrastructure Fund bid includes allocation for Sprint, so it is viewed as key deliverable of the wider project in the area.

Moor St Queensway will undergo significant changes due to the location of HS2 Curzon Street and the requirement to close Park Street. Therefore, public transport movements through this area will be altered by Birmingham City Council as part of the revised Moor Street Queensway. The Sprint team are working closely with Birmingham City Council to ensure the changes improve reliability for buses and that stops are positioned at optimum locations for passengers to encourage sustainable trips and promote seamless interchange between different modes. The latest proposals include restrictions to general traffic that will improve public transport reliability and access to Sprint stops, these are currently scheduled to be delivered in 2020 in order to support Sprint. These are interim proposals, which will not be affected by any change to the HS2 delivery date.

Alexander Stadium will be expanded as part of the Commonwealth Games. The venue on the A34 Walsall Road, Perry Barr, will be the focal point of the 2022 Commonwealth Games, hosting the Opening and Closing Ceremonies as well as the athletics programme. Artist impressions and plans for the stadium have been released revealing Birmingham City Council's intentions to create a legacy asset for the city. The redeveloped stadium will increase its permanent seating capacity from 12,700 to 18,000 allowing up to 40,000 during the Games through additional temporary seating.

Key features include:

- A new western stand replacing the Main, Knowles and Nelson stands
- New tiered seating to the north and south
- A new 400m 6-lane warm up track and re-laying of a new IAAF Category 1 track (400m 9-lane competition standard track)
- Improved public realm and parking provision, with additional landscaping and signage

- Installation of new stadium lighting and practice throwing field
- A new access road from A453 Aldridge Road (to be used for event/maintenance use only)

The design will facilitate the temporary 'Games overlay' elements and additional infrastructure needed to deliver the 2022 Games. There is currently no proposed changes to access from the A34 itself but there will be interaction with constriction work. TfWM are closely aligned with the Commonwealth Games Capital Programme through the Capital Board and Infrastructure Coordination Group.

The A34 Walsall to Birmingham Sprint route will link to the A45 Birmingham to Birmingham Airport and Solihull Sprint route. These are presented as separate business cases so are not dependent on each other. However, the Sprint network will not be fully realised without cross city operation that reduces the requirement for interchange. The A45 Sprint FBC has been submitted to the WMCA at the same time as the A34 FBC. Each scheme has a good individual business case, so the services can operate separately if required.

Other major public transport schemes are not dependent on nor constrained by the A34 Sprint. Additional benefit realisation of the A34 Sprint scheme, due to increased patronage, may be achieved through a wider network of public transport routes and significant changes in demand in the West Midlands:

- HS2 Phase One (from London to Birmingham);
- HS2 Phase 2a and 2b (from Birmingham to Crewe, Manchester, and Leeds);
- Clean Air Zone measures;
- Metro extensions from Birmingham to Wolverhampton City Centre, Edgbaston, East Birmingham, Birmingham Airport and Brierley Hill; and
- Other Sprint routes from Birmingham to Sutton Coldfield, Halesowen, Longbridge, and Dudley.

If some of the aforementioned projects are not delivered, or are delayed, there may be an impact on additional benefit realisation for the A34 Sprint scheme. However, these dependencies will not prevent the successful completion of the scheme, nor delay the introduction of Sprint services. Members of the Sprint team attend the HS2 Local Delivery Team meetings to ensure regular updates on HS2 proposals, work closely with West Midlands Metro project teams, and share information on other Sprint routes.

Define any constraints that may impact the success of the project, e.g. resource, legal, 3rd party agreement constraints. What is being done to mitigate and/or manage these constraints?

A segregated cycle route has been implemented along the A34, from Birmingham City Centre to Perry Barr, as part of the Birmingham Cycle Revolution. This has constrained some of the options available for the A34 Sprint scheme, as some land within the highway boundary has been utilised for this scheme. However, the option appraisal for the A34 Sprint scheme was undertaken with full knowledge of the cycle lanes being implemented, and therefore the impact has been mitigated and managed from an early stage. As stated in the project description, the Sprint scheme route has also been designed to ensure future upgrades to cycling infrastructure are not precluded.

The scheme is constrained by highway boundaries to minimise land acquisition costs. However, the northbound intervention on the Birmingham Road/Broadway Junction requires land acquisition from two private land owners. However, if there are delays in acquiring this land it will have an impact on the proposal for this section of the route. Negotiation for this land has commenced and an early agreement to secure the land through private treaty is sought. A CPO is being pursued in parallel with land negotiations to ensure the scheme can be delivered to programme – this element is included within the latter section of the route plan.

The vehicle will be procured, ordered, and paid for by the operator to ensure best value for money. The scheme is assumed to be wholly commercial, so no subsidy will be provided. The patronage modelling that has taken place on the scheme, existing demand on the corridor, and interest from operators show the likely commercial nature of the scheme.

The wider Sprint programme has prioritised two routes, including the A34, which will be delivered by 2022, with significant bus priority to be delivered on a third route. This may introduce resource constraints, due to the extent of works required, and the high level of resource required to design and construct the routes. The Sprint Programme Board is overseeing all projects and workstreams and will mitigate and manage any potential

resource issues that are identified as soon as they occur. Early Contractor Involvement started in 2019 to support smooth delivery, this is provided through the MHA Framework noted in section E, Q6.

Section C6: Alignment with a Broader Programme

Please refer to OBC Qs 10 for Programme Alignment

Programme Alignment: Has the planning and delivery of the wider programme suffered setbacks that will affect this project (e.g. delay of other projects on which this project is dependent?) How is this being addressed?

The Sprint projects have been developed as a programme with several work packages relevant to each scheme: ticketing, vehicles, shelters, and operation will be consistent across the entire Sprint network. This has meant planning for the A34 and A45 schemes has considered the impact on the wider programme. Therefore, the proposals consider the aggregate effect of delivery of all schemes together. Governance and delivery of the Sprint Programme is discussed in the Management Case, section G5.

The planning and delivery of the wider programme was delayed in early 2017 while the vision and fit with the Strategic Economic and Transport plans was aligned following the Mayoral election. A prioritisation exercise took place that reviewed each of the Sprint schemes and the associated deliverables, this was endorsed by the Mayoral team and approved by the Sprint Programme Board. The review is complete and the A34 scheme was prioritised for delivery.

The schedule of the A34 Sprint scheme has been aligned with the Birmingham 2022 Commonwealth Games, to ensure the enhanced public transport route is in place for this international event. The delivery of the associated Perry Barr Infrastructure Package is also being considered with regard to the A34 Sprint and programme - this includes the highway interventions at Perry Barr, the railway station upgrade, bus interchange project, and Athletes Village construction. Both programmes are fixed due to the date and profile of the Commonwealth Games and should not adversely affect this project programme. A Sprint representative attends the Perry Barr Village Board meetings, Commonwealth Games Capital Board, and Perry Barr Infrastructure Coordination Group to ensure activities are coordinated and a combined high-level schedule is reviewed at each meeting. The Perry Barr highway scheme received cabinet decision in February 2019, and the construction schedules run concurrently.

As part of the Birmingham 2022 Commonwealth Games, the Alexander Stadium will be upgraded temporarily to a 40,000-capacity stadium with a permanent capacity of 18,000. The changes to the stadium will not permanently affect access from the A34, however construction work will need to be coordinated with Sprint works in the area to avoid conflict.

In July 2019, TfWM senior officers took the decision to phase the introduction of Sprint on the A34 and A45. The Sprint Programme Board was informed, and briefings provided to local authority leaders and cabinet leads in advance. Ian Reid (CWG CEO) was also advised of the change. The decision to phase reduces the risk to construction, allowing a concentration of resource on the elements that are more critical to the Commonwealth Games. The change has also provided more time to explore the detailed design options of the Walsall and Solihull sections to ensure the maximum benefits can be achieved for bus travellers. These sections have now been confirmed and will be delivered be consecutively following the first phase. The bus priority on the key section of the A34 and A45 will still be delivered for the Commonwealth Games.

There is regular dialogue with the Local Authorities to ensure the proposal complement other programmes of work along the route, particularly in Perry Barr, Birmingham City Centre and at UK Central. Local authority representatives attend monthly project boards to provide updates on progress. As highway schemes are signed off by the local cabinet, close liaison has been essential throughout scheme development.

3. Programme Alignment: Please complete the Prioritisation Template [attach as an appendix] – this will be used to evaluate this project against others within the programme and across other programmes

Not applicable to this scheme. Confirmed by Chris Davies 23rd August 2019.

Section D: Economic Case - Options Appraisal

Section D1: Short List of Options considered

4. Please highlight any changes to the Preferred Option, Alternative Option and Reference Case option (see OBC Qs 11-15 for detail).

The options considered is the same as set out in the OBC. There are no changes which would affect the consideration of options subsequent to the OBC submission. Since OBC, further work has taken place to progress the preferred option, which has significantly reduced risk and increased delivery confidence.

Design

Design have been refined following public consultation to address the concerns of residents, specifically regarding loss of parking and congestion at the Scott Arms. This has enhanced the scheme as the majority of parking is now retained and improvements at the Scott Arms will benefit all highway users. Detailed design has also confirmed the deliverability of the proposed interventions.

The Environmental Screening report has also concluded "the proposed development will not result in any significant environmental effects and as such would not constitute an EIA Development."

Modelling

Micro-simulation modelling has been undertaken to present the impact on general traffic of the changes and the benefit to Sprint. This detailed modelling has provided evidence of the minimal impact on general traffic with changes to signal timings expected to optimise traffic flow on the core route. **Appendix I** contains the results of the micro-simulation modelling for the A34 Sprint scheme.

Operating Model

The intention to utilise the Enhanced Partnership powers under the Bus Services Act (2017) have been confirmed by the WMCA Board, which provides the basis for the operation of Sprint. As stated within the OBC, this gives greater control on routes and ties in with wider Network Development Planning. This decision has provided assurance of the future operation and integration with existing services.

Operator

An operator has now confirmed their intention to operate the Sprint route from Walsall to Birmingham and plan complementary services around the corridor to maximise benefits. The operator(s) will also be required to purchase the vehicle which has strengthened the case for change as the vehicle costs and future renewals are no longer included within the scheme

Vehicle

The intention to use zero emission electric vehicles has been confirmed by the Sprint Programme Board and supported by the operator. The vehicle cost will also be borne by the operator. This maintains the benefits of multi-door boarding, single deck vehicles whilst removing the public cost of this. Charging locations have been identified and expected running/charging times.

Contracts

Utilising the Midland Highway Alliance MSF3 framework, has allowed Early Contractor Involvement and detailed design work to progress. The scheme costs have been refined to provide further cost certainty and contractors are prepared for mobilisation. The contractor has also provided a delivery programme which has confirmed the Commonwealth Games timescales can be achieved.

Section D2: Demand and Project Need

Please refer to OBC Qs 16-17 for Demand and Project Need

Summary

The demand case has been established through use of the West Midlands PRISM model in accordance with Government Guidance.

The annualised patronage is around 4.4 million in 2026 for this scheme and, over a 60-year appraisal period the present value of benefits (PVB) is around £101.58 million following the subtraction of highway disbenefit. Details of this is given in **The Economic Assessment Report in Appendix T**.

The PM peak is expected to be the most popular with 940,000 trips per year. The AM peak is expected to carry 816,000 trips per year. Whilst there is a strong tidal flow to trips, around 30% of journeys originate towards Walsall. The time savings for passengers occur throughout the route with savings for off board ticketing and multi-door boarding. The interventions are focused on areas of congestion so also create good savings, the average passenger saves 5 minutes and this is monetised to provide the core PVB.

The passenger numbers do not assume any mode shift as a result of Birmingham's Clean Air Zone Strategy, as this is not modelled within PRISM. Therefore, the number of trips may be under presented in some locations.

The scheme will deliver:

- An increase in public transport patronage evidenced through PRISM. The patronage forecast and modal shift for Sprint will help reduce highway congestion.
- Improved journey times evidenced through impact assessment of interventions.
- Improved reliability evidenced through impact assessment of interventions and PRISM.
- A range of sustainable transport choices available within the corridor will encourage future inclusive growth.
- Other bus services using parts of the route will benefit from additional bus priority (such as 51, 77, 424, 907, 937, and X51) evidenced through PRISM.
- Environmental benefits from the use of low emission vehicles evidenced through Munep2 study of Sprint route and supporting Birmingham City Council's Clean Air Zone Strategy.

Context

Despite operating as an express service, there is significant variability in the existing X51 bus journey times on the route (shown on the charts in Figure 11 below). This is particularly apparent during peak times and shows that delays occur in both directions of the route. This makes the service less attractive to potential users and also creates inefficient use of bus users' time. Furthermore, the X51 service excludes some of the key areas of deprivation on the route and restricts connectivity in these locations.

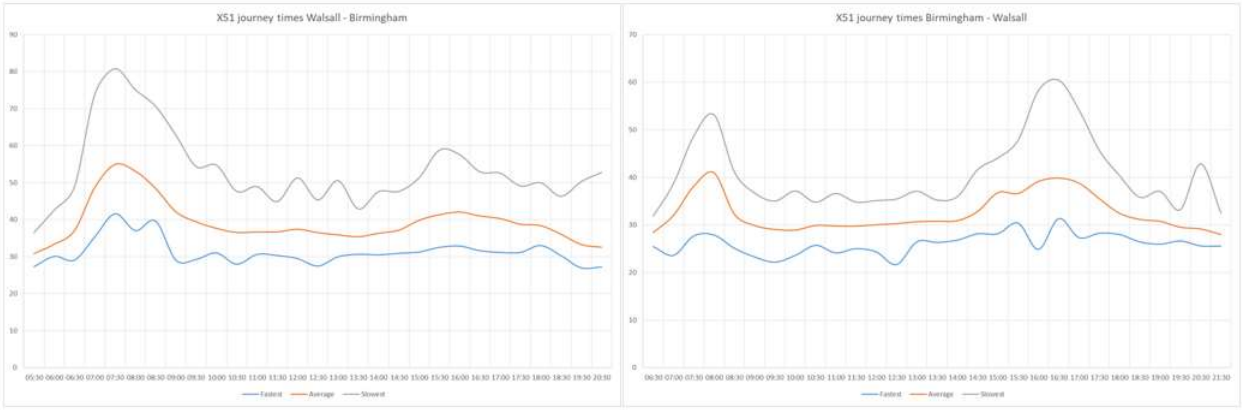

Figure 11: Journey variability of X51 bus route during peak periods

In order to assess the impact of the Sprint scheme on bus patronage, the West Midlands Public Transport model has been run (in 2026 and 2036) to analyse the Sprint route linking Walsall with Birmingham City Centre. Benefits

identified by the assessment are based on forecast passenger journey time savings and assume a 7.5 minutes (equivalent to 8 services per hour) frequency service.

The annualised patronage is around 4.4 million for this scheme, and each user is forecast to obtain around an average 5 minute travel time benefit. This gives a present value of benefits (PVB) of around £101.58 million following the subtraction of highway disbenefit. The PVB also includes benefits to existing bus services that will also be improved through the introduction of new bus priority.

Table 5: A34 SPRINT benefits

	Highways Assessment (£'000)	PT Assessment (£'000)	Combined (£'000)
Greenhouse Gases	407	0	407
Economic Efficiency: Consumer Users (Commuting)	-3,909	32,709	28,800
Economic Efficiency: Consumer Users (Other)	-2,097	63,244	61,147
Economic Efficiency: Business Users and Providers	-621	13,545	12,924
Wider Public Finances (Indirect Taxation Revenues)	-1,038	-661	-1699
Present Value of Benefits (PVB)	-7,258	108,837	101,579

The journey time savings differ significantly depending on the origin and destination of the trip, this is due to the X51 limited stop service that currently operates from Walsall to Birmingham, but does not serve Perry Barr, Aston or Newtown. The current scheme proposals now offer further journey time savings and improved reliability. The enhancements made since the initial model run include the introduction of a bus bypass at St Stephens St, additional southbound bus lane towards Perry Barr, a new north bound bus lane towards Walsall, and the use of Lancaster Circus Underpass for Sprint. These modifications will provide additional travel time benefits to make the service more attractive. By introducing an express service that will serve Perry Barr, Newtown and Lozells the scheme will support inclusive growth by improving the connectivity of these deprived areas to growth in Birmingham City Centre.

Figure 12: Unemployment levels along the A34 Sprint route

These areas also have the highest population density on the route.

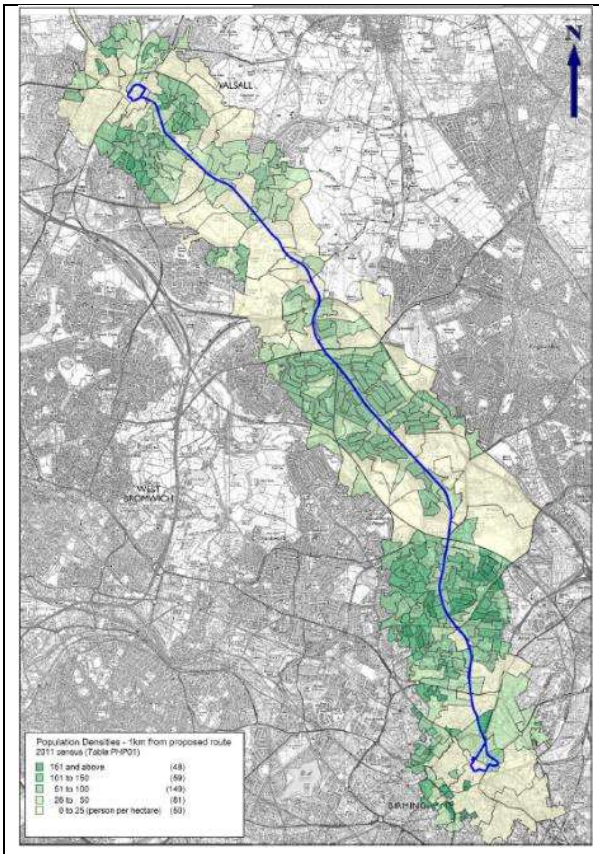

Figure 13: Population densities along the A34 Sprint route

The project links to several employment and skills areas, including: Birmingham City University, Aston University, University of Wolverhampton (Walsall Campus), Aston University Recreation Ground, Alexander Stadium, Aston Regional Investment Site (via interchange), The planned Food Hub, Walsall Town Centre, Birmingham City Centre, and HS2 Curzon Street. There is a high concentration of future jobs estimated in North Birmingham with proximity to the A34 Sprint route, as highlighted by the map below.

PRISM 5 has been used to assess the scheme's impact on general traffic flows. There is limited negative impact of the proposed changes and the consultant states that the "comparison of the delays along each link shows that the reduction in capacity along the Sprint route has not negatively affected the route in a significant manner." This is highlighted by the relatively low highway disbenefits stated above. The PRISM 5 model has calculated that around 1% of new trips will be generated from modal shift away from car.

Patronage data has been calculated using PRISM (Policy Responsive Integrated Transport Model), which is the strategic transport model for the West Midlands. PRISM has been developed based on extensive data collection and provides a means of testing the transport impacts of a range of transport and land use planning policies, strategies, and projects. Representing travel by all modes (private car, good vehicles, public transport, and non-motorised travel) at an individual level, PRISM is capable of quantifying the impact of a range of interventions including rapid corridors, motorway capacity enhancements, and road pricing.

PRISM reflects current patterns of demand based upon a range of input data – from highway geometry, public transport timetables, observed traffic counts, land use information, demographic statistics, to data on travel behaviour captured by interviewing residents in the study area. As PRISM includes all transport modes it is able to model the options available on the network and the choice that is likely to be made based on journey time between origin and destination, frequency, and mode attractiveness. PRISM is of particular relevance when testing strategic issues, land use planning implications, the introduction of rapid transit, or major transport schemes. An assumptions log is maintained for PRISM which tracks the status of various developments in the region and includes a likelihood rating for their progress. The model assumes demand from committed developments only, with sensitivity testing to understand a high growth scenarios. Assumptions have also been included which consider how the bus market will respond to the introduction of a new service, these have been sense checked with existing operators.

The corridor also experiences frequent overcrowding in peak times, with some passengers unable to board existing services midway through the route due to lack of bus capacity. This issue was raised during the public consultation as responders sought assurance that there would be sufficient capacity for them to use the Sprint service. The overall response to the consultation was also positive with 47% fully supporting the Sprint proposals and 26% partially supporting. In particular, 63% of people stated they were very likely or likely to use Sprint, and only 24% stated they were unlikely or very unlikely, showing there is core demand for the service.

Furthermore, research undertaken through YouGov by an operator in the West Midlands shows that the public are 10% more likely to use Sprint than a conventional bus service.

This is supported by the latest research by Transport Focus that interview over 40,000 bus passengers. Their Bus Passenger Survey report shows that 14-32% of bus journeys are negatively affected by congestion, 10-26% are affected by boarding times, and 2-11% are affected by buses waiting too long at stops. These are all issues addressed by the A34 Sprint project in order to make public transport more attractive. The recent introduction of a similar service in Belfast has led to a 17% increase in demand, with over 30,000 extra passenger trips per week (which equates to around 4,000 less car weekday trips), this provides evidence that the type of vehicle and reliability of the service offered by Sprint is popular in other UK cities.

Since the OBC, Birmingham City Council has undertaken a bus use survey with over 6,500 responses. Of those who do not catch the bus, 80% said it was because “it takes too long” and 73% said because “bus services are unreliable.” 63% of these responses were from lapse bus users, which indicates a there is a significant target group who would switch to bus if a quicker and more reliable service was provided.

Section D3: Additionality

Please refer to OBC Qs 18-20 for Additionality

An appropriate and proportionate approach to estimating the potential wider economic benefits (WEBS) resulting from the scheme has been derived using findings from the previous A34 Sprint WEBS assessment undertaken in 2012 and updated using current data.

The WEBS analysis was underpinned by a labour market balance sheet approach. This approach estimated the ability of the scheme to link labour supply to labour demand more effectively and match employees more closely with jobs commensurate to their skills (move to more or less productive jobs). The labour market balance sheet approach was approved by DfT as part of previous iterations of work.

Based on the labour market balance sheet approach, the gross WEBS associated with the A34 scheme are estimated at £3.4 million per annum (2002 prices). This translates to a net WEBS estimate of £1.7 million per annum after consideration of deadweight, displacement, leakage.

This scale of WEBS was associated with an estimated increase in daily bus patronage along the corridor of nearly 1,200. Combining these estimates, the value of WEBS per additional daily passenger amounts to nearly £3,000 per year. This value acts as a benchmark which can be applied to other Sprint corridors, following route-specific adjustments.

Based on this approach, the WEBS PVB associated with the A34 scheme is £34.15m (2010 prices and values) for 60-year appraisal.

This is comparable with similar transport schemes in the region. In total, WEBS provides an additional 37% of benefits for the A34 scheme, the Wednesbury Brierley Hill Metro Extension has an additional 47% for WEBS.

The wider impacts for following categories have not been monetised, therefore the adjusted benefits remain conservative:

- Agglomeration – increase in labour productivity, product input, access to labour markets, knowledge and technology spill overs from improved connectivity
- Output change in imperfectly competitive markets - reduces transport costs allow output and profitability to increase
- Tax revenues arising from labour market impacts

Commercial Case

Section E: Commercial case – External Procurement (if appropriate)

5. Please highlight any changes to the Commercial Case (see OBC Qs 21-28 for detail). Do they impact on any other aspects of deliverability?

The Procurement Strategy has been confirmed since the OBC (see **Appendix K**). The procurement strategy will source goods and services in order to execute the scope of works which is extensive and incudes, but not limited to, the following:

- ECI
- Detailed design
- Construction works
- Utilities
- Shelters
- Passenger Information including Real time information, timetables, maps, way finders
- Electric charging Infrastructure
- Ticketing
- Sprint vehicles
- Sprint operator including market sounding
- Branding / Livery
- Tree surveys
- Environmental /ecological surveys
- Noise surveys
- Vibration surveys
- Drainage surveys
- Traffic surveys
- GPR (Ground Penetrating Radar)
- Street lighting surveys
- Parking surveys

The main changes to the commercial case since OBC have been to the operating model and vehicle propulsion.

The operator will no longer procured, but the WMCA will now enter in to a Voluntary Partnership Agreement with the operator(s) who are able to meet the standards of the service. Legal support is being provided to assist with this. This will also necessitate the operator to purchase the vehicle without additional public funding support. An operator has already indicated their willingness to enter into this partnership subject to FBC approval. The removal of vehicle costs have significantly improved the business case as vehicle renewal and maintenance costs have also been removed from the Present Value of Costs with no additional whole life costs. Electric charging infrastructure will be provided by the scheme and are included in costs. The sourcing arrangements have been updated below.

Table 6: Procurement sourcing arrangements

Title	Description	Timeframe	Procurement route and rationale	Status
Shelters	To supply and install Sprint shelter infrastructure.	March 2016	Supplier appointed through mini-competition using the WMCA Enhanced Shelter Framework (A2012080). Rationale based on existing framework.	Complete
Contractor	To construct Sprint bus priority infrastructure measures.	June 2019 and August 2019	ECI2 and Preferred Contractor appointment through Midlands Highway Alliance MSF3 utilising Model Cost and mini-competition route.	Complete

Ticketing	To provide the ticketing system and machines for use on Sprint services/route.	March 2020	Market sounding undertaken with West Midland Metro Team and TfWM Ticketing Team to ensure chosen route is appropriate. Mini competition to be undertaken through WMCA's Collection Payment and Revenue Protection framework. A PIN has been issued for this.	To be undertaken with operator support
RTI	To provide electronic passenger information at stops	July 2019	Supplier appointed through mini-competition using the WMCA Enhanced Shelter Framework (A2012080). Rationale based on existing framework.	Complete

Support services

Internal WMCA support is being provided from the legal, finance, marketing, procurement, ticketing, and communications teams. The Sprint team has dedicated procurement support to manage the requirements of the project. They have supported the procurement of the construction contractor, and other programme services.

Legal support has been appointed to assist with land negotiations and legal agreements. This service was appointed through the WMCA Framework in 2018.

Support will be provided by Local Authorities for Traffic Regulation Order changes.

These services will be managed through TfWM with support of the Project Board.

Personnel

As stated at OBC, there are no TUPE implications. It has been discussed with the legal team that as the operation of the service will be delivered by a wholly separate commercial operator, and construction work will be carried out by a framework supplier, there are no TUPE personnel implications.

Additional WMCA/TfWM staff will be recruited to support the next stage of delivery and these costs are included within the TfWM Internal Overheads allocation.

Permissions

Permission requirements have previously been discussed with the WMCA legal team. There are no statutory planning consents required to deliver the Sprint scheme. The highway and shelter elements can be delivered under "Permitted development" and this has been clarified by the Local Authority.

Traffic Regulation Orders will need to be submitted for any changes to highway designation and these will follow the standard procedure of Local highway Authorities. These will be submitted following FBC approval.

6. If you've been to procurement, how has this impacted price?

The design refinement, Early Contractor Involvement other work undertaken has resulted in increased costs than anticipated at OBC stage, but this has greatly increased the degree of certainty. Construction costs have increased by £20.7m. The main areas of increase are as a result of changes to the preferred design, an increase in preliminaries, and an elongated delivery timeframe. This will be partly be funded through the reassignment of vehicle costs although the remaining additional funding is now sought through the WMCA.

ECI2 and preferred contractor support has been procured through the model cost mechanism within the MHA framework.

The procurement of shelters, real time information, development costs, and updated utilities costs have all been within the expected price range. Mini-competition was used to keep costs down.

7. If you haven't, why not? What are your plans for doing so?

The final ticketing approach will be agreed with the operator(s) which means it is unsuitable for the ticket machine procurement to be undertaken before final funding approval and the Voluntary Partnership Agreement being confirmed. As a consequence, it is scheduled to take place in March 2020 using mini competition to be undertaken through WMCA's Collection Payment and Revenue Protection framework. A PIN has been issued for this.

The principles of the ticketing approach have been agreed however, which confirms limited interaction with the driver for ticket purchase and validation. The budget includes a reasonable estimate for ticket machine costs, based on similar schemes elsewhere.

Section F: - Financial Analysis of the recommended Option

Section F1: Costs and Cost Assumptions

8. Please highlight any changes to the Costs and Cost Assumptions (see OBC Qs 29-32 for detail).

Below is a summary table which outlines the expected scheme costs, by year, including a comparison to expected out-turn reported at Outline Business Case stage:

	2018/19 and Prior Years £m	2019/20 £m	2020/21 £m	2021/22 £m	2022/23 £m	Total £m	OBC Submission £m	Movement £m
Capital Costs (include scheme development and lifecycle costs)								
Design Activities (Prelim Design/Detailed Design/Construction PM)	0.3	0.9	0.1	0.1	0.1	**1.5**	**1.1**	**(0.4)**
Programme Overheads	0.1	0.5	0.6	0.6	0.2	**2.1**	**1.0**	**(1.2)**
Construction Costs (inc risk allowance)	0.0	0.5	14.7	11.8	0.3	**27.3**	**12.6**	**(14.7)**
Statutory Diversions	-	-	8.4	-	-	**8.4**	**6.0**	**(2.4)**
Road Surfacing	-	-	2.8	-	-	**2.8**	**3.9**	**1.2**
Other Costs	0.1	0.1	0.9	0.5	0.6	**2.1**	**1.7**	**(0.4)**
Electric Vehicle Infrastructure	-	-	0.6	-	-	**0.6**	**-**	**(0.6)**
Vehicle Costs	-	-	-	-	-	**-**	**11.4**	**11.4**
Contingency	-	-	-	-	5.5	**5.5**	**4.4**	**(1.1)**
Total Costs / Funding Requirement	**0.5**	**2.0**	**28.1**	**13.0**	**6.7**	**50.3**	**42.2**	**(8.1)**

As shown above, the forecast scheme out-turn has increased from £42.2m to £50.3m. Key reasons for the movements are as follows:

Construction Costs - £14.7m Increase

There are a number of movements within the £16.2m increase from OBC to FBC estimates. These are:

Construction Activity	OBC Estimate (£m)	FBC Estimate (£m)	Movement (£m)	Comments
Direct Works	6.1	11.3	(5.2)	c.£2.8m increased estimate relating to traffic signs and road markings, only minimal allowance provided within OBC c.£1.1m drainage and service ducts increase £1.3m various other direct cost increases
Shelter Costs	3.9	2.7	1.2	Note the cost estimate at FBC contains shelter foundation costs within the Direct works heading above, therefore a fully direct comparison cannot be drawn
Indirect Costs	nil	0.7	(0.7)	Relates to "Labour & Plant not in rates" amounts, not provided for in OBC estimate.
Preliminaries	1.4	9.0	(7.6)	Significantly higher than expected costs in relation to staffing provision, site accommodation and security, and central office overheads provided for within the FBC estimate. OBC estimate assumed 20% of construction costs

Inflation Allowance	0.7	0.9	(0.2)	
Risk Allowance	n/a	n/a	n/a	The contractor provided a 5% risk allowance within their costings, however this has been removed and replaced with a QCRA assessment allowance included within the overall project contingency cost line
Fee on net cost	nil	2.2	(2.2)	Profit was built into the various cost headings within the OBC estimate
Impact of 2 phase delivery	nil	nil	nil	The ECI contractor has provided costings of £5.9m based on de and re mobilisation, additional staffing costs and base programme prolongation associated with a two phase project approach. This has been removed as it is now envisaged the scheme will again be delivered in a single construction phase.
Early Contractor Involvement	0.5	0.5	nil	
TOTAL	**12.6**	**27.3**	**(14.7)**	

Construction estimates have been provided by the ECI contractor, Morgan Sindall. With the exception of shelter costs and ECI in the table above, Appendix Lii contains a breakdown containing further detail of the constructions estimates. The Morgan Sindall estimate has been reviewed by a commercial quantity surveyor and the TfWM delivery manager for the scheme.

The appendix contains details of the OBC estimate, the ECI contractor estimate, and the amounts included within this FBC submission following a final review between the TfWM Delivery Manager and a commercial quantity surveyor. Where an estimate has been included at a different value to the ECI Contractors submission, notes have been included as to the justification for those adjustments.

Target Cost

A mini competition is due to commence during October 2019, and is estimated to be complete before the end of the calendar year. It is expected that the mini competition will drive a Target Cost for the scheme downwards. Whilst the direct costs provided by the ECI contractor do not appear too excessive upon initial review, it is felt that there is opportunity for the preliminaries estimate to be driven down as part of the mini competition exercise.

Other Non-construction Costs – £6.6m Decrease

Activity	OBC Estimate (£m)	FBC Estimate (£m)	Movement (£m)	Comments
Design	1.1	1.5	(0.4)	Minor increase
Programme Overheads	1.0	2.1	(1.2)	Under estimation of required programme resourcing, as well as increased technical work relating to ticketing and change of vehicle to electric vehicles
Statutory Diversions	6.0	8.4	(2.4)	Extent of utility diversions is expected to be higher than OBC assumed, due to design changes which require road widening into existing central reservation along A34

Road Surfacing	3.9	2.8	1.2	OBC assumption was road surfacing required along the full route, FBC has reduced assumption to 60% of route requiring re-surfacing
Other Costs	1.7	2.1	(0.4)	A £0.8m allowance has been made for "Part 1 Claims" whereby compensation is due if a property value is a reduced as a result of new or altered roads.
Vehicle Purchase	11.4	nil	11.4	Capital cost of vehicles will now be borne by the operator. Offsetting this, the assumption of 50% funding of the vehicles has also been removed from the funding package
Electric Vehicle Infrastructure	nil	0.6	(0.6)	The decision to adopt electric vehicle as opposed to Diesel will result in the need for charging infrastructure to be included within the scheme costs
Contingency	4.4	5.5	(1.1)	Contingency has been included based on a QCRA exercise which resulted in P50 risk of £4.9m and estimating uncertainty of £0.6m
TOTAL	**26.0**	**20.2**	**5.8**	

A more detailed breakdown of the financial estimate can be found in Appendix L.

Contingency

Contingency has been included within the project estimates as follows:

Contingency in Budget:

P50 QCRA	4,900,726
Estimating Uncertainty	646,743
Flat % allocation for contingency	-
Total Contingency	5,547,469
Cost Estimates excluding contingency allowance:	44,795,329
Contingency Overall %	**12%**

As noted above, contingency has been included at P50, plus an allocation for estimating uncertainty. This represents 12% of costs, and makes up 11% of the overall scheme out-turn inclusive of contingency.

Optimism bias has been applied to the economic assessment, but is not relevant to the financial assessment

Commuted Sums / Road Surfacing

Within the scheme estimate, £2.8m is included for road surfacing and £nil included for commuted sums. These are currently high level estimates, and the cost for each is uncertain.

It is assumed commuted sums fees will be offset against the re-surfacing of road along the route that is currently in poor condition, and would require repairs by the local authorities in the future regardless.

Assumptions/Excluded Works

It is considered that a Walsall Park & Ride facility will significantly enhancement the scheme, however a Park & Ride has never been within the scope of the A34 Sprint business case. Therefore, there has been no allowance made within the Full Business Case cost estimates for a Park & Ride.

An annual 2.8% inflation has been assumed on quoted construction costs. Other cost estimates do not include inflation.

Benefit (PVB) and cost (PVC) data for the economic evaluation of the scheme are deflated to a common price base, and costs have been converted from factor prices to market prices, discounted for the 60-year appraisal period. An optimism bias of 3% has also been applied to the Present Value of Costs (PVC).

As with all bus priority schemes, there are sections of the route which could be removed. However, this would reduce the overall benefits of the project and perception of bus rapid transit within the West Midlands. Any reduction in the level of intervention on the route will require the business case to be re-established and for the scheme to be re-assessed against the Sprint Standards.

The changes to costs between OBC and FBC have been noted and lessons learned collected. These lessons will be shared with other TfWM projects in development.

Scheme comparison

When the scheme budget is compared to similar projects at a high level, the cost is similar:

MetroBus, Bristol. 50km at £230m = £4.6m per km
Glider, Belfast. 24.5km at £95m = £3.8m per km
A34 and A45 Sprint, West Midlands. 34.5km at £121.6m = £3.5m per km
WBHE Metro. 11km at £449m = £40.8m per km

Section F2: Funding, Financing and Assumptions

9. Please highlight any changes to the Funding, Financing and Assumptions (see OBC Qs 33-38 for detail).

Funding Source	2018/19 £m	2019/20 £m	2020/21 £m	2021/22 £m	2022/23 £m	Total £m	Total £m	Total £m
Capital Funding								
WMCA Funding - SOC / OBC Approved	0.5	2.0	5.7			**8.2**	**8.2**	-
WMCA Funding - Subject to FBC Approval			19.3	13.0	6.7	**39.0**	**25.2**	**(13.8)**
3rd Party Contributions (MHCLG)			3.1			**3.1**	**3.1**	-
Operator Contribution						-	**5.7**	**5.7**
Total Capital Funding	**0.5**	**2.0**	**28.1**	**13.0**	**6.7**	**50.3**	**42.2**	**(8.1)**

The above table details the funding for the scheme, with a comparison to the assumed funding included within the OBC. The £8.1m increase in cost estimate results in a £13.8m increased funding request from WMCA Investment Programme. This is due to the removal of £5.7m vehicle contribution, as the operator is now funding the capital outlay 100%, as opposed to the previous assumption that the Sprint scheme would purchase the vehicles with a 50% contribution from the operator.

The Sprint Development Team will continue to seek contributions to the scheme including potential Government grant funding to support to charging infrastructure, cycle facilities, and interchange enhancements.

Various other revenue and commercial angles have been explored to finance the project.

- The operator(s) is contributing to the scheme through vehicle purchase and the construction of a new depot facility. Additional contribution from the operator to bus priority would likely require exclusivity, which would not be possible without a lengthy franchising process. The provision of the service by a commercial operator removes any risk to the WMCA for running the service.

- Shelter enhancements in prime locations will increase attractiveness to advertising agencies, and the current supplier will supply electronic advertising panels. This will be beneficial for renegotiation of future advertising contracts, which will generate additional money for the WMCA to support network delivery
- Electric charging costs will be recharged to the operator
- Money taken at ticket machines (cash or card) will be distributed to the operator with a handling fee taken by WMCA to cover operating costs
- The commuted sum to local authorities for highway maintenance has been reduced through agreement with local highway authority to offset these costs against the betterment of the corridor

Section F3: Cashflow

10. Please provide an updated Cashflow (see OBC Q.39 for detail).

The cashflow for the scheme is not expected to be significantly different to the phased cost estimate detailed in Appendix L. The cash flow forecast can be found in the table below:

A34 - FBC Cash Flow Forecast

Expenditure

Capital Costs	2018/19 and Prior Years £m	2019/20 £m	Q1 20/21	Q2 20/21	Q3 20/21	Q4 20/21	2020/21 £m	Q1 21/22	Q2 21/22	Q3 21/22	Q4 21/22	2021/22 £m	Q1 22/23	Q2 22/23	Q3 22/23	Q4 22/23	2022/23 £m	Post 2022/23	Total £m
Design Activities (Prelim Design/Detailed Design/Construction PM)	0.27	0.78	0.12	0.03	0.03	0.03	0.23	0.03	0.03	0.03	0.03	0.12	0.03	0.03	0.03	0.01	0.11		**1.50**
Programme Overheads	0.15	0.52	0.16	0.16	0.16	0.16	0.63	0.16	0.16	0.16	0.16	0.63	0.11	0.11			0.22		**2.14**
Construction Costs (inc risk allowance)	0.01	0.48	2.18	3.28	3.28	3.28	12.01	2.91	2.73	2.73	2.73	11.10	0.73	(0.18)			0.56		**24.17**
Shelters			1.24				1.24	1.24				1.24	0.62				0.62		**3.10**
Statutory Diversions	-	-	6.30			2.10	8.40					-					-		**8.40**
Road Surfacing	-	-	0.46	0.69	0.69	0.69	2.54	0.23				0.23					-		**2.77**
Other Costs	0.06	0.12	0.15	0.23	0.23	0.23	0.84	0.15	0.11	0.11	0.11	0.49	(0.05)	(0.09)			(0.14)	0.75	**2.11**
Electric Vehicle Infrastructure	-	-			0.24	0.24	0.48	0.12				0.12					-		**0.60**
Vehicle Costs	-	-					-					-					-		-
Contingency	-	-	0.55	0.55	0.55	0.55	2.21	0.55	0.55	0.55	0.55	2.21	0.55	0.55			1.11		**5.53**
Total Costs / Funding Requirement	**0.48**	**1.89**	**11.17**	**4.94**	**5.18**	**7.28**	**28.58**	**5.39**	**3.58**	**3.58**	**3.58**	**16.14**	**2.00**	**0.43**	**0.03**	**0.01**	**2.48**	**0.75**	**50.32**
Funding:																			
WMCA Funding - SOC / OBC Approved	0.48	1.89	5.83				5.83					-					-		**8.20**
WMCA Funding - Subject to FBC Approval			2.25	4.94	5.18	7.28	19.65	5.39	3.58	3.58	3.58	16.14	2.00	0.43	0.03	0.01	2.48	0.75	**39.02**
3rd Party Contributions (MHCLG)			3.10				3.10					-					-		**3.10**
Operator Contribution							-					-					-		-
Total Costs / Funding Requirement	**0.48**	**1.89**	**11.17**	**4.94**	**5.18**	**7.28**	**28.58**	**5.39**	**3.58**	**3.58**	**3.58**	**16.14**	**2.00**	**0.43**	**0.03**	**0.01**	**2.48**	**0.75**	**50.32**
NET CASHFLOW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Assumptions:

- Expenditure to end of 19/20 is largely in line with cash payments, with minor amounts for Design Activities expenditure assumed to fall into 2020/21
- Utility diversionary works usually require large upfront payments in order to qualify for an 18% discount on cost. Therefore the cash flow assumes 75% upfront payments, and 25% payment upon completion of works and settlement of accounts
- Shelters - assumed 40% payment upon placement of order, followed by further staged payments of 40% and 20%
- Construction contract - assumed payments made month after invoiced, payment terms tend to be 28 days from application assessment
- Road Surfacing - as per construction
- Other Costs - as per construction plus allowance for Part 1 Claims moved to beyond end of scheme
- Contingency - spend profiled in final year, assumed cash drawdown will be from 20/21 onwards, during construction
- WMCA Funding - assumed income matched with expenditure as incurred, as unlike other Investment Programme schemes, Sprint is controlled by WMCA and therefore does not have to make quarterly grant claims in arrears
- MHCLG Funding - Originally due in 19/20, however have not yet received the grant, have assumed will be received in April 2020

Section F4: Benefits Profiling

11. Please provide an updated profile of the qualitative and quantitative benefits of the project (see OBC Q.41 for detail)

Benefits realisation management is an integral part of the WMCA assurance process, to ensure that all projects and programmes maximise benefits at project inception and that these benefits are realised as the project is developed and implemented. Sprint has been identified as one of TfWM's key priorities. The scheme is designed to support the aims and objectives of the West Midlands Strategic Economic Plan, the West Midlands Strategic Transport Plan, and the HS2 Growth Strategy. The links to various strategic themes is given in Section C.

The scheme will help to support key local and national policies such as lowering carbon levels and supporting inclusive economic growth by provision of high-quality public transport linking key sites with residential areas, improving travel opportunities for employees and visitors.

All outcomes and benefits from this project will be achieved from scheme implementation; monitoring programmes proportional to the scale and type of the scheme will be in place to ensure benefits are realised.

In order to maximise the business case presented for funding, and improve opportunities for funding of future Sprint schemes, we will need to clearly demonstrate all benefits from the project and subsequently ensure that they are all fully realised. Therefore, a full benefits assessment has been undertaken to identify all benefits and dis-benefits, to allow presentation of benefits to stakeholders and ensure plans are in place for benefits realisation once the project is transferred to business as usual.

The benefits of the scheme will be experienced by a range of groups, including existing bus passengers, new passenger, local businesses, local residents and other users of the West Midlands transport network. However, it is recognised that activities are required to ensure that defined benefits are indeed realised. A benefits management approach is therefore being adopted for the scheme.

Benefits management entails active management to optimise benefits and minimise dis-benefits as part of project planning, design, delivery and post-delivery operation. Benefits management will also be used to track delivery of the direct benefits that the scheme is forecast to achieve.

This Benefits Realisation Plan has been prepared to summarise the benefits management approach. This will enable the benefits that are expected to be derived from the scheme to be planned for, tracked and thereby realised. First, the benefits that are expected are identified and the value associated with each as determined through the business case appraisal, are reported. Secondly, the Plan details the key activities that will be undertaken to manage the successful realisation of these benefits; what needs to be done, when and by whom. Key questions that are addressed in this outline Benefits Realisation Plan are therefore:

- What are the benefits and what is their value?
- How will they be realised?
- How will the benefits be monitored and by whom?
- What are the next steps?

The scheme Economic Case has identified the range of anticipated benefits, which will be derived through the project, aligned to the programme and scheme objectives. The table below summarises the benefits, separated into two main groups: user benefits; and non-user benefits.

Table: Summary of benefits – user and non-user benefits

	Benefits
Sprint user benefits	Journey time (consisting of the various elements such as in-vehicle time, platform wait time, access and egress time)
	Enhanced connectivity to strategic centres, in particular Birmingham City Centre and future HS2 station
	Improved public transport information
	Improved reliability for public transport users, compared with conventional bus users
	Higher quality public transport on the corridor
Non-user benefits	Reduced car vehicle kilometres driven
	Reduced congestion
	Reduced noise and air quality issues

	Reduced road traffic accidents

The Economic Case summarised the value of the aforementioned benefits. These highlight that community and other journey time savings represent the vast majority of anticipated benefits, resulting from the faster end-to-end and stop-to-stop journey times afforded by the project.

TfWM has already commenced a benefits management approach for the Sprint programme, through the logic mapping of scheme outcomes as part of the Monitoring and Evaluation Plan (MEP). This has demonstrated the link between the proposed scheme outputs, the short to medium term outcomes and longer term wider economic impacts. This has also outlined the range of outcomes that feed into individual benefits, and the recipients of each.

This Benefits Realisation Plan represents an initial record of the activities to fully implement the approach, which will be updated following funding approval.

The design stages of the scheme have, and will continue to, embed the defined benefits into all activities, to maximise the value associated with each benefit area. For example, the stops will be designed to maximise passenger security, with high quality lighting, passenger information services, and CCTV.

Furthermore, during scheme construction the noise impact of works will be isolated to the areas around the specific sites, and attempts will be made to minimise the intensity through screening and regulated construction hours.

Following scheme implementation, the operation of the Sprint service will be central to the realisation of journey time and reliability benefits, which are central to the overall scheme value for money.

To determine whether the scheme benefits are being realised, the desired outputs and outcomes have been converted into measurable indicators of scheme benefits. These are intrinsically linked to the MEP, and the proposed data collection and analysis proposed at the scheme and programme levels. The table below summarises the outcome metrics associated with each defined scheme benefit. The MEP sets out the method and frequency of data collection for each outcome, so these are not repeated herein.

Those datasets that are collected on a continuous basis, such as traffic counts and public transport passenger satisfaction, will be reviewed on an annual basis as part of the Sprint Programme Board. This will provide direct tracking of individual benefits and identify areas for additional action.

Benefit Group	Benefit	Outcome Metric	Benefit Owner
User Benefits	Journey time improvements	Travel demand PRISM (GJT) Sprint Timetable	WMCA
	Connectivity improvements	Travel demand	WMCA
	Better PT information	Passenger satisfaction	WMCA
	Enhanced journey time reliability	Travel demand PRISM (GJT) Sprint Timetable	WMCA
	Higher quality of service	Passenger satisfaction	WMCA
Non-User Benefits	Reduced car vehicle kilometres driven	Travel demand PRISM	WMCA
	Reduced congestion	Traffic counts SATURN model	WMCA
	Reduced noise and air quality issues	Traffic counts SATURN model	WMCA
	Reduced road traffic accidents	Traffic counts STATS19	WMCA

Baseline surveys will be undertaken to provide a clear “before” position to monitor against.

The evaluation will enable the performance of the system to be continually optimised. Before the monitoring regime is introduced, consideration will be given to the availability of data, the practicality of obtaining it, whether it will properly reflect the indicators and the cost of obtaining it. Monitoring of key data sets e.g. patronage, customer satisfaction, journey speeds should be conducted at least one year after programme completion as a minimum.

Additional benefits have also been identified which are not specifically quantified within the business case: -

Public Health

Benefits

- Increased levels of active travel across the region
- Reduced levels of accidents avoided through increase patronage of public transport
- Reduction in health in-equalities enabled through a better-connected transport system providing access to services

Risks

- Change in NHS policy impacting type and location of service provision
- In-effective communication leading to poor wayfinding
- Changes to local cycling policy

Social Well-Being

Benefits

- Improved access to a range of social facilities at an affordable price point

Risks

- Ability of programme to collect meaningful data to prove benefit
- High dependency on external factors to connect to service to facilities current and future

Environment

Benefits

- Enhancement to the quality of the public realm space along route
- Reduction in greenhouse emissions

Risks

- Dependant on broader package of environmental improvements
- Lack of connectivity to other place making projects across the region
- Changes to policy in other modes of transport making the impact of public transport on reduced emissions less relevant
- Road-space reallocation policy changes

Population Growth and Housing Development

Benefits

- Increase in viability of new housing developments through connectivity to the Sprint route

Risks

- Changes to planning policy impacting development
- Economic changes impacting housing development

Economic growth/economic inclusion

Benefits

- Better connection to key employers across the region

Risks

- Economic changes impacting job availability across the region

Section J provides detail on the monitoring and evaluation arrangements, and the full proposal for assessing progress is within Appendix H (Monitoring and Evaluation Plan).

Section F5: Affordability and Value for Money

12. Please provide evidence of affordability.

As set out in F2, the scheme benefits from £3.1m funding from the Housing Infrastructure Fund. The remaining capital costs have been requested through the WMCA. There is currently a funding gap as the amount requested is more than identified at OBC, this is a risk to the project if the additional funding request is not affordable from the WMCA Investment Programme.. As with all bus priority schemes, there are sections of the route which could be removed. However, this would reduce the overall benefits of the project and perception of bus rapid transit within the West Midlands. Any reduction in the level of intervention on the route will require the business case to be re-established and for the scheme to be re-assessed against the Sprint Standards. The Sprint Development Team will continue to

seek contributions to the scheme including potential Government grant funding to support to charging infrastructure, cycle facilities, and interchange enhancements.

Necessary allowance has been made for risks through the risk assessment and quantification process.

Vehicle costs, in the region of £11.45m, will be procured and funded by the service operator and are excluded from the scheme costs. Based on the existing commercial service and patronage predictions, it is assumed that the operator will run a service that does not require public subsidy. Electric charging costs will also be recharged to the operator.

The WMCA balance sheet is correctly organised and properly accounts for current assets, current liabilities, long-term liabilities and capital. Due diligence has been followed to allow assessment of the financial accounts of contracted partners to ensure sound judgement can be made regarding their ability to deliver work of this nature. The Dunn and Bradstreet Report and Creditsafe Company Report for the contractor are attached as Appendix P - these have been checked by the WMCA finance team.

13. Please provide evidence of Value for Money. For example, please provide a Benefit-Cost ratio or a Cost-Effectiveness indicator, or other means to demonstrate why this project is a good use of public monies

The scheme has a core Benefit Cost Ration of 2.42 and is high value for money. The main change from the OBC is that a commercial operator will now provide the Sprint vehicles without a public sector contribution to capital or renewal costs, as well as the operator retaining all revenue. As previously assumed, there will be changes to existing services where Sprint operates and fares on Sprint will be the same as existing bus. The approach to leave both revenue and bus operating costs (including vehicle renewal costs over the 60 year period) out of the appraisal have resulted in an updated TEE table with estimated revenue (given that both Sprint and existing services are commercial) now allocated to the private sector. This methodology approach has been approved by the DfT for A45 Sprint and adopted for A34 Sprint, whose response stated that "the outlined proposed approach for reporting of bus revenues in the economic case (in the private sector provider row in the TEE table) appears sensible and logically argued"

The reasons for updated approach include:

- The existing operator will lose revenue from the withdrawn services and save operating costs. The Sprint operator will gain revenue and incur operating costs. If shown in the TEE table these would appear in the private sector provider impacts section. The two will at least cancel each other out and the entire impact takes place within the private sector. It is not possible to show impacts between different commercial operators of the same mode within the TEE table.
- The demand assessment work assumes that Sprint will increase patronage and hence revenue. Given that a commercial operator chooses to operate this service, it is reasonable to assume that overall within the bus sector profits will be higher. If that is the case the figure in the private sector impacts would be positive and add to the total scheme benefits. Therefore not including this increase in the scheme benefits, provides a conservative assumption.
- Impacts on passengers from the new service pattern are included in the modelling outputs which feed the TUBA benefits.

The table below outlines the Value for Money of the proposed scheme:

A34 Sprint	**£ m (2010 prices)**
Present Value of Benefits (PVB)	**101.58**
Present Value of Costs (PVC)	**41.9**
Benefit Cost Ratio (BCR)	**2.42**
Value for Money	**High**

Based on the additionality identified in section D3, an adjusted BCR has also been produced:

A34 Sprint	**£ m (2010 prices)**
Present Value of Benefits (PVB)	**101.58**

WEBS Present Value Benefits (WEBS PVB)	**34.15**
Present Value of Costs (PVC)	**41.9**
Adjusted Benefit Cost Ratio (BCR) inc. WEBS (Level 3)	**3.23**
Value for Money	**High**

The PVB is evidenced in Appendix T. The Transport User Benefit Analysis was run using forecast years of 2026 and 2036. Skim matrices for fare and for Perceived Journey Time were used, which include Access time, Egress time, Walk time, Origin Wait Time, Number of transfers, Transfer Wait Time, In-vehicle time bus, In-vehicle time metro, and In-vehicle time rail. This generates a time saving for passengers which is then translated to a monetary value given the value of time for passengers over the standard 60 year appraisal period. The Economic Assessment Report (Appendix T) sets out the benefits in Table 13 as £108,837,000. This includes benefits to all bus services that will benefit from the Sprint bus priority. Dis-benefit to highway users has been calculated through PRISM as £7,258,000 which is shown in Table 7 in the Economic Assessment Report (Appendix T). Therefore, the total PVB is £101,579,000.

The PVC is evidenced in Appendix S. This includes capital costs and ongoing maintenance costs for TfWM infrastructure. It includes the standard discount rate of 3.5%.

Section G: Programme Management Case - Achievability of Project Components

Section G1: Project Plan (Extract of Key Milestones)

14. Please provide an updated list of Key Project Milestones and Gantt Chart (see Appendix E) (see OBC Qs 42-43 for detail).

The key project milestones have been updated following detailed design work and early contractor involvement, to provide more certainty. The contractor has also provided a programme of activities to deliver the proposed infrastructure. Please see **Appendix E** for an updated Gantt Chart.

Table: A34 Sprint Key Milestones

Key Milestone	Progress to date	Delivery Date	Reference
Scheme costed	Robust cost budget provided by ECI2 contractor Complete	September 2019	A34.CE.104
Detailed Design	Detailed design work complete Local authority approval in progress	October 2019	A34.DSN.112
Full Business Case submission	OBC approved	September 2019	A34.AA.111
Full Business Case approval	OBC approved	January 2020	A34.AA.148
Utility Diversions	C4s received Funding approved at OBC stage	March 2020	A34.CON.114
Vehicle order	Sprint Standards produced with vehicle details Heads of Terms agreed with operator Letter of support from operator	February 2020	From vehicle schedule
Contractor Appointed	ECI2 contractor appointed (preferred contractor) ECI2 budget received	February 2020	A34.CE.112
Mobilisation	Tier 1 contractors engaged	February 2020	A34.CON.107
Traffic Regulation Orders	Existing regulations confirmed Detail of changes confirmed	February 2020	A34.LP.125
Beginning of construction	Early notices placed	March 2020	A34.CON.109
Shelter installation begins	Shelter supplier appointed Prototype shelter installed Shelter locations consulted	January 2021	From shelter schedule
Completion of Phase 1 construction	ECI2 complete ECI2 programme produced for section delivery	December 2021	A34.CON.120
Vehicle testing and driver training	Specification produced Market sounding complete	January 2022	From vehicle schedule
Phase 1 scheme complete	Enhanced Partnership discussions	Spring 2022	A34.HO.107

Completion of Phase 2 construction	ECI2 programme produced for section delivery	December 2022	From contractor
Phase 2 scheme launch	Enhanced Partnership discussions Operator letter of support received Charging locations identified and costed	January 2023	From contractor

Section G2: Risk Monitoring and Management

15. Please extract the details of the top 5 Risks from your project Risk Register:

A robust and systematic risk management process to Identify, Analyse, Plan and Manage risk will be applied to the programme. Risks have been identified and will continue to be reviewed, prioritised and, where appropriate, mitigation strategies developed for all significant risks. Effective control measures has been established to ensure risks are maintained at the level acceptable to the business. The project adheres to the West Midlands Combined Authority Programme and Project Risk Management Strategy (**Appendix G**).

The risk registers have been further developed since OBC through a series of meetings with the Sprint Programme team, internal stakeholders, the detailed design team, and local authorities during 2018/19.

The purpose of the meetings was to review risks arising from the Sprint works. Present at these meetings was the delivery manager, the project development manager and representatives of the project board.

The objectives of the meeting were as follows:

- Identify significant risks to the achievement of the project objectives.
- Identify and list all assumptions, exclusions and constraints.
- Identify actions to be undertaken.

All information captured on all the risks that were identified and relate to the programme or project is held on a central Risk Register (**Appendix F**). This provides a record of all risks including their status and history. The risk register also provides the Quantified Risk Assessment, which is the value used for the budgeted risk (Appendix Fii). Responsibility for reviewing the risk register sits with the Project Board. The top five risks are also reported on a monthly basis to the Sprint Programme Board, the current top five risks are listed below.

Table: A34 Sprint – top five risks

Register ref	Description of risk	Impact	Probability	RAG rating	Risk owner	Mitigation
2914	There is a risk S8 / S278 Agreements will not be agreed with Local Highway Authorities	5	2		Angela Hosford	TfWM legal liaising with LHA's to conclude agreement.
2115	There is a risk that utilities diversions take longer to complete than planned	4	4		Duncan Fry	TfWM / contractor stats teams now in place.
2884	There is a risk the operator requests additional/less Sprint stops on the route	2	4		Martin Pyne	Work with operator to understand requirements. Submit change request to Project Board.
2108	There is a risk of materials are unavailable due to competing projects / lead times	4	2		Duncan Fry	Early engagement of supply chain through contractor

2808	There is a risk the delivery programme is not confirmed with LHA's	3	2		Sandeep Shingadia	Working with contractor to confirm delivery programme.	

16. For all other risks not identified in Q. 16 (e.g. force majeure), please provide details of who will own the risk.

The full risk register, contained in **Appendix F**, provides the details on all other risks and the identified owners.

Section G3: Freedom of Information

17. Please indicate whether any information in this proforma is considered exempt from release under Section 41 of the Freedom of Information Act 2000. Please outline why if so.

Appendix F, K and L contains commercially sensitive information under Section 43(2) of the Freedom of Information Act 2000 as the disclosure would, or would be likely to, prejudice the commercial interests of any person (an individual, a company, the public authority itself or any other legal entity).

Information in D2 is provided in confidence and is exempt under Section 40 of the Freedom of Information Act 2000.

Information in F1 is provided in confidence and is exempt under Section 43(2) of the Freedom of Information Act 2000.

Section G4: State Aid Condition

18. Please highlight any State Aid issues that were not raised in the OBC (see OBC Q 46).

As stated in the OBC, the A34 Sprint scheme will deliver general interest public works primarily within the existing highway boundary through the delivery of bus priority infrastructure and junction enhancements for all existing and future bus operators.

This complies with State Aid Regulations – advice taken from WMCA Legal Team.

19. All applicants need to take steps to satisfy themselves that any WMCA funding approved does not amount to unlawful State Aid. Further confirmation to this effect will be requested at the Full Business Case stage. A declaration of compliance with EU State Aid regulations will be required prior to any WMCA funding being provided.

If your project is awarded funds from the WMCA it will be subject to a condition requiring the repayment of any WMCA funding in the event that the European Commission determines that the funding constitutes unlawful State Aid.

Please confirm your acceptance to this condition:	***Yes***	~~*No*~~

Section G5: Project Governance: Key roles & Responsibilities

20. Please set out the Key Roles in governing the Project, with named officers, which will oversee, deliver and close the project.

The Sprint Programme Board is the primary means for TfWM to manage the performance of the Sprint Programme and to coordinate the various activities and oversight mechanisms that control the different elements of the programme. The Sprint Programme Board have accountability to monitor and support the development and delivery of the Sprint programme according to the Business Plan Objectives and funders requirements, in line with the vision, ensuring that Sprint schemes will deliver identified benefits and achieve Sprint Standards through the delivery of the Sprint Programme.

The Sprint Programme Board is accountable to the TfWM Board for monitoring the planning and delivery of the wider programme. The Core Board Membership is:

- Senior Responsible Owner – Director of Development & Delivery - Sandeep Shingadia
- Senior Supplier – Black Country Transport Director - Stuart Everton
- Senior User – Sprint Sponsor - Steve McAleavy
- Head of Sprint – Angela Hosford
- Finance – Project Accountant – Jack Grayson
- Senior LA Officer (BCC) – Phil Edwards
- Senior LA Officer (Solihull) – Perry Wardle
- Senior LA Officer (Black Country) – Stuart Everton
- Senior LA Officer (Coventry) – John Seddon

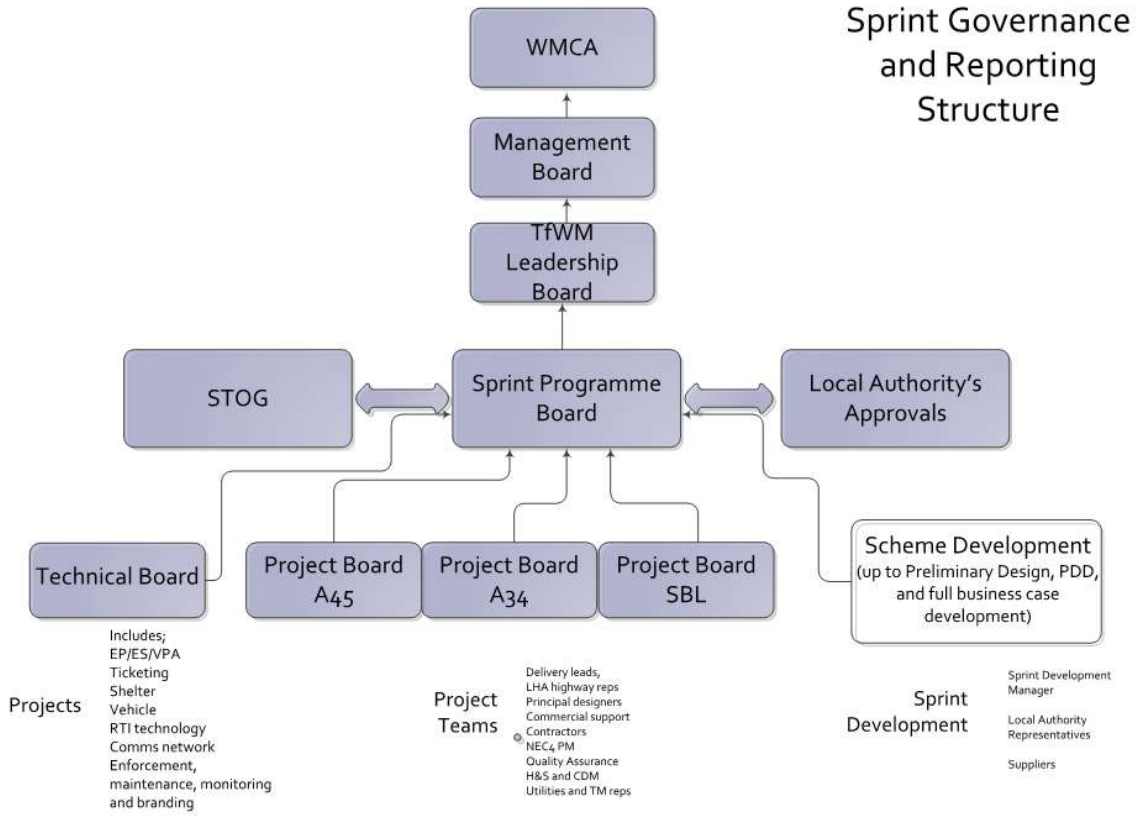

Figure 14: Sprint governance and reporting structure

There are also invitees from across the WMCA, including the following:

- Sprint Development - Tom Skidmore
- Sprint Technical - Martin Pyne
- Sprint Delivery - Jason Griffin
- Sprint Delivery - Duncan Fry
- Sprint Delivery - Owain Lewis
- Sprint Engagement - Bernard Ibekwem
- Sprint Legal - Jat Sekhon
- Sprint Legal - Peter Wilson
- Detailed design - Sarah Guest

A project board is in place with local authority officer representatives to ensure alignment with other local schemes. The A34 Sprint Project Board manages the performance of the project and coordinates the various activities within it – the Terms of Reference have been agreed by the Sprint programme Board.

The Project remit for A34 Sprint has been agreed by the Sprint Programme Board and will be delivered by the A34 Sprint Project Board.

The Project Board will monitor adherence to project schedule and budget and monitor risk, which feed into the Dashboards required for the WMCA assurance monitoring process.

It manages change requests within agreed project tolerances and escalates change requests to the Programme Board where required with appropriate recommendations.

It will review stage gate documentation prior to submission to the Sprint Programme Board, funders and local highway authority review processes, including:

- Business Case & associated documentation;
- Invitation to Tender documentation;
- Birmingham City Council, Walsall MBC and Sandwell MBC cabinet reports for this scheme;
- Consultation documentation and supporting information
- Procurement Strategy.

It will monitor project progress during construction including maintaining oversight of adherence to time, cost and quality constraints.

Core Project Board Membership:

- Executive - Head of Sprint, Sprint Delivery Manager
- Senior User – Head of Network Delivery
- Senior Supplier - Principal Designer's Project Manager
- Project Delivery Team - Relevant Local Authority Infrastructure Delivery Manager(s) & other representatives as appropriate, TfWM Project Manager
- Project Support Office - TfWM Communications Executive
- Reporting Members - Other Officers or suppliers as required.

A technical board is in place to allow oversight of cross programme deliverables. The Sprint Technical Board is the primary means for TfWM to manage the performance of specific, cross cutting workstreams within the Sprint Programme.

The Sprint Technical Board is designed to coordinate and direct the various cross cutting activities within the Sprint Programme.

This board has accountability to monitor and support the development and delivery of the Sprint cross cutting activities considering the Business Plan Objectives and funders requirements, in line with the vision, ensuring that Sprint schemes will deliver identified benefits and achieve Sprint Standards.

Technical Board Membership:

- Head of Sprint
- Technical Programme Manager
- Head of Swift (Ticketing)
- Integrated Information Manager
- Marketing & Strategic Communications Manager
- Head of Network Delivery (Senior User)
- Bus Operator(s) (Senior Supplier)
- Birmingham CC rep
- Sandwell MBC rep
- Solihull MBC rep
- Walsall MBC rep
- Legal

- Finance – Project Accountant

It is the Sprint Programme Board who will retain responsibility for closing the project, including handover and ensuring appropriate monitoring and evaluation plans are in place.

21. Please outline any governance procedures that will support the successful delivery of the project

The governance of this project will utilise the WMCA Assurance Framework and will review and approve the project at key stages to provide surety that they remain on target to deliver agreed objectives to time, budget and that project risk is being managed.

At key stages, projects go through a review by representatives of specialist functions within the organisation as part of the Assurance process.

The key stages are set out in the table below.

Table: Overview of TfWM 'Gateway Review Process'

Gateway	Purpose
Strategic Outline Case	Problem/Opportunity Identification and Strategic fit
Outline Business Case	Options Exploration and Project Definition
Full Business Case	Design and Strategy

. As funding sought for this project is greater than £5m, the case for funding must be assessed through a WebTAG business case approach (through the development and scrutiny of a Strategic Outline Business Case, Outline Business Case and Full Business Case).

In addition to the stage gates outlined below, there is a monthly project assessment dashboard used to examine project progress and identify concerns, this feeding into the Programme Board reporting mechanism. The scheme will also follow the Midland Metro Alliance Stage Gate Assessment Review (SGAR) process and stage gate reviews will be undertaken at the appropriate stages with programme assurance support. An extract of the SGAR framework is shown below:

	Midland Metro Alliance Stagegate Framework						
	Owner Accountability	Accountability					
WMCA Stagegates	-3 to -1	1 to 2	3	4	NEW	5	6
Stage	A Opportunity Definition	B Project Development	C Pre-Construction	D Mobilsation & Construction	E Testing & Commissioning	F Handover into Operation	G Close Out
Activities	Engaged by WMCA on a Professional Services Basis Concept Design	Outline & preliminary design & Approved in Principal's Early Contractor Involvement	Detailed Design Early Contractor Involvement Procurement 3rd Party Approvals	Fabrication Design Site Setup & Mobilisation Construction Works	Testing & Commissioning	O&M Manual H&S File As-Builts	Operational Services Commercial Close-out Lessons Learnt
Reimbursable Cost Requirements	Professional Services	1 *(or for period as requested by the Owner)*	2 *(or for period as requested by the Owner)*	3			
WMCA Deliverables	Owners Brief including associated information as agreed	Owners Brief Outline Business Case	Owners Brief Final Business Case	Owners Brief			

Early Warnings are identified and discussed at weekly management meetings between the Sprint delivery managers, contractor and designer. These are escalated to Project Board and Programme Board where appropriate. Change control is also managed through the Project and Programme Board process.

Local governance

In order to deliver the West Midlands devolution deal, the WMCA through powers devolved to the Mayor of the West Midlands, were appointed to take on responsibility for a devolved and consolidated transport budget, and for a key route network. The order makes provision for identifying specific local authority roads as the Combined Authority roads and to create a statutorily defined West Midlands Key Route Network (KRN).

The KRN provides WMCA with powers to exercise the functions of the constituent councils as local highway authorities specified in Section 8 of the Highways Act 1987. In turn, his allows WMCA to enter into agreements with local highway authorities and strategic highways companies for the doing of certain works.

WMCA will enter into legal agreements with the local authorities under Section 8 and Section 278 of the Highways Act, which will allow WMCA and their contractors to work on the public highway. Section 8 agreements will be made for part of the route on the Key Route Network (KRN) and Section 278 agreements will be needed for locations outside the

KRN. The local authorities will retain the Network Management Duty, including the processing of permanent and temporary TROs.

Section G6: Key Stakeholder engagement strategy

22. Please identify your preferred strategy for engaging key Stakeholders in making your project successful.

TfWM has an ongoing active partnership with Birmingham City Council, Sandwell Council, Walsall Council, and the West Midlands Bus Alliance. It is proposed that this close working relationship would continue to support the development and delivery of A34 Sprint, with TfWM liaising with the Local Authority and WMCA Members, in addition to undertaking ongoing engagement exercises during construction.

Appendix C provides the overarching Sprint Communication and Engagement Strategy which sets the principles of stakeholder engagement. The aim of this Strategy is to outline how we plan to successfully deliver the Sprint programme by achieving the following objectives:

- Gain further key stakeholder support and advocacy for the Sprint scheme to obtain full Cabinet approval.
- Gain interest from stakeholders who have not yet engaged on the Scheme and to further establish robust stakeholder relationships with those who have previously participated.
- Ensure public understanding and acceptance of the design and decision-making processes, addressing any misinformation around the Scheme proposals.
- Illustrate the benefits of the Sprint Bus Rapid Transit Scheme/route in the wider regional context, including its links with all nearby towns and villages and other upcoming schemes (e.g. HS2 and Commonwealth Games Village and the Stadium and the Sutton Coldfield Housing Development scheme).
- Understand stakeholder and local community views on the potential to deliver the Sprint scheme with legacy benefits that other stakeholders can further develop.

The overarching engagement objective is to help achieve majority public and stakeholder support and create a platform for Transport for West Midlands to start construction with maximum support and minimum issues.

To achieve this objective this strategy seeks to maximise advocacy and minimise active opposition to the Sprint project, particularly among key Tier 1 and 2 stakeholders, but also across local communities and road users.

Implementation of our engagement strategy will be based on the following principles:

- Work with our key stakeholders to help them act as public advocates of the Sprint Project by providing platforms for them to show their support;
- Fill any potential local information vacuums with ongoing communication with local communities about the project and provide a route for people to ask the Sprint project team questions and where to find out more;
- Maximise opportunities to ensure broad support for the Scheme from all other stakeholders;
- Proactively engage local communities, the public and road users to increase understanding of and buy into the need for the Bus Rapid Transit Scheme and the benefits in can bring; and encourage advocacy of the project.
- Demonstrate how feedback from all is being taken into consideration and responded to them on time and accurately.
- Control the media narrative through regular updates to encourage positive news coverage in the local, regional and trade media utilising knowledgeable spokesperson to field queries.
- For good news stories use regular newsletter publication to promote the Sprint scheme focusing on environmental mitigation carried out by TfWM and archaeological surveys/findings.

This is supported by the scheme Communication and Engagement Plan which gives specific detail of how the objectives will be achieved.

Section G7: Communications Plan or strategy

23. Please identify your preferred communications strategy for Internal Stakeholders and External Stakeholders for reporting progress and gathering support.

TfWM have prepared a Stakeholder Communication Plan and are co-ordinating all stakeholder communication processes in partnership with the Highway Authorities. TfWM led on detailed consultation in relation to highway changes and will coordinate ongoing engagement with stakeholders. The contractors appointed to design and construct the works will have a key role in carrying out communications regarding the works programme with stakeholders. The Plan defines how communications with stakeholders and the general public will be managed and will set out the interfaces between TfWM, the contractors and the relevant local authority. The communications plan will be a living document and updated during the delivery phase.

TfWM will ensure that the following key matters are addressed:

- All parties who may be affected by the project or have an interest in its implementation will be identified and recorded on a database.
- The stakeholder database will identify the interest that each stakeholder has, what communications they should receive during the course of the project implementation and the timing of such communication.
- The Plan will identify any input required from the stakeholder and the timing of that input and will set out how the project will manage the delivery of that input. Where relevant, the Plan will also describe the outcome desired by the stakeholder and how the project will deliver that outcome.
- The Plan will identify those stakeholders who have been offered undertakings and will describe the management methods to be adopted to ensure that fulfilment of the obligations in the undertakings is monitored effectively.
- The database will be updated to record all communications, whether by telephone, email, and letter or at presentations, with each stakeholder. The Plan will ensure that all those who are, or may be, affected by the works are advised in good time of the progress of the works and how they may be affected. The Plan will set out exactly what information will be sent to each stakeholder at each stage of the project.
- The Plan will ensure that the parties engaged in implementing the projects comprising this Business Case understand their roles so that communications with the public are co-ordinated, consistent and avoid duplication.
- The Plan will ensure good records are kept so that queries from the public are responded to appropriately and are tracked effectively.
- Information centres and websites will be kept up to date with accurate and informative information.
- Information prepared for distribution to stakeholders or the public will be accurate, up to date, informative and attractively produced so that the image of the project is enhanced as far as possible.
- Appropriate and up to date information will be provided to the media in a manner that ensures there is no duplication or misinformation and that the project is promoted positively.

Appendix C contains the communication strategy.

Section G8: Issue Resolution Plan

24. Please extract the top 5 Issues from your project issue log:

Table: A34 Sprint top five project issues

Description of Issue	Impact (H, M, L)	Owner for resolution	Resolution	Resolution Date
Construction Contract is not yet signed	M	Sandeep Shingadia	Contract will be in place following FBC approval	30/1/2020
Residents in Perry Barr are particularly negative about the Sprint proposals and continue to create bad publicity for the scheme	L	Steve McAleavy	Engagement and communication plan in place, and additional engagement activities planned to build	31/12/2021

			support for the scheme	
Electric vehicles need additional infrastructure that was not identified within the OBC	L	Martin Pyne	Charging requirements, locations, equipment, and costs identified. Subject to final agreement with operator and local authority.	30/3/2020
Barton Arms junction design/operation is to be reviewed by BCC	L	Duncan Fry	Review to include Sprint team input and preserve bus priority	30/11/2019
The operator has not yet agreed the Voluntary Partnership Agreement	M	Steve McAleavy	Agreement to be signed following FBC approval	30/1/2020

Appendix F provides the full issue register.

Section G9: Project Team

25. Please describe the experience of the project team and attach the team structure.

The delivery structure below has been agreed by the Sprint Programme Board in order to manage construction work and responsibilities. These individuals will be responsible to the project and programme board for delivery.

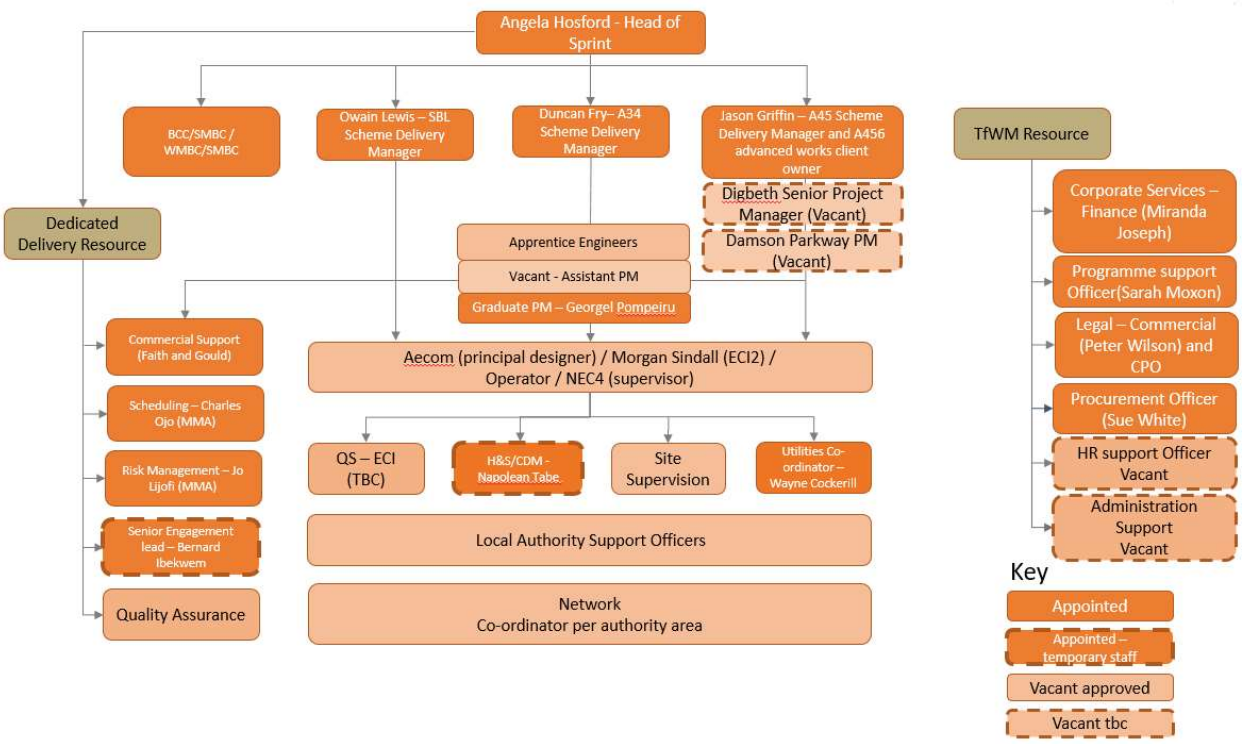

Figure 16: Sprint Delivery Structure

The scheme delivery managers have a mixture of experience which is well suited to a project of this nature. Experience includes Coventry University public realm, Coventry city cycle infrastructure, Birmingham city network integrity, Amey PFI, Longbridge Park and Ride, Centro red route schemes, and nuclear power logistics. This is strengthened by utilities, scheduling and risk support that has experience of working on the Midland Metro Alliance schemes, such as Birmingham City Centre Extension, Centenary Square, Edgbaston, and Wolverhampton City Centre.

A Director of Sprint Delivery has recently been recruited to provide additional expertise and oversight of the scheme's delivery. The Director has significant experience working on the Riyadh Bus Project and will be accountable for ensuring the delivery team are sufficiently resourced and the scheme is delivered to schedule.

The Engagement lead has previously worked as Stakeholder and Community Engagement Manager at Coventry City Council, Stakeholder Engagement Consultant at HS2, and, Roads Programme Engagement & Comms Manager at Highways England. They will also be supported by the contractor's engagement team.

Dedicated scheme Finance support has over 10 years' experience within transport projects, including work on Metro and rail projects. Dedicated scheme Procurement support has previously worked for Birmingham City Council and has considerable experience of working on comparable projects, including repairs, maintenance, gas and capital investment contracts, constructing West Midlands' framework contract, and the highways PFI contract. They also have extensive experience of securing social value within contracts and working with contractors to ensure targets are met.

Legal support is provided across several different project areas and is specific to the area of support eg commercial, operating model, property, and contract agreements.

The programme development structure (below) complements the delivery structure by providing expertise on the operating model, shelters, and ticketing systems. This is supported by individuals across Transport for West Midlands who have several years' experience in these areas including Matt Lewis (ticketing), Pete Bond (operating model), and Sarah Wilson (comms).

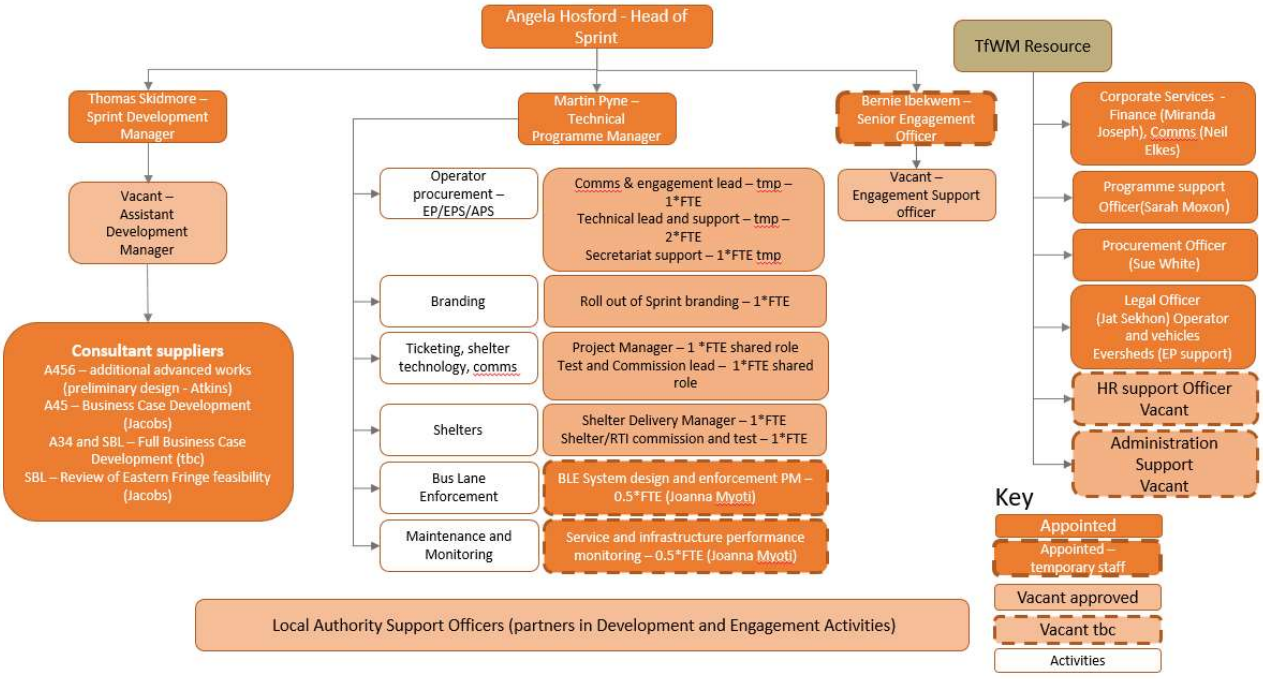

Figure 17: Sprint Programme Development Structure

Recommendation

Section H: Conclusion
26. Please state clearly the desired action that your Business Case supports. Please outline. This Full Business Case has set out the evidence in favour of developing a new rapid transit service between Walsall and Birmingham. The proposals aligns with a number of strategic policies at a local, regional and national level, in particular linking to additional housing at Perry Barr, improving access to jobs in Birmingham, and supporting the delivery of the Commonwealth Games. The project addresses a number of issues in the area, such as poor connectivity, lack of capacity, and social deprivation. The journey time savings and improved reliability will enhance public transport connectivity across the entire corridor and unlocks several opportunities for further growth and links to the future demand associated with HS2, UK Central, and Perry Barr. This is demonstrated by the strong economic case for the scheme. It has been demonstrated that significant progress has been made since the OBC to develop the scheme and provide certainty across a number of areas, particularly in relation to the commercial aspects. This emphasises the management case for the scheme and highlights that TfWM are well set up to deliver the project. This business case is seeking £39m funding from WMCA for scheme delivery, out of the total cost of £50.3m.

Section I: Appendices

Appendix A: Full route descriptions

Appendix B: Full route drawings

Appendix C: Stakeholder and communication strategy

Appendix D: Birmingham City Council Letter of Support

Appendix E: Full Project Plan

Appendix F: Risk and Issues Registers

Appendix G: WMCA programme and Project Risk Management Strategy

Appendix H: Monitoring and Evaluation Plan

Appendix I: Micro-simulation modelling results

Appendix J: Demand - PRISM reports

Appendix K: Procurement Strategy

Appendix L: A34 FBC - Cost Budget

Appendix M: A34 FBC - 30 Yr Life Costing

Appendix O: BCC Housing Capacity Study

Section J: Monitoring and Evaluation Plan

27. Please outline your proposed monitoring and evaluation arrangements to assess whether the project is on track to achieving its objectives and outputs, and to check to what extent the actual costs/benefits are matching the expected costs/benefits.

Programme level

A programme-level M&E plan has been developed, in line with TfWM monitoring and evaluation framework (2018) for all Devolution Deal funded schemes. It is outlined in **Appendix H.** This ensures a consistent evaluation approach is adopted across all Sprint routes, providing a single reference document for all evaluation activities at route and programme levels. It also assists in generating efficiency savings in the design and delivery of evaluation activities, particularly common outcome and impact indicators to feed into annual reports.

Baseline (pre-construction), Year One and Year Five post opening monitoring will still be reported for each route, ensuring there is full transparent accountability for each funding allocation. Each route will also require the ex-post evaluation of outturn performance and economic benefits, compared with ex-ante forecasts.

Logic models

The MEP has been developed to consider programme and route-specific objectives. A programme-level theory of change has been generated, however the complexity of the Sprint programme required the production of three logic maps, to split into various outputs: relating to branding and vehicles; relating to facilitates and fares; and relating to junctions and routes. The figures below outline the three logic maps.

The blue numbered boxes in the logic maps reflect where, on each causal pathway, a stated programme objective is anticipated to be achieved. These maps will be reviews and tested throughout the programme evaluation.

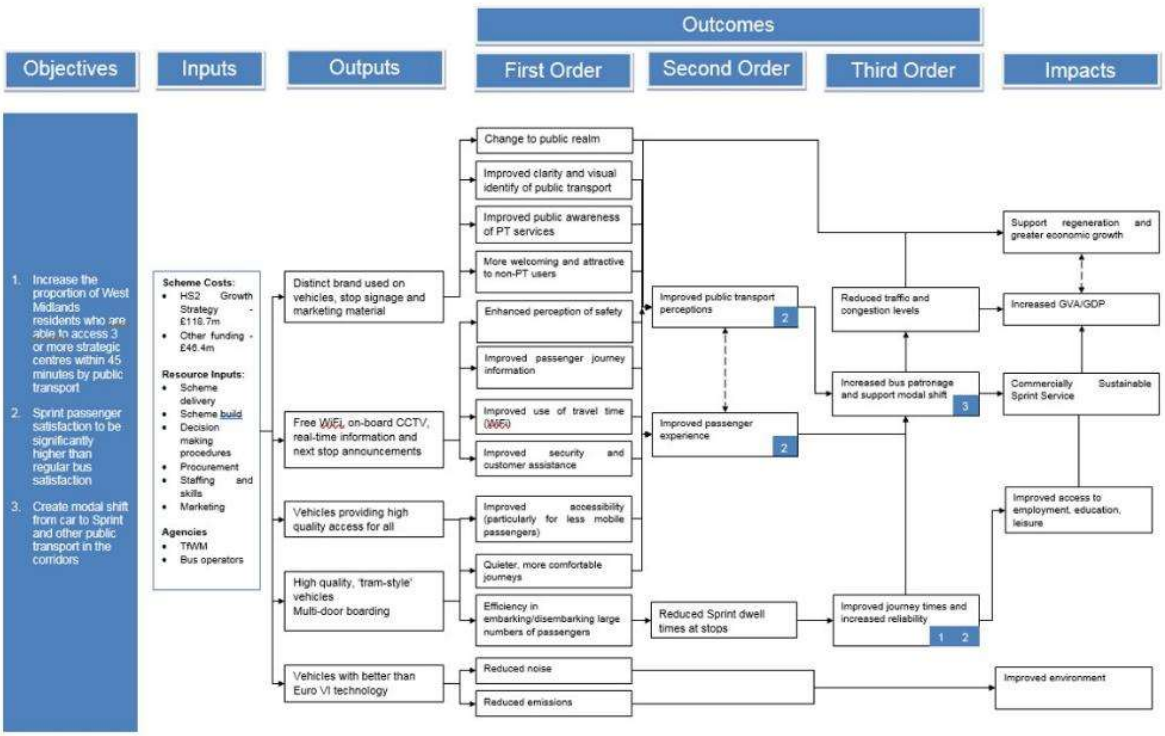

Figure 18: Theory of Change – outputs relating to branding and vehicles

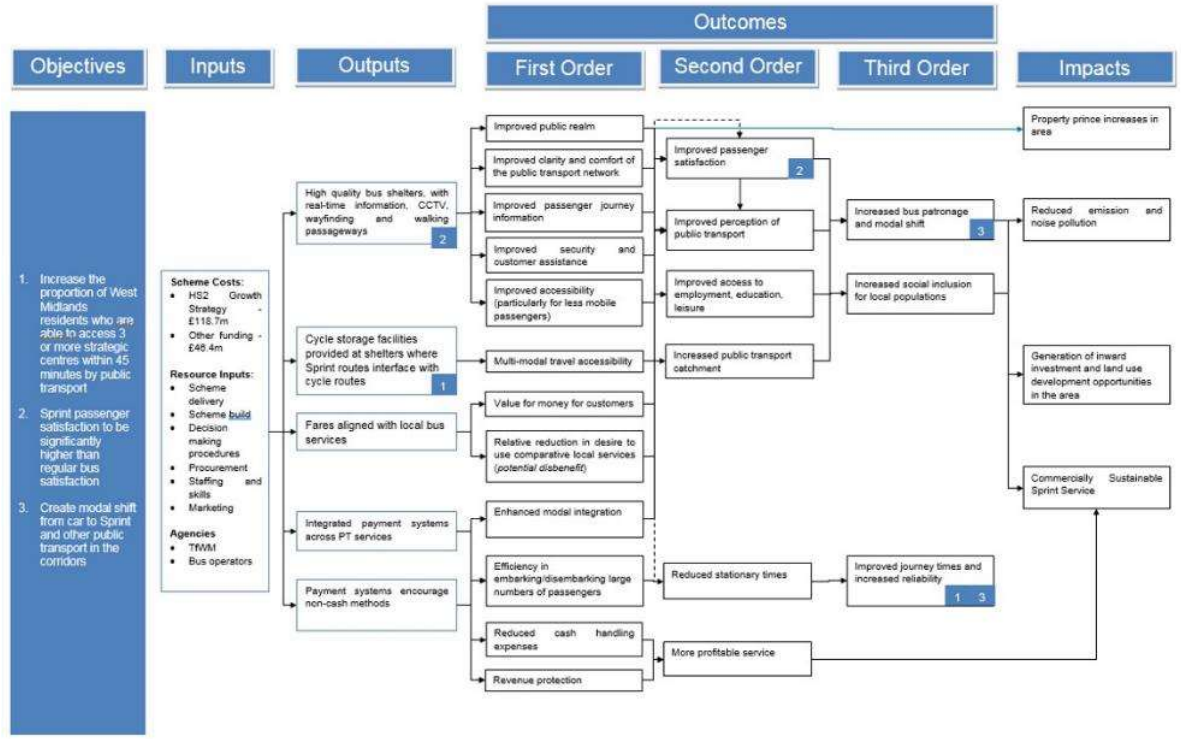

Figure 19: Theory of Change – outputs relating to facilities and fares

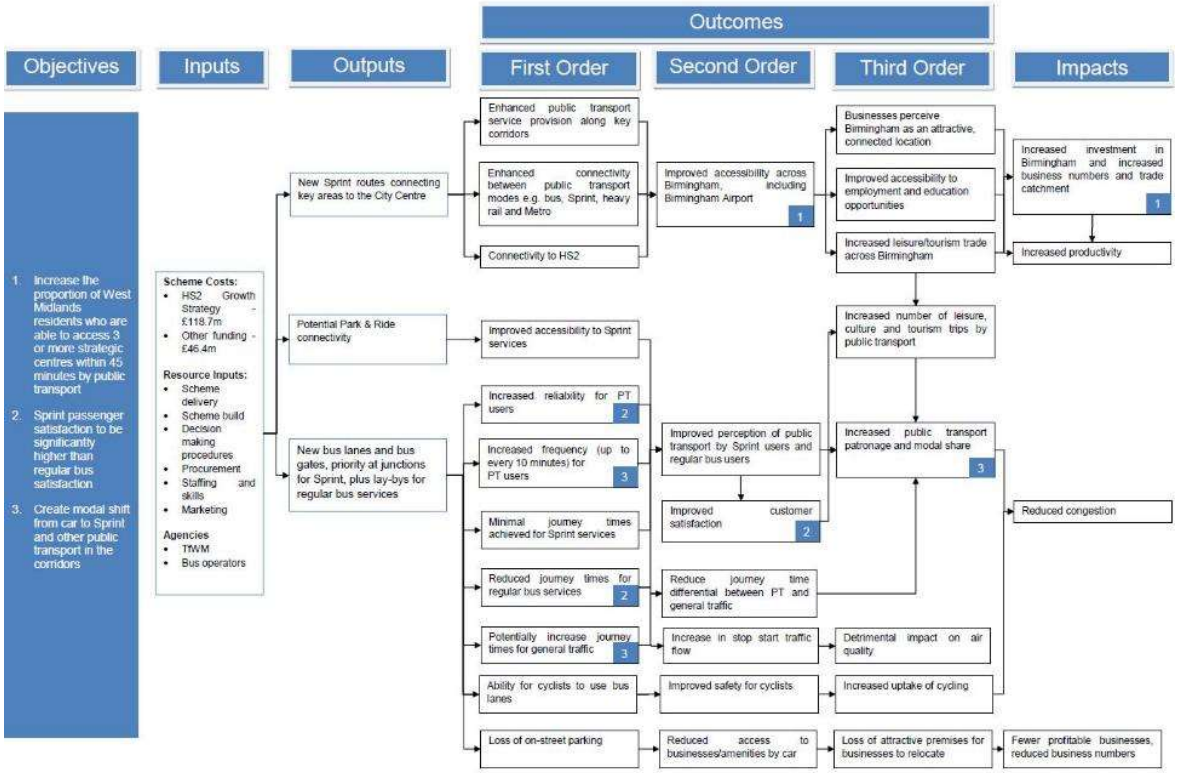

Figure 20: Theory of Change – outputs relating to junctions and routes

Key metrics

Cost

The monitoring of scheme costs will assess the validity and accuracy of cost forecasts and, importantly, changes during the construction and delivery of routes. It will be important that the monitoring uses available key metrics, thereby ensuring that evidence collected is quantifiable and consistent across extensions. This will include the use of Earned Value Management (EVM) to enable project performance to be tracked in terms of costs. Cost Performance Indices (CPIs) will be evaluated on a six-monthly basis to identify progress.

The monitoring of costs will also utilise the PMF and Delivery Dashboards to identify headline progress against baseline forecasts. Where issues arise, the cause of the variance, lessons learnt and the internal and external factors that influence programme and scheme outcomes will be identified. The monitoring will conclude, post construction, with the review and analysis of the full outturn programme and scheme costs, and variance from baseline forecasts disaggregated by each of the scheme elements. Figure 21 outlines the cost metrics identified as part of the M&E plan.

Cost Metrics	Monitoring Metrics
Financial Management	• Cost by scheme element and period • Comparison with forecast costs • Cost of manifest risks • Scheme elements with manifest risks • Scheme elements generating cost savings • Reasons for savings materialising • Scheme elements generating cost overruns • Reasons for overruns materialising • Identification of maintenance and operating costs • Comparison with forecast costs
Resource Management	• Resources applied to programme and scheme implementation • Skills gaps and mitigation plans

Figure 21: Cost metrics

Impact

The monitoring of the short-term and longer-term impacts will be focused around the continuous assessment of key indicators of change. Figure 22 below outlines the key outcomes of Sprint, along with data collection methods to enable measurement of change and outcome metrics.

Outcome	Indicator	Objective	Frequency of Data Collection	Data Collection Method	Existing Dataset (Owner)
			First/Second Order		
Accessibility	Catchment population within 45 minutes of selected locations	1	Can be generated as required	TfWM generate catchments using TRACC software	Yes TfWM
Passenger satisfaction	Percentage of passengers satisfied or very satisfied with Sprint service elements	2	Annual	Transport Focus surveys Existing Bus Passenger Surveys can be used as the basis for design	No TfWM
Stakeholder perceptions	Perception of stakeholders with Sprint service elements	3	Bespoke surveys needed at key milestones	Surveys of stakeholders on Sprint corridors	No TfWM
			Third Order		
Travel demand by mode	Number of passengers using public transport and traffic counts	3	Continuous	Ticket machine data, boarding and alighting counts, traffic counts	Yes TfWM
Mode split	Proportion of trips conducted by non-car modes	1,2	Biennial	LTP Cordon Counts	Yes TfWM
Journey time and variability	AM, Inter and PM peak average, and 95th percentile 'real' journey times	1,2,3	Continuous	TrafficMaster for general traffic Operators/TfWM for PT	Yes TfWM
Service punctuality	Percentage of services arriving within defined parameters (on-time running)	1,2	Continuous	Operators/TfWM	Yes TfWM

Cyclists	Number of bicycles parked at stops	1	Continuous	Cycle Parking Surveys (at stops)	No TfWM
Safety	Accidents	1,2,3	Continuous	STATS19	Yes TfWM
Carbon	CO_2 levels	2	Milestone based e.g. one year after opening	Calculation based on observed traffic flows, PT patronage.	Yes (TfWM)

Figure 22: Key monitoring and evaluation indicators

Section 4.3 of the full M&E plan outlines the data requirements along with frequency of data collection. However, to deliver a robust monitoring and evaluation programme, it is important to identify and understand the changes in a wider context. Therefore, a log of key changes in programme context will be maintained and updated at key milestones within the programme. This will assist in determining whether observed changes in metrics occurred as a result of the programme or are influenced by external factors.

Feedback loops

The full M&E plan sets out the approach that should be used to undertake monitoring and evaluation of the Sprint programme. The approach is in line with national guidance that has been produced to ensure that monitoring and evaluation is proportional. Furthermore, it has been developed to ensure that activities also meet the requirements of the WMCA and of national organisations to adequately assess the most realistic benefits of interventions as well as identifying lessons learnt.

As mentioned above, the use of PMF and delivery dashboards will also enable the identification of headline progress against baseline forecasts, including where lessons learnt are a key element.

It is proposed to prepare Annual Reports from 2019, presenting the ongoing analysis of the core outcome metric data. This approach will both streamline the analysis and reporting process, whilst also making the analysis of trends more consistent and holistic across the programme.

The Annual Reports will be aligned with annual data collection/collation and analysis activities so as to present the latest scheme metrics and trend data, as well as record any changes in programme context as the network develops. Annual reporting will therefore enhance the programme-level monitoring and evaluation of the programme by providing regular and consistent outputs.

In addition to the Annual Reports, specific route-based reporting will also be required at key stages in the programme. Specifically, this relates to the:

- End of Construction Report: these will be required for each route to summarise the findings of the process evaluation and to confirm the details of each delivered route;
- Year One Post Opening Report: building on the Annual Report but including more detailed causal pathway analysis, additional primary data collection, stakeholder discussions and the re-assessment of the scheme's value for money; and
- Five Year Post Opening Report: as per the Year One report to consider the longer-term outcomes and impacts.

M&E plan responsibilities

This programme comes under the remit of the Key Networks Board which is delegated by the WMCA to carry out the Assurance and Monitoring functions, and reports to the WMCA on this assurance activity, programme progress, risks and issues. As representatives for their business area's interests, Key Networks Board members will provide decision making and agreement of recommendations to the WMCA where decisions are above the Board's delegated authority. This will include acceptance of projects into funded programmes of works, tolerance setting, and exception decisions on projects, process developments, review and prioritisation of the project pipeline and future programmes of works.

In addition, there is a programme review group which is a monthly project assessment tool used to examine project progress and provide support and guidance to projects, this feeding into the Programme Board reporting mechanism.

Declaration

To be completed by the Business Case Applicant:

I hereby confirm that the information provided in this form is complete and, to the best of my knowledge, accurate.

I acknowledge that the West Midlands Combined Authority may seek to verify the information set forth herein, and agree to provide further information where it is available.

I acknowledge that any funding agreement reached with the WMCA is provisional until approved by the West Midlands Combined Authority Board and confirmed in writing.

Signed .....

Date .....

Name .....

Position .....

Organisation/Company .....

Certificate of Approval

To be completed by WMCA staff:

I have read and understood the information provided by the applicant in this **Initial Proposal/Outline Business Case/Full Business Case** and confirm that the application has been evaluated in accordance with the West Midlands Combined Authority Assurance Framework and Project Lifecycle.

Appraisal Panel Decision: **Approve / Reject** Signed..... Date ..... Name..... Position.....	**Investment Advisory Group** Decision: **Approve / Reject** Signed..... Date ..... Name..... Position.....
Management Board Decision: **Approve / Reject** Signed..... Date ..... Name..... Position.....	**Board** Decision: **Approve / Reject** Signed..... Date ..... Name..... Position.....