GM GROWTH DEAL MAJOR SCHEMES APPLICATION FOR FULL APPROVAL	
Scheme Name	Salford Bolton Network Improvements – Bolton Delivery Package 4
Local Authority	Transport for Greater Manchester

SHIFT STATEMENT

Purpose of this Report

This Shift Statement has been produced to support a Full Approval Business Case submission for Bolton Delivery Package 4 (Farnworth) which will be delivered as part of the Salford Bolton Network Improvements (SBNI) Programme.

Overview

The SBNI programme comprises 11 Delivery Packages (6 in Bolton and 5 in Salford) which collectively represent a series of multi-modal local transport infrastructure interventions to connect communities, make the network more efficient and reduce unpredictable delays.

The programme received Conditional Approval in February 2016. Since this date, the following Full Approval awards have been made across the Programme:

Delivery Package	Full Approval Award Date	Planned Completion
Bolton Delivery Package 3: Longcauseway	June 2016	July 2016
Bolton Delivery Package 1: Raikes Lane junction improvements	August 2016	December 2016
Bolton Delivery Package 7: Bolton Bus Stop Upgrades	August 2016	February 2018
Bolton Delivery Package 2: Loxham Street Pinch Point	December 2016	April 2018
Salford Delivery Package 1: Walkden/Pendleton	March 2017	November 2017

This submission focuses on Bolton Delivery Package 4 (Farnworth) which comprises two interventions within Farnworth town centre:

- Redevelopment of Farnworth Bus Station; and
- Reconfiguration of the King Street and Market Street junction and urban realm improvements.

Changes at Project Level

Since Conditional Approval changes for this Delivery Package include: alterations to the road markings and kerblines; a reduction in the number of bus stops and shelters being delivered as part of the scheme; a reduction in the extent of statutory undertaker diversions required; and the removal of the requirement to acquire third party land as part of the scheme. These changes are not expected to have a negative impact on the outputs, objectives or benefits of the scheme.

Changes at Programme Level

No changes at programme level.

Strategic Case

As documented in the Strategic Case presented in the Conditional Approval submission, the vitality of the district centres within the SBNI area act as a constraint to the overall economic vitality of the SBNI area. In particular, the poor quality of the public realm and pedestrian links in these centres, as well as the fragmented and low-quality bus stop and interchange arrangements, impact on their economic performance. Supporting the economic vitality of Farnworth, together with the other district centres within the SBNI area, has therefore been identified as a key objective of the SBNI programme and is a strategic priority for Bolton Council.

To enhance the economic vitality of Farnworth town centre, Bolton Council has produced a masterplan to support the regeneration of the town centre. This masterplan was formerly endorsed by the Council in February 2014.

Through the masterplan the Council is seeking to secure the redevelopment of a site in the centre of Farnworth, which incorporates Farnworth Precinct, the outdoor market (recently demolished), the bus station and the surrounding public realm and road network. The Council considers that the redevelopment of this site will have a transformational impact on the area and considers it to be of strategic importance for the town centre.

The redevelopment of the bus station is therefore essential for enabling wider development to take place whilst ensuring the retention of a functional bus station within the town centre, which can meet both the Council's vision for regeneration as well as passengers' expectations of a modern, safe, secure, attractive and operationally future-proof bus station.

As such, the redevelopment of the bus station forms a key component of Bolton Council's Masterplan vision for achieving a revitalised and regenerated Farnworth town centre and will make a key contribution to the SBNI objective of improving the economic vitality of the district centre.

The Farnworth town centre scheme will also support the masterplan aspirations to improve transport corridors, pedestrian routes and pedestrian permeability in and around the town centre.

Economic Case

Amendments to the scheme design and alterations to scheme costs have resulted in the costs for Delivery Package 4 decreasing from the Conditional Approval budget for the scheme. A revised socio-economic appraisal has since been undertaken for Delivery Package 4. The outcomes of this appraisal are detailed below.

Appraisal Background

During the Conditional Approval Gateway review for the SBNI programme and the Full Approval Gateway review for the Bolton DP3 Longcauseway junction improvements scheme, concerns were raised over the use of local junction modelling to appraise the scheme. The SBNI programme was appraised using local junction modelling due to programme timescales and, specifically, the considerable programme delay presented by validating the network-wide SATURN model. It was identified in the Conditional Approval Gateway review that this approach to appraising the programme has limitations with respect to understanding the re-routing impacts of the SBNI programme across the wider network. For this reason a high level comparison was undertaken using a cordoned SATURN model around the Bolton area. No further validation of the existing SATURN model was undertaken due to the timescale constraints. The results of the cordoned SATURN model comparison exercise successfully validated the assumptions made in the local junction modelling for the SBNI programme. As the works within Delivery Package 4 comprise the redevelopment of an existing bus station and a minor junction upgrade, the SATURN modelling has not been revisited for this submission.

Bolton Delivery Package 4 Appraisal Update

Delivery Package 4 is designed to:

- Redevelop the existing Farnworth Bus Station within a smaller operational footprint whilst enhancing the facility through the installation of CCTV, provision of new shelters and a refresh of the carriageway and surrounding footways.

- Reconfigure the King Street/Market Street junction including the reconfiguration of kerb lines and traffic islands, improvements to crossing points, implementation of super stops and urban realm improvements.

The changes to the Conditional Approval design for the Farnworth Bus Station scheme can be summarised as:

- The design option for the redevelopment of Farnworth Bus Station as presented at Conditional Approval for the SBNI programme was based on retaining a drive in, drive out (DIDO) arrangement that retained the current direction of circulation within the bus station and which maintained the existing shared access arrangements with an adjacent service yard. The design comprised of two bus stop islands, that would each accommodate a single bus stop; one within the adopted highway and the other within the main bus station. Two further bus stops were to be provided within the main circulation area and an additional two stops on King Street, to the west of the facility.

- Further development of the design identified that this option posed a number of operational issues, such as increasing the risk of pedestrian/vehicle conflict by providing a greater number of zebra-style uncontrolled crossings within a relatively small area and also concerns over the safety of bus movements exiting the facility onto the highway. Bolton Council's Highways and Engineering Division has since progressed this design through a series of iterations to produce a design which overcame many of the operational issues associated with the Conditional Approval design. This design has been subject to a detailed vehicle tracking exercise carried out by Bolton Council's Highway & Engineering Division and validated by TfGM's Traffic Management Team.

- The outline design proposed a second bus stop island within the off-highway bus circulation area with zebra-style crossings connecting this island to the main pedestrian circulation area to the south and the bus stop island adjacent to King Street to the north. This second bus stop island has been removed from the design to eliminate the need to introduce additional crossing points which have the potential to create additional conflict zones between pedestrian and bus movements within the bus circulation area and also to improve the operation of the facility by making it easier for buses to pull into and out of the stops within the station.

- At outline design stage, it was proposed to retain the zebra-style markings across the entrance and exit to the bus station. Following a design risk assessment and the proposed extension of the adopted highway, these crossings will be constructed as standard highway uncontrolled crossings. This change, particularly at the entrance crossing, removes the perception that pedestrians have the right of way over vehicles across an area where there are vehicle movements to/from the service yard as well as near 180° bus turning manoeuvres from King Street. These amendments to the crossing arrangements have been presented to TfGM's Infrastructure Safety Review Committee who raised no fundamental objections to proceeding with the scheme as designed, subject to a number of actions all of which have since been closed.

- The number of on-highway bus stops proposed to the west of the facility has been reduced from two to one. This is primarily due to reasons of road and pedestrian safety, particularly visibility splays for buses exiting the bus station and vehicles wishing to enter and exit the adjacent side roads, and reflect the recommendations of the initial Road Safety Audit undertaken for the scheme. It was also considered that the bus stop provision would have been excessive given the number of departures per hour from the bus station.

<u>Farnworth Town Centre</u>

The proposals for the reconfiguration of the King Street and Market Street junction and associated urban realm improvements have also been subject to a number of amendments since Conditional Approval. These changes to the Conditional Approval design in relation to the Farnworth town centre scheme can be summarised as follows:

- A proposed eastbound bus stop on King Street to the north of the bus station and a zebra crossing adjacent to the bus station exit have been omitted from the scheme. These elements were removed principally due to concerns about existing pedestrian safety due to the potential conflict between pedestrians seeking to cross King Street between buses parked opposite one another. The proposed zebra crossing would have also failed to meet the Traffic Signs Regulations and General Directions 2016 design standards and the kerb line build out required to implement this would have resulted in buses overrunning into the oncoming traffic lane when turning left out of the bus station.

- The proposed re-alignment of the access road to/from the indoor market has been removed from the design as this element of the scheme required the Council to purchase third party land, the costs of which were estimated to be prohibitive to the delivery of the scheme. The existing layout will therefore remain the same with kerb line amendments limited to improving the turning manoeuvre into the access road and amendments required as part of the new King Street/Market Street junction layout to increase footway widths and facilitate the proposed lane re-allocations.

- The Conditional Approval design proposed a new signalised crossing across the northern arm of the King Street / Market Street junction. This was based on retaining two separate lanes from King Street, albeit operating under two separate signal stages to allow for the additional pedestrian phase across the northern arm. This approach would however have negatively impacted the operating capacity of the junction. The design has therefore been amended to retain a single signal stage out of King Street for both left- and right-turning manoeuvres via a single lane of traffic, which still achieves pedestrian benefits across the junction and the efficient movement of vehicles.

- The number of lanes approaching the junction from King Street has been reduced from two to one in order to provide a right turn pocket for vehicles entering the service yard and buses entering the bus station. This amendment will improve the access arrangements at the entrance to the bus station.

- The proposed reversal of the flow of traffic on Darley Street and Peel Street, which would have required the banning of the left turn manoeuvre from Peel Street to Market Street southbound, has been removed from the scheme. Any vehicles not adhering to this ban would be in conflict with pedestrians using the crossing on the southbound arm. The reversal would have also introduced potential vehicle conflicts with right-turning vehicles competing to make their turning manoeuvres in the middle of the junction. Similarly, with a single lane of traffic heading north, vehicles waiting to turn right into Darley Street would block straight-ahead traffic.

- The Conditional Approval design proposed to rationalise bus stops along Market Street into double stops, referred to as 'super stops', in both the northbound and southbound direction. However, whilst these have been retained, the super stop in the southbound direction will only have one shelter rather than two as proposed at Conditional Approval due to concerns about the impact of this second shelter on the sight lines for vehicles emerging from Church Street on to Market Street. The changes to both the Farnworth Bus Station and Farnworth town centre schemes listed above have not had a material impact on the scope of Delivery Package 4 and the Delivery Package is expected to deliver benefits in line with those forecast at Conditional Approval.

- At Conditional Approval a combined economic appraisal of the Farnworth Bus Station (Delivery Package 4a) and Farnworth town centre (Delivery Package 4b) schemes was undertaken. This was undertaken as a combined appraisal due to the close proximity of the interventions and the mutually beneficial relationship between the improvements that would be realised from both schemes, particularly around pedestrian facilities and public realm improvements across the town centre. The economic appraisal for King Street/Market Street junction improvements showed that the scheme would result in dis-benefits to both road and public transport users driven by marginal journey time dis-benefits associated with additional pedestrian priority provided in the area. Specifically, in the PM peak, journey times for vehicles travelling through the junction were anticipated to worsen by two seconds and by five seconds for bus users. However, the dis-benefits to public transport users were outweighed by the sizeable benefits attributable to the bus station improvements. Significant health benefits to pedestrian users were also being accrued due to additional pedestrian activity.

A summary of the benefit cost ratio (BCR) appraisal undertaken for Delivery Package 4a and 4b at Conditional Approval is provided in the table below. The forecast BCR as appraised at Conditional Approval was 0.46, which in terms of transport economic benefits produced Poor Value for Money.

Component Ref.	£000s
Road User Benefits	-£112
Public Transport User Benefits	£341
Cycle User Benefits (including health benefits)	£0
Pedestrian User Benefits (health benefits)	£1,391
Environmental Benefits	£9
Public Accounts (excluding Investment Costs)	-£4
Broad Transport Budget Impact (Investment Costs plus any Revenue Impacts)	£3,500
Benefit Cost Ratio	**0.46**

Whilst in pure transport economic terms the Conditional Approval schemes were shown to provide Poor Value for Money, the appraisal noted that the aims of increasing accessibility and associated health benefits are met by the scheme and should be considered by the decision makers. The appraisal also observed that the predicted dis-benefits are small increases in delay to vehicles, which are considered to be less significant for the economic performance of Farnworth as a centre than the improved pedestrian environment and crossing facilities. The improved pedestrian environment is expected to contribute directly to economic vitality which is a key objective of the scheme. In addition, and as detailed in the Strategic Case section above, it was also recognised that Delivery Package 4 would make a significant and vital contribution to the regeneration of Farnworth town centre and also to the SBNI objective of improving the economic vitality of the district centre.

Following on from the design changes detailed in this Shift Statement, a revised economic appraisal for Delivery Package 4 has been produced and the results of this are summarised in the table below. The methodology used for this updated appraisal has been based upon the approach taken at Conditional Approval, although additional/alternative assessments have been applied in certain instances to ensure that the full benefits of the scheme are adequately captured.

The forecast BCR is 1.82, which in terms of the DfT Value for Money criteria is considered to be Medium Value for Money.

Component Ref.	£000s
User Time Savings	£478
Private Sector Revenues	-£3
Journey Quality Impacts	£1,376
Physical Activity Impacts	£823
Present Value of Benefits (PVB)	£2,677
Present Value of Costs (PVC)	£1,472

Net Present Value (NPV) (PVB-PVC)	**£1,205**
Benefit Cost Ratio (BCR) (PVB/PVC)	**1.82**

As detailed in the table above, the principal benefits of the scheme relate to journey quality impacts. This reflects improvements for bus passengers resulting from the provision of improved shelters and the addition of CCTV at the bus station and also improvements to the quality of journeys for pedestrians in the town centre. Significant physical activity benefits will also be accrued due to additional pedestrian activity resulting from the proposed improvements and the schemes will also provide journey time savings for pedestrians and bus users.

The updated appraisal focuses principally on quantified benefits but also acknowledges that Delivery Package 4 will deliver a number of wider benefits that are not captured within the scheme BCR. These include safety benefits resulting from improvements to the layout and operation of the bus station and the associated reduction in user conflict between pedestrians and bus operations, accident reductions relating to the provision of safer and more direct crossing points at the King Street/Market Street junction, and also the positive impact of the proposals on the regeneration of Farnworth town centre. These qualitative benefits would be expected to increase the BCR further.

In addition to the combined economic appraisal of the Farnworth Bus Station (Delivery Package 4a) and Farnworth Town Centre (Delivery Package 4b) schemes, the updated appraisal has provided a separate BCR for both components of Delivery Package 4. This has demonstrated that both schemes have a BCR in excess of 1.5 and are therefore considered to provide Medium Value for Money. A sensitivity test has also been applied to demonstrate that Delivery Package 4 as a whole would continue to demonstrate Medium Value for Money if the capital costs were to increase by a further 15%. A further sensitivity test has demonstrated that if the appraisal period is reduced from 20 years to 15 years – which can be seen as a reduction is asset life or as a proxy for lower than expected scheme benefits – the BCR would fall below 1.5 but would remain comfortably in excess of 1.0.

Financial Case

Following detailed design on both the Farnworth Bus Station (Delivery Package 4a) and the Farnworth town centre (Delivery Package 4b) schemes and the successful tender of the civils work to the bus station, it is deemed that DP4 is affordable within the allocated budget.

It should also be noted that at Conditional Approval QRA was calculated at programme level; however, for this Full Approval submission, a separate QRA has been calculated for Delivery Package 4 through the production of a quantified risk register.

Management Case

A robust governance structure is already in place. The delivery model selected for the Bolton element of the SBNI programme is for TfGM to manage the programme with Bolton Council having full responsibility to develop the designs for its schemes, tender the packages, procure a contractor and administer the contract. Delivery Package 4 will follow this delivery strategy.

The delivery of the works will be governed by a Delivery Agreement which was entered into on 31 July 2017. The signatories of this agreement are the GMCA, TfGM and Bolton Council. The Delivery Agreement defines the delivery requirements and outputs that must be attained in order for Bolton Council to qualify for the drawdown of funds through the delivery of the schemes. A Deed of Variation to this Delivery Agreement to include Delivery Packages 4 will be executed following the completion of the Full Approval process. This delivery strategy is consistent with the approach agreed at Conditional Approval and has been used to good effect on other TfGM programmes, such as the Cross City Bus Package and Cycling City Ambition Grant (CCAG) programme.

Any TfGM-managed infrastructure to be implemented as part of Delivery Package 4, such as bus shelters, will be implemented in close liaison with the TfGM Facilities and Bus Operations teams. In particular, the progress of the Farnworth Bus Station (Delivery Package 4a) scheme will be monitored and inspected during construction to ensure that TfGM standards are met prior to handover of the facility and the commencement of bus operations.

Further information as to how DP4 will be governed through TfGM's Programme Management Services (PMS) procedures is outlined in the Conditional Approval Business Case and the Programme Project Execution Plan (PEP) provided as an Appendix to the Bolton DP4 PEP.