

# **GREATER MANCHESTER – LOCAL HIGHWAYS MAINTENANCE CHALLENGE FUND**

## **PACKAGE SUBMISSION TO DFT**

### **1. Strategic Context**

The Greater Manchester (GM) economy generates £47 billion of GVA each year, employing 1.14 million people in 93,000 businesses, with an additional 85,000 jobs forecast to be created over the next 10 years. Hence, as the City Deal with Government makes clear, GM has a critical and essential contribution to make to drive overall growth at a national level and support objectives for economic rebalancing across the country.

Effective connectivity is a central component of GM's economic success. 7 million people live within an hour's drive of city region employment opportunities – the largest journey-to-work area outside London – across the Regional Centre, a number of major town centres and other sub-regionally significant employment centres.

We have recently undertaken research and analysis on the cost of highway congestion and delay on the economy of GM. This has estimated the total annual cost to be £1.3 billion.

Maintaining the condition of our roads and structures is key to mitigating these costs by ensuring that the network is available for all road users. This Local Highways Maintenance Challenge Fund provides a key opportunity to deliver significant upfront capital investment, reducing disruption and delays that result from cyclical and reactive maintenance requirements.

The GM Growth Deal in July 2014 included a commitment for GM to identify a Key Route Network (KRN) of local authority roads for unified management in the interests of the city region's growth agenda. This has been taken forward through the Highway Reform work and a KRN comprising 616km of the most economically important roads has been established – this Local Highways Maintenance Challenge Fund bid focusses on delivering improvements to this part of the road network.

GM recognises the value of strong governance and clear prioritisation in ensuring that public money is best targeted where it can unlock not only growth, but also private investment and entrepreneurial talent. We have demonstrated this through the establishment of the first Combined Authority in the country, which is now complemented by a strong and focussed Local Enterprise Partnership (LEP), as well as the ground-breaking GM Transport Fund. In addition all ten authorities have now

delegated joint investment oversight for funding bids of this type to four Chief Executives who meet at least monthly as the Chief Executive Investment Group. Letters of support from the LEP and the Combined Authority are attached in **Appendix A**.

Each of the priorities within this package presents a strong case for investment in itself, is ready for delivery in the short-term and will deliver immediate local economic benefits. They also support the spatial priorities of the GM Strategy, which defines our priorities for economic growth, housing and associated infrastructure, to:

- Secure the future of the regional centre;
- Provide a supply of land to meet investor demand;
- Deliver more housing;
- Deliver a sustainable role for town centres;
- Ensure resilient low carbon infrastructure; and
- Invest in transport infrastructure to improve access to jobs and opportunities.

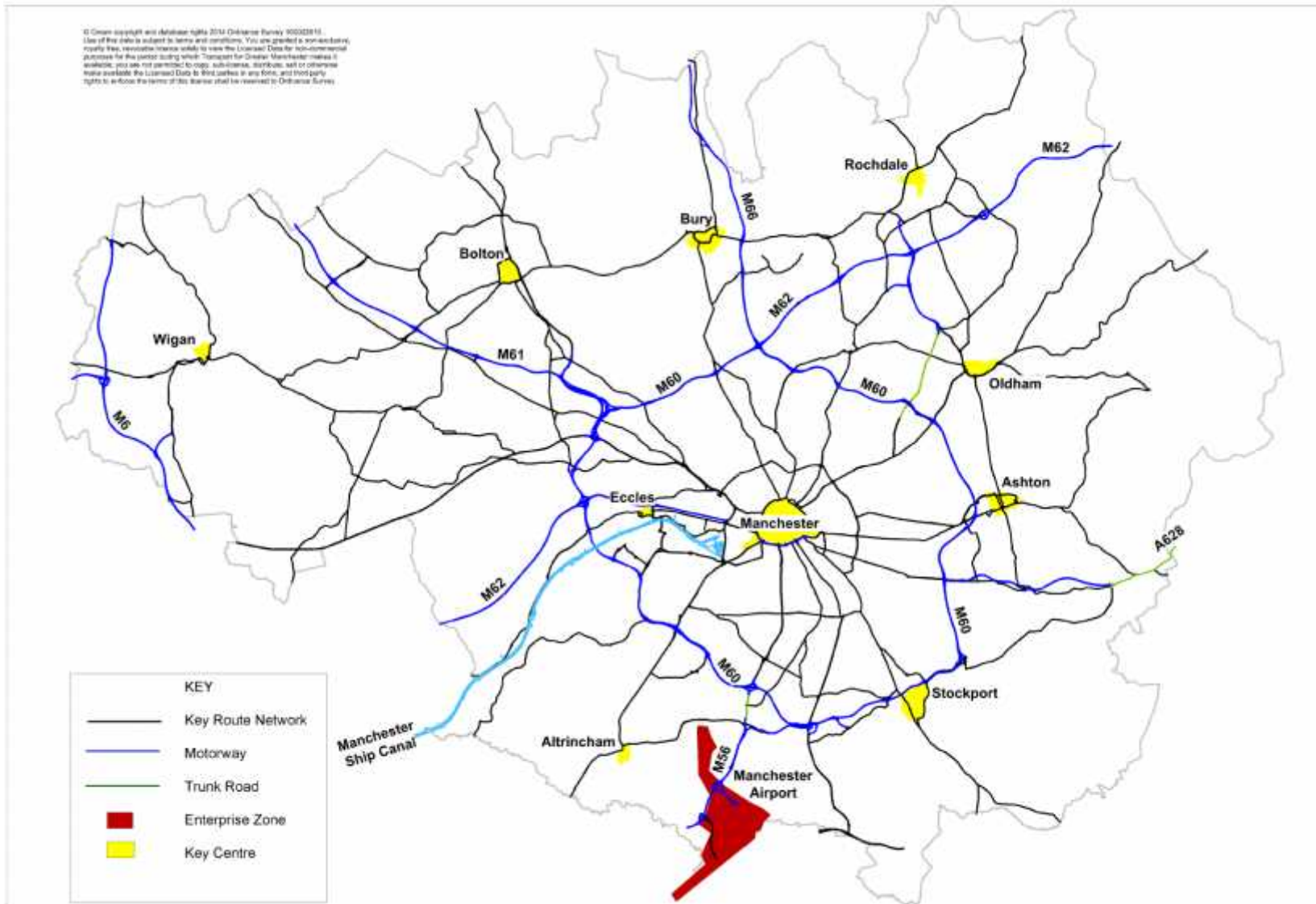
## **2. Greater Manchester Key Route Network**

Our package bid focuses on the KRN – the strategic rationale for this network is based on the changing economic shape of GM and the demands that this places on the highway system. Despite the significant role played by the Regional Centre in city region’s economic output, GM remains a polycentric economic area.

The local road network in GM comprises over 9,000km of roads, managed by 10 local highway authorities. Approximately 1,200km of this network is A and B roads, which carry c. 7 billion km of vehicle traffic per annum. Within this the KRN (616km in length) comprises 48% of all A and B roads that supports the greatest concentrations of economic activity (commuting and logistics). With increased congestion on main routes drivers are also displaced to residential roads which are not designed or equipped to deal with the volume of traffic being placed on them. Improving the key route network will add to the economic growth and sustainability of the city and benefit the quality of life of local residents.

**Figure 1** below shows the proposed KRN that has been developed.

Figure 1: Greater Manchester Key Route Network



The KRN is based on the Primary Route Network (those A-roads identified previously by the GM highways authorities as forming the core road network in GM) - this has been reviewed and added to so as to include any of the following:-

- significant road-links to strategic employment sites and to adjacent areas outside GM boundary;
- Bus priority corridors and high frequency bus routes; and
- Links from the KRN to adjacent motorway junctions and Ship Canal crossings.

TfGM is to take on strategic investment responsibilities for the KRN including structural maintenance. These proposals are currently being finalised through the GM Highways Reform work.

### 3. Existing Maintenance Programmes

Data has been collated on the total highways capital maintenance expenditure in GM – this is shown in **Table 1** alongside the DfT Highways Maintenance Block allocations for the period 2011/12 to 2014/15. This shows that GM has spent significantly in excess of the DfT block allocation in each year amounting to an additional £53 million over the four year period.

**Table 1: Greater Manchester Highways Maintenance Expenditure**

| Highways Maintenance Spend       | Year    |         |         |         | Total   |
|----------------------------------|---------|---------|---------|---------|---------|
|                                  | 2011/12 | 2012/13 | 2013/14 | 2014/15 |         |
| GM Capital Spend (Maintenance)   | £37.0m  | £36.1m  | £42.5m  | £39.9m  | £155.4m |
| DfT Maintenance Block Allocation | £27.4m  | £26.2m  | £25.3m  | £23.5m  | £102.4m |
| Additional GM Capital Spend      | £9.6m   | £9.9m   | £17.2m  | £16.4m  | £53.0m  |

Further investment in the network is required to address the current backlog – the Local Highway Maintenance Challenge Fund provides an opportunity to deliver prioritised larger projects that are difficult to fund under the annual block funding allocation.

### 4. Scheme Identification and Prioritisation Process

The GM Chief Executives' Investment Group agreed that the bid should focus on ensuring that the structures and carriageways on the KRN are fit for purpose as these map best on to economic growth priorities.

Schemes were identified in conjunction with the local highway authorities and a prioritisation exercise was undertaken at the GM level. Schemes submitted into the prioritisation process had to demonstrate that they would meet the following screening criteria:

- Located on the Key Route Network;
- Local contribution of 10% or above; and
- Potential to deliver a BCR in excess of 1.5.

Importance was also attached to the ability to deliver in the period 2015/16 to 2017/8, particularly in the first year. In the case of carriageway resurfacing schemes, condition information was also reviewed at local level to determine VFM and GM wide for prioritisation.

Following the prioritisation 24 schemes (**Figure 2**) with a total cost of £51 million and requiring DfT funding support of £40.3 million were identified for inclusion in the bid for Tranche 1, reflecting the scale of immediate need in GM. A further set of schemes were identified as potential bids for the Tranche 2 funding round.

Schemes that passed the screening criteria were progressed to a second stage – this included an assessment of each scheme with respect to the following:

- Strategic Case;
- Annual Average Daily Traffic (AADT);
- % HGVs;
- Local Contribution; and
- Delay (as reported by Trafficmaster).

Given the timescales for completing the prioritisation exercise, AADT, % HGVs and Delay were taken as a proxy for the economic impact of the scheme. Specific scheme appraisals have been subsequently completed and reported in section 7.

Each of the criteria was weighted to produce an overall score (see **Appendix B** for details). The results of the overall scheme ranking are shown in **Table 2**.





**Table 2: Scheme Ranking**

| Scheme Details |  |                 |                            |            |            |                    | Assessment Criteria - Quantitative Data |        |                      |   | Assessment Scores |                              |        |                      |                      | Summary                |                 |                               |                            |
|----------------|--|-----------------|----------------------------|------------|------------|--------------------|---|--------|----------------------|---|-------------------|------------------------------|--------|----------------------|----------------------|------------------------|-----------------|-------------------------------|----------------------------|
| Scheme Ref     | Scheme   | Local Authority | Scheme Type                | Total Cost | DfT Ask    | Local Contribution | Annual Average Daily Traffic            | % HGVs | Local Contribution % | Traffic Master Delay % of scheme on 'slow road' links | Strategic Case    | Annual Average Daily Traffic | % HGVs | Local Contribution % | Traffic Master Delay | Total Score (Weighted) | Rank (Weighted) | Cumulative DfT 'Contribution' | Cumulative Overall 'Total' |
| 13             | Regent Road Resurfacing (M602 Roundabout - Manchester Boundary)  | Salford         | Resurfacing                | £4,240,000 | £3,349,600 | £890,400           | 41,946                                  | 3.6    | 21                   | 75  | 3                 | 3                            | 2      | 4                    | 3                    | 8.7                    | 1               | £3,349,600                    | £4,240,000                 |
| 25             | A62 Oldham Way/A669 Middleton Road Bridge (including carriageway resurfacing on A62 Oldham Way, A62 Manchester Road and A669 Middleton Road)   | Oldham          | Resurfacing and Structures | £4,000,000 | £3,160,000 | £840,000           | 34,555                                  | 3.3    | 21                   | 50  | 3                 | 3                            | 2      | 4                    | 3                    | 8.7                    | 1               | £6,509,600                    | £8,240,000                 |
| 20             | Stockport Town Centre (Wellington Road Viaduct and Merseyway Precinct Structure)   | Stockport       | Structures                 | £6,068,000 | £4,794,000 | £1,274,000         | 26,405                                  | 2.9    | 21                   | 50  | 3                 | 3                            | 1      | 4                    | 3                    | 8.3                    | 3               | £11,303,600                   | £14,308,000                |
| 17             | A66 Resurfacing (various sections Derbyshire Lane/Chester Road Junction to Bowdon Roundabout, Junction 7)  | Trafford        | Resurfacing                | £1,500,000 | £1,180,000 | £320,000           | 29,704                                  | 2.0    | 21                   | 65  | 2                 | 3                            | 1      | 4                    | 3                    | 7.3                    | 4               | £12,483,600                   | £15,808,000                |
| 1              | A666 (Folds Road Bridge to Kearsley Roundabout), including Steel Parapet Replacement Works to highway structures   | Bolton          | Resurfacing and Structures | £7,271,000 | £5,744,090 | £1,526,910         | 54,092                                  | 3.3    | 21                   | 18  | 2                 | 3                            | 2      | 4                    | 1                    | 7.0                    | 5               | £18,227,690                   | £23,079,000                |
| 10             | A640 Rochdale Road (Kingsway to Dale Street)   | Rochdale        | Resurfacing                | £300,000   | £225,000   | £75,000            | 16,412                                  | 3.2    | 25                   | 46  | 2                 | 2                            | 2      | 4                    | 3                    | 7.0                    | 5               | £18,452,690                   | £23,379,000                |
| 24             | A580 Bridges (Goborne Railway Bridge and Morleys Canal Bridge)   | Wigan           | Structures                 | 1,250,000  | 987,500    | 262,500            | 29,435                                  | 7      | 21                   | 0   | 2                 | 3                            | 3      | 4                    | 0                    | 7.0                    | 5               | £19,440,190                   | £24,629,000                |
| 5              | Alan Turing Way / Hulme Hall Lane (Ashton Old Road to Lord North Street)   | Manchester      | Resurfacing                | £1,691,000 | £1,335,045 | £355,956           | 27,399                                  | 3.2    | 21                   | 2   | 2                 | 3                            | 2      | 4                    | 0                    | 6.7                    | 8               | £20,775,235                   | £26,320,000                |
| 18             | KRN Resurfacing (Sections of the KRN, including on the A49, A58, A577 and A580)  | Wigan           | Resurfacing                | £3,003,000 | £2,372,000 | £631,000           | 18,105                                  | 4.1    | 21                   | 27  | 2                 | 2                            | 2      | 4                    | 2                    | 6.7                    | 9               | £23,147,235                   | £29,323,000                |
| 8              | Broadway (Nuthurst Road to Oldham boundary (N))  | Manchester      | Resurfacing                | £194,000   | £153,163   | £40,837            | 18,967                                  | 2.2    | 21                   | 55  | 2                 | 2                            | 1      | 4                    | 3                    | 6.7                    | 9               | £23,300,398                   | £29,517,000                |
| 12             | A664 Manchester New Road (Middleton Way to Borough Boundary)   | Rochdale        | Resurfacing                | £683,000   | £512,250   | £170,750           | 17,372                                  | 0.9    | 25                   | 47  | 2                 | 2                            | 1      | 4                    | 3                    | 6.7                    | 9               | £23,812,648                   | £30,200,000                |
| 3              | A58 Rochdale Road (Rochdale Boundary to Derby Way), (Derby Way to Angouleme Way), A58 Angouleme Way (Full length), A56/58 Jubilee Way (Full length), A58 Bolton Street (Jubilee Way to Crostons Road)  | Bury            | Resurfacing                | £1,865,000 | £1,398,600 | £266,400           | 27,317                                  | 2.0    | 16                   | 31  | 2                 | 3                            | 1      | 3                    | 2                    | 6.5                    | 12              | £25,211,248                   | £31,865,000                |
| 4              | Hyde Road (Stockport Road to Tameside Boundary)  | Manchester      | Resurfacing                | £2,433,000 | £1,920,854 | £512,147           | 23,169                                  | 2.5    | 21                   | 39  | 2                 | 2                            | 1      | 4                    | 2                    | 6.3                    | 13              | £27,132,101                   | £34,298,000                |
| 7              | Stockport Road (Devonshire Street to Stockport boundary)   | Manchester      | Resurfacing                | £2,257,000 | £1,781,902 | £475,099           | 22,314                                  | 2.0    | 21                   | 32  | 2                 | 2                            | 1      | 4                    | 2                    | 6.3                    | 13              | £28,914,003                   | £36,555,000                |
| 11             | A58 Bury New Road (Peel Street to Borough Boundary)  | Rochdale        | Resurfacing                | £867,000   | £650,250   | £216,750           | 19,606                                  | 3.3    | 25                   | 24  | 2                 | 2                            | 2      | 4                    | 1                    | 6.3                    | 13              | £29,564,253                   | £37,422,000                |
| 16             | KRN Resurfacing (various links on the A57, A6017, A6018, A627, A635, A662)   | Tameside        | Resurfacing                | £1,913,000 | £1,511,000 | £402,000           | 16,394                                  | 2.7    | 21                   | 36  | 2                 | 2                            | 1      | 4                    | 2                    | 6.3                    | 13              | £31,075,253                   | £39,335,000                |
| 14             | Broughton Road Pendleton roundabout and Gyrotory   | Salford         | Resurfacing                | £1,404,000 | £1,109,160 | £294,840           | 17,466                                  | 2.3    | 21                   | 16  | 2                 | 2                            | 1      | 4                    | 1                    | 6.0                    | 17              | £32,184,413                   | £40,739,000                |
| 6              | Palatine Road (1. Princess Parkway to M60 2. Mersey Road to Wilmslow Road)   | Manchester      | Resurfacing                | £1,462,000 | £1,154,249 | £307,751           | 14,302                                  | 1.2    | 21                   | 57  | 2                 | 1                            | 1      | 4                    | 3                    | 6.0                    | 17              | £33,338,662                   | £42,201,000                |
| 9              | KRN Resurfacing (A664 Queensway Edinburgh Way to Schofield Street)   | Rochdale        | Resurfacing                | £900,000   | £675,000   | £225,000           | 23,757                                  | 2.8    | 25                   | 13  | 2                 | 2                            | 1      | 4                    | 1                    | 6.0                    | 17              | £34,013,662                   | £43,101,000                |
| 21             | Tameside MBC Retaining wall Structural replacement and strengthening (Roe Cross Longendale, Mottram Rd Hyde, Mottram Rd Longendale Manchester Road Hyde, Manchester Road Mossley, Wakefield Rd Stalybridge, Woolley Lane Hyde, Stamford Street Stalybridge, Mottram Cutting, and Hollingworth) | Tameside        | Structures                 | £2,702,000 | £2,135,000 | £567,000           | 13,764                                  | 3.9    | 21                   | 30  | 2                 | 1                            | 2      | 4                    | 2                    | 6.0                    | 17              | £36,148,662                   | £45,803,000                |
| 2              | A56 Walmersley Road (M66 Bridge to M66 northbound exit), (Springside Road to Northfield Road), A56 Manchester Road (Jubilee Way to Terryson Avenue), (Chestnut Avenue to Stanhope Avenue), (Fairfax Road to Butensale Lane)  | Bury            | Resurfacing                | £2,415,000 | £2,028,600 | £386,400           | 18,921                                  | 1.9    | 16                   | 34  | 2                 | 2                            | 1      | 3                    | 2                    | 5.8                    | 21              | £38,177,262                   | £48,218,000                |
| 15             | A555 Resurfacing (A5102 Woodford Road to B5358 Wilmslow Road)  | Stockport       | Resurfacing                | £1,500,000 | £1,185,000 | £315,000           | 16,494                                  | 2.3    | 21                   | 0   | 2                 | 2                            | 1      | 4                    | 0                    | 5.7                    | 22              | £39,362,262                   | £49,718,000                |
| 22             | Ashburton Road West Bridgewater Canal bridge Trafford Park   | Trafford        | Structures                 | £495,000   | £391,000   | £104,000           | 7,760                                   | 7.7    | 21                   | 0   | 2                 | 1                            | 3      | 4                    | 0                    | 5.7                    | 22              | £39,753,262                   | £50,213,000                |
| 19             | Todmorden Road Retaining Walls   | Rochdale        | Structures                 | £840,000   | £630,000   | £210,000           | 7,017                                   | 2.3    | 25                   | 0   | 2                 | 1                            | 1      | 4                    | 0                    | 5.0                    | 24              | £40,383,262                   | £51,053,000                |

## 5. Package Development

The results of the scheme prioritisation exercise were used to derive three packages (in priority order), with a total forecast cost of £51 million and a DfT funding requirement of £40.3 million. Each package falls within the £20m threshold for a small scheme, as outlined in the guidance. The forecast cost, DfT funding requirement and BCR for each package is as follows:

|                    | <b>Forecast<br/>Costs<br/>(£m)</b> | <b>Local<br/>Contribution<br/>(£m)</b> | <b>DfT funding<br/>requirement<br/>(£m)</b> | <b>BCR</b> |
|--------------------|------------------------------------|--|---|------------|
| Priority Package 1 | 24.6                               | 5.2                                    | 19.4  | 6.3        |
| Priority Package 2 | 14.7                               | 3.1                                    | 11.6  | 3.2        |
| Priority Package 3 | 11.7                               | 2.4                                    | 9.3   | 5.0        |
| <b>Total</b>       | <b>51.0</b>                        | <b>10.7</b>                            | <b>40.3</b>                                 |            |

The composition of the packages is identified in the **Table 3**, along with the total cost, DfT funding requirement and local contribution.



**Table 3: Priority Packages**

| Scheme   | Local Authority | Scheme Type                | Ranking | Total Cost | DfT Contribution | Local Contribution | Cumulative DfT 'Contribution' | Cumulative Overall 'Total' |
|--|-----------------|----------------------------|---------|------------|------------------|--------------------|-------------------------------|----------------------------|
| <b>Priority Package 1</b>  |                 |                            |         |            |                  |                    |                               |                            |
| Regent Road Resurfacing (M602 Roundabout - Manchester Boundary)  | Salford         | Resurfacing                | 1       | £4,240,000 | £3,349,600       | £890,400           | £3,349,600                    | £4,240,000                 |
| A62 Oldham Way/A669 Middleton Road Bridge (including carriageway resurfacing on A62 Oldham Way, A62 Manchester Road and A669 Middleton Road)   | Oldham          | Resurfacing and Structures | 1       | £4,000,000 | £3,160,000       | £840,000           | £6,509,600                    | £8,240,000                 |
| Stockport Town Centre (Wellington Road Viaduct and Merseyway Precinct Structure)   | Stockport       | Structures                 | 3       | £6,068,000 | £4,794,000       | £1,274,000         | £11,303,600                   | £14,308,000                |
| A56 Resurfacing (various sections Derbyshire Lane/Chester Road junction to Bowdon Roundabout, Junction 7)  | Trafford        | Resurfacing                | 4       | £1,500,000 | £1,180,000       | £320,000           | £12,483,600                   | £15,808,000                |
| A666 (Folds Road Bridge to Kearsley Roundabout), including Steel Parapet Replacement Works to highway structures   | Bolton          | Resurfacing and Structures | 5       | £7,271,000 | £5,744,090       | £1,526,910         | £18,227,690                   | £23,079,000                |
| A640 Rochdale Road (Kingsway to Dale Street)   | Rochdale        | Resurfacing                | 5       | £300,000   | £225,000         | £75,000            | £18,452,690                   | £23,379,000                |
| A580 Bridges (Golborne Railway Bridge and Morleys Canal Bridge)  | Wigan           | Structures                 | 5       | 1,250,000  | 987,500          | 262,500            | £19,440,190                   | £24,629,000                |
| <b>Priority Package 2</b>  |                 |                            |         |            |                  |                    |                               |                            |
| Alan Turing Way / Hulme Hall Lane (Ashton Old Road to Lord North Street)   | Manchester      | Resurfacing                | 8       | £1,691,000 | £1,335,045       | £355,956           | £20,775,235                   | £26,320,000                |
| KRN Resurfacing (Sections of the KRN, including on the A49, A58, A577 and A580)  | Wigan           | Resurfacing                | 9       | £3,003,000 | £2,372,000       | £631,000           | £23,147,235                   | £29,323,000                |
| Broadway (Nuthurst Road to Oldham boundary (NI))   | Manchester      | Resurfacing                | 9       | £194,000   | £153,163         | £40,837            | £23,300,398                   | £29,517,000                |
| A664 Manchester New Road (Middleton Way to Borough Boundary)   | Rochdale        | Resurfacing                | 9       | £683,000   | £512,250         | £170,750           | £23,812,648                   | £30,200,000                |
| A58 Rochdale Road (Rochdale Boundary to Derby Way), (Derby Way to Angouleme Way), A58 Angouleme Way (Full length), A56/58 Jubilee Way (Full length), A58 Bolton Street (Jubilee Way to Crostons Road) plus A58 Bury New Road (Peel Street to Bury Borough Boundary)                              | Bury/Rochdale   | Resurfacing                | 12      | £2,532,000 | £2,048,850       | £483,150           | £25,861,498                   | £32,732,000                |
| Hyde Road (Stockport Road to Tameside Boundary)  | Manchester      | Resurfacing                | 13      | £2,433,000 | £1,920,854       | £512,147           | £27,782,351                   | £35,165,000                |
| Stockport Road (Devonshire Street to Stockport boundary)   | Manchester      | Resurfacing                | 13      | £2,257,000 | £1,781,902       | £475,099           | £29,564,253                   | £37,422,000                |
| KRN Resurfacing (various links on the A57, A6017, A6018, A627, A635, A662)   | Tameside        | Resurfacing                | 13      | £1,913,000 | £1,511,000       | £402,000           | £31,075,253                   | £39,335,000                |
| <b>Priority Package 3</b>  |                 |                            |         |            |                  |                    |                               |                            |
| Broughton Road Pendleton roundabout and Gyrotory   | Salford         | Resurfacing                | 16      | £1,404,000 | £1,109,160       | £294,840           | £32,184,413                   | £40,739,000                |
| Palatine Road (1. Princess Parkway to M60<br>2. Mersey Road to Wilmslow Road)  | Manchester      | Resurfacing                | 16      | £1,462,000 | £1,154,249       | £307,751           | £33,338,662                   | £42,201,000                |
| KRN Resurfacing (A664 Queensway Edinburgh Way to Schofield Street)   | Rochdale        | Resurfacing                | 16      | £900,000   | £675,000         | £225,000           | £34,013,662                   | £43,101,000                |
| Tameside MBC Retaining wall Structural replacement and strengthening (Roe Cross Longdendale, Mottram Rd Hyde, Mottram Rd Longdendale Manchester Road Hyde, Manchester Road Mossley, Wakefield Rd Stalybridge, Woolley Lane Hyde, Stamford Street Stalybridge, Mottram Cutting, and Hollingworth) | Tameside        | Structures                 | 16      | £2,702,000 | £2,135,000       | £567,000           | £36,148,662                   | £45,803,000                |
| A56 Walmersley Road (M66 Bridge to M66 northbound exit), (Springside Road to Northfield Road), A56 Manchester Road (Jubilee Way to Tennyson Avenue), (Chestnut Avenue to Stanhope Avenue), (Fairfax Road to Butterstile Lane)  | Bury            | Resurfacing                | 20      | £2,415,000 | £2,028,600       | £386,400           | £38,177,262                   | £48,218,000                |
| A555 Resurfacing (A5102 Woodford Road to B5358 Wilmslow Road)  | Stockport       | Resurfacing                | 21      | £1,500,000 | £1,185,000       | £315,000           | £39,362,262                   | £49,718,000                |
| Ashburton Road West Bridgewater Canal bridge Trafford Park   | Trafford        | Structures                 | 22      | £495,000   | £391,000         | £104,000           | £39,753,262                   | £50,213,000                |
| Todmorden Road Retaining Walls   | Rochdale        | Structures                 | 23      | £840,000   | £630,000         | £210,000           | £40,383,262                   | £51,053,000                |

**Note: In defining the packages, the A58 Bury New Road and A58 Rochdale Road schemes were combined in the table above, reducing the total number of scheme components from 24 to 23.**

Application forms relating to the component schemes within the packages have been prepared by the respective local highway authorities, including financial sign off by the Section 151 officers. It should be noted that some of the application forms cover more than one of the schemes identified in the table above - **Appendix C** provides cross references between the component schemes within the packages and the relevant application form.

## 6. Expenditure Profile

The **Table 4** shows the proposed spend profile for each of the identified packages.

**Table 4: Total Expenditure Profile by Package (DfT and LA Contribution)**

| Package      | 2015/16           | 2016/17           | 2017/18           | Total             |
|--------------|-------------------|-------------------|-------------------|-------------------|
| Package 1    | 8,282,000         | 10,127,000        | 6,220,000         | 24,629,000        |
| Package 2    | 3,710,000         | 6,432,000         | 4,564,000         | 14,706,000        |
| Package 3    | 4,544,00          | 5,407,000         | 1,767,000         | 11,718,000        |
| <b>Total</b> | <b>16,536,000</b> | <b>21,966,000</b> | <b>12,551,000</b> | <b>51,053,000</b> |

A breakdown of the spend profile for each of the package components is provided in **Appendix D**.

## 7. Value for Money

For this Challenge Fund bid, Value for Money (VfM) has been assessed in two ways. For structures, scheme specific appraisals have been completed for bridges, while for retaining wall schemes, previous GM major scheme appraisals have been used as proxies for the expected VfM. For carriageway schemes, one of the projects has been appraised to derive an estimate of VfM and this has then been used as a proxy, pro-rata to capital cost, for the other schemes in the bid. This analysis has been brought together to generate a VfM assessment at the package level. A VfM statement, covering each of the three packages is provided in Table 5. Appendix E documents the actual method used.

**Table 5: Value for Money Statement**

|                           |  |
|---------------------------|--|
| <b>Monetised Benefits</b> | <p>The packages 1-3 comprise both structure repair and road resurfacing schemes.</p> <p>The monetised benefits of structure repair schemes comprise the following:</p> <ul style="list-style-type: none"> <li>• Time savings from traffic not being diverted away from weak structures; and</li> </ul> |
|---------------------------|--|

|                                    |  |
|------------------------------------|--|
|                                    | <ul style="list-style-type: none"> <li>• Vehicle operating cost savings (fuel and non-fuel) arising from traffic not having to be diverted away from weak structures.</li> </ul> <p>The monetised benefits of road resurfacing schemes comprise the following:</p> <ul style="list-style-type: none"> <li>• Time savings arising from traffic not being delayed by road repair works; and</li> <li>• Accident reductions resulting from the absence of defects in road surfaces.</li> </ul> <p>The Benefits (PVBs) at 2010 values / prices, discounted to 2010 are:</p> <ul style="list-style-type: none"> <li>• Package 1: PVB = £138.9m</li> <li>• Package 2: PVB = £40.5m</li> <li>• Package 3: PVB = £52.1m</li> </ul> |
| <b>Costs</b>                       | <p>The TfGM capital cost estimates at nominal prices are:</p> <ul style="list-style-type: none"> <li>• Package 1: £24.6m</li> <li>• Package 2: £14.7m</li> <li>• Package 3: £11.7m</li> </ul> <p>Appraisal Optimism Bias at 15% and 10% to structures and resurfacing respectively.</p> <p>Resurfacing schemes are assumed to reduce ongoing maintenance costs. Over 10 years, this cost reduction is 3% of capital cost.</p> <p>The Costs (PVCs) at 2010 values / prices, discounted to 2010 are:</p> <ul style="list-style-type: none"> <li>• Package 1: PVC = £22.2m</li> <li>• Package 2: PVB = £12.6m</li> <li>• Package 3: PVB = £10.3m</li> </ul>   |
| <b>Initial BCR</b>                 | <p>The Benefit to Cost Ratios for the packages are:</p> <ul style="list-style-type: none"> <li>• Package 1: BCR = 6.3</li> <li>• Package 2: BCR = 3.2</li> <li>• Package 3: BCR = 5.0</li> </ul>   |
| <b>Non-monetised impacts, SDIs</b> | <p>The monetised appraisals exclude the benefits arising from:</p> <ul style="list-style-type: none"> <li>• Avoided delays to traffic on other (secondary) roads onto which traffic would be diverted to avoid weak structure in the absence of repair works;</li> <li>• Avoided damage to vehicles from road surface defects; and</li> <li>• Improved journey ride quality to persons travelling in vehicles over resurfaced roads – this impact particularly affects bus passengers.</li> </ul>  |
| <b>Robustness of Appraisal</b>     | <p>Sensitivity tests showed the appraisal to be robust to the following changes:</p>   |

|                     |   |
|---------------------|---|
|                     | <ul style="list-style-type: none"> <li>• Cost increases of up to 50%; and</li> <li>• Reduced appraisal (benefits) period to 5 years.</li> </ul> |
| <b>VfM category</b> | All packages represent Very High VfM.   |

## 8. Programme Management

### Project Governance

The strategic monitoring, management and assurance of the programme of schemes funded through the Local Highways Maintenance Challenge Fund will be the responsibility of Transport for Greater Manchester (TfGM). TfGM is the Greater Manchester Combined Authority’s delivery agent for transport. The local authorities will be delivery partners with responsibility for the implementation of the specific schemes within the programme. The governance will incorporate local authority self-assurance (via individual S151 Officer and GM Network Management Group Representative sign-offs) of project information that will, in turn, be supplemented by the programme level assurance by TfGM.

TfGM has developed a robust and comprehensive set of project and programme management procedures to ensure the delivery of the scheme together with a significant increase in its organisational capacity and review functions. As part of ensuring organisational readiness and ability to deliver TfGM has:

- Continuously strengthened its Corporate Governance arrangements;
- Provided a step change in Organisation capability in relation to highways;
- Strengthened its in house audit and assurance function; and
- Continued to adopt a best practice approach to Risk Management and project scheduling.

### Senior Responsible Owner (SRO)

The Senior Responsible Owner (SRO) for the programme will be TfGM’s Chief Operating Officer, supported by TfGM’s Head of Highways and a designated Programme Manager. The SRO has overall accountability for ensuring that the scheme meets its objectives and delivers the anticipated benefits.

### Programme Manager

The day to day management and co-ordination of the programme will be the responsibility of the TfGM Programme Manager who will manage the programme in line with TfGM’s Programme Management Services procedures. Their key responsibilities will include:

- Overall responsibility for the co-ordination and management of the programme.
- Overall responsibility for liaison with individual scheme promoters.
- Responsible for ensuring that all schemes are appropriately resourced, technically supported and being progressed in line with the Assurance and Governance arrangements that will be adopted for the programme.
- Lead responsibility for reporting on the position on the programme to the Highways Maintenance Challenge Fund Steering Group, TfGM Operations Board, TfGM Executive Board, GMCA, AGMA Wider Leadership Team and AGMA Chief Executive's Investment Group.
- Lead responsibility for ensuring that all schemes are progressed in line with schedule and budgetary requirements; and for ensuring that appropriate corrective action is taken in relation to the management of risks and issues.
- Lead responsibility for liaising with, and reporting to, Government officials.

### **Highways Maintenance Challenge Fund Steering Group**

Progress on the delivery of the scheme will be reported to the TfGM Highways Maintenance Challenge Fund Steering Group, which will be chaired by the Head of Highways and attended by Senior Managers and key members of the programme team. The Steering Group meetings will review pre-prepared progress reports prepared by the Programme Manager (utilising information received from Local Authority scheme promoters) covering the key aspects of the programme including a period overview, cost, schedule, risk, issues, Health and Safety and key activities for the next period.

The purpose of the Highways Maintenance Challenge Fund Steering Group will be to:

- ensure individual projects are managed to budget, time and quality and in accordance with any statutory and corporate requirements;
- resolve strategic issues between projects which need agreement of senior stakeholders to ensure progress of the whole life programme;
- manage and review the risks, issues and assumptions underpinning the projects;
- monitor risk and contingency expenditure and make appropriate recommendations to the AGMA Chief Executives' Investment Group;
- ensure that the appropriate level of engagement is undertaken with key stakeholders;

- take ownership of escalated issues and ensure appropriate priority and management is forthcoming; and
- ratify the TfGM Gateway Review Panel's decision on the progress of individual projects through, and adherence to, TfGM's gateway processes.

### **TfGM Project and Programme Management Procedures (PMP/ProgMP)**

All of TfGM's projects and programmes are managed following the systems set out in TfGM's bespoke Project and Programme Management Procedures (PMP/ProgMP). The purpose of these procedures is to ensure that TfGM's projects and programmes are managed effectively and efficiently and are delivered to a consistent standard, on budget and on time using a single corporate management methodology. Stage gateway reviews, conducted by TfGM's Gateway Review Panel, are central to this approach.

TfGM's Project and Programme Management Procedures operate within a flexible framework which allow appropriate levels of scrutiny to be applied to individual projects and programmes, dependent on their scale, complexity and risk profile. Following the confirmation of Highways Maintenance Challenge Funding TfGM will confirm the level of gateway scrutiny to be applied across the programme with individual scheme promoters. This will be flexible and adapt to the scale and nature of the individual schemes.

## **9. Finance and Procurement**

Financial sign off for each of the schemes within the three priority packages has been provided through the application forms (appended to this submission), which have been signed by the respective Section 151 officers.

There is considerable potential to consolidate existing procurement arrangements across GM to deliver schemes funded through the Local Highways Maintenance Challenge Fund.

TfGM, in conjunction with districts, will develop procurement strategies for the schemes to ensure in all cases they meet the strategic objectives of:

- delivering best whole life value for money;
- compliance with all relevant legislation
- is open and transparent and providing all necessary safeguards against fraud and corruption;
- is properly documented providing clear audit trails;

- ensures active and widespread involvement with TfGM making it as easy as possible to engage; and
- ensures that TfGM Procurement supports the organisation to achieve its Sustainability, Environmental and Diversity Policies.

As part of the individual strategy developments a number of cross project activities will be developed and managed to ensure procurement wide synergies and benefits are maximised. In particular these will include:-

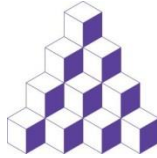
- The procurement strategy for each of the schemes will consider options to bundle scheme elements together in order to maximise procurement synergies and efficiency.
- Particular focus will be paid to opportunities to bundle the schemes on a geographic basis within each District. Wider bundling opportunities and synergies will then be considered across all of the schemes to identify a number of opportunity areas that will be progressed during the next stages of procurement strategy development.
- Efficient contractual arrangements – by further increasing the use of framework agreements and using standard ‘forms of contract’ to provide flexibility, speed of execution and reduce cost; and
- Stakeholder value – by establishing performance criteria for supply that is aligned to key scheme drivers, service and quality deliverables and taking into account whole of life costs.

There are some existing collaborative frameworks that would be available, including the Stockport Trafford Alliance, the Bolton Framework and Highways Agency’s Area 10 contract, which can be used by all of the local authorities.

In addition, a package of 12 major schemes is to be delivered under the GM Local Growth Deal, 7 of which are highway related. To facilitate the delivery of these schemes, the establishment of a new North West highways framework is being progressed. This will maximise the opportunities for securing financial efficiencies; negate the requirement to undertake multiple tendering exercises and minimise the risks to delivery.



## **Appendix A: Letters of Support**



Rt Hon Patrick McLoughlin MP  
Secretary of State for Transport  
Department for Transport  
Great Minster House  
76 Marsham Street  
London  
SW1P 4DR

Dear Secretary of State

### **Greater Manchester Submission to the Local Highways Maintenance Challenge Fund**

I am pleased to write to you in support of the Greater Manchester package submission to the Local Highways Maintenance Challenge Fund, which has been compiled on behalf of the Greater Manchester Combined Authority and the Local Enterprise Partnership.

Greater Manchester has placed connectivity and transport at the heart of its economic strategy for a number of years. Initiated in 2009, the Greater Manchester Transport Fund (GMTF) committed almost £800m of local borrowing as part of a £1.5bn fund. The GMTF is supporting a targeted programme of transport priorities identified for their significant impact on output (GVA).

The recent Greater Manchester Growth Deal builds on this with a programme of investment and reform, including a shared government/GMCA commitment to identify a Key Route Highway Network for management at a City Region level. It sets out how our highways reform is targeting maintenance investment to support the long term economic growth of the City Region and to deliver aspirations with Government for maximum economic impact.

The Key Route Network's performance will be a critical factor in our economic growth strategy, giving business the confidence to invest and expand, and is the focus for this bid.

The robust prioritisation process behind this package reflects the strength of our governance arrangements in Greater Manchester, which drive clear decision making on those investment priorities that hold the greatest potential to support growth. Our prioritisation process for this fund has maturely prioritised £40m from an initial 'long list' of over £100m.

Therefore, the Department can be assured that each of the priorities within this package presents a strong case for investment in itself; is ready for delivery in the short-term, will deliver an immediate local economic benefit and will facilitate strategically important developments.

If supported by the Department, this package will significantly progress local and national economic objectives, and we look forward to working with you to bring them to fruition.

Yours sincerely

A handwritten signature in blue ink that reads "Jim McMahon". The signature is written in a cursive, slightly slanted style.

**Cllr Jim McMahon**

Lead Member for Transport & Infrastructure, Greater Manchester Combined Authority



Rt Hon Patrick McLoughlin MP  
Secretary of State for Transport  
Department for Transport  
Great Minster House  
76 Marsham Street  
London  
SW1P 4DR

Dear Secretary of State

### **Greater Manchester Submission to the Local Highways Maintenance Challenge Fund**

I am pleased to write to you in support of the Greater Manchester package submission to the Local Highways Maintenance Challenge Fund, which has been compiled on behalf of the Greater Manchester Combined Authority and the Local Enterprise Partnership.

Greater Manchester has placed connectivity and transport at the heart of its economic strategy for a number of years. Initiated in 2009, the Greater Manchester Transport Fund (GMTF) committed almost £800m of local borrowing as part of a £1.5bn fund. The GMTF is supporting a targeted programme of transport priorities identified for their significant impact on output (GVA).

The recent Greater Manchester Growth Deal builds on this with a programme of investment and reform, including a shared government/GMCA commitment to identify a Key Route Highway Network for management at a City Region level. It sets out how our highways reform is targeting maintenance investment to support the long term economic growth of the City Region and to deliver aspirations with Government for maximum economic impact.

The Key Route Network's performance will be a critical factor in our economic growth strategy, giving business the confidence to invest and expand, and is the focus for this bid.

The robust prioritisation process behind this package reflects the strength of our governance arrangements in Greater Manchester, which drive clear decision making on those investment priorities that hold the greatest potential to support growth. Our

---

c/o Greater Manchester Integrated Support Team, Room 308, Level 3, Town Hall, Manchester, M60 2LA

prioritisation process for this fund has maturely prioritised £40m from an initial 'long list' of over £100m.

Therefore, the Department can be assured that each of the priorities within this package presents a strong case for investment in itself; is ready for delivery in the short-term, will deliver an immediate local economic benefit and will facilitate strategically important developments.

If supported by the Department, this package will significantly progress local and national economic objectives, and we look forward to working with you to bring them to fruition.

Yours sincerely

A handwritten signature in black ink, appearing to read "Mike Blackburn", is shown on a light-colored, textured background.

**Mike Blackburn**

Chair of the Greater Manchester Local Enterprise Partnership

## Appendix B – Assessment Criteria

The assessment of the Strategic Case was undertaken on a qualitative basis using a three point scale (1 to 3).

**Table 1: Strategic Case**

| Strength of Strategic Case | Score |
|----------------------------|-------|
| Low                        | 1     |
| Medium                     | 2     |
| High                       | 3     |

Quantitative data was compiled for the other metrics and bands were identified to which summary scores were assigned.

AADT, % HGVs and Delay were used as a proxy for the economic importance and contribution of the road – the band and scores assigned to AADT and % HGVs are shown in **Table 2**. Equivalent information for delay is shown in **Table xx**.

**Table 2: AADT and HGV Scoring Bands**

| AADT (Flow)                    | Score | HGV %                     | Score |
|--------------------------------|-------|---------------------------|-------|
| AADT up to 15,000              | 1     | HGV % up to 3%            | 1     |
| AADT between 15,001 and 25,000 | 2     | HGV % between 3.1% and 5% | 2     |
| AADT >25,000                   | 3     | HGV % > 5%                | 3     |

**Table 3: Delay: Slow Roads (% Scoring Bands)**

| Delay - Slow Roads % | Score |
|----------------------|-------|
| Up to 10%            | 0     |
| 11% to 24%           | 1     |
| 25% to 40%           | 2     |
| >40%                 | 3     |

Slow Roads (i.e. two times slower in the AM peak hour compared with the overnight period (2000-0600), only links with more than 10 observations and longer than 25 metres included).

The assessment of the local contribution was consistent with the bands identified in the DfT guidance (see **Table 4** below).

**Table 4: Local Contribution Scoring Bands**

| Local Contribution %          | Score |
|-------------------------------|-------|
| Local contribution 10%        | 1     |
| Local contribution 11% to 15% | 2     |
| Local contribution 16% to 20% | 3     |
| Local contribution >20%       | 4     |

The above were combined to generate an overall total score, adjusted to account for the varying scales between the criteria. A weighted score was then generated based on weights assigned to the criteria – these were selected in view of the DfT guidance, which attached particular importance on the Strategic Case and Local Contribution. The weights are shown in **Table 5**.

**Table 5: Weights by Criteria**

| <b>Criteria</b>              | <b>Weight</b> |
|------------------------------|---------------|
| Strategic Case               | 3             |
| Annual Average Daily Traffic | 2             |
| HGVs                         | 1             |
| Local Contribution           | 2             |
| Traffic Master Delay         | 1             |

The total weighted score was used to generate a ranked list of schemes at the GM level.



## Appendix C: Package/Application Form – Cross References

Application forms are included in Appendix F.

**Table 1: Package/Application Form Cross References – Package 1**

| Scheme   | Local Authority | Application Form Number | Application Form Name  |
|--|-----------------|-------------------------|--|
| Regent Road Resurfacing (M602 Roundabout - Manchester Boundary)  | Salford         | 6a                      | Key Route Network (KRN)-<br>Carriageway Resurfacing Schemes                |
| A62 Oldham Way/A669 Middleton Road Bridge (including carriageway resurfacing on A62 Oldham Way, A62 Manchester Road and A669 Middleton Road) | Oldham          | 4a                      | Oldham Council A62 Key Route Network Maintenance Scheme                    |
| Stockport Town Centre (Wellington Road Viaduct and Merseyway Precinct Structure)   | Stockport       | 7a                      | Stockport Town Centre Structures Major Maintenance                         |
| A56 Resurfacing (various sections Derbyshire Lane/Chester Road junction to Bowdon Roundabout, Junction 7)                                    | Trafford        | 9a                      | Major Maintenance A56 Corridor   |
| A666 (Folds Road Bridge to Kearsley Roundabout), including Steel Parapet Replacement Works to highway structures                             | Bolton          | 1a                      | A666 Major Maintenance Scheme  |
| A640 Rochdale Road (Kingsway to Dale Street)   | Rochdale        | 5a                      | Highways Structural Maintenance  |
| A580 Bridges (Golborne Railway Bridge and Morleys Canal Bridge)  | Wigan           | 10a                     | Br.1. Golborne Railway Bridge No. 010<br>Br.2. Morleys Canal Bridge No 003 |

**Table 2: Package/Application Form Cross References – Package 2**

| Scheme  | Local Authority   | Application Form Number | Application Form Name  |
|---|-------------------|-------------------------|--|
| Alan Turing Way / Hulme Hall Lane (Ashton Old Road to Lord North Street)  | Manchester        | 3a                      | Planned Maintenance Works to the Key Strategic Network       |
| KRN Resurfacing (Sections of the KRN, including on the A49, A58, A577 and A580)   | Wigan             | 10b                     | Key Route Network (KRN) Carriageway Rehabilitation Programme |
| Broadway (Nuthurst Road to Oldham boundary (N))   | Manchester        | 3a                      | Planned Maintenance Works to the Key Strategic Network       |
| A664 Manchester New Road (Middleton Way to Borough Boundary)  | Rochdale          | 5a                      | Highways Structural Maintenance                              |
| A58 Rochdale Road (Rochdale Boundary to Derby Way), (Derby Way to Angouleme Way), A58 Angouleme Way (Full length), A56/58 Jubilee Way (Full length), A58 Bolton Street (Jubilee Way to Crostons Road) plus A58 Bury New Road (Peel Street to Bury Borough Boundary) | Bury/<br>Rochdale | 2b                      | A58 Bury Inner Relief Road                                   |
|   |                   | 5a                      | Highways Structural Maintenance                              |
| Hyde Road (Stockport Road to Tameside Boundary)   | Manchester        | 3a                      | Planned Maintenance Works to the Key Strategic Network       |
| Stockport Road (Devonshire Street to Stockport boundary)  | Manchester        | 3a                      | Planned Maintenance Works to the Key Strategic Network       |
| KRN Resurfacing (various links on the A57, A6017, A6018, A627, A635, A662)  | Tameside          | 8a                      | Key Route Network Major Maintenance of Carriageways          |

**Table 3: Package/Application Form Cross References – Package 3**

| Scheme   | Local Authority | Application Form Number | Application Form Name  |
|--|-----------------|-------------------------|--|
| Broughton Road Pendleton roundabout and Gyratory   | Salford         | 6a                      | Key Route Network (KRN)-<br>Carriageway Resurfacing Schemes                                  |
| Palatine Road (1. Princess Parkway to M60<br>2. Mersey Road to Wilmslow Road)  | Manchester      | 3a                      | Planned Maintenance Works to<br>the Key Strategic Network                                    |
| KRN Resurfacing (A664 Queensway Edinburgh Way to Schofield Street)   | Rochdale        | 5a                      | Highways Structural Maintenance  |
| Tameside MBC Retaining wall Structural replacement and strengthening (Roe Cross Longdendale, Mottram Rd Hyde, Mottram Rd Longdendale Manchester Road Hyde, Manchester Road Mossley, Wakefield Rd Stalybridge, Woolley Lane Hyde, Stamford Street Stalybridge, Mottram Cutting, and Hollingworth) | Tameside        | 8b                      | Tameside MBC Retaining Wall<br>Structural Replacement and<br>Strengthening Schemes – Phase 2 |
| A56 Walmersley Road (M66 Bridge to M66 northbound exit), (Springside Road to Northfield Road), A56 Manchester Road (Jubilee Way to Tennyson Avenue), (Chestnut Avenue to Stanhope Avenue), (Fairfax Road to Butterstile Lane)  | Bury            | 2a                      | A56 Principal Road Network<br>Renewal Scheme   |
| A555 Resurfacing (A5102 Woodford Road to B5358 Wilmslow Road)  | Stockport       | 7b                      | A555 Resurfacing Works   |
| Ashburton Road West Bridgewater Canal bridge Trafford Park   | Trafford        | 9b                      | Major Structures   |
| Todmorden Road Retaining Walls   | Rochdale        | 5b                      | Retaining Wall Structural<br>Maintenance   |

## Appendix D: Breakdown of Package Expenditure Profile (DfT and LA Contribution)

| Scheme   | Local Authority | Scheme type                | 2015/16          | 2016/17           | 2017/2018        | Total             |
|--|-----------------|----------------------------|------------------|-------------------|------------------|-------------------|
| <b>Priority Package 1</b>  |                 |                            |                  |                   |                  |                   |
| Regent Road Resurfacing (M602 Roundabout - Manchester Boundary)  | Salford         | Resurfacing                | 1,200,000        | 1,520,000         | 1,520,000        | 4,240,000         |
| A62 Oldham Way/A669 Middleton Road Bridge (including carriageway resurfacing on A62 Oldham Way, A62 Manchester Road and A669 Middleton Road)   | Oldham          | Resurfacing and Structures | 1,300,000        | 1,800,000         | 900,000          | 4,000,000         |
| Stockport Town Centre (Wellington Road Viaduct and Merseyway Precinct Structure)   | Stockport       | Structures                 | 1,902,000        | 1,266,000         | 2,900,000        | 6,068,000         |
| A56 Resurfacing (various sections Derbyshire Lane/Chester Road junction to Bowdon Roundabout, Junction 7)  | Trafford        | Resurfacing                | 400,000          | 550,000           | 550,000          | 1,500,000         |
| A666 (Folds Road Bridge to Kearsley Roundabout), including Steel Parapet Replacement Works to highway structures   | Bolton          | Resurfacing and Structures | 2,430,000        | 4,491,000         | 350,000          | 7,271,000         |
| A640 Rochdale Road (Kingsway to Dale Street)   | Rochdale        | Resurfacing                | 300,000          | -                 | -                | 300,000           |
| A580 Bridges (Golborne Railway Bridge and Morleys Canal Bridge)  | Wigan           | Structures                 | 750,000          | 500,000           | -                | 1,250,000         |
| <b>Total</b>   |                 |                            | <b>8,282,000</b> | <b>10,127,000</b> | <b>6,220,000</b> | <b>24,629,000</b> |
| <b>Priority Package 2</b>  |                 |                            |                  |                   |                  |                   |
| Alan Turing Way / Hulme Hall Lane (Ashton Old Road to Lord North Street)   | Manchester      | Resurfacing                | 20,000           | 230,000           | 1,441,000        | 1,691,000         |
| KRN Resurfacing (Sections of the KRN, including on the A49, A58, A577 and A580)  | Wigan           | Resurfacing                | 1,532,000        | 1,471,000         | -                | 3,003,000         |
| Broadway (Nuthurst Road to Oldham boundary (N))  | Manchester      | Resurfacing                | 181,000          | 13,000            | -                | 194,000           |
| A664 Manchester New Road (Middleton Way to Borough Boundary)   | Rochdale        | Resurfacing                | -                | -                 | 683,000          | 683,000           |
| A58 Rochdale Road (Rochdale Boundary to Derby Way), (Derby Way to Angouleme Way), A58 Angouleme Way (Full length), A56/58 Jubilee Way (Full length), A58 Bolton Street (Jubilee Way to Crostons Road) plus A58 Bury New Road (Peel Street to Bury Borough Boundary)                              | Bury/Rochdale   | Resurfacing                | 555,000          | 1,422,000         | 555,000          | 2,532,000         |
| Hyde Road (Stockport Road to Tameside Boundary)  | Manchester      | Resurfacing                | 100,000          | 1,333,000         | 1,000,000        | 2,433,000         |
| Stockport Road (Devonshire Street to Stockport boundary)   | Manchester      | Resurfacing                | 976,000          | 1,231,000         | 50,000           | 2,257,000         |
| KRN Resurfacing (various links on the A57, A6017, A6018, A627, A635, A662)   | Tameside        | Resurfacing                | 346,000          | 732,000           | 835,000          | 1,913,000         |
| <b>Total</b>   |                 |                            | <b>3,710,000</b> | <b>6,432,000</b>  | <b>4,564,000</b> | <b>14,706,000</b> |
| <b>Priority Package 3</b>  |                 |                            |                  |                   |                  |                   |
| Broughton Road Pendleton roundabout and Gyrotary   | Salford         | Resurfacing                | 1,404,000        | -                 | -                | 1,404,000         |
| Palatine Road (1. Princess Parkway to M60<br>2. Mersey Road to Wilmslow Road)  | Manchester      | Resurfacing                | 100,000          | 1,362,000         | -                | 1,462,000         |
| KRN Resurfacing (A664 Queensway Edinburgh Way to Schofield Street)   | Rochdale        | Resurfacing                | 900,000          | -                 | -                | 900,000           |
| Tameside MBC Retaining wall Structural replacement and strengthening (Roe Cross Longdendale, Mottram Rd Hyde, Mottram Rd Longdendale Manchester Road Hyde, Manchester Road Mossley, Wakefield Rd Stalybridge, Woolley Lane Hyde, Stamford Street Stalybridge, Mottram Cutting, and Hollingworth) | Tameside        | Structures                 | 440,000          | 1,410,000         | 852,000          | 2,702,000         |
| A56 Walmersley Road (M66 Bridge to M66 northbound exit), (Springside Road to Northfield Road), A56 Manchester Road (Jubilee Way to Tennyson Avenue), (Chestnut Avenue to Stanhope Avenue), (Fairfax Road to Butterstile Lane)  | Bury            | Resurfacing                | 805,000          | 805,000           | 805,000          | 2,415,000         |
| A555 Resurfacing (A5102 Woodford Road to B5358 Wilmslow Road)  | Stockport       | Resurfacing                | -                | 1,500,000         | -                | 1,500,000         |
| Ashburton Road West Bridgewater Canal bridge Trafford Park   | Trafford        | Structures                 | 55,000           | 330,000           | 110,000          | 495,000           |
| Todmorden Road Retaining Walls   | Rochdale        | Structures                 | 840,000          | -                 | -                | 840,000           |
| <b>Total</b>   |                 |                            | <b>4,544,000</b> | <b>5,407,000</b>  | <b>1,767,000</b> | <b>11,718,000</b> |

# Appendix E: Value for Money Assessment - Assumptions

## Introduction

This note describes the method used to appraise the Value for Money (VfM) of the schemes involving (1) maintenance works to highway structures and (2) resurfacing of highways that have defects. The treatment of the cost estimates is also described.

Impacts are appraised up to (and including) 2025. After this date it was assumed that other strategies would be adopted to address the problems.

## Scheme costs

The cost estimates including the contributions to be made by the local highway authorities, are provided in **Table 3** in the main body of this document. These are expressed in nominal values. The following adjustments are made to convert these into real values for the appraisals.

- Addition of real cost inflation, which is assumed to be 1.0% p.a.
- Conversion to Market Prices by applying the WebTAG tax correction factor of 1.209.
- Addition of Optimism Bias, which is assumed to be 15% for structures schemes and 10% for resurfacing schemes.
- Conversion to 2010 prices by the removal of price inflation, which is assumed to be 2.5% p.a.
- Discounting to 2010 at the WebTAG rate of 3.5% p.a.

## Structures schemes

These scheme options involve the repair of bridges and retaining walls to enable traffic to continue using the existing roads, including negating the requirement for restrictions to Heavy Goods Vehicles.

### *Bridges*

For bridge schemes, in the base or “Do Minimum” cases weight restrictions would be typically be applied to the roads, requiring all vehicles other than cars and light goods vehicles to divert to use an alternative route. In some cases the structural deterioration would require all traffic to be diverted. The diversionary routes were identified by the local highway authorities. The ‘Do Something’ case would involve

all traffic continuing to use the bridges as it does currently. The following impacts of maintaining existing use of the bridges were quantified and monetised:

- Travel time changes;
- Fuel based Vehicle Operating Costs (VOCs);
- Non-fuel based VOCs; and
- Indirect tax receipts to the Government arising from changes in fuel consumption.

The route distances were measured using Geographical Information Systems software. Annual average traffic flow data on the roads affected, classified by vehicle type, were provided by either the highway authorities or the TfGM Highways Forecasting and Analysis Service department. Data for the vehicle fuel consumption rates and the monetisation of travel time changes and VOCs was obtained from the WebTAG databook, Autumn 2014 edition.

### ***Retaining Walls***

For retaining wall schemes, a full business case was produced for a major scheme funding submission in 2009. [GM Highway Retaining Walls, Maintenance Major Scheme Business Case, Revision 6, March 2009.] This Business Case included investment appraisals of retaining wall repair schemes in Rochdale, Oldham, Tameside and Stockport districts. These appraisals showed Benefit to Cost Ratios (BCRs) ranging from 1.7 to 16.7. A mid-range BCR of 9.20 is assumed to be appropriate for the schemes being submitted for the Highways Maintenance Challenge fund bid, because the schemes are located in the Tameside and Rochdale districts.

### **Resurfacing schemes**

One of the resurfacing schemes was appraised, with the following impacts being quantified and monetised:

- Reduced maintenance costs – avoiding repairs of an average of 19.1 defects per km at a cost of £45 per defect (in 2015 prices);
- Avoided delays to traffic from lane possessions needed for defect repairs – assumed to amount to 1 minute delay affecting 30% of traffic on 1 day per defect; and
- Reduced accidents resulting from better road surfaces, forecast by the Council to deliver a 20% reduction in Personal Injury Accidents per vehicle-km on its roads.

Data for the vehicle fuel consumption rates and the monetisation of travel time changes and VOCs was obtained from the webTAG databook, Autumn 2014 edition.

The resurfacing scheme, which covered five main arterial roads showed a BCR of 3.22. The other resurfacing schemes also cover similar roads on the Key Route Network. It was therefore considered reasonable to assume that these schemes would generate similar BCRs - as such, this BCR was applied to other resurfacing schemes in calculating the overall BCR for the packages.



## **Appendix F – Application Forms**