



## PTOLEMY: 2016 Reference case supply inputs

|                 |     |                                                                                      |
|-----------------|-----|--------------------------------------------------------------------------------------|
| Project note:   | 007 | P:\P20\2079 Derby HMA\TEXT\REPORTS\Preliminary Stage Report\007_2016Reference_v8.doc |
| Technical note: |     |                                                                                      |

| Version | Date     | By   | Reviewed by | Authorised (TN only) | Notes                                                                                                          |
|---------|----------|------|-------------|----------------------|----------------------------------------------------------------------------------------------------------------|
| 1.0     | 11/04/08 | Dunc | Ying Jin    | Ying Jin             | Note prepared with permission, based on Technical Note 27 (version 8.0) from the 6C's TIF Pump-Priming Project |

### 1.1 INTRODUCTION

1.1.1 The 2016 Reference Case consists of an assumed package of transport schemes and interventions that are considered to be 'most likely' by the 6C's TIF project in the period upto 2016. The transport measures included in this package have been derived by a process of extrapolation of past trends, interpretation of current policies and an expectation of a continuation of historic levels of funding availability.

1.1.2 The base year for PTOLEMY and the SATURN traffic models is 2006. Therefore the reference case includes all 'most likely' schemes between 2006 and 2016.

1.1.3 In this technical note, the schemes in the 2016 Reference Case are tabulated in turn, for each of the three cities (Derby, Leicester and Nottingham).

1.1.4 For each city and its surrounding areas, tables are included showing:

- Local authority highway schemes (major and minor).
- Car parking schemes (on and off street).
- PT infrastructure.
- Park and Ride schemes.
- Heavy rail schemes.
- Light rail schemes.
- Other transport initiatives, including Smarter Choice measures.

1.1.5 Following the tables for local authority schemes there is a table indicating Highways Agency schemes in the East Midlands Region



1.2 DERBY CITY AND DERBYSHIRE COUNTY SCHEMES

1.2.1 Local Authority Highway schemes

Table 1: Derby and Derbyshire Local Authority Highway Schemes

| Ref | Scheme           | Cost               | Description                                                                                                                                                | Impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Status | Plan Ref                                                                                       |
|-----|------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|
| D6  | T12              |                    | A Development Link Road to open access to Chellaston Business Park (Local Plan EP1).<br><br>Modelled in DATM 2016 South Derbyshire Reference Case Scenario | Scheme will provide some relief to the A514, particularly traffic that wants to get to and from Rolls Royce.                                                                                                                                                                                                                                                                                                                                                                                                       |        | Diagram of scheme at <a href="#">T12.PDF</a>                                                   |
| D7  | Connecting Derby | £29 Million (2004) | Phases 2, 3A and 3B. Integrated scheme that includes a new single lane carriageway to complete the ring road, bus lanes and bus priorities.                | Benefits for both general traffic and buses, as a result of reductions in journey times Also improved pedestrian and cycle accessibility.<br><br>Comprises reductions in off-street parking from 803 spaces to 388.<br><br>Benefits (30yr) include: <ul style="list-style-type: none"><li>• £25 million in accidents savings.</li><li>• £2.7 million bus user benefits in AM over 30 year period, £7.5 million in Peak.</li><li>• £109 million operating cost and time savings to private vehicle users.</li></ul> |        | <a href="#">AS_GEN_76LS_122AS_GEN_76[1].pdf</a><br><br><a href="#">Siddals Rd bus link.pdf</a> |



## 1.2.2 Car Parking Schemes

**Table 2: Derby Car Parking Schemes- off street**

| Ref | Scheme             | Cost | Description                                                                                      | Impacts                                                                                                                                                                                                                                                                                                                    | Status      | Figure / Plan Ref          |
|-----|--------------------|------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|
|     | Off-Street Parking |      | Changes as a result of Connecting Derby and Westfield Development Changes in Off-Street Parking: | <ul style="list-style-type: none"> <li>■ Drewery Lane from 123 to 42</li> <li>■ Abbey Street from 159 to 195</li> <li>■ Little City from 219 to 32</li> <li>■ Sacheveral Street from 86 to 0</li> <li>■ Wilmot Street from 189 to 92</li> <li>■ Eagle Centre from 739 to 3040</li> <li>■ Coliseum from 127 to 0</li> </ul> | 2016 (2011) | DATS DRAFT Final Report v5 |

**Table 3: Derby Car Parking Schemes- on street**

| Ref | Scheme            | Cost | Description                                                                    | Impacts                                                                                                                                                                                                                                                                                                                                                         | Status      | Figure / Plan Ref          |
|-----|-------------------|------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|
|     | On-Street Parking |      | Changes in Parking, resulting from Connecting Derby and Westfield Development: | <ul style="list-style-type: none"> <li>■ Osmaston Road loss of all spaces</li> <li>■ London Road loss of all spaces</li> <li>■ Burton Road loss of 31 spaces</li> <li>■ Sacheveral Street loss of 10 spaces</li> <li>■ Normanton Road loss of 24 spaces</li> <li>■ Leopold Street loss of 3 spaces</li> <li>■ Charnwood Street addition of 36 spaces</li> </ul> | 2016 (2011) | DATS DRAFT Final Report v5 |



## 1.2.3 PT Infrastructure

**Table 4: Derby and Derbyshire road based PT infrastructure schemes**

| Ref | Scheme                                           | Cost                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Impacts                                                                                                                                              | Document / Plan Ref                                  |
|-----|--------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| D1  | Burton Road SITS <sup>1</sup>                    | £3.5 Million                         | Mixture of bus lane and signal priority measures on the approaches to the following: <ul style="list-style-type: none"><li>• B5021 Hillsway/Burton Road including full signalisation of junction</li><li>• A5111/Burton Road</li></ul>                                                                                                                                                                                                                                                       | Traffic Neutral for general traffic<br><br>Will achieve around 3 minute bus journey time saving inbound and outbound during weekday peaks            |                                                      |
| D2  | Uttoxeter New Road SITS                          | £3 Million Based on Current Estimate | Mixture of bus lane and signal priority measures on the following links: <ul style="list-style-type: none"><li>• Uttoxeter New Road/Uttoxeter Old Road Junction</li><li>• Westbound priority between A5111 and Uttoxeter New Road/Uttoxeter Old Road Junction.</li><li>• Eastbound and westbound bus priority between new access point and A5111 Ring Road.</li><li>• Bus Priority to Uttoxeter Road/Corden Avenue</li><li>• Eastbound bus lane between Western and Corden Avenue.</li></ul> | Traffic Neutral for general traffic<br><br>Delays that could be removed through bus priority are estimated at around 5 minutes inbound and outbound. | See 1:50,000 plan <a href="#">reference plan.pdf</a> |
| D3  | A6 London Road SITS (Bus Priority Measures Only) | £3 Million Based on Current Estimate | Mixture of bus lane and signal priority measures on the following links: <ul style="list-style-type: none"><li>• A5111 Ring Road Approaches</li><li>• London Road Bridge</li><li>• London Road to Midland Road.</li></ul>                                                                                                                                                                                                                                                                    | Traffic Neutral for general traffic<br>delays that could be removed through bus priority are estimated at around 9 minutes inbound and outbound.     | See 1:50,000 plan <a href="#">reference plan.pdf</a> |
| D4  | A514 Osmaston Road SITS                          | £3 Million Based on Current Estimate | Mixture of bus lane and signal priority measures on the following links: <ul style="list-style-type: none"><li>• Phase 1 Between Litchurch Lane &amp; St. Reginald Street.</li><li>• Phase 2 Sinfin Avenue &amp; A5111 Outer Ring Road.</li></ul>                                                                                                                                                                                                                                            | Traffic Neutral for general traffic<br>Delays that could be removed through bus priority are estimated at around 3.5 minutes inbound and outbound.   | See 1:50,000 plan <a href="#">reference plan.pdf</a> |



## 1.2.4 Park and Ride schemes

**Table 5: Derby and Derbyshire Park and Ride Schemes**

| Ref | Scheme                     | Cost                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Impacts                                                                                                                                                                        | Status | Figure / Plan Ref                                                         |
|-----|----------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------|
| D5  | Boulton Moor Park and Ride | £5 million<br><br>Maintenance based on previous studies will be around £60,000 per annum | Construction of a 750 space car park. It is expected that a minimum level of infrastructure could be delivered through the LTP. This would be in the form of a gravel car park and limited facilities.<br><br>Service frequency: 15 minutes Monday to Saturday; 30 minutes; evenings and Sunday.<br><br>Journey time 15 minutes<br>Operating Costs paid through S106 contributions.<br><br>Fare based on current Park and Ride site £2.00 return paid on bus. | Estimated 6-9% interception rate of inbound traffic; depending on level of bus priority measures.<br><br>Current Park and Ride charges are around £2.00 for a return bus fare. | 2011   | Figure2.1.doc<br>E702-58-C_ParkRide.pdf<br>ReferenceCase.pdf<br>for route |
|     | Derby City Hospital P&R    |                                                                                          | 350 spaces, 1 bus every 15 mins Mon-Fri 06:30 to 22:00, (06:30 to 19:00 weekend)                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                | 2009   |                                                                           |



1.2.5 Heavy Rail Schemes

Table 6: Derbyshire Heavy Rail Schemes

| Ref | Scheme              | Cost | Description                                                                                                                                                                                                                 | Impacts | Status      | Document / Plan Ref            |
|-----|---------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|--------------------------------|
|     | Rail service change |      | The hourly London-Sheffield service will operate as now; however, there will be off-peak calls at East Midlands Parkway and Luton Stations.                                                                                 |         | 2016 (2011) | Stakeholder Briefing Document* |
|     | Rail service change |      | The existing hourly fast London-Nottingham service includes a train portion for Derby, with portions splitting and joining at Leicester. The Derby portion will call at Loughborough, East Midlands Parkway and Long Eaton. |         | 2016 (2011) | Stakeholder Briefing Document* |
|     | Rail service change |      | The existing hourly Nottingham to London semi-fast service will operate as now, but with additional calls at East Midlands Parkway.                                                                                         |         | 2016 (2011) | Stakeholder Briefing Document* |

\* Stakeholder Briefing Document – East Midlands Franchise (October, 2006), East Midlands Regional Assembly

1.2.6 Other local initiatives

Table 7: Other initiatives in Derby

| Ref | Scheme         | Cost | Description                              | Impacts | Status | Document / Plan Ref |
|-----|----------------|------|------------------------------------------|---------|--------|---------------------|
|     | Smart Measures |      | To Central areas of Derby. See Section 7 |         |        |                     |



### 1.3 LEICESTER CITY AND LEICESTERSHIRE COUNTY SCHEMES

#### 1.3.1 Local Authority Highway Schemes

**Table 8: Leicester and Leicestershire Local Highway Infrastructure Schemes**

| Ref | Scheme                                   | Cost | Description                                                                | Impacts                                          | Status | Figure / Plan ref                                                                                                                                                                                                                                                                                                                  |
|-----|------------------------------------------|------|----------------------------------------------------------------------------|--------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18a | B582 Narborough Road - Whetstone         |      | B582 between Narborough Road and Whetstone and to the Foxhunter Roundabout | Note: also included under Leicester's PT schemes |        | <a href="#">2489.03/a1/1/1</a><br><a href="#">(2489_03_A1_1_1.pdf)</a><br><br><a href="#">2489.04/H1/1/1</a> (paper only)<br><br><a href="#">B582 Waste Transfer Access (2 lane trafficSigs070521.pdf)</a><br><br><a href="#">0010\M\22</a><br><a href="#">(B582improved_0010_M_22.pdf and B582 Improvements - 0010_M_22.pdf )</a> |
| 18b | Narborough Road                          |      | 50mph to 40mph                                                             | Note: also included under Leicester's PT schemes |        |                                                                                                                                                                                                                                                                                                                                    |
|     | Loughborough Integrated Transport scheme |      | From Regional Funding Allocation Letter from the secretary of state        |                                                  |        |                                                                                                                                                                                                                                                                                                                                    |
|     | Melton Mowbray Bypass                    |      | From Regional Funding Allocation Letter from the secretary of state        |                                                  |        |                                                                                                                                                                                                                                                                                                                                    |
|     | Lutterworth Western                      |      | From Regional Funding Allocation Letter from the secretary of state        |                                                  |        |                                                                                                                                                                                                                                                                                                                                    |
|     | Kegworth Bypass                          |      | From Regional Funding Allocation Letter from the secretary of state        |                                                  |        |                                                                                                                                                                                                                                                                                                                                    |



1.3.2 Car Parking

**Table 9: Leicester- Car Parking**

| Ref | Scheme             | Cost | Description                                                | Impacts                                                                                                                   | Status      | Figure / Plan Ref                    |
|-----|--------------------|------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------|
|     | Off-Street Parking |      | St Peters Lane car park (850 spaces) has been closed down. | St Peters Lane has been replaced by a new 2000 space car park for the expanded Shires shopping centre off Burgess Street. | 2016 (2011) | Leicester City Council (March, 2007) |

1.3.3 PT Infrastructure

**Table 10: Leicester and Leicestershire Road based PT Infrastructure Schemes**

| Ref | Scheme                | Cost | Description                                | Impacts                                                                                      | Status | Figure / Plan Ref |
|-----|-----------------------|------|--------------------------------------------|----------------------------------------------------------------------------------------------|--------|-------------------|
| 10  | Quality Bus Corridors |      | Quality Bus Corridors within City boundary | Leicestershire and Leicester 2016 DN and ref case schemes                                    |        | 070907.doc        |
| 10a | Saffron Lane          |      |                                            | From city boundary to city centre                                                            |        |                   |
| 10b | Melton Road           |      |                                            |                                                                                              |        |                   |
| 10c | Humberstone Road      |      |                                            |                                                                                              |        |                   |
| 10d | Aylestone Road        |      |                                            | Capacity neutral achieving 7% improvement in JT over 2016 JT +10% fare reduction equivalence |        |                   |
| 10e | Groby Road            |      |                                            |                                                                                              |        |                   |
| 10f | Welford Road          |      |                                            |                                                                                              |        |                   |
| 10g | London Road           |      |                                            |                                                                                              |        |                   |





| Ref | Scheme                                          | Cost | Description                                                | Impacts                                                                                          | Status                     | Figure / Plan Ref                                                                                                          |
|-----|-------------------------------------------------|------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 10h | Narborough Road                                 |      |                                                            |                                                                                                  |                            |                                                                                                                            |
| 11  | Abbey Lane JT improvements                      |      |                                                            | 16.8sec per vehicle from Redhill circle/St Margerets Way to Vaughan Way at the Central Ring Road |                            |                                                                                                                            |
| 12  | SCOOT                                           |      | Improve Journey times on radial routes.<br>To be phased in | 0.5% reduction in the increase in JT journey time to 2016.                                       |                            |                                                                                                                            |
| 13  | New Link to Soar Valley Way to Lutterworth Road |      |                                                            |                                                                                                  |                            | <a href="#">L(--)-129 (Sour Valley Link Road.pdf)</a> (NOTE: ignore the P&R site on this drawing it is not to be modelled) |
| 14  | Clock Tower Resident Parking                    |      | 2.5 mile radius from area.<br>Will be phased in            | 90% of residential areas within 2.5 miles of Clock Tower covered by residents car park schemes   |                            | Map of clock tower<br><a href="#">Residents parking city 2half.doc</a>                                                     |
| 15  | Employee Travel Plans                           |      | See section 7 regarding SMART measures                     | 90% of employees in CTZ covered by travel plan                                                   |                            | CTZ from <a href="#">CTZ.doc</a>                                                                                           |
| 16  | School travel plans                             |      | See section 7 regarding SMART measures                     | 90% of state schools covered by travel plan                                                      | Target for 2011 completion |                                                                                                                            |



| Ref | Scheme                                                   | Cost | Description                                                                                                                                                      | Impacts                                                                   | Status | Figure / Plan Ref                                                                                                                                                                                                                                                                                                                                    |
|-----|----------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18a | B582 Improvement                                         |      | B582 between Narborough Road and Whetstone and to the Foxhunter Roundabout                                                                                       | Note: also included under Leics highway schemes                           |        | <a href="#">2489.03/a1/1/1</a><br><a href="#">(2489_03_A1_1_1.pdf)</a><br><br><a href="#">2489.04/H1/1/1</a> (paper only)<br><br><a href="#">B582 Waste Transfer Access (2 lane trafficSigs070521.pdf)</a><br><br><a href="#">0010\M\22</a><br><a href="#">(B582improved_0010_M_22.pdf</a><br><a href="#">andB582 Improvements - 0010_M_22.pdf )</a> |
| 18b | 50mph to 40mph Narborough Road                           |      |                                                                                                                                                                  | Note: also included under Leics highway schemes                           |        |                                                                                                                                                                                                                                                                                                                                                      |
| 19  | Quality Bus Corridors from City boundary into the county |      | Also assume that bus corridors in the County are capacity neutral expected to achieve 7% improvement in JT over 2016 JT + 10% fare reduction for quality.        | <a href="#">Leicestershire and Leicester 2016 DN and ref case schemes</a> |        | <a href="#">070907_received 10Sept07.doc</a>                                                                                                                                                                                                                                                                                                         |
| 19a | Saffron Lane                                             |      | Saffron Lane to B582 and beyond to Countesthorpe Rd. in Countesthorpe Rd. Along B582 to Launceston Rd up to A5199 Welford Rd to existing bus Lane on Welford Rd. |                                                                           |        |                                                                                                                                                                                                                                                                                                                                                      |
| 19b | Melton Road                                              |      | Melton Rd to east Goscote                                                                                                                                        |                                                                           |        |                                                                                                                                                                                                                                                                                                                                                      |
| 19c | Humberstone Road                                         |      | Humberstone Rd to Station Rd in Thurnby                                                                                                                          |                                                                           |        |                                                                                                                                                                                                                                                                                                                                                      |



| Ref | Scheme             | Cost | Description                                                                                                                                                             | Impacts | Status | Figure /<br>Plan Ref |
|-----|--------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|----------------------|
| 19d | Aylestone Road     |      | Aylestone Rd to Countesthorpe, Blaby,<br>Glen Parva to City<br><br>Broughton Astley, Cosby, Whetstone,<br>Blaby, Glen Parva to City                                     |         |        |                      |
| 19e | Groby Road         |      | From Ratby, Groby and A50 to City<br>Boundary                                                                                                                           |         |        |                      |
| 19f | Welford Road       |      | Guthlaxton Way Roundabout to City                                                                                                                                       |         |        |                      |
| 19g | London Road        |      | Florence Wragg Way, Oadby to City                                                                                                                                       |         |        |                      |
| 19h | Narborough<br>Road |      | From Narborough Forest Rd to B4114<br>B4114 through Grove Park and Fosse<br>Park to City<br><br>From Enderby B582 to B4114 through<br>Grove Park and Fosse Park to City |         |        |                      |
| 19i | Hinckley Road      |      | Beggars Lane/A47 to City                                                                                                                                                |         |        |                      |



1.3.4 Park and Ride Schemes

Table 11: Leicester and Leicestershire Park and Ride Schemes

| Ref | Scheme        | Cost | Description                                                                                                                                                                                                                                                                                          | Impacts                          | Status           | Figure / Plan Ref                                                                                                                                                                 |
|-----|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17a | P&R Enderby,  |      | Current proposal is to install Intelligent Bus Priority (IBP) at the traffic signal controlled junctions along the corridor to give bus priority/ journey time reliability. Further investigation into the proposed A47 bus lanes is pending finalisation of proposals. Results expected October '07 | 1000 spaces<br>10 minute headway |                  | <a href="#">2947/H1/1/1P (Enderby PandR General Layout PLANNING.PDF)</a><br><br>Bus route <b>Corridor Route.pdf</b> .<br><br><b>A47 Bus Lanes 070725.pdf</b>                      |
| 17b | P&R Birstall, |      | Note: Birstall is in the 2016 do nothing with a total of 350 parking spaces.                                                                                                                                                                                                                         | 1000 spaces<br>10 minute headway | Developer funded | <a href="#">Birstall PandR site Layout.pdf</a><br><br>Bus Route <a href="#">Report 04-04.jpg</a>                                                                                  |
| 17c | P&R Glenfied  |      |                                                                                                                                                                                                                                                                                                      | 1000 spaces<br>10 minute headway |                  | Bus route <a href="#">Report 04-04.jpg</a><br><br>Layout: <a href="#">Report 04-01.jpg</a> and <a href="#">Report04-02.jpg</a><br><br>Description <a href="#">Report02-01.jpg</a> |



1.3.5 Heavy Rail Schemes

Table 12: Leicester and Leicestershire Heavy Rail Schemes

| Ref | Scheme              | Cost | Description                                                                                                                                                                                                                 | Impacts | Status      | Figure / Plan Ref              |
|-----|---------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|--------------------------------|
|     | Rail service change |      | The hourly London-Sheffield service will operate as now; however, there will be off-peak calls at East Midlands Parkway and Luton Stations.                                                                                 |         | 2016 (2011) | Stakeholder Briefing Document* |
|     | Rail service change |      | The existing hourly fast London-Nottingham service includes a train portion for Derby, with portions splitting and joining at Leicester. The Derby portion will call at Loughborough, East Midlands Parkway and Long Eaton. |         | 2016 (2011) | Stakeholder Briefing Document* |
|     | Rail service change |      | The existing hourly Nottingham to London semi-fast service will operate as now, but with additional calls at East Midlands Parkway.                                                                                         |         | 2016 (2011) | Stakeholder Briefing Document* |

\* Stakeholder Briefing Document – East Midlands Franchise (October, 2006), East Midlands Regional Assembly

## 1.4 NOTTINGHAM AND NOTTINGHAMSHIRE COUNTY SCHEMES

### 1.4.1 Local Authority Highway Schemes

**Table 13: Nottingham and Nottinghamshire Major Highway Infrastructure schemes**

|    | Scheme                               | Cost        | Description                                             | Impacts | Status                      | Figure / Plan Ref    |
|----|--------------------------------------|-------------|---------------------------------------------------------|---------|-----------------------------|----------------------|
| N1 | Ring Road Major                      | £30 million | Nottingham Ring Road Improvements                       |         | LTP                         | ?                    |
| N2 | Eastside Transport Strategy          | £12 million | Nottingham City Centre – (eastern) network improvements |         | Planned                     | ?                    |
| N4 | Gedling Transport Improvement Scheme |             |                                                         |         | Completed                   |                      |
| N5 | Hucknall Inner Relief Route          |             |                                                         |         | Planned                     | Notts                |
| N6 | Gedling Access Road                  |             |                                                         |         | In LDF as developer funded. | Local Plan Documants |

**Table 14: Nottingham and Nottinghamshire Minor Local Authority Highway Schemes**

| Ref | Scheme                                                                          | Cost       | Description                                                                                                                                                                                                                                        | Impacts | Status | Figure / Plan Ref                                                                        |
|-----|---------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|------------------------------------------------------------------------------------------|
| N7  | Cattle Market Road realignment                                                  | £4 million | Minor impact in capacity. Not modelled in PTOLEMY                                                                                                                                                                                                  |         |        |                                                                                          |
| N8  | Triumph Road                                                                    | £150k      | Minor impact in capacity. Not modelled in PTOLEMY                                                                                                                                                                                                  |         |        |                                                                                          |
| N9  | Hucknall Road/Arnold Road and Hucknall Road/Kersall Drive junction improvements | £500k      | Proposed scheme (as shown in drawing) has two lanes on Hucknall Road on the southbound approach to the junction, with one lane permitting straight ahead and left turn movements and the other permitting straight ahead and right turn movements. |         |        | reference case n9-n13.doc<br>Hucknall Road Junction - Feasibility drawing Option 2.pdf), |



#### 1.4.2 Car Parking Schemes

**Table 15: Nottingham- Workplace Parking Levy**

| Ref | Scheme                                     | Cost | Description                                                               | Impacts        | Status | Figure / Plan Ref |
|-----|--------------------------------------------|------|---------------------------------------------------------------------------|----------------|--------|-------------------|
| N29 | Workplace Parking Levy<br>£185 – Year 2010 |      | Annual charge for every space (over a limit of 10 spaces for businesses). | TN 22 from MVA |        |                   |
| N30 | Workplace Parking Levy<br>£350 – Year 2014 |      | Annual charge for every space (over a limit of 10 spaces for businesses). | TN 22 from MVA |        |                   |

#### 1.4.3 PT Infrastructure

**Table 16: Nottingham and Nottinghamshire Road-based PT infrastructure Schemes**

| Ref | Scheme                                                                      | Cost          | Description                                                                                                                                                                                                                                                                                                                                                                            | Impacts                                                                                                                                                                                                                                                        | Status | Figure / Plan Ref          |
|-----|-----------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------|
| N21 | Mansfield Road:<br>Carrington to<br>Gregory Boulevard<br>(inbound/outbound) | £1<br>million | Ongoing scheme to provide continuous bus lanes between Haydn Road and Hucknall Road, by carrying out strip widening works on the east side of Mansfield Road, benefiting approximately 30 buses an hour.<br>Interim solution, which is a queue relocation system, has been provided to assist inbound buses on this section of highway, which benefits approximately 50 buses an hour. | Inbound bus lane between Hucknall Road and Gregory Boulevard, not yet possible due to additional land-take yet to be procured.<br><br>The cost of this scheme to date is £630K and it has reduced journey times for buses by up to 2 minutes capacity neutral. |        | <b>TIF ref n21-n28.doc</b> |
| N22 | Wollaton Road:<br>Russell Avenue to<br>Ring Road<br>(inbound)               | £1<br>million | This scheme consists of 2 options. The first option was to allow buses only to access the service road, which runs parallel to A609 Wollaton Road between Lambourne Drive and Woodhall Road. The second option was to widen the existing carriageway between Russell Avenue and Crown Island, although this option highlighted a number of problems.                                   | This scheme would benefit 9 buses an hour and reduce journey times for buses by up to 2 minutes capacity neutral.                                                                                                                                              |        | <b>TIF ref n21-n28.doc</b> |



| Ref | Scheme                                                    | Cost       | Description                                                                                                                                                                                                                                                                                                                                                                                                                         | Impacts                                                                                                                                                                                                                                                                                                                                                                                                                       | Status | Figure / Plan Ref          |
|-----|-----------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------|
| N23 | Nottingham Road: approach to Ring Road (inbound/outbound) | £100k      | <p>This scheme provides an outbound evening peak period bus lane on Nottingham Road between North Gate and Ring Road. The bus lane does not require any significant civils works other than signing and lining required for the bus lane and associated parking restrictions.</p> <p>It is unlikely that any bus priority could be provided on the inbound corridor due to the width of the carriageway on Sherwood Rise.</p>       | <p>The introduction of a peak period, outbound bus lane on Nottingham Road would halve average bus journey times along this corridor - an average journey time saving of 1 minute, 21 seconds.</p> <p>This scheme will benefit approximately 15 buses an hour capacity neutral.</p>                                                                                                                                           |        | <b>TIF ref n21-n28.doc</b> |
| N24 | Trent Bridge: Meadows Way/London Road approach (outbound) | £50k       | <p>This scheme extends the existing bus lane on Meadows Way outbound from a point opposite Eugene Gardens to Ryehill Street. To enable the new bus lane to "tie in" with the existing bus lane, it will be necessary to carry out some minor widening works on the east side of Meadows Way.</p> <p>Other bus priority measures to assist buses between Meadows Way and Trent Bridge are likely to be introduced in the future.</p> | <p>This scheme will benefit over 50 buses an hour and is likely to reduce journey times for buses by up to 2 minutes capacity neutral</p>                                                                                                                                                                                                                                                                                     |        | <b>TIF ref n21-n28.doc</b> |
| N25 | Derby Road – City Boundary to City Centre                 | £1 million | <p>To provide inbound and outbound bus priority on Derby Road, between Priory and QMC. The Scheme Identification Study carried out by AMScott in April 2004 identified 2 options. The first option provides a partial bus lane, i.e. only provide the lane at those sections which are 10m wide or more. The second option provides a full bus lane between the two roundabouts, which involves road widening.</p>                  | <p>This scheme will benefit up to 30 buses an hour at peak times and could save bus journey times by a maximum of 2.9 minutes.</p> <p>The A52 (between Priory and QMC) is a Trunk Road. Therefore any scheme that is introduced on this section of road will need to have approval from the Highways Agency. At the present, AMScott are recommending that no action be taken thus impact on highway is capacity neutral.</p> |        | <b>TIF ref n21-n28.doc</b> |





| Ref | Scheme                                                                | Cost       | Description                                                                                                                                                                                                                                                                                                                                      | Impacts                                                                                                       | Status | Figure / Plan Ref          |
|-----|-----------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------|----------------------------|
| N26 | A612 Daleside Road                                                    | £1 million | The option for this corridor is to carry out strip widening works to provide peak period, inbound and outbound bus lanes between Candle Meadow and Trent Lane. It is also proposed to provide improvements to the Daleside Road/Racecourse Road junction, to allow easier egress for buses from the north and south sections of Racecourse Road. | This scheme will benefit up to 12 buses an hour and should reduce journey times for buses by up to 3 minutes. |        | <b>TIF ref n21-n28.doc</b> |
| N27 | A6005 Derbyshire/Nottinghamshire boundary to Nottingham City boundary | £2 million | Nottinghamshire County Council has identified a number of improvements on A6005 from the County boundary to Attenborough Lane, including:- Nottingham Road/High Road, Toton; Nottingham Road/Swiney Way; Nottingham Road/Ranson Road and Nottingham Road/Attenborough Lane.                                                                      | This scheme will benefit up to 10 buses an hour.                                                              |        | <b>TIF ref n21-n28.doc</b> |
| N28 | Ring Road: QMC to Mansfield Road (as part of Ring Road Major)         |            | Included in Ring Road Major scheme                                                                                                                                                                                                                                                                                                               | Costs are, included within total cost estimate for Ring Road Major                                            |        | <b>TIF ref n21-n28.doc</b> |



#### 1.4.4 Park and Ride Schemes

**Table 17: Nottingham and Nottinghamshire Park and Ride Schemes**

| Ref  | Scheme                 | Cost  | Description                                                                                                                                     | Impacts                                                   | Status             | Document / Plan Ref                            |
|------|------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------|------------------------------------------------|
| N10  | Phoenix Park expansion | £250k | Existing sites more spaces (current capacity 660 additional 250 in ref case DJ 25/9/07)                                                         |                                                           | <b>Implemented</b> | <b>reference case n9-n13.doc</b>               |
| N11  | Racecourse expansion   | £250k | Existing sites more spaces (addition 250 each)<br>Junction at entrance of site to be changed as part of A612 Daleside Road bus priority scheme. | Current capacity is about 470. Capacity to rise to 720.   |                    | DJ 25/9/07<br><b>reference case n9-n13.doc</b> |
| N12  | Toton                  |       | Included in NET 2 near to junction 24.<br>Capacity 1400 spaces                                                                                  | Costs included within total cost estimate for NET Phase 2 | <b>Implemented</b> | <b>reference case n9-n13.doc</b>               |
| N13  | Clifton South          |       | Included in NET 2 near to junction 24.<br>Capacity 1000 spaces                                                                                  | Costs included within total cost estimate for NET Phase 2 | <b>Implemented</b> | <b>reference case n9-n13.doc</b>               |
| N13a | Gamston P&R            |       | South East Quadrant of Gamston Roundabout.<br>Capacity 600 spaces in phase 1 > +400 spaces in phase 2.                                          | 10min bus frequency                                       | <b>Implemented</b> |                                                |



## 1.4.5 Heavy rail Schemes

**Table 18: Nottinghamshire Heavy Rail Schemes**

| Ref | Scheme                            | Cost | Description                                                                                                                                                                                                                                                                                                                                               | Impacts | Status      | Document / Plan Ref                                                                                                           |
|-----|-----------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|-------------------------------------------------------------------------------------------------------------------------------|
|     | The East Midlands Parkway station |      | The East Midlands Parkway station is situated on the old Ratcliffe Power station adjacent to the A453, approximately 7km from Nottingham East Midlands Airport. Station access is via the proposed 1000 space car park.                                                                                                                                   |         | 2016        | Department for Transport website                                                                                              |
|     | Rail service change               |      | The hourly London-Sheffield service will operate as now; however, there will be off-peak calls at East Midlands Parkway and Luton Stations.                                                                                                                                                                                                               |         | 2016 (2011) | Stakeholder Briefing Document*                                                                                                |
|     | Rail service change               |      | The existing hourly fast London-Nottingham service includes a train portion for Derby, with portions splitting and joining at Leicester. The Derby portion will call at Loughborough, East Midlands Parkway and Long Eaton.                                                                                                                               |         | 2016 (2011) | Stakeholder Briefing Document*                                                                                                |
|     | Rail service change               |      | Currently Central Trains are running the service from Nottingham to Sheffield, two out of seven that extends to Leeds. As proposed a new hourly service is coded to operate between Nottingham and Leeds via Longley Mill, Alfreton, Chesterfield, Dronfield, Dore, Sheffield, Barnsley and Wakefield Kirkgate, as outlined in the consultation document. |         | 2016 (2011) | Stakeholder Briefing Document*<br>More information in NDS Press Release, issued to WSP by GNN Nottingham Press Office (2006). |

\* Stakeholder Briefing Document – East Midlands Franchise (October, 2006), East Midlands Regional Assembly



1.4.6 Light Rail Schemes

Table 19: Nottingham Light Rail Schemes

| Ref | Scheme       | Cost | Description                                                                                                                                                                                                                                                 | Impacts                                       | Status                                              | Document / Plan Ref                        |
|-----|--------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------|--------------------------------------------|
| N3  | NET Phase II |      | Phase 2 of the NET builds on the NET Line 1 scheme. Future tram services will serve the areas to the south and west of Nottingham. Two further P&R sites from junction 24 (Clifton) and 25 (Toten) of the M1 are coded (capacity of 1000 vehicles assumed). | The tram track was coded as fully segregated. | Approved by Central Government. Implemented by 2016 | Information David Carter (MVA Consultancy) |

1.4.7 Other Local Transport Initiatives

| Ref | Scheme         | Cost | Description                                   | Impacts | Status | Document / Plan Ref |
|-----|----------------|------|-----------------------------------------------|---------|--------|---------------------|
|     | Smart Measures |      | To Central areas of Nottingham. See Section 7 |         |        |                     |



## 1.5 CENTRAL GOVERNMENT HIGHWAY SCHEMES

**Table 20: Central Government Highway Schemes- Derbyshire, Leicestershire, Nottinghamshire**

| Ref | Scheme                           | Cost | Description                                                                                                                      | Impacts                                                                                                                    | Status                                                                                                 |
|-----|----------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| D8  | A38(T) Grade Separation          | £77M | Highways Agency scheme to grade Separation of the following junctions:<br>A61 Abbey Hill<br>A52 Markeaton Park<br>A5111 Kingsway | Significant benefits for traffic and bus journey times as a result of separating A38 traffic from local traffic movements. | Scheme is currently in the RFA.<br>Included within DATM                                                |
|     | A38/A50 Derby                    |      | Highways Agency scheme to traffic signal the 'Toyota' roundabout in Derbyshire                                                   | Improve capacity and safety.                                                                                               |                                                                                                        |
|     | M1 J21 – 30 Widening             |      | Highways Agency scheme to widen the motorway through Leicestershire, Nottinghamshire and Derbyshire                              | Improved strategic link between the South, the Midlands and the North. Includes provision for A6 Kegworth Bypass           | J25-J28 length is under construction (2009 completion).<br>J21-J30 planned for 2012 (completion 2018). |
|     | A46 Newark - Widmerpool          |      | Highways Agency's scheme to dual the single carriageway (28km) length to the south of Newark.                                    | Improved capacity and safety Route links Lincoln and Newark to Nottingham and Leicester.                                   | Planned. North section open by 2014. South part two years after.                                       |
|     | A453 Improvement J24 to A52      |      | Highways Agency scheme to dual the single carriageway between the M1 (J24) and Nottingham.                                       | Increased capacity, improved reliability and safety and easier maintenance.                                                | Planned. Expected opening 2013.                                                                        |
|     | A6096 Ilkeston-Awsorth Link Road |      | From Regional Funding Allocation letter from the Secretary of State                                                              |                                                                                                                            |                                                                                                        |
|     | A46 Earl Shilton Bypass          |      | From Regional Funding Allocation letter from the Secretary of State                                                              |                                                                                                                            |                                                                                                        |

## 1.6 SCHEME INFORMATION

**Table 21: Reference Documents**

|                                                                   |                                                                                            |                                                                                                                                                                                                |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TN18 Transport Planning Inputs to Model Based Scenario Testing    | TN18_Transport_Planning_Inputs_V2 1.doc                                                    | Concerns a number of transport planning tasks that need to be undertaken (or provisionally considered) prior to the commencement of the Scenario Testing Programme using the modelling system. |
| 6C's TIF: CONTENTS OF REFERENCE CASE 2016                         | 6Cs TIF contents of reference case 2016 310807.doc                                         | Early document summarising the schemes from PTOLEMY Appendix D1 to be included/excluded from the TIF 2016 Reference Case                                                                       |
| PTOLEMY Appendix D1                                               | Ptolemy App.D1<br>Summary_scenario_assumptionsv0.52_SavedChanges.doc                       | Chapter 5 provides details of the PTOLEMY future year scenarios for the original development reference case.                                                                                   |
| Letter from Secretary of State on the Regional Funding Allocation |                                                                                            | Schemes identified to be included within the reference case are, schemes underway, approved schemes not yet underway and schemes which do not yet have approval but are likely to be approved  |
| Derby                                                             | 2016Reference<br>Case\Derby\Reference.doc<br><br>007_007_2016_Reference_v1_AndyGibbard.doc | Summary of schemes and interventions in Derby<br><br>Revision by Andy Gibbard of Derby of the PN007                                                                                            |
| Leicester                                                         | Leicestershire and Leicester 2016 DN and ref case schemes 070907_received 10Sept07 .doc    | Summary of schemes and interventions in Leicester                                                                                                                                              |
| Nottingham                                                        | Reference case inputs for Greater Nottingham.doc                                           | Summary of schemes and interventions in Nottingham                                                                                                                                             |

## 1.7 AN INITIAL PACKAGE OF SMARTER CHOICE MEASURES

1.7.1 An initial package of Smarter Choice measures with limited scope and implementation has been included with the 2016 Reference Case. Note that this does not include a full implementation of such measures which are to be considered in policy tests.

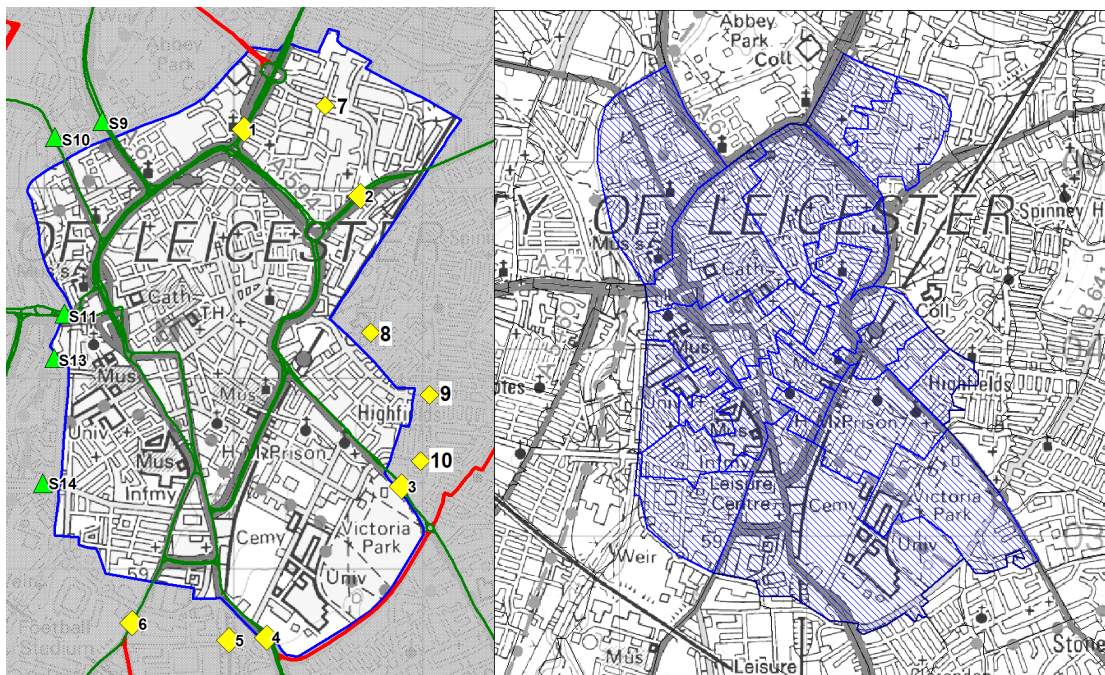
1.7.2

1.7.3 For the purposes of modelling in the 6Cs TIF Project, the implementation of the Smarter Measures within the Reference Case has been coded as a reduction in generalised cost of travel on walking/cycling, and PT modes, in the following way:

- journey to work to “central areas” in all three cities, as defined below: 2 minutes less in generalised travel time in the AM and inter-peak. In the PM peak, the same time reduction was assumed for trips originating from the central areas.
- journey to work (other destinations): 1 minute less in generalised travel time to represent workplace travel plans
- education trips: 2 minutes less in generalised travel time for all education journeys to represent universal school travel plans
- Other personal trips: 0.5 minutes less in generalised travel time to represent personalised travel plans etc.

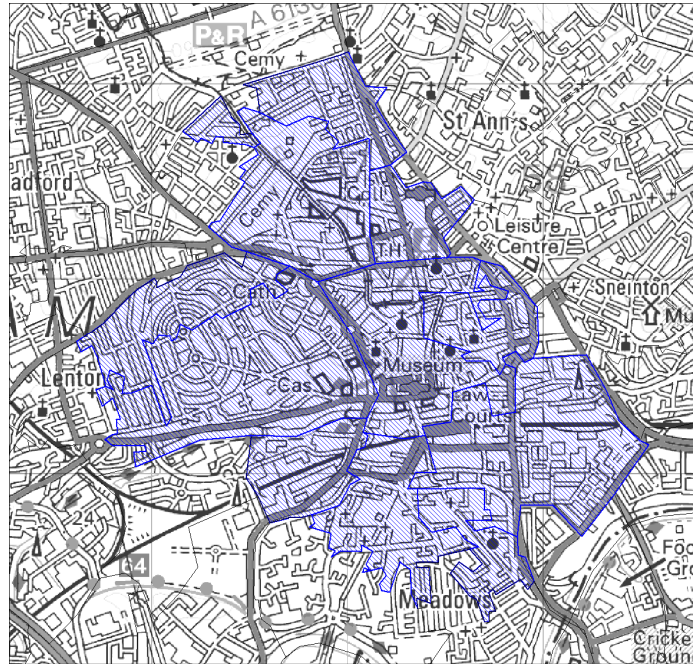
1.7.4 The above values in generalised travel time reduction are considered in line with the Reference Case assumptions regarding implementation. A fuller implementation of the measures are tested as a policy scenario.

1.7.5 For the definition of the “Central areas” see Figure 1 to Figure 3 below.

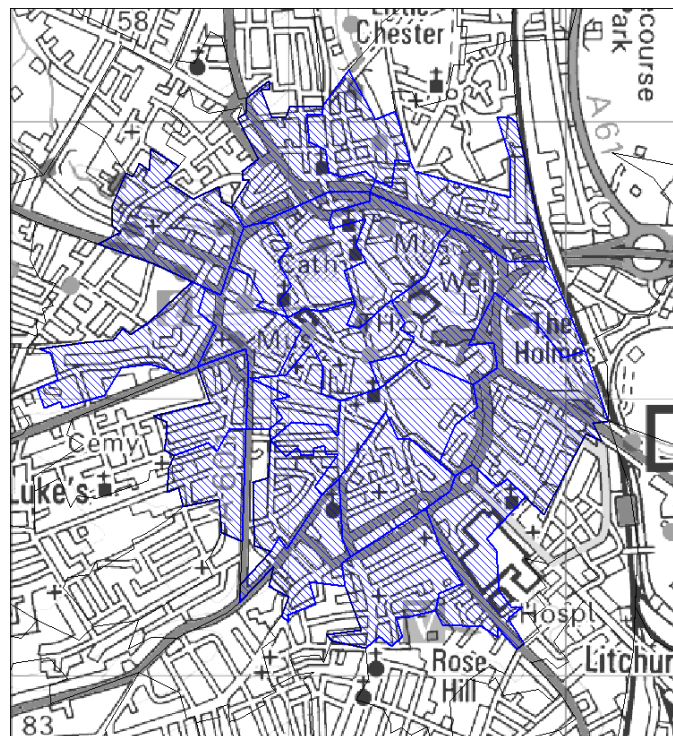


**Figure 1: Leicester: Central Transport Zone (CTZ) (left) and the matching PTOLEMY zones used for Smarter Choices implementation (right)**





**Figure 2: Nottingham: central areas used for Smarter Choices implementation**



**Figure 3: Derby central areas used for Smarter Choices implementation**