Rossendale BOROUGH COUNCIL

ITEM NO. D2

Subject:	Local Plan Highways Capacity Study		**Status:**	For Publication	
Report to:	Cabinet		**Date:**	21st February 2018	
Report of:	Planning Manager		**Portfolio Holder:**	Regulatory Services	
Key Decision:	☐	Forward Plan ☒	General Exception ☐	Special Urgency ☐	
Equality Impact Assessment:		Required:	~~Yes~~/No	Attached:	~~Yes~~/No
Biodiversity Impact Assessment		Required:	~~Yes~~/No	Attached:	~~Yes~~/No
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1.	**RECOMMENDATION(S)**
1.1	That Cabinet note the results of the first phase of the Highway Capacity Study.
1.2	That Member sign-off of the detailed proposals for each of the junctions identified as having issues should be delegated to the Portfolio Holder in consultation with the Planning Manager.

2. PURPOSE OF REPORT

2.1 To inform Cabinet of the results of Phase 1 of the Local Plan Highways Capacity Study which identifies which of 15 junctions examined will have significant capacity issues within the 2019-2034 period of the Local Plan.

3. CORPORATE PRIORITIES

3.1 The matters discussed in this report impact directly on the following corporate priorities:

- **A clean and green Rossendale:** our priority is to keep Rossendale clean and green for all of Rossendale's residents and visitors, and to take available opportunities to recycle and use energy from renewable sources more efficiently.
- **A connected and successful Rossendale that welcomes sustainable growth:** our priority is to ensure that we are well connected to our residents, key partners and stakeholders. We want to make the most of every pound we spend and we are always looking for new and innovative ways to make the resources we do have, work harder for us.
- • **A proud, healthy and vibrant Rossendale:** our priority is to ensure that we are creating and maintaining a healthy and vibrant place for people to live and visit.

4. RISK ASSESSMENT IMPLICATIONS

4.1 The Assessment identifies a number of junctions that will require remedial action if they are not to become significant constraints to future development. These are:

- The Gyratory in Rawtenstall together with the Asda and Tup Bridge junctions;
- Haslingden Road/Tesco roundabout
- Grane Road/A56 junction
- Grane Road/Holcombe Road
- Rochdale Road/Market St roundabout, Edenfield
- Waterfoot roundabout
- Toll Bar roundabout

4.2 In respect of the Grane Rd/Holcombe Rd junction this may be subject to a re-survey in early February to support the assessment and the date received is not what would be expected.

4.3 There will be some issues with a number of the other junctions by 2034 but these are not considered substantial enough to warrant additional analysis. The other junctions assessed were the mini roundabout at Hardman's Mill, A56 Haslingden roundabout, A56 Rising Bridge roundabout, Todd Hall Road access, Grane Road/ A56 junctions (Waterside Rd Access A56 on-slip Road), A56/ M66 'Junction 0' at Edenfield and Market Street/ Shawclough Road, Whitworth.

4.4 The junction of Bacup Street/ James Square is one of the 15 junctions which have been assessed and have recently been modelled by LCC however there have been issues obtaining the correct licenses to view the data which has delayed the analysis. The analysis will however be provided before the end of January.

4.5 The costs of the works required could be substantial in some instances (i.e. over £1 million) and could have significant impacts on the immediate proximity of the site. Funding streams to deliver the works required, such as via LEP and Homes England, will need to be identified.

4.6 Some proposals, such as for the Gyratory, could be challenging to deliver, especially if a more radical approach is taken.

5. BACKGROUND AND OPTIONS

5.1 Road capacity, particularly at junctions, can constrain economic productivity and new development as well as contribute to wider issues, such as air quality problems.

5.2 In June 2017 Lancashire County Council indicated at a "Duty to Co-operate" meeting that they would require a Highway Capacity Study to enable the full impact of the Local Plan allocations to be considered in detail.

5.3 The Council commissioned Mott McDonald to undertake this work. Phase 1 involved detailed traffic counts at 15 junctions which have now been analysed and results produced. Phase 2, which will continue until late February, involves identifying and costing interventions at the junctions where there are issues within the plan period as set out above.

5.4 The Phase 1 report states that while there are currently issues at a number of junctions new development in the first five years of the Plan (2019-2024) can proceed without major works being required. While there will be delays and queuing in some places these can be addressed through minor solutions such as changing traffic signal timings.

5.5 Beyond 2024 there are significant issues at a number of locations which will require physical interventions. These could include solutions such as adding extra lanes, mini-roundabouts, etc. In some locations, e.g. Toll Bar in Stacksteads, this could be challenging because of the road layout and the lack of space available. Proposals for the junctions in Rawtenstall could have implications including potentially on the Fire Station. This and Tesco Haslingden roundabout will also have a potential impact on the Air Quality Management Areas.

5.6 Costed design solutions and identifying sources of funding will be necessary to prove to the Examination in Public Inspector that the infrastructure proposals and the related Local Plan allocations are deliverable.

COMMENTS FROM STATUTORY OFFICERS:

6. SECTION 151 OFFICER

6.1 Required funding sources will be varied, for example, If the impacts are a direct result of allocated sites within our Local Plan the Council will need to consider whether developer contributions would be sufficient to address the required improvements or whether Council needs to seek funding sources to facilitate the delivery of our Local Plan in partnership with Lancashire County Council. Final sources are not yet clear.

7. MONITORING OFFICER

7.1 All legal implications are covered in the body of the report.

8. POLICY IMPLICATIONS AND CONSULTATION CARRIED OUT

8.1 The findings of the Study will be central to the delivery of Local Plan allocations. Delivering infrastructure solutions will require close co-operation with Lancashire County Council (the local road network) and Highways England (Strategic Road Network- A56). Both agencies are key partners in the Study and will continue to be integrally involved.

8.2 Identification of funding is a key consideration. This will require the Highways Authorities to put forward funding proposals in their own Forward Plans. There will also be wider linkages to strategic studies such as Transport for the North's Central Corridor Study which Mott McDonald's work may help to deliver. As Infrastructure is key to delivery of housing and economic objectives the findings of the Study will be key factors in negotiation for funding from the LEP and Homes England.

8.3 Colleagues internally in Economic Development and Environmental Health have been made aware that the Study is progressing.

8.4 Highways England has advised of the current Department for Transport consultation on *Shaping the future of England's strategic roads (RIS2).* This initial report sets out Highways England's assessment of the current state of the strategic road network, its potential future needs and their proposed priorities. Highways England proposes that investment in the network over the coming twenty years should work towards achieving consistency around four categories of road. This includes the creation of expressways (the busiest A-roads) which includes better design, technology and on-road response and alternative routes for non-motorised users and slow vehicles. It is expected that the A56 will become an expressway though there would be significant costs in doing so. In such a scenario it would be likely that it would include measures such as removing "at level" junctions which would alter the access to Carrs Industrial Estate and Rising Bridge roundabout. The former could lose direct access to the A56 while the latter would almost certainly become a full "fly-over" junction. The Council will formally respond to this consultation requesting that these changes are prioritised to benefit the strategic road network which serves the Borough.

9. CONCLUSION

9.1 The findings of the Mott McDonald Study confirm that there are existing problems with some road junctions in the Borough that will only get worse over time. Some of these cannot be attributed to the Local Plan (ie, they would be just normal traffic growth) so addressing these would be the responsibility of the relevant Highway Authority. This would be identified in the Local Plan's Infrastructure Delivery Plan. Other junctions were problems directly relate to the Local Plan, e.g. Edenfield mini-roundabout in 2034, would need specifically addressing to ensure the allocations are deliverable.

9.2 Mott McDonald are now completing Phase 2 of the study and concentrating on assessing and identifying solutions for the seven junctions at which issues have been identified. The results of this assessment will be shared with the Local Authority within the next few months.

Background Papers	
Document	Place of Inspection
MOTT MACDONALD TECHNICAL NOTE	Appendix 1

MOTT MACDONALD

Technical Note

Project:	Rossendale Local Plan		
Our reference:	391034	**Your reference:**	N/A
Prepared by:	JK/RS	**Date:**	12.01.18
Approved by:	RS	**Checked by:**	CS
Subject:	Operational Analysis		

1 Introduction

1.1 Background

Mott Macdonald have been commissioned by Rossendale Borough Council to undertake a Highway Capacity Analysis in relation to the draft Rossendale Local Plan. The analysis has been undertaken to inform both the allocations process and to provide appropriate commitment to the formal Duty to Cooperate process.

A detailed report outlining the assessment approach and methodology will be produced by Mott Macdonald, however the purpose of this short technical note is to provide a point of reference for stakeholder discussion regarding the operational assessments undertaken to date.

Operational analysis has been carried out for the following assessment years and scenarios;

- 2019 Baseline,
- 2024 Reference Case,
- 2024 Local Plan,
- 2034 Reference Case, and
- 2034 Local Plan.

The 2019 assessment year represents the assumed year for adoption of the plan, 2024 represents 5-year build out within the plan and 2034 represents the ultimate life of the plan. Local Plan traffic impacts can be isolated by comparing the Reference Case scenario with the Local Plan scenario. The difference between these two scenarios is the principal measures by which we will measure impact and assess the need for subsequent mitigation

Derivation of the assessment scenarios has been undertaken through a combination of adjusted Tempro growth factors, application of committed development traffic volumes and determination of housing and employment allocation traffic volumes using 2011 Census Journey to Work data, TRICS analysis, Transport Assessments for committed developments and GIS fastest route analysis.

Surveyed traffic flows for each of the junctions have been supplied by Lancashire County Council and were undertaken in 2017 in neutral periods outside school holidays.

The operational analysis relates to a series of individual junction assessments, using LinSig, Arcady and Picady as well as DMRB Merge/Diverge tests for the A56 mainline operation. The method of analysis has been

agreed with Lancashire Highways and Highways England, the two principal stakeholders who are responsible for maintaining and operating the local road and trunk road network respectively. The exception is the Bacup, St James Square junction has recently been modelled by Lancashire County Council using the Aimsun software and this model has been supplied to Mott Macdonald.

The following junctions, listed in **Table 1** overleaf, have been assessed as part of this analysis, as well as the merges and diverges listed subsequently in **Table 2**.

Table 1. Junctions Assessed

Junction Number	Description	SRN / Local	Latitude	Longitude
1	The Gyratory, Rawtenstall	Local	53.699789°	-2.289610°
2	Mini-roundabout by Hardman's Mill, Rawtenstall	Local	53.697475°	-2.297938°
3	Junction of St Mary's Way, Bank Street and Asda, Rawtenstall	Local	53.701931°	-2.286668°
4	Tup Bridge Junction, St Mary's Way, Rawtenstall	Local	53.704607°	-2.285882°
5a	Haslingden Road/Tesco roundabout, Haslingden	SRN/Local	53.695174°	-2.315709°
5b	A56 Haslingden Roundabout	SRN/Local	53.413805°	-2.184915°
6	Rising Bridge roundabout, A56	SRN/Local	53.723421°	-2.326739°
7	Todd Hall Road access	SRN/Local	53.706076°	-2.331073°
8	Grane Road/Holcombe Road junction	Local	53.698447°	-2.335038°
9a	Grane Road/A56 junctions (A56 off-slip)	SRN/Local	53.699681°	-2.331588°
9b	Grane Road/A56 junctions (Waterside Rd Access Rd A56 on-slip Road)	Local	53.699681°	-2.331588°
10	A56 / M66 'Junction 0' at Edenfield	SRN/Local	53.663579°	-2.309594°
11	Rochdale Road/Market St roundabout, Edenfield	Local	53.668806°	-2.304304°
12	Bacup St James Square (recently modelled by Lancashire CC)	Local	53.703389°	-2.200542°
13	Waterfoot roundabout	Local	53.692402°	-2.252515°
14	Toll Bar Roundabout, Stacksteads	Local	53.692867°	-2.220467°
15	Market St/Shawclough Road, Whitworth	Local	53.639837°	-2.178169°

Table 2. Merge / Diverge Assessments

Merge / Diverge No.	Description
1	A56 / Grane Road SB Merge
2	A56 / Grane Road NB Diverge
3	A56 / Tesco Haslingden SB Diverge
4	A56 / Haslingden Roundabout NB Merge
5	A56 / Haslingden Roundabout NB Diverge
6	A56 / Tesco Haslingden SB Merge
7	A56 / Junction '0' Edenfield SB Diverge
8	A56 / Junction '0' Edenfield NB Merge

2 Junction Operational Analysis

2.1 Preamble

The operational analysis results for each junction are summarised in the attached spreadsheets to this Technical Note. The text below each junction header below summarises Mott Macdonald's considerations in relation to the operation of the junction specific to the Local Plan development / progression. For the purposes of these operational assessment, Ratio Flow to Capacity indices (RFC's) and Degree of Saturation (DoS) have been used. Standard industry thresholds have been defined with respect to identifying impact:-

0 to 0.85 (RFC) and 0 to 0.9 (DoS) – The arm of the junction is generally operating within capacity, with minimal queues and delays

0.85 to 1 (RFC) and 0.9 to 1 (DoS) – The junction is approaching design capacity. Under this scenario, flow breakdown is more common, journey time reliability starts to deteriorate and there may be some queuing. However, across a typical week this will vary.

Greater than 1 – The junction is at or above design capacity. Under this scenario, queues and flow breakdown are commonplace at peak periods and journey time reliability is poor. These conditions would be expected to occur on most occasions.

2.2 Junctions 1, 3 and 4 – Rawtenstall Gyratory - St Mary's Way/Asda - St Mary's Way/Tup Bridge

Junctions 1, 3 and 4 have been assessed within a linked LinSig model because of the close proximity of these junctions and because the operational performance of each junction is impacted by its neighbour. Linking the junctions has enabled Mott MacDonald to examine the performance of the corridor as a whole.

The results demonstrate that some notable operational issues are expected to occur at the junction in the 2019 baseline position. These issues are exacerbated by local traffic growth in 2024, in both the Reference Case and Local Plan scenarios.

By 2034 some very significant operational issues are expected to occur (DoS > 1), which are notably exacerbated in the Local Plan scenario compared to the 2034 Reference Case.

This corridor of junctions is likely to be able to accommodate the first 5 years of Local Plan Growth up to 2024 with only minimal intervention required such as the reconfiguration of signals. Beyond this period and within the lifetime of the Local Plan, a more comprehensive intervention(s) will be required which could require the remodelling of some or all the junctions. Given the proximity of these junctions to the town centre such interventions will also need to be able to cater for pedestrians and cyclists in order to mitigate any severance impacts. The scheme would also need to take account of any proposed town centre renewal initiatives and any operational impacts on the fire station would also need to be considered.

2.3 Junction 2 – Mini-Roundabout by Hardman's Mill, Rawtenstall

Junction 2 has been assessed using the Arcady software.

The junction demonstrates no operational issues for any of the five scenarios assessed.

It is expected that this junction can accommodate the full build out of the Local Plan and no further assessment is required.

2.4 Junction 5a – Haslingden Road, Tesco Roundabout

Junction 5a has been assessed using the Arcady software.

The junction demonstrates some operational issues at the 2019 baseline scenario.

These issues are exacerbated in the 2024 assessment year, with some notable poor performance on certain arms of the junction resulting in Level of Service [LOS] F being derived. However, the performance of the junction remains consistent between the Reference Case and Local Plan scenarios suggesting that existing geometric issues have a greater impact on the junction than additional local plan traffic.

At the 2034 scenario there are again some very poorly performing arms of the junction, which result in LOS F being derived. It is noted that there is a noted worsening of performance between the 2034 Reference Case and Local Plan scenarios, even though the LOS F remains consistent.

It is considered that this junction can accommodate the build out of the plan within the first five years, however consideration for upgrade may need to be considered for the later years of the plan to 2034.

2.5 Junction 5b – A56 Haslingden Roundabout

Junction 5b has been assessed using the Arcady software.

The junction demonstrates no operational issues at either the 2019 or 2024 scenarios.

At 2034 there is one instance of an LOS F (0.95 RFC) being recorded on the B6527 Manchester Rd S approach in the morning peak, which is a noted increase when compared to the 2034 Reference Case results.

It is expected that this junction can accommodate the build out of the Local Plan within the first five years to 2024, with further consideration to whether any minor alterations need to occur to accommodate the final years of the plan to 2034.

2.6 Junction 6 – A56 Rising Bridge Roundabout

Junction 6 has been assessed using the LinSig software.

The junction demonstrates relatively minimal operational issues at the 2019 scenario.

At 2024 there are some issues of poor performance recorded, however there is no discernible difference between the Reference Case and Local Plan scenarios.

A 2034 there are a number of operational issues recorded, particularly within the morning peak. These issues occur in both the Reference Case and Local Plan scenarios, however two arms of the junction do show notable increases between these scenarios at 2034.

It is considered that this junction can accommodate the build out of the Local Plan within the first five years to 2024. At 2034 there are some notable operational issues, which are exacerbated slightly by the Local Plan build out. It is considered that discussion with Highways England regarding their long-term aspirations for the A56 should take place, which may determine how best to deal with increases in delay at this junction.

This junction is the only remaining at-grade junction on the A56 – M66, and Highways England have considered the potential for Expressway upgrade for the A56, although no firm commitment exists.

2.7 Junction 7 – Todd Hall Road Access

Junction 7 has been assess using the Picady software.

No operational issues are recorded at this junction in any scenario assessed.

It is considered that this junction can accommodate the build out of the plan up to 2034 and no further assessment is warranted.

2.8 Junction 8 – Grane Road / Holcombe Road

Junction 8 has been assessed using the Picady software.

Operational issues are expected at this junction at 2019. These issues are exacerbated by 2024, however there is a very similar performance between the Reference Case and Local Plan scenarios.

By 2034 there is further exacerbation of the existing issues and a notable worsening in performance on additional arms which were not noted in 2019 or 2024. Performance overall between the Reference Case and Local Plan scenarios is considered to be consistent, however some large increases in delay are noticed, even if the LOS remains constant at F.

It is considered that this junction can accommodate the first five years of the Local Plan to 2024. However, the performance of the junction to 2034 (although notably poor in both scenarios) suggests that further consideration might be warranted.

2.9 Junction 9a – Grane Road/A56 junctions (A56 off-slip)

Junction 9a has been assess using the Picady software.

This junction shows some very poor operational performance at 2019, which is exacerbated through to 2024 and 2034. This would appear to run counter intuitive to existing conditions on the network where queuing and delay is minimal. It is recommended that a further analysis of this junction and cross reference with TRADS data is undertaken

The difference between the Reference Case and Local Plan scenarios is considered irrelevant given the length of queues recorded, which show blocking back to the A56 in all scenarios.

The junction results show that the Local Plan would struggle to be accommodated at either 2024 or 2034 at this junction, however this is not as a result of the Local Plan allocations, but rather traffic increases in general as well as a seemingly existing issue. The observed traffic flows for this junction, which when growthed to 2924 and 2034, result in significant operational concerns. As such, Mott Macdonald have a query regarding the supplied traffic data for this junction.

2.10 Junction 9b – Grane Road/A56 junctions (Waterside Rd Access Rd A56 on-slip Road)

Junction 9b has been assess using the Picady software.

This junction shows some very poor operational performance at 2019, which is exacerbated through to 2024 and 2034.

It should be noted that there is no 2024 Local Plan test undertaken for this junction, as no Local Plan related traffic from the first five years of the plan was assigned through the junction.

The difference between the Reference Case and Local Plan scenarios is considered irrelevant given the length of queues recorded, which show blocking back to the A56 in all scenarios.

Similar to Junction 9a, the junction results show that the Local Plan would struggle to be accommodated at either 2024 or 2034 at this junction, however this is not as a result of the Local Plan allocations, but rather traffic increases in general as well as a seemingly existing issue.

The observed traffic flows for this junction, which when growthed to 2924 and 2034, result in significant operational concerns. As such, Mott Macdonald have a query regarding the supplied traffic data for this junction.

2.11 Junction 10 – A56 / M66 'Junction 0' at Edenfield

Junction 10 has been assess using the Arcady software.

There are no noted operational issues at this junction in either the 2019, 2024 or 2034 assessment years and scenarios.

It is considered that this junction can accommodate the build out of the Local Plan up to 2034.

2.12 Junction 11 – Rochdale Road/Market St roundabout, Edenfield

Junction 11 has been assess using the Arcady software.

There are no significant operational issues experienced at this junction at either 2019 or 2024, in both the Reference Case and Local Plan scenarios. As such, it is considered that this junction can accommodate the build out of the Local Plan up to 2024.

At 2034 there is a noted worsening of performance in the morning peak at the Local Plan scenario when compared to the Reference Case.

It is considered therefore that discussion with LCC should take place as to whether an intervention is required at this junction due to the Local Plan build out to 2034. It should be noted however that the existing configuration of the junction and the general nature of the surrounding built up area, may prohibit the development of a scheme within the existing highway boundary.

2.13 Junction 12 – Bacup St James Square (recently modelled by Lancashire CC)

Junction 12 has been assess using the Aimsun software.

The results for this operational assessment are pending, due to arrangement of an Aimsun licence to use the existing LCC model.

2.14 Junction 13 – Waterfoot Roundabout

Junction 13 has been assess using the Arcady software.

The junction results show a notable poor performance in the 2019 baseline scenario.

The operational issues noted are exacerbated through the 2024 and 2034 scenarios. Whereas it could be argued that the it is not the Local Plan allocations which are the cause of these notable operational issues, it is considered that discussion should take place with LCC as to the poor performance recorded.

2.15 Junction 14 – Toll Bar Roundabout, Stacksteads

Junction 14 has been assessed using the Arcady software.

There are some notable operational issues recorded at the junction in the evening peak at 2019.

By 2024 the performance of the junction has worsened significantly, although the difference between the Reference Case and the Local Plan scenario is considered relatively marginal.

The 2034 Reference Case scenario shows very poor operational performance which is exacerbated by the addition of the Local Plan traffic volumes. It could again be argued that the failings in performance at the

junction are not a direct result of the Local Plan allocations, however it is recommended that discussion should take place with LCC as to the poor performance recorded.

The existing junction is noted to already have a sub-standard layout, with respect to alignment and safety issues, which may need to be addressed if any scheme were considered for this junction within the life of the plan.

2.16 Junction 15 – Market St / Shawclough Road, Whitworth

Junction 15 has been assessed using the Picady software.

No operational issues are recorded at 2019 or 2024, and it is considered that the first five years of the plan can be accommodated by the junction.

Some minor operational issues are noted at 2034 when comparing the Reference Case and Local Plan scenarios, however the LOS remains below F on all arms, as such it is considered that this junction can accommodate the full build out of the plan also.

2.17 Junction Assessment Summary

Table 3 below summarises Mott Macdonald's findings as to whether each junction should be considered for further analysis as part of this study, in order to derive an outline infrastructure upgrade option.

Table 3. Assessment Summary

Junction Number	Description	Can accommodate first five years of plan?	Can accommodate full fifteen years of plan?	Considered for further analysis as part of this study?
1	The Gyratory, Rawtenstall	✓	×	Yes
2	Mini-roundabout by Hardman's Mill, Rawtenstall	✓	✓	No
3	Junction of St Mary's Way, Bank Street and Asda, Rawtenstall	✓	×*	Yes
4	Tup Bridge Junction, St Mary's Way, Rawtenstall	✓	×*	Yes
5a	Haslingden Road/Tesco roundabout, Haslingden	✓	×	Yes
5b	A56 Haslingden Roundabout	✓	✓	No
6	Rising Bridge roundabout, A56	✓	✓	No
7	Todd Hall Road access	✓	✓	No
8	Grane Road/Holcombe Road junction	✓	×^	?
9a	Grane Road/A56 junctions (A56 off-slip)	✓^	×^	?
9b	Grane Road/A56 junctions (Waterside Rd Access Rd A56 on-slip Road)	✓^	×^	?
10	A56 / M66 'Junction 0' at Edenfield	✓	✓	No
11	Rochdale Road/Market St roundabout, Edenfield	✓	×^	?
12	Bacup St James Square (recently modelled by Lancashire CC)	pending	pending	pending
13	Waterfoot roundabout	✓^	×^	?
14	Toll Bar Roundabout, Stacksteads	✓^	×^	?
15	Market St/Shawclough Road, Whitworth	✓	✓	No

* junctions 3 and 4 may be able to accommodate full extent of plan in isolation, however their performance is controlled by their proximity to the Rawtenstall gyratory and will need to be considered alongside those junctions.

^ operational performance at these junctions is notably poor in both the Reference Case and Local Plan scenarios at 2024 and 2034. The poor performance is not necessarily a result of the Local Plan allocations, it is considered however that the views of LCC should be sought nonetheless.

2.18 A56 Merge / Diverge Assessments

A series of A56 DMRB Merge-Diverge assessments have also been undertaken for the locations identified in **Table 2** of this Technical Note. The results are summarised in **Table 4** below.

The Merge / Diverge analysis is attached to this Technical Note in spreadsheet format.

Table 4. Assessment Summary

Merge / Diverge No.	Description	2024 Ref Case		2024 Local Plan		2034 Ref Case		2034 Local Plan		Further Consideration within this study?
		Merge / Diverge Type								
		AM	PM	AM	PM	AM	PM	AM	PM	
1	A56 / Grane Road SB Merge	C	C	C	C	C	A	C	A	No
2	A56 / Grane Road NB Diverge	A/D	B	A/D	B	B	E	B	E	No
3	A56 / Tesco Haslingden SB Diverge	A	A	A	A	A	A	C	C	?*
4	A56 / Haslingden Roundabout NB Merge	A/D	E	A/D	E	B	E	B	E	No
5	A56 / Haslingden Roundabout NB Diverge	A	A	A	A	A	C	A	C	No
6	A56 / Tesco Haslingden SB Merge	A/D	A/D	A/D	A/D	A/D	A/D	A/D	A/D	No
7	A56 / Junction '0' Edenfield SB Diverge	C	C	C	C	A	C	A	C	No
8	A56 / Junction '0' Edenfield NB Merge	B	A/D	B	A/D	E	A/D	E	A/D	No

* at 2034 the analysis shows a change in the required diverge type between the Reference Case and Local Plan scenarios.

The analysis presented in **Table 4** above demonstrates that the required Merge / Diverge type does not alter between the Reference Case and Local Plan scenarios for all locations barring the A56 – Tesco Haslingden SB Diverge, which alters from a Type A to Type C in both the AM and PM analysis.

Whereas the results of the analysis do show differing Merge / Diverge Types being required between AM and PM tests, as well as between 2024 and 2034, It is only the 2034 Tesco Haslingden SB Diverge which shows a change in provision between the Reference Case and Local Plan scenarios.

The analysis indicates that the first five years of the plan can be accommodated to 2024.

The 2034 analysis demonstrates that there might need to be alterations to Merge/Diverge provision considered alongside any A56 upgrade that Highways England wish to promote. Upgrade to Expressway has been considered, however no firm commitment exists at this stage.

With regards to the one location from the analysis does indicate a potential impact from the Local Plan at 2034, the section of carriageway between this Diverge and the downstream Merge is very short, at only 300m. As such, it is considered that discussion with Highways England should take place, as an isolated Diverge upgrade may not be a suitable solution and would need to be considered alongside any aspirations held by Highways England for the A56.

MOTT MACDONALD