

8. Transport and Access

Introduction

- 8.1 This Chapter reports the outcome of the assessment of likely significant environmental effects arising from the Project for Assessment in relation to Transport and Access. It also reports the likely significant environmental effects associated with the Proposed Scheme, which comprises the planning application.
- 8.2 In line with **Chapter 2: Approach to EIA**, the assessment reports on the likely significant environmental effects, the further mitigation measures required to prevent, reduce or offset any significant adverse effects, or further enhance beneficial effects. The conclusions are provided both in terms of the residual effects and whether these are considered significant. The assessment of effects takes into consideration both primary and tertiary mitigation (see **Chapter 2: Approach to EIA** for further details) and is informed by the EIA Scoping process (**Appendix 2.1 – 2.3**) and iterative scoping process where applicable.
- 8.3 This Chapter, and its associated **Figures 8.1 – 8.5** and **Appendix 8.1 to 8.15**, is intended to be read as part of the wider ES with particular reference to the introductory Chapters of this ES (**Chapters 1 – 6**), as well as **Chapter 9: Noise and Vibration** and **Chapter 10: Air Quality**. In addition, this Chapter should be read in conjunction with **Chapter 19: Assessment of Cumulative Effects**.

Summary of Consultation

- 8.4 **Table 8.1** provides an overview of the consultation that has been undertaken to inform the EIA, including the consideration of likely significant effects and the methodology for assessment.

Table 8.1: Summary of Consultation

Body/ Organisation	Contact	Date/Form of Consultation	Summary of Consultation Outputs
Transport for Greater Manchester (TfGM)	TfGM Officers	10 th January 2024, Presentation	Transport Framework Document, setting out the vision and potential active travel and public transport strategies.
National Highways	Development Control Team	November 2024, Report	National Highways confirm that the approach is consistent with the principles of IEMA guidance.
TfGM (also on behalf of the Councils)	Land Use Team	12 th November 2024, letter	Whilst the letter is titled environmental impact assessment (EIA) scoping opinion for proposed Northern Gateway site (JPA 1.1), the content makes no comments on the EIA scope, instead it focuses on the TA approach. Given this, it is assumed that TfGM are in agreement to the EIA Scope.

Scope of the Assessment

- 8.5 An EIA Scoping Report was submitted to Bury Council (BC) and Rochdale Borough Council (RBC) on 17th October 2024, as presented as **Appendix 2.1**. A Scoping Opinion has not been received to date; however, a number of consultation responses have been received and are provided in **Appendix 2.2**. A response to the comments in **Appendix 2.2** are provided in **Appendix 2.3**. This section provides confirmation on the scope of the assessment presented within this Chapter following submission of the EIA Scoping Report.

Effects Not Considered to be Significant

- 8.6 The following effects (**Table 8.2**) were considered likely to be Significant and are reported within this Chapter:

Table 8.2: Effects Considered Likely to be Significant

Effect	Receptor(s)*	Applicable Stage(s)	Spatial Zone
Increase in severance	Communities	Construction and Operation	The Study Area
Increase in driver delay	Vehicle drivers	Construction and Operation	
Increase in NMU delay	NMUs	Construction and Operation	
Reduction in NMU amenity	NMUs	Construction and Operation	
Increase in fear and intimidation	Vehicle drivers / NMUs	Construction and Operation	
Increase in accidents and reduction in safety	Vehicle drivers / NMUs	Construction and Operation	
Impact to Public right of Way (PRoW) Network	PRoW and users (NMUs)	Construction and Operation	
Increased demand on Public Transport	Public Transport Network and users	Operation	

**For Non-Motorised Vehicles (NMU), such as pedestrians, cyclists, horse riders, etc. Assessors will use judgement on which NMUs are applicable for receptor assessment.*

- 8.7 Construction will take place over an assumed 19-year period. In the early and mid-term years, construction traffic volumes will be far lower than the operational traffic level which have been assessed. In the latter years, traffic volumes will be dominated by operational trips, with construction volumes relating to just the smaller proportion of the Plots to be developed. Given this, the assessment of construction effects, as outlined in **Table 8.2** has been represented by considering the higher operational traffic assessment presented in this Chapter.

Assessment Methodology

Legislative Framework, Policy and Guidance

8.8 The following legislation and policy has informed the assessment of effects:

- National Planning Policy Framework (2025)¹;
- Greater Manchester Transport Strategy 2040 (2017)²; and
- IEMA Environmental Assessment of Traffic and Movement (2023)³ (hereafter referred to as the IEMA Guidelines). This provides advice for practitioners on assessing the impacts of traffic and movement as part of EIA, and covers the assessment methodology, proportionality, and scope.

8.9 The IEMA Guidelines provide a structured methodology for evaluating traffic and movement impacts, providing a systematic and proportional approach to the transport and access assessment process. NPPF and Greater Manchester Transport Strategy informed the environmental assessment by emphasizing the need for sustainable transport solutions and integrating transport considerations into the planning process.

Defining the Study Area

8.10 The Study Area for the Transport and Access ES Chapter is based on the methodology outlined at **Appendix 8.1**.

8.11 The Study Area identifies 23 junctions in the vicinity of the Assessment Boundary, where the Project for Assessment, would have the most significant vehicular impacts. The ES requires the assessment of Links (or Roads), rather than junctions. Therefore, the links on approach to the 23 junctions identified form the study area. This is illustrated at **Figure 8.4**.

8.12 The IEMA Guidelines identifies that as a guide, two broad rules should be applied to identify the links (roads) for the ES assessment. These are:

- Rule 1: Links that experience a 30% increase in daily traffic or heavy goods vehicle (HGV) flow; and
- Rule 2: Highly Sensitive Links that experience a 10% to 30% increase in traffic.

8.13 For the links within the study area, the above two broad rules have been applied through a Net Impact Assessment (comparing the Without Development scenario against the With Development Scenario, this is further detailed below under 'Assessment Process').

8.14 The Net Impact Assessment has been undertaken based on the 2-way Annual Average Daily Traffic flow (AADT) on a link (carriageway) in accordance with IEMA guidelines. The net impact assessment provided a provisional list of Links for assessment.

8.15 Each link has then been subject to a qualitative assessment to establish whether it should be included in the assessment, for example, a link may be forecast to be subject to 2 HGV's a day in the Without Development Scenario, and 4 HGV's a day in the With Development scenario, which is a 100% increase and therefore the broad rules would capture this link in the Links for Assessment. However an increase of 2 HGV's a day is clearly not a significant impact and therefore this link would be removed from the Links for Assessment.

- 8.16 On completion of the quantitative review, the final list of “Links for assessment” has been established and those links have been taken forward in the Assessment.
- 8.17 The above-described methodology and final list of “links for Assessment” are detailed in **Table 8.11** and are illustrated at **Figure 8.5**.

Background Studies to Inform the ES / Establishing the Baseline

- 8.18 The baseline traffic data for the assessments has been derived from the Northern Gateway Transport Model (NGTM), prepared using the SATURN modelling package. This model includes inputs from various stakeholders (who comprise the Transport Steering Group), such as Transport for Greater Manchester (TfGM), National Highways, BC and RBC, and several transport consultants (WSP, Pell Frischmann, Focus Transport Planning, and Tetra Tech).
- 8.19 The data sets extracted from the model includes traffic volumes ‘Without Development’ and ‘With Development scenarios’.
- 8.20 The detailed information on the sources of existing baseline data undertaken to inform the assessment presented within this Chapter is summarised at **Table 8.3**.

Table 8.3: Background Surveys and Studies

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Completed		
Locality Assessment Report	Traffic Assessment to support the allocation of the area in Places for Everyone (PfE)	July 2021
Draft Transport Strategy, Arup	Baseline Study of Transport Conditions and overview of potential mitigation	November 2022
TfGM Active Travel Study, Stage 1 – Draft	Review of Active Travel Provision in the vicinity of the area	November 2022
Model Agreement Statement	A summary of the Transport Steering Group Meeting and the agreed methodology for the preparation of the NGTM	April 2024
Production of the Northern Gateway Traffic Model (NGTM)	See below	August 2024 onwards
Review of Public Rights of Way	On-site review of Public Rights of Way	August and September 2024
Active Travel Strategy – TfGM	A strategy for active travel	Under determination*
Public Transport Strategy – TfGM	A strategy for public transport	Under determination*

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
M66 J3 Improvement	Assessments being undertaken by Pell Frischmann on behalf of the districts	Under determination**
Transport Assessment	An assessment of the transport, accessibility and highways.	Submitted April 2025
Travel Plan	Management plan designed to encourage safe, healthy and sustainable travel options.	Submitted April 2025
*Emerging TfGM documents	**Emerging National Highways and Bury Council documents	

Assessment Process

Assessment Scenarios

- 8.21 Environmental assessments will consider the impacts of the proposed maximum development extent which represents the remaining balance of the JPA 1.1 allocation, excluding already approved developments at South Heywood. A development log has been created to inform the **Transport Assessment**, based on assumptions about project timelines.
- 8.22 Consequently, the traffic-related effects in the EIA account for a greater number of cumulative projects than those specifically required by the EIA. Four of the Cumulative Projects (as discussed in **Chapter 19: Assessment of Cumulative Effects**) are likely to be accounted for within the network growth included in the traffic flows. The development log has been used to inform the assessment scenarios for the environmental assessment, which is the most reliable approach.
- 8.23 The years 2032 and 2039 have been selected for the environmental assessment. The 2032 scenario assumes partial completion of the JPA 1.1 development by that time, while the 2039 scenario assumes full completion. Although the implementation of JPA 1.1 extends beyond 2039, this timeframe provides the most robust data for a meaningful EIA assessment, effectively forming a worst-case scenario. This approach provides a level of contingency to the assessments and supports the Officers in their review.
- 8.24 Traffic data has been obtained from the NGTM transport model for the years 2032 and 2039, considering traffic with and without development on the network.
- 8.25 The baseline years for this assessment are 2032 and 2039, as outlined above. To calculate the volume of transport users' movements and operations for the 2032 and 2039 future years, transport users from cumulative assessments must be added to the baseline dataset for the purpose of evaluation.
- 8.26 The assessment scenarios have been categorized as follows:
- 2032 Do Minimum vs 2032 Do Something 1 (Without M62 Access Solution);
 - 2032 Do Minimum vs 2032 Do Something 1 (With M62 Access Solution);

- 2039 Do Minimum vs 2039 Do Something 1 (Without M62 Access Solution); and
- In the 2039 Do Minimum vs 2039 Do Something 1 (With M62 Access Solution).

Methodology

- 8.27 The IEMA Guidelines for the Environmental Assessment of Road Traffic sets out the broad principles of how to assess the magnitude of change/impact for each of the effects. The assessment principles are summarised below.

Public Rights of Way (PRoW)

- 8.28 The IEMA guidance emphasizes the importance of using existing data, conducting site visits, and applying professional judgment to evaluate impacts. It also highlights the need to provide guidance on maintaining connectivity and addressing changes during and after development.
- 8.29 In assessing the environmental impact on the PRoW network, a qualitative assessment has been conducted using existing data, such as maps. Site visits have been carried out to observe and document the current state of the network. Professional judgment has been applied to evaluate the impact on the PRoW network during and after operation, providing guidance on maintaining connectivity and addressing any changes to the network during development and post-operation. In assessing the network, it is a matter of maintaining public access connectivity from 'A' to 'B' points within the network.

Demand for Public Transport

- 8.30 According to the IEMA guidelines, assessments should focus on road traffic associated with major new developments. Whilst road traffic effects impact upon active travel modes, the guidelines do not extend to public transport movement impacts of development projects.
- 8.31 However, given the scale of the Project for Assessment and the Proposed Scheme, there is potential for increased demand on public transport facilities in the area from/to the Assessment Boundary. Therefore, the effects on public transport (users of buses, tram and rail) have been reported as part of a qualitative assessment within the ES. The qualitative assessment will consider the existing public transport available in the vicinity of the Assessment Boundary and provide an estimate of the increased demand as a result of the Project for Assessment and the Proposed Scheme.
- 8.32 Consideration will be given to secondary mitigation and the potential alignment with the Public Transport Strategy being prepared by TfGM for the area surrounding the Assessment Boundary. Secondary mitigation should create a net benefit for both the Project for Assessment and the surrounding areas, through enhanced public transport connectivity and service frequency. This will offer a viable alternative for accessing both the local and wider areas by car, whilst also providing a practical option for those who do not own a car. The Applicant is working with TfGM through providing public transport trip generation figures for the Project for Assessment to TfGM, to tie into the strategy for the area. These proposals will contribute to the TfGM strategy. The alignment with the wider TfGM strategy will bring benefits over those which would be derived from the Applicant carrying out separate and un-aligned assessment of public transport.

Reporting of the Environmental Effects and Significance Criteria

- 8.33 assessment of likely significant environmental effects as a result of the Project for Assessment has taken into account the construction and operational stages. The following sections define the approach adopted within the assessment for the determination of sensitivity (or value/importance), magnitude of change (or impact), the level of effect and significance.
- 8.34 The links assessed are selected based on the magnitude of change experienced, specifically where medium and large magnitudes of change occur. This selection is due to the potential for significant effects associated with these changes. To ensure a thorough and robust assessment, 'worst case' scenarios have been considered. This approach allows for a comprehensive evaluation of potential impacts, ensuring that the assessment captures the most significant effects that could arise from the proposed development.

Determining Sensitivity of Receptor

- 8.35 The sensitivity of affected receptors has been considered on a scale of **high, medium, low or negligible**. The sensitivity of a road can be defined by the vulnerability of the groups who may use it, such as elderly people or children. A more sensitive area may be where pedestrian activity is high, such as in the vicinity of a school, or where there is already an existing safety issue. It should be noted that receptor sensitivity is judged on the sensitivity of road users (primarily pedestrians). It also takes account of the nature of the road; for example, an 'A' road is likely to have lower sensitivity than a minor residential road. The sensitivity of receptors is shown in **Table 8.4**.
- 8.36 The receptor sensitivity will be used for two purposes:
- Identifying which of the links subject to traffic increases of 10-30% are Highly Sensitive and therefore to be included in the "Links for Assessment" and
 - For the links included in the "Links for Assessment", which are subject to a 30% or more increase in vehicles or HGV, a Receptor Sensitivity level will be assigned.

Table 8.4: Receptor Sensitivity

Receptor Sensitivity	Receptor Type
High	Schools, colleges, playgrounds, accident blackspots, retirement homes, urban/residential roads without footways that are used by pedestrians
Medium	Congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, un-segregated cycleways, community centres, parks, recreation facilities.
Low	Places of worship, public open space, nature conservation areas, listed buildings, tourist attractions and residential areas with adequate footway provision
Negligible	Any with low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions.

Determining the Magnitude of Change

- 8.37 The magnitude of change has been considered as the change experienced from the current baseline conditions at the sensitive receptor and has been considered on a scale of **large, medium, small** or **negligible**.

Severance

- 8.38 The IEMA guidance states that severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. However, the guidance **acknowledges** that the measurement and prediction of severance is extremely difficult. The assessment of severance pays full regard to specific local conditions, in particular the location of pedestrian routes to key local facilities and whether crossing facilities are provided.
- 8.39 The IEMA guidance references that the LA 112 'Population and Human Health' of the Design Manual for Roads and Bridges⁴ (DMRB) provides further guidance on this aspect of severance within a community. LA 112 provides criteria against which the magnitude of change shall be reported and the LA 112 is quoted in the IEMA Guidance, as shown in **Table 8.5**.

Table 8.5: Severance Thresholds⁵

Magnitude of Impact (Change)	Typical Description
Large	90% or more Change in traffic flow
Medium	60% to 89% Change in traffic flow
Small	30% to 59% change in traffic flow
Negligible	29% or lower change in traffic flow

Driver Delay

- 8.40 Driver Delay is likely to be significant when the traffic on the network surrounding the Assessment Boundary is already at, or close to, the capacity of the system. Driver delay is a result of the net impact generated by a development when compared to the baseline.
- 8.41 The guidance suggests that assessors use their judgement and modelling forecast software to determine whether driver delay is a significant effect.
- 8.42 The Junction Modelling Results in the **Transport Assessment** will be used to establish which of the "Links for Assessment" are operating at, or close to capacity. Any arms of junctions which are forecast to operate at or over 90% of its theoretical capacity will be assessed in terms of driver delay.
- 8.43 The links of interest will then be assessed against the magnitude of impact/change and shall be reported, as shown in **Table 8.6**, which are Tetra Tech's in-house threshold which have been used on ES assessments previously.

Table 8.6: Driver Delay Thresholds

Magnitude of Impact (Change)	Change in delay
Large	Over 180 seconds
Medium	>120 to <180 seconds
Small	>60 to <120 seconds
Negligible	<60 seconds

Non-motorised User Delay

- 8.44 Mon-motorised user (NMU) delay refers to the changes in the volume, composition or speed of traffic that may affect the ability of people to cross a road. The IEMA guidance suggests that assessors use their judgement to determine whether pedestrian delay is a significant effect.
- 8.45 The links of interest will be assessed against the magnitude of change/impact and shall be reported, as shown in **Table 8.7**, which are Tetra Tech's in-house threshold which have been used on ES assessments previously.

Table 8.7: NMU Delay thresholds

Magnitude of Impact (Change)	Total vehicles: peak hour two-way hourly flow (frequency)
Large	Greater than 720 (1 vehicle every 5 seconds)
Medium	360-720 (1 vehicle between 5 to 10 seconds)
Low	120-360 (1 vehicle between 10 and 30 seconds)
Negligible	Less than 120 (less than 1 vehicle every 30 seconds)

Non-Motorised User Amenity

- 8.46 NMU amenity is broadly defined as the relative pleasantness of a journey. It is affected by traffic flow, traffic composition and pavement width / separation from traffic. The guidance suggests that assessors use their judgement to determine whether change to pedestrian amenity is a significant effect. The IEMA guidelines suggest a tentative threshold for judging the significance of a change in pedestrian amenity where traffic flow (or its HGV component) is halved or doubled. They note that the assessment of amenity should pay full regard to local conditions.
- 8.47 Based on this, the impact magnitude thresholds are set out in **Table 8.8**.

Table 8.8: Pedestrian Amenity thresholds

Magnitude of Impact (Change)	Increase in vehicles per hour (peak hour)
Large	Greater than 150%
Medium	100%-150%
Low	50%-100%
Negligible	Less than 50%

Fear and Intimidation

- 8.48 Fear and intimidation are dependent upon the volume of traffic, the level of HGVs, the proximity of traffic to people and the lack of protection caused by such factors as narrow pavement widths.
- 8.49 The guidance states that there are no commonly agreed thresholds for estimating this from known traffic and physical conditions, but it does nevertheless suggest some thresholds which could be used, based on previous research, and these are shown in **Table 8.9**.

Table 8.9: Fear and Intimidation Thresholds⁶

Magnitude of Impact (Change)	Average Hourly Traffic Flow over 18hr Day (vehicles per hour)	18hr HGV Flow (vehicles per hour)	Average vehicle speed18 (c)	Degree of Hazard Score
Large	1,800+	3,000+	40+	30
Medium	1,200 – 1,799	2,000 – 2,999	30-40	20
Small	600 – 1,199	1,000 – 1,999	20-30	10
Negligible	599 or less	999 or less	20 or Lower	0

- 8.50 The hazard score is assigned to each criterion, resulting in a total weighted magnitude of change score categorized as follows:
- Large – A score of 70+
 - Medium – A score of 40 - 69
 - Small – A score of 21 - 39
 - Negligible - A score of 0 to 20

Accidents and Safety

- 8.51 The guidance suggests that professional judgement is used to assess the implications of local circumstances or factors which may elevate or lessen risks of accidents. The safety information is contained within the **Transport Assessment** and **Appendix 8.15** with the magnitude of change for accidents and safety to be assessed qualitatively, using professional

judgement.

Public Rights of Way (PRoW)

- 8.52 The guidelines do not extend to public transport movement impacts of development projects. The movement of public transport users can be considered under the Traffic and Movement Assessments of the IEMA Guidelines⁷. Professional judgement will be applied to determine magnitude, alongside consideration of the ease of movement for all users, including those with disabilities.

Demand for Public Transport

- 8.53 The guidelines do not extend to public transport movement impacts of development projects, with guidance sought from the Traffic and Movement Assessments of the IEMA Guidelines as outlined above. Professional judgement will be applied to determine magnitude, alongside consideration of ridership levels, service frequency, coverage, travel times, and reliability.

Determining the Level of Effect

- 8.54 The level of effect has been informed by the magnitude of change due to the Project for Assessment and the evaluation of the sensitivity of the affected receptor. The level of effect has been determined using professional judgement and **Table 8.10** has been a tool which has assisted with this process.
- 8.55 Whilst **Table 8.10** provides ranges, the level of effect is confirmed as a single level and not a range, informed by professional judgement. For each effect, it has been concluded whether the effect is '*beneficial*' or '*adverse*'.

Table 8.10: Matrix to Support Determining the Level of Effect

Magnitude of change (or impact)	Sensitivity (or value, importance, etc.)				
		High	Medium	Low	Negligible
	Large	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Small	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

- 8.56 The following terms have been used to define the level of the effects identified and these can be '*beneficial*' or '*adverse*':

- **Major effect:** where the Project for Assessment / Proposed Scheme is likely to cause a considerable change from the baseline conditions and the receptor has limited adaptability, tolerance or recoverability or is of the highest sensitivity;

- **Moderate effect:** where the Project for Assessment / Proposed Scheme is likely to cause either a considerable change from the baseline conditions at a receptor which has a degree of adaptability, tolerance or recoverability or a less than considerable change at a receptor that has limited adaptability, tolerance or recoverability;
- **Minor effect:** where the Project for Assessment / Proposed Scheme is likely to cause a small, but noticeable change from the baseline conditions on a receptor which has limited adaptability, tolerance or recoverability or is of the highest sensitivity; or where the Project for Assessment / Proposed Scheme is likely to cause a considerable change from the baseline conditions at a receptor which can adapt, is tolerant of the change or/and can recover from the change; and
- **Negligible:** where the Project for Assessment / Proposed Scheme is unlikely to cause a noticeable change at a receptor, despite its level of sensitivity or there is a considerable change at a receptor which is not considered sensitive to a change.

8.57 The duration of the effect has been assessed as either 'short-term', 'medium-term' or 'long-term'. Short-term is considered to be up to 1 year, medium-term is considered to be between 1 and 10 years and long-term is considered to be greater than 10 years.

Determining Significance

- 8.58 For each effect, a statement has been made as to whether the level of effect is '**Significant**' or '**Not Significant**'. This determination has been based on professional judgement and/or relevant guidance/legislation where applicable.
- 8.59 Significance has only been concluded for residual effects (i.e. following the identification of secondary mitigation).

Baseline Conditions

Site Location

- 8.60 The Assessment Boundary (**Figure 1.1**) is located in the Heywood/Pilsworth area, spanning Bury and Rochdale in Greater Manchester. It is part of the Atom Valley Mayoral Development Zone, promoting economic growth.⁸
- 8.61 The Assessment Boundary and the surrounding area is situated in the strategically important intersection of the M60, M62 and M66 motorways.

Local Road Network

- 8.62 The Assessment Boundary is traversed by Moss Hall Road, which has speed limits ranging from 30 to 40 mph. This road is generally rural in character, supporting two-way traffic and providing access to residential properties and agricultural land. To the southeast, Moss Hall Road becomes Whittle Lane, offering access to the A4065 and Middleton.
- 8.63 The Assessment Boundary is bordered to the north by Pilsworth Road and intersected by Haresill Road and Queen Elizabeth II Way. These roads form the main commuter corridor for vehicles traveling within South Heywood, providing connections to the town, the A58 Bury Road, M66 Junction 3, and M62 Junction 19.
- 8.64 Queen Elizabeth II Way is a 40mph carriageway that accommodates the main thoroughfare of traffic from southwest Heywood to M62 Junction 19. It is primarily designed for vehicle

traffic, connecting to Manchester Road via a signalized crossing point. Manchester Road facilitates the movement of traffic from north to south, between Heywood and Rhodes via the A6045.

- 8.65 Queen Elizabeth II Way becomes Hareshill Road to the west, retaining its 40mph speed limit. The purpose of this carriageway is to facilitate traffic between Queen Elizabeth II Way and Pilsworth Road, while also providing access to the commercial facilities located to the north. It connects to Pilsworth Road via a signalized arrangement. Pilsworth Road facilitates the movement of traffic to and from Heywood, offering access to the wider parts of the town, including residential neighbourhoods and commercial facilities. It also continues westward, providing access to the commercial facilities located on its northern front, and extends towards M66 Motorway Junction 3.
- 8.66 The M66 and M62 Junction 19 are part of the strategic highway network and are subject to a maximum speed limit of 70mph. They are managed by National Highways, offering strategic traffic routes to the wider parts of the country.

Active Travel Infrastructure

- 8.67 **Figures 8.1 to 8.3** illustrates the existing active travel infrastructure in the vicinity of the Assessment Boundary.
- 8.68 Shared use paths (pedestrian and cycle) are provided on the northern side of Hareshill Road and Queen Elizabeth II Way. These paths facilitate the safe and suitable movement of pedestrians and cyclists, connecting Heywood through the shared use path and footway located on the A4065 Manchester Road.
- 8.69 These footways ensure the safe and suitable movement of active travel users into the wider parts of Heywood and connect to the local pedestrian network, which includes footways, footpaths, and crossing points. The A4065 Manchester Road / Queen Elizabeth II Way is a signalized junction, with crossing facilities provided for active travel users.
- 8.70 A shared use (pedestrian and cycle) path is also provided on both the northern and southern sides of Hareshill Road, near Pilsworth Road, further enhancing the provision of active travel infrastructure. Pilsworth Road in this location provides a connection to Heywood, offering routes towards the town and residential areas. The Hareshill Road / Pilsworth Road junction is signalized, accommodating the safe and suitable passage of active travel users. West of this junction, the provision is reduced, with footways provided only on the northern side of Pilsworth Road.
- 8.71 Additionally, Bury: 79BUR is a bridleway in close proximity to the Assessment Boundary, which would provide for equestrians, however this is currently subject to a temporary closure associated with the landfill site.
- 8.72 Infrastructure increases near the connection between Pilsworth Road and Moss Hall Road, where a shared use path is provided to accommodate active travel users on Moss Hall Road north of the junction. These connections permeate into Heywood, offering access to the town and local active travel network. South of this junction Moss Hall Road provides footway connections.
- 8.73 The footway along Pilsworth Road continues, allowing pedestrians to travel underneath the M66 Motorway and into the Pilsworth pedestrian network.

8.74 The Assessment Boundary benefits from direct connections to the following parts of the PRow network.

- Bury: 2WHI;
- Bury: 3WHI;
- Bury: 4WHI;
- Rochdale: Hey-Fp-74;
- Bury: 5WHI;
- Bury: 6WHI;
- Bury: 7WHI;
- Bury: 8WHI;
- Bury: 9WHI;
- Bury: 46WHI;
- Bury: 87BUR;
- Bury: 85BUR;
- Bury: 89BUR;
- Rochdale: Hey-Fp-72;
- Rochdale: Hey-Fp-75;
- Rochdale: Hey-Fp-142;
- Rochdale: Hey-Fp-164;
- Rochdale: Hey-Fp-165;
- Rochdale: Hey-Fp-166; and
- Rochdale: Hey-Fp-166.

8.75 Bury: 79BUR is a bridleway in close proximity to the Assessment Boundary, which would provide for equestrians, however this is currently subject to a temporary closure associated with the landfill site.

8.76 **Figures 8.1 to 8.3** advises on the extent of the network within and in proximity of the Assessment Boundary. A detailed audit of the PRow network is provided within Appendix 8.2 of the **Transport Assessment**.

Access to Public Transport

8.77 Bus stops are located on the A6045 Manchester Road near The Birch Hotel. These stops are identified by a flag and pole arrangement, with a bus waiting bay provided on the carriageway. They are served by the Number 125, an hourly service operating Monday to Sunday between Heywood and Middleton, running via the library, Newhouse Academy, Middleton, and Rhodes.

8.78 Additional bus stops can be accessed at Parr Lane, near the junction with Castle Road. These stops are also identified by a flag and pole arrangement, with a bus waiting bay adjacent to the carriageway. They are served by the Number 94 and 97. The Number 94 offers hourly services Monday to Saturday, with a reduced two-hourly service on Sunday. It routes between North Manchester General Hospital and Bury, running via Prestwich, Pilsworth, and Fishpool. The Number 97 operates every 30 minutes Monday to Sunday, with a reduced evening service operating hourly. It facilitates travel between Bury and Manchester, running via Prestwich, Broughton, and Manchester.

Highway Safety Review

8.79 A highway safety review has been undertaken using data obtained from 'Crashmap'⁹ for a five-year period from 2018 to 2023, comprising the most recent data freely released by the Department for Transport (DfT). 'Crashmap' uses data collected by the police regarding the

occurrence of Personal Injury Accidents. This data is approved by the National Statistics Authority and report on by the DfT each year.

- 8.80 This review (**Appendix 8.15**) recorded 52 incidents on the Links within Assessment Boundary, which are outlined at **Table 8.11**. Of these, 36 were classified as slight, 15 as serious, and 3 as fatal. The number of incidents per link averaged between 0 and 2 per year, with no notable clusters identified. This suggests that the incidents were more likely due to user error rather than deficiencies in the highway.
- 8.81 Given the location and volume of traffic operating on the local highway network, the incidents recorded over a five-year period do not indicate any inherent highway design fault, that may be exacerbated by the Project for Assessment.

Links for Assessment

- 8.82 The links for assessment has been selected using guidance from the IEMA Transport for Traffic, identifying parts of the road network where the two-way Annual Average Daily Traffic flow (AADT) on a link (carriageway) experiences a 30% increase in daily traffic or HGV flow. If categorized as a Highly Sensitive Link, a 10% increase in traffic is considered.
- 8.83 Each link was then subject to a qualitative assessment to determine whether it should be included in the assessment. For example, a link may be forecast to have 2 HGVs per day in the Without Development Scenario and 4 HGVs per day in the With Development Scenario, representing a 100% increase. According to the broad rules, this link would be included in the Links for Assessment. However, an increase of 2 HGVs per day is not considered a significant impact, so this link would be removed from the Links for Assessment.
- 8.84 The resultant assessment is presented at **Table 8.11**.

Table 8.11: Link Assessment Summary – All Links

Ref	Link Name	24hr AADT – Difference		Sensitivity	Provisional List of “Links for Assessment”
		All Vehs	HGV		
1	Manchester Road / Hollins Lane Corridor, between Langley Lane and M62 junction 19.	4.3%	20.0%	Negligible	No
2	M62 Westbound Off-Slip.	18.0%	46.7%	Medium	Yes
3	M62 Westbound Off-Slip.	17.7%	10.9%	Medium	No
4	Queen Elizabeth II Way, between M62 Junction 19 and Manchester Road.	29.6%	42.9%	Negligible	Yes
5	Middleton Road, to the north of M62 Junction 19.	2.0%	7.9%	Low	No
6	Manchester Road / Heywood Old Road, between Langley Lane and Queen Elizabeth II Way.	22.4%	-65.2%	Negligible	No
7	Manchester Road, between Queen Elizabeth II Way and Coronation Avenue.	8.0%	35.2%	Medium	Yes

Ref	Link Name	24hr AADT – Difference		Sensitivity	Provisional List of “Links for Assessment”
		All Vehs	HGV		
8	Hareshill Road / Queen Elizabeth II Way Corridor, Between Hareshill Road / QEII / South Heywood residential & local centre (Junction 3) and Manchester Road.	20.6%	43.5%	Medium	Yes
9	Hareshill Road, between Hareshill Road / Queen Elizabeth II Way / South Heywood residential & local centre (Junction 3) and Hill Top Road.	20.3%	43.4%	Medium	Yes
10	Hill Top Road Corridor, north east of Hareshill Road	2.2%	1.5%	Low	No
11	Hareshill Road, between Hill Top Road and Pilsworth Road.	23.9%	50.8%	Low	Yes
12	Pilsworth Road, between Hareshill Road / Pilsworth Road and A58 Bury St	0.8%	49.1%	Medium	Yes
13	Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park	27.1%	57.2%	Medium	Yes
14	A58 Bury Road – West of Pilsworth Road	1.5%	9.6%	Low	No
15	A58 Bridge Street – East of Pilsworth Road	2.0%	36.3%	Low	Yes
16	Pilsworth Road, between Heywood Distribution Park and Access to Committed Development on South Side of Pilsworth Road	25.8%	62.6%	Low	Yes
17	Pilsworth Road, between Access to Committed Development on South Side of Pilsworth Road & Moss Hall Road	25.7%	62.0%	Low	Yes
18	Moss Hall Road, between Pilsworth Road and Whittle Lane	74.5%	90.4%	Medium	Yes
19	Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10)	45.4%	62.1%	Low	Yes
20	Pilsworth Road, between Moss Hall Road and M66	45.4%	55.4%	Medium	Yes
21	Moss Hall Road, between Fowler Welch and Broadlands Industrial Access	32.8%	71.8%	Low	Yes
22	M66 Northbound Off-Slip.	14.7%	41.2%	Medium	Yes
23	M66 Southbound Off-Slip, between Pilsworth Road and M66 JUNCTION 2.	36.3%	34.1%	Medium	Yes
24	Pilsworth Road / Croft Lane Corridor, between M66 and Hollins Lane.	4.2%	24.1%	Medium	No
25	A58 Bury St, between M66 Junction 2 and Heap Brow	4.6%	29.8%	Low	No

Ref	Link Name	24hr AADT – Difference		Sensitivity	Provisional List of “Links for Assessment”
		All Vehs	HGV		
26	M66 Northbound Off-slip	4.0%	1.3%	Medium	No
27	Waterfold, entire extent of Waterfold	0.0%	0.0%		No
28	Rochdale Road, between wash lane and M66 JUNCTION 2	4.7%	19.6%	Medium	No
29	M66 Southbound Off-Slip	-11.4%	-47.7%	Medium	No
30	Bridge Hall Lane, between M66 JUNCTION 2 and Bridge Hall Fold	0.0%	0.0%		No
31	Heywood Old Road, between whittle Lane and Langley Lane	11.0%	-78.7%	Low	No
32	Heywood Old Road, between Whittle Lane and A6045 Middleton Road	6.7%	-78.6%	Negligible	No
33	Whittle Lane, between Heywood Old Road and Moss Hall Road	40.9%	0.0%	Low	Yes
34	Langley Lane, between Heywood Old Road and Hollin Lane	4.4%	14.6%	Medium	No
35	Hollin Lane, between Langley Lane and Rochdale Road.	4.4%	19.9%	Low	No
36	Manchester Road, between Coronation Avenue and Middleton Road	6.6%	0.0%	Low	No
37	Coronation Avenue, between Manchester Road and Middleton Road	15.3%	8.1%	Medium	No
38	Hollins Lane, between Hollins Brow / Croft Lane and Church Meadow	18.3%	30.4%	Low	Yes
39	Hollins Brow, between Hollins Lane and Manchester Road	-1.7%	41.8%	Medium	Yes
40	Manchester Road, between Hollins Brow and High Bank Road	6.8%	2.0%	Negligible	No
41	Manchester Road, between Hollins Brow and Crossfield St	3.6%	32.0%	Medium	Yes
42	M60 JUNCTION18 Eastbound Off-Slip	4.2%	7.9%	Medium	No
43	M60 JUNCTION 18 Westbound Off-Slip	-1.2%	8.6%	Medium	No
44	M60 JUNCTION 18 Northbound Off-Slip	1.9%	6.0%	Low	No
45	M60 JUNCTION 18 Southbound Off-Slip	0.2%	11.7%	Negligible	No
46	M62 JUNCTION 20 Eastbound Off-Slip	-0.5%	6.4%	Medium	No

Ref	Link Name	24hr AADT – Difference		Sensitivity	Provisional List of “Links for Assessment”
		All Vehs	HGV		
47	M62 JUNCTION 20 Westbound Off-Slip	1.7%	2.3%	Medium	No
48	M60 JUNCTION 20 Northbound Off-Slip	1.6%	7.2%	Medium	No
49	M60 JUNCTION 20 Southbound Off-Slip	-0.6%	1.5%	Negligible	No
50	M60 JUNCTION 19 Westbound Off-Slip	1.1%	-12.5%	Medium	No
51	Middleton Road, between M60 JUNCTION 19 and Heaton Park Road W - SWB	-1.4%	0.7%	Medium	No
52	Middleton Road, between M60 JUNCTION 19 and Heaton Park Road W - NEB	3.9%	18.0%	Medium	No
53	M60 JUNCTION 19 Eastbound Off-Slip	10.1%	16.7%	Medium	No
54	Middleton Road, between M60 JUNCTION 19 and Heywood Old Road	10.5%	-7.6%	Low	No
55	Kelvin Avenue, between Middleton Road and Lister Road	7.9%	0.1%	Low	No
56	Manchester Old Road, between Heywood Old Road and Lands End Road	5.0%	4.4%	Medium	No
57	Heywood Old Road, between Whittle Lane and A6045 Middleton Road	20.4%	-68.8%	Medium	No
58	Rochdale Road, between Wash Lane and Deal St	6.5%	18.6%	Low	No

8.85 The resultant 21 Links for Assessment are outlined at **Table 8.12**.

Table 8.12: Links for Assessment

Ref	Link Name	24hr AADT – Difference		Sensitivity
		All Vehs	HGV	
2	M62 Westbound Off-Slip.	18%	47%	Medium
4	Queen Elizabeth II Way, between M62 Junction 19 and Manchester Road.	30%	43%	Negligible
7	Manchester Road, between Queen Elizabeth II Way and Coronation Avenue.	8%	35%	Medium

Ref	Link Name	24hr AADT – Difference		Sensitivity
		All Vehs	HGV	
8	Hareshill Road / Queen Elizabeth II Way Corridor, Between Hareshill Road / QEII / South Heywood residential & local centre (Junction 3) and Manchester Road.	21%	44%	Medium
9	Hareshill Road, between Hareshill Road / Queen Elizabeth II Way / South Heywood residential & local centre (Junction 3) and Hill Top Road.	20%	43%	Medium
11	Hareshill Road, between Hill Top Road and Pilsworth Road.	24%	51%	Low
12	Pilsworth Road, between Hareshill Road / Pilsworth Road and A58 Bury St	1%	49%	Medium
13	Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park	27%	57%	Medium
15	A58 Bridge Street – East of Pilsworth Road	2%	36%	Low
16	Pilsworth Road, between Heywood Distribution Park and Access to Committed Development on South Side of Pilsworth Road	26%	63%	Low
17	Pilsworth Road, between Access to Committed Development on South Side of Pilsworth Road & Moss Hall Road	26%	62%	Low
18	Moss Hall Road, between Pilsworth Road and Whittle Lane	75%	90%	Medium
19	Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10)	45%	62%	Low
20	Pilsworth Road, between Moss Hall Road and M66	45%	55%	Medium
21	Moss Hall Road, between Fowler Welch and Broadlands Industrial Access	33%	72%	Low
22	M66 Northbound Off-Slip.	15%	41%	Medium

Ref	Link Name	24hr AADT – Difference		Sensitivity
		All Vehs	HGV	
23	M66 Southbound Off-Slip, between Pilsworth Road and M66 JUNCTION 2.	36%	34%	Medium
33	Whittle Lane, between Heywood Old Road and Moss Hall Road	41%	0%	Low
38	Hollins Lane, between Hollins Brow / Croft Lane and Church Meadow	18%	30%	Low
39	Hollins Brow, between Hollins Lane and Manchester Road	-2%	42%	Medium
41	Manchester Road, between Hollins Brow and Crossfield St	4%	32%	Medium

Future Baseline

8.86 Unlike other environmental assessments, which typically use the present year as the baseline, the baseline assessment for transport and access uses a forecast year(s). For the transport and access environmental assessment, these forecast years are 2032 and 2029.

8.87 The methodology for calculating future baseline years is set out at **Appendix 8.3**.

Primary and Tertiary Mitigation

Construction Stage

8.88 A Construction Traffic Management Plan (CTMP) will be provided to effectively manage construction traffic, aiming to minimize disruption and ensure safety. It will detail traffic management strategies, including designated routes for construction vehicles, access points to the construction site, and measures to control traffic flow and reduce congestion. This may involve the use of signage, barriers, speed limits, and protocols for pedestrians and cyclists. Additionally, the plan will address environmental considerations such as noise and dust control, as well as strategies to minimize environmental impact.

8.89 The following primary and tertiary mitigation which has been evaluated as part of the construction stage assessment is outlined in the table below. It is worth noting that those which are relevant to the Proposed Scheme can be controlled through **Volume 3: Environmental Management Plan**, although those that apply to the Project for Assessment will be a matter for when planning applications are made for those relevant areas.

Table 8.13: Primary and Tertiary Mitigation to Inform Assessment of Construction Effects

Mitigation	Relevant to	
	Project for Assessment	Proposed Scheme
Construction Traffic Management Plan:		
This document will outline measures to facilitate safe and efficient vehicle and pedestrian movement around a construction site by organizing traffic flow, minimizing risks, separating pedestrians and vehicles, implementing safety measures, and ensuring compliance with regulations.	✓	✓

Operational Stage

8.90 The following primary and tertiary mitigation which has been evaluated as part of the operational stage assessment is outlined in the **Table 8.14**.

Table 8.14: Primary and Tertiary Mitigation to Inform Assessment of Operational Effects

Mitigation	Relevant to	
	Project for Assessment	Proposed Scheme
Primary access points off Moss Hall Road and Whittle Lane with improvements to Moss Hall Road as outlined in Chapter 4 and 5 .	✓	✓
Infrastructure Area BBB – M62 remodelling/improvement works	✓	x
Existing PROW to be extinguished and provision of a network of replacement PROW to be provided to a higher standard than is currently provided across the Assessment Boundary, ensuring accessibility for all users.	✓	✓
Infrastructure Area CCC – The area within the consented South Heywood development where an access option is being considered as part of the access strategy for the Project for Assessment (See Figure 4.1).	✓	x

Assessment of Effects, Secondary Mitigation and Residual Effects**Construction Stage**

8.91 In terms of traffic volumes during the construction stage, the Project for Assessment will be built out incrementally over 19 years.

- 8.92 Construction vehicle traffic during the development of Plot/s will be controlled through a Construction Traffic Management Plan (CTMP) as outlined in **Table 8.13**. Routing will utilise the primary road network to Moss Hall Road via either the M66 and Pilsworth Road or the M62 and Queen Elizabeth II Way. Construction traffic will primarily consist of HGVs. Access to Infrastructure Areas AAA-CCC and AAAA is expected to have their own independent and secure construction access points from the primary and secondary access corridors, which will be determined once site construction management and programming plans are developed, and compound locations are fixed.
- 8.93 The remaining roads, with the exception of Moss Hall Road, are key arterial routes for the area, experiencing approximately 10,000 AADT (Annual Average Daily Traffic) movements or more. The environmental assessment threshold for assessing construction traffic (10% to 30% net increase in vehicle or HGV traffic) is unlikely to be met. Construction traffic will be focused on Moss Hall Road, as will the operational development traffic. Moss Hall Road will form the north to south spine road within the Proposed Scheme. Whilst it will be subject to additional vehicles, the improvements will accommodate the size, type and level of traffic associated with the construction operations.
- 8.94 For this reason, professional judgement concludes that the effects of traffic flows during the construction of the Project for Assessment will be temporary and lower than those presented by the operational stage assessment below.

Operational Stage

- 8.95 This section reports on the worst-case assessment for all environmental evaluations. The complete assessment results can be found in **Appendix 8.5 to 8.14**.

Increase in Severance

- 8.96 In the IEMA guidelines, "severance" refers to the perceived division within a community caused by major traffic arteries. It describes how increased traffic flow can separate people from other people and places, impacting social interactions and accessibility.
- 8.97 Links that will undergo a medium or higher magnitude of change have been evaluated and the results can be found in **Appendix 8.14**. The following links were identified:
- Moss Hall Road, between Pilsworth Road and Whittle Lane; and
 - Pilsworth Road, between Moss Hall Road and M66.

Project for Assessment

- 8.98 The worst-case magnitude of change is considered to be large for Moss Hall Road between Pilsworth Road and Whittle Lane and medium for Pilsworth Road, between Moss Hall Road and M66. This is because there is a greater than 90% change in traffic flow (209%) for Moss Hall Road between Pilsworth Road and Whittle Lane and a 90% change in traffic flow for Pilsworth Road, between Moss Hall Road and M66.
- 8.99 The sensitivity of the communities along the receptors is medium, and the magnitude of change ranges from large to medium. Therefore, there is likely to be a direct, permanent, long-term adverse effect, which is considered moderate.

Proposed Scheme

8.100 The effects of an increase in severance for all receptors outlined above is that same as that reported for the Project for Assessment.

Secondary Mitigation

8.101 The following secondary mitigation is outlined in the **Table 8.15**.

Table 8.15: Secondary Mitigation to Inform Assessment of Operational Effects for Severance

Mitigation	Person Responsible	Secured by	Relevant to	
			Project for Assessment	Proposed Scheme
Travel Plan	Applicant / future applications	Planning Condition	✓	✓
TfGM Active Travel and Public Transport Strategy – TfGM Transport Framework Document	Applicant / future applications	Planning Condition	✓	✓

8.102 For the Proposed Scheme, the mitigation will be managed through the planning conditions. It is assumed that the same or similar mitigation will apply to the wider Project for Assessment, although will be a matter for when planning applications are made for those relevant areas.

Residual Effect

8.103 Secondary mitigation is targeted at increasing the mode share of sustainable travel and consequently reducing traffic volumes below those reported above. The traffic modelling undertaken does not reflect vehicle trip reductions associated with the Travel Plan and TFD. Those reduced traffic volumes will equate to both a lower baseline traffic volume and a lower development traffic volume. The percentage change is expected to be similar.

8.104 However, the total traffic on the roads within the study area will lower, which will reduce overall severance, and therefore professional judgement advises the level of impact will be lower following implementation of secondary mitigation.

8.105 However, the residual effects for all receptors outlined above is the same as that reported in the pre-mitigation scenario for the Project for Assessment and Proposed Scheme.

Significance

8.106 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme.

Increase in Driver Delay

8.107 In the IEMA guidelines, 'driver delay' refers to the additional time drivers experience due to changes in traffic conditions caused by a development or project. Junction capacity assessments have been completed and included in the **Transport Assessment**, which advises on the expected level of delay during peak hours.

8.108 Links that will undergo a medium or higher magnitude of change have been evaluated, with the complete assessment results available in **Appendix 8.14**. The following links were identified:

- M62 Westbound Off-Slip;
- Hollins Brow, between Hollins Lane and Manchester Road;
- Manchester Road, north of Hollins Brow; and
- Pilsworth Road, between Hareshill Road / Pilsworth Road and A58 Bury St.

Project for Assessment

8.109 The receptors (vehicle drivers) along the routes identified above are considered to be of medium sensitivity.

8.110 The worst-case magnitude is considered medium for Pilsworth Road, between Hareshill Road/Pilsworth Road and A58 Bury Street, due to increased delays of 120 to 180 seconds in the peak hour. The M62 Westbound Off-Slip, Manchester Road, north of Hollins Brow, and Hollins Brow, between Hollins Lane and Manchester Road, are expected to experience a large magnitude of change, with delays exceeding 180 seconds in the peak hour.

8.111 Vehicle drivers on the links identified above will likely experience a direct, permanent, long-term, adverse effect which is considered to be moderate.

Proposed Scheme

8.112 The effects of an increase in driver delay for all receptors outlined above is that same as that reported for the Project for Assessment.

Secondary Mitigation

Table 8.16: Secondary Mitigation to Inform Assessment of Operational Effects for Driver Delay

Mitigation	Person Responsible	Secured by	Relevant to	
			Project for Assessment	Proposed Scheme
Travel Plan	Applicant / future applications	Planning Condition	✓	✓
TfGM Active Travel and Public Transport Strategy – TfGM Transport Framework Document	Applicant / future applications	Planning Condition	✓	✓

8.113 For the Proposed Scheme, the mitigation will be managed through the planning conditions. It is assumed that the same or similar mitigation will apply to the wider Project for Assessment, although will be a matter for when planning applications are made for those relevant areas.

Residual Effect

- 8.114 Secondary mitigation will provide a level of relief to vehicle movements, reducing the delays that vehicles will experience on the links identified above. Professional judgement advises the level of impact will be lower following implementation of secondary mitigation. However, the residual effects for all receptors outlined above is the same as that reported in the pre-mitigation scenario for the Project for Assessment and Proposed Scheme.

Significance

- 8.115 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme.

Increase in NMU delay

- 8.116 In the IEMA guidelines, "non-motor user delay" refers to the additional time experienced by pedestrians, cyclists, and other non-motorized road users due to changes in traffic conditions caused by a development or project. This can include delays at crossings, increased waiting times at intersections, or longer travel times due to diversions or roadworks.
- 8.117 Links that will undergo a medium or higher magnitude of change have been evaluated, with the complete assessment results available in **Appendix 8.14**. The following links were identified.
- Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10);
 - Moss Hall Road, between Pilsworth Road and Whittle Lane;
 - Pilsworth Road, between Moss Hall Road and M66;
 - Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park; and
 - M66 Junction 3, Southbound Off-Slip.

Project for Assessment

- 8.118 Moss Hall Road, between Junction 9 (3 Arrows) and Junction 10 (Fowler Welch), has been identified as having low sensitivity for NMUs, while all other links are categorized as medium sensitivity.
- 8.119 Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park, and the M66 Junction 3 Southbound Off Slip are expected to experience a medium magnitude of change, due to the traffic increases of 360 to 720 vehicles per hour, in the peak hours.
- 8.120 The remaining receptors, Moss Hall Road between Pilsworth Road and Whittle Lane, Moss Hall Road between Junction 9 (3 Arrows) and Junction 10 (Fowler Welch), and Pilsworth Road between Moss Hall Road and the M66, will experience a large magnitude of change due to traffic increased exceeding 720 vehicles per hour, in the peak hour.
- 8.121 Therefore there is likely to be a direct, permanent, long-term, adverse effect, which is considered to be moderate at all NMUs using the road links outlined above.

Proposed Scheme

8.122 The effects for all receptors outlined above is that same as that reported for the Project for Assessment.

Secondary Mitigation

Table 8.17: Secondary Mitigation to Inform Assessment of Operational Effects for NMU delay

Mitigation	Person Responsible	Secured by	Relevant to	
			Project for Assessment	Proposed Scheme
Travel Plan	Applicant / future applications	Planning Condition	✓	✓
TfGM Active Travel and Public Transport Strategy – TfGM Transport Framework Document	Applicant / future applications	Planning Condition	✓	✓

8.123 For the Proposed Scheme, the mitigation will be managed through the planning conditions. It is assumed that the same or similar mitigation will apply to the wider Project for Assessment, although will be a matter for when planning applications are made for those relevant areas.

Residual Effect

8.124 Secondary mitigation will provide a level of relief to vehicle movements, reducing the delays that vehicles will experience on the links identified above. Professional judgement advises the level of impact will be lower following implementation of secondary mitigation. However, the residual effects for all receptors outlined above is the same as that reported in the pre-mitigation scenario for the Project for Assessment and Proposed Scheme.

Significance

8.125 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme.

Reduction in NMU Amenity

8.126 In the IEMA guidelines, "NMU amenity" refers to the quality of the environment experienced by non-motorized users (NMUs), such as pedestrians, cyclists, and equestrians. This includes factors like safety, comfort, convenience, and overall enjoyment of the route or area.

8.127 Links that will undergo a moderate or higher magnitude of change have been evaluated, with the complete assessment results available in **Appendix 8.14**. The following links were identified.

- Moss Hall Road, between Pilsworth Road and Whittle Lane; and
- Pilsworth Road, between Moss Hall Road and M66.

Project for Assessment

- 8.128 Pilsworth Road, between Moss Hall Road and M66 is forecast to experience a worst-case hourly increase of 102%, with assessment confirming that it is expected to experience of magnitude of change of medium. Moss Hall Road, between Pilsworth Road and Whittle Lane is forecast to experience a worst-case hourly increase of 208%, confirming that it is expected to experience of magnitude of change of large.
- 8.129 The sensitivity of NMUs using the links identified above are considered to be medium. The magnitude of change is medium to large. Therefore there is likely to be a direct, permanent, long-term, adverse effect, which is considered to be moderate.

Proposed Scheme

- 8.130 The effects for all receptors outlined above is that same as that reported for the Project for Assessment.

Secondary Mitigation

Table 8.18: Secondary Mitigation to Inform Assessment of Operational Effects for NMU amenity

Mitigation	Person Responsible	Secured by	Relevant to	
			Project for Assessment	Proposed Scheme
Travel Plan	Applicant / future applications	Planning Condition	✓	✓
TfGM Active Travel and Public Transport Strategy – TfGM Transport Framework Document	Applicant / future applications	Planning Condition	✓	✓

- 8.131 For the Proposed Scheme, the mitigation will be managed through the planning conditions. It is assumed that the same or similar mitigation will apply to the wider Project for Assessment, although will be a matter for when planning applications are made for those relevant areas.

Residual Effect

- 8.132 Secondary mitigation will provide a level of relief to movements, reducing the delays that users will experience on the links identified above. Professional judgement advises the level of impact will be lower following implementation of secondary mitigation. However, the residual effects for all receptors outlined above is the same as that reported in the pre-mitigation scenario for the Project for Assessment and Proposed Scheme.

Significance

- 8.133 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme.

Increase in fear and intimidation

8.134 In the IEMA guidelines, "fear and intimidation" refer to the negative feelings and behaviours experienced by road users, particularly pedestrians and cyclists, due to traffic conditions. This can include feelings of anxiety, stress, or fear caused by high traffic volumes, fast-moving vehicles, or a high proportion of heavy goods vehicles (HGVs). These conditions can make non-motorized users feel unsafe and deter them from using certain routes.

8.135 Links that will undergo a medium or higher magnitude of change have been evaluated, with the complete assessment results available in **Appendix 8.14**. The following links were identified.

- Hareshill Road / Queen Elizabeth II Way Corridor, Between Hareshill Road / QEII / South Heywood residential & local centre (Junction 3);
- Hareshill Road, between Hareshill Road / Queen Elizabeth II Way / South Heywood residential & local centre (Junction 3) and Hill Top Road;
- Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park;
- Pilsworth Road, between Heywood Distribution Park and Access to Committed Development on South Side of Pilsworth Road;
- Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10);
- Manchester Road, between Queen Elizabeth II Way and Coronation Avenue; and
- Pilsworth Road, between Moss Hall Road and M66.

Project for Assessment

8.136 The road users using the following routes have been identified as being of low sensitivity:

- Pilsworth Road, between Heywood Distribution Park and Access to Committed Development on South Side of Pilsworth Road
- Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10)

8.137 These links are forecasted to experience a large magnitude of change, having scored a total hazard score exceeding 70. Consequently, they will be subject to a direct, permanent, long-term adverse effect, which is considered moderate.

8.138 The following road users near the following routes have been identified as being of medium sensitivity:

- Hareshill Road / Queen Elizabeth II Way Corridor, Between Hareshill Road / QEII / South Heywood residential & local centre (Junction 3);
- Hareshill Road, between Hareshill Road / Queen Elizabeth II Way / South Heywood residential & local centre (Junction 3) and Hill Top Road;
- Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park;

- Manchester Road, between Queen Elizabeth II Way and Coronation Avenue; and
- Pilsworth Road, between Moss Hall Road and M66.

8.139 These links are forecasted to experience a medium magnitude of change, having scored a total hazard score in the region of 40 to 69. Consequently, they will be subject to a direct, permanent, long-term adverse effect, which is considered moderate.

Proposed Scheme

8.140 The effects for all receptors outlined above is the same as that reported for the Project for Assessment.

Secondary Mitigation

Table 8.19: Secondary Mitigation to Inform Assessment of Operational Effects for Fear and Intimidation

Mitigation	Person Responsible	Secured by	Relevant to	
			Project for Assessment	Proposed Scheme
Travel Plan	Applicant / future applications	Planning Condition	✓	✓
TfGM Active Travel and Public Transport Strategy – TfGM Transport Framework Document	Applicant / future applications	Planning Condition	✓	✓

8.141 For the Proposed Scheme, the mitigation will be managed through the planning conditions. It is assumed that the same or similar mitigation will apply to the wider Project for Assessment, although will be a matter for when planning applications are made for those relevant areas.

Residual Effect

8.142 Secondary mitigation will provide a level of relief to movements, reducing the volume of vehicles on the network that contribute towards fear and intimidation. Professional judgement advises the level of impact will be lower following implementation of secondary mitigation. However, the residual effects for all receptors outlined above is the same as that reported in the pre-mitigation scenario for the Project for Assessment and Proposed Scheme.

Significance

8.143 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme.

Increase in accidents and reduction in safety

8.144 In the IEMA guidelines, "accident and safety" refers to the assessment of potential risks and impacts related to accidents and safety issues that may arise from a development or project. This includes evaluating the likelihood and consequences of accidents, such as traffic

collisions, industrial incidents, or natural disasters, and their potential effects on human health, welfare, and the environment.

- 8.145 The **Transport Assessment** conducted a highway safety review which confirms that links experience 0 to 2 network incidents per year. There are no inherent concerns regarding the existing network infrastructure's ability to operate safely and suitably. Facilities to accommodate all transport users, including segregated footways, shared-use paths, and crossing points, are present.

Project for Assessment

- 8.146 Professional judgment indicates that existing vehicle drivers and NMUs using links will have a low sensitivity and in turn will experience a small magnitude of change. The reason being that infrastructure is currently in place to accommodate the safe and suitable movement of transport users. Therefore, there is likely to be a direct, permanent, long-term, adverse effect, which is minor.

Proposed Scheme

- 8.147 The effects for existing vehicle drivers and NMUs is the same as that reported for the Project for Assessment.

Secondary Mitigation

Table 8.20: Secondary Mitigation to Inform Assessment of Operational Effects for Increase in accidents and reduction in safety

Mitigation	Person Responsible	Secured by	Relevant to	
			Project for Assessment	Proposed Scheme
Travel Plan	Applicant / future applications	Planning Condition	✓	✓
TfGM Active Travel and Public Transport Strategy – TfGM Transport Framework Document	Applicant / future applications	Planning Condition	✓	✓

- 8.148 For the Proposed Scheme, the mitigation will be managed through the planning conditions. It is assumed that the same or similar mitigation will apply to the wider Project for Assessment, although will be a matter for when planning applications are made for those relevant areas.

Residual Effect

- 8.149 Secondary mitigation will provide a level of relief towards safety, reducing the delays that vehicles will experience on the links identified above. Professional judgement advises the level of impact will be lower following implementation of secondary mitigation.
- 8.150 The existing vehicle drivers and NMUs using links will have a low sensitivity. As a result of the secondary mitigation, there will be a reduced magnitude of change, negligible. Therefore,

there is likely to be a direct, permanent, long-term, residual adverse effect, which is negligible.

Significance

8.151 This effect is considered to be **Not Significant** for the Project for Assessment and the Proposed Scheme.

Impact to Public Right of Way Network

8.152 The principles of the IEMA guidelines advises that developments or projects should consider the movement and access of PROWs. These being the accessibility, safety, and usability of public paths used by pedestrians, cyclists, and other non-motorized users such as horse riders.

8.153 The following Public Rights of Way have been assessed and are considered to have low sensitivity.

- | | |
|------------------------|-----------------------------|
| • Bury: 2WHI; | • Bury: 87BUR; |
| • Bury: 3WHI; | • Bury: 85BUR; |
| • Bury: 4WHI; | • Bury: 89BUR; |
| • Rochdale: Hey-Fp-74; | • Rochdale: Hey-Fp-72; |
| • Bury: 5WHI; | • Rochdale: Hey-Fp-75; |
| • Bury: 6WHI; | • Rochdale: Hey-Fp-142; |
| • Bury: 7WHI; | • Rochdale: Hey-Fp-164; |
| • Bury: 8WHI; | • Rochdale: Hey-Fp-165; |
| • Bury: 9WHI; | • Rochdale: Hey-Fp-166; and |
| • Bury: 46WHI; | • Rochdale: Hey-Fp-166. |

8.154 A survey was undertaken of public rights of ways which is presented in the Transport Assessment. This review advised that existing public rights of ways were overgrown, purposely blocked in some locations, not well maintained and very little used. The surveyor encountered only 3 other pedestrians in their many hours of walking the routes.

8.155 It is assumed that all existing public rights of way within the Assessment Boundary will be extinguished to allow for the development of the Plots. A network of replacement PROW will be established to ensure permeability through the Application Boundary and connectivity between PROW throughout the Assessment Boundary. These replacement PROW will be provided to a higher standard than currently available, ensuring accessibility for all users.

8.156 Based on the reasons mentioned above, the PROWs have been classified as having low sensitivity through professional judgment.

Project for Assessment

- 8.157 Professional judgment indicates that all PRow infrastructure and their users have a low sensitivity and in turn will experience a small beneficial magnitude of change as replacement PRow will be provided to a higher standard than currently available, ensuring accessibility for all users. Therefore, there is likely to be a direct, permanent, long-term, beneficial effect which is considered to be minor.

Proposed Scheme

- 8.158 The effects for links, inclusive of PRow infrastructure and their users, within the Assessment Boundary is the same as that reported for the Project for Assessment.

Secondary Mitigation

- 8.159 No secondary mitigation or enhancement has been identified.

Residual Effect

- 8.160 In the absence of secondary mitigation the residual effects for all PRow infrastructure and their users is that same as that reported in the pre-mitigation scenario.

Significance

- 8.161 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme. The reason being that improvements to the connectivity of the PRow network, such as enhanced surfacing, lighting, or trimming of vegetation, will enhance user experiences and connectivity.

Increased demand on Public Transport

- 8.162 The principles of the IEMA guidelines advises that developments or projects should consider the movement and access of public transport. This involves considering the context and specific characteristics of the area, including ridership levels, service frequency, coverage, travel times, and reliability.

Project for Assessment

- 8.163 The existing bus services in the vicinity of the Assessment Boundary are poor, due to its large and undeveloped nature, with limited public transport need. Existing public transport users are therefore considered to be of low sensitivity, as they are very limited.
- 8.164 The level of public transport demand associated with the Project for Assessment, based on the trip generation rates, is 765 trips per day, as set out by TfGM. 765 trips per day is approximately 383 people a day carrying out a round trip. 383 people a day is considered to be a medium magnitude of change.
- 8.165 The sensitivity of public transport users is considered to be low, and the magnitude of change is medium. Therefore, there is a direct, permanent, long-term, adverse effect, which is considered to be minor.

Proposed Scheme

- 8.166 The effects for public transport within the Assessment Boundary is the same as that reported for the Project for Assessment.

Secondary Mitigation

8.167 The TfGM Northern Gateway Transport Framework Document (NG TFD) sets out the public transport strategy for the Project for Assessment. The vision is defined within the TFD's Scenario 2, which is:

'Achievable transport vision (developed by TFD, optimal scenario for planning). This should represent the most likely, balanced, and affordable sustainable transport package. This will be developed using an iterative assessment of transport interventions, their viability, cost, and their likely impacts.'

8.168 Scenario 2 assumes a 20% mode share for buses, increasing the daily patronage from 765 trips per day to 5,100 trips per day associated with the Project for Assessment.

8.169 In achieving the 20% mode share, the trip demand from the Project for Assessment and the adjacent JPA1.2 allocation are expected to support an additional 17 buses. TfGM have identified that existing bus services 125, 475 and 18 could be extended to route via the Project for Assessment and that new bus services X1 and 91/92 could be provided, again routing via the Project for Assessment.

8.170 The improvements to the local bus services would not just benefit occupiers and residents at the Project for Assessment, but also the existing local communities and businesses.

8.171 Furthermore, travel by bus will be promoted via the Travel Plan. TfGM are also exploring the following measures:

- Tram-Train Pathfinder (Oldham-Bury via Rochdale and Heywood);
- Bus Rapid Transit corridor to Manchester City; and
- Tram extension to Middleton.

8.172 TfGM are responsible for the public transport strategy.

8.173 Secondary mitigation will assist in maintaining and enhancing public transport ridership levels, service frequency, coverage, travel times, and reliability. Professional judgement concludes that the level of impact on public transport users both at the Project for Assessment, and the local residents in the nearby areas, will be beneficial.

Residual Effect

8.174 The sensitivity of existing public transport users is considered to be low, and the magnitude of change is large. Therefore, there is a direct, permanent, long-term, beneficial effect, which is considered to be moderate.

8.175 This effect is considered to be **Significant** for the Project for Assessment and the Proposed Scheme.

Limitations and Assumptions

8.176 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- The Construction Traffic Management Plan is yet to be carried out and therefore assumptions have been made on its content;
- Committed and Local Plan developments have been identified by the Councils, via the Development Log;
- Total traffic growth (including committed / local plan developments) aligns with TEMPro;
- Development traffic routing is based on a combination of donor sites (i.e., the distribution associated with local nearby similar developments) and 2011 Census data for journey to work;
- Data has been provided from the NGTM SATURN model; and
- The impact to PRoWs in terms of their temporary stopping up / realignment and reconfiguration is addressed holistically within the operational stage assessment.

Summary

- 8.177 **Table 8.21** provides a summary of the effects, receptors, residual effects and conclusions of significance considered within the Chapter, with reference to both the Project for Assessment and Proposed Scheme.
- 8.178 The table only provides a summary of the residual effects identified within the assessment. Details of all primary, secondary and tertiary mitigation that has been taken into account is summarised within **Volume 3: Environmental Management Plan**.

Table 8.21: Summary of Residual and Significant Effects for the Project for Assessment and Proposed Scheme

Effect	Receptor	Project for Assessment		Proposed Scheme	
		Residual Effect	Is the Effect Significant?	Residual Effect	Is the Effect Significant?
Construction Stage					
The effects during the construction stage will be lower than those presented by the operational stage assessment below.					
Operational Stage					
Increase in Severance	Communities using the following links:				
	Moss Hall Road between Pilsworth Road and Whittle Lane	Moderate Adverse	Yes	Moderate Adverse	Yes
	Pilsworth Road, between Moss Hall Road and M66				
Increase in Driver Delay	Vehicle drivers using links:				
	M62 Westbound Off-Slip				
	Hollins Brow, between Hollins Lane and Manchester Road	Moderate Adverse	Yes	Moderate Adverse	Yes
	Manchester Road, north of Hollins Brow				
	Pilsworth Road, between Hareshill Road / Pilsworth Road and A58 Bury St.				

Effect	Receptor	Project for Assessment		Proposed Scheme	
		Residual Effect	Is the Effect Significant?	Residual Effect	Is the Effect Significant?
Increase in Non-motorised User Delay	NMUs using links:				
	Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10)				
	Moss Hall Road, between Pilsworth Road and Whittle Lane	Moderate Adverse	Yes	Moderate Adverse	Yes
	Pilsworth Road, between Moss Hall Road and M66				
	Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park				
	M66 Junction 3, Southbound Off-Slip				
Reduction in Non-motorised User Amenity	NMUs using links:				
	Moss Hall Road, between Pilsworth Road and Whittle Lane	Moderate Adverse	Yes	Moderate Adverse	Yes
	Pilsworth Road, between Moss Hall Road and M66				

Effect	Receptor	Project for Assessment		Proposed Scheme	
		Residual Effect	Is the Effect Significant?	Residual Effect	Is the Effect Significant?
Increase in fear and intimidation	Vehicle drivers / NMUs using the following routes: Pilsworth Road, between Heywood Distribution Park and Access to Committed Development on South Side of Pilsworth Road				
	Moss Hall Road, between 3 arrows (Junction 9) and Fowler Welch (Junction 10)				
	Hareshill Road / Queen Elizabeth II Way Corridor, Between Hareshill Road / QEII / South Heywood residential & local centre (Junction 3)	Moderate Adverse	Yes	Moderate Adverse	Yes
	Hareshill Road, between Hareshill Road / Queen Elizabeth II Way / South Heywood residential & local centre (Junction 3) and Hill Top Road				
	Pilsworth Road, between Hareshill Road / Pilsworth Road and Heywood Distribution Park				
	Manchester Road, between Queen Elizabeth II Way and Coronation Avenue;				
	Pilsworth Road, between Moss Hall Road and M66				
Increase in accidents and reduction in safety	Vehicle drivers / NMUs	Negligible Adverse	No	Negligible Adverse	No

Effect	Receptor	Project for Assessment		Proposed Scheme	
		Residual Effect	Is the Effect Significant?	Residual Effect	Is the Effect Significant?
Impact to Public right of Way (PRoW) Network	PRoW and users (NMUs)	Minor Beneficial	Yes	Minor Beneficial	Yes
Increased demand on Public Transport	Public Transport Network and users	Moderate Beneficial	Yes	Moderate Beneficial	Yes

References

¹ Ministry of Housing, Communities and Local Government, National Planning Policy Framework, 2025

² Greater Manchester Combined Authority (2017). *Greater Manchester Transport Strategy 2040*. Manchester: Greater Manchester Combined Authority.

³ Institute of Environmental Management and Assessment (2023). *Guidelines: Environmental Assessment of Traffic and Movement*. Lincoln: Institute of Environmental Management and Assessment.

⁴ LA 112 Population and Human Health. In: Design Manual for Roads and Bridges. Highways England (2020).

⁵ Thresholds reproduced from the suggestions provided by Institute of Environmental Management (IEMA) Guidance: Environmental Assessment of Traffic and Movement, paragraph 3.16.

⁶ Thresholds reproduced from the suggestions provided by Institute of Environmental Management (IEMA) Guidance: Environmental Assessment of Traffic and Movement, Table 3.1.

⁷ Institute of Environmental Management and Assessment (2023). *Guidelines: Environmental Assessment of Traffic and Movement*. Lincoln: Institute of Environmental Management and Assessment.

⁸ Details available at <https://www.atom-valley.co.uk/why-atom-valley/mayoral-development-zone/>

⁹ Details available at <https://www.crashmap.co.uk/>