Middlesbrough Local Implementation Plan 2021



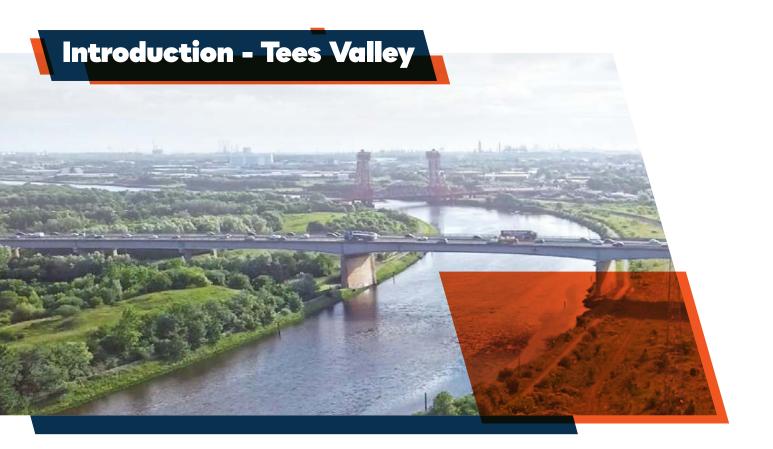








MIDDLESBROUGH LOCAL IMPLEMENTATION PLAN



The Tees Valley has ambitious plans to grow the local economy. Over the next 10 years, there is a collective target to create 25,000 new jobs and build 22,000 new homes, as set out in the Tees Valley Strategic Economic Plan (SEP) and supporting Local Industrial Strategy (LIS).

Transport is central to the delivery of the SEP and LIP in terms of managing its impact on the environment and helping the people who live and work in Tees Valley to fulfil their potential. As a result, the region needs a first class, connected transport system that allows people and goods to be fully connected, moving easily and safely.

The Transport Vision for the Tees Valley is:

"To provide a high quality, quick, affordable, reliable and safe transport network for people and freight to move within, to and from Tees Valley."

To support the SEP and LIS, a Strategic Transport Plan (STP) has been prepared, consulted upon and approved by the Tees Valley Combined Authority (TVCA). This sets out how the partner organisations and stakeholders will improve and invest in the transport network to make the vision a reality.

The STP is aimed at people living and working in Tees Valley, as well as business owners, developers, Government, partner organisations and investors.

The Tees Valley Strategic Transport Plan can be found here:

https://teesvalley-ca.gov.uk/transport/strategic-transport-plans

To support the STP, a series of 'daughter documents' have been prepared; This document is the Middlesbrough Council Local Implementation Plan (LIP), which sets out how the STP will be delivered within Middlesbrough.



Middlesbrough is at the heart of the 'city centre' region, surrounded by the neighbouring local authorities of Darlington, Hartlepool, Redcar & Cleveland and Stockton Borough Councils.

Middlesbrough Council's Strategic Plan sets out a number of priorities designed to promote the future prosperity of the town and its people. These priorities are grouped into three overarching themes:





3. Business

(The full list and detail of themes are contained within the Action Plan table)

The LIP sets out the integral role that transport will play in delivering these priorities, together with the priorities set out in the STP. This plan has six specific objectives:

- ▶ Reduce the number and severity of casualties on the Borough's highway network
 - Minimise congestion and manage traffic flow on the highway network
 - Improve highway network reliability and resilience
 - Improve local air quality
 - Remove transport as a barrier to accessing jobs, education and training, leisure and retail opportunities
 - Provide targeted interventions and measures to assist mode shift and allow highway users to make informed travel choices

Highway management & planning

Middlesbrough needs a well-planned, efficient, attractive and fully integrated transport network in order to deliver the Council's strategic priorities.

Middlesbrough Council has numerous statutory responsibilities, including the management of the local highway network. The Traffic Management Act 2004 (TMA) introduced the Network Management Duty for Local Traffic Authorities (LTAs) such as the Council. Section 16 of the TMA sets out the requirements of the Network Management Duty, as follows:

"It is the duty of a Local Traffic Authority to manage their road network with a view to achieving, so far as is reasonably practicable having regard to their other obligations, policies and objectives, the following objectives;

> Securing the expeditious movement of traffic on the Authority's road network; and

b. Facilitating the expeditious movement of traffic on road networks for which another Authority is the Traffic Authority."

In order to assist with the delivery of Network
Management duty, the Council has developed
a strategic transport model covering all of
Middlesbrough. This model is used to manage traffic
growth, enable appropriate development to proceed,
identify priority locations for interventions and test
these interventions to ensure that they will operate
efficiently and deliver best value for the funding
available.

Building on the last set of successful interventions, the Council developed the next locations identified for improvements to assist in delivering its objectives. Details can be found in the Council's Integrated Transport Strategy.

http://democracy.middlesbrough.gov.uk/aksmiddlesbrough/images/att1015383.pdf

To enable continued growth, accessibility and connectivity within the Tees Valley; the implementation of a long-term, forward thinking and sustainable City scale Transport network for all highway users is necessary, demonstrating that Middlesbrough is a place that is open and connected for business.

In line with the Council's Integrated Transport Strategy (ITS), the LIP provides further detail as to how a fully integrated transport network can be realised. This will improve both access within the Borough and provide a gateway to the rest of the Tees Valley.

An efficient and safe transport network is an integral element to attract inward investment, allowing businesses to develop in cluster areas appropriate to both their own and their customer needs.

With this strategy, the Council is making a clear statement that will seek to manage the highway network more efficiently, including the introduction of measures designed to achieve modal shift. The level of car ownership in the Tees Valley (and particularly in Middlesbrough) is lower than the UK average (31% of households have no car), yet 73% of journeys are made by car.

The local road network plays a key role in supporting economic growth. However, unless managed efficiently, traffic congestion can constrain the future economic growth of the local area. Reducing dependence on the private car will tackle congestion, improve air quality and help to deliver both social and economic regeneration.

An integrated transport network that promotes and incentivises sustainable travel will reduce dependence on the private car, thereby improving accessibility and releasing capacity on the road network without the need for expensive (and often unaffordable) highway improvement schemes. This capacity unlocks further development, allowing sustained economic growth to take place.

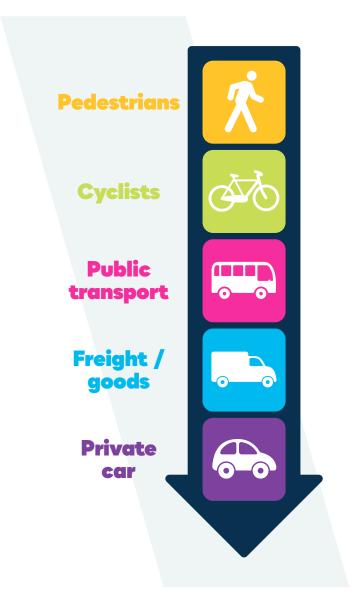
Hierarchy of need

In order to promote and assist informed travel choices, the Council has adopted a hierarchy of highway users (shown in the diagram on the right).

This hierarchy will be at the heart of everything the Council does as the Highway Authority and will help to identify the different themes, which will be addressed through the implementation of this Strategy.

The LIP identifies opportunities for overlap between different modes of transport to ensure seamless accessibility. For example, walking and cycling routes will connect to public transport infrastructure at key interchanges, at which higher quality facilities such as bus 'superstops' will be introduced. This seamless interconnectivity will ensure that the local transport network is accessible to everyone; helping to remove transport as a barrier to accessing key jobs and services.

The following Action Plan sets out how the objectives of the LIP will be met, whilst also contributing toward the priorities in the STP and the Council's Strategic Plan.



How will we measure success?

By implementing the outcomes identified within the action plan, the Council we will be providing Middlesbrough a platform in which to thrive, achieve all objectives and ultimately improve the local area for all people living, working and enjoy the retail and leisure facilities.

The Council has identified a number of indicators, together with historical and baseline data, which will be used to track progress and inform if changes are required to address corporate priorities.

While progress against these indicators will be monitored closely, it must be appreciated that there are a number of external influences at national and local level that may impact on the effectiveness of the chosen interventions. These include:



- Economical changes to the local, regional and national economy could result in a shift in priorities.
 - Social predicted changes in attitudes and behaviour may or may not happen.
 - Technological advances or changes in technology could boost or hinder the impact of the chosen interventions.
 - Legislative changes in legislation and/or legal requirements.
 - Environmental environmental concerns could result in a shift in priorities.

Progress against key indicators will be reviewed on an annual basis in order to monitor against the objectives and ensure that the LIP remains fit for purpose.

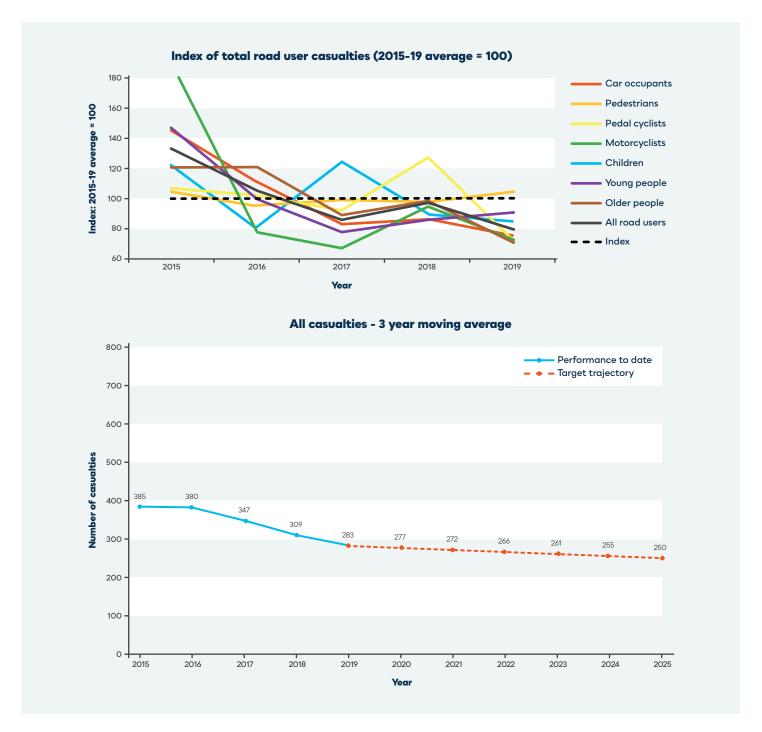
The targets set for each indicator are set out in the table opposite. Appendix 1 contains the historical and trend data for each indicator.



Ref.	Outcome	How monitored?	Current value (2020)	Target	Risks against achieving
1	Reduction in the incidence and severity of casualties on the Borough's highway network	Road casualty data	See graph in Appendix 1.1	Reduce total number of casualties, based on a three-year moving average - 250 incidents by 2025	 Increase in traffic flows Increase in number of vulnerable road users Constraints on capital and revenue funding
2	Minimise congestion/ manage traffic flows	Average congestion monitoring across the network	See graphs in Appendix 1.2	A reduction in the peak flows and congestion %, and reduced longevity	Increase in traffic flowsConstraints on capital funding
3	Improve highway network reliability and resilience	Average vehicle delays monitored across the network	See graphs in Appendix 1.3	A reduction in the average delays observed in length and period	Increase in traffic flowsConstraints on capital funding
4	Increased public transport patronage	Operator patronage	7,216,360 bus journeys 1,409,680 train journeys (2018/19) See graphs in Appendix 1.4	Increase by 1%	 Car parking accessibility and cost Resistance to priority measures on key routes Poor accessibility to new developments Engaging private sector operators Delays in delivering Middlesbrough Railway Station capacity improvements
5	Ensure no structural failures on the highway network, and improved asset condition	Observation – no infrastructure failures, and asset condition surveying	O failures in structures See graph in Appendix 1.5 for asset condition	O failures, and reduction in red rated asset	Increase in traffic flowsConstraints on capital funding for capacity improvements
6	Improve local air quality	Air quality monitoring assessments	All monitored pollutants below objective levels See graph in Appendix 1.6	All monitored pollutants below objective levels	 Increase in traffic flows Constraints on capital funding for capacity improvements Political/public resistance to infrastructure improvements Improved accessibility to nonsustainable modes of travel Poor public transport accessibility
7	A more accessible transport network	Journey times	See graph in Appendix 1.7	Journey times by all modes to decrease	 Car parking accessibility and cost Consultation on proposed infrastructure improvements Poor public transport accessibility Engaging private sector operators Constraints on capital funding
8	Fewer people unemployed	% of people registered unemployed	See graph in Appendix 1.8	Reduction in the levels of unemployment in Middlesbrough	•Economic decline
9	More businesses registered in Middlesbrough	Middlesbrough Council business register	See graph in appendix 1.9	Increase in the number of registered businesses in Middlesbrough	•Economic decline

Appendix 1: Monitoring data & graphs

Casualty data



The overall trend since 2015 has been consistently downwards, although progress has slowed slightly in recent years.

The challenge over the five-year period covered by the LIP will be to maintain the downward trend in casualty numbers against a background of increasing traffic flows and reduced capital and revenue resources, particularly if the number of journeys made on foot and by cycle rises as expected.

2. Congestion and delay (reliability) monitoring

Monitoring of congestion, vehicle flows and delay will be undertaken at 3 key junctions in order to assess the overall picture within the Councils Highway network. The 3 junctions are as follows:

- Hartington Interchange major Town Centre interchange connecting the strategic local network with the A66 (Key Road network)
 - 2. Borough Road/Newport Road major Town Centre junction between 2 key strategic local roads
 - 3. Stainton Way/Dixons Bank junction major out of town junction on the strategic local network

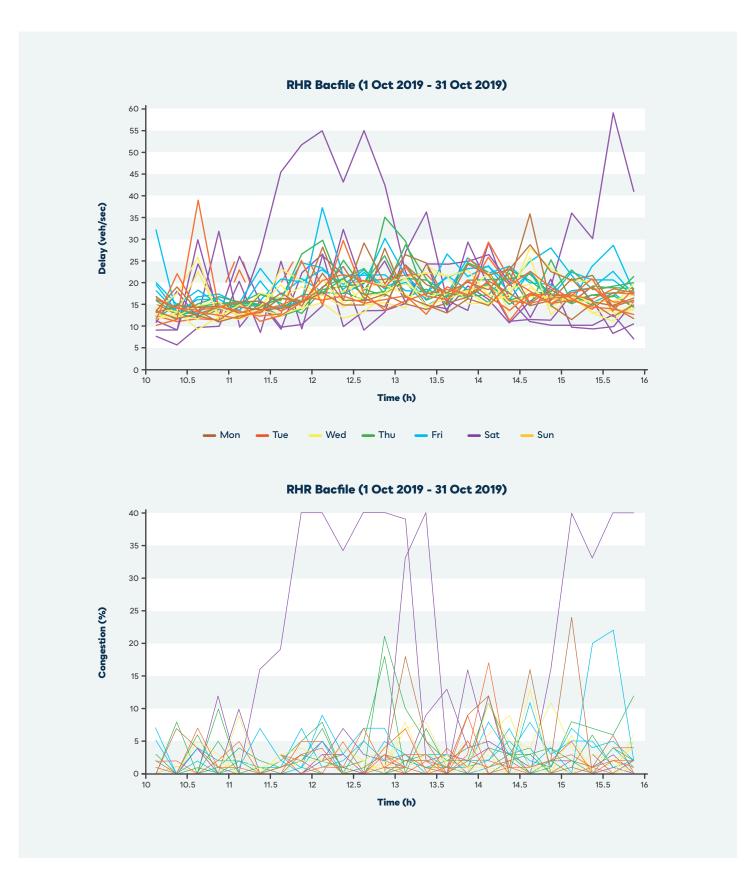
Data is taken from the month of October, as this is a traffic neutral month in so far as people tend to travel relatively consistently throiughout (not typically impacted by bad weather, holiday seasons etc). The following graphs highlight the variance between the years 2016 and 2019. 2020 has been avoided due to the impact of the COVID-19 pandemic on traffic (vastly reduced).

It is worth noting that these comparisons are snap shots in time, and that there could be anomalies within the data sets. This monitoring is being used to provide a general overview, however, local factors could quite significantly impact the reliability of the information, such as road works, Road Traffic Accidents, and local events etc, which all can disrupt the movement of people and times of travel on the network.

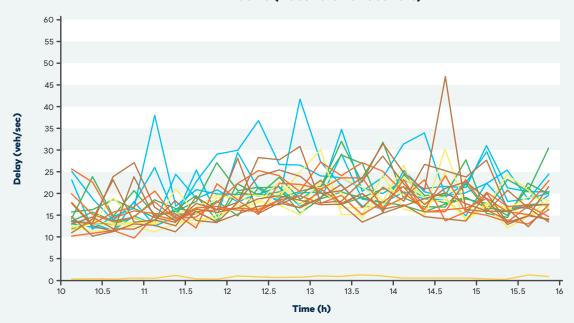
Hartington Interchange (RHR 2016 vs 2019)

The below graphs highlight a slight reduction in the peaks of delay to vehicles at the junction, however the overall level of delay is also slightly lower in 2019 versus 2016. In terms of the congestion witnessed at this junction, 2019 is quite noticeably lower in 2019, particularly in the AM.

The information from 2019 is flatter, and much less sporadic than 2016, indicating more stability, and therefore more reliable journey times.

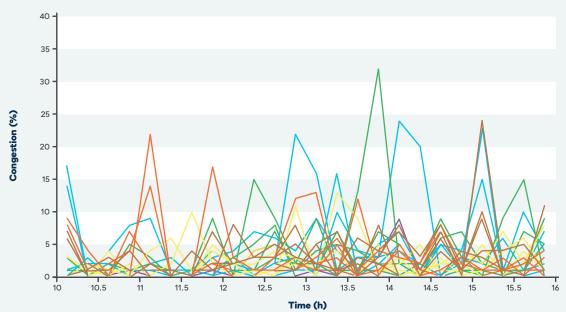








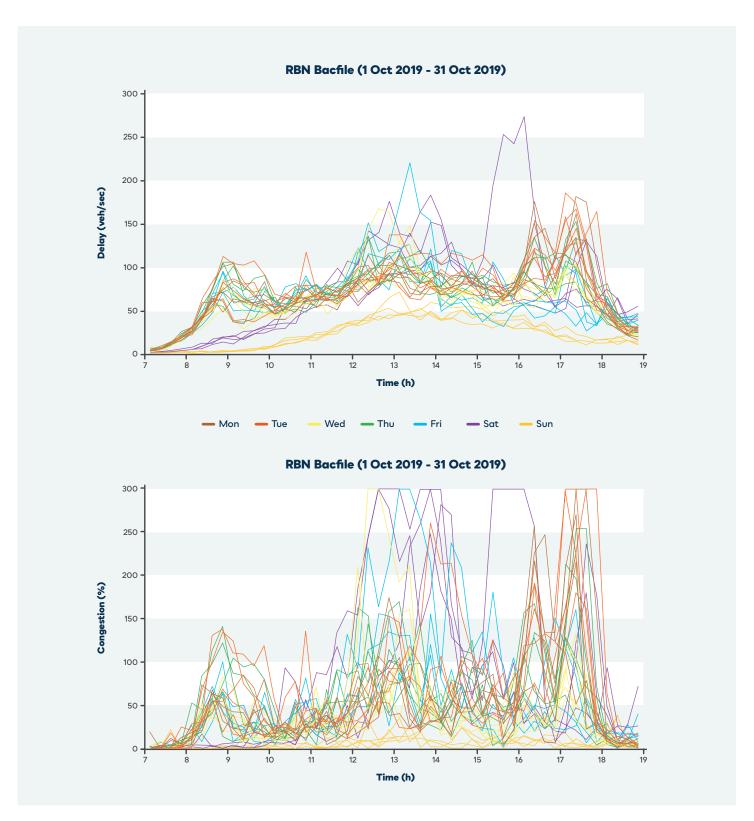
RHR Bacfile (1 Oct 2016 - 31 Oct 2016)



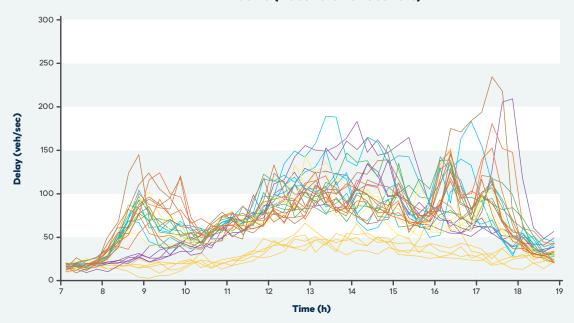
Signal junctions in the Region BN from Borough Road / Albert Road through to Newport Road / Hartington Road / Borough Road / Newport Road (RBN 2016 VS 2019)

The below graphs highlight a slight reduction in delays at the junction in the AM peak in 2019, however there appears to be a more sustained level of delays throughout the day.

In terms of congestion, the AM peak in 2019 is significantly improved, whereas the remainder of the day is not too dissimilar to the levels witnessed in 2016. The congestion appear to be quite sporadic, and therefore highlight that journey time through this junction can be quite unpredictable, and therefore more unreliable.

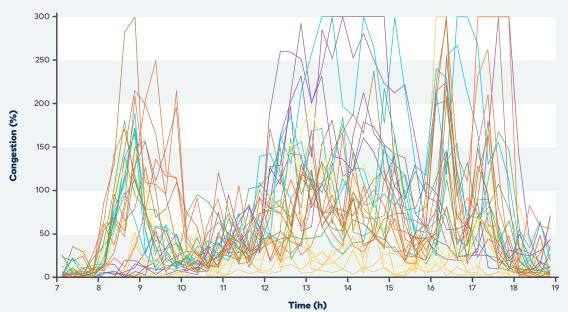








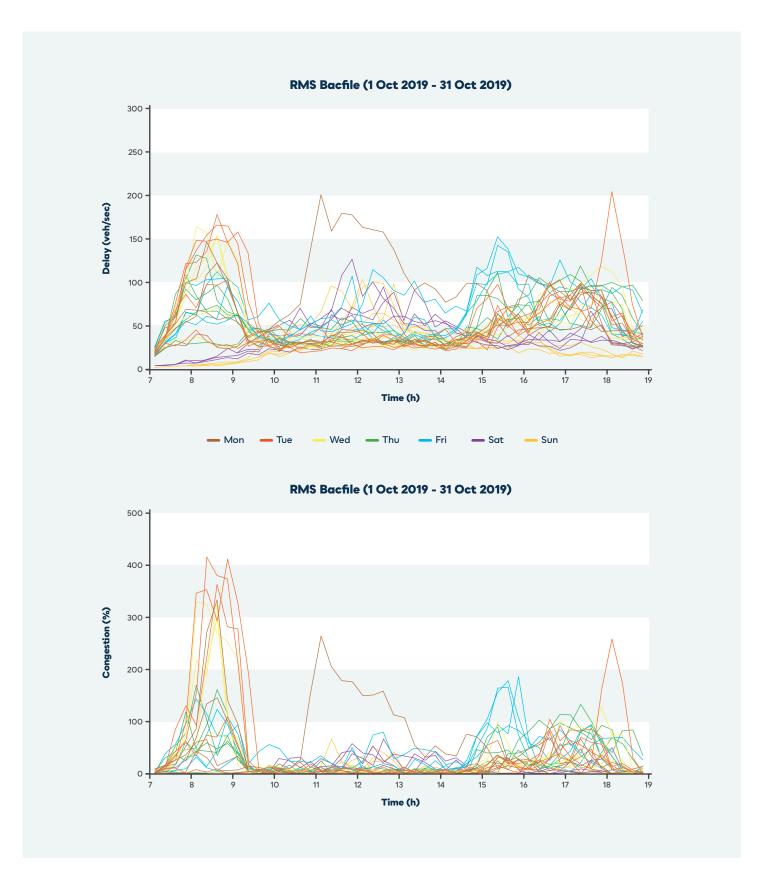
RBN Bacfile (1 Oct 2016 - 31 Oct 2016)

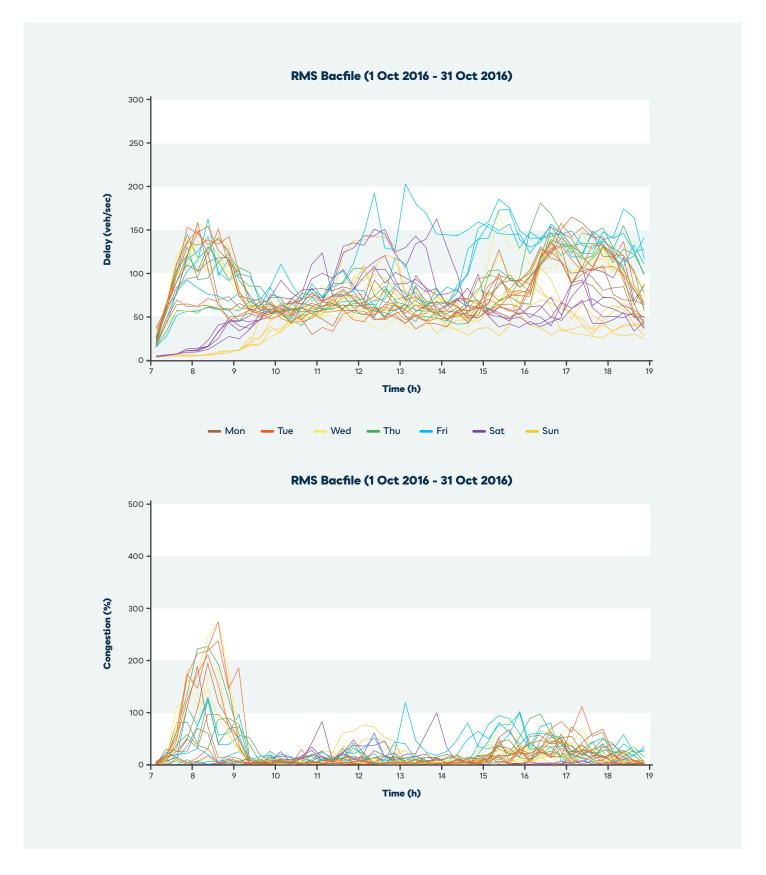


Marton Road corridor from A174 Marton Country Club junction through to Dixons Bank junction (RMS 2016 Vs 2019)

The below graphs highlight a slight increase in the AM peak delay rates in 2019 in comparison to 2016, however overall, the delays witness throughout the remainder of the day are noticeably lower.

Congestion in 2019 is markedly higher in 2019 compared to 2016 in the AM peak, and the rest of the day is only slightly higher. There are higher, more sporadic peaks in 2019, indicating less reliability of journey times.

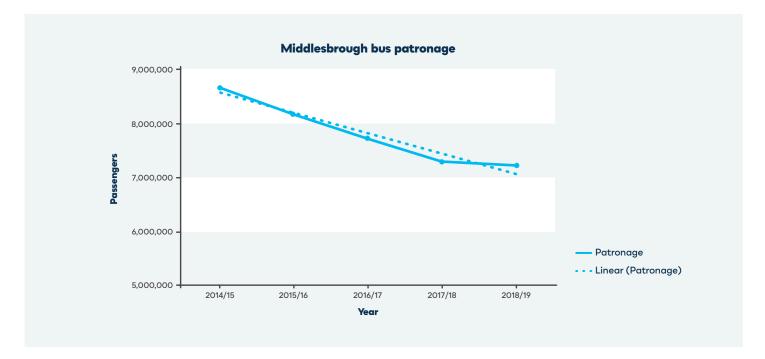




Overall, the above graphs are highlighting that the journeys through the designated junctions have become slightly more reliable, and slightly less congested between 2016 and 2019 on the key road network, but slightly worse on the local network. This will continue to be monitored for future comparison.

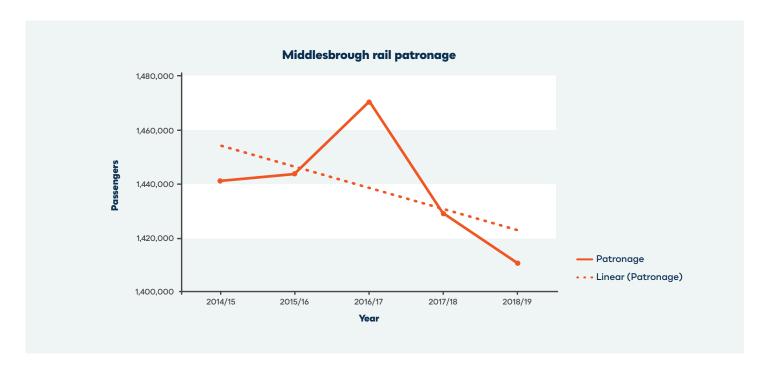
This information will assist in identifying areas to investigate improvement works in order to create a more reliable and less congested highway network.

3. Public transport patronage figures



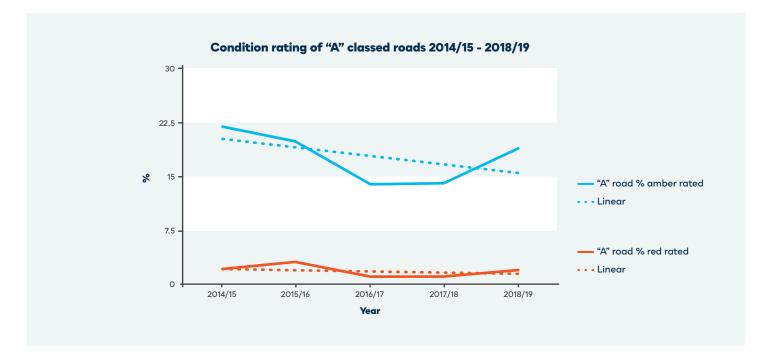
The graph above shows a long-term decline in bus patronage. This is not a unique position to Middlesbrough and is linked to the removal of supported services funding; which essentially reduced the accessible network.

Proposals contained within the LIP and ITS are aiming to reverse decline in bus patronage by creating a Tees Valley bus partnership with operators that will make it a more seamless and accessible mode of travel by all people living, working and visiting Middlesbrough.



Rail patronage has had more sporadic patronage levels. The overall trend is now stable. However, work at Middlesbrough Rail Station, franchising improvements and the direct London service will improve connectivity for Middlesbrough on both a pan-regional and national scale, not seen previously.

4. Asset condition %



The council's asset condition surveys are undertaken annually, and provide an assessment of the quality of the network. A reduction in national funding, coupled with increased demand has resulted in a gradual decline in the asset condition. However, Middlesbrough is still in band 1 (top tier) ranking across the country. There have been no structural failures recorded in the borough.

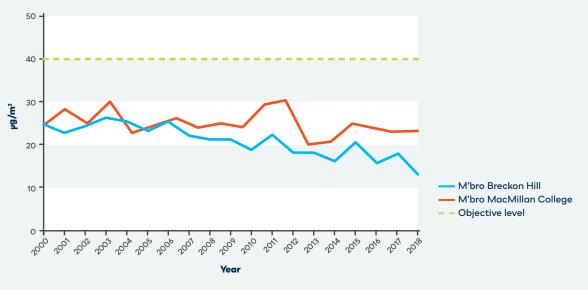
5. Air quality data

Middlesbrough Council monitors air quality against a number of key pollutants. The air quality in Middlesbrough is not in breach of any objective levels, and has improved over time. Transport is linked to different pollutants to a varying degree; the following figures highlight the position of those where transport has a key input.

Nitrogen Dioxide (NO₂);

Road transport associated with up to 49% of the overall levels of pollutant. Linked to internal combustion engine (vehicles) burning fuel, particularly diesel fuelled vehicles.

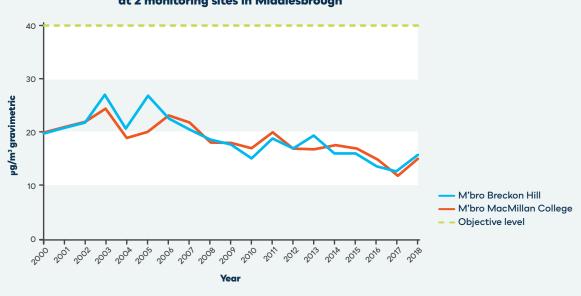


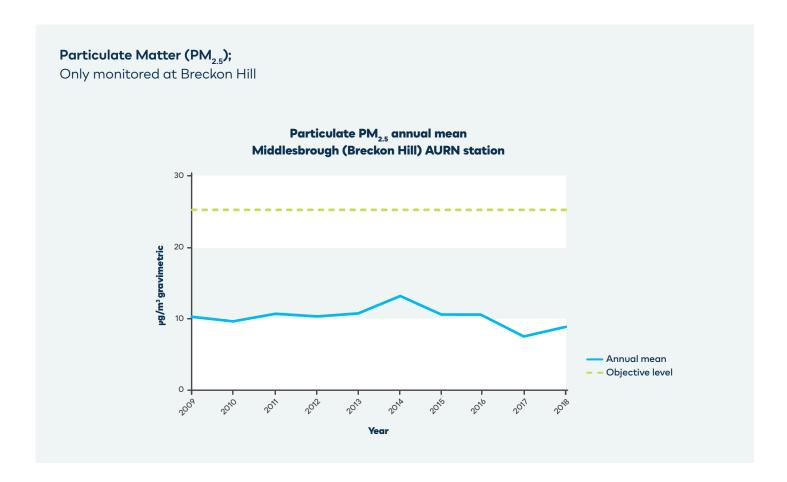


Particulate Matter (PM₁₀);

Road transport associated with approximately 20% of the overall levels of pollutant. Linked to incomplete combustion of fuel (soot), and tyre / brake wear.

Particulate PM₁₀ annual mean at 2 monitoring sites in Middlesbrough

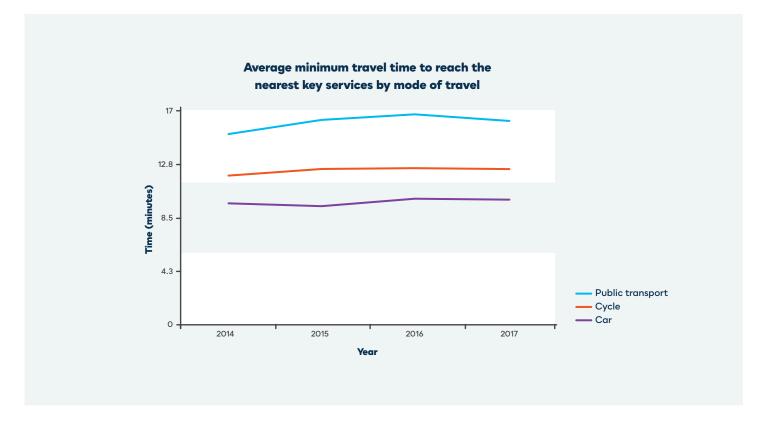




For a full report on air quality monitoring, please visit:

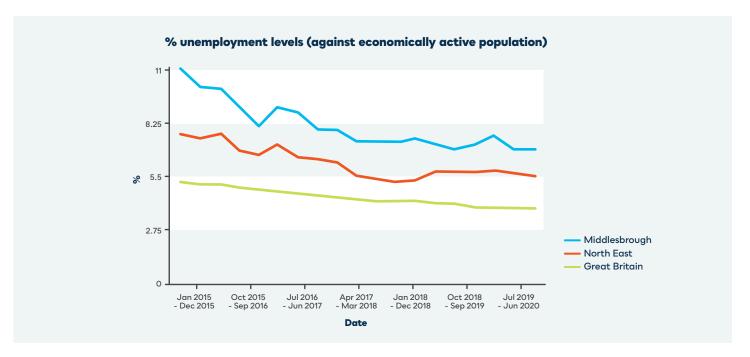
https://middlesbrough.gov.uk/environment-and-public-protection/advice-and-information/air-quality

6. Accessible network



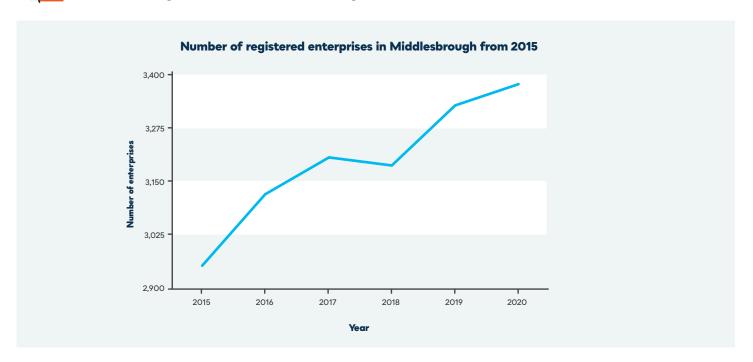
The above graph produced by the Department for Transport identifies the average minimum time to access key services (Employment Centres, Education, GP surgeries, Hospital, Food Stores, and Town Centres). Time taken to access these services has increased slightly over the monitored period. The Council aims to reduce the time taken to access these services by sustainable transport.

7. Employment statistics



The graph highlights the percentage of people employed from the economically active population of Middlesbrough, the North East and Great Britain. This highlights a decrease in the levels of unemployment across each population, however Middlesbrough has higher levels of unemployment than the greater populations. Increasing levels of employment increases pressure on the local highway network, as more people travel to jobs, creating pressure on the highway network.

Economic growth (new business growth)



The graph above highlights an increase in the number of businesses registers within Middlesbrough since 2015. This correlates with the reduction in unemployment. Increased numbers of businesses increases economic activity, however increases the pressure on the highway network, as more people rely upon it to travel as part of accessing opportunities.

Appendix 2: Inventory of supporting documents

As identified within the Action Plan Table, a number of supporting documents are available, each of which provides further detail around the individual elements within the LIP. These documents are listed below:

1 4 Year Highway Maintenance Plan

https://www.middlesbrough.gov.uk/sites/default/files/4%20Year%20Highway%20Maintenance%20Plan%202018.pdf

Access For All

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7776/156681.pdf$

3 Air Quality Monitoring

https://www.middlesbrough.gov.uk/sites/default/files/Middlesbrough%20Borough%20Council%20%20%20Air%20Quality%20Annual%20Status%20Report%202019.pdf

Cross Boundary Agreement Middlesbrough/Redcar

https://middlesbrough.gov.uk/sites/default/files/Highways-Cross_Boundary_Agreement_2012.pdf

5. Cycling Strategy

https://www.middlesbrough.gov.uk/sites/default/files/Middlesbrough%20Cycling%20Strategy.pdf

Definitive Map and Statement

https://middlesbrough.gov.uk/parking-roads-and-footpaths/travel-and-getting-around/walking-and-public-rights-way/definitive-map-and-statement

English National Concessionary Travel Scheme (concessionary bus passes)

http://search3.openobjects.com/kb5/middlesbrough/fsd/service.page?id=6ut6qMHy5Eg

B HAUC (UK) - New Roads & Street Works Act 1991 -

Full Code of Practice for Co-ordination of Street Works

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/43578/street-works-code-of-practice.pdf$

Highway Asset Management Communication Plan

https://middlesbrough.gov.uk/sites/default/files/Highway_Asset_Management_Communication_Plan_Jan2016.pdf

Highway Maintenance Specification

https://middlesbrough.gov.uk/sites/default/files/Highways-Highway_Maintenance_Specification.pdf

Highway Network Management Plan

 $https://middlesbrough.gov.uk/sites/default/files/Highways-Highway_Network_Management_Plan.pdf$

122 Highway Safety Inspection Manual

https://www.middlesbrough.gov.uk/sites/default/files/Highway-Safety-Inspection-Manual-Oct18.pdf

13 Highways England Design Manual for Roads and Bridges

http://www.standardsforhighways.co.uk/ha/standards/dmrb/

Highways England Specification for Highways Works

http://www.standardsforhighways.co.uk/ha/standards/mchw/vol1/

155 Housing Local Plan

 $https://www.middlesbrough.gov.uk/sites/default/files/PlanPol-Housing_Local_Plan.pdf$

16. Independent Travel Training

 $https://www.middlesbrough.gov.uk/sites/default/files/Independent_Travel_Information_for_Parents.pdf$

Integrated Transport Scheme

http://democracy.middlesbrough.gov.uk/aksmiddlesbrough/images/att1015383.pdf



18. Investment Prospectus

 $https://www.middlesbrough.gov.uk/sites/default/files/Middlesbrough-Investment-Prospectus_final-proof-March-2017_0.pdf$

122 Local Cycling and Walking Implementation Plan (LCWIP)

https://teesvalley-ca.gov.uk/wp-content/uploads/2019/08/Draft-Cycling-Implementation-Plan.pdf

20 Local Flood Risk Management Strategy

https://middlesbrough.gov.uk/sites/default/files/Middlesbrough%20LFRMS%20Sept%2016.pdf LTP3 - https://middlesbrough.gov.uk/sites/default/files/LTP_2011-16.pdf

21. Local Industrial Strategy

https://teesvalley-ca.gov.uk/wp-content/uploads/2019/08/Local-Industrial-Strategy-Evidence-Base-Report.pdf

22 Management of Electronic Traffic Equipment

http://www.ukroadsliaisongroup.org/en/utilities/document-summary.cfm?docid=B089A94C-6174-4584-A3E12AC2C7CB3706

23 Mayors Vision 2025

https://middlesbrough.gov.uk/sites/default/files/Vision%20for%20Middlesbrough%202025.pdf

Middlesbrough Parking Strategy

https://middlesbrough.gov.uk/sites/default/files/Parking%20Strategy%202009%202014.pdf https://www.middlesbrough.gov.uk/sites/default/files/Parking-strategy-2015-2020.pdf

25 Middlesbrough Sustainable Travel Strategy (home to school)

https://middlesbrough.gov.uk/sites/default/files/Middlesbrough%20Sustainable%20Travel%20Strategy.pdf (a.g., a.g., a.g.

Operational Guidance for Parking Policy and Enforcement

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/695793/ operational-guidance.pdf

Parking Data including Annual Reports from 2013-2019

https://www.middlesbrough.gov.uk/open-data-foi-and-have-your-say/open-data-and-policies/parking-data

23 Public Rights of Way (PROW) Map

http://rightsofway.middlesbrough.gov.uk/standardmap.aspx?NavigationPage=Page1

Safety at Streetworks & Road Works - A Code Of Practice

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/321056/ safety-at-streetworks.pdf

SEP Exec Summary

https://teesvalley-ca.gov.uk/wp-content/uploads/2016/12/SEP-Exec-Summary.pdf

31. Strategic Plan (Chief Executive)

https://www.middlesbrough.gov.uk/sites/default/files/Strategic%20Plan%202020-2023.pdf

Sustainable Drainage (Tees Valley)

 $https://middlesbrough.gov.uk/sites/default/files/Tees-Valley-sustainable-drainage-Sept_2017.pdf$

Tees Valley Bus Strategy

https://teesvalley-ca.gov.uk/wp-content/uploads/2019/08/Draft-Bus-Implementation-Plan.pdf

Tees Valley Design Guide and Specification

https://middlesbrough.gov.uk/sites/default/files/Design-guide-and-specification-Aug18.pdf

155. Tees Valley Freight Strategy

https://teesvalley-ca.gov.uk/wp-content/uploads/2019/08/Draft-Freight-Implementation-Plan.pdf

Tees Valley Rail Strategy

https://teesvalley-ca.gov.uk/wp-content/uploads/2019/08/Draft-Rail-Implementation-Plan.pdf













Tees Valley Road Strategy

https://teesvalley-ca.gov.uk/wp-content/uploads/2020/02/Tees-Valley-Roads-Implementation-Plan-2020.pdf

38 Traffic Regulation Orders; Traffic Regulation Act 1984

https://researchbriefings.files.parliament.uk/documents/SN06013/SN06013.pdf

Transport Asset Management Plan

 $https://www.middlesbrough.gov.uk/sites/default/files/Highways-Transport_Asset_Management_Plan_2007.pdf$

Transport Asset Management Plan Part 1

 $https://middlesbrough.gov.uk/sites/default/files/Highways-Transport_Asset_Management_Plan_pt1.pdf$

Transport Asset Management Plan Part 2

https://middlesbrough.gov.uk/sites/default/files/Highways-Transport_Asset_Management_Plan_pt2.pdf

Transport Network Management Plan

 $https://middlesbrough.gov.uk/sites/default/files/Highways-Traffic_Network_Management_Plan.pdf$

Ultra-Low Emission Vehicle (ULEV)

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239317/ultra-low-emission-vehicle-strategy.pdf$

Winter Maintenance Plan

https://www.middlesbrough.gov.uk/sites/default/files/Winter-maintenance-plan-2019-20.pdf

The LIP is influenced by and influences a number of key Middlesbrough Council strategy documents. These include:

Planning Policy

https://www.middlesbrough.gov.uk/planning-and-housing/planning/planning-policy

45 Investment Prospectus

 $https://middlesbrough.gov.uk/sites/default/files/Middlesbrough-Investment-Prospectus_final-proof-March-2017_0.pdf$







