Calderdale Council

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# Report to Scrutiny Panel

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| **Name of Scrutiny Panel** | Economy and Environment | |
| **Meeting Date** | 17th December 2015 | |
| **Subject** | Tackling Traffic Congestion and Pollution | |
| **Wards Affected** | All | |
| **Report of** | Director of Economy and Environment | |
| **Type of Item** (please tick✓ ) | **Review existing policy** | |
| | **Development of new policy** | |
| | **Performance management (inc. financial)** | |
| | **Briefing (inc. potential areas for scrutiny)** | |
| | **Statutory consultation** | |
| | **Council request** | |
| | **Cabinet request** | |
| | **Member request for scrutiny (CCFA)** | **X** |

**Why is it coming here?**

Panel Member request for scrutiny.

**What are the key points?**

- Traffic congestion needs to be defined in terms of the users' expectations of the performance of the road network;
- Traffic congestion in Calderdale and across West Yorkshire is being tackled using a variety of measures as defined within the 'MyJourney' West Yorkshire Local Transport plan 2011-26;
- Poor air quality on Calderdale's highway network as a result of traffic congestion can only be addressed through major interventions or changes in policy at EU, national or regional level.

**Possible courses of action**

This report is designed to inform an initial conversation.

**Contact Officer**

Peter Stubbs, Transport Policy and Strategy Manager

**Should this report be exempt?**

No

# Report to Scrutiny Panel

## 1. Background

1.1. Definition of traffic congestion

Traffic congestion is an inherently difficult concept to define as it has both physical and relative dimensions. In physical terms it can be explained as the way in which vehicles interact to impede each other's progress. These interactions and their influence on individual journeys usually increase as demand for the available road space approaches capacity or when capacity itself is reduced through road works or closures for example. In addition, one-off events such as bad weather or road traffic accidents can also have a significant bearing on congestion.

However congestion can mean very different things to different people. For example, a person living in a rural area might regard an unusually long queue of traffic experienced on their daily commute as severe congestion, while someone living in an urban area might experience much longer hold-ups on a daily basis and regard the same length queue as being almost totally uncongested. In relative terms, congestion can therefore also be defined in terms of the difference between users' expectations of the road network and how it actually performs.

Regardless of whether it is defined physically or relatively, the effects of increased congestion are typically characterised by:

- Slower speeds;
- Longer journey times;
- Increased queuing at junctions or bottlenecks;
- Increased stopping and starting;
- More time spent stationary;
- Less predictable journey times;
- Increased traffic emissions.

1.2. Causes of traffic congestion

The main causes of traffic congestion in Calderdale and West Yorkshire, along with predictions of future trends contributing towards congestion, are as follows:

- Economic growth
  Economic growth contributes towards increased levels of congestion as more people travel to work, more business trips are made and freight movements increase.

- Planning decisions
  Planning policies of the 1980s and early 1990s were based on developing sites with good access by car. These decisions have led to increased

numbers of car based trips being made on the network and have added to congestion problems.

- Increasing affluence and increasing car ownership
  Car ownership continues to rise. Average private car mode share for travel to work in West Yorkshire is 64% and the rise in mode share has been predominantly at the expense of bus travel.

- Relative cost of public transport
  The cost of owning and running a car has decreased significantly in comparison to the cost of public transport fares in West Yorkshire over the last two decades. The cost of bus and train fares has consistently exceeded that of motoring costs and the retail price index. The disparity between the costs has contributed to the change in modal share that has been experienced.

- Increased journey length
  Average length of journey to work continues to grow. Between 2001 and 2011 the average distance people travel to work in Calderdale increased from 11km to 14.5km. Longer journeys result in traffic being on roads for longer, thus increasing the amount of traffic and adding to congestion. Increased complexity of journeys also makes them less likely to be undertaken by public transport or other sustainable modes.

- Increase in population and increase in households
  The population of West Yorkshire has increased by 6% between 2001 and 2011 and this trend is forecast to continue. At the same time there has been an increase in the number of single person households. With this increase there will be the need for more travel as there is less scope for linked trips.

- Constrained highway capacity
  Throughout Calderdale and West Yorkshire there are significant pinch-points on the highway network where congestion occurs as a result of there being more traffic than the highway can accommodate. In many of these locations there is limited scope to increase highway capacity due to the topography of the area or the density of the surrounding development.

## 2. Main issues for Scrutiny

2.1. Congestion monitoring
Mapping of traffic congestion in West Yorkshire has been carried out at high level as part of the development of successive Local Transport Plans. This has used data derived from global positioning systems (GPS) to derive average traffic speeds and compared these with prevailing speed limits to identify slow moving parts of the network (‘congestion hot-spots’). This has been used to inform the development of regional and district work programmes.

The ‘MyJourney’ West Yorkshire Local Transport Plan (2011-26) has sought to develop a new indicator for congestion based upon journey time reliability and

comparing the variation in peak period journey times with those achieved during times of free-flow.

2.2. Actions to tackle traffic congestion

A variety of measures is being developed and delivered in West Yorkshire to address traffic congestion and its causes. These are set out in the 'MyJourney' West Yorkshire Local Transport Plan (2011-26) and fall under four main headings as follows:

- Management of the highway network;
- Sustainable travel choices;
- Better connectivity and integration of transport modes; and
- Targeted enhancement of transport infrastructure.

2.3. Management of the highway network

- Yorkshire Common Permit Scheme. Introduced to better manage street works. Evidence shows that these works cause one third of delays on the highway network. This scheme is discussed in further detail below;
- West Yorkshire Key Road network (WYKRN). Discussions between the West Yorkshire Districts and West Yorkshire Combined Authority are at an advanced stage towards establishment of a 'key road network' that will be managed at a strategic level;
- West Yorkshire Highway Network Efficiency Package. This scheme is mandated through the West Yorkshire Plus Transport Fund and aims to deliver improved Urban Traffic Management Control (UTMC) resulting in improved network performance and real time information;
- Improved asset management and resilience leading to reduced disruption on the network.

2.4. Sustainable travel choices

- Reducing the need to travel including support for broadband roll-out and targeted work with employers (through the West Yorkshire Travel Plan Network) to encourage flexible and home working policies;
- Travel behaviour change. Engaging with customers to understand what motivates current travel behaviour and providing better information and incentives to influence that behaviour;
- Joint working with public health to promote active travel alternatives including initiatives such as bikeability, go:cycling and go:walking;
- Demand management such as reallocation of road space from the private car to public transport and sustainable travel modes and management of parking supply and price;
- Planning new developments in sustainable and accessible locations. See below for a more detailed discussion of planning policy and the development of Calderdale's Local Plan.

2.5. Better connectivity and integration of transport modes

- Public Transport. Development of a core, high quality and financially sustainable public transport network that will provide attractive alternatives to car travel;
- Transport hubs. Improved interchange and integration between different modes of travel. Todmorden has recently benefitted from provision of an improved walking environment between the bus and rail stations;
- Integrated ticketing and smartcards. WYCA are currently developing an 'Oyster'-style card that will enable seamless transfer across the public transport network;
- Provision of a high quality walking and cycling network. The City Connect programme has secured substantial funding for the development of a segregated walk/ cycle network across West Yorkshire.

2.6. Targeted enhancement of transport infrastructure

- Strategic regional transport programmes. As part of the Leeds City Region growth deal substantial funding has been secured for the West Yorkshire Plus Transport Fund for major road and rail schemes to support economic growth and enhance the transport network. Proposals within Calderdale include significant investment in the A629 Halifax – Huddersfield corridor, A641/ A644 Brighouse corridors and the Calder Valley rail line. Calderdale also plays an active role in development of proposals through Transport for the North. Discussion of the A629 corridor proposals is provided in a separate report;
- Local Transport Plan 'network management' block proposals. Targeted small schemes to improve signal control and junction capacity. The current Calderdale three-year LTP implementation plan is investigating/ delivering capacity improvements at a number of junctions including:
  - ~ Future-proofing of junctions in north Halifax – A629/ Shroggs Road and A629/ Ovenden Way installation of MOVA intelligent traffic control;
  - ~ Bailiff Bridge A641/ A649 junction – study into capacity improvements and provision of pedestrian facilities (may require land purchase);
  - ~ Sowerby Bridge – comprehensive study into traffic and transport aimed at identifying a range of measures that can be developed as 'pipeline' projects for WY+TF or other funding streams;
  - ~ West Vale – study into traffic movements and junction improvements programmed for 2016/17.

2.7. Yorkshire Common Permit Scheme

Calderdale joined the Yorkshire Common Permit Scheme on 31st March 2015. The aim of the scheme is to:

- Reduce congestion and disruption on the highway networks, in particular on 'A' class roads;
- Work more closely with the utility companies to reduce the amount of time they occupy the highway network;
- Reduce the impact of traffic management on the highway network;

- Create more robust forward planning for both streetworks and roadworks with a 2 year programme of works put together in advance to highlight conflicts, hot spots etc.
- Establish collaborative working between the utility companies and Highway Maintenance;
- Identify disruption hotspots and proactively work with the utility companies to put a plan of action together.

2.8. Planning for development

Calderdale has developed a strategic transport (SATURN) model to support development of schemes through the West Yorkshire Plus Transport Fund. This feeds traffic information derived from surveys into a representation of the district highway network and assigns trips through that network. The model is used to identify locations within the network that may be under stress and where interventions are required to address traffic and congestion levels.

The model is being adapted to assess the potential impact of development through Calderdale's emerging Local Plan. Analysis of site allocations can be used to generate additional trips which will be fed into the model and the results used to inform development of an Infrastructure Plan which will include highway schemes that may be necessary to enable housing and economic growth to happen.

At an individual development site level planning decisions need to take into account the potential impact of the development on the highway network. Paragraph 32 of the National Planning Policy Framework sets out that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development.

Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

Note that there is no effective mechanism to address the cumulative traffic generation impacts of a large number of smaller developments.

2.9. Air quality

Congestion hot-spots on the local highway network correspond with Calderdale's Air Quality Management Areas (AQMAs) which have all been declared as a result of high Nitrous Oxide levels from traffic emissions. The Council does have an Air Quality Action Plan which was adopted in 2009 but the location of all the AQMAs on the main arterial routes through the district mean that any significant

improvements in air quality at these locations will only be achieved by major interventions to reduce traffic levels or through changes in European Union and national regulations to improve traffic emissions or encourage a switch to cleaner vehicle technologies.

The West Yorkshire Low Emission Strategy is currently open to public consultation and seeks to reduce carbon emissions and address issues of poor air quality on a regional basis. The Council's Air Quality Action Plan will be updated to reflect this strategy.

## 3. Consultation

Not applicable.

## 4. Further action and timescales

Not applicable.

## 5. Options appraisal

Not applicable.

## 6. Conclusions

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## 7. Appendices

None.

## 8. Background documents

'MyJourney' West Yorkshire Local Transport Plan 2011-26

## 9. Documents available for inspection at

Highways and Transportation, Westgate House, Halifax HX1 1PS