

North Yorkshire County Council & Ryedale District Council

MALTON & NORTON INFRASTRUCTURE AND CONNECTIVITY IMPROVEMENTS STUDY

Options Assessment Report - Executive Summary





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OPTIONS ASSESSMENT REPORT - EXECUTIVE SUMMARY

1. INTRODUCTION

The Malton and Norton Infrastructure and Connectivity Improvements Study is led by a partnership of North Yorkshire County Council (NYCC) and Ryedale District Council (RDC).

WSP was commissioned by NYCC to undertake work associated with identifying potential improvement options to address the issues of traffic congestion and poor connectivity in and around the Malton and Norton urban areas. These issues are likely be exacerbated when planned increases in train service frequencies at Malton Railway Station are implemented in December 2019.

The Options Assessment Report (OAR) considers the existing evidence base to establish the issues and problems experienced in the study area (identified in Figure 1 in the accompanying Appendix) and how these may change in the future. This evidence review and analysis examines the case for intervention through the preparation of a sound body of evidence to demonstrate the need to develop any improvement intervention(s).

The OAR then seeks to provide the following:

- Study specific objectives setting out what the interventions are aiming to achieve;
- Develop a long-list of interventions, informed by numerous sources, which will be subject to a high-level 'sift' to identify any which would be considered undeliverable in the context of the study.
- Consider the resulting short-list of interventions and undertake detailed sifting to inform early prioritisation, ahead of public consultation.
- i Identify a Preferred Package and Potential Quick Wins.

The study has closely followed the Department for Transport's (DfT) Transport Appraisal Guidance (WebTAG). The guidance sets out the recommended approach to take in understanding the current and future context and conditions, establishing the need for intervention and developing options to address the identified issues through an objective led approach.

2. ESTABLISHING THE NEED FOR INTERVENTION

Strategies and Policies

A review of relevant policies and strategies has demonstrated strong support for intervention to address issues of traffic congestion and delay in the urban areas of Malton and Norton, and to support economic development and growth.

Economic Context

Malton and Norton act as a Principal Town and district-wide Service Centre for the Ryedale District, occupying an important position in relation to the local and regional economy.

The limited skilled job opportunities, predominance of a low wage economy and conflicting high house prices results in local housing potentially being largely unaffordable for many of the people working in the district. This imbalance coupled with the need for some residents employed in more skilled industries having to commute elsewhere is likely to be resulting in commuting in and out of the towns placing additional pressure on the local transport network.

There are aspirations to further grow and diversify Malton and Norton's economy, particularly in relation to higher value sectors, and specifically in the agri-food and bio-economy sectors; Malton has a designated Food Enterprise Zone and is promoted as Yorkshire's Food Capital.

The local transport network is often perceived as a barrier to achieving additional inward investment and realising this growth.

Operation of the Local Transport Network

Accessibility between the two towns is impacted by both the railway line and the River Derwent, which run between them. There are two crossing points over the river, at Railway Street and County Bridge on the B1248 Castlegate, while the one level crossing provides a single route over the railway line, immediately south of County Bridge. These limited crossing points create bottle-necks for traffic in these locations; generally considered to be compounded by a combination of a natural increase in traffic, a historic and constrained network and seasonal and 'through' traffic.



The key routes through the towns (B1257 and B1248) carry relatively high volumes of traffic, particularly HGVs, for the standard of road, resulting in issues of delay in both towns.

Butcher Corner is a key junction in Malton, where the B1257 and B1248 meet at a signal controlled crossroads; the junction experiences high volumes of traffic and resulting congestion throughout the day (around 28,000 vehicles per day – including 1,000 HGVs). Average speeds at Butcher Corner range between 25% - 50% of the corresponding free flow speeds (based on journey times recorded between 1am and 5am when traffic flows and densities are typically low). Congestion issues at Butcher Corner have contributed to poor air quality, journey time unreliability and resulting impacts on public transport punctuality. An Air Quality Management Area (AQMA) was declared, by RDC in 2009, for the area around Butcher Corner.

The level crossing is situated to the east of Malton Station and south of Butcher Corner. When the level crossing barriers are down, traffic builds up on the surrounding network resulting in congestion and delay. Typically, there are two closures per hour, with closure times of between 1.5 minutes and 3.5 minutes in each instance. These closures can lead to gueue lengths of up to 54 vehicles forming on approach roads. At the level crossing, average daytime speeds range between 33% - 55% of free flow speeds. This analysis suggests that there are significant journey time savings that could be made if the issue of congestion was adequately addressed. Rail service frequencies at Malton are due to increase to two trains per hour in each direction from December 2019, thereby doubling the number of trains stopping in Malton each hour. This will result in the level crossing barriers being down for a greater overall duration across the hour increasing delays to traffic.

Journey to Work data, from the 2011 Census, reveals that almost half of internal commuting trips (i.e. those that remain within the two towns) are made by car despite the short distances involved. These short, internal, trips utilise the local highway network and are likely to be exacerbating issues of local congestion and resulting delay. The quantity of available car parking, and its relatively low cost, is also considered to be a significant contributory factor in the encouragement of driving to, from and within the towns, including the short internal journey to work trips. The resultant congestion culminates in environmental issues, as well as an adverse impact upon quality of life, public health, safety and the general aesthetics of the towns.

Sustainable Transport

Malton Railway Station is the only rail station in the Ryedale District with regular passenger services. Nearly all rail services operating on the York to Scarborough line call at Malton; the station is used by approximately 350,000 passengers a year, a figure that has increased by 20% in the last five years.

Malton is a single platform station; this presents significant limitations, in terms of capacity, and is a major constraint to the wider Trans-Pennine route. The provision of a single platform means that services travelling in both directions must use the same line on the approaches to, and through, the station, resulting in no current or future potential to operate services travelling in opposite directions concurrently. Any delays to westbound services, because of having to wait for eastbound services to clear the platform, impacts the service times for the remainder of the route e.g. between Leeds and Manchester. The single platform at Malton also impacts the accessibility of the station for rail users, particularly for residents of Norton and areas to the south of the station who currently have to cross the level crossing to access the station.

Journey to Work data for residents in Malton and Norton illustrates that over half of the residents, who are employed within the towns, undertake their journey to work by active modes; the majority of these trips (40%) are on foot while 11% travel by bike. These figures are far higher than regional and national averages; this is likely due to the geographic size of the urban area, making active modes very realistic modes of travel for these trips.

Bus mode share, for all commuting trips undertaken by residents of the Malton and Norton urban area, regardless of destination, is 2.3%. This is substantially lower than the regional and national averages of 3.6% and 8.5%. This highlights that there are opportunities for mode shift to use of public transport in the towns.

The census Journey to Work data also revealed that almost half of internal commuting trips are made by car, despite the short distances involved; these short, internal, trips utilise the local highway network and are likely to be exacerbating issues of local congestion and resulting delay. It is considered that the high level of car use for these trips offers the opportunity for considerable mode shift to more sustainable modes, with the introduction of appropriate supporting interventions; this, in turn, has the potential to bring about significant positive impacts upon issues of local congestion.



Environmental Evidence

Ryedale, as a district, covers a large and primarily rural area of exceptionally high quality. This is reflected in the number and geographical scale of areas that are formally subject to environmental designations designed to protect the natural and built environment.

As part of the evidence gathering mapping of environmental constraints within the study area has been undertaken, including flooding - some areas of Malton and Norton are at a high risk of flooding.

High traffic flows and existing congestion are contributing to issues of Air Quality on key routes and an AQMA has been declared at Butcher Corner.

Committed and Planned Development

RDC's Local Plan Strategy sets out a growth policy that seeks to provide, approximately 200 new houses per year in the district (3,000 over the plan period); 50% of these dwellings will be provided in Malton and Norton. In addition, 37ha (net) of additional employment land (plus a further 8ha additional land supply if required) is to be allocated for the district, in addition to existing commitments; 80% of which is to be provided in and around Malton and Norton.

The level of development proposed across Malton and Norton, (employment, retail and housing) will place additional demand on an already constrained local network unless adequate mitigation measures are identified and implemented. Traffic modelling work, undertaken as part of the development of the Local Plan, forecast that approximately 1,000 additional trips will be generated within the towns as a result of the proposed developments.

3. THE NEED FOR INTERVENTION

To maximise Malton and Norton's economic potential, there is a need to plan, not only for the expansion of existing businesses, but also to attract the inward investment required to generate new, high value jobs with transport connectivity key to achieving this. Without intervention within the study area the transport network will remain a constraint. Congestion in urban areas and at localised pinch points, such as Butcher Corner and the level crossing between the towns, can negatively impact connectivity resulting in longer and/or unpredictable journey times, constraining access to labour markets and movement of goods and services. In

turn this can influence business decisions to locate elsewhere.

Initial assessments, undertaken for the Local Plan, suggest that traffic associated with development can be accommodated mainly through localised junction improvements or provision of new roads. However, these improvements will only mitigate impact to existing levels and will not improve upon the current situation. In the longer term, the impact of this growth, if left unmanaged, is likely to deter the further inward investment and diversification of the economy that is considered crucial to ensuring resilience of the district and achieving economic growth projections, both locally and regionally.

4. IDENTIFICATION OF OBJECTIVES, OPTION GENERATION AND APPRAISAL

Setting Objectives

Based upon the outcomes of the evidence review, and informed by stakeholder engagement, a set of Strategic and Specific Objectives have been identified in accordance with the WebTAG process.

These objectives have been developed to align with the current and future issues identified as part of the evidence base review, and provided a framework for initial high-level assessment of the interventions.

In order to identify how each Specific Objective contributes to the Strategic Objectives, a 'mapping' exercise has been undertaken. Objectives are set out in Figures 2 and 3 in the accompanying Appendix.

Developing the Long-List of Interventions

Following the evidence review, and subsequent stakeholder engagement, a long-list of interventions was developed. Interventions were included as part of the long-list if it was considered that they could seek to address the identified issues and contribute towards achievement of the objectives. The 71 interventions identified were from a range of sources including:

- A review of existing policies and strategies, relating to transportation in Malton and Norton;
- A review of proposed transport improvements included in existing and previous studies;
- Previous stakeholder consultations;
- Consideration of the issues and opportunities identified in the evidence review; and
- A study specific Options Workshop (March 2018).



At this stage, the interventions are high level concepts only. Given the complex issues in the study area, as well as being considered separately, each of the interventions has also been looked at in terms of its potential contribution as part of a package of interventions.

Initial Sift and Short-Listing of Interventions

Due to the number of interventions, identified as part of the long-list, an initial 'sift' has been carried out to identify any that would not be taken forward for more detailed assessment as part of this study. This approach is in accordance with the DfT TAG appraisal process and included consideration of the following:

- Contribution to the Specific Objectives;
- Deliverability;
- Dependence upon other interventions;
- Indicative cost: and
- Timescales.

Each of the Initial Sift criteria, set out above, was brought together in an overall framework, allowing for an assessment of individual interventions to be considered on an equal and consistent basis.

Following the Initial Sift 46 interventions were taken forward for more detailed appraisal. 11 Potential Quick Wins were also identified. The identification of Quick Wins, as part of this appraisal, is largely linked to the, December 2019, rail service improvements at Malton Station; any intervention categorised as a 'Quick Win' could, theoretically, be implemented ahead of that time albeit dependent upon factors such as funding availability and gaining relevant permissions. Potential Quick Wins are listed in Table 1 in the accompanying Appendix.

Packaging of Interventions

It is considered that the complex nature of the traffic issues experienced in the towns of Malton and Norton, which are primarily a result of the historic nature of the towns, severance by rail and river and a large number of trips that are purely internal to the towns (i.e. wholly within the urban areas) are unlikely to be successfully addressed through delivery of a singular intervention. As such, a 'package' approach to interventions has been adopted, with the aim of successfully addressing the combination of factors that result in issues on the highway network within the study area.

A total of eight packages were developed, which represent the grouping of interventions with common themes. The eight packages are:

- Package A Traffic Management;
- Package B Level Crossing Area;
- Package C Public Transport Improvement;
- Package D Active Mode Improvements;
- Package E Car Parking;
- Package F Major Road Improvements;
- Package G Behavioural Changes; and
- Package H Land Use Changes

It should be noted that the packaging process was undertaken to enable the assessment of a suite of interventions and to illustrate the benefits that they could provide cumulatively. As the study progressed the best mix of interventions to provide the desired outcomes was sought. As with all of the proposed interventions, there has been no detailed design of the interventions, they are high-level concepts only.

Detailed Sift of Packages of Interventions

In order to look at the Packages in more detail a second round of sifting was undertaken using the DfT's Early Assessment and Sifting Tool (EAST).

EAST considers a range of metrics, set out in line with the DfT's 'Five Case Model' – this includes the following factors:

- Strategic;
- Economic;
- Financial;
- Management; and
- Commercial.

With this in mind a multi-discipline team was involved in undertaking the scoring of each package against the various metrics. The EAST sift was proportionate to this early stage of the study, where complex modelling would not usually be applied, as per the recommended WebTAG approach.

Summary of Appraisal of Packages

The results of the EAST appraisal demonstrate that Package D (Active Mode Improvements) and Package G (Behavioural Change) generally provide the best level of fit against the EAST metrics. It should, however, be noted that there was no weighting applied to each metric due to the stage of the study; if this was applied the overall scores and subsequent ranking would likely be impacted.

Given the early stage of the process of option development it was not proposed to discount any of the Packages. None of the Packages scored poorly in the detailed EAST appraisal and, as such, it was determined that no particular mode or theme should be discounted at this stage. The results of the EAST based appraisal highlighted that provision of measures targeting a range of themes should be



considered, and that a multi-modal package of interventions would be necessary to address the complex issues experienced in Malton and Norton.

5. IDENTIFICATION OF PREFERRED PACKAGE

Based on the outcomes of the sifting processes, an exercise was undertaken to combine the individual intervention scores against the study objectives (established as part of the Initial Sift), and the overall outcomes of the EAST based appraisal in order to formulate a draft Preferred Package for review at a stakeholder workshop.

Feedback provided at the workshop confirmed that the interventions comprising the draft Preferred Package was, overall, well supported, with one additional intervention (a new junction on A64 with Broughton Road (B1257)) being requested by stakeholders for inclusion ahead of the subsequent public consultation. The interventions making up the final Preferred Package are set out in Table 2, (in accompanying Appendix); it includes interventions that are aspirational, with likely long timeframes for delivery, together with interventions where delivery may be possible over a short to medium timeframe. Timeframes and costs, set out in Table 2, are indicative high-level estimates only and would need to be determined based upon detailed scopes of work as interventions are brought forward for further work.

6. PUBLIC CONSULTATION

An online questionnaire consultation was undertaken, in April/May 2018, to better understand the level of support, from the wider public, for the Preferred Package proposals.

Over 290 responses were received and the results demonstrated that that the majority of respondents supported all of the interventions proposed as part of the Preferred Package, i.e. each intervention received in excess of 50% (ranging between 52% - 83%) of respondents agreeing or strongly agreeing to its inclusion in the Package.

7. NEXT STEPS

Further work will be required to move forward the interventions recommended as part of the Preferred Package. As such, NYCC and RDC have set up an officer working group to consider:

- appropriate next steps and routes for delivery;
- priority of interventions for progression; and
- identification of funding.



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