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A682 Nelson to Rawtenstall Bus Corridor Study

Executive Summary

February 2014

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Executive Summary

Background

One of the key objectives of Lancashire County Council's (LCC) Local Transport Plan 3 (LTP3) is to improve economic performance and regeneration through the introduction of initiatives focused on reducing congestion, improving journey time reliability and increasing sustainable travel patterns.

In order to meet this objective, LCC have proposed a series of corridor studies that are focused on improving the main corridors of travel on the county's strategic road network. This summarises the findings of the corridor study undertaken for the A682 corridor between Nelson and Rawtenstall.

Methodology

LCC have requested that this study be undertaken in line with the principles set out within the Route Management Strategy (RMS) guidance and pilot studies in Preston and Lancaster that were developed by Jacobs in 2012. The study includes three distinct Work Packages:

- ***Work Package 1*** *focuses on identifying problems and issues along the A682 Corridor, with the emphasis on bus journey reliability. Also identifies a detailed Area of Interest for Work Package 2.*
- ***Work Package 2*** *seeks to develop and prioritise interventions for all transport modes within the Area of Interest.*
- ***Work Package 3*** *provides outline designs and budgetary costs for up to 6 of the prioritised interventions.*

The rationale behind this methodology was to progressively develop the detail of any corridor improvements. This allowed for input from key stakeholders, data analysis and policy documentation to be reviewed and incorporated into the development of interventions.

Study Area

The A682 Corridor extends from the M65 Junction 13 in the north to the A56 in the south. It travels through Nelson and Burnley before heading south along Manchester Road towards Crawshawbooth and then through Rawtenstall to join with the A56. The Area of Interest centres on Rawtenstall Town Centre.

The extent of these areas is included in the Figures section at the end of this document, alongside the interventions and designs proposed.

Work Package 1

The first Work Package studied the whole length of the A682 Corridor to determine the main problems affecting route performance and where future work packages should be focused.

As part of this Work Package, a Problems and Opportunities meeting was held with key stakeholders at LCC and the local bus operator Veolia Transdev. Additionally,

data analysis was carried out along the length of the route, which incorporated real time bus information, TrafficMaster data, traffic counts and the findings previous studies.

Four recommendations were put forward at the end of Work Package 1;

- *Work Package 2 should identify and appraise multi-modal improvements within the Rawtenstall Area of Interest.*
- *Carry out an assessment of traffic signal performance at key locations along the entire corridor.*
- *Bus Priority measures should also be considered alongside the Traffic Signal Performance Optimisation*
- *Improved partnerships could be formed between local bus operators and LCC to ensure decisions are made based on the latest real time information*

Work Package 2

The second Work Package built upon the findings of Work Package 1 to develop and prioritise interventions for all transport modes, with the focus on the Rawtenstall Area of Interest.

As part of this Work Package, a wider ranging Stakeholder Workshop was carried out, involving representatives from LCC, Veolia Transdev, Lanchashire Police and Rossendale Borough Council. Alongside the workshop, a range of policy and planning documents were also consulted in order to establish key themes associated with the route.

From this, it was possible to determine the principal functions of the route and the problems that prevented the route from fulfilling its functions. These were used to develop six Route Objectives;

- *Improve journey times and reliability of bus services along the A682 Corridor and minimise the potential delays associated with re-routing into a new bus station*
- *Alleviate traffic congestion along A682 Corridor for both strategic and local traffic*
- *Improve accessibility for pedestrians and cyclists on key corridors along the A682*
- *Ensure that any new or improved transport infrastructure does not constrain future development proposals*
- *Manage levels of on-street parking that are prohibitive to the efficiency of the local road network*
- *Ensure that all improvements are carried out with consideration of "best practice" urban design to support the regeneration of Rawtenstall*

The Route Objectives were used as the basis to develop a long-list of 54 Potential Interventions. These included improvements to the local highway network, traffic signals, public transport, pedestrian movements and parking management. The study also considered a potential Park and Ride site at New Hall Hey roundabout, as highlighted in the East Lancashire Highways and Transport Masterplan.

The long-list of interventions were appraised and filtered down to 23 Prioritised Interventions, following the standardised RMS methodology as adopted in other studies within Lancashire. The Prioritised Interventions were grouped into 4 Strategies:

- *Bus Operation Strategy*
- *Traffic Signal Performance Optimisation Strategy*
- *Pedestrian Accessibility Strategy*
- *Parking Management Strategy*

These are summarised in the table below, with those interventions outside of the Rawtenstall Area of Interest shaded grey and interventions taken forward into Work Package 3 highlighted in green. The locations of each intervention are illustrated in the Figures section at the end of this document.

Strategy	Ref.	Description
Bus Operation Strategy	**SIG-2**	Bus priority on traffic signals through Rawtenstall Gyratory
	SIG-3	Bus priority on traffic signals along St. Mary's Way
	SIG-12	Bus priority on traffic signals through Nelson Broadway
	PUT-1	Bus punctuality partnerships with neighbouring operators and local authorities
	PUT-2	Improved bus stops with shelters/real time information
Traffic Signal Performance Optimisation Strategy	**SIG-1**	Improved co-ordination of signals in close proximity around the Rawtenstall Gyratory
	SIG-4	Traffic Signal Performance Optimisation Check of Asda Junction
	SIG-5	Traffic Signal Performance Optimisation Check of Tup Bridge Junction
	SIG-6	Traffic Signal Performance Optimisation Check of A682/Glen View Road Junction
	SIG-7	Traffic Signal Performance Optimisation Check of Yorkshire Street/A6114 Junction
	SIG-8	Traffic Signal Performance Optimisation Check of A682/Casterton Avenue Junction
	SIG-9	Traffic Signal Performance Optimisation Check of A682/Roundwood Avenue Junction
	SIG-10	Traffic Signal Performance Optimisation Check of A682/Halifax Road Junction
	SIG-11	Improved co-ordination of signals in close proximity around Nelson Broadway
Pedestrian Accessibility Strategy	**PED-1**	Improved crossings around New Hall Hey Roundabout
	PED-2	New pedestrian crossings around Rawtenstall Gyratory (Bury Road and Bacup Road)
	PED-3	Replace subway crossing of St. Mary's Way with a toucan crossing
	PED-9	Improved pedestrian/cyclist signage
	PED-4	Rationalise pedestrian crossings across St. Mary's Way
	PED-11	Include pedestrian crossing to Manchester Road Train Station
	PED-12	Improve crossings around Duke Bar Gyratory
	PED-13	Improve crossings on Colne Road, north of Duke Bar Gyratory
Parking Management Strategy	**PRK-2**	Improve the efficiency of on-street parking on Bank Street

Prioritised Interventions and Strategies

Work Package 3

The final work package developed outline designs and feasibility assessments on 7 of the 23 Prioritised Interventions identified in Work Package 2 (shaded in green in the table above). It grouped these into 5 schemes;

- *Scheme 1: Rawtenstall Gyratory - Traffic Signal Upgrade (SIG-1)*
- *Scheme 2: Rawtenstall Gyratory - Full Improvements (SIG-1, PED-2 & PED-4)*
- *Scheme 3: Asda Junction Improvements (SIG-4)*
- *Scheme 4: Tup Bridge Junction Improvements (SIG-5)*
- *Scheme 5: Bus Stop Improvements (PUT-2)*

A number of different scenarios were tested for each scheme to determine the most effective and feasible improvement. The tests involved traffic signal analysis and budgetary cost estimates for the junction improvements and a basic value for money assessment for the bus improvements.

This concluded that the following improvements would be beneficial to the performance of the route:

- *Upgraded signal control systems on Rawtenstall Gyratory*
- *New traffic signal on Bury Road approach to Rawtenstall Gyratory*
- *Provision of pedestrian crossings on Bury Road, Bacup Road and St. Mary's Way around the Rawtenstall Gyratory*
- *Increased capacity and pedestrian accessibility at Asda Junction*
- *Increased capacity and pedestrian accessibility at Tup Bridge Junction*
- *Integration of bus priority technology into traffic signal upgrades*
- *Improvements to the Rawtenstall Bus Station*
- *Provision of Real Time Information at key bus stops along A682 Corridor*

Each of these improvements would require further design work and scoping prior to being implemented on site. Similarly, if any of the other Prioritised Interventions were to be taken forward, these would require the same level of design and analysis before being progressed further.

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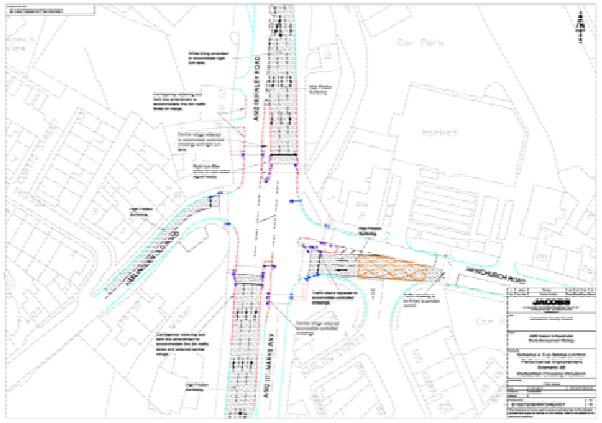
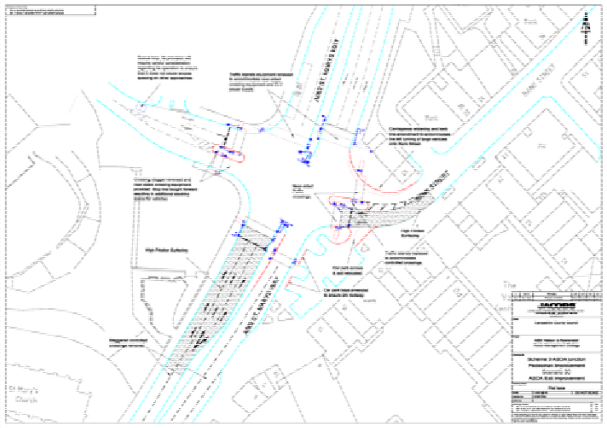
Figures

Outline Designs:

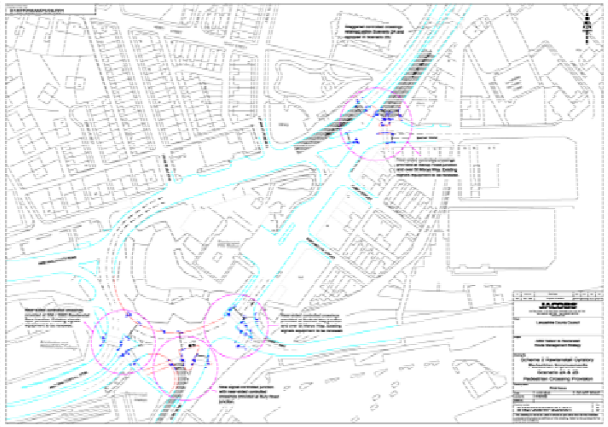
Tup Bridge: New Turning Lane and Pedestrian Crossings

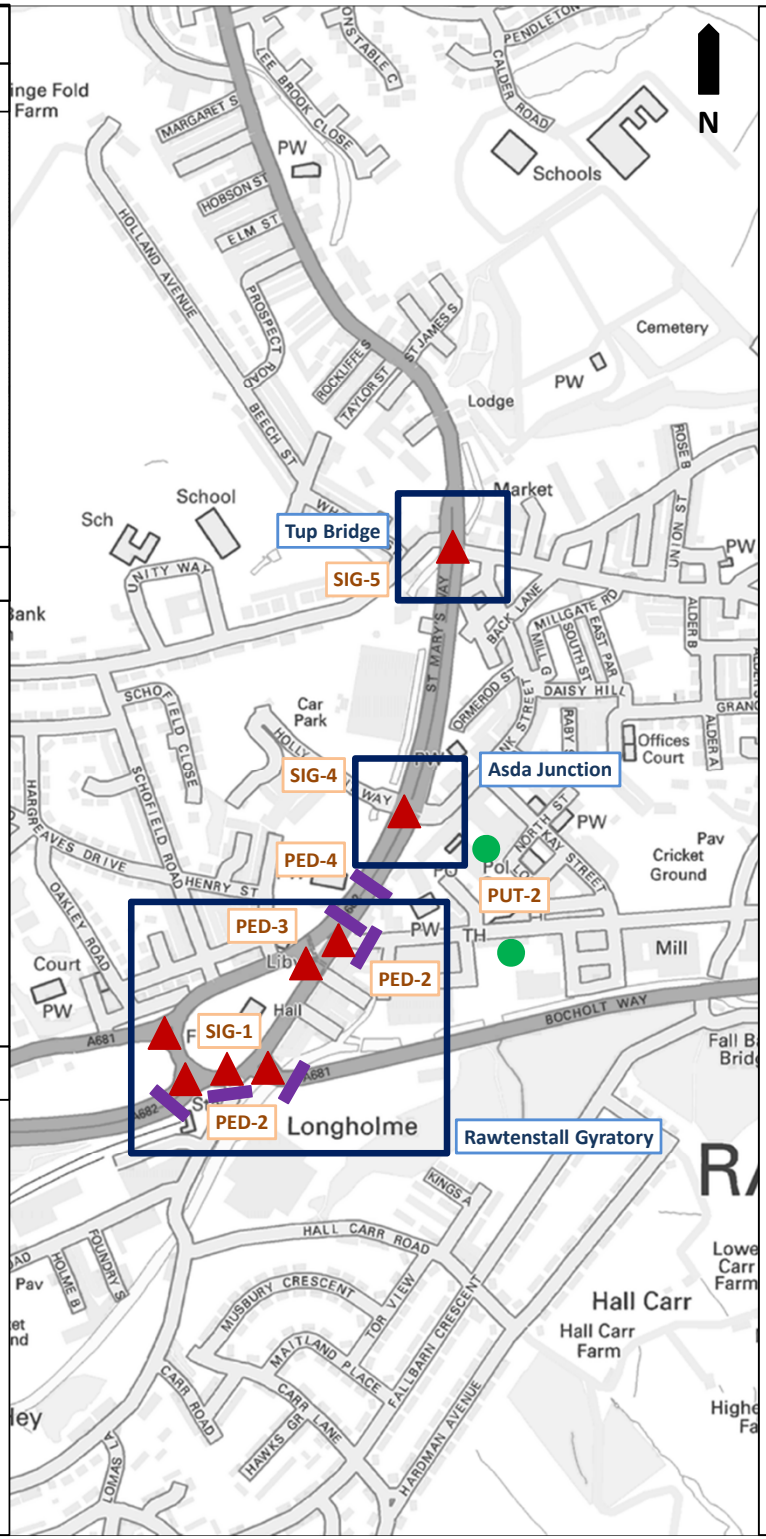


Asda Junction: Additional Capacity and Pedestrian Crossings



Rawtenstall Gyratory: Signal Upgrade and Pedestrian Crossings



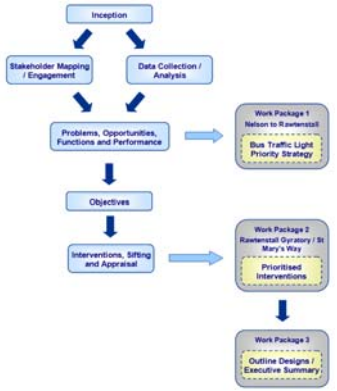


PRIORITISED INTERVENTIONS FOR WORK PACKAGE 3

Legend:

- Prioritised Intervention Area
- Traffic Signal Intervention
- Pedestrian Intervention
- Bus Intervention

Process:



Prioritised Interventions Table:

Interventions proposed for further analysis and design in Work Package 3 are highlighted green

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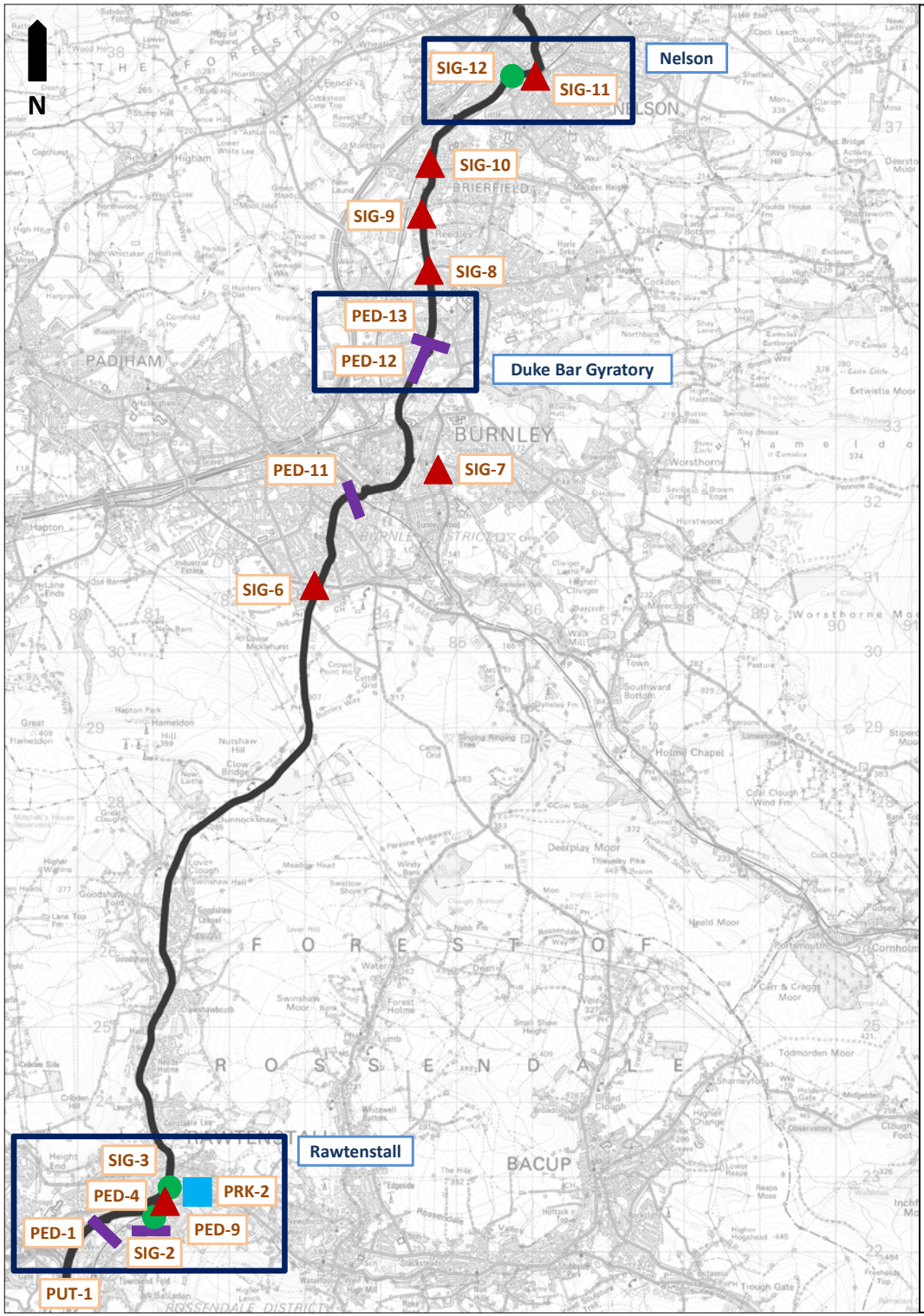
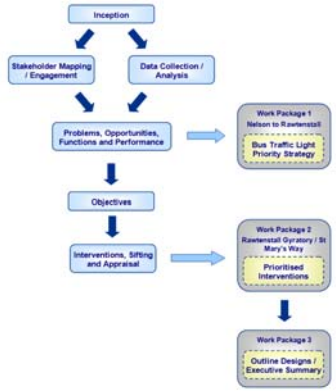


OTHER PRIORITISED INTERVENTIONS

Legend:

- Prioritised Intervention Area
- Traffic Signal Intervention
- Pedestrian Intervention
- Public Transport Intervention
- Parking Intervention

Process:



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