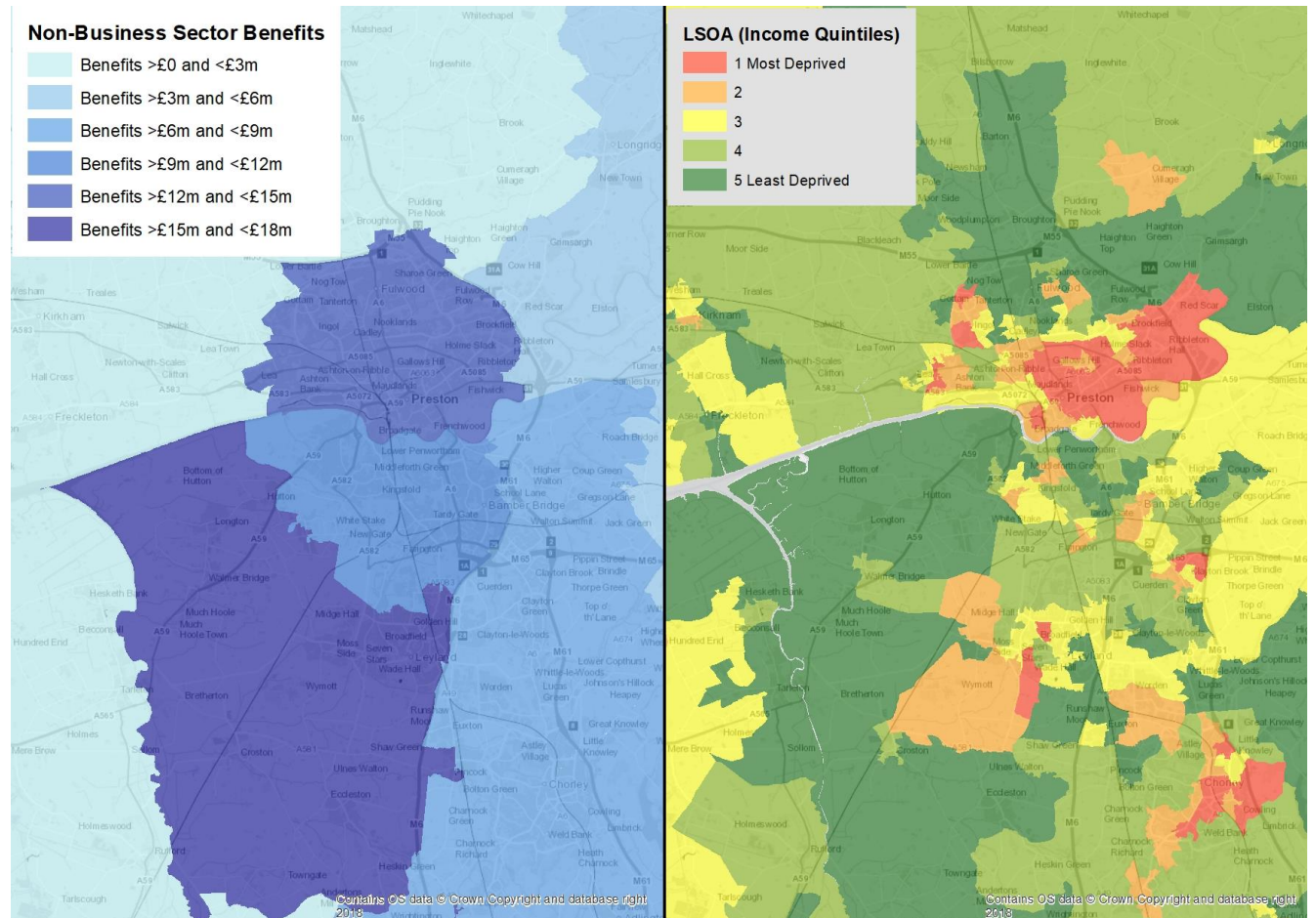


Introduction

The assessment of Distributional Impacts (DIs) is designed to help understand the impacts of transport interventions on different groups of people, including those potentially more vulnerable to the effects of transport. In this Strategic Outline Business Case, the likely impact of the scheme on vulnerable groups has been assessed at a high level. This assessment will be developed further at Outline Business Case stage.

User Benefits and Affordability

The figure below provides a spatial summary of the travel time and vehicle operating cost (VOC) benefits for commuting and other non-business users, mapped alongside the income deprivation distribution at Lower Super Output Area level.



TUBA Benefits for Non-business Trips

South Ribble and southwest of South Ribble receive the highest benefits because of the scheme. These areas contain a mixture of deprived and non-deprived LSOAs in terms of income deprivation.

Preston also receives high benefits due to the scheme. Several LSOAs within Preston are amongst the 20% most deprived in the country.

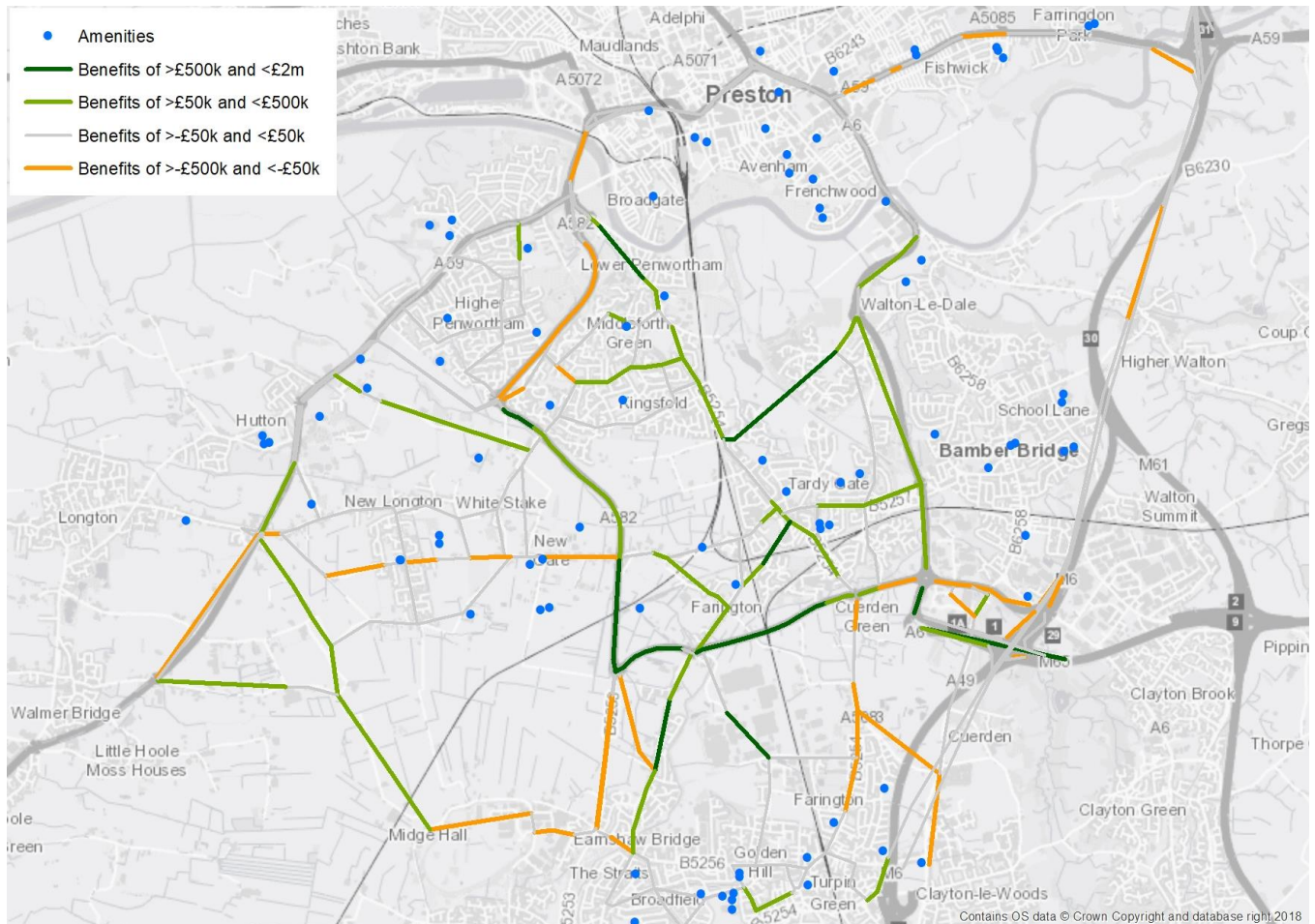
Accident Impacts

The figure below shows the amenities used by vulnerable groups such as children and older people within the impact area of the scheme. This includes schools, colleges, nurseries, hospitals and care homes.

It also shows which links are predicted to receive accident benefits and disbenefits due to the scheme.

In the Lostock Hall and Bamber Bridge areas, there are amenities which attract vulnerable groups in places where the scheme is expected to provide accident benefits. On the other hand, there are also amenities where accident disbenefits (increase in number of accidents) are expected at Chain House Lane near New Longton. Therefore the scheme is expected to have a mixed effect on vulnerable groups (children, older people, young male drivers, motorcyclists, pedestrians and cyclists).

As the number of observed accidents per link does not meet the minimum threshold required for detailed quantified analysis set out in WebTAG, any Distributional Impact assessment of accidents should be limited to qualitative analysis. Therefore in the next stage through a qualitative appraisal from demographic analysis and identification of accident clusters, the vulnerable groups within the study area will be identified. COBALT outputs will also be used to identify the likely impact of the scheme on these vulnerable groups.



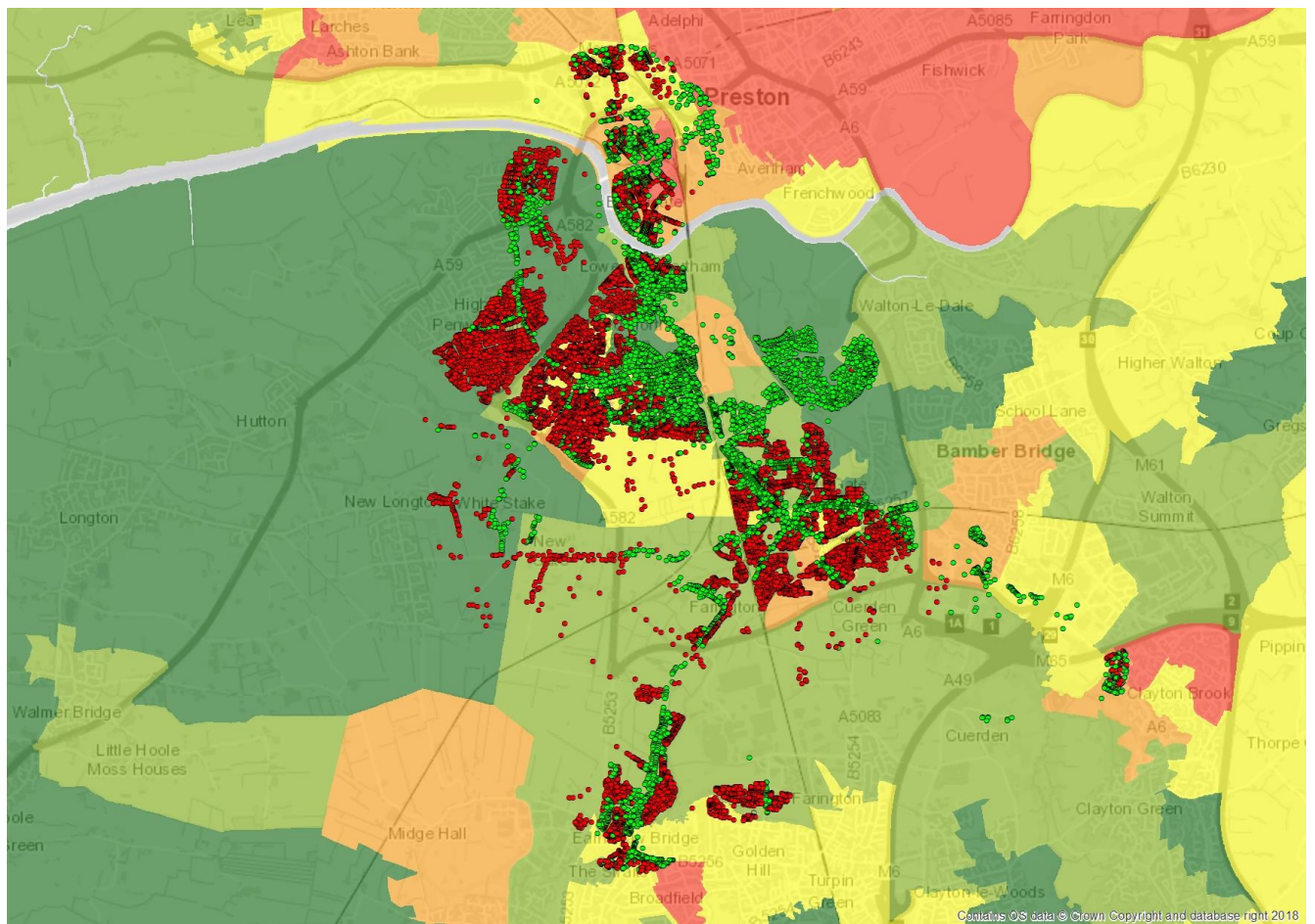
Amenities in Study Area

Noise Impacts

A noise assessment has been undertaken. The proposed scheme would result in negligible effects in the noise environment for the majority of dwellings in the study area. The number of properties predicted to experience 55dB L_{night} or greater in the future assessment year is 1,388 with the scheme in place, and 1,489 without the scheme in place. Therefore, there are 101 fewer properties above the night-time SOAEL with the scheme in place.

No properties are predicted to experience 80dB LA_{eq,16h} or greater in the future assessment year with and without the scheme in place.

The figure below shows the change in night time noise level for receptors within the study area for the design year of the scheme. Around 25% of the receptors in the study area are located within 40% most deprived LOSAs, out of which 10% experience an increase in noise levels and 9% experience a reduction in noise levels.



Change in Design Year Night Time Noise Levels for Receptors within the Study Area

Despite the negligible effects in noise environment and small number of affected receptors in the most deprived area, a change of flows of greater than 25% on A582 is expected and therefore a detailed DI assessment should be undertaken in the next stage of the scheme.

Other Distributional Impacts

Other distributional impacts have been through screening process. The following impacts will be assessed in the next stage of the scheme:

- Air Quality
- Severance

The screening proforma for Distributional Impacts is provided in the table below.

A582 South Ribble Western Distributor - Distributional Impacts Screening Proforma

Indicator	(a) Appraisal output criteria	(b) Potential impact (yes / no, positive/negative if known)	(c) Qualitative Comments	(d) Proceed to Step 2
User benefits	The TUBA user benefit analysis software or an equivalent process has been used in the appraisal; and/or the value of user benefits Transport Economic Efficiency (TEE) table is non-zero.	Yes, Positive	TUBA analysis of travel time and VOC benefits has been undertaken and showed User Benefits of the scheme. Beneficial income distribution in Preston is expected.	Yes
Noise	Any change in alignment of transport corridor or any links with significant changes (>25% or <-20%) in vehicle flow, speed or %HDV content. Also note comment in TAG Unit A3.	Yes, Positive	A noise assessment has been undertaken. The proposed scheme would result in negligible effects in the noise environment for the majority of dwellings in the study area. However an increase of more than 25% in flows on A582 is expected. Therefore a detailed DI assessment should be undertaken.	Yes
Air quality	Any change in alignment of transport corridor or any links with significant changes in vehicle flow, speed or %HDV content: <ul style="list-style-type: none"> • Change in 24 hour AADT of 1000 vehicles or more • Change in 24 hour AADT of HDV of 200 HDV vehicles or more • Change in daily average speed of 10kph or more • Change in peak hour speed of 20kph or more • Change in road alignment of 5m or more 	Yes, Negative	A regional air quality assessment has been undertaken. An increase in regional NOx emissions over the 60-year appraisal period is predicted. However, South Ribble Borough Council AQMA No. 3 (Lostock Hall) has a reduction in traffic flows. This reduction in traffic flows is likely to result in an improvement in air quality in this AQMA. This may introduce beneficial distributional impacts for proportion of population under 16.	Yes
Accidents	Any change in alignment of transport corridor (or road layout) that may have positive or negative safety impacts, or any links with significant changes in vehicle flow, speed, %HGV content or any significant change (>10%) in the number of pedestrians, cyclists or motorcyclists using road network.	Yes, Positive and Negative	COBALT accident analysis has been undertaken. A582 SRWD upgrade will introduce a safer route and a positive impact is predicted.	Yes
Security	Any change in public transport waiting/interchange facilities including pedestrian access expected to affect user perceptions of personal security.	No	The scheme does not include any intervention measure to affect the user perception of personal security.	No
Severance	Introduction or removal of barriers to pedestrian movement, either through changes to road crossing provision, or through introduction of new public transport or road corridors. Any areas with significant changes (>10%) in vehicle flow, speed, %HGV content.	Yes, Positive	The scheme provides new formal crossing access at Croston Road / Farrington Road and also at Longmeanygate which do not exist at the present time. The new facilities provided along the road would provide increased level of access for NMU but after dualing some journeys along existing PRowWs will be diverted owing to the provision of a central crash barrier.	Yes
Accessibility	Changes in routings or timings of current public transport services, any changes to public transport provision, including routing, frequencies, waiting facilities (bus stops / rail stations) and rolling stock, or any indirect impacts on accessibility to services (e.g. demolition & re-location of a school).	No	No effect on accessibility due to the scheme is expected.	No
Affordability	In cases where the following charges would occur; Parking charges (including where changes in the allocation of free or reduced fee spaces may occur); Car fuel and non-fuel operating costs (where, for example, rerouting or changes in journey speeds and congestion occur resulting in changes in costs); Road user charges (including discounts and exemptions for different groups of travellers); Public transport fare changes (where, for example premium fares are set on new or existing modes or where multi-modal discounted travel tickets become available due to new ticketing technologies); or Public transport concession availability (where, for example concession arrangements vary as a result of a move in service provision from bus to light rail or heavy rail, where such concession entitlement is not maintained by the local authority[1]).	Yes, Negative	According to TUBA results car fuel and non-fuel operating costs will vary with the scheme in place for various journeys. DI will be undertaken to assess the affordability impacts of the scheme.	Yes