

Appendix B5.4 – Distributional Impact screening

Appendix B5.4 – Distributional Impact screening

ASSESSMENT OF DISTRIBUTIONAL IMPACTS (DIs) OF TRANSPORT INTERVENTIONS

Proforma for reporting conclusions of first screening stage (Step 1)

This form is intended for use by scheme promoters to capture the considerations, assessment and conclusions of the first screening stage of the DI analysis (Step 1). For a full description of Step 1 please see WebTAG guidance units A4.1 and A4.2. These initial screening tests are not intended to be onerous and should require no additional data collection or analysis. At this stage promoters are only expected to carry out a qualitative assessment, based on their professional judgement and that of the technical specialists responsible for undertaking assessment of noise, air quality, safety, security, severance, accessibility, personal affordability and user benefits.

Scheme name: Farmer's Roundabout NPIF

Brief description of scheme: The proposed scheme consists of capacity and safety improvements at the A350 Melksham Farmers Roundabout junction with the B3107 and A3102 and the introduction of traffic signals to improve safety and capacity. As part of the scheme, the traffic lanes at the entries to the roundabout and the circulatory carriageway will be altered. The adjacent A350/A365 junction and the traffic signals at Asda will be linked to improve capacity at the junctions.

Scheme Objectives:

- Improve connectivity between Melksham, the west Wiltshire towns and the A36/M4;
- Reduce queue lengths and delays, improving journey time reliability on the A350 at Melksham;
- Facilitate housing and employment growth along the A350 corridor and encourage inward investment by addressing known and forecast congestion pinch-points; and
- Protect the strategic role of the A350, minimising the potential for traffic reassignment away from the corridor.

Distributional Impacts Screening

Indicator	Key scheme details <i>(What needs to be considered when assessing the scheme against each indicator?)</i>	Assessment	Vulnerable Groups <i>(Groups located in the area, any particular impacts)</i>	Potential impact <i>(7 point scale – Beneficial, Neutral, Adverse)</i>
User benefits	<i>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. Changes to journey times or cost of trips, (inc. vehicle operating costs)</i>	The A350 is the main north-south route on the western side of the county and is an important transport link for the west Wiltshire towns and the local economy. The objective of the scheme is to reduce queue lengths, delays and journey times and improve reliability. This would reduce the vehicle operating costs and thus bring more user benefits.	There are no particular vulnerable groups for this category. It improves the performance of the roundabout in general.	Large Beneficial
Noise	<i>Any change in alignment of transport corridor or any links with significant changes (>25% or <-20%) in vehicle flow, speed or %HDV content.</i>	Due to the scale of the scheme it is considered very unlikely that it will result in any increase in daily traffic flow and whilst the inclusion of signals may result in a change in the pattern of vehicle speed on the approach to the junction. Therefore, the noise aspect has been scoped out of further assessment.	There are no sensitive receptors within 200m of the scheme.	Neutral

Indicator	Key scheme details <i>(What needs to be considered when assessing the scheme against each indicator?)</i>	Assessment	Vulnerable Groups <i>(Groups located in the area, any particular impacts)</i>	Potential impact <i>(7 point scale – Beneficial, Neutral, Adverse)</i>
Air quality	<p><i>Any change in alignment of transport corridor or any links with significant changes in vehicle flow, speed or %HDV content:</i></p> <ul style="list-style-type: none"> • <i>Change in 24 hour AADT of 1000 vehicles or more</i> • <i>Change in 24 hour AADT of HDV of 200 HDV vehicles or more</i> • <i>Change in daily average speed of 10kph or more</i> • <i>Change in peak hour speed of 20kph or more</i> • <i>Change in road alignment of 5m or more</i> 	<p>The scheme will result in reduced congestion on the roundabout and across A350 near Melksham, hence reduced stationary traffic. This will result in slightly improved air quality in the vicinity of the junction. The scheme won't result in an increase in traffic or vehicle speeds.</p>	<p>There are no sensitive receptors within 200m of the scheme.</p>	<p>Slight Beneficial</p>
Accidents	<p><i>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 the road network.</i></p>	<p>One of the objectives of the scheme is to improve the safety at the roundabout. The signals will reduce conflicts when vehicles join at the roundabout. The signalisation and buffer zones would help the traffic flow which would reduce the chances of accidents.</p>	<p>Young Male drivers</p>	<p>Slight Beneficial</p>

Indicator	Key scheme details <i>(What needs to be considered when assessing the scheme against each indicator?)</i>	Assessment	Vulnerable Groups <i>(Groups located in the area, any particular impacts)</i>	Potential impact <i>(7 point scale – Beneficial, Neutral, Adverse)</i>
Security	<p><i>Any change in:</i></p> <ul style="list-style-type: none"> • <i>public transport waiting facilities / interchange facilities;</i> • <i>Changes to pedestrian access;</i> • <i>Changes to provision of lighting and visibility;</i> • <i>Changes to landscaping; and</i> • <i>Changes to formal or informal surveillance.</i> 	<p>The scheme proposes no changes which would improve or degrade security on the highway network.</p> <p>The replacement of lighting columns would potentially help the visibility and lighting for pedestrians.</p>	N/A	Neutral
Severance	<p><i>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.</i></p>	<p>The scheme aims to reduce congestion at the roundabout, which is likely to increase speed and flow in general. Adding short lanes before the signal or at the roundabout may reduce the side walk and bring vehicles closer to pedestrians. This poses new hazards to the pedestrians in the area.</p>	There are no sensitive receptors within 200m of the scheme.	Neutral
Accessibility	<p><i>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).</i></p>	No public transport element to scheme	N/A	Neutral

Indicator	Key scheme details <i>(What needs to be considered when assessing the scheme against each indicator?)</i>	Assessment	Vulnerable Groups <i>(Groups located in the area, any particular impacts)</i>	Potential impact <i>(7 point scale – Beneficial, Neutral, Adverse)</i>
Affordability	<i>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 Council).</i>	One of the aims of the scheme is to reduce congestion at the junction and cause a smoother flow of traffic. The improvement in journey times for all uses will reduce vehicle operating costs.	Low Income group	Moderate Beneficial