

Appendix D (ii)

Summary Assessment of Distributional Impacts

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Stubbington Bypass

Introduction

This note presents a summary assessment of the Distributional Impacts of the Stubbington Bypass scheme, in support of the Appraisal Summary Table. A proportionate approach has been taken, in line with the value, scale and extent of impacts expected of the scheme proposed. It is not intended to be a fully comprehensive Distributional Impact appraisal, although key principles from TAG Unit A4.2 have been applied. The main purpose of this note is to summarise the initial consideration of how the scheme impacts may be expected to vary across different social groups.

Scheme Location / Context

The scheme is located in Fareham and close to the boundary with Gosport, within south Hampshire – see diagram below. The Solent Enterprise Zone is located to the south of the eastern end of the bypass. The bypass provides an alternative route to the existing B3334 which runs through Stubbington village and provides a main connection between Gosport / Lee-on-Solent and the A27 /M27 (J9).



Overview of the Scheme

The scheme comprises a new 3.5km long single carriageway road through an area of predominantly arable farmland. The bypass will be a 7.3m wide single carriageway road with a 2.5m wide shared footway/ cycleway, and verges that will run to the south of Fareham and to the north and east of the village of Stubbington (between B3334 Titchfield Rd to the west and Gosport Rd to the east). The

scheme includes associated enabling works on B3334 Titchfield Rd and Gosport Rd and junction improvements within Stubbington Village.

The key overall objectives of the scheme are as follows:

Scheme Objectives	Key Outcomes Sought
To provide a viable alternative route for traffic wishing to travel from the Gosport Peninsula westwards towards the M27 Junction 9, whilst avoiding heavily congested parts of the transport network	<ul style="list-style-type: none"> • Reduced congestion and delays on the local highway network • More reliable / improved journey times for western access to / from the Gosport Peninsula • Traffic relief to Stubbington village –reduced severance • Support housing / jobs growth • Support inward investment at strategic growth sites, in particular the Solent Enterprise Zone
To help encourage regeneration, investment and growth in the area	
To help remove the transport barriers to growth	
To help unblock critical bottlenecks and congestion hotspots on strategic routes, in town centre areas and in areas of employment	
To provide new and improved existing infrastructure to help better manage traffic flows, particularly during peak periods	

Socio-demographics (vulnerable groups)

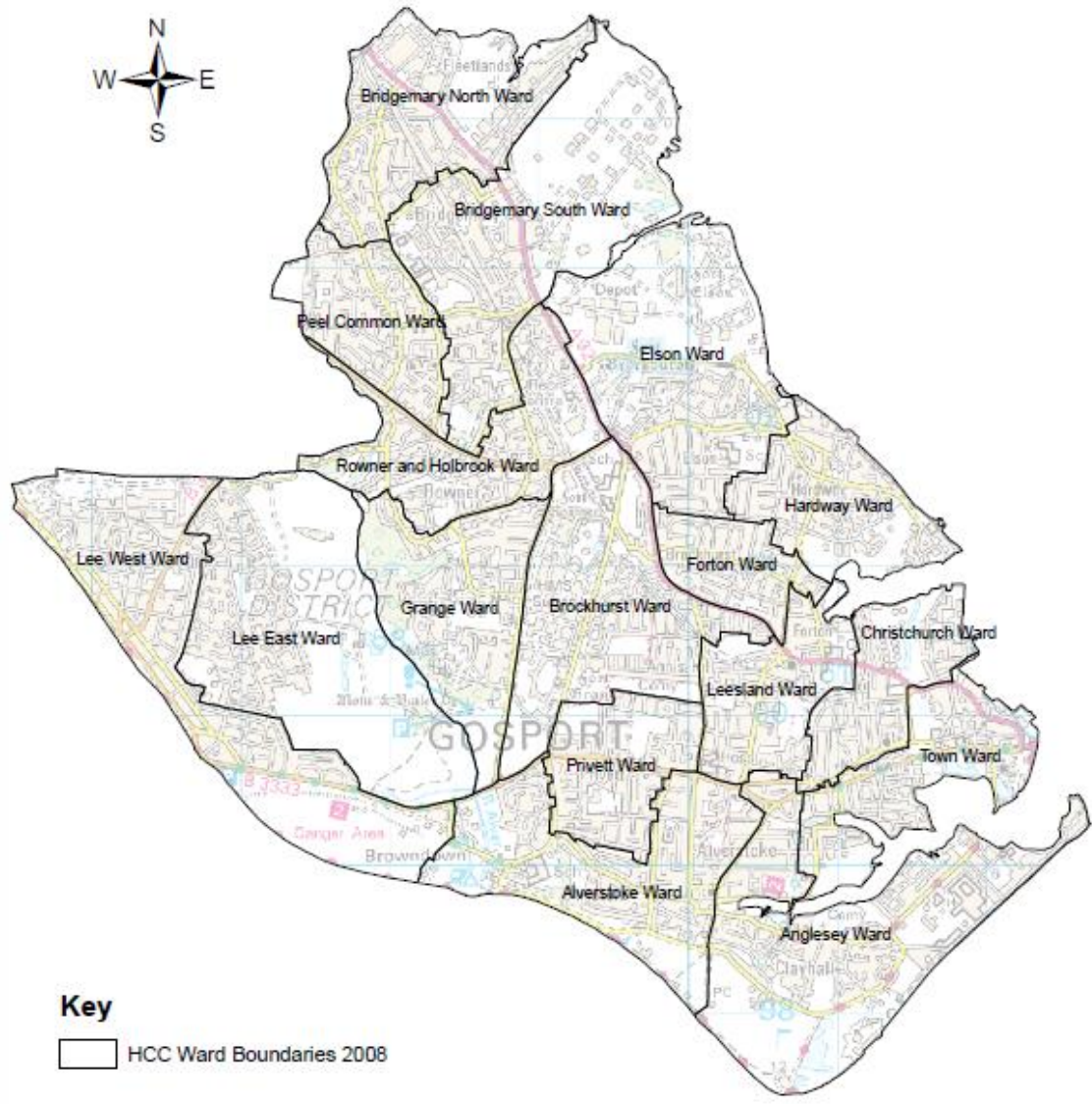
The different socio-demographic groups likely to be affected by the scheme have been investigated, with a particular focus on the vulnerable groups defined in TAG Unit A4.2.

Those affected by the scheme will include:

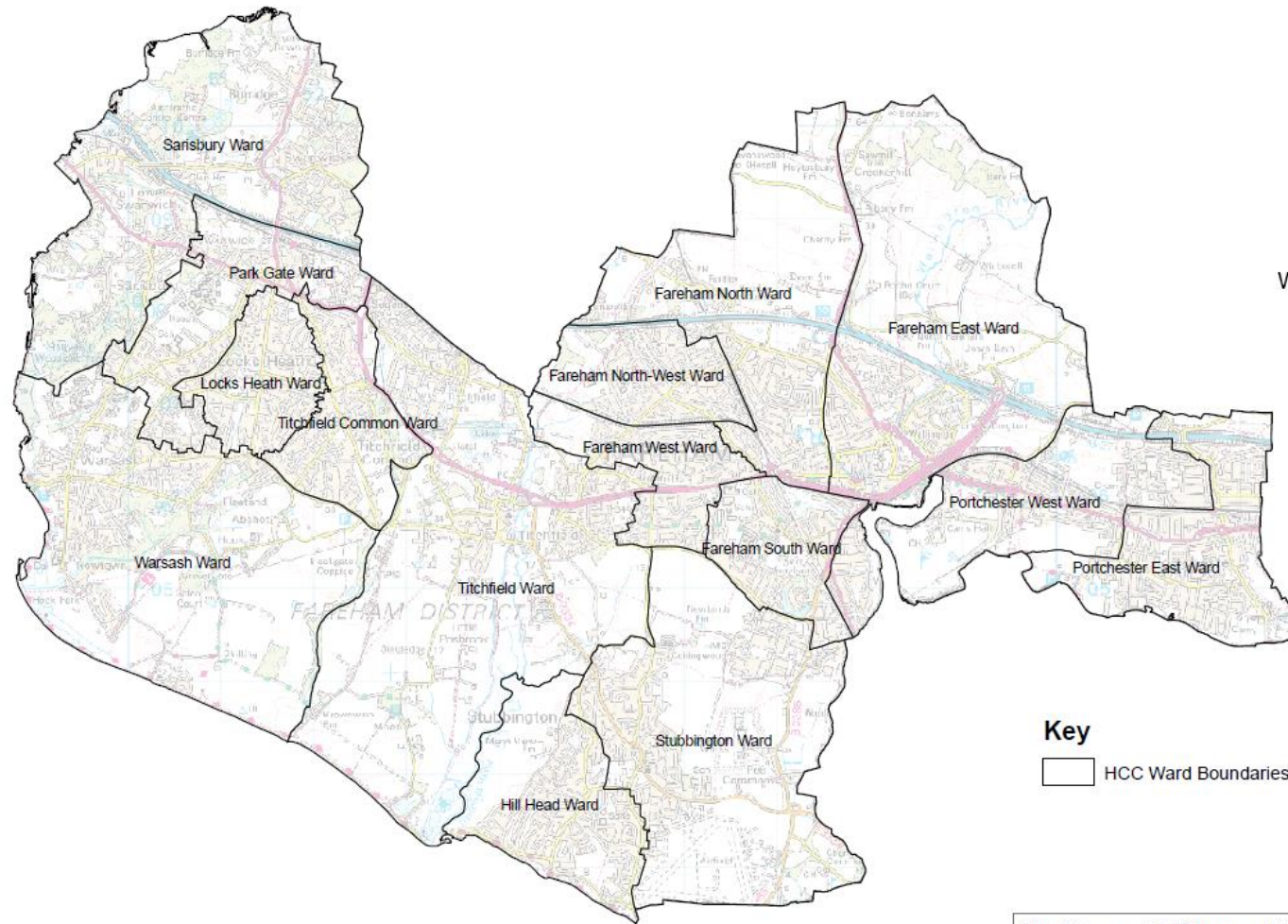
- The **transport users** that will be affected by the scheme (this would include car / bus / goods vehicles travelling to / from the Gosport peninsula; and users making more local trips, including those residents within Stubbington village;
- The **people living in areas** who may experience impacts of the intervention even if they are not users (e.g. within Stubbington, on Titchfield Road, Gosport Road and potentially others affected by wider impacts; and
- The **people travelling in areas** identified as likely to be affected by the intervention.

Socio-demographic data at a local level has been reviewed for the likely impact area. This has been compared against the average for the Fareham Borough and Gosport Borough authority areas and any significant differences identified in order to highlight particular concentrations.

Ward Boundaries for Gosport



Ward Boundaries for Fareham



Key

 HCC Ward Boundaries 2008

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Older People (65+)

2011 Census data has been investigated. There are greater proportions of older people (defined as over 65) in areas such as Lee West and Alverstoke in Gosport (approx. 40% and 35% respectively), which are located to the south west of the proposed Stubbington Bypass. These figures are higher than the average of 20% for Fareham district and 17% for Gosport district. One of the areas most local to the proposed Bypass is Stubbington which has above average levels of older people (28%). Some of the areas to the north of Stubbington, close to the proposed bypass route, also have notably higher concentrations of older people (c. 40%).

Young adults (16 to 25)

2011 Census data has been investigated. There are greater proportions of young adults in areas such as Town and Grange (Gosport), although the difference from the district average is not particularly marked (in the region of 14%, compared to 10%) – these areas are not within particularly close proximity to the scheme. Across the Gosport and Fareham districts, there is not a significant variation from the district average in general. Lee West has a lower proportion of young adults (6%) than the Gosport average and Alverstoke has lower proportion (7%) than the Fareham average (10%). The more localised areas to the scheme such as Stubbington have average levels of young adults.

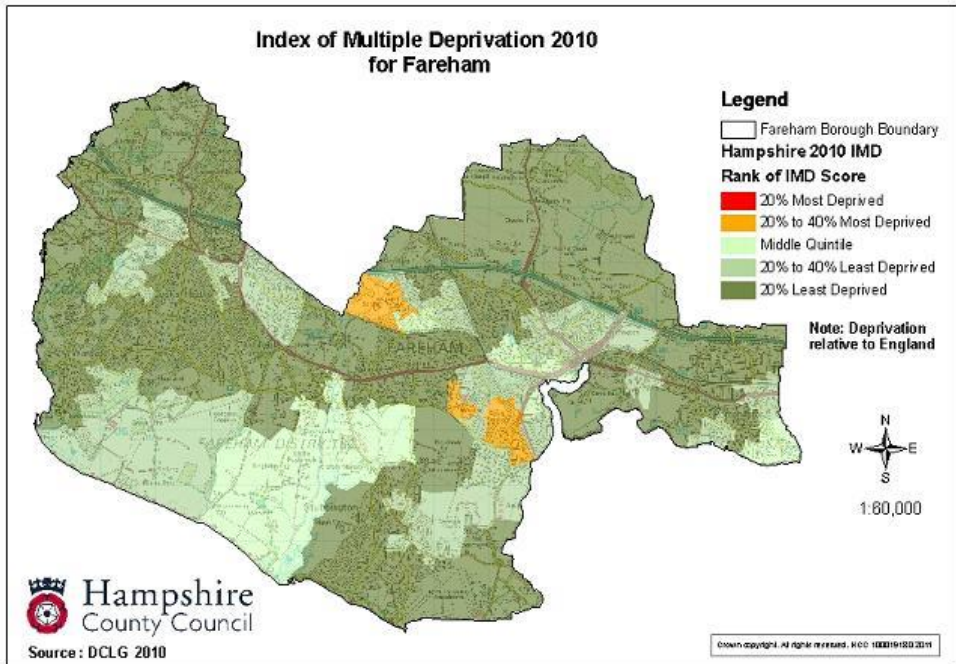
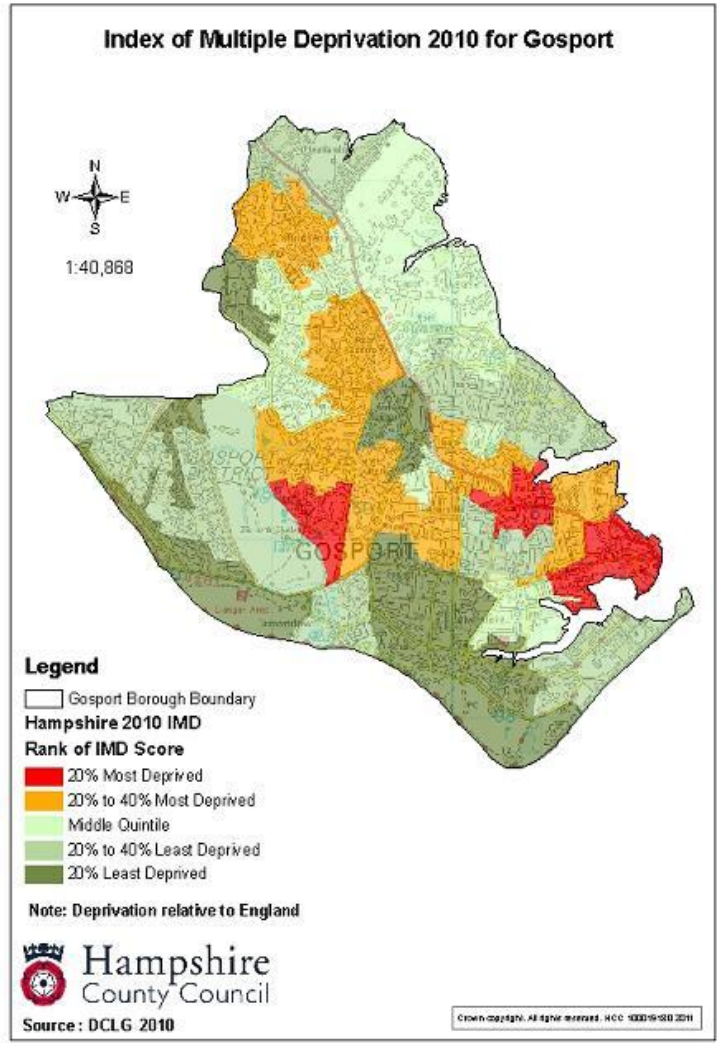
Children (<16)

2011 Census data has been investigated. The respective district averages of Gosport and Fareham are 20% and 17% respectively. There are greater proportions of children in areas such as Grange (32%) and Rowner and Holbrook (25%), which are both to the east of the scheme. Areas in close proximity to the scheme generally have levels of young children in line with district averages.

Low income groups

Index of Multiple Deprivation (2010) data (income domain) has been investigated to identify areas with higher proportions of low income households (i.e. those living in areas ranked highest in terms of income deprivation) – see diagrams overleaf.

There are higher proportions of low income households particularly in Grange, Town and Leesland (Gosport) and Fareham North West. Some areas within the vicinity of the scheme such as Peel Common and Rowner and Holbrook have slightly higher than average proportions of low income households. However, other nearby areas such as Stubbington and Titchfield have lower proportions of low income households. Additionally, the areas Locks Heath, Sarisbury, and Titchfield in Fareham have lower proportions of low income households.



Households without a car

2011 Census data has been investigated. The proportion of households without access to a car differs quite significantly between Fareham and Gosport, at 13% and 23% respectively. There are higher proportions of households without access to a car in Town, Leesland and Christchurch (Gosport). Stubbington and Peel Common, in the vicinity of the scheme, have broadly average levels of households without access to a car, whilst Titchfield, also nearby, has a much lower than average level. Similarly, the areas of Sarisbury and Titchfield Common have a much lower than average proportion of households without a car (<10%) when compared with the study area.

Disability

2011 Census data has been investigated. Areas with higher proportions of people with a long term health problem or disability include Alverstoke, Anglesey, Lee West and Town. There are also areas in the vicinity of the scheme with higher proportions of people with a long term health problem or disability, including Stubbington and Peel Common. Titchfield and Sarisbury are areas with much lower than average proportions of people with a long term health problem or disability.

Trip attractors / Amenities

It is not only resident population that may be affected by the scheme and trip attractors / local amenities can influence the concentration of certain groups within the impact area.

The key trip attractors within the vicinity of the scheme include:

- Lee-on-the-Solent Golf club (approx. 300m to the south of Peel Common Roundabout)
- Peel Common Infant School (approx. 300m to the north east of Peel Common Roundabout)
- Brookers Field Recreation Ground (approx. 100m to the north east of Peel Common Roundabout)
- Crofton Secondary School (approx. 500m to the west of Peel Common Roundabout)
- Crofton Junior and Hammond Infant Schools (In Stubbington. Approx 1110m south west of bypass)
- Crofton Community Centre (In Stubbington. Approx. 900m south west of the bypass)
- Baycroft School (approx. 500m to the west of Peel Common Roundabout)
- Meoncross School (In Stubbington. Approx 500m west of bypass)
- Crofton Anne Dale Junior and Infant School (In Stubbington. Approx. 1000m south west of the bypass)
- HMS Collingwood (approx. 50m east of bypass)
- Crofton Manor Equestrian Centre (In Stubbington. Approx 500m south west of bypass)
- Heathfield School (approx. 900m east of Titchfield Gyratory)
- Fareham College (approx. 1900m east of Titchfield Gyratory)
- St Francis Special School (approx. 900m east of Titchfield Gyratory)
- Ranvilles Infant and Junior School (approx. 900m east of Titchfield Gyratory)
- Titchfield Primary School (approx. 400m west of Titchfield Gyratory)

Major new employment development is also planned at the Solent Enterprise Zone (Daedalus), located to the south of the bypass.

Distributional Impacts – Summary assessment

The table that follows provides an initial summary assessment of potential distributional impacts. This draws upon the socio-demographic information described above, in addition to the expected scheme impacts (see the Appraisal Summary Tables).

The table includes the initial screening criteria set out in TAG Unit A4.2. If the expected impact does not meet the relevant minimum criteria then the impact has been screened out on this basis and no further consideration has been given to it.

Distributional Impacts – Summary assessment

Stubbington Bypass

Indicator	(a) Appraisal output criteria	Is the indicator (positive or negative) relevant?	Are there vulnerable and/ or low income groups and any sensitive receptors that may be affected?	What is the potential extent / nature of the impact on these groups / receptors?	Summary assessment
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 – the nature of the scheme means it will produce differing levels of benefit (and disbenefit) across different geographical sectors.	There are middle quintile / 20% least deprived areas within vicinity of the scheme. Higher proportions of low income households particularly in Grange, Town and Leesland (Gosport) and Fareham North West.	Greatest benefits fall predominantly within areas of Gosport (inc Lee-on-the-Solent and north Fareham). Slight disbenefits in the Stubbington village area.	Widespread distribution of benefits / disbenefits. Not possible to fully assess distribution across income groups at this level of assessment. Benefits fall to Gosport and north Fareham, where there is relatively high proportion of low income households.
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 – the nature of the scheme means it will produce differing levels of benefit (and disbenefit) across different geographical sections.	Areas to the north east of Stubbington, including Meoncross school. Crofton and Baycroft Schools are located in the vicinity of the B3334. Greater proportions of children in areas such as Rowner and Holbrook which is to the east of the scheme. Average levels in the vicinity of the scheme. The areas impacted in Stubbington	The scheme includes a new alignment which will re-locate the principal traffic noise source. Increase in noise levels in the area around the new bypass – affecting properties in the north east of Stubbington, and on Titchfield Road at the western end. Decreases in noise on the B3334 through	Localised increases / decreases in noise expected. Preliminary analysis suggests potential increases in noise are unlikely to disproportionately affect vulnerable group (children) or low income groups. Beneficial and adverse noise impacts may be expected in relation to

Indicator	(a) Appraisal output criteria	Is the indicator (positive or negative) relevant?	Are there vulnerable and/ or low income groups and any sensitive receptors that may be affected?	What is the potential extent / nature of the impact on these groups / receptors?	Summary assessment
			are generally below average in the Index of Multiple Deprivation.	Stubbington.	some sensitive receptors (e.g. schools).
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 – The construction of a new bypass will alter the road layout and change vehicle flows and traffic conditions in the area.	Greater proportions of children in areas such as Rowner and Holbrook which is to the east of the scheme and may experience a small increase in emissions. Several schools in vicinity of Titchfield Gyratory. Peel common and Rowner and Holbrook also have slightly higher levels of deprivation. Stubbington has a higher than average proportion of older people and will see a large decrease along the B3334.	Rowner and Holbrook and Peel Common to the east, and parts of Titchfield to the west are identified as experiencing a slight disbenefit (increase in vehicle emissions), while Stubbington / Hill Head are predicted to experience more significant benefits. In terms of regional air quality, NOX emissions are predicted to increase 0.1% and PM10 emissions are predicted to decrease 0.2 – 0.4%.	Potential beneficial impact on air quality for older people due to higher than average levels in Stubbington area. Potential to adversely affect vulnerable group (children) or low income groups, due to higher concentrations of these groups in areas predicted to experience an increase in vehicle emissions.
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 – The construction of a new bypass will alter the road layout change vehicle flows in the area. Scheme also includes new / amended pedestrian	Greater proportions of children in areas such as Rowner and Holbrook which is to the east of the scheme. Average levels in the vicinity of the scheme. Meoncross School within	Reduced traffic flow on the B3334 through Stubbington expected to have a positive impact in relation to accidents. The overall increase in vehicle kilometres may slightly	Potential beneficial safety impacts expected on vulnerable group (older people), with higher concentrations in vicinity of the scheme in

Indicator	(a) Appraisal output criteria	Is the indicator (positive or negative) relevant?	Are there vulnerable and/ or low income groups and any sensitive receptors that may be affected?	What is the potential extent / nature of the impact on these groups / receptors?	Summary assessment
		and cyclist facilities.	Stubbington and Crofton school. Concentrations of older people present in the vicinity of the scheme. Middle quintile / 20% least deprived areas within vicinity of scheme.	offset some of the positive impacts on the B3334.	Stubbington. Overall the impact of the scheme on accidents has been assessed as slight beneficial.
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 have any material impact on the criteria specified for security.			
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 – The bypass will physically impact on some pedestrian / cyclist rights of way, however informal crossing facilities will be provided on all. Redistribution of traffic will result in localised increases and decreases in traffic flow.	Higher proportion of older people in Stubbington. Higher proportion of people with a disability in Stubbington and Peel Common. Areas with high proportions of children such as Rowner and Holbrook.	Significant reduction of traffic flows on B3334 through Stubbington expected to have a beneficial impact on severance. Improved crossing facilities at Peel Common Roundabout and Titchfield gyratory contributes to reducing severance.	Slight beneficial impact expected through removal of barriers to pedestrian movement in areas with higher concentrations of vulnerable groups.
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).	Yes – Bus routes are not expected be altered. Potential impacts on journey times / reliability which could affect	Higher proportions of households without access to a car in Town, Leesland and Christchurch (Gosport). Concentrations of older	The reduction of traffic though Stubbington is expected to improve bus service reliability and punctuality (service 21 /21A),	No particular disproportionate impacts identified based on preliminary assessment.

Indicator	(a) Appraisal output criteria	Is the indicator (positive or negative) relevant?	Are there vulnerable and/ or low income groups and any sensitive receptors that may be affected?	What is the potential extent / nature of the impact on these groups / receptors?	Summary assessment
		frequencies.	people present in the vicinity of the scheme. Middle quintile / 20% least deprived areas within vicinity of scheme.	without necessarily reducing journey time. Bus route X5 could experience additional delays due to new signals on the route along Peak Lane.	
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]).	No – the scheme itself is not expected to change costs of travel materially. The TUBA analysis indicates some increases in vehicle operating costs (likely to be a result of distance travelled on the new bypass)s, but these are not considered to be significant in terms of personal affordability. Overall impact assessed as neutral.			