A350 Yarnbrook and West Ashton Relief Road

Outline Business Case Appendices: Part 2

Wiltshire Council

24 March 2015

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Part 2:

Appendix D. Forecasting & Economic Appraisal Report

A350 Yarnbrook and West Ashton Relief Road OBC – Appendix D

Forecasting & Economic Appraisal Report

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1. Introduction

1.1. Background

Atkins was commissioned by Wiltshire Council to develop an Outline Business Case (OBC) for the A350 Yarnbrook and West Ashton Relief Road scheme which has been included in the Swindon & Wiltshire Strategic Economic Plan (SEP) submitted to the Government on 31st March 2014. The A350 Yarnbrook and West Ashton Relief Road will have a direct and strong relationship with the Ashton Park Urban Extension which is included in the emerging Wiltshire Core Strategy. Ashton Park Trowbridge Ltd and Persimmon Homes are planning to submit an outline planning application for the site, including proposals for the A350 Yarnbrook and West Ashton Relief Road, to Wiltshire Council in early 2015.

The approach for the appraisal of the A350 Yarnbrook and West Ashton Relief Road was approved by the SWLTB at its meeting in July 2014. As part of the economic appraisal for the OBC, the original Trowbridge SATURN highway model needed to be re-validated using traffic counts undertaken in 2014. Details of the re-validation of the base year highway assignment model can be found in Local Model Validation Report, August 2014. Details of the forecasts and economic appraisal undertaken using the SATURN model are contained within this Forecasting & Economic Appraisal Report.

1.2. Scheme Objectives

The objectives of the A350 Yarnbrook and West Ashton Relief Road scheme as set out in the Appraisal Specification Report (ASR), produced in August 2014, are to:

- Reduce traffic queues and delays on the A350 corridor at West Ashton and approaching Yarnbrook Roundabout;
- Improve journey time reliability on the A350 corridor;
- Facilitate housing and employment growth in the Ashton Park (Trowbridge) Urban Extension; and
- Reduce the number of road accidents in the West Ashton area.

1.3. Scope of the Report

This Forecasting & Economic Appraisal Report describes the basis for the future year model forecasting, the assumptions adopted and the results. Results include the forecast impacts on travel demand, traffic flows and highway network operation as a result of the A350 Yarnbrook and West Ashton Relief Road. This report also describes the economic appraisal outputs, including user benefits, accident impacts, carbon impacts, reliability and land value uplifts.

1.4. Structure of the Report

This report is structured as follows:

- Chapter 2 provides an overview of the forecasting approach;
- Chapter 3 considers the forecast highway network;
- Chapter 4 discusses the forecast matrix development process;
- Chapter 5 presents the traffic forecasts and the network statistics and journey times;
- Chapter 6 presents the economic appraisal results for the Core Scenario;
- Chapter 7 discusses the results of the Sensitivity Test; and
- Chapter 8 contains the summary and conclusions.

1.5. Sources

A number of existing reports and models were used in compiling this report:

- Trowbridge Traffic Model – Model Development and Validation Report – September 2009, PFA Consulting;
- Trowbridge Traffic Model – 2026 Model Forecasting ‘Problems & Issues’– June 2011, PFA Consulting;

- 2009 Trowbridge SATURN models for AM and PM peak hour developed by PFA Consulting;
- 2026 Trowbridge SATURN models for AM and PM peak hour developed by PFA Consulting;
- Ashton Park, Trowbridge Transport Assessment Report – June 2014, PFA Consulting;
- Major Transport Schemes Appraisal Specification Report – Yarnbrook and West Ashton Relief Road (version 3.0) – 31 July 2014; and
- Local Model Validation Report, August 2014, Atkins.

2. Traffic Model Development

2.1. Introduction

This chapter provides an overview of the original Trowbridge Traffic Model and the re-validated version of this model. A fuller description of the model development and re-validation process is presented in the Local Model Validation Report, August 2014.

The base year highway model operates with 125 zones, of which 14 zones are external zones. The Trowbridge Traffic Model, which is a SATURN model, has a single user class with demand represented as passenger car units (PCUs).

The modelled time periods in the base and forecast years are as follows:

- Morning peak hour from 08:00 to 09:00; and
- Evening peak hour from 17:00 to 18:00.

2.2. Base Demand

The 2014 base matrix from the re-validated model has been factored back to 2009 using the growth factors (2009 to 2014) computed for the re-validation. This has been done to ensure that the model base year remains as 2009, allowing for direct comparisons between the re-validated model and the Ashton Park Transport Assessment Report.

2.3. Forecast Years

Model forecasts have been prepared for 2021 and 2026 for the Without Scheme (Do Minimum - DM) and With Scheme (Do Something - DS) scenarios.

2.4. Demand Forecasting

Future year demand estimates for each of the defined scenarios are based on a number of sources including:

- The latest version of TEMPRO v6.2;
- National Road Traffic Forecast (NRTF09);
- TRICS database version 2013(b) v6.12.2; and
- Trowbridge Traffic Model 2026 Model Forecasting 'Problems & Issues' report.

2.5. Forecast Traffic Growth Rates

The Trowbridge Traffic Model takes as its starting point the planning forecasts from the latest version of TEMPRO (V6.2) and NRTF for traffic growth as set out in TAG Unit M4.

TEMPRO (V6.2) was used to calculate background growth rate for internal traffic after duly applying the income and fuel adjustment as per TAG Unit 3.15.2[1] 'Use of TEMPRO data'.

The growth rate for external to external trips was calculated using the NRTF09, with TEMPRO factors used to tailor the NRTF growth rates to local circumstances. Forecast growth rate calculations are detailed the following sections.

[1] Income and Fuel Adjustment factors are adopted from TAG 3.15.2 as the base year for the current forecasts is 2009. 2009 adjustment factors are not available in the latest TAG data book.

2.6. Forecasting Trip Generation Methodology

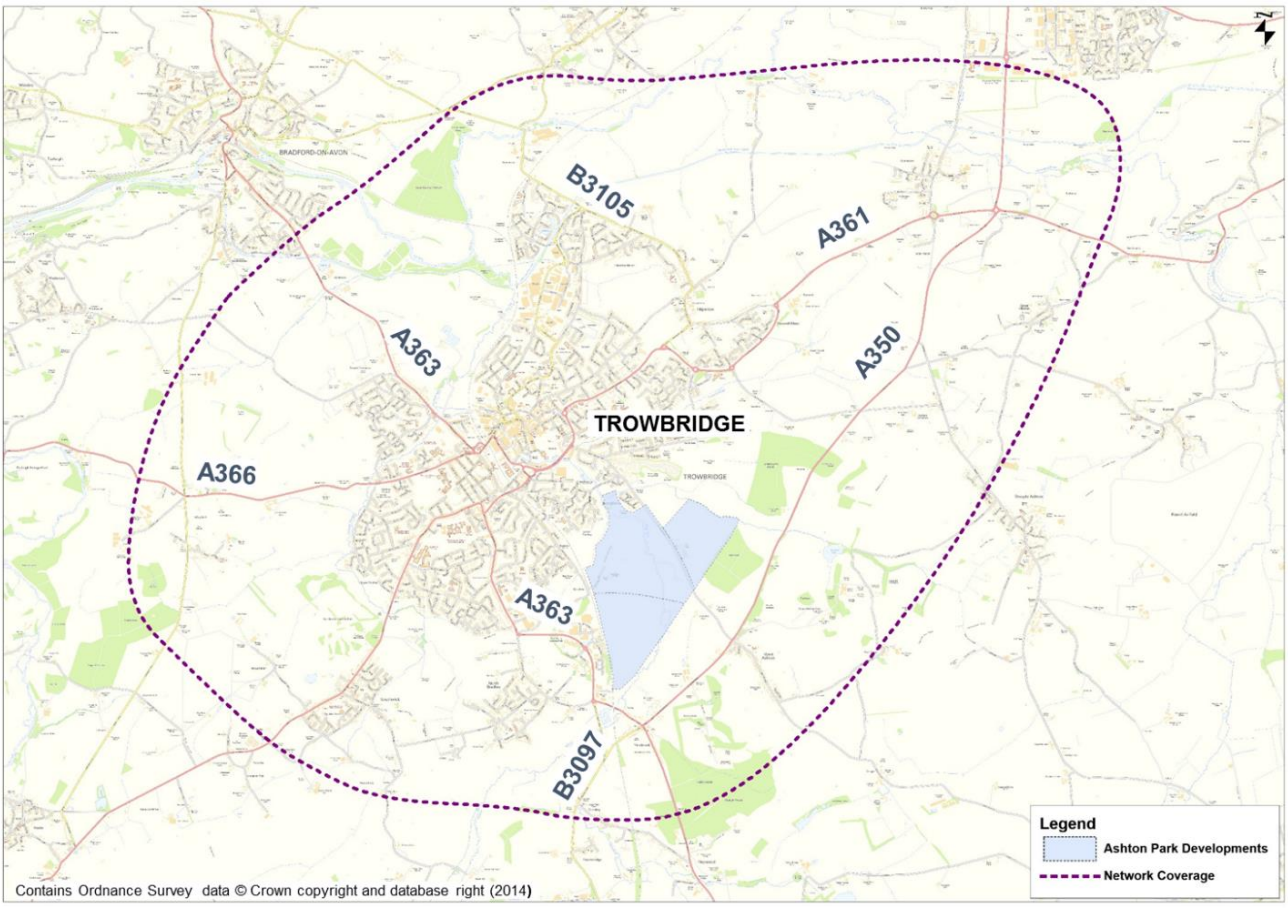
The methodology adopted for the trip generation forecasts was consistent with the approach used in the original Trowbridge Traffic Model:

- Step 1: Split the base year Origin Destination (O/D) matrix into two matrices, an 'external' matrix containing external to external trips only, and an 'internal' matrix which only contains trips with an origin and/or a destination in Trowbridge;
- Step 2: Obtain the base year (2009) trip ends by time period and by internal and external zones from the matrices described in step 1;
- Step 3: Calculate the background growth rate for the forecast years 2021 and 2026 from TEMPRO for Trowbridge (internal zones) by time period and average weekday (using the alternative planning data option in TEMPRO assuming no new development);
- Step 4: Compute the income and fuel adjustment factors to be applied for the internal zones to represent the impact of income growth and fuel cost changes;
- Step 5: Compute the combined growth rate for internal traffic by adjusting the Trowbridge TEMPRO growth rate after alternative assumptions and applying fuel and income adjustment factors;
- Step 6: Calculate the growth rate for the forecast years 2021 and 2026 from TEMPRO for Wiltshire (external zones) by time period and average weekday;
- Step 7: Compute the combined growth rate for external traffic by adjusting the regional National Road Traffic Forecast (NRTF09) growth rate using the ratio of TEMPRO Zone (Trowbridge) car driver trip end growth for respective periods to regional (Wiltshire Count) average weekday car driver growth factor derived from TEMPRO;
- Step 8: Compute the development trip ends from the committed developments based on TRICS trip rate for housing units and the trip rates from forecasting reports for other developments;
- Step 9: Compute the forecast trip ends for each forecast year by adding the background growth and the committed housing units trips;
- Step 10: Furness the base O/D matrices by trip ends obtained in step 9 to obtain forecast year matrices by time period for the Without Scheme scenario;
- Step 11: Add the committed developments other than the housing units to the matrix, which are obtained from Step 10 based on the distribution pattern of a similar zone for each category of development;
- Step 12: Compute the trip generation from the proposed developments at Ashton Park based on land use from TRICS and add it to the Without Scheme trip ends; and
- Step 13: Furness the base O/D matrices by trip ends obtained in Step 11 to obtain forecast year matrices by time period for the With Scheme scenario.

2.7. Study Area

The extent of the modelled area for the Trowbridge Traffic Model along with the proposed developments at Ashton Park is presented in Figure 2–1.

Figure 2–1 Modelled Area



2.8. Committed Developments

The proposed Ashton Park development site is surrounded by a variety of land uses, including residential development, the Castle Mead Development (currently under construction), and Biss Meadows Country Park to the north; Biss Wood and farmland to the southeast; and the Wessex Mainline railway, the White Horse Business Park, and residential development to the west.

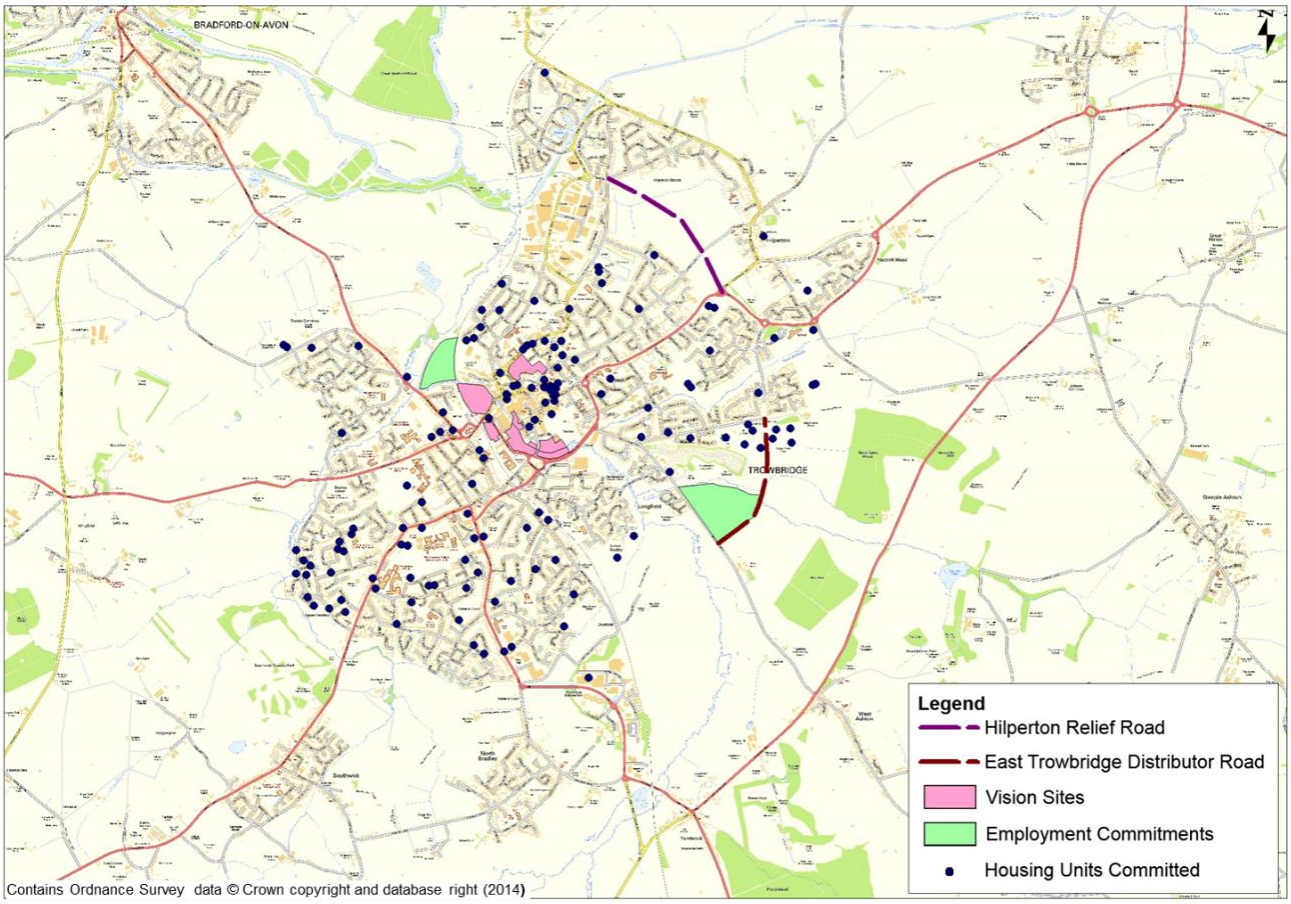
The following committed developments were adopted from Trowbridge Traffic Model 2026 Model Forecasting Problems & Issues Report (2011) (including development completed since 2009). By assuming that these developments will be completed by 2026, a linear growth from 2009 until 2026 was used to arrive at development data for 2021.

- East of Trowbridge, Castle Mead Development (under construction);
- Bradford Road - 4.4 Hectares of Employment;
- West Ashton/Biss Farm – 12.1 Hectares of Employment;
- The Gateway (former Wincanton site) - 7,000 sq.m Retail /1,200 sq.m Office;
- Brewery Gate - Former Ushers Bottling Plant - 44,000 sq.ft Foodstore;
- Pork Farms, Former Bowyer Site - 60,000 sq.ft Foodstore; and
- East Wing County Hall - 8,000 sq.m Leisure facility.

In addition to the above, information on completed housing units between 2009 and 2014 has been obtained from Wiltshire Council (any lost housing units have also been accounted for). The committed housing units between 2014 and 2021 and 2014 and 2026 have been obtained from the Trowbridge Traffic Model 2026 Model Forecasting Problems & Issues Report (2011), and clarifications/updates from Wiltshire Council. The total number of committed housing units between 2009 and 2021 is 2,311 and remains the same for 2026.

Figure 2–2 shows the location of the committed developments. Committed developments remain the same in both Without Scheme and With Scheme scenarios.

Figure 2–2 Committed Developments



2.9. Proposed Developments

The proposed Ashton Park development site is situated approximately 2 km to the south-east of the centre of Trowbridge and lies to the northwest of the A350 and to the east of the Wessex Mainline railway. The development proposal for Ashton Park is for a comprehensive, mixed-use, sustainable urban extension to Trowbridge. Figure 2–3 shows the location of the proposed developments; the proposed development at Ashton Park will comprise:

- Up to 2,600 dwellings;
- 15 hectares of employment land to support a mix of B1,B2 & B8 use classes;
- Two mixed use local centres;
- Two primary schools – Total 840 pupils;
- A site for a secondary school – Total 1200 pupils;
- Areas of public open space including extensions to the Biss Meadows Country Park; and
- The provision of the A350 Yarnbrook and West Ashton Relief Road and distributor roads.

The development at Ashton Park consists of both transport and development elements, neither of which will proceed without the other and hence the appraisal follows TAG Unit A2-3 (Transport Appraisal in Context of Dependent Development).

The WebTAG approach to testing for dependency requires not only a test of whether the entire development is dependent upon transport improvements, but also to establish how much of the development is dependent, by considering how much of it could go ahead without improving the network, such that a reasonable level of service is still provided.

The value of this is to define a Without Scheme (DM) scenario in which the maximum level of development which the network can support is included, with the remaining development forming the With Scheme (DS) scenario. The proportion of land value gains attributable to the dependent portion of the development should then be calculated as a part of the Scheme value, rather than assuming that the impact of the whole development is enabled by the transport improvements.

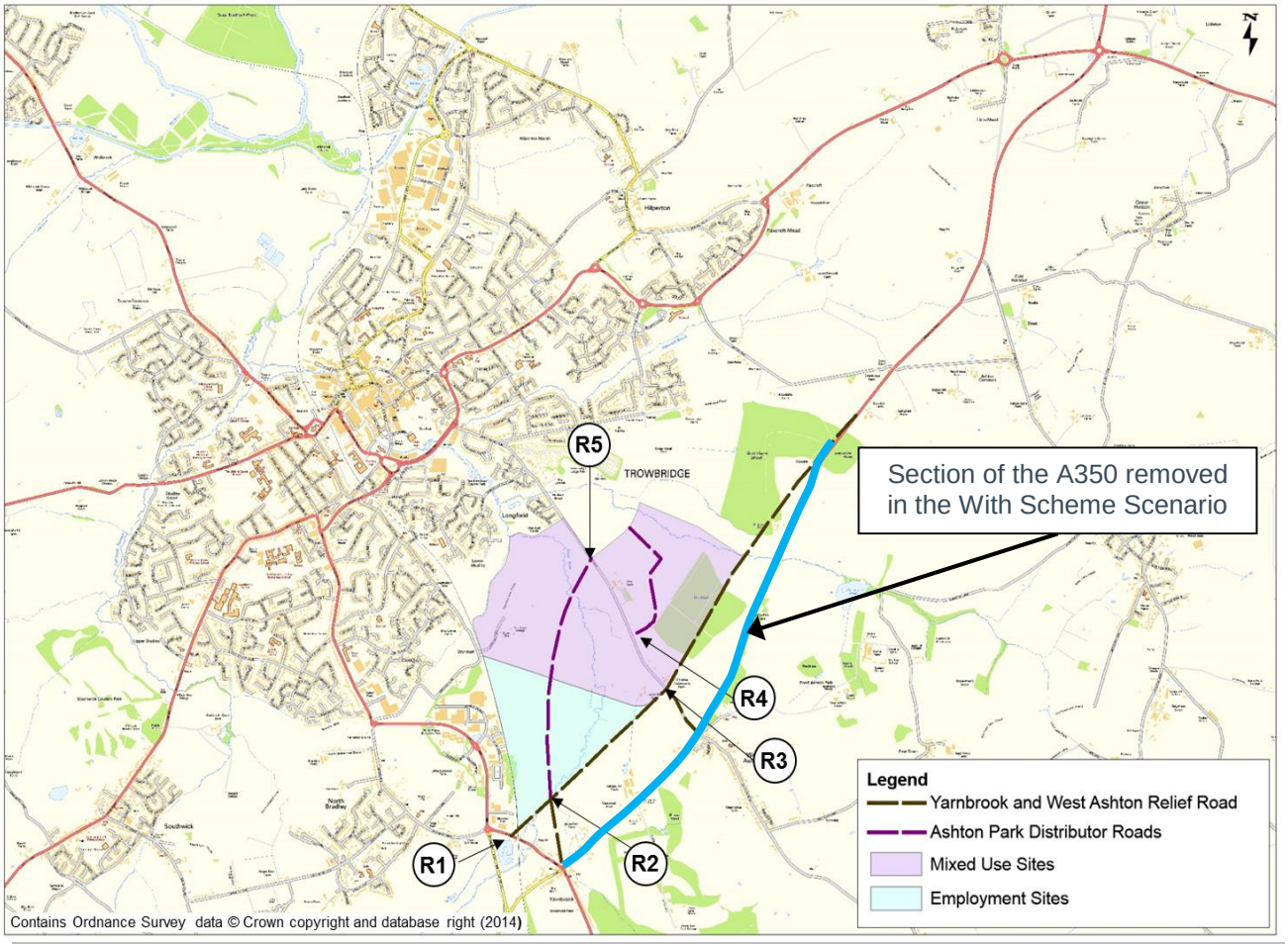
However, for this stage of testing, the additional modelling required is not considered proportionate to the assessment required. In this situation the developer has made it clear that should the whole development not be enabled, there will be no interest in implementing fractions of that development which can be supported by the existing infrastructure. Therefore a Without Scheme scenario, with only part of the Ashton Park development included, is not a realistic scenario to model.

In order to take an approach appropriate for dependent development, an alternative method of appraisal has been undertaken, which avoids the inaccuracies which the WebTAG methodology seeks to mitigate while minimising the need for additional modelling. As part of the dependent development approach, two scenarios were modelled:

- **Without Scheme:** *without* the proposed Ashton Park development and *without* the A350 Yarnbrook and West Ashton Relief Road (DM);
- **With Scheme:** *with* the proposed Ashton Park Development and *with* the A350 Yarnbrook and West Ashton Relief Road (DS).

The standard approach for a scheme such as this, which involves increased trip growth, would be to constrain both the Without Scheme and With Scheme scenarios to TEMPRO growth levels, resulting in the same increase in trips occurring across both the scenarios. However, it is unlikely that such development (and therefore trip growth) could be accommodated anywhere in Trowbridge other than at Ashton Park, which is dependent on the A350 Yarnbrook and West Ashton Relief Road. Due to this dependency, trips to and from the Ashton Park developments are not included within the Without Scheme scenario, resulting in much higher trip numbers in the With Scheme scenario.

Figure 2–3 Proposed Developments



3. Network Development

3.1. Introduction

This chapter describes the development of highway networks for Without Scheme (DM) and With Scheme (DS) scenarios for each forecast year.

3.2. Without Scheme Network

With regard to the future year Without Scheme network scenario, the probability of committed schemes to be implemented has been established in consultation with Wiltshire Council and, from this, the Without Scheme network has been prepared. The schemes included in the Without Scheme network are:

- East Trowbridge Distributor Road (under construction) - connecting the A361 Hilperton Drive with West Ashton Road, secured by the Castle Mead development;
- Hilperton Relief Road - connecting A361 Trowbridge Road with Canal Road/Wyke Road/Horse Road, secured by the Castle Mead development;
- West Ashton Road Improvements (complete) - secured by the Castle Mead development;
- Yarnbrook Roundabout Improvements - secured by the Biss Farm development;
- A361/West Ashton Road Roundabout Improvements - secured by the Biss Farm development; and
- West Ashton Crossroads improvement (complete) - secured by the Biss Farm development/ Castle Mead development.

3.3. Excluded Schemes

The following future schemes were not included in the forecast year models; the reasoning for not including is also given.

- Vehicular access to Green Lane (potential bus link) – bus gate associated with the Castlemead development; scheme would not affect the overall operation of the highway network;
- Hill Street/Broad Street one-way operation amendments and altered geometry – part of Emerging Strategy, but not a committed scheme and not part of a major scheme;
- A363 Holy Trinity Gyratory - enhance pedestrian realm and traffic capacity – part of Emerging Strategy, but not a committed scheme and not part of a major scheme; and
- B3015 Staverton Bridge Improvement – part of Emerging Strategy, but not a committed scheme and not part of a major scheme.

3.4. With Scheme Network

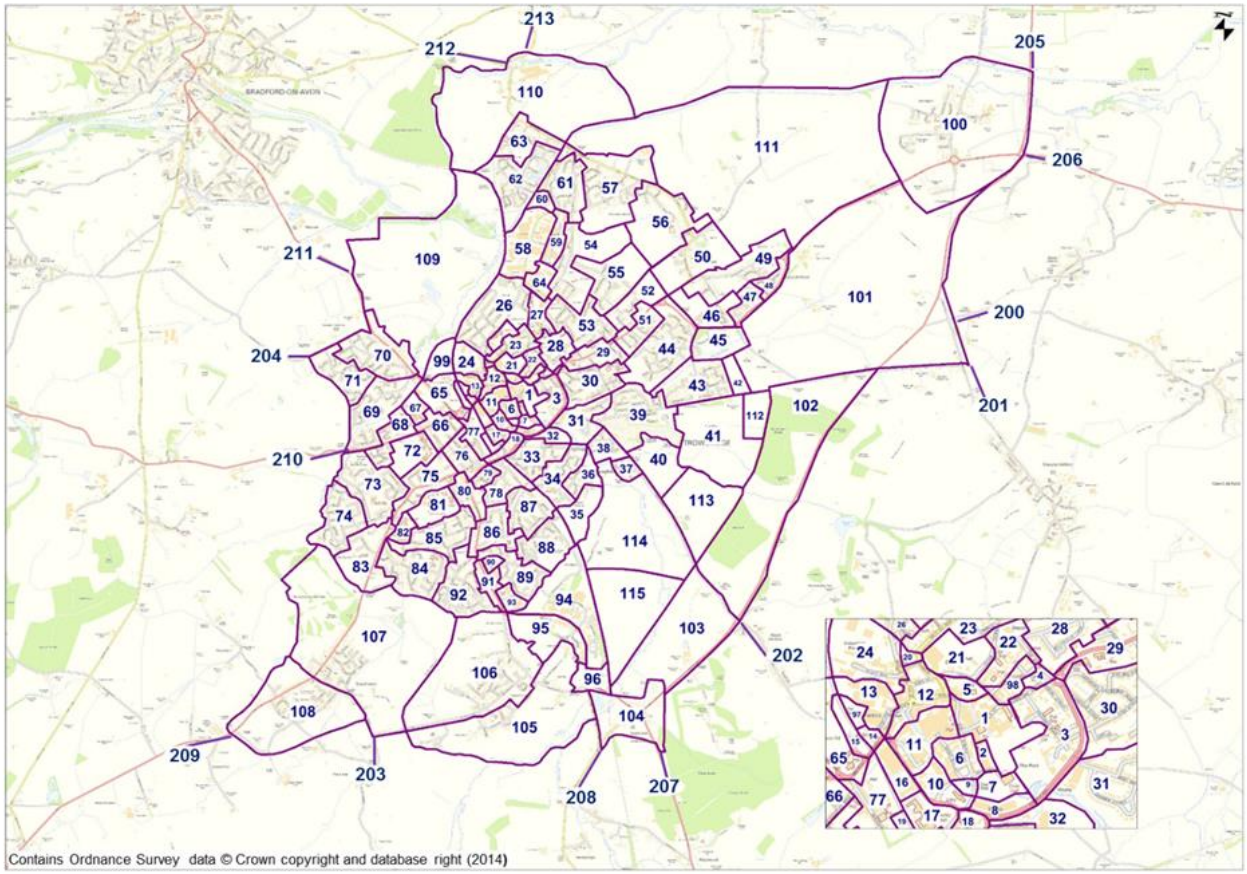
The With Scheme network includes all the schemes listed in the Without Scheme network, in addition to the proposed A350 Yarnbrook and West Ashton Relief Road, Ashton Park distributor roads and the removal of A350 between West Ashton Cross Roads and Yarnbrook Roundabout.

In the absence of drawings for the distributor roads with the level of detail required for highway network model development, the same network coding as provided by PFA Consulting was adopted. It has been assumed that both the relief road and distributor roads are in place for 2021 and have therefore been included in all forecast year runs.

3.5. Development Zones

To allocate the trips from the proposed Ashton Park development, the base year Trowbridge SATURN model zoning system was refined to incorporate the developments. The new zones 113 and 114 represent the housing and developments and zone 115 represents the employment site. The forecast year zoning system for the Trowbridge Traffic Model comprises of 115 internal zones (zone numbers - 1 to 115) and 14 external zones (zone numbers - 200 to 213). Figure 3–1 shows the zone plan adopted for the forecast year models.

Figure 3–1 Forecasting Zone Plan



The forecast networks for the Without Scheme and With Scheme scenarios are shown in Figure 3–2 and Figure 3–3.

Figure 3–2 Without Scheme SATURN Network

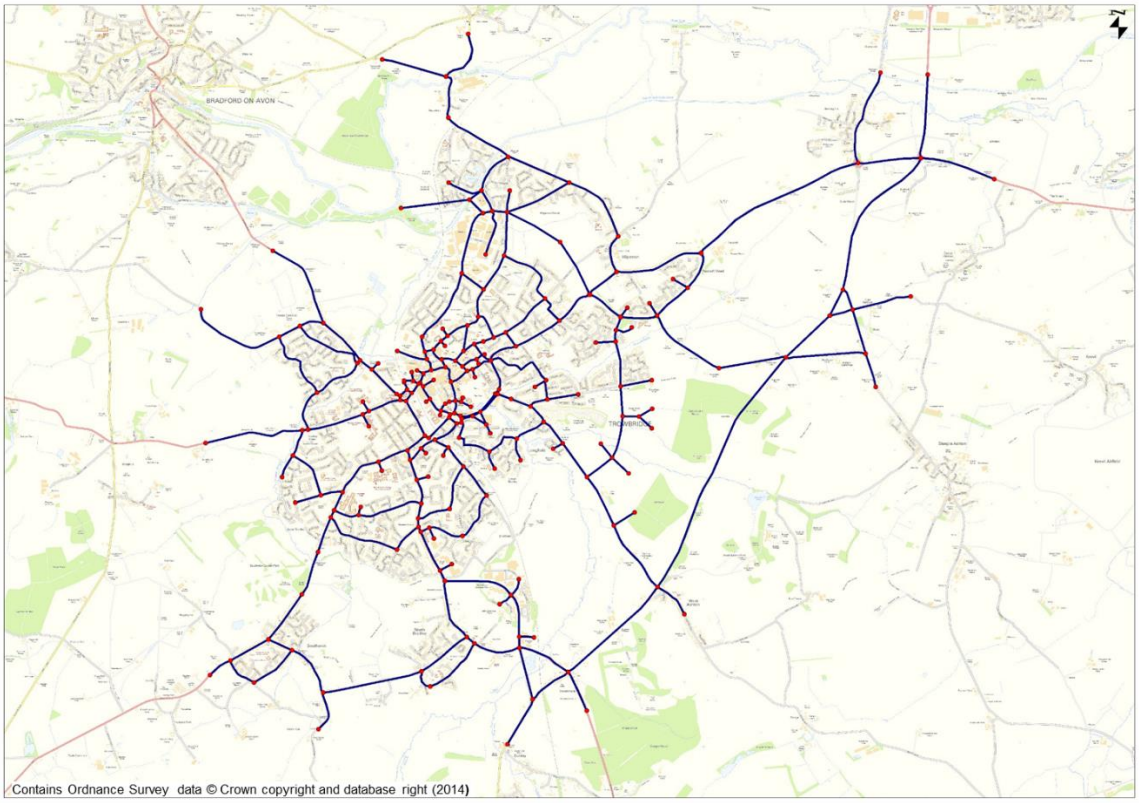
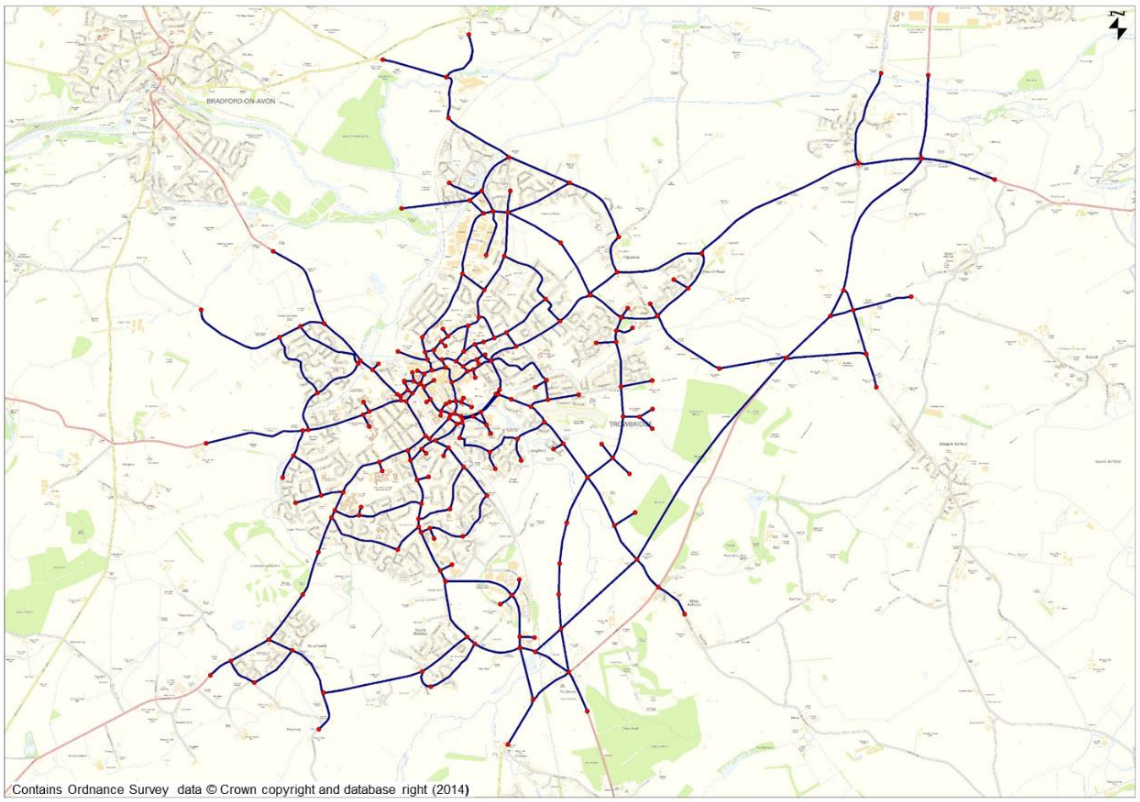


Figure 3–3 With Scheme SATURN Network



4. Matrix Development

4.1. Introduction

The principal source of traffic growth factors was the TEMPRO Dataset version 6.2. TEMPRO is a program that provides projections of growth over time for use in local and regional transport models. Based on the outputs provided by the Department for Transport's (DfT) National Trip End Model (NTEM 6.2), it presents projections of growth in planning data, car ownership and resulting growth in trip-making by different modes under a constant cost assumption.

The background growth in demand is applied through growth factors derived for the study area. In addition, new developments will add to the established land uses, leading to new travel patterns locally. The new development trips are calculated using trip rates appropriate for the proposed land use based on the TRICS database.

4.2. External to External Traffic

For the external to external trips the DfT published growth forecasts from the NRTF09 have been used as the basis, with TEMPRO factors used to tailor the published traffic forecasts to local circumstances.

The NRTF forecasts give traffic growth by region, road type and whether the area is built up or not. For the external to external traffic the NRTF traffic growth on Principal Roads in the South West region was adjusted by applying the ratio of car driver trip end growth for the Trowbridge area for the relevant time period to the average day car driver trip end growth for the Wiltshire Region (both from TEMPRO).

Table 4–1 shows the external to external growth factors derived from TEMPRO for both the AM and PM peak periods.

Table 4–1 External to External Traffic Growth Factors

Time Period	Forecast Year-2021	Forecast Year-2026
AM	1.143	1.240
PM	1.153	1.256

4.3. Internal Traffic

Trips which have either an origin and/or a destination within the Trowbridge TEMPRO zone are assumed as internal traffic and the traffic growth factors were calculated using data for the Trowbridge TEMPRO zone.

The set of growth factors extracted from TEMPRO for both the forecast years are based on the assumptions of no growth between the base and future years for households or jobs. This provides background growth rather than full growth to avoid overestimating the increase in trips when the future developments are added. The 'alternative planning data' facility within the TEMPRO software was used to set 2021/2026 planning data to 2009 values.

In accordance with good practice the local TEMPRO growth factors were adjusted by applying appropriate global adjustment factors to represent the impact of income growth and fuel cost changes.

Table 4–2 shows the background traffic growth factors derived from TEMPRO for Trowbridge for both origins and destinations between the base and forecast years for the AM and PM peaks allowing for adjustments for fuel and income.

Table 4–2 Internal Traffic Growth Factors

Time Period	Forecast Year-2021		Forecast Year-2026	
	Origin	Destination	Origin	Destination
AM	1.051	1.124	1.062	1.154
PM	1.120	1.075	1.151	1.093

The derived growth factors were applied to the 2009 base year trip ends to produce the forecast background traffic growth.

4.4. Traffic Generation from Committed Developments

The committed developments comprise housing units, employment sites and other retail and leisure sites including the vision sites. TRICS database 2013(b) v6.12.2 has been used to determine the trip rates by vehicle for the residential trips. The vehicle trip rates are converted to PCU trip rates for deriving the trip ends. These housing units were assumed to be a mix of houses privately owned and houses for rent (70:30 proportion). The total number of committed housing units between 2009 and 2021 is 2,311 and remains the same for 2026. The list of committed developments is presented in Appendix A.

4.4.1. Residential

TRICS trip rates for houses privately owned and houses for rent in the AM and PM peak are provided in Table 4–3.

Table 4–3 TRICS Trip Rate – Residential (trips per dwelling)

Time Period	Houses Privately Owned		Houses for Rent	
	Arrival	Departure	Arrival	Departure
AM	0.144	0.406	0.100	0.187
PM	0.400	0.228	0.223	0.164

The trip rates from other committed developments and vision sites for other land use types such as employment, retail, leisure, etc. were the same as those used in the PFA Traffic Forecasting Report.

4.5. Traffic Generation from Ashton Park Development

All sites identified in the development plan were assigned a trip rate for each time period based on the TRICS database 2013(b) v6.12.2. The following sections present the trip rate by land use type for the different development types.

4.5.1. Employment

TRICS trip rates for employment (industrial estate uses) in the AM and PM peak are provided in Table 4–4.

Table 4–4 TRICS Trip Rate – Employment (Industrial Estate) (trips per 100 Sq. M.)

Time Period	Employment (Industrial Estate)	
	Arrival	Departure
AM	0.486	0.262
PM	0.140	0.384

4.5.2. Education – Primary School

TRICS trip rates for a primary school in the AM and PM peak are provided in Table 4–5.

Table 4–5 TRICS Trip Rate – Education (Primary School) (trips per 100 Sq. M.)

Time Period	Education-Primary School	
	Arrival	Departure
AM	0.353	0.258
PM	0.023	0.033

4.5.3. Education – Secondary School

TRICS trip rates for a secondary school in the AM and PM peak are provided in Table 4–6.

Table 4–6 TRICS Trip Rate – Education (Secondary School) (trips per 100 Sq. M.)

Time Period	Education (Secondary School)	
	Arrival	Departure
AM	0.127	0.068
PM	0.018	0.028

4.6. Proposed Development Trips in PCU – AM and PM Peaks

Applying the above trip rates to each land use type and the quantum of proposed development, the vehicular trips from and to the proposed development sites for each forecast year have been estimated. The results are presented in Table 4–7 to Table 4–10. The numbers of trips in 2021 reflect partial build-out at Ashton Park, and the numbers of trips in 2026 reflect full build-out of the development.

Table 4–7 Proposed Development Vehicular Trips – AM Peak 2021

Land Use	Arrival	Departure	Two-way
Total Residential	144	374	518
Total Primary School	297	217	513
Total Secondary School	152	82	234
Total Employment	170	92	262
Total Development	**763**	**764**	**1,527**

Table 4–8 Proposed Development Vehicular Trips – PM Peak 2021

Land Use	Arrival	Departure	Two-way
Total Residential	382	230	611
Total Primary School	19	28	47
Total Secondary School	22	34	55
Total Employment	49	134	183
Total Development	**472**	**425**	**897**

Table 4–9 Proposed Development Vehicular Trips – AM Peak 2026

Land Use	Arrival	Departure	Two-way
Total Residential	340	885	1,225
Total Primary School	297	217	513
Total Secondary School	152	82	234
Total Employment	292	157	449
Total Development	**1,081**	**1,340**	**2,421**

Table 4–10 Proposed Development Vehicular Trips – PM Peak 2026

Land Use	Arrival	Departure	Two-way
Total Residential	902	543	1,445
Total Primary School	19	28	47
Total Secondary School	22	34	55
Total Employment	84	230	314
Total Development	**1,027**	**835**	**1,861**

4.7. On-Site Containment

Assumptions have been made with respect to on-site containment as detailed in the Ashton Park Transport Assessment Report:

- 10% of the proposed employment vehicular trips would be trips from/to the proposed housing on-site.
- 75% of all trips arriving at the primary school in the AM peak would be from the on-site housing with the remaining 25% of arrivals attributed to either staff or pupils living off-site.
- 50% of primary school departures are assumed to be to the on-site housing, with 50% to destinations off-site for the AM peak.
- For the PM peak it has been assumed that 50% of the primary school arrivals and departures would be to/from the on-site housing and the remaining 50% to/from off-site.
- 50% of all trips arriving at the secondary school in the AM peak would be from the on-site housing with 50% of arrivals attributed to either staff or pupils living off-site.
- For the AM peak 25% of the secondary school departures are assumed to be to the on-site housing, with 75% to destinations off-site.
- For the PM peak it has been assumed that 50% of the secondary school arrivals and departures would be to/from the on-site housing and the remaining 50% to/from off-site.

The traffic generation and attraction to the development zones for the various land use types with trip containment is provided in the Table 4–11 to Table 4–14.

Table 4–11 Trip Containment AM – 2021

		Arrivals				Off-site	Total
Departures	Land Use	Residential	Primary Schools	Secondary Schools	Employment		
	Residential		222	76	17	59	374
	Primary Schools	108		0	0	108	217
	Secondary Schools	20	0		0	61	82
	Employment	9	0	0		83	92
Offsite		6	74	76	153		
Total		144	297	152	170		

Table 4–12 Trip Containment PM – 2021

		Arrivals				Off-site	Total
Departures	Land Use	Residential	Primary Schools	Secondary Schools	Employment		
	Residential		10	11	5	204	230
	Primary Schools	14		0	0	14	28
	Secondary Schools	17	0		0	17	34
	Employment	13	0	0		121	134
Offsite		337	10	11	44		
Total		382	19	22	49		

Table 4–13 Trip Containment AM – 2026

		Arrivals				Off-site	Total
Departures	Land Use	Residential	Primary Schools	Secondary Schools	Employment		
	Residential		222	76	29	557	885
	Primary Schools	108		0	0	108	217
	Secondary Schools	20	0		0	61	82
	Employment	16	0	0		141	157
Offsite		196	74	76	262		
Total		340	297	152	292		

Table 4–14 Trip Containment PM – 2026

		Arrivals				Off-site	Total
Departures	Land Use	Residential	Primary Schools	Secondary Schools	Employment		
	Residential		10	11	8	514	543
	Primary Schools	14		0	0	14	28
	Secondary Schools	17	0		0	17	34
	Employment	23	0	0		207	230
Offsite		848	10	11	76		
Total		902	19	22	84		

The numbers of trips arriving to and departing from offsite locations in the forecast year 2026 are 608 arrivals and 867 departures in the AM peak, and 944 arrivals and 752 departures in the PM peak. Table 4–15 and Table 4–16 compare the development trips estimated for the OBC with the Transport Assessment Report trips for the AM and PM peak hours respectively.

Table 4–15 Ashton Park Traffic Generation in Forecast Year 2026 – AM Peak Hour

Study	Arrivals	Departures	Two-way
OBC Estimates	608	868	1,476
TA Report	590	866	1,456
Difference	18	2	20

Table 4–16 Ashton Park Traffic Generation in Forecast Year 2026 – PM Peak Hour

Study	Arrivals	Departures	Two-way
OBC Estimates	944	752	1,696
TA Report	931	737	1,668
Difference	13	15	28

The above comparison shows that the traffic generation assumed for the OBC based on TRICS and on-site containment is in line with the Ashton Park Transport Assessment Report.

4.8. Forecast Matrices

The application of the forecast growth factors calculated using the method described above resulted in a set of forecast trip matrices. The matrix totals for each forecast year and scenario is presented in Table 4–17 and Table 4–18.

Table 4–17 Forecast Matrix Totals 2021

Scenario	AM Peak Hour	PM Peak Hour
Base	14,835	13,820
Without Scheme (DM)	17,422	16,720
With Scheme (DS)	18,496	17,548
Base to DM Growth Rate	**1.17**	**1.21**
Base to DS Growth Rate	**1.25**	**1.27**

Table 4–18 Forecast Matrix Totals 2026

Scenario	AM Peak Hour	PM Peak Hour
Base	14,835	13,820
Without Scheme (DM)	18,286	17,749
With Scheme (DS)	20,235	19,528
Base to DM Growth Rate	1.23	1.28
Base to DS Growth Rate	1.36	1.41

5. Forecasting Outputs

5.1. Introduction

This chapter sets out the headline indicators for the Without Scheme and With Scheme scenarios in the 2021 and 2026 forecast years.

5.2. Network Wide Performance

The network wide performance is summarised by the following statistics:

- Total Distance Travelled (PCU kilometres) - the total distance travelled on the modelled highway network multiplied by the number of passenger car units (PCUs);
- Total Travel Time (PCU hours) - the total time travelled on the modelled highway network including delays multiplied by the number of passenger car units (PCUs);
- Average Network Speed (km/hr) - the average speed is the total distance travelled divided by the total travel time; and
- Total Delay (PCU hours) - total delay is taken as the difference between congested and free flow travel time on the modelled highway network in hours multiplied by the number of passenger car units (PCUs).

Table 5–1 shows the network performance for the Trowbridge area. Total travel time and delay is predicted to increase in the With Scheme Scenario in both peak hours during 2021 and 2026 forecast years.

Table 5–1 Network Performance

	AM Peak Hour		PM Peak Hour	
Metric	Without Scheme	With Scheme	Without Scheme	With Scheme
2021				
Total Distance Travelled (pcu km)	63096	65348	62246	64730
Total Travel Time (pcu hr)	2026	2053	1892	1967
Total Delay (pcu hr)	611	614	517	560
Average Network Speed (km/hr)	31.1	31.8	32.9	32.9
2026				
Total Distance Travelled (pcu km)	66694	71979	66269	72143
Total Travel Time (pcu hr)	2227	2437	2085	2340
Total Delay (pcu hr)	731	857	620	776
Average Network Speed (km/hr)	29.9	29.5	31.8	30.8

It can be seen from the above table that in 2026 With Scheme, the average network speed is generally slightly lower than the Without Scheme with the increased number of trips on the network.

The network wide average journey time *per trip* for each forecasting year and scenario is presented in Figure 5–1 and Figure 5–2.

Figure 5–1 Network Wide Average Journey Time 2021

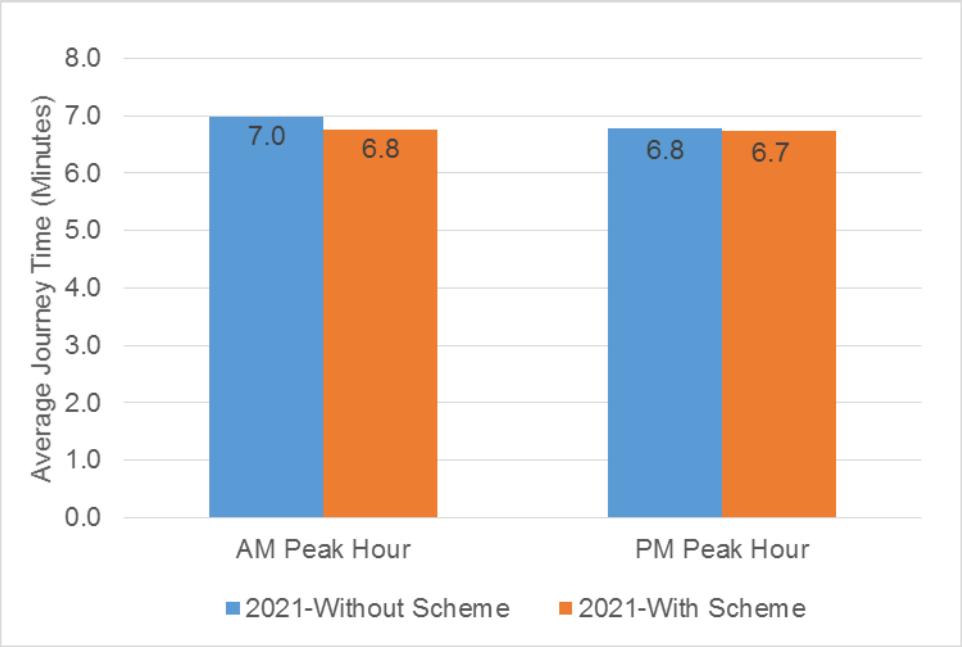
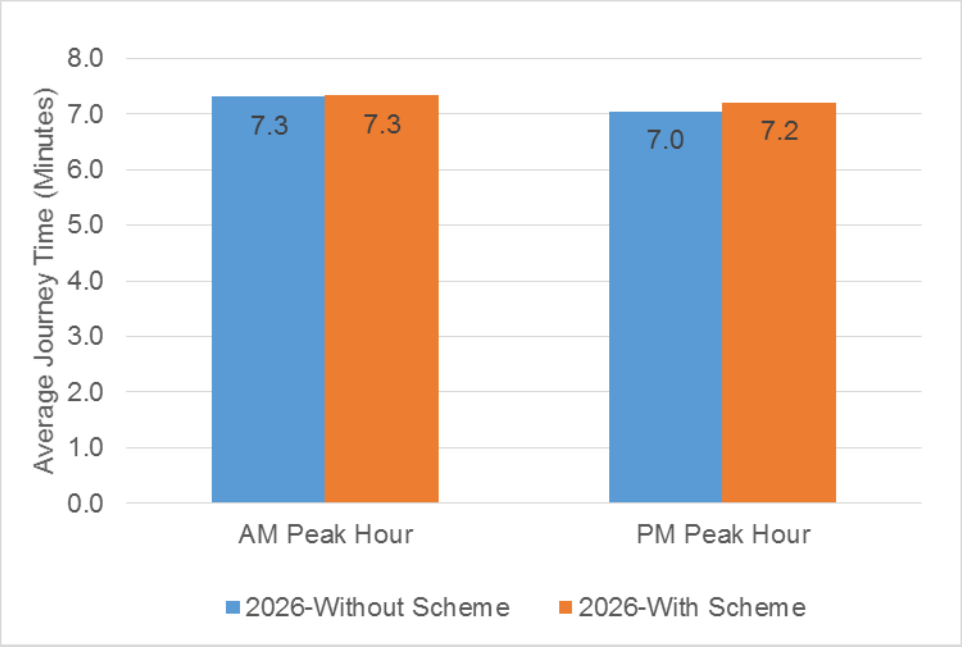


Figure 5–2 Network Wide Average Journey Time 2026



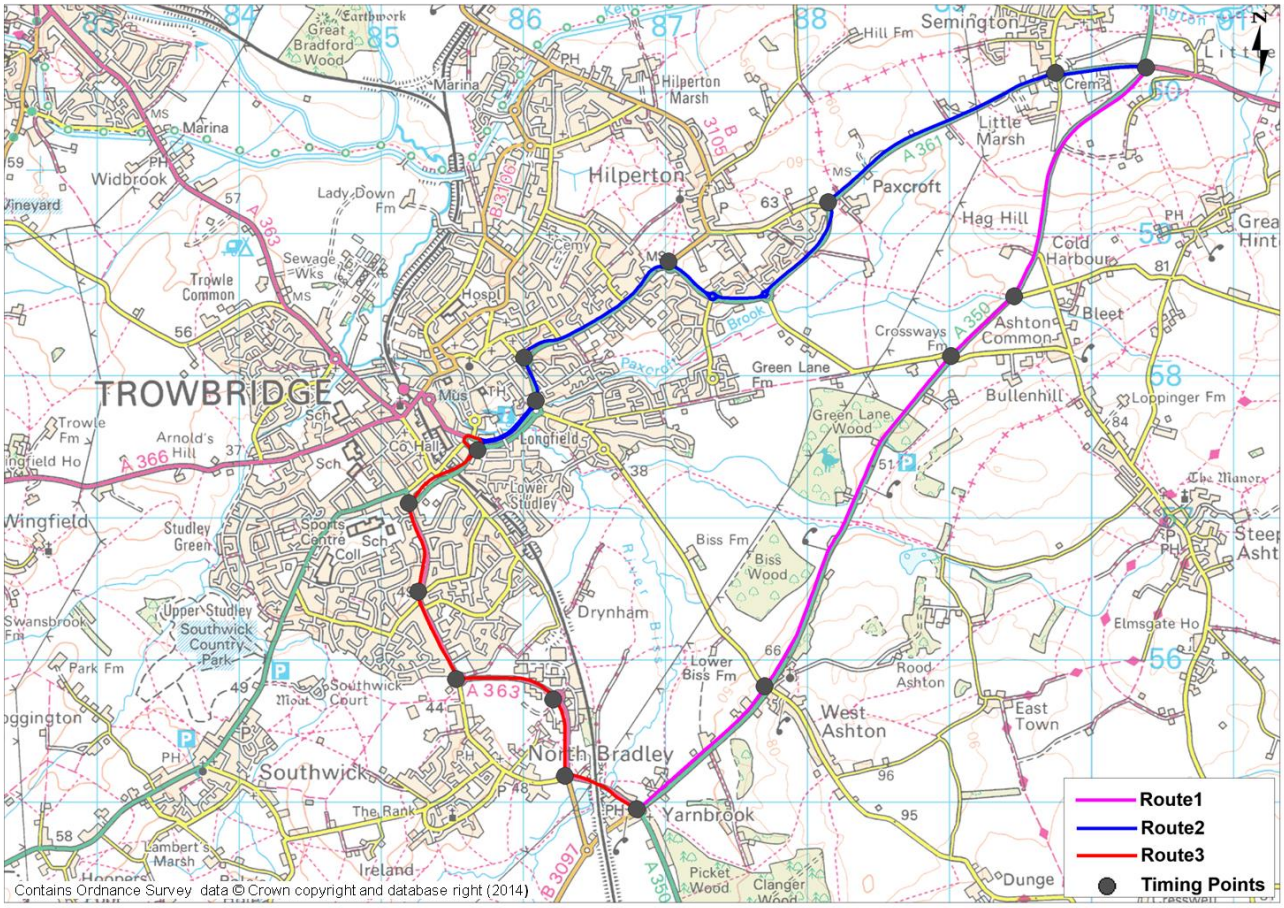
The above results show that the additional traffic generated by the proposed developments at Ashton Park along with the Yarnbrook and West Ashton Relief Road will not have an adverse impact on network wide journey times. With Scheme (DS) journey times are lower than the Without Scheme (DM) journey times in 2021. However in 2026, the journey times with the Scheme in place are almost equal to the without Scheme journey time in the AM peak hour and slightly higher in the PM peak hour.

5.3. Journey Time along the Major Corridors

In order to analyse the impact of the additional trips along the major corridors in the study area, journey times for the forecast years and scenarios were compared against the base year. The journey time comparisons are provided for three routes, as illustrated in Figure 5–3:

- **Route 1** - A350 between A350/A361 Roundabout (South of Semington) and A350/A363 Yarnbrook;
- **Route 2** - A361 between A350/A361 Roundabout (South of Semington) and A361 County Way/Bythesea Road Roundabout; and
- **Route 3** - A363 between A350/A363 Yarnbrook and A361 County Way/Bythesea Road Roundabout.

Figure 5–3 Journey Time Routes



The overall (end-to-end) journey time comparisons are summarised in Table 5–2 and Table 5–3 for the AM and PM peak hours.

Table 5–2 AM Peak Journey Time Comparison (Seconds)

Journey Time Route	Route Name	Direction	Observed-2012	Modelled-DM-2021	Modelled-DS-2021	Modelled-DM-2026	Modelled-DS-2026	Difference (DM-DS)-2021	Difference (DM-DS)-2026
Route 1*	A350 between A350/A361 Roundabout (South of Semington) and A350/A363 Yarnbrook	NB	449	416	412	425	418	4	7
		SB	432	413	399	422	406	14	16
Route 2	A361 between A350/A361 Roundabout (South of Semington) and A361 County way/Bythesea Road Roundabout	NB	460	541	540	543	543	1	0
		SB	475	574	546	590	591	28	-1
Route 3	A363 between A350/A363 Yarnbrook and A361 County way/Bythesea Road Roundabout	NB	381	396	407	399	412	-11	-13
		SB	348	384	383	386	385	1	1

Table 5–3 PM Peak Journey Time Comparison (Seconds)

Journey Time Route	Route Name	Direction	Observed-2012	Modelled-DM-2021	Modelled-DS-2021	Modelled-DM-2026	Modelled-DS-2026	Difference (DM-DS)-2021	Difference (DM-DS)-2026
Route 1*	A350 between A350/A361 Roundabout (South of Semington) and A350/A363 Yarnbrook	NB	430	410	400	417	405	10	12
		SB	405	401	393	406	399	8	7
Route 2	A361 between A350/A361 Roundabout (South of Semington) and A361 County way/Bythesea Road Roundabout	NB	458	556	555	565	569	1	-4
		SB	492	526	523	529	529	3	0
Route 3	A363 between A350/A363 Yarnbrook and A361 County way/Bythesea Road Roundabout	NB	396	398	407	401	412	-9	-11
		SB	374	384	384	391	390	0	1

Note: * In DS, Route1 is along the A350 between A350/A361 Roundabout at Semington up to Ashton Common Signals and then along the A350 Yarnbrook and West Ashton Relief Road up to Yarnbrook Roundabout.

The summary tables illustrate that journey times along the major corridors in the study area are not adversely affected by the development trips. This is consistent with the overall network wide speeds reported above.

The observed journey times are for 2012 where the West Ashton Signals had not been improved whereas in the forecast years, the Signals are improved as part of the committed developments listed in section 3.2. Hence the forecast year modelled journey times are lower than the observed journey times for this route.

The 2026 With Scheme scenario shows a marginal improvement in journey times in comparison to the Without Scheme along the A350 corridor (Route 1) in both AM and PM peak hours in both directions. Along Route 2, the journey time remains the same between Without Scheme and With Scheme in 2026. Route 3 NB journey times are marginally higher by 13 seconds and 11 seconds in the AM and PM peak hour Without Scheme scenario compared to With Scheme scenario in 2026.

5.4. Junction Capacity Performance

Figure 5–4 to Figure 5–7 show the junction volume capacity ratio (V/C in %) for both scenarios in the 2026 forecast year.

Figure 5–4 Without Scheme Scenario Junction V/C – AM 2026

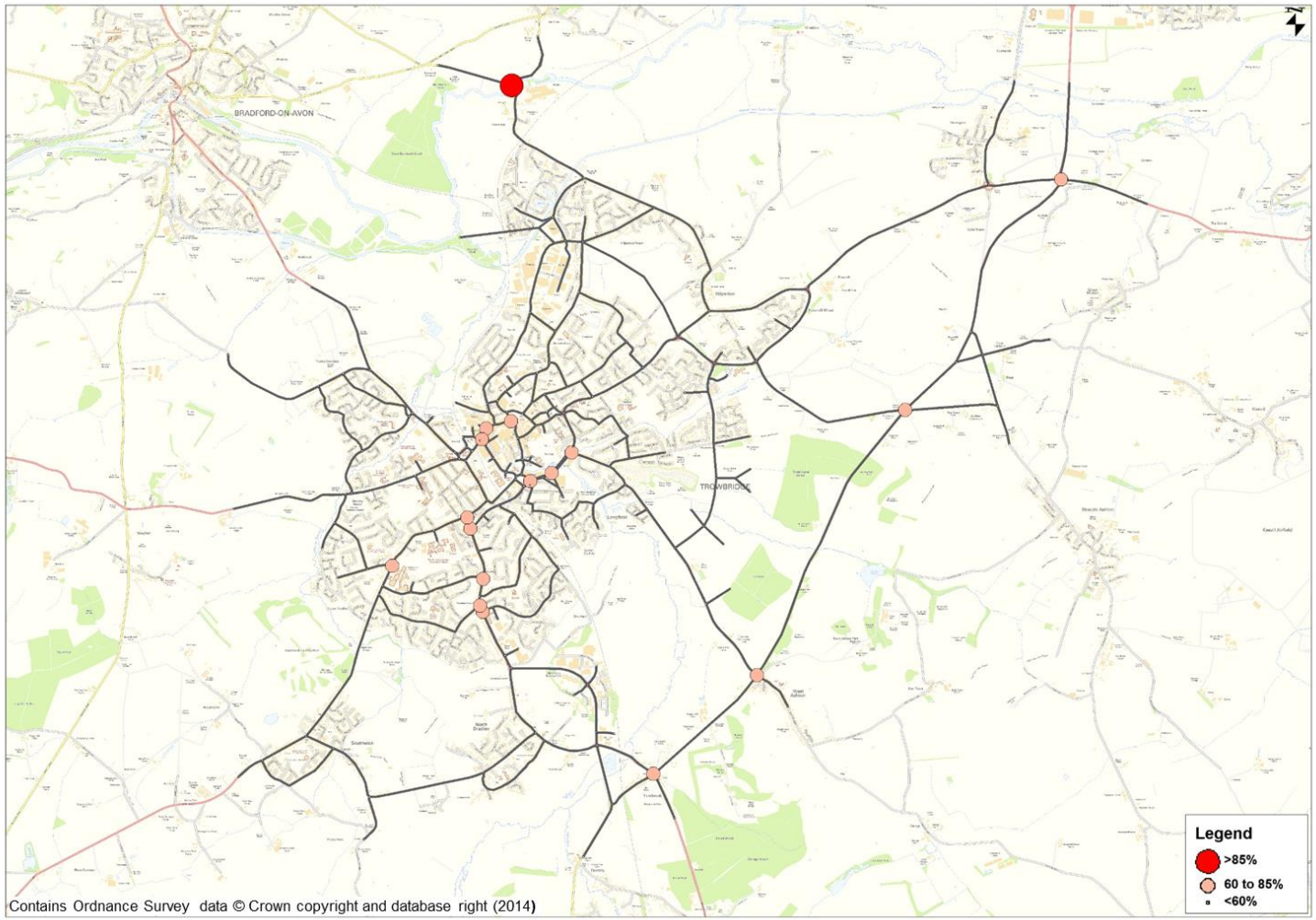


Figure 5–5 With Scheme Scenario Junction V/C – AM 2026

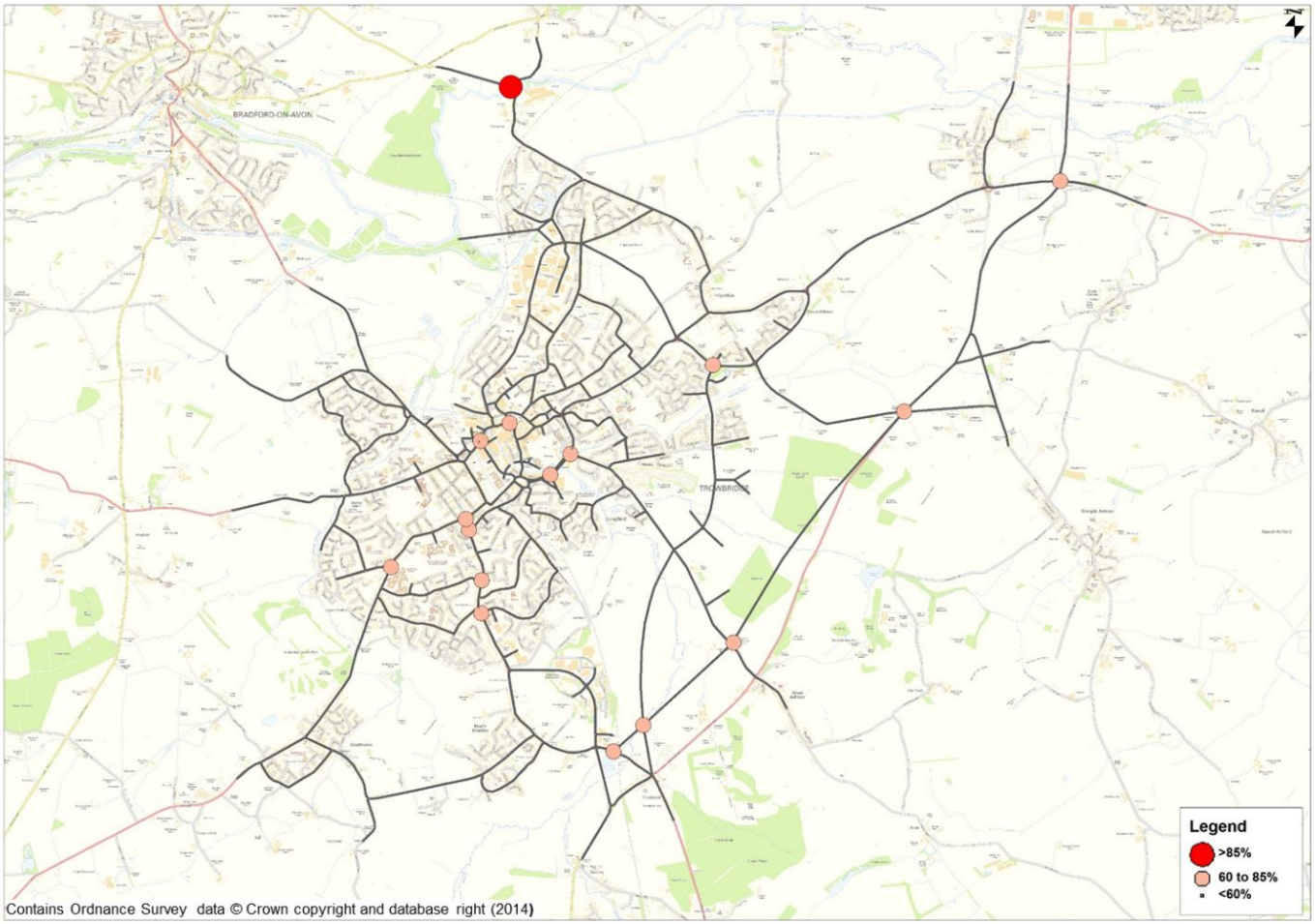


Figure 5–6 Without Scheme Scenario Junction V/C – PM 2026

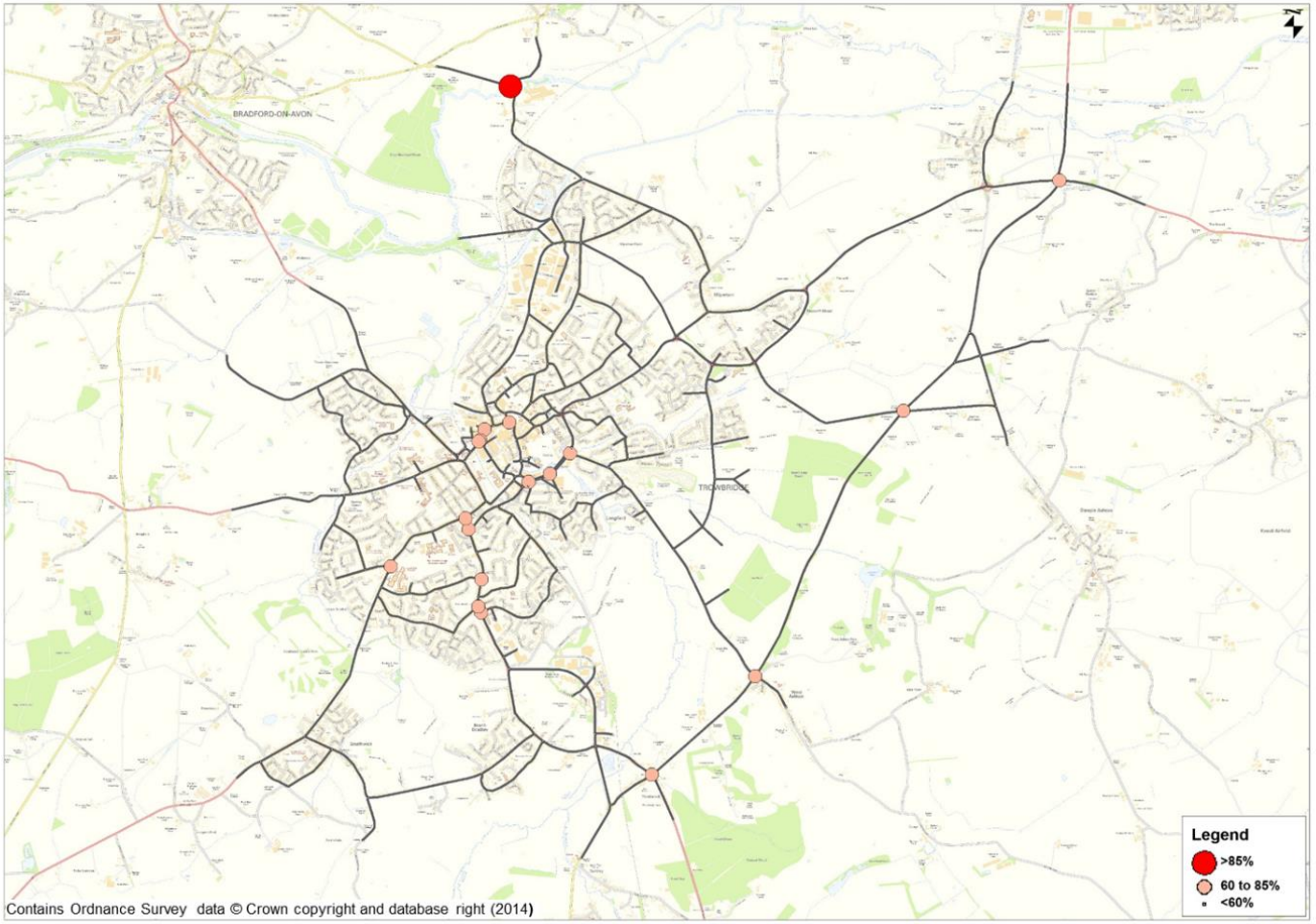
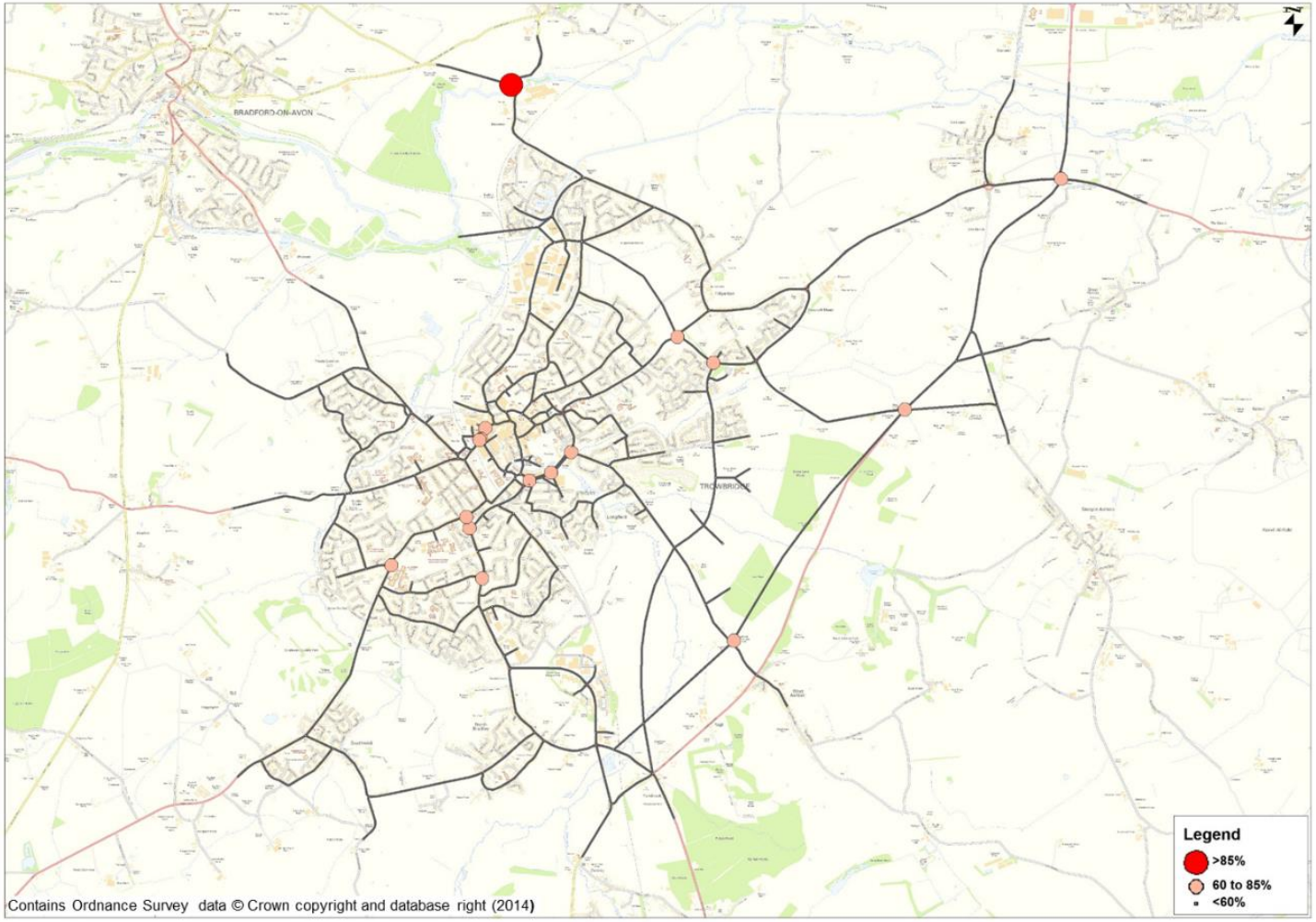


Figure 5–7 With Scheme Scenario Junction V/C – PM 2026



The above plots demonstrate that, for both the AM and PM peak hours, the Staverton Signals operate at more than 85% of capacity in 2026 in both With and Without Scheme scenarios, indicating congestion at this junction. In the AM peak hour Without Scheme scenario, four junctions (A350/A361 Semington Roundabout, A350 Ashton Common Signals, A350 West Ashton Signals and the Yarnbrook Roundabout) on the A350 will operate at 60 to 85% of capacity. In the With Scheme scenario, A350/A361 Semington Roundabout, A350 Ashton Common Signals, and the three new Roundabouts on the Yarnbrook and West Ashton Relief Road will operate at 60 to 85% of capacity.

In the PM peak hour Without Scheme scenario, four junctions (A350/A361 Semington Roundabout, A350 Ashton Common Signals, A350 West Ashton Signals and the Yarnbrook Roundabout) on the A350 will operate at 60 to 85% of capacity. In the With Scheme scenario, A350/A361 Semington Roundabout, A350 Ashton Common Signals, and the Roundabout at Yarnbrook and West Ashton Relief Road/West Ashton Road will operate at 60 to 85% of capacity.

Other major junctions operating at 60-85% of capacity in 2026 are A361 County Way/ A363 Bradley Road Roundabout, A361 County Way/ Frome Road, Longfield Gyratory, Tesco Signals, A363 Stallard Street/ Bythesea Road Roundabout and A361 County Way/ West Ashton Road Roundabout. In the 2026 With Scheme scenario, for both the AM and PM peak hours, A361 Hilperton drive/ Leap Gate Roundabout will be operating at 60-85% of capacity due to the increased traffic flow on this link in the With Scheme compared to the Without Scheme scenario.

5.5. Changes in Network Traffic Flows

The changes in traffic flows in response to the Yarnbrook and West Ashton Relief Road and Ashton Park development are reported as:

- Flow difference plots for 2021 and 2026, comparing the Without Scheme and With Scheme forecasts; and
- Two way traffic flow tabulation at key links in the network comparing base, Without Scheme and With Scheme forecasts for each time period and forecast year.

The traffic flow differences plots are shown in Figure 5–8 to Figure 5–11.

Figure 5–8 Actual Flow Difference (in PCU) Plot – AM 2021

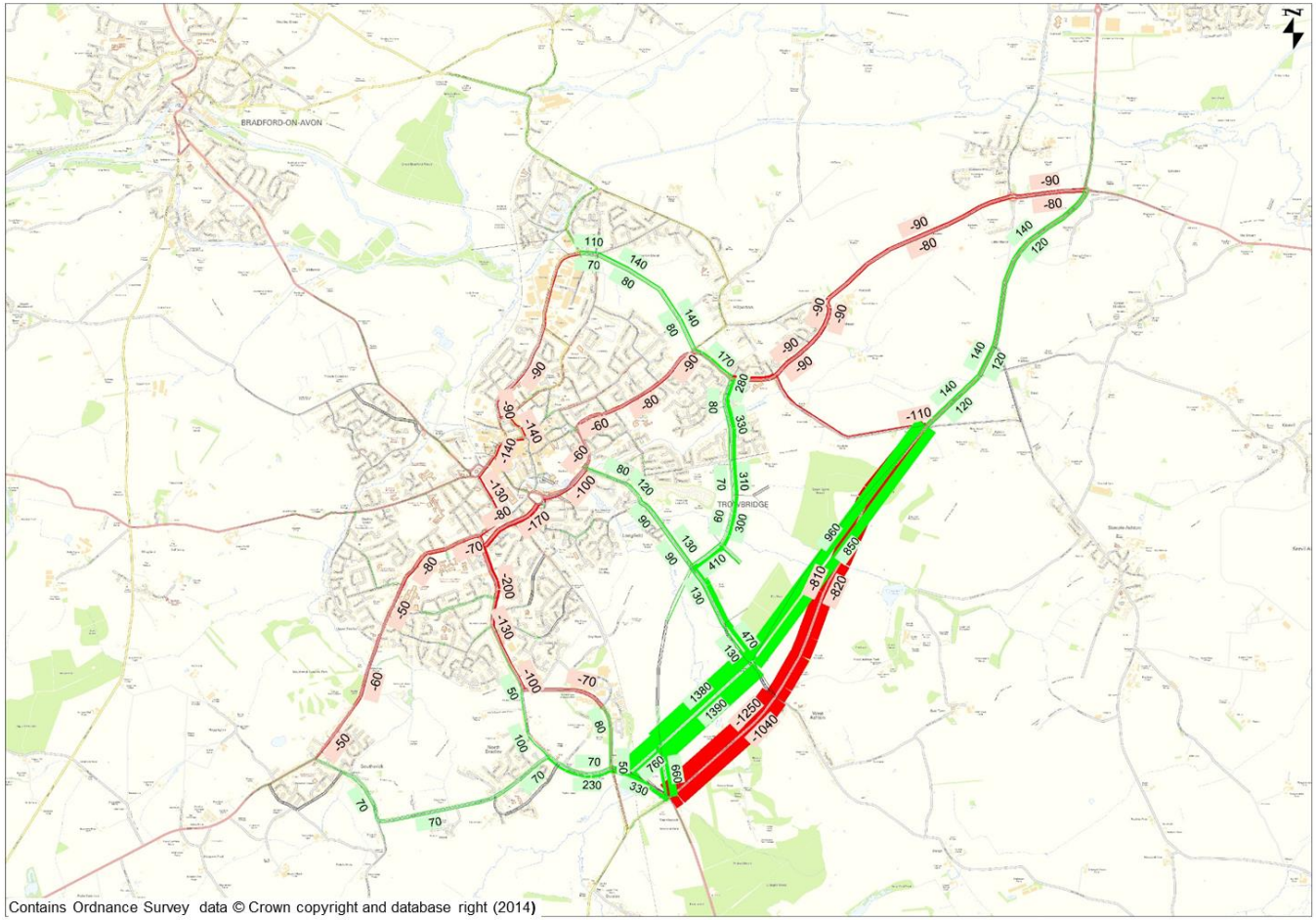


Figure 5–9 Actual Flow Difference (in PCU) Plot – AM 2026

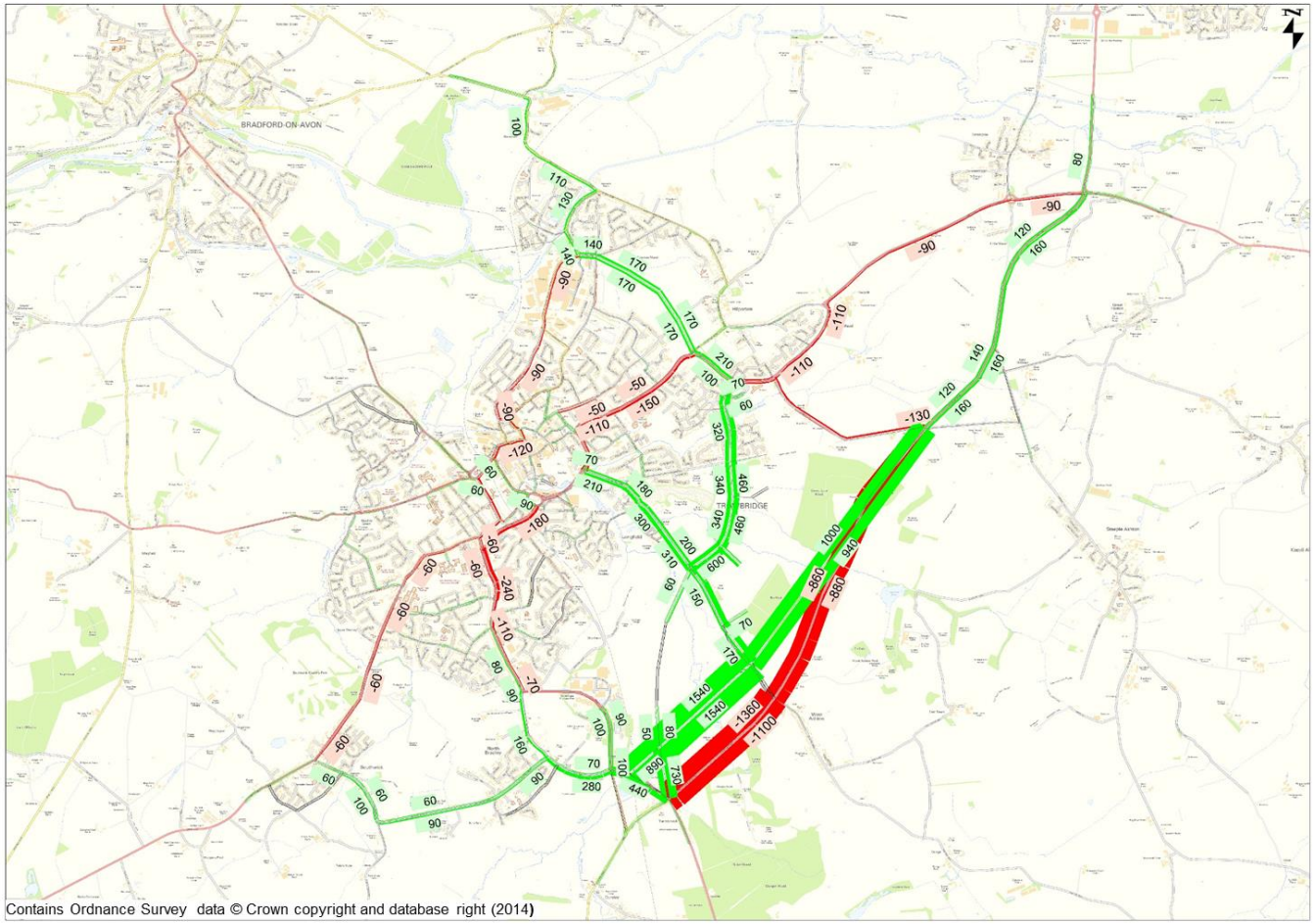


Figure 5–10 Actual Flow Difference (in PCU) Plot – PM 2021

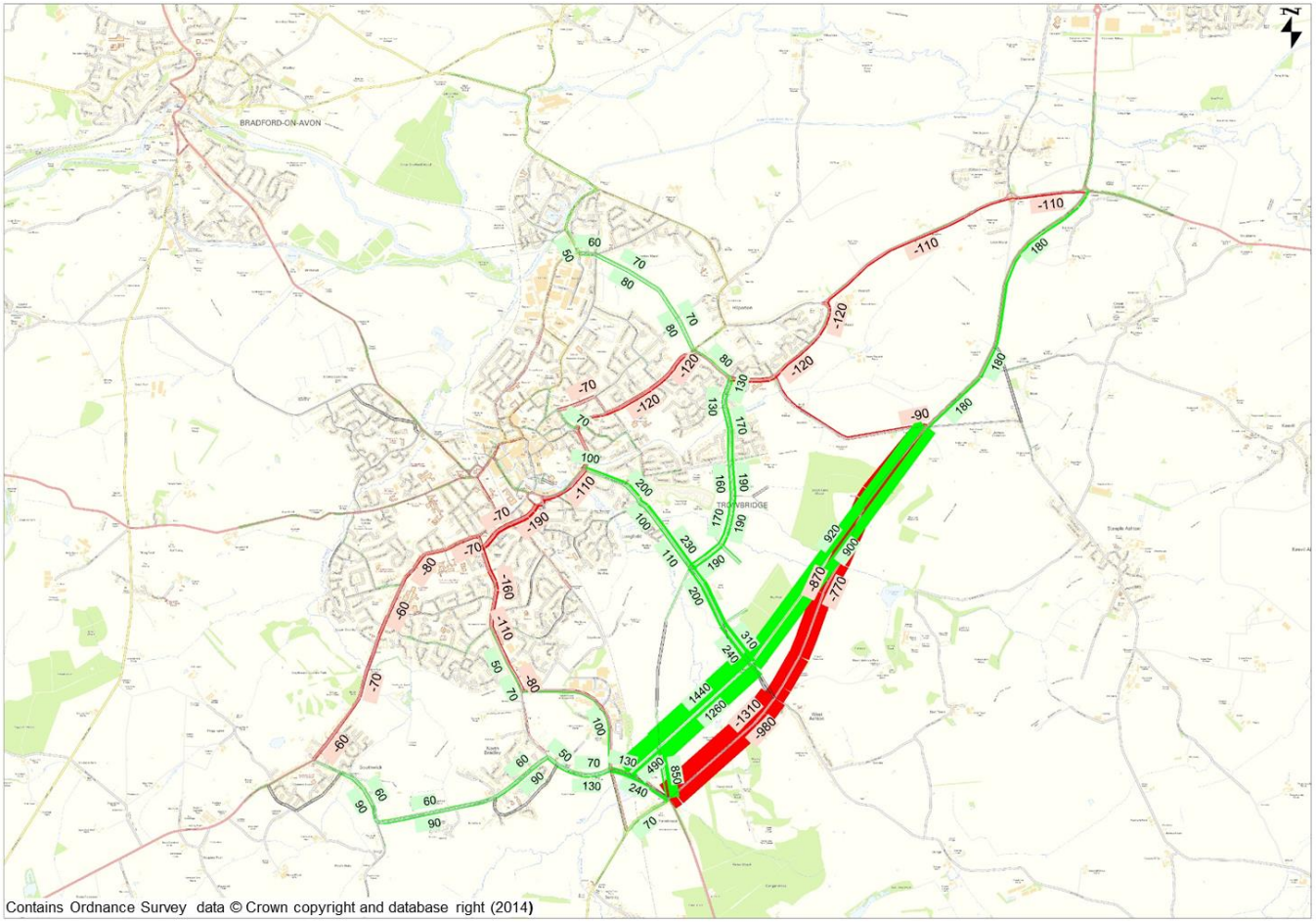
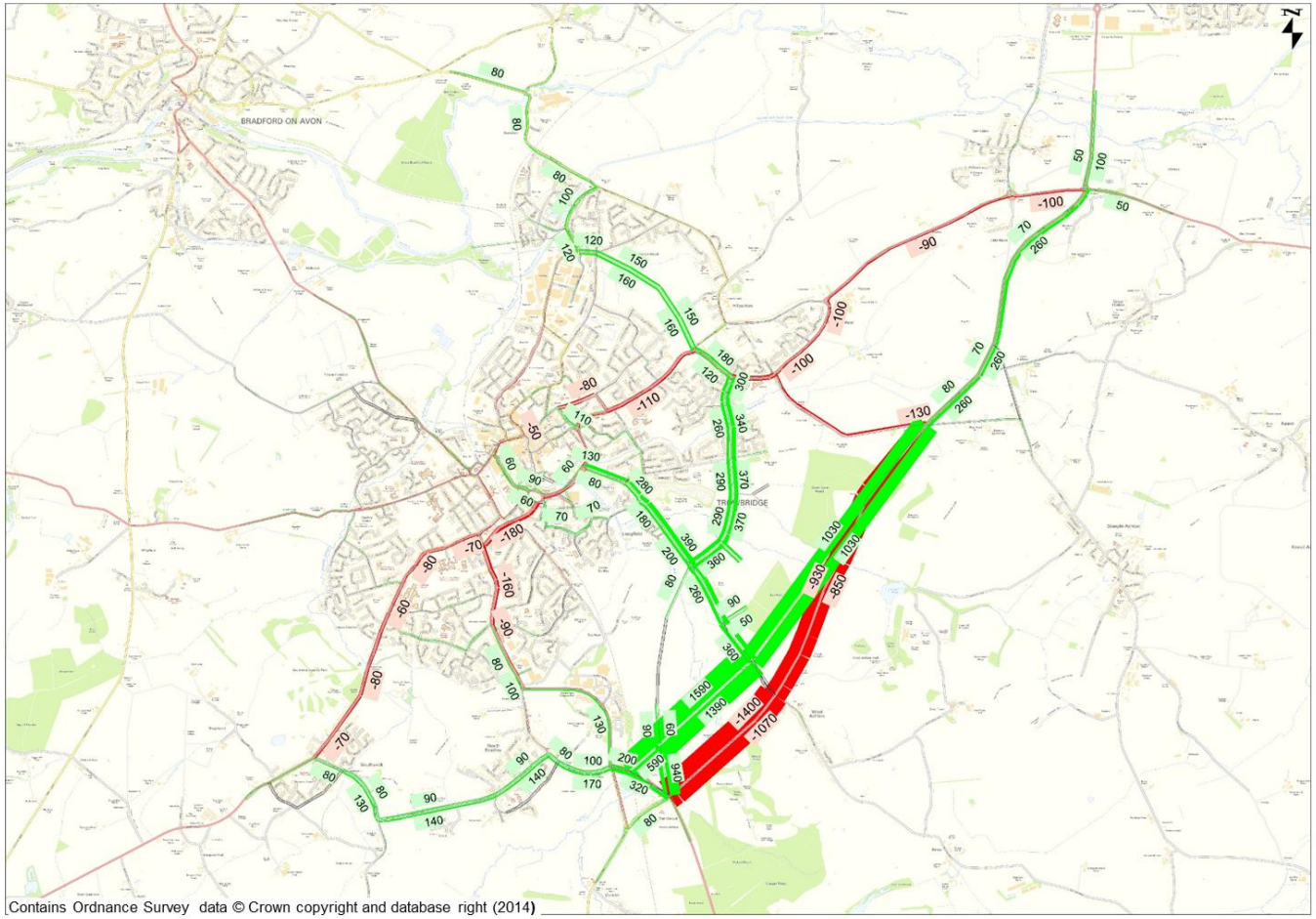


Figure 5–11 Actual Flow Difference (in PCU) Plot – PM 2026



The most significant increase in flow occurs on West Ashton Road, Hilperton Drive and the East Trowbridge Distributor Road, and on the A350. The areas that show an increase in traffic flow in the With Scheme scenario are mostly the major corridors that draw traffic to/from the developments. West Ashton Road and East Trowbridge Distributor Road shows much higher level of increase in traffic flow in the With Scheme scenario than in the Without Scheme scenario relative to other roads, because this will act as a key route for the proposed development traffic in the With Scheme. Some reductions are forecast on the A361, Ashton Road connecting the A361 and A350, A363 and some local roads within the town centre. The A350 alignment will change between Without Scheme and With Scheme scenarios between Ashton Common Signals and Yarnbrook Roundabout and hence the large difference in flow is seen on the old and new alignments of the A350.

5.6. Link Flows

Figure 5–12 to Figure 5–15 present a comparison of base, Without Scheme and With Scheme traffic flows for each peak hour and forecast year along the major corridors in the study area.

In general, it can be observed that the traffic flow increases significantly from the base year to the Without Scheme and With Scheme scenarios, along the major corridors in the study area. At Hill Road (B3105), there is a reduction in traffic in the forecast years due to traffic being reassigned to the new road between B3106 and A361 Hilperton Drive in the Without Scheme and With Scheme scenarios.

The traffic flows in With Scheme scenario are consistently higher than the Without Scheme scenario across the network. For example, on West Ashton Road, the forecast year flow is almost double in the With Scheme scenario, which is due to the additional traffic generated from the proposed Ashton Park development.

Figure 5–12 Link Flow Comparison – AM: Base, DM 2021 and DS 2021

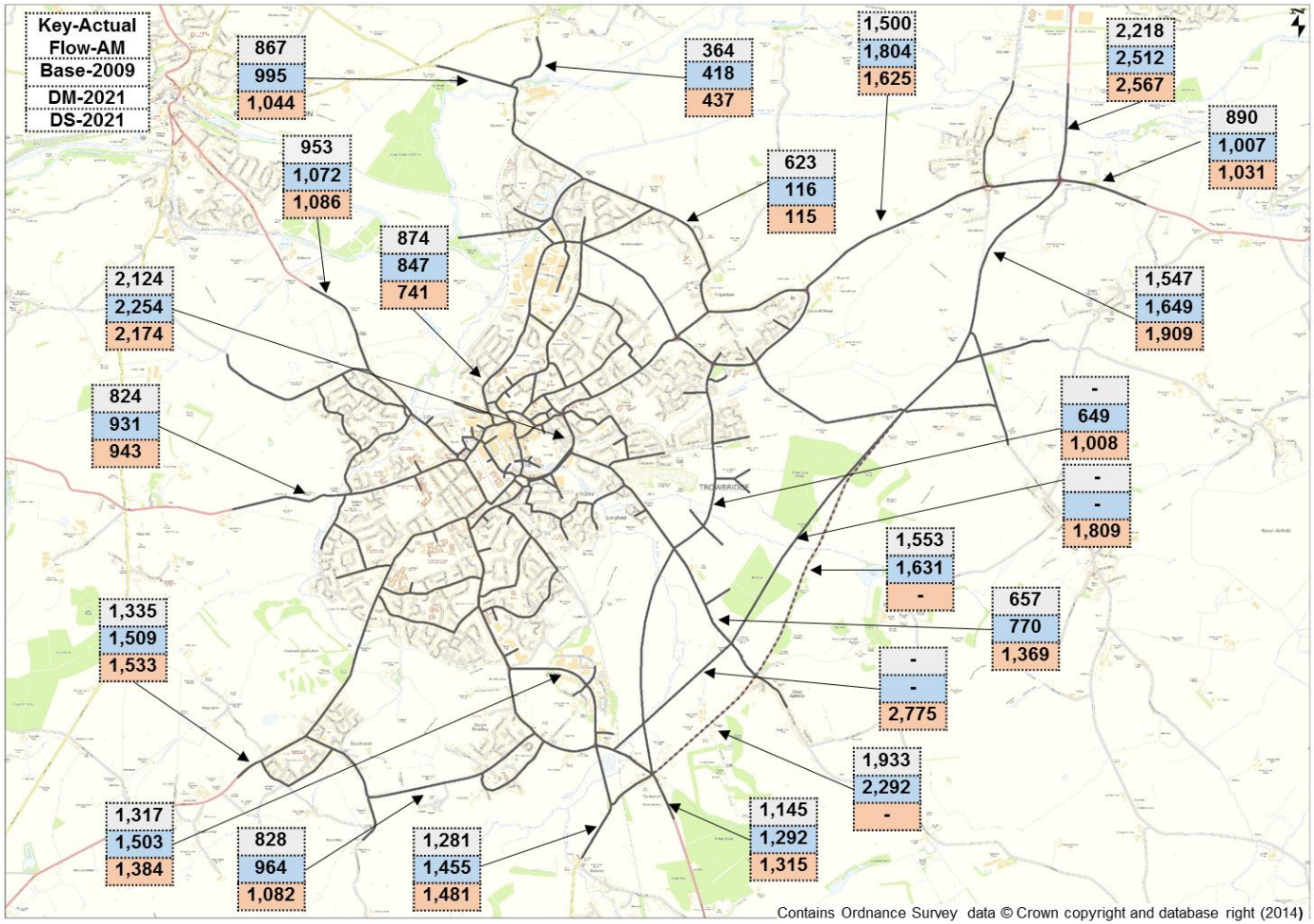


Figure 5–13 Link Flow Comparison – PM: Base, DM 2021 and DS 2021

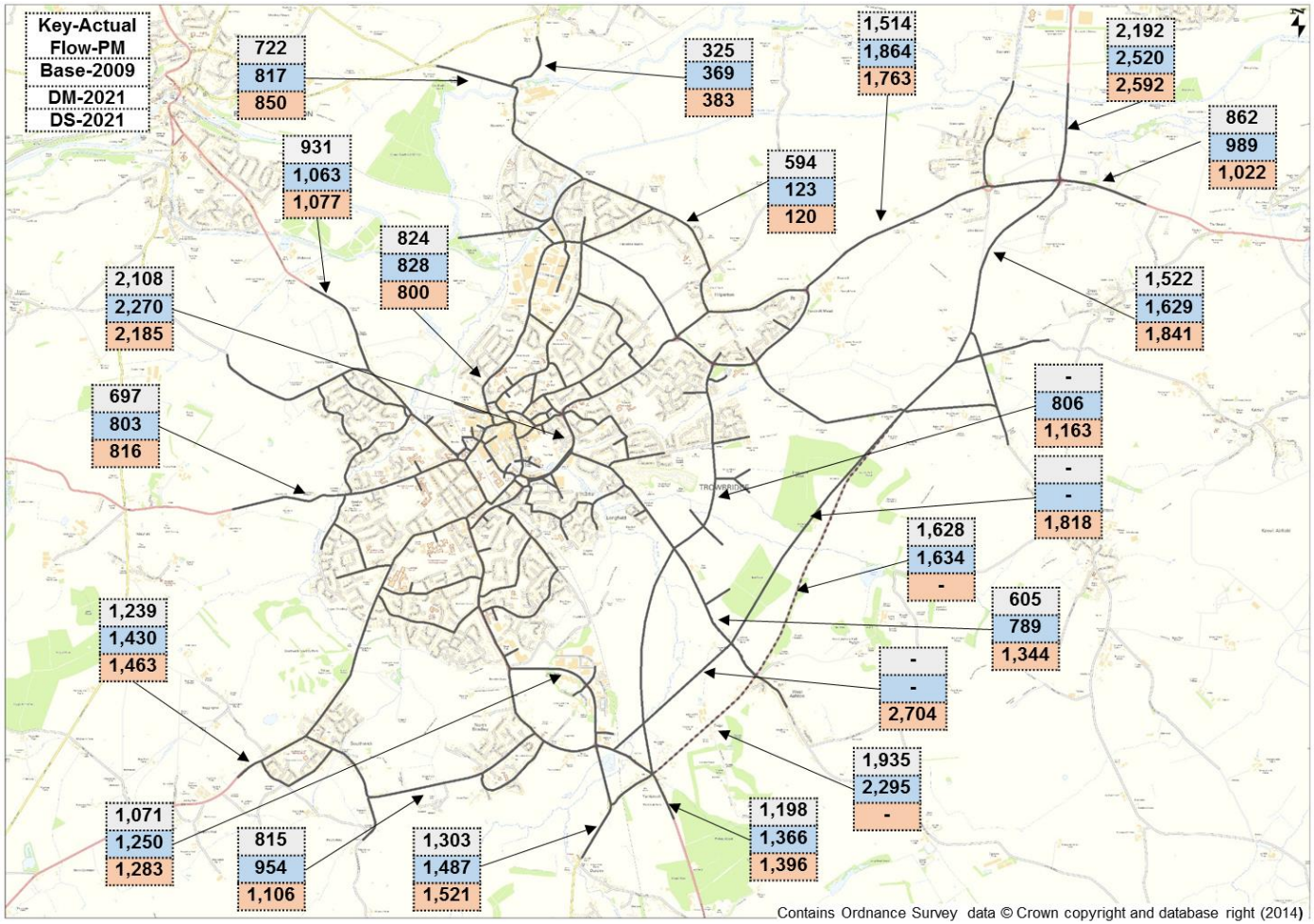


Figure 5–14 Link Flow Comparison – AM: Base, DM 2026 and DS 2026

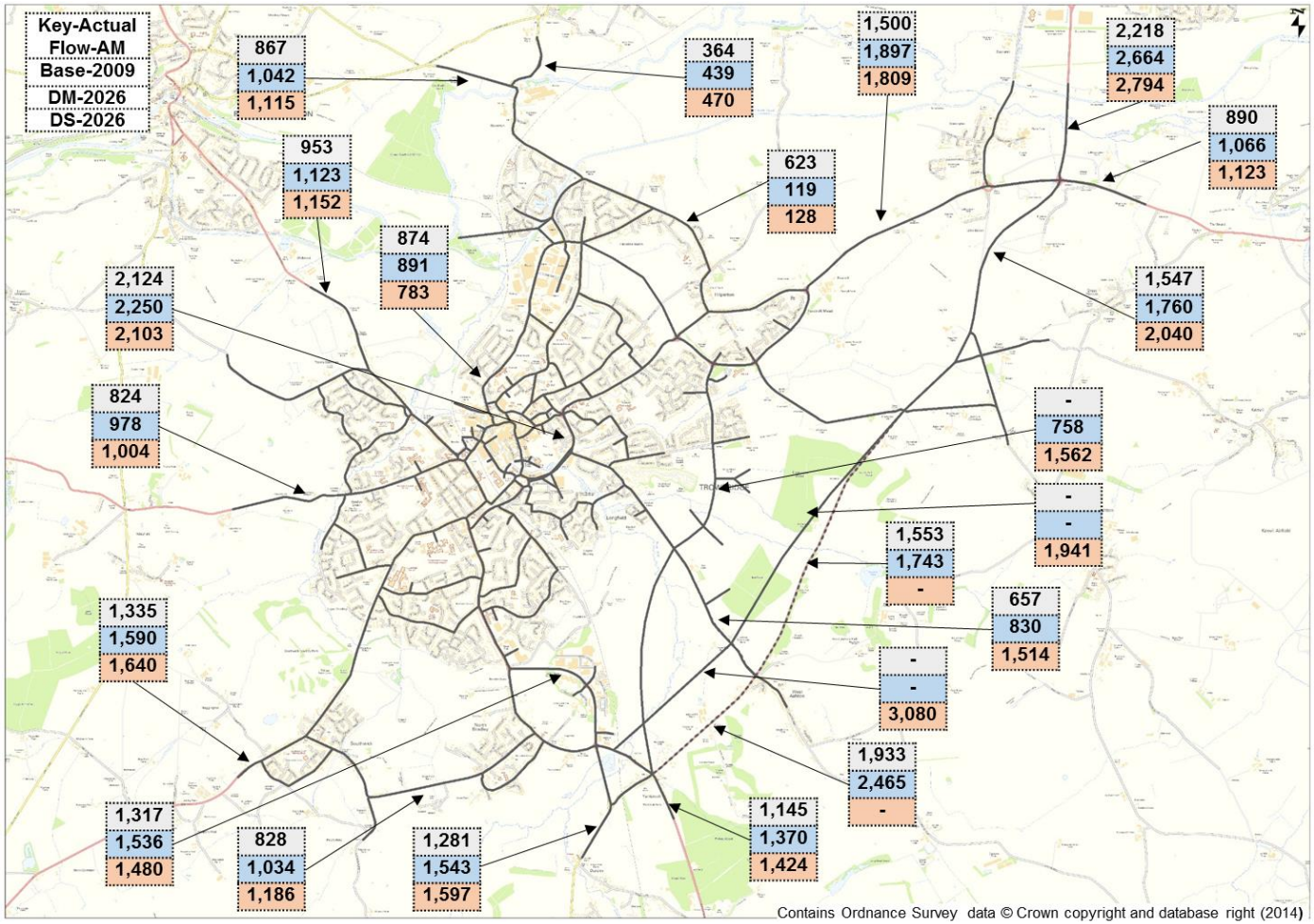
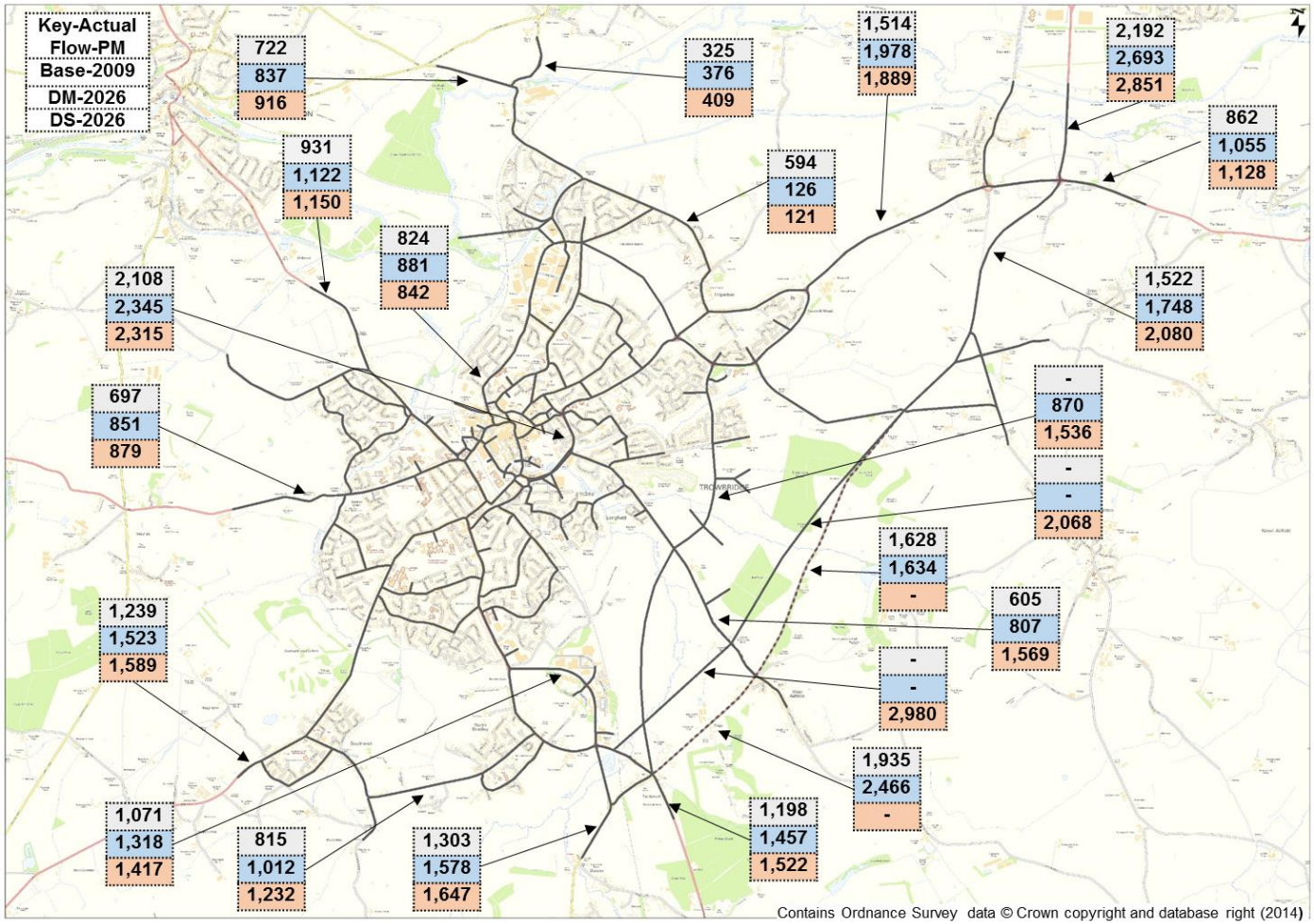


Figure 5–15 Link Flow Comparison – PM: Base, DM 2026 and DS 2026



6. Economic Appraisal

6.1. Introduction

This chapter describes the basis for the appraisal of the proposed Yarnbrook West Ashton Relief Road, including the procedures applied in determining the benefits, disbenefits and costs that are likely to arise from the Scheme, using the traffic forecasts presented in the previous section. Many of the Scheme impacts are monetised and combined to give an indication of the value for money of the Scheme over a 60 year appraisal period.

As outlined in section 5.4, significant delays are forecast at the Staverton Signal Junction (to the north of the model) in all forecast years, time periods and scenarios. Detailed analysis of benefits by OD pair has indicated that the three zones (zones 110, 212 and 213) near the Staverton area are expected to have large disbenefits in the forecast years and are forecast to have an adverse impact on the overall scheme benefits. However, the performance of movements to and from these zones is not directly related to the Scheme, being at the far northern edge of the modelled area with limited movement between the Scheme and these zones. Hence these three zones are excluded from benefits appraisal for the Scheme.

6.2. Economic Appraisal Approach

The process of economic appraisal of the Scheme consists of several steps, which are briefly described, then covered in more detail in the subsequent sections of this report.

- **User Benefits** (TUBA & Spreadsheet based method to deal with development dependency) - Calculation of user benefits such as time savings, fuel-related vehicle operating costs (VOC) and non-fuel VOC are the major part of the economic assessment of a highway scheme. TUBA Version 1.9.4 was used for validation of the spreadsheet based method
- **Accident Benefits** - Benefits associated with accident savings were calculated using the spreadsheet-based COBALT program. COBALT uses existing accident rates on individual links in combination with traffic flow forecasts from the traffic model.
- **Reliability Benefits** – Improvements in journey time reliability were computed using the WebTAG based method of assessing reliability on Urban Roads.
- **Carbon Benefits** – Monetisation of carbon emissions is obtained from TUBA.
- **Land Value Uplifts** – this scheme is designed to enable development at a location which could not support large numbers of new trips with the existing transport infrastructure. Unlocking the development potential of this land will create an uplift in land values, which have been assessed in line with WebTAG guidance.
- **Annualisation of Benefits** - Benefits of the Scheme were converted from the weekday traffic model outputs to a full annual assessment over a 60 year appraisal period.
- **Scheme Costs** - The latest costs estimates for the Scheme, including construction cost, land cost, preparation and supervision costs, were incorporated in the economic assessment, together with the costs of maintaining the new infrastructure.
- **Appraisal Period** - The economic appraisal was carried out for a 60-year period, from 2021 (Opening Year).
- **Initial Cost Benefit Assessment** - An initial cost benefit assessment was undertaken to assess the Scheme's value for money. The results produced from the spreadsheet method for dependent development and accident benefits were combined to calculate the core economic benefits of the Scheme. By comparing the construction and associated costs with the traffic benefits of the Scheme over a 60 year assessment period, an initial Benefit Cost Ratio (BCR) was calculated, which represents the value for money afforded by the Scheme.
- **Adjusted Cost Benefit Assessment** – In addition to the initial BCR of the Scheme, an adjusted BCR has been calculated which includes the assessed benefits of reliability and land value uplifts. These are recognised and quantifiable benefits of the Scheme but do not form part of the initial value for money assessment.

6.3. User Benefits Method: Use of Spreadsheet for Dependent Development

The benefits that would be expected to accrue to road users over the appraisal period were evaluated using the spreadsheet based method for dependent development.

A specific spreadsheet based program has been developed for this OBC, to account for housing dependency. Full details of this approach are documented separately in Annex B (Proportionate Appraisal – Housing Dependency) to the Appraisal Specification Report. This spreadsheet based tool is used to monetise the journey time, vehicle operating costs, indirect tax and reliability benefits of the Scheme and the inputs required for this are in line with TUBA software.

The DfT's TUBA software (version 1.9.4) has been used in order to monetise the greenhouse gas emissions generated by the Scheme across the highway network. The primary inputs to TUBA are:

- Trip volume, journey time and journey distance matrices from the Trowbridge SATURN forecast model for 2021 and 2026 for both With Scheme and Without Scheme situations, and for both the AM and PM peaks;
- Scheme costs by category and cost profile; and
- Standard TUBA economic parameters for the growth in values of time and fuel costs over the appraisal period.

The present value year is considered as 2010 and the appraisal period is 60 years.

6.3.1. Scheme Specific Parameters

The scheme specific parameters adopted are:

- First year – 2021;
- Horizon year – 2080; and
- Modelled Years – 2021 and 2026.

6.3.2. Time Slices and Annualisation Factors

TUBA works on the basis of the following standard definition of time periods as follows:

- AM peak (Weekday 07:00-10:00);
- Inter Peak (Weekday 10:00-16:00); and
- PM Peak (Weekday 16:00-19:00).

The Trowbridge SATURN forecast model represents traffic movements in the two weekday (Mon-Fri) peak hours, with a morning peak hour of 08:00-09:00 and an evening peak hour of 17:00-18:00. In order to reflect the benefits for a wider time period than the two hours covered by the model, benefits are factored ('annualised') based on the expansion and annualisation factors.

Expansion factors were derived based on ATC counts at the eight locations conducted during the traffic data collection as part of this project during June 2014. These factors for AM and PM were calculated based on the relationship of peak hour to peak period traffic flows. The expansion factor for the inter peak period was based on the assumption that benefit per trip in the non-modelled period will not be equivalent to benefit per trip in the modelled period. Any time periods during which flow is less than 70% of the flow in the peak hour cannot be assumed to have network performance comparable with the modelled period. Therefore, no benefits can be assumed for those periods. Hence the inter peak expansion factor was based on the number of hours during which the inter peak flow is greater than or equal to the threshold value (70% of peak hour flow). The expansion factors for each time period are as follows:

- Multiply the AM peak hour benefits by 2.52 to represent the weekday morning peak period of 07:00 to 10:00, allowing also for peak shoulders with slightly lower traffic flows outside of the peak hour;
- Multiply the PM peak hour benefits by 2.63 to represent the weekday evening peak periods of 16:00 to 19:00, allowing also for peak shoulders with slightly lower traffic flows outside of the peak hour;
- Multiply the AM peak hour benefits by 2.18 to represent the inter peak period of 10:00 and 16:00.

Daily benefits were then multiplied by 253 to reflect the number of working weekdays during the year.

Benefits factoring was not expanded beyond the two weekdays due to limited long-term traffic count data in the vicinity of the Scheme covering the weekend traffic volumes. Similarly, benefits were not expanded to include the off-peak. However, analysis of the off-peak flows suggests that at all ATC locations, off-peak flows are less than 70% of the peak flows. By limiting the economic appraisal to the two weekday peak periods and inter peak period, the overall scheme appraisal therefore represents a conservative view of the value for money represented by the Scheme.

The appraisal considered the 60-year period 2021 to 2080 inclusive, following the first modelled year of 2021.

6.3.3. Validation of Spreadsheet Based Approach

In order to validate the spreadsheet used for the appraisal of the dependent development benefits, a comparison is made with the same distance and time skim for each scenario using TUBA itself and by using the spreadsheet set into an alternative mode in which it replicates the TUBA methodology. The three zones near Staverton are excluded for consistency with the development benefits appraisal. This provides an indication of the impact of the change in calculation for 'with development' approach. Table 6–1 presents the journey time and vehicle operating cost comparison by the three methods and the % change between TUBA mode in the spreadsheet and the TUBA run itself.

Table 6–1 Validation of Spreadsheet Based Method

	Journey Purpose	Spreadsheet-Development Benefits [A]	Spreadsheet-TUBA Mode [B]	TUBA V1.9.4 [C]	Change [B-C]	% Change [B-C] / [Abs(C)]
Travel Time Benefits	Commuting	6,941	7,984	8,200	-216	-3%
	Other	13,113	15,068	15,503	-435	-3%
	Business	13,810	15,859	16,320	-461	-3%
Vehicle Operating Costs	Commuting	-1,696	-1,617	-1,681	64	4%
	Other	-2,446	-2,334	-2,427	93	4%
	Business	678	790	769	21	3%

It can be seen from Table 6–1 that the percentage change in the computation of benefits between TUBA mode in the spreadsheet (column B) and the TUBA run itself (column C) is in the range of 3 to 4% indicating the accuracy of the spreadsheet based evaluation. These small variations occur due to a level of rounding of values in the TUBA software which is not applied in the spreadsheet method.

As would be expected, values of benefit calculated using the dependent development approach (column A) are lower than those calculated using the formula applied by TUBA (column B). This is because the development benefit calculation excludes the time savings generated by YWARR for trips to and from the new development sites, since these trips do not have an equivalent Without Scheme journey time[2].

6.4. Estimation of Accident Benefits Method

Accident data covering the five year period 2009 to 2013 inclusive has been obtained from Wiltshire Council for the study area. Figure 6–1 shows the location of the accidents and the accident severity across the study area over the five year period.

[2] As set out in Section 4.2 of Annex B of ASR.

Figure 6–1 Location of Accidents and Accident Severity in the Study Area

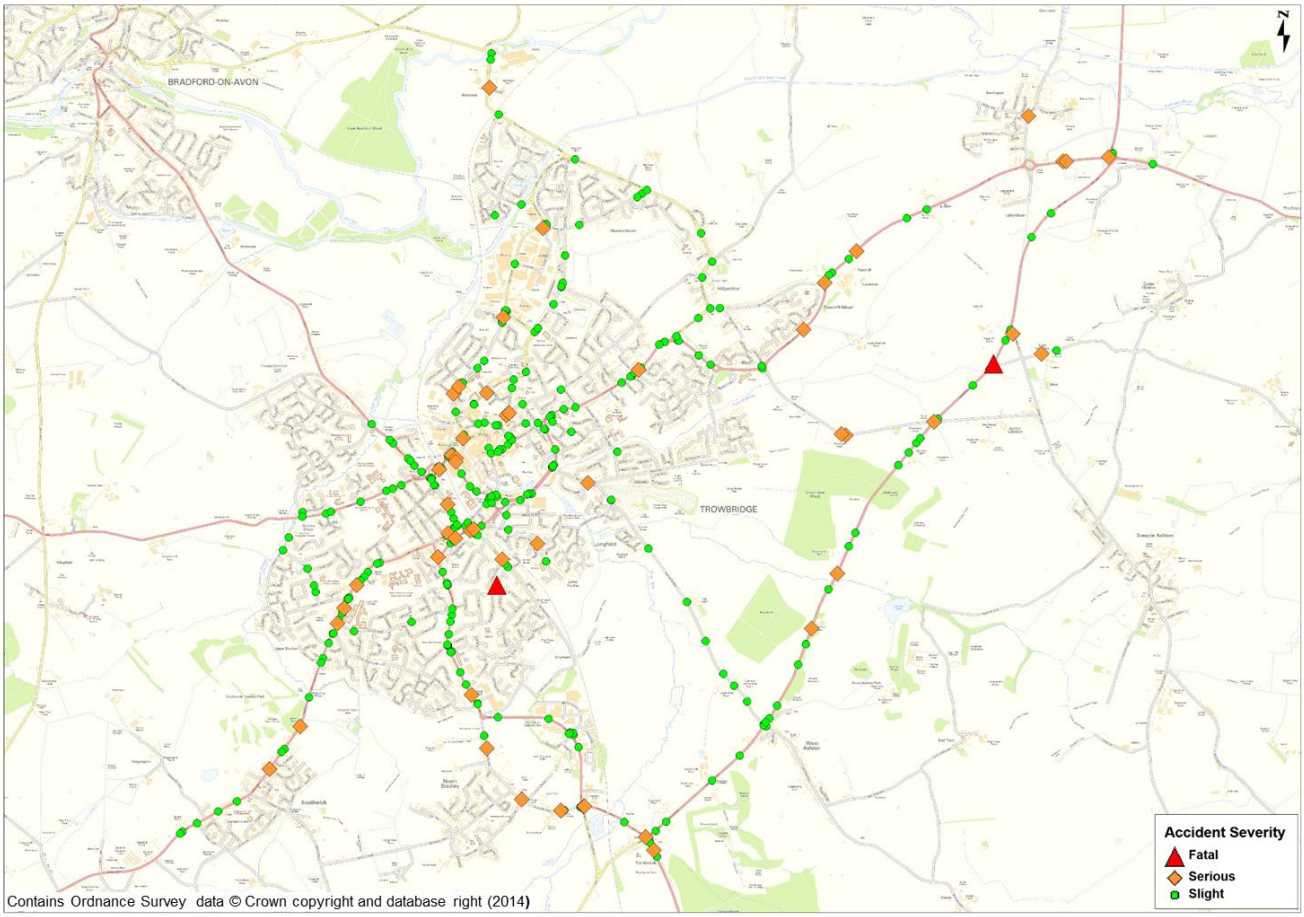


Table 6–2 presents the number of accidents in each year classified by severity.

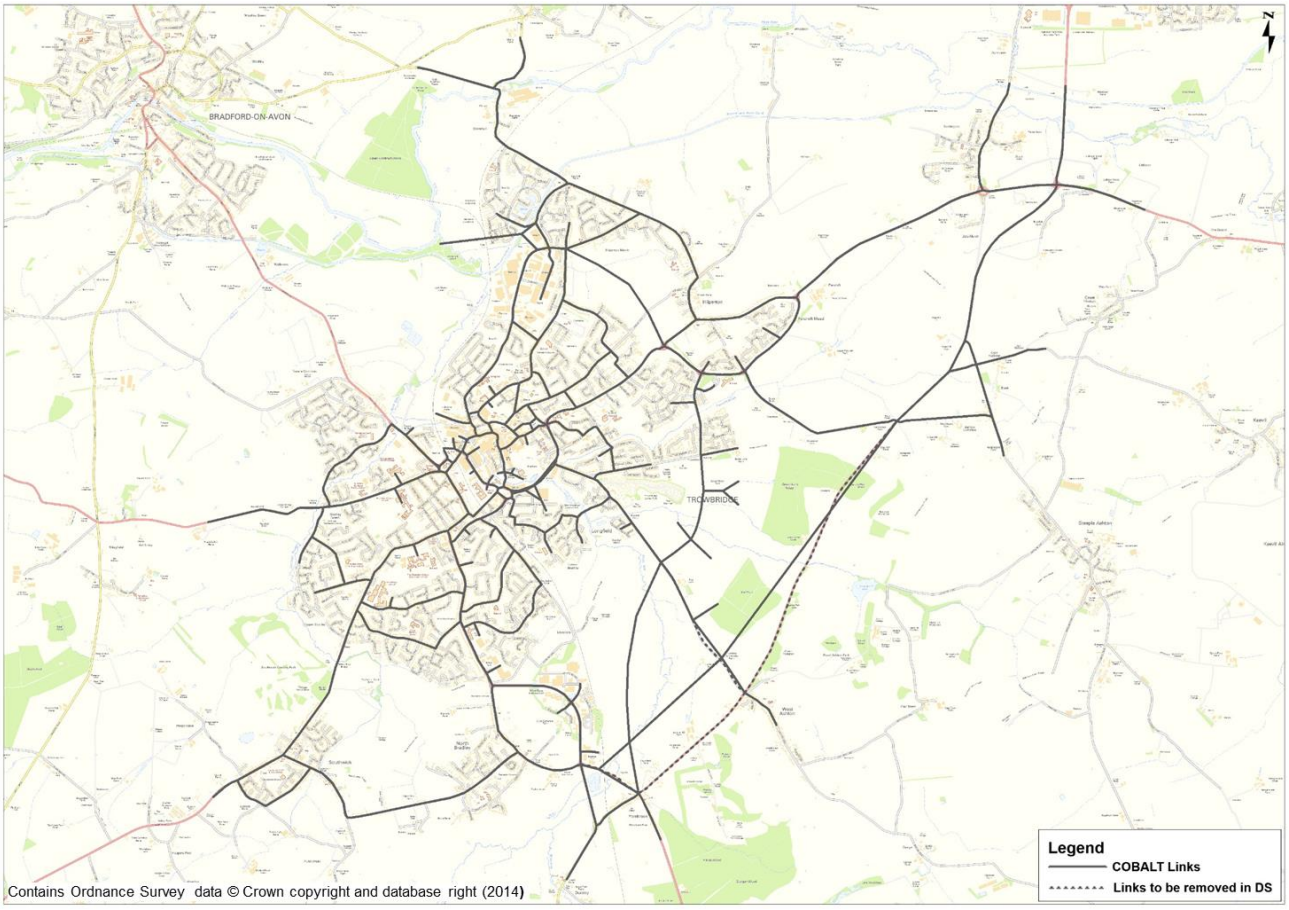
Table 6–2 Accident Severity in the Study Area

Severity	2009	2010	2011	2012	2013	Average per Year
Fatal	0	0	0	0	2	0.4
Serious	13	10	4	10	14	10.2
Slight	57	62	57	52	87	63.0
Total	**70**	**72**	**61**	**62**	**103**	73.6

It can be seen from the above table that the average annual accidents in the study area is 73.6 of which 0.5% are fatal accidents, 13.9% are serious accidents and 85.6% are slight accidents.

The study area for accident analysis was identified based on the flow difference between Without Scheme and With Scheme scenarios to ensure that all links with significant flow changes or changes of layout are considered in the analysis. Based on this, the links near Trowle Common were excluded from the analysis as they are some distance away from the proposed scheme with negligible flow difference between Without Scheme and With Scheme. Figure 6–2 presents the study area considered for accident analysis.

Figure 6–2 Study Area Considered for Accident Analysis



The DfT's COBALT (Cost and Benefit to Accidents – Light Touch) (Parameter file Version 2014.2) computer program has been used to estimate and monetise the accident savings.

An observed accident rate is derived for each road section (link) in the study area, based on data over a five year period and modelled base year flows. The observed data used to calculate accident rates only includes personal injury accidents. The accident rate is calculated by dividing the average annual number of accidents by the million vehicle kilometres travelled.

For more minor roads and the new roads in Without Scheme and With Scheme, COBALT default accident rates were used. The opening year has been considered as 2021 and a combined link and junction approach has been considered for the analysis.

COBALT presents results in the form of changes in the number of personal injury accidents (PIAs), and disaggregates this further by severity of injury: fatal, serious and slight. A further standard rate of damage only accidents per PIA is applied by link type, in order to capture the impacts of all accidents.

A monetised value is assigned to the accidents, so that total accident costs can be calculated for the Without Scheme and With Scheme scenario. Accident costs are summed across the same 60-year appraisal period and discounted back to the 2010 base year. The difference between the Without Scheme and With Scheme discounted 60-year accident costs represents the accident benefits related to the Scheme.

6.5. Estimation of Scheme Costs

6.5.1. Derivation of Base Costs

Scheme costs for the A350 Yarnbrook and West Ashton Relief Road have been estimated in both 2014 prices and outturn prices (including inflation), based on design drawings and bills of quantities. A summary of

scheme implementation costs is shown in Table 6–3. Further information regarding scheme costs, including outturn costs, is presented in the OBC report.

Table 6–3 Base Year Scheme Costs

Cost Category	£
Preparatory	£1.724 million
Construction (including Preliminaries)	£11.430 million
Site Supervision	£0.423 million
Land	£0.565 million
Quantified Risk Budget[3]	£0.474 million
Total – 2014 prices	**£14.616 million**

6.5.2. Calculation of the PVC

The appraisal considered the 60-year period 2021 to 2080 inclusive, following the assumed opening of the scheme at the beginning of the 2021/22 financial year (April 2021). The estimated net increases in maintenance and capital renewal costs, over this 60-year appraisal period, have been taken into account in the appraisal. In line with current economic appraisal guidance for transport schemes, the following adjustments to scheme costs have also been made:

- 15% optimism bias has been added to the risk-adjusted scheme costs to ensure that the economic appraisal is robust. This level of optimism bias is recommended in WebTAG when appraising road schemes that have been subject to reasonably detailed design and costing process; and
- Costs have been factored to 2010 prices and then discounted to 2010 in order to calculate the Present Value of Costs (PVC). The PVC is therefore different to the quoted scheme costs.

6.6. Economic Assessment Results

This section of the report sets out the results of the various economic assessments.

6.6.1. User Benefits

The Transport Economic Efficiency (TEE) benefits arise from journey time and vehicle operating cost savings over the 60 year appraisal period. The user benefits by journey purpose are presented in Table 6–4.

Table 6–4 User Benefits by Journey Purpose

Purpose	Time Savings (£000s)	Vehicle Operating Costs (£000s)	Total (£000s)
Non-business: commuting	6,941	-1,696	5,244
Non-business: other	13,113	-2,446	10,667
Business	13,810	678	14,488
Total	**33,864**	**-3,465**	**30,399**

Note: All values are in £000 at 2010 prices and values and are as abstracted from the spreadsheet for the dependent development approach excluding the Staverton zones.

Overall the Scheme provides benefits, in the form of time and vehicle operating cost savings of £30.4 million over the 60 year appraisal period. Positive benefits are derived entirely from journey time savings with a small negative (disbenefit) attributable to vehicle operating costs for commuting and other users. The small disbenefit for operating costs is caused by traffic re-routeing to take advantage of the Yarnbrook and West Ashton Relief Road, leading to a slight increase in distance travelled. Overall, 48% of the benefits are

[3] Note that an additional 'contractors risk allowance' is included within the construction cost. The Quantified Risk Assessment should be updated if design and build is not pursued.

realised by business users, with a further 35% by commuters. The remaining 17% are spread across all other journey purposes.

6.6.2. Accident Benefits

The safety benefits have been appraised for the 60 year period based on a comparison of the expected changes in traffic flows and road layouts between the Without Scheme and With Scheme scenarios for the Core Scenario and the Sensitivity Test. The approach to the assessment has been described in the previous section.

The COBALT results for the Core Scenario show that there is a large disbenefit resulting from the increased accidents due to increased traffic in the With Scheme scenario. As this disbenefit can be attributed purely to the increase in the number of trips generated by the Ashton Park development, the accident benefits for the central case economic appraisal have been based on the Sensitivity Test results where the traffic in both Without Scheme and With Scheme is constrained to TEMPRO to have realistic impacts.

The standard appraisal approach for a scheme such as this, which involves increased trip growth, would be to constrain both Without Scheme and With Scheme scenarios to TEMPRO growth levels, resulting in the same increase in trips occurring across both the Without Scheme and With Scheme. However, it is unlikely that such development (and therefore trip growth) could be accommodated anywhere in Trowbridge other than at Ashton Park, which is dependent on the A350 Yarnbrook and West Ashton Relief Road. Due to this dependency, trips to and from the Ashton Park development are not included within the Without Scheme, resulting in much higher trip numbers in the With Scheme. These extra trips result in increased accident numbers in the With Scheme.

In reality, if the Ashton Park development were not to proceed, additional growth would need to be accommodated elsewhere in Wiltshire, resulting in an equivalent growth in accidents at that location.

A broader model, beyond the confines of the Trowbridge SATURN model, would therefore include TEMPRO constrained trip growth in both Without Scheme and With Scheme scenarios. The Sensitivity Test, using this approach of equal Without Scheme and With Scheme trip numbers, is therefore considered to be a more accurate method for measuring accident impacts attributable to only the Scheme.

The results of the accident analysis undertaken in COBALT, based on the Sensitivity Test, are summarised in Table 6–5, which shows the overall changes in numbers of accidents between Without Scheme and With Scheme scenarios.

Table 6–5 Changes in the Number of Accidents and Casualties

Scenario	Number of PIA Accidents	Casualties by Severity		
		Fatal	Serious	Slight
Without Scheme (DM)	6,067	56.5	656.0	7,755.2
With Scheme (DS)	5,928	54.8	639.8	7,577.1
Difference (DM-DS)	138.7	1.7	16.2	178.1

It can be seen from the table that the A350 Yarnbrook and West Ashton Relief Road will result in an estimated PIA saving of 138.7 accidents over the 60-year assessment period. The predicted decrease in fatal, serious and slight casualties over the appraisal period is 1.7, 16.2 and 178.1 respectively.

The cost of accidents, including both PIAs and damage only accidents, in the Without Scheme scenario is £312.0 million and in With Scheme scenario is £304.5 million, from which it has been assessed that the benefits over the 60 year appraisal period amounts to a net present value of £7.6m (at 2010 prices and values).

In order to assess the isolated impact of the Scheme, the same approach is adopted (using the Sensitivity Test benefits) for greenhouse gases and indirect tax revenues for the Core Scenario.

6.6.3. Greenhouse Gases

The costs of greenhouse gases emissions are calculated from the main TUBA output file and have been adjusted to account for the Staverton zones by applying the ratio of adjusted to unadjusted Vehicle Operating Costs to the TUBA output value for carbon benefits. As with the accident benefit calculations, for greenhouse gases emissions the sensitivity test TUBA results were also used. The adjusted carbon benefits are £0.69 million (2010 prices, discounted to 2010) over the 60-year appraisal period, which reflects the improved network performance of the With Scheme scenario in comparison to Without Scheme scenario at the same level of traffic demand.

6.6.4. Indirect Tax Revenues

The indirect tax revenues received by the Government in the With Scheme scenario are lower than the revenues received in the Without Scheme scenario. This is a result of decrease in overall fuel consumption resulting from the increased speeds for same number of trips, and hence there is reduction in fuel duty and VAT received by the Government. The decrease in indirect tax revenue is £1.86 million (2010 prices, discounted to 2010) over the 60 year appraisal period.

6.7. Principal Economic Indicators

The values of the principal economic indicators (2010 market prices, discounted to 2010) for the Scheme are shown in Table 6–6. A breakdown of the quantified benefits is provided in the Analysis of Monetised Costs and Benefits (AMCB) in Table 6–9.

Table 6–6 Principal Economic Indicators for the A350 Yarnbrook and West Ashton Relief Road

Economic Indicator	A350 Yarnbrook and West Ashton Relief Road
Present Value of Benefits (PVB)	£28.12 million
Present Value of Costs (PVC)	£10.50 million
Net Present Value (NPV)	£17.62 million
Initial Benefit Cost Ratio (BCR), excluding reliability, land value uplifts, and wider impacts	2.68

Table 6–6 indicates that the total present value of benefits is £28.12 million excluding the reliability and land value uplift benefits. When combined with the PVC of £10.50 million, this results in a NPV of £17.62 million and a Benefit Cost Ratio of 2.68. This BCR represents 'high' value for money as defined in DfT's value for money guidance. As noted above, the appraisal excludes the off-peak and weekend periods and therefore may underestimate scheme performance.

The outputs from the economic appraisal for the A350 Yarnbrook and West Ashton Relief Road are summarised in the following standard economics output tables:

- Transport Economic Efficiency (TEE), summarising the user benefits - Table 6–7;
- Public Accounts (PA), summarising the impact on public sector expenditure - Table 6–8; and
- Analysis of Monetised Costs and Benefits (AMCB) - Table 6–9.

Table 6–7 Economic Efficiency of the Transport System (Core Scenario)

Non-business: Commuting	**ALL MODES TOTAL**		**ROAD**	**BUS and COACH**	**RAIL**	**OTHER**
User benefits			**Private Cars and LGVs**	**Passengers**	**Passengers**	
Travel time	6,941		6,941			
Vehicle operating costs	-1,696		-1,696			
User charges	0		0			
During Construction & Maintenance	0					
NET NON-BUSINESS BENEFITS: COMMUTING	5,244	*(1a)*	5,244			

Non-business: Other	**ALL MODES TOTAL**		**ROAD**	**BUS and COACH**	**RAIL**	**OTHER**
User benefits			**Private Cars and LGVs**	**Passengers**	**Passengers**	
Travel time	13,113		13,113			
Vehicle operating costs	-2,446		-2,446			
User charges	0		0			
During Construction & Maintenance	0					
NET NON-BUSINESS BENEFITS: OTHER	10,667	*(1b)*	10,667			

Business								
User benefits			**Goods Vehicles**	**Business Cars & LGVs**	**Passengers**	**Freight**	**Passengers**	
Travel time	13,810		0	13,810				
Vehicle operating costs	678		0	678				
User charges	0		0	0				
During Construction & Maintenance	0							
Subtotal	14,488	*(2)*	0	14,488				
Private sector provider impacts					**Passengers**	**Freight**	**Passengers**	
Revenue	0							
Operating costs	0							
Investment costs	-8,713		-8,713					
Grant/subsidy	0							
Subtotal	0	*(3)*						
Other business impacts								
Developer contributions	0	*(4)*						
NET BUSINESS IMPACT	5,775	*(5) = (2) + (3) + (4)*						

TOTAL		
Present Value of Transport Economic Efficiency Benefits ('Adjusted TEE')	21,686	*(6) = (1a) + (1b) + (5)*

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.
All entries are discounted present values, in 2010 prices and values

Table 6–8 Public Accounts (Core Scenario)

	ROAD INFRASTRUCTURE TOTAL	
Local Government Funding		
Operating Costs	1,220	
Investment Costs	3,029	
Developer and Other Contributions	0	
NET IMPACT	4,249	(7)
Central Government Funding: Transport		
Operating costs	-	
Investment Costs	6,249	
Developer and Other Contributions	0	
NET IMPACT	6,249	(8)
Central Government Funding: Non-Transport		
Indirect Tax Revenues	1,855	(9)
TOTALS		
Broad Transport Budget	10,497	(10) = (7) + (8)
Wider Public Finances	1,855	(11) = (9)

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All entries are discounted present values, in 2010 prices and values

Table 6–9 Analysis of Monetised Costs and Benefits (Core Scenario, Initial Quantified Benefits Only)

Noise	-	*(12)*
Local Air Quality	-	*(13)*
Greenhouse Gases	699	*(14)*
Accidents	7,585	*(16)*
Economic Efficiency: Consumer Users (Commuting)	5,244	*(1a)*
Economic Efficiency: Consumer Users (Other)	10,667	*(1b)*
Economic Efficiency: Business Users and Providers	5,775	*(5)*
Wider Public Finances (Indirect Taxation Revenues)	-1,855	*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Wider Impacts	-	*(17)*
Present Value of Benefits (see notes) (PVB)	28,116	*(PVB) = (12) + (13) + (14) + (16) + (1a) + (1b) + (5) + (17) - (11)*
Broad Transport Budget	10,497	*(10)*
Present Value of Costs (see notes) (PVC)	10,497	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	17,618	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.68	BCR=PVB/PVC

7. Additional Quantified Benefits

7.1. Introduction

The following additional benefits forecast to arise from the Scheme have been monetised and included within the economic appraisal and 'adjusted BCR' estimate. A portion of benefit for the Scheme is expected to come from the increase to land values resulting from the development.

7.2. Reliability Benefits

The results of the reliability assessment, using the Urban Road reliability approach specified in WebTAG, by journey purpose is presented in Table 7–1. The overall assessment results in total reliability benefits of £4.01 million.

Table 7–1 Reliability Benefits by Journey Purpose

Purpose	Reliability Benefits (£000)
Business	1,787
Commuting	707
Others	1,518
Total	**4,012**

Note: All values are in £000 at 2010 prices and values

In line with WebTAG guidance, the reliability benefits are excluded from the BCR calculations for the central case but are shown separately in the Appraisal Summary Table in the OBC. It is also considered for the 'adjusted BCR' estimate.

7.3. Land Value Benefits

At present the area is all in agricultural use and will be converted to new purposes as part of the developments. The existing transport infrastructure is not sufficient to support large scale development on this site and so the land could reasonably be expected to remain in agricultural use if the Yarnbrook and West Ashton Relief Road is not implemented, therefore retaining its existing value.

The proposed Ashton Park Development comprises of 58.57ha of residential, 1.47ha of local centres, 11.27ha of schools and 15ha of employment land. These area splits were used to arrive at the present value of the land value for future use. Land values were adopted from Valuation Office Agency for 2010 and Savills for growth rate to 2014. The land value estimate in its present and future use is presented in Table 7–2.

Table 7–2 Land Value Impacts

	Land Use	Land Value (£ / Hectare)	Total Area (Hectares)	Total Land Value (£)	Total Land Value (£ Million)	Difference (£ Million)
Total Land Value in 2014 - Present Use	Agricultural	24,799	86.31	2,140,418	2.14	
Total Land Value in 2014 - Future Use	Residential	1,617,569	58.57	94,740,989	136.38	134.24
	Local Centres	1,617,569	1.47	2,377,826		
	Schools	1,617,569	11.27	18,229,997		
	Employment	1,401,893	15	21,028,391		

Source: The Valuation Office Agency for 2010 values and Savills for growth rates to 2014.

The proposed development will result in an increase in land value, but enabling the development will depend on a range of factors like transport, infrastructure for power, water, etc. Hence the benefit of land value uplift cannot be fully attributed to the transport scheme, although transport is expected to be the main factor enabling the development. As this benefit is not fully attributable to the transport scheme it cannot be included in the core BCR, but is considered for the 'adjusted BCR' estimate.

The land value uplift benefit at 2010 prices and values is estimated to be £108.2 million and this is used in the AMCB table to calculate the adjusted BCR.

7.4. Wider Impacts

Increased output in imperfect markets has been calculated as a proxy of 10% of business user benefits, as calculated for the business user sub-impact.

7.5. Adjusted BCR

This section presents the Scheme's adjusted BCR of 13.42; the AMCB table showing the reliability, land value uplift, and wider impacts benefits is included in Table 7–3.

Table 7–3 Analysis of Monetised Costs and Benefits (Core Scenario, including Additional Quantified Benefits)

Noise	-	*(12)*
Local Air Quality	-	*(13)*
Greenhouse Gases	699	*(14)*
Accidents	7,585	*(16)*
Reliability	4,012	*(15a)*
Land Value Uplift	108,155	*(15b)*
Economic Efficiency: Consumer Users (Commuting)	5,244	*(1a)*
Economic Efficiency: Consumer Users (Other)	10,667	*(1b)*
Economic Efficiency: Business Users and Providers	14,488	*(5)*
Wider Public Finances (Indirect Taxation Revenues)	-1,855	*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Wider Impacts	577	*(17)*
Present Value of Benefits (see notes) (PVB)	140,860	*(PVB) = (12) + (13) + (14) + (16) + (1a) + (1b) + (5) + (17) - (11)+(15a)+(15b)*
Broad Transport Budget	10,497	*(10)*
Present Value of Costs (see notes) (PVC)	10,497	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	130,363	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	13.42	BCR=PVB/PVC

8. Sensitivity Tests

8.1. Introduction

The forecast matrices for the Core Scenario were based on the proposed and committed developments and were not constrained to TEMPRO. The standard appraisal approach for a scheme such as this, which involves increased trip growth, would be to constrain both Without Scheme and With Scheme scenarios to TEMPRO growth levels, resulting in the same increase in trips occurring across both the Without Scheme and With Scheme. However, it is unlikely that such high levels of development (and therefore trip growth) could be accommodated anywhere in Trowbridge other than at Ashton Park, which is in itself entirely dependent on the Yarnbrook and West Ashton Relief Road. Due to this dependency, trips to and from the Ashton Park development are not included within the Without Scheme, resulting in much higher trip numbers in the With Scheme.

Recognising that the OBC has not adopted the standard appraisal approach, a Sensitivity Test has been carried out in which overall growth is constrained to TEMPRO in both the Without Scheme and With Scheme. Trip growth is constrained to TEMPRO after applying income and fuel adjustment factors, without any alternate assumptions for the internal zones, in line with WebTAG guidance. The external to external trips were constrained to TEMPRO in the Core Scenario and hence the Sensitivity Test has considered the same external to external matrix as in the Core Scenario. The matrix total for Without Scheme and With Scheme scenarios will be the same for the Sensitivity Test. The results of this Sensitivity Test and its impact on the economic appraisal are presented in this section.

8.2. Matrix Totals

Table 8–1 and Table 8–2 present the comparison of matrix totals for Core Scenario and the Sensitivity Test.

Table 8–1 Forecast Year Trip Matrix Totals 2021

Scenario	AM Peak Hour	PM Peak Hour
Base	14,835	13,820
Without Scheme (DM) – Core Scenario	17,422	16,720
With Scheme (DS) – Core Scenario	18,496	17,548
Sensitivity Test	17,582	16,544
Base to DM Growth Rate – Core Scenario	**1.17**	**1.21**
Base to DS Growth Rate – Core Scenario	**1.25**	**1.27**
Base to DM/DS Growth Rate – Sensitivity Test	**1.19**	**1.20**

Table 8–2 Forecast Year Trip Matrix Totals 2026

Scenario	AM Peak Hour	PM Peak Hour
Base	14,835	13,820
Without Scheme (DM) – Core Scenario	18,286	17,749
With Scheme (DS) – Core Scenario	20,235	19,528
Sensitivity Test	18,281	17,260
Base to DM Growth Rate – Core Scenario	**1.23**	**1.28**
Base to DS Growth Rate – Core Scenario	**1.36**	**1.41**
Base to DM/DS Growth Rate – Sensitivity Test	**1.23**	**1.25**

8.3. Network Statistics

The network statistics for the Sensitivity Test are presented in Table 8–3.

Table 8–3 Sensitivity Test Network Performance

	AM Peak Hour		PM Peak Hour	
Metric	**Without Scheme**	**With Scheme**	**Without Scheme**	**With Scheme**
2021				
Total Distance Travelled (pcu km)	64,436	63,770	62,707	62,500
Total Travel Time (pcu hr)	2,078	1,977	1,924	1,881
Total Delay (pcu hr)	637	585	545	531
Average Network Speed (km/hr)	31	32	33	33
2026				
Total Distance Travelled (pcu km)	67,483	67,145	65,769	65,876
Total Travel Time (pcu hr)	2,247	2,152	2,068	2,041
Total Delay (pcu hr)	739	695	623	628
Average Network Speed (km/hr)	30	31	32	32

Table 8–3 indicates that there will be a reduction in the total travel time in the With Scheme scenario compared to Without Scheme in AM and PM peak hour for both forecast years. The average network speed is predicted to improve in the AM peak hour and remain the same in PM peak hour between With Scheme and Without Scheme scenario.

8.4. A350 Yarnbrook and West Ashton Relief Road Flows

A comparison of traffic flow using the A350 Yarnbrook and West Ashton Relief Road between Roundabout 2 (R2) and Roundabout 3 (R3) for the forecast years between the Core Scenario and the Sensitivity Test is provided in Table 8–4.

Table 8–4 Two Way Traffic Flow – A350 Yarnbrook and West Ashton Relief Road

Peak Hour	Description	2021	2026
AM	Core Scenario	2,775	3,080
	Sensitivity	2,724	2,892
	Difference	-51	-188
	% Difference	-2%	-6%
PM	Core Scenario	2,704	2,980
	Sensitivity	2,631	2,774
	Difference	-73	-206
	% Difference	-3%	-7%

Table 8–4 indicates a marginal difference in flows on the A350 Yarnbrook and West Ashton Relief Road between the core and Sensitivity Test, which demonstrates that modelling approach adopted for the OBC is appropriate.

8.5. Principal Economic Indicators

A comparison of the principal economic indicators (2010 prices, discounted to 2010) for the Core Scenario and Sensitivity Test are shown in Table 8–5.

Table 8–5 Principal Economic Indicators for Core scenario and Sensitivity Test

Economic Indicator	Core Scenario	Sensitivity Test
Present Value of Benefits (PVB)	£28.12 million	£81.11 million
Present Value of Costs (PVC)	£10.50 million	£10.50 million
Net Present Value (NPV)	£17.62 million	£70.61 million
Benefit Cost Ratio (BCR)	**2.68**	**7.73**

The Sensitivity Test indicates that the total PVB is £81.11 million, excluding reliability, land value uplift and wider impacts benefits. When combined with the PVC of £10.50 million, this results in a NPV of £70.61 million and a BCR of 7.73. Assuming the traditional approach of equal trips in the Without and With Scheme scenarios demonstrate that the Scheme in itself would offer 'very high' value for money according to the criteria in DfT's value for money guidance.

There is a large difference in PVB between the Core Scenario (£28.12 million) and Sensitivity Test (£81.11 million). This is because the Core Scenario acknowledges that the Scheme will itself unlock development land at Ashton Park, which gives rise to increased trips around Trowbridge, tempering the overall benefits of the road. The Sensitivity Test assumes that if growth does not take place at Ashton Park then it would take place elsewhere in Trowbridge – this is very unlikely, hence the approach undertaken for the Core Scenario. However, the Sensitivity Test demonstrates that if the traditional approach was followed, of equal trips in the DM and DS, then the Scheme would have a very high initial BCR.

The accident benefits are positive for the Sensitivity Test, due to the traffic growth being constrained to TEMPRO in both the Without Scheme and With Scheme scenarios, resulting in the same amount of traffic between the two scenarios, and with the modern standard road network in the With Scheme scenario in the vicinity of the Scheme. The cost of accidents in the Without Scheme and With Scheme scenario are £312.0 million and £304.5 million respectively, resulting in an accident benefit of £7.6 million over the 60 year appraisal period.

The outputs from the economic appraisal for the Sensitivity Test are summarised in the standard AMCB economics output table (Table 8–6).

Table 8–6 Analysis of Monetised Costs and Benefits (Sensitivity Test, Initial Quantified Benefits Only)

Noise	-	*(12)*
Local Air Quality	-	*(13)*
Greenhouse Gases	699	*(14)*
Accidents	7,585	*(16)*
Economic Efficiency: Consumer Users (Commuting)	16,764	*(1a)*
Economic Efficiency: Consumer Users (Other)	32,217	*(1b)*
Economic Efficiency: Business Users and Providers	25,700	*(5)*
Wider Public Finances (Indirect Taxation Revenues)	- 1,855	*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Wider Impacts	-	*(17)*
Present Value of Benefits (see notes) (PVB)	81,111	*(PVB) = (12) + (13) + (14) + (15) + (16) + (1a) + (1b) + (5) + (17) - (11)*
Broad Transport Budget	10,497	*(10)*
Present Value of Costs (see notes) (PVC)	10,497	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	70,613	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	7.73	BCR=PVB/PVC

9. Summary and Conclusion

This Forecasting & Economic Appraisal Report for the A350 Yarnbrook and West Ashton Relief Road OBC provides a summary of the forecast year model runs and economic appraisal undertaken for the OBC. The Trowbridge Traffic Model has been revalidated in line with the agreed Appraisal Specification Report to support the OBC.

The modelling framework was developed to represent a 2014 base year to which the model was calibrated and validated and then the matrices were factored back to the 2009 base year, in order to remain consistent with the modelling approach used for the Ashton Park Transport Assessment. Two forecast years have been developed; 2021 (scheme opening year) and 2026 (consistent with the forecast year for the Ashton Park Transport Assessment). The transport network was updated to reflect schemes implemented since 2009, schemes currently under construction and committed transport schemes which are expected to be in place by 2021 or 2026.

With additional demand due to the Ashton Park development, the With Scheme scenario performs almost at the same level or even slightly better than the Without Scheme scenario. This is evident from the average journey times remaining almost the same in the modelled area and most of the major junctions performing at the same level in both the scenarios.

The scheme is expected to generate £28.12 million of benefits over the 60 year appraisal period, based on the initial BCR. The majority of benefits arise from travel time benefits (£33.86 million). Benefits of £699k will arise due to reduced carbon emissions.

The scheme is expected to generate additional benefit in the form of land value uplifts by virtue of land conversion from agricultural to residential and employment. The estimated benefit in 2010 prices as a result of land value uplift is £108.2 million. The scheme will generate £4.01 million through journey time reliability benefits

The overall impact of the Scheme is summarised by the analysis of benefits and costs and the Scheme is expected to generate an NPV of £17.62 million and BCR of 2.68, indicating High value for money.

The adjusted BCR, by also considering the journey time reliability benefits, wider impacts, and land value uplift benefits, is estimated to be 13.42.

Appendices

Appendix A. Committed Developments

A.1. Housing Developments

Net Housing Completions between 2009 and 2014

APPLICATION_NUMBER	Flat_House	New_Conversion	Net Completions	Year_of_Completion	Zone in which development falls	CA	PDL	Town	Site_address
W08.0762	Flat	New Build	6	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W08.0762	House	New Build	1	2011	70	Trowbridge	Brownfield	Trowbridge	Islington Motors Site, Cockhill
W09.0627	House	New Build	0	2011	71	Trowbridge	Brownfield	Trowbridge	Court Lodge, Westwood Road
W11.3291	House	New Build	1	2013	69	Trowbridge	Greenfield	Trowbridge	Land West Of 14 Brook Road
W04.0065	House	New Build	2	2010	66	Trowbridge	Brownfield	Trowbridge	Land at Westbourne Gardens
W04.0065	House	New Build	2	2010	66	Trowbridge	Brownfield	Trowbridge	Land at Westbourne Gardens
W10.1950	Flat	New Build	2	2012	73	Trowbridge	Brownfield	Trowbridge	23 Westfield Road
W12.1893	Flat	New Build	1	2013	73	Trowbridge	Greenfield	Trowbridge	Land Adjoining 51 Summerleaze
W04.0287	Flat	Conversion	1	2010	73	Trowbridge	Brownfield	Trowbridge	10 Talbot Road
W12.1893	Flat	New Build	0	2013	73	Trowbridge	Greenfield	Trowbridge	Land Adjoining 51 Summerleaze
W12.1893	Flat	Conversion	2	2013	73	Trowbridge	Brownfield	Trowbridge	Land Adjoining 51 Summerleaze
W09.1220	House	Conversion	1	2010	74	Trowbridge	Brownfield	Trowbridge	Land adjacent 7 Aldeburgh Place
W09.3519	House	New Build	1	2012	74	Trowbridge	Brownfield	Trowbridge	Garage Block, Sheridan Gardens
W09.1411	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Land adj 36 Summerleaze
W09.3485	Flat	New Build	2	2013	74	Trowbridge	Brownfield	Trowbridge	Land adjoining 1 & 2 Summerleaze
W09.3485	Flat	New Build	2	2013	74	Trowbridge	Brownfield	Trowbridge	Land adjoining 1 & 2 Summerleaze
W09.1411	Flat	New Build	2	2012	74	Trowbridge	Brownfield	Trowbridge	Land adj 36 Summerleaze
W08.0351	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 6 - 12 St Johns Crescent
W08.0351	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 6 - 12 St Johns Crescent
W08.0467	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 47 Lambrok Road
W08.0467	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 47 Lambrok Road
W08.0467	House	New Build	2	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 47 Lambrok Road

W08.0351	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 6 - 12 St Johns Crescent
W08.0467	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 47 Lambrok Road
W08.1543	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Adj 6 - 12 St Johns Crescent
W08.2638	House	New Build	2	2010	74	Trowbridge	Brownfield	Trowbridge	Garages at Lambrok Road
W09.1411	House	New Build	1	2010	74	Trowbridge	Brownfield	Trowbridge	Land adj 36 Summerleaze
W10.0400	Flat	Conversion	0	2012	83	Trowbridge	Brownfield	Trowbridge	Part of 1st Floor Over One Stop Shop, Frome Road
W11.0419	House	New Build	0	2012	83	Trowbridge	Greenfield	Trowbridge	Land Rear Of 69 Whiterow Park
W11.0525	House	Conversion	1	2012	83	Trowbridge	Brownfield	Trowbridge	3 College Road
W11.0419	House	New Build	1	2012	83	Trowbridge	Greenfield	Trowbridge	Land Rear Of 69 Whiterow Park
W11.0525	House	Conversion	1	2012	83	Trowbridge	Brownfield	Trowbridge	3 College Road
W09.3767	House	New Build	1	2011	83	Trowbridge	Brownfield	Trowbridge	Adj 58 Whiterow Park
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W11.3323	Flat	Change of use	1	2013	75	Trowbridge	Brownfield	Trowbridge	198 Frome Road
W09.0620	Flat	Conversion	2	2011	75	Trowbridge	Brownfield	Trowbridge	11 Pitman Avenue
W07.3101	House	New Build	0	2010	75	Trowbridge	Brownfield	Trowbridge	115 Frome Road
W05.0807	House	New Build	0	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W05.0807	House	New Build	1	2010	75	Trowbridge	Brownfield	Trowbridge	Rear of 95-133 Frome Road
W09.1014	House	New Build	1	2010	84	Trowbridge	Brownfield	Trowbridge	Land adjacent 43 Willlow Grove
W10.1159	Flat	Conversion	2	2012	85	Trowbridge	Brownfield	Trowbridge	Grove Court, College Road
W10.0044	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land rear of 22 & 32 Maple Grove
W10.0041	House	New Build	1	2013	85	Trowbridge	Brownfield	Trowbridge	Rear of 166 to 178 College Road
W10.0041	House	New Build	1	2013	85	Trowbridge	Brownfield	Trowbridge	Rear of 166 to 178 College Road
W10.0041	House	New Build	1	2013	85	Trowbridge	Brownfield	Trowbridge	Rear of 166 to 178 College Road
W10.0040	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land West of 11 Larch Grove
W10.0040	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land West of 11 Larch Grove
W10.0042	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land East of 27 Beech Grove
W10.0042	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land East of 27 Beech Grove
W10.0041	House	New Build	1	2013	85	Trowbridge	Brownfield	Trowbridge	Rear of 166 to 178 College Road
W10.2693	House	New Build	1	2011	85	Trowbridge	Brownfield	Trowbridge	Land Adj 2 Hawthorn Grove
W10.3739	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land West of 20 Almond Grove
W10.3739	House	New Build	1	2012	85	Trowbridge	Brownfield	Trowbridge	Land West of 20 Almond Grove

W11.0367	House	New Build	1	2014	83	Trowbridge	Greenfield	Trowbridge	Land South of 25 Kingsdown Road
W12.1643	House	New Build	1	2014	91	Trowbridge	Greenfield	Trowbridge	Land rear of 229 Bradley Road
W12.1643	House	New Build	1	2014	91	Trowbridge	Greenfield	Trowbridge	Land rear of 229 Bradley Road
W08.1927	House	Conversion	1	2010	89	Trowbridge	Brownfield	Trowbridge	5 Collingbourne Close
W08.1927	House	Conversion	1	2010	89	Trowbridge	Brownfield	Trowbridge	5 Collingbourne Close
W12.1350	House	New Build	1	2014	86	Trowbridge	Greenfield	Trowbridge	Land West Of 24 Holbrook Lane
W07.0859	House	New Build	1	2010	87	Trowbridge	Brownfield	Trowbridge	Adj 12 Holbrook Lane
W09.0515	Flat	New Build	1	2011	80	Trowbridge	Brownfield	Trowbridge	Rutland House, Rutland Crescent
W09.0515	Flat	New Build	39	2011	80	Trowbridge	Brownfield	Trowbridge	Rutland House, Rutland Crescent
W10.2547	Flat	New Build	6	2014	80	Trowbridge	Brownfield	Trowbridge	Unit 9 Yeoman Way
W10.2547	Flat	New Build	4	2014	80	Trowbridge	Brownfield	Trowbridge	Unit 9 Yeoman Way
W09.3728	House	New Build	1	2011	80	Trowbridge	Brownfield	Trowbridge	Rutland House, Rutland Crescent
W09.3728	House	New Build	1	2011	80	Trowbridge	Brownfield	Trowbridge	Rutland House, Rutland Crescent
W09.0193	Flat	Change of use	1	2010	78	Trowbridge	Brownfield	Trowbridge	56 Dursley Road
W10.0039	House	New Build	1	2013	78	Trowbridge	Brownfield	Trowbridge	Garage Block at Ashmead Court
W10.0039	House	New Build	1	2013	78	Trowbridge	Brownfield	Trowbridge	Garage Block at Ashmead Court
W13.0618	House	New Build	1	2014	78	Trowbridge	Greenfield	Trowbridge	Land Rear Of 90 And 88A And 88B Dursley Road
W13.0618	House	New Build	1	2014	78	Trowbridge	Greenfield	Trowbridge	Land Rear Of 90 And 88A And 88B Dursley Road
W11.1453	House	Change of use	1	2012	77	Trowbridge	Brownfield	Trowbridge	Wiltshire Mind, 107 Newtown
W07.3586	Flat	New Build	8	2010	16	Trowbridge	Brownfield	Trowbridge	Former Wincanton Site, Bythesea Road
W07.3586	Flat	New Build	3	2010	16	Trowbridge	Brownfield	Trowbridge	Former Wincanton Site, Bythesea Road
W11.1869	House	Change of use	1	2012	16	Trowbridge	Brownfield	Trowbridge	Pumpkin Tower, Bythesea Road
W08.0203	Flat	New Build	6	2011	65	Trowbridge	Brownfield	Trowbridge	3 Bradford Road
W08.0203	Flat	Conversion	2	2012	65	Trowbridge	Brownfield	Trowbridge	3 Bradford Road
W13.1958	House	Change of use	1	2014	65	Trowbridge	Brownfield	Trowbridge	11 Westbourne Gardens
W09.0625	Flat	Conversion	1	2012	6	Trowbridge	Brownfield	Trowbridge	60 Castle Street
W09.0882	House	Conversion	1	2012	1	Trowbridge	Brownfield	Trowbridge	12C Pitman Mews, Silver Street
W08.2118	Flat	Conversion	4	2010	1	Trowbridge	Brownfield	Trowbridge	19 Silver Street
W09.0882	House	Conversion	1	2012	1	Trowbridge	Brownfield	Trowbridge	12C Pitman Mews, Silver Street
W08.0069	Flat	New Build	3	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W10.2101	Flat	Change of use	1	2012	12	Trowbridge	Brownfield	Trowbridge	2-4 Wicker Hill
W10.2101	Flat	Change of use	2	2012	12	Trowbridge	Brownfield	Trowbridge	2-4 Wicker Hill
W06.0995	Flat	Conversion	4	2010	12	Trowbridge	Brownfield	Trowbridge	10 Wicker Hill
W06.2896	Flat	New Build	15	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W08.0069	Flat	New Build	3	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W08.0069	Flat	New Build	3	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W08.0069	Flat	New Build	4	2010	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	6	2010	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	10	2010	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	3	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	23	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	10	2010	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	8	2010	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street
W06.2896	Flat	New Build	6	2011	12	Trowbridge	Brownfield	Trowbridge	Ushers Brewery Site, Back Street

W11.1998	Flat	New Build	11	2014	20	Trowbridge	Brownfield	Trowbridge	Broad Street Car Park
W11.1998	Flat	New Build	20	2014	20	Trowbridge	Brownfield	Trowbridge	Broad Street Car Park
W08.2345	House	New Build	3	2010	26	Trowbridge	Brownfield	Trowbridge	South of 39 Francis Street
W09.0224	House	New Build	2	2011	26	Trowbridge	Greenfield	Trowbridge	Adj 43 Seymour Road
W09.0224	House	New Build	2	2011	26	Trowbridge	Greenfield	Trowbridge	Adj 43 Seymour Road
W08.3293	Flat	New Build	2	2010	26	Trowbridge	Brownfield	Trowbridge	Adj 26 Melton Road
W08.2337	House	New Build	1	2010	26	Trowbridge	Brownfield	Trowbridge	Land at Langford Road
W08.2337	House	New Build	2	2010	26	Trowbridge	Brownfield	Trowbridge	Land at Langford Road
W08.2337	House	New Build	0	2010	26	Trowbridge	Brownfield	Trowbridge	Land at Langford Road
W08.2335	House	New Build	1	2010	26	Trowbridge	Brownfield	Trowbridge	Adj 1 Francis Road
W09.0080	House	New Build	0	2010	26	Trowbridge	Brownfield	Trowbridge	Adj 64 Langford Road
W09.0080	House	New Build	0	2010	26	Trowbridge	Brownfield	Trowbridge	Adj 64 Langford Road
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W12.0538	House	New Build	1	2014	26	Trowbridge	Brownfield	Trowbridge	Land At Junction Of Charles Street And Westcroft Street
W10.1840	Flat	Conversion	5	2014	23	Trowbridge	Brownfield	Trowbridge	8 + 9 Timbrell Street
W07.2692	Flat	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	Flat	New Build	32	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	Flat	New Build	2	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	Flat	New Build	4	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W07.2692	House	New Build	1	2011	23	Trowbridge	Brownfield	Trowbridge	Land opposite 2 Prospect Place
W08.0432	Flat	Conversion	2	2011	23	Trowbridge	Brownfield	Trowbridge	2 Adcroft Cottage, British Row
W09.1679	Flat	Conversion	1	2010	23	Trowbridge	Brownfield	Trowbridge	1 Adcroft Street
W09.1679	House	New Build	1	2010	23	Trowbridge	Brownfield	Trowbridge	1 Adcroft Street
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	Flat	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	Flat	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	Flat	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre

W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	Flat	New Build	4	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	Flat	New Build	2	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2013	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre

W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W11.2656	House	New Build	1	2014	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant Ushers Brewery Conigre
W09.1115	Flat	New Build	6	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	Flat	New Build	6	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W09.1115	House	New Build	1	2011	21	Trowbridge	Brownfield	Trowbridge	Former Bottling Plant, Ushers Brewery, Conigre
W07.3929	Flat	New Build	6	2010	22	Trowbridge	Brownfield	Trowbridge	Land opposite 5-9 Duke Street
W07.3929	Flat	New Build	16	2010	22	Trowbridge	Brownfield	Trowbridge	Land opposite 5-9 Duke Street
W09.3592	Flat	Change of use	1	2013	22	Trowbridge	Brownfield	Trowbridge	15 Church Street
W10.0591	Flat	New Build	2	2011	22	Trowbridge	Greenfield	Trowbridge	Rear of Adj 3 St Thomas Street
W10.0591	Flat	New Build	2	2011	22	Trowbridge	Greenfield	Trowbridge	Rear of Adj 3 St Thomas Street
W10.0591	House	New Build	2	2011	22	Trowbridge	Greenfield	Trowbridge	Rear of Adj 3 St Thomas Street
W10.0591	House	New Build	2	2011	22	Trowbridge	Greenfield	Trowbridge	Rear of Adj 3 St Thomas Street
W10.1152	Flat	Change of use	1	2012	22	Trowbridge	Brownfield	Trowbridge	14 Church Street
W13.1279	Flat	Conversion	1	2014	22	Trowbridge	Brownfield	Trowbridge	Land To The Rear Of Flat 4, 9 Union Street
W09.0342	Flat	New Build	1	2013	98	Trowbridge	Brownfield	Trowbridge	Rear of 12-13 Duke Street
W09.0342	Flat	New Build	2	2013	98	Trowbridge	Brownfield	Trowbridge	Rear of 12-13 Duke Street
W09.0342	Flat	New Build	2	2013	98	Trowbridge	Brownfield	Trowbridge	Rear of 12-13 Duke Street
W12.0780	Flat	Conversion	1	2014	98	Trowbridge	Brownfield	Trowbridge	42A Roundstone Street
W08.0934	Flat	Change of use	2	2014	98	Trowbridge	Brownfield	Trowbridge	1 & 1A Church Street
W09.1591	House	Change of use	1	2011	98	Trowbridge	Brownfield	Trowbridge	3-4 Duke Street
W09.1591	House	Change of use	1	2011	98	Trowbridge	Brownfield	Trowbridge	3-4 Duke Street
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	Flat	New Build	6	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	Flat	New Build	3	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm

W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W10.3061	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	Flat	New Build	9	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm

W08.0896	Flat	New Build	3	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	Flat	New Build	3	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	Flat	New Build	3	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm

W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2012	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2013	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2011	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm

W08.0896	House	New Build	1	2014	35	Trowbridge	Greenfield	Trowbridge	Land at Southview Farm
W05.0821	Flat	New Build	9	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W05.0821	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Trowbridge Rugby Football Club
W10.1056	Flat	Conversion	1	2013	39	Trowbridge	Brownfield	Trowbridge	Greenwood House, 7 Green Lane
W10.1056	Flat	Conversion	1	2013	39	Trowbridge	Brownfield	Trowbridge	Greenwood House, 7 Green Lane
W10.1056	Flat	Conversion	1	2013	39	Trowbridge	Brownfield	Trowbridge	Greenwood House, 7 Green Lane
W09.1127	Flat	Conversion	2	2011	39	Trowbridge	Brownfield	Trowbridge	4-6A Paxcroft Way
W10.1056	Flat	Conversion	1	2013	39	Trowbridge	Brownfield	Trowbridge	Greenwood House, 7 Green Lane
W10.1056	Flat	Conversion	1	2013	39	Trowbridge	Brownfield	Trowbridge	Greenwood House, 7 Green Lane
W13.0929	House	New Build	1	2014	39	Trowbridge	Greenfield	Trowbridge	Land North Of Pinecroft West Ashton Road
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	Flat	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	Flat	New Build	6	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)

W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W11.1932	House	New Build	1	2014	42	Trowbridge	Greenfield	Trowbridge	Land North East of Green Lane Farm, Green Lane (The Pastures)
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W08.3268	House	New Build	1	2013	45	Trowbridge	Greenfield	Trowbridge	Land at Hilperton Drive/Ashton Road, Hilperton
W10.0527	Flat	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2012	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2012	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place

W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W10.0527	House	New Build	1	2011	45	Trowbridge	Greenfield	Trowbridge	Land off, Hackett Place
W12.0519	Flat	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	Flat	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	Flat	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way

W12.0519	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North Of Paxcroft Way
W10.4052	Flat	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	Flat	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way

W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	5	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	Flat	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	Flat	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	Flat	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way

W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
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W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2013	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2012	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W10.4052	House	New Build	1	2014	44	Trowbridge	Greenfield	Trowbridge	Land H8 North of Paxcroft Way
W03.1730	Flat	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	Flat	New Build	6	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	Flat	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	Flat	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	Flat	New Build	6	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	Flat	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive

W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W03.1730	House	New Build	1	2010	44	Trowbridge	Greenfield	Trowbridge	Land South of the Beeches/Kenton Drive
W12.1107	House	Conversion	0	2013	51	Trowbridge	Brownfield	Trowbridge	Jasmin House 115A Hilperton Road
W10.2449	House	New Build	1	2012	51	Trowbridge	Brownfield	Trowbridge	Durlston, Hilperton Road
W10.2449	House	New Build	1	2012	51	Trowbridge	Brownfield	Trowbridge	Durlston, Hilperton Road
W10.2449	House	New Build	1	2013	51	Trowbridge	Brownfield	Trowbridge	Durlston, Hilperton Road
W10.1050	Flat	Conversion	0	2011	30	Trowbridge	Brownfield	Trowbridge	21 Heather Shaw
W07.3914	Flat	Conversion	2	2011	30	Trowbridge	Brownfield	Trowbridge	45 Harford Street
W09.3340	House	New Build	1	2011	30	Trowbridge	Brownfield	Trowbridge	Land Adj 7 Furlong Gardens
W09.2397	House	New Build	1	2010	53	Trowbridge	Brownfield	Trowbridge	Land rear of 117 St Thomas Road
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	Flat	New Build	7	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	Flat	New Build	5	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W10.1381	House	New Build	1	2014	28	Trowbridge	Brownfield	Trowbridge	Land off York Buildings
W11.0459	House	New Build	1	2012	28	Trowbridge	Greenfield	Trowbridge	Land at 8 St Thomas Road
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace

W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	Flat	New Build	6	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace

W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	Flat	New Build	6	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	Flat	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2011	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W07.1903	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0108	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	Land South of New Terrace
W09.0448	House	New Build	1	2010	54	Trowbridge	Brownfield	Trowbridge	Rear of 76 The Down
W08.2339	House	New Build	2	2010	54	Trowbridge	Brownfield	Trowbridge	Adj Downside Walk
W08.2344	House	New Build	2	2010	54	Trowbridge	Brownfield	Trowbridge	Land between 2 & 3 Downside Park
W09.1913	House	New Build	1	2010	55	Trowbridge	Brownfield	Trowbridge	Rear of 45 Victoria Road
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton

W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W10.3236	House	New Build	1	2012	46	Trowbridge	Greenfield	Trowbridge	Land rear of The Grange, Ashton Road, Hilperton
W13.1880	Flat	New Build	4	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	Flat	New Build	3	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	Flat	New Build	6	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W13.1880	Flat	New Build	4	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W13.1880	Flat	New Build	6	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0453	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead

W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0811	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0470	Flat	New Build	3	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0470	Flat	New Build	6	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0470	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
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W11.0470	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead

W11.0470	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0466	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0466	Flat	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0466	Flat	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0466	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W11.0466	House	New Build	1	2013	41	Trowbridge	Greenfield	Trowbridge	Castlemead
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W12.1393	Flat	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	Flat	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	Flat	New Build	6	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	Flat	New Build	6	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	Flat	New Build	6	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	Flat	New Build	3	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	Flat	New Build	4	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1393	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
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W12.1477	Flat	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1477	Flat	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1477	Flat	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1477	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1477	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
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W12.1477	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
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W12.1477	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W12.1477	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
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W12.1477	House	New Build	1	2014	41	Trowbridge	Greenfield	Trowbridge	Castlemead
W04.0948	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	
W04.0948	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	
W04.0948	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	
W05.0626	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	
W05.0626	House	New Build	1	2010	63	Bradford on Avon	Greenfield	Trowbridge	
W10.2361	House	Conversion	1	2012	71	Trowbridge	Greenfield	Trowbridge	Land North West Of Manor Farm, 8 Westwood Road
W09.1117	House	Conversion	1	2011	71	Trowbridge	Greenfield	Trowbridge	Land adj Manor Court Far, Westward Road
W09.1117	House	Conversion	1	2011	71	Trowbridge	Greenfield	Trowbridge	Land adj Manor Court Far, Westward Road
W09.1117	House	Conversion	1	2011	71	Trowbridge	Greenfield	Trowbridge	Land adj Manor Court Far, Westward Road

Committed developments between 2014 and 2026

Site_Address	Site_Ref	CA	Type	Town	Zone in which development falls	Total
3 Drynham Lane	W08.3649	Trowbridge	Full Permission	Trowbridge	94	1
Land rear of 110 Bradley Road	W09.1975	Trowbridge	Full Permission	Trowbridge	91	2
Land rear of 252 Frome Road	W10.2583	Trowbridge	Full Permission	Trowbridge	75	1
Land Rear Of 9 11 And 13 Pitman Avenue	W11.1105	Trowbridge	Full Permission	Trowbridge	72	1
17 Church Street	W11.1615	Trowbridge	Full Permission	Trowbridge	22	1
6 Summerdown Walk	W11.2014	Trowbridge	Full Permission	Trowbridge	83	1
First Floor, 53 Castle Street	W11.2928	Trowbridge	Full Permission	Trowbridge	6	1
29A Newtown	W11.3234	Trowbridge	Full Permission	Trowbridge	77	2
Land North Of 10 Trowle	W12.0480	Trowbridge	Full Permission	Trowbridge	70	1
Land Rear Of 25 Westmead Crescent	W12.0510	Trowbridge	Full Permission	Trowbridge	83	1
Land East Of 46 The Croft	W12.0825	Trowbridge	Full Permission	Trowbridge	86	1

Land at Bond Street	W12.0958	Trowbridge	Full Permission	Trowbridge	76	1
37 - 38 Fore Street	W12.1359	Trowbridge	Full Permission	Trowbridge	5	3
6 Fore Street	W12.1542	Trowbridge	Full Permission	Trowbridge	12	3
Adj 36 Westfield Road	W12.1553	Trowbridge	Full Permission	Trowbridge	73	1
6 Summerdown Walk	W12.1778	Trowbridge	Full Permission	Trowbridge	83	1
29 Duke Street	W12.1789	Trowbridge	Full Permission	Trowbridge	98	2
1 Islington	W12.1828	Trowbridge	Full Permission	Trowbridge	27	1
Land West Of 60 Bradley Road	W12.2043	Trowbridge	Full Permission	Trowbridge	86	2
Rear of 28 Roundstone Street	W12.2161	Trowbridge	Full Permission	Trowbridge	98	5
Land At 60 And 60A Bradford Road	W13.0186	Trowbridge	Full Permission	Trowbridge	65	8
12B Pitman Mews Silver Street	W13.0619	Trowbridge	Full Permission	Trowbridge	1	1
Trowbridge Rugby Football Club	W05.0821	Trowbridge	Full Permission	Trowbridge	39	72
Land at Southview Farm	W08.0896	Trowbridge	Full Permission	Trowbridge	88	138
The New Testament Church Of God 14 Islington	W13.1110	Trowbridge	Full Permission	Trowbridge	27	3
Land South Of 49 Lambrok Road	W13.1979	Trowbridge	Full Permission	Trowbridge	74	1
1 To 5 Manvers Street And 65 Fore Street	W13.2508	Trowbridge	Full Permission	Trowbridge	12	3
Rear of Wesley Road Club, Wesley Road	W13.2586	Trowbridge	Full Permission	Trowbridge	77	5
Unit 9 Yeoman Way	W10.2547	Trowbridge	Full Permission	Trowbridge	80	14
Castlemead	W11.0466	Trowbridge	Full Permission	Trowbridge	43	1
Trowbridge Motor Supplies Ltd, 1A Gloucester Road	W13.5434	Trowbridge	Full Permission	Trowbridge	77	3
280 Frome Road	W13.6264	Trowbridge	Full Permission	Trowbridge	83	2
The Halve Health Clinic	W13.6678	Trowbridge	Full Permission	Trowbridge	22	5
Land west of 7 Kingsdown Road	W14.0254	Trowbridge	Full Permission	Trowbridge	83	1
Land North East of Green Lane Farm, Green Lane (The Pastures)	W11.1932	Trowbridge	Full Permission	Trowbridge	42	172
Former Bottling Plant Ushers Brewery Conigre	W11.2656	Trowbridge	Full Permission	Trowbridge	21	17
Land Rear Of 16 Holbrook Lane	W12.0105	Trowbridge	Full Permission	Trowbridge	87	15
Castlemead	W12.1477	Trowbridge	Full Permission	Trowbridge	43	3
Land at Court Street	W13.0014	Trowbridge	Full Permission	Trowbridge	6	24
Castlemead	W13.1880	Trowbridge	Full Permission	Trowbridge	43	168
Adcroft Villa 1a Adcroft Drive	W13.3058	Trowbridge	Full Permission	Trowbridge	23	9
Castlemead	W13.5104	Trowbridge	Full Permission	Trowbridge	43	60
Castlemead	W04.2105	Trowbridge	Outline Permission	Trowbridge	43	138
Garages at Rutland Crescent	W13.5172	Trowbridge	Outline Permission	Trowbridge	80	3

Other developments

Site Name	Description	Zone in which development falls
Bradford Road	4.4 Ha of Employment	99
West Ashton	12.1 Ha of Employment	40
Vision Sites		
The Gateway (former Wincanton site) 1	7000 sqm Retail / 1200 sq.m Office	16
Brewery Gate - Former Ushers Bottling Plant 1	44,000 Sq.ft Foodstore	21
Pork Farms, Former Bowyer Site	60,000 Sq.ft Foodstore	13
East Wing County Hall	8000 sq.m Leisure Facility	10

Atkins
500 Park Avenue
Aztec West
Almondsbury
Bristol
BS32 4RZ

Appendix E. Environmental Appraisal

E.1. Introduction

This is an appendix to the environmental appraisal in the Economic Case, which is predominantly based on the ES for the proposed Ashton Park development.

An ES has been prepared for the proposed Ashton Park development which, in agreement with Wiltshire Council, also encompasses the proposed A350 Yarnbrook and West Ashton Relief Road. This was prepared in 2014 by Pegasus Planning Group on behalf of the Developers Ashton Park Ltd and Persimmon Homes Ltd.

The ES covers a number of environmental topics, including Noise & Vibration, Air Quality, Landscape and Visual Impacts, Ecology, Cultural Heritage, Hydrology, Drainage & Flood Risk, Ground Conditions, Soils and Agriculture and Transport and Access. Those required for this OBC are: Noise, Air Quality, Greenhouse Gasses, Landscape, Townscape, Biodiversity, Historic Environment and Water Environment.

As part of the preparation of the OBC for the A350 Yarnbrook and West Ashton Relief Road, Atkins were instructed by the Client, Wiltshire Council, to use where possible, the data collected in the preparation of the Ashton Park ES. It was agreed that this would necessitate a review of the data in the ES to determine its suitability for assessing the potential impacts of the road only.

A review of this ES was carried out by Atkins environmental specialists in October - November 2014. This review highlighted areas which were suitable for the purpose of informing the OBC, and identified areas where further study would be required to determine the potential impacts on the proposed Relief Road on the environmental topics required for the OBC. In most cases, some level of additional environmental data has been obtained through desk studies, specific to the Scheme, in order to more closely align the data with the requirements of the guidance in 'TAG Unit A3: Environmental Impact Appraisal'.

More detail on the assessment methodologies, baseline data and individual topic findings is available in the draft Ashton Park, Trowbridge Environmental Statement Report (June 2014), which was provided for the purposes of this OBC.

E.2. Noise

A noise assessment of the proposed relief road was included in the ES for the nearby Ashton Park development. This shows that, during the construction phase short-term minor to moderate negative impacts are anticipated at noise sensitive receptors within approximately 50m of the works.

During the operational phase of the development the ES shows that although some negligible negative noise impacts would be experienced at 56 properties the overall impact would be positive when compared to the Do Minimum scenario. It concluded, "*the assessment of noise levels associated with the operation of the relief road indicates that the new road would provide an overall benefit to residents within Yarnbrook and West Ashton.*" The overall impacts are shown in the table below. Note that these figures are for the Ashton Park development as a whole and not just for the relief road.

Without the development the impacts are all minor negative, at 135 properties, therefore the noise impact of the Scheme is overall positive. It is anticipated that the operation of the Scheme would have an overall positive impact in terms of noise.

Table E.1 Long Term Change in Road Traffic Noise Levels 2026 with Scheme minus 2009 Baseline[1]

Change in Noise Level		**Daytime ($L_{A10,18hour}$) dB**	**Night-time ($L_{Aeq,8hour}$) dB**
		Number of dwellings	**Number of dwellings**
Increase in noise level	Negligible 0.1 – 2.9	56	53
	Minor 3 – 4.9	0	0
	Moderate 5 – 9.9	0	0
	Major 10+	0	0

[1] Source: Ashton Park ES (June 2014) Chapter 10 Table 5.3

Change in Noise Level		Daytime ($L_{A10,18hour}$) dB	Night-time ($L_{Aeq,8hour}$) dB
		Number of dwellings	Number of dwellings
No change	0	0	0
Decrease in noise level	Negligible 0.1 – 2.9	17	20
	Minor 3 – 4.9	6	4
	Moderate 5 – 9.9	20	23
	Major 10+	36	35

E.3. Air Quality

The Air Quality assessment in the Ashton Park ES has identified that the main potential effects of the "*Proposed Development will lead to an increase in traffic on the local roads, which may lead to air quality effects at sensitive receptors. New residential properties within the Proposed Development may also be subject to significant air quality effects resulting from road traffic emissions from the adjacent road network. The main air pollutants of concern related to traffic emissions are nitrogen dioxide and fine particulate matter (PM_{10} and $PM_{2.5}$).*"

The traffic data presented in the EIA in Table A9.4.1 indicates which roads may experience changes, as a result of implementing the Ashton Park development including the A350 Yarnbrook and West Ashton Relief Road, with potential to change local air quality conditions for receptors within 200 m. The data does not identify any changes in speed or percentage HDV so this evaluation is limited to the DMRB criteria addressing a change in the road alignment by 5m or more, or daily traffic flows changing by 1,000 AADT or more.

The figure below (not provided in the ES) presents road links with an expected increase in flow of more than 1,000 AADT with the Scheme in red and those expected to experience a decrease in flow of more than 1,000 AADT with the Scheme in blue. The figure also shows a buffer area identifying buildings within 200 m of the affected network. Relevant receptors sensitive to long term air quality objectives, (houses, hospitals, schools, old people's homes, etc.); within the buffer area may experience changes in air pollutant concentrations.

The traffic data assumes that no change in speed or vehicle composition occurs. It is reasonable to expect that where a reduction in AADT is expected this will result in a decrease or no change in air pollutant concentrations and an increase in AADT may result in an increase or no change in air pollutant concentrations.

Reductions in AADT are identified on:

- A350, Yarnbrook Road including receptors within West Ashton close to the A350;
- A section of the A350 between West Ashton Road and Ashton Road where it is relieved by the proposed road;
- Phillips Way, Hawkeridge Road and a section of Westbury Road and the A350 approaching the new junction with the proposed road; and
- Sections of County Way between Bradley Road and Longfield Road and West Ashton Road and Hilperton Road and including Hilperton Road.

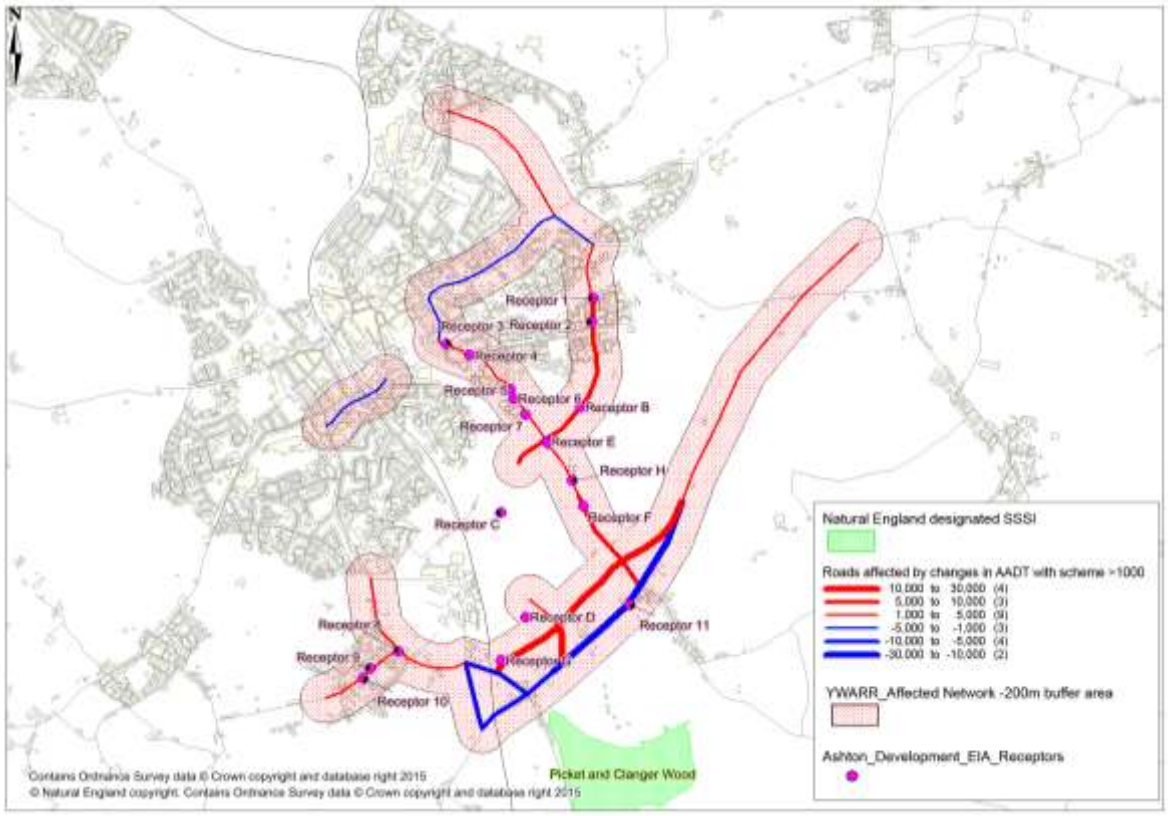
Increases in AADT are identified on:

- Proposed road between A350 and Westbury Road and between West Ashton Road and A350;
- West Ashton Road between West Ashton and Trowbridge;
- Soprano Way;
- Leap Gate;
- A350 between West Ashton Road and Ashton Road north of the proposed road;
- A350 north of Ashton Road;
- New road north of Hilperton Road;
- Southwick Road and Westbury Road between Southwick Road and Phillips Way; and
- Woodmarsh.

These changes are detailed in Figure E.1.

A quantitative assessment has not been completed at this stage as the results of the EIA already indicate likely changes in air quality in the vicinity of the development from the cumulative impact of the road scheme and the associated development.

Figure E.1 Air Quality - Affected Road Network and Potentially Affected Buffer Area[2]



The air quality modelling reported in the EIA was focussed on receptors where increases in traffic are expected as a result of the proposed development. It did not include results for locations with an improvement (reduced traffic levels), which as the figure above shows clearly occur. The list of receptors selected for the proposed Ashton Park development EIA are shown in Figure E.1 above and are detailed in Table 9.4 of the EIA. There are 15 receptors close to roads where traffic flows are expected to increase and one receptor, Receptor 11, where traffic flows are expected to reduce. The planned new road north of Hilperton Road is not part of the A350 Yarnbrook and West Ashton Relief Road and is included as part of the cumulative assessment considered in the EIA. Currently there are no receptors within 200m of this road and there are no future case receptors identified in the EIA.

The EIA air quality assessment compares the do minimum scenario nitrogen dioxide, PM_{10} and $PM_{2.5}$ concentrations modelled in the opening year, 2016, with the do something scenario where Ashton Park, the A350 Yarnbrook and West Ashton Relief Road and other planned developments are implemented. The EIA reports that the predicted annual mean concentrations of nitrogen dioxide, PM_{10} and $PM_{2.5}$ are below the objectives in 2012 and in 2016 at all receptors in the baseline, do minimum and do something scenarios.

The change in concentrations as a result of implementing the proposed development has a negligible impact at most receptors. Receptor 11 in West Ashton is predicted to experience a slight beneficial impact because traffic is reduced on the existing A350 when the proposed road is opened. Beneficial or negligible impacts are therefore likely at other local receptors along the relieved sections of the A350 with similar reductions in traffic. Receptor 3, located on the northern end of West Ashton Road in Trowbridge, is predicted to experience a moderate adverse impact in the worst case scenario where all the development is implemented in 2016 and there are no emissions reductions between 2012 and 2016, although concentrations are still

[2] Source: Ashton Park ES (June 2014)

below the air quality objective. The report concludes in paragraph 9.7.5 "*the overall air quality effects of road traffic emissions are negligible, the Proposed Development will lead to some increases in air pollutant concentrations at a number of existing residential properties. However, by contrast, properties located close to the A350 in the village of West Ashton are predicted to experience an improvement in air quality with the Proposed Development in operation, as a result of the realignment of the road*."

The EIA identified a number of ecological habitats potentially sensitive to changes in air pollution, as part of the air quality assessment to support the planning application. Of the sites identified, those located within 200 m of the affected network are not internationally designated conservation sites or SSSIs, and so are not sites identified within the DMRB methodology HA207/07 as requiring further assessment. Therefore no reporting of these findings is made within this report. It is confirmed that there are no AQMA or designated sites within 200 m of the affected network as shown in the figure above.

The air quality assessment work presented in the EIA was not completed using the latest air quality tools. The following tools have been updated since this work was completed:

- Estimated annual mean background pollutant concentrations in 2012 and 2016 in the EIA were based on 2010 background maps available from Defra, these have now been revised and 2011 based background maps for years 2011-2030 for NO_x, NO_2, PM_{10} and $PM_{2.5}$ and a revised sector removal tool were made available in June 2014;
- The NO_x-NO_2 Calculator was revised to version 4.1 for use with the 2011 based background maps and the Emission Factor Toolkit v6 and issued in June 2014; and
- Emission Factor Toolkit (Version 5.2c) used in the EIA was revised in July 2014 and a minor fault was addressed in version 6.0.2 in November 2014.

In summary, the study area for local air quality in the EIA focuses on potential problem areas, and finds no receptors where air quality objectives are exceeded and no significant issues. The outline business case in line with WebTAG principles should consider all impacts adverse and beneficial. The affected road network illustrates that there are both adverse and beneficial impacts in practice, and it can be concluded that if there had been locations where air quality worsened, there would have been some offset of these from the locations showing improvements with the Scheme in place.

E.4. Greenhouse Gases

Greenhouse gases have been appraised in this OBC based on TUBA outputs, and is covered in the main OBC report (Chapter 3).

E.5. Landscape and Visual Impact

E.5.1. Landscape

Designated Sites:

- No nationally designated Landscape areas eg National Park (NP) Area of Outstanding Natural Beauty (AONB), Environmentally Sensitive Area (ESA), are identified within 5km of the site. The Cotswolds AONB is approximately 7km to the northwest. No impacts are anticipated on these features.
- There is one Site of Special Scientific Interest (SSSI) within 2km of the proposed road (Picket & Clanger Wood SSSI), at approximately 400m to the southeast of the proposed junction at Yarnbrook. Impacts on this site are considered to be negligible.
- There is one Local Nature Reserve (LNR) within 2km of the site. Green Lane Wood LNR is located approximately 780m to the north of the northern end of the proposed road at its junction with the existing A350. Direct impacts on this site is considered to be negligible.
- There are no Registered Parks & Gardens within a 2km search area.

Additional Features:

- Biss Meadows Country Park is located approximately 1.3km to the northwest of the junction of the proposed road with West Ashton Road. There are 2 other Country Parks in the area, Southwick Country Park at approximately 2.6km to the west and Brokerswood Country Park approximately 3.3km to the southwest. No impacts are anticipated on these sites due to intervening deveopments.
- Several areas with trees covered by Tree Preservation Orders (TPO) have been identified in a 2km search area. Biss Wood (TPO ref W/79/00003/WOOD) is approximately 200m to the northwest of the

northern end of the proposed road. TPOs at Park Farm Cottage, Round Wood and north of Blackball Bridge are at distances of approximately 850m, 950m and 1.3km respectively from the proposed road. Direct impacts on these features due to the proposed road are considered to be negligible.

Landscape Character:

- The scheme is located within National Character Area (NCA) 117 Avon Vales and Natural Area (NA) 63 Thames & Avon Vales. At County level it is covered by the Wiltshire Landscape Character Assessment (2005), LCA 11 Rolling Clay Lowland, (11C Trowbridge Rolling Clay Lowland). At District level, it falls under the West Wiltshire District Landscape Character Assessment LCAs "E4, Green Lane Rolling Clay Lowland" and "B2, Biss Clay River Floodplain". Detailed descriptions are in the Ashton Park ES.
- The scheme runs to the east / southeast of Trowbridge, approximately 1.2km from the existing suburban edge, which is classified as "urban". Detailed descriptions of the area are in the Ashton Park ES.
- Sensitivity of landscapes at National and Regional levels are assessed as "low", with a low magnitude of change, the effects during construction are assessed as minor, on completion at year 1 as minor adverse and at year 15 as negligible. Sensitivity of the landscape at Local level is assessed as "low", with a high magnitude of change, the effects during construction are assessed at moderate, on completion at year 1 as moderate and at year 15 as negligible. Detailed assessments are available in the Ashton Park ES.
- The impact of the proposed relief road on the overall landscape character is considered to be negligible due to the proximity of the site to the urban edge of Trowbridge.
- Landscape Features: The field boundaries in the vicinity of the Scheme are mainly hedgerows with some timber post & rail fences, and linear tree & shrub belts along some small watercourses, as well as the River Biss. There will be loss of some hedgerow field boundaries, which will disrupt the field pattern in the area. Effects on these features has been assessed as being moderate to minor. Detailed assessments are available in the Ashton Park ES.

E.5.2. Visual Impact

Residential Areas:

- Details of the visual context and general views are available in the Ashton Park ES.
- Visibility of the Scheme will vary due to the landform & existing vegetation. There will be views for properties along the existing A350 where it is elevated, such as at West Ashton, but as the road drops down, views will be more contained. However, the proposed road will be in relatively close proximity to existing properties at Yarnbrook and there will be minor – moderate adverse impacts on the properties along the existing A363 due to the new junction. These effects were not covered in the Ashton Park ES.
- From the west, views will be interrupted by the existing mainline railway and buildings along the suburban edge of Trowbridge, and also by the intervening hedgerows and linear tree belts. To the north, the intervening hedgerows, woodlands and linear tree belts will also limit visibility. Visual impacts from these areas is considered to be minor adverse.
- There will be opportunity for mitigation, eg planting, along some sections of the Scheme which will limit the impacts on the wider landscape, as well as providing foraging corridors for commuting wildlife, including bats. Visual impact on long distance views are considered to be neutral.

Public Rights of Way (PRoW):

- There are a number of Public Rights of Way (PRoW) along the Scheme corridor. Footpaths WASH12, WASH6 and WASH16 / SASH44 intersect with the existing A350, and NBRA44, crosses the line of both the existing and the proposed A350. The PRoW's which cross the line of the proposed road will experience severance due to the construction of the new road, whereas those outside the road corridor will not be directly affected by changes in alignments, but may experience increased visibility due to loss of screening vegetation. Impacts on the adjacent PRoWs are considered to be minor adverse, whereas impacts on those at greater distance are likely to be negligible. Additional assessment is available in the Ashton Park ES.

Lighting:

- The existing road corridor is largely unlit, with lighting limited to the West Ashton crossroads and Yarnbrook. It is not proposed to light the new road, although it may be necessary to light the roundabouts at the junctions with West Ashton Road and the A363. Should this be necessary at the West Ashton Road roundabout, it will introduce lighting into an unlit rural area which may potentially have adverse impacts on the wider landscape and affect the bat commuting routes crossing the site

area. Any new lighting must be designed to minimise impacts on wildlife. A detailed assessment is available in the Ashton Park ES. Impacts are anticipated as minor adverse.

E.5.3. Cumulative Effects

- Other developments identified in the immediate vicinity as having a potential cumulative effect with the proposed A350 Relief Road, occur predominantly in the urban and suburban areas of Trowbridge and the settlements of West Ashton and Yarnbrook. There are several applications for new housing and mixed developments including B1, B2 and B8 employment which abut the existing urban edge. These, together with the proposed A350 relief road will have the effect of extending the urban character with a corresponding loss of the surrounding rural agricultural area.

Landscape Character

- National Landscape Character: The key features identified in the NCA will be largely unchanged, with the cumulative magnitude of change assessed as low. The cumulative effect of other developments together with the proposed relief road is therefore assessed as minor.
- County and District Landscape Character: The county and district character areas are assessed as having low sensitivity. The majority of key characteristics identified at this level will remain materially unchanged, therefore the cumulative magnitude of change is assessed as low. The cumulative effect of other developments together with the proposed relief road is therefore assessed as minor.

Landscape Features

- It is not anticipated that the other developments identified, with the exception of the Ashton Park development, are likely to result in the loss of any additional landscape features, or compromise their long term retention or viability. The combined cumulative effect of the other developments on landscape features, is therefore assessed as negligible.

Visual Amenity

Potential cumulative effects on visual amenity are defined as being as a result of:

- Combined or simultaneous visibility;
- Successive viewpoints; and
- Sequential visibility.

The majority of the viewpoints identified in the Ashton Park ES, have been identified as likely to experience minor to negligible magnitude of change as a result of the proposed road and adjacent development, and are therefore assessed as having minor to negligible cumulative effect. Approximately a third of the viewpoints were identified as likely to experience moderate magnitude of change, however this is as a result of being within or adjacent to the proposed mixed housing / employment development, with some consideration of the impact of the proposed relief road. These locations are assessed as having moderate cumulative effects due to the proximity of the Ashton Park development.

E.6. Townscape

The scheme is located on the outskirts of the urban / suburban developments, on the eastern / southeastern edge of Trowbridge. Views from the town centre are screened by the intervening residential and retail developments along the A361, A363, West Ashton Road, and by the mainline railway.

There may be limited views of the proposed relief road from the top of some taller buildings in the Town Centre, but distance and the urban foreground and suburban middle ground will blend the road with the existing suburban fringe and eventually with the proposed Ashton Park development.

Due to the location and restricted visibility of the Scheme from the urban areas, the coherence and distinctiveness of the urban environment will not be affected by the proposals. The impacts are assessed as neutral.

E.7. Historic Environment

There are no Scheduled Monuments, Listed buildings, World Heritage Sites, Registered Parks and Gardens of Special Historic Interest, Registered Battlefields or Conservation Areas within the Application Site or its

vicinity. The following designated heritage assets are located within the 500m study area and were identified as being potentially affected by development:

- Grade II Listed South View Farmhouse, c. 400m north-west of the Application Site;
- Grade II Listed Drynham Lane Farmhouse, c. 200m west of the Application Site;
- Grade II Listed Willow Grove, c.350m west of the Application Site;
- Grade II Listed monuments and gateway in burial ground of former Baptist chapel, c. 530m west of the Application Site;
- Grade II Listed Kings Farmhouse, c. 540m west of the Application Site;
- Grade II Listed Manor Farmhouse, c. 400m west of the Application Site;
- Grade II Listed Church of St John, c. 200m south-east of the Application Site;
- Grade II Listed The White House, c. 580m south of the Application Site;
- Grade II Listed 16 Bratton Road, c. 800m south of the Application Site;
- Grade II Listed Manor Farmhouse, c. 800m south of the Application Site; and
- Grade II Listed Castle Lodge, c.350m east of the Application Site.

The Ashton Park ES evaluated the likely direct and indirect impacts to these designated heritage assets and found that the proposed development would have a negligible effect on the settings of the listed buildings identified above. There would be no direct physical impacts to the listed buildings. Cumulative effects were also assessed in the ES, which found negligible effects to the Grade II listed South View Farmhouse.

Non-designated archaeological sites are present within the Application Site and would be impacted by the development. This includes major adverse effects on a possible prehistoric/ Romano-British enclosure complex, moderate adverse effects to ridge and furrow earthworks, and minor adverse effects to medieval enclosed land and a historic parish boundary. Development that will lead to harm to non-designated heritage assets can be adequately compensated through the implementation of a programme of industry standard mitigation measures. Overall residual effects upon non-designated, below-ground archaeological remains will be minor adverse. Overall residual effects upon designated heritage assets in the study area will be negligible, as development will not lead to any adverse effects to the important elements of the setting of designated heritage assets.

E.8. Biodiversity

The nearest European level designation to the Application Site (which comprises the Scheme in question, i.e. the A350 Yarnbrook and West Ashton Relief Road, as well as Ashton Park housing development) is Salisbury Plain Special Area of Conservation (SAC), which is located approximately 5.2km to the south east. Bath and Bradford-on-Avon Bats SAC is located approximately 7.8 km to the north east, whilst a population of Bechstein's bats (the species being one of the primary reasons for designation) present within the local area is known to be linked to Bath and Bradford on Avon Bats SAC (located approx. 7.8 km north west). In addition, the statutory ecological designations Picket and Clanger Woods Site of Special Scientific Interest (SSSI) and Green Lane Wood Local Nature Reserve (LNR) are present within the near vicinity of the Application Site, whilst the Application Site is surrounded by a number of non-statutory ecological designations and Ancient Woodlands, of which the closest is Biss Wood Local Wildlife Site (LWS) and WWTR located adjacent to the eastern boundary of the Application Site.

The Application Site itself is dominated by arable land and agricultural grassland, considered to be of negligible-low ecological value. Habitats within the Application Site considered to be of low to moderate ecological value include areas of pasture and field margins, marshy grassland, ruderal vegetation, hedgerows, trees, scrub, watercourses, ditches and a pond, whilst the River Biss corridor is considered to be of moderate to high ecological value.

Surveys of protected species have recorded use of the Application Site and surrounds by a range of bat species, including the Annex II listed species Bechstein's bat, as well as low numbers of dormice, otter, water vole and a range of other mammals and bird species including skylark, a Species of Principal Importance in England, and a population of great crested newt.

Mitigation measures in respect of ecological designations are proposed in order to minimise potential adverse effects from increased recreational pressure and reduced air quality, including provision of extensive and multi-functional green infrastructure linking the Proposed Development to other areas of greenspace in the wider surrounds, as well as a Country Park and a site for an Ecological Visitors Facility.

In respect of habitats and fauna, mitigation and enhancement measures at the Site are also proposed, including new wildflower grassland, woodland, scrub, trees and ponds as part of an extensive area of green infrastructure throughout the Proposed Development. These habitats will provide significant benefits to a wide variety of faunal species.

In addition to large-scale habitat creation and enhancement, specific mitigation measures in respect of bats, dormice, skylark and great crested newt are also proposed. These take the form of vegetated 'hop-overs' (for instance features that encourage bats to fly higher over roads by using false cuttings, fences, tree planting etc.) to facilitate movement across roads including the A350 Yarnbrook and West Ashton Relief Road, sensitive lighting design including dark corridors, provision of skylark plots and contributions to off-site habitat provision, as well as a number of safeguard measures and licensing, where appropriate, to avoid adverse effects during construction.

Following mitigation, it is considered that the Proposed Development (A350 Yarnbrook and West Ashton Relief Road together with the housing development) would result in enhancements to the existing ecological interest of the Application Site, with benefits in respect of ecological designations, habitats, bats, Dormice and other mammals, birds, amphibians and invertebrates, these effects being assessed as of overall minor to moderate beneficial significance at the local to Regional level.

Given effective implementation of mitigation proposals, residual effects on the population of Bechstein's bats linked to the Bath and Bradford on Avon Bats SAC are considered to be non-significant, to minor beneficial.

Note: *the information above was taken from the document entitled "CIR A 0236 Chapter 6 Ecology DRAFT" dated 28 August 2014. Due to the fact that the Environmental Impact Assessment was carried out on both the Scheme (Yarnbrook and West Ashton Relief Road) alongside with the proposed Ashton Park housing development, and therefore mitigation measures included in the ES addressed the Proposed Development as a whole, it was not possible to consider the A350 Yarnbrook and West Ashton Relief Road Scheme as a stand-alone development. Therefore the conclusions with regards to impacts were considered to be the same for the Scheme as well as the housing development.*

E.9. Water Environment

E.9.1. Water Quality

From the ES prepared for the Ashton Park development, the following assessment has been undertaken on Environmental and Water Quality:

- The River Biss is located to the north of the proposed A350 Yarnbrook and West Ashton Relief Road. It flows from south to north from the confluence of the Biss Brook and Bitham Brook. The Stourton Brook flows north of the meadows on the edge of Trowbridge, flowing from east to west. Stourton Brook joins the River Biss to the north, near Blackball Hatch at the Biss Meadows Country Park. There are also a number of small unnamed drainage ditches present in the adjacent fields, which drain into the River Biss.
- None of the on-site drainage or surface water features are designated sites on a local, county, national or international level.
- There are no statutory nature conservation sites within the application site's immediate vicinity and the Application Site does not lie within a Nitrate Vulnerable Zone.
- The Environment Agency's online mapping does not record any historic pollution incidents within the immediate vicinity of the Application Site.
- The Environment Agency grades river chemical and biological quality from Grade A (very good) to Grade F (bad). An assessment of the River Quality of the River Biss is contained in Table 4 below. The River Biss is classified as Moderate Ecological Quality.
- The area north of the proposed road is located in the Bristol Avon Catchment Abstraction Management Strategy (CAMS) area.

Table E.2 River Quality

River Biss: Confluence of Bitham Brook to confluence of unnamed Tributary			**Typology Description:** Low, Small, Calcareous	
Hydromorphological status	Current Ecological Quality	Current Chemical Quality	2015 predicted Ecological Quality	2015 predicted Chemical Quality
Not designated as Artificial or Heavily Modified	Moderate	Does not require Assessment	Moderate	Does not require Assessment

Potential Impacts on Environmental Water Quality:

- During Construction: a number of substances used in the construction process could have adverse impacts on local water quality.
- During operation: Following construction, the operation of the proposed A350 Yarnbrook and West Ashton Relief Road is likely to result in permanent changes to the surface water drainage regime in the area. There is also a limited risk that the normal operation of the proposed relief road could result in a local adverse impact on water quality.

Mitigation

- Mitigation during construction: this will include compliance with safe working practices, pollution prevention guidance and emergency planning. These measures will ensure that risk of water pollution is kept to a minimum.
- Mitigation during operation: this will include an element of water quality treatment, an increase in habitat diversity and the provision of greenspace to help buffer the proposed road from the existing watercourses.

Conclusion:

- The residual effect of the proposed relief road on the local water quality is not deemed to be significant with the appropriate mitigation measures in place. The overall impact is assessed as neutral.

E.9.2. Hydrology, Drainage and Flood Risk

Flood risk and drainage have been assessed at a high level to understand the effects that the A350 Yarnbrook and West Ashton Relief Road Development would have on the water environment and identifies mitigation measures.

Two assessment methods have been undertaken; WebTAG assessment as part of the ES and a Level 1 Flood Risk Assessment (FRA).

To complete the drainage design/surface water attenuation scheme then ground investigations will need to be undertaken.

The ES chapter 11 undertakes a WebTAG assessment of the water environment. WebTAG is a high level desk study to identify the sensitivity of the receptors and the effect of the proposed development. The results of the Web-tag analysis at this stage are summarised below.

- Flood risk without mitigation – major adverse impact; and
- Flood risk with planned mitigation – minor adverse/negligible impact.

The ES concludes that the residual effect of the A350 Yarnbrook and West Ashton Relief Road Development on the Assessment Site's surface water drainage regime, flood risk and local water quality is not deemed significant with the appropriate mitigation measures in place. The proposed mitigation methods are described below.

A FRA has been undertaken for by the developers. This FRA is high level. It is unlikely to fully satisfy the National Planning Policy Framework (NPPF) which would normally be required for outline planning. The main findings of the FRA are as follows:

- A sustainable drainage strategy is proposed for managing the disposal of surface water. As the use of infiltration devices is not appropriate for the site, flow balancing methods are proposed, comprising a

system of on-line ponds/detention basins. Thus to attenuate surface water runoff to greenfield runoff rates with discharges via existing ditches or proposed swales to the local watercourse and ditch system.

- The proposed Yarnbrook and West Ashton Relief Road and access roads into the site are required to cross watercourses and the flood plain at various locations. All road crossings of watercourses would be via three span bridges with soffit levels set a minimum of 600mm above the corresponding 1 in 100 year flood level including an allowance for climate change.
- If not mitigated, roads crossing the floodplain would result in a decrease in the overall flood storage available to the watercourses in times of flood. A preliminary floodplain storage compensation scheme has therefore been designed in order to demonstrate that it would be feasible to mitigate the effects of any loss of floodplain storage. Based on the modelled 1 in 100 year annual probability flood levels, including an allowance for climate change, the total volume of flood water that would be displaced by the proposed roads is around 4930m3. As no modelling has been undertaken it is assumed that a volumetric analysis has been used at this stage.
- All road crossings of watercourses and floodplains would be set above the relevant 1 in 100 year annual probability of river flooding level, including an allowance for climate change. It is therefore considered that safe access and egress routes would be available during times of flood.
- At detailed design stage a detailed floodplain storage compensation scheme should be designed.

If a hydraulic modelling study is undertaken at a subsequent stage the following data will be required;

- Detailed topographic survey data of Blackball Brook and Biss Brook channels and floodplain;
- LiDAR data for the area;
- Master map data for the area.

Appendix F. Distributional Impact Appraisal Report

A350 Yarnbrook and West Ashton Relief Road OBC – Appendix F

Distributional Impact Appraisal Report

Wiltshire Council

24 March 2015

ATKINS

Plan Design Enable

Notice

This document and its contents have been prepared and are intended solely for information and use in relation to the Distributional Impact of the A350 Yarnbrook and West Ashton Relief Road.

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Document history

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Revision	**Purpose description**	**Originated**	**Checked**	**Reviewed**	**Authorised**	**Date**
Rev 1.0	Draft for Client	KQ/AP/CB	TP	KC	TP	19/1/15
Rev 2.0	For SWLTB Website	KQ/AP/CB	TP	KC	TP	24/3/15

Table of contents

1. Introduction

1.1. Purpose of Report

This report presents findings from the Distributional Impacts (DIs) appraisal of the A350 Yarnbrook and West Ashton Relief Road to form part of the Scheme's Outline Business Case (OBC). This appraisal has been undertaken in accordance with WebTAG guidance, published by the DfT in January 2014, which replaced Unit 3.17 (Guidance on Social and Distributional Impacts) with two separate units, Unit A4.1 (Social Impact Appraisal) and A4.2 (Distributional Impact Appraisal). Unit A4.2 is the guidance now used to undertake DIs appraisals.

1.2. Background – What is a DI Appraisal?

The DfT has developed its understanding of DIs through work over the last few years, including a detailed literature review of DIs in transport interventions, and consideration of current practice in appraisals.

'Distributional' impacts relate to the extent to which there are differences in the way impacts affect different groups in society. For example, the noise impacts of an intervention will affect different groups of households, with some experiencing increases, and others decreases. Depending on the geographical locations of different groups of people, these groups will each experience varying impacts.

1.3. Overview of DI Process

The approach outlined in the DfT's guidance ensures that the DI appraisal is proportionate to the scale of the issue and follows a process to ascertain whether a full appraisal is required. Table 1-1 shows this process, detailing key decision-making points as illustrated by the three identified steps.

Table 1-1 DI Process

Step	Description	Output
1	Screening Process: • Identification of likely impacts for each indicator.	Screening Proforma
2	Assessment: • Confirmation of the area impacted by the transport intervention (impact area); • Identification of social groups in the impact area; and • Identification of amenities in the impact area.	DIs social groups statistics and amenities affected within the impact area.
3	Appraisal of Impacts: • Core analysis of the impacts; and • Full appraisal of DIs and input into AST.	Appraisal worksheets and AST Inputs.

1.4. Scheme Overview

The A350 Yarnbrook and West Ashton Relief Road (see Figure 1-1) comprises a single carriageway road departing from the existing A350 alignment to the east of West Ashton crossroads, intersecting the West Ashton Road with an at-grade roundabout junction, and passing to the north-west of West Ashton village running parallel to the existing A350 connecting with the existing A363 east of the railway bridge by means of an at-grade roundabout junction. A

further intermediate at-grade roundabout junction would be provided on the new relief road with a link to the existing A350 between Yarnbrook and West Ashton. Access to Ashton Park would be provided to the north from the intermediate roundabout junction.

Figure 1-1 A350 Yarnbrook and West Ashton Relief Road

1.5. Scheme Objectives

The main objectives of the proposed scheme are to:

- Reduce traffic queues and delays on the A350 corridor at West Ashton and approaching Yarnbrook Roundabout by 2026;
- Improve journey time reliability on the A350 corridor;
- Facilitate housing and employment growth in the Ashton Park Urban Extension through addressing known and forecast congestion pinch-points at West Ashton and Yarnbrook by 2026; and
- Reduce the number of road accidents in the Yarnbrook and West Ashton areas by 2026.

1.6. Report Structure

Following on from this Introduction the remainder of the report is structured as follows:

- **Chapter 2: DI Appraisal – Screening** outlines the key findings of the Step 1 screening process, and details the process required for a full appraisal (Steps 2 and 3);
- **Chapter 3: DI Assessment and Appraisal** (Steps 2 and 3) details the approach taken to assess each required DI indicator and the outputs from the appraisal; and
- **Chapter 4: Summary of Findings** describes the main outputs from the DI appraisal in a matrix and contains summary text to be included within an Appraisal Summary Table.

This report contains two appendices:

- Appendix A illustrates the socio-demographic profiling of the Scheme area with data from the 2011 Census[2] and Index of Deprivation; and
- Appendix B contains the proforma which summarises the initial screening undertaken to determine the level of analysis required for this DI appraisal.

[2] http://www.ons.gov.uk/ons/datasets-and-tables/index.html

2. DI Appraisal – Screening

2.1. Screening (Step 1) – Approach

The initial screening assessment considered the likely positive and negative impacts of the Scheme using the eight DI indicators in relation to specific vulnerable groups, including children, older people, people with a disability, Black and Minority Ethnic (BME) communities, people without access to a car and people on low incomes.

A number of key questions are posed in a Screening Proforma published by the DfT which are considered during the initial screening. The questions cover the following:

- Is the option being considered likely to have negative or positive impacts on specific groups of people, including children, older people, disabled people, Black and Minority Ethnic (BME) communities, people without access to a car and people on low incomes?
- Can the likely impacts be eliminated or mitigated through re-design or amendment?
- Are the impacts either significant or concentrated?

The remaining sections present the findings from the DI screening process and approach for the full appraisal (Steps 2 & 3) in accordance with WebTAG.

2.2. Screening (Step 1) – Key Findings

The screening proforma for this DI appraisal details the reasoning behind the analysis undertaken in this report, and can be found in Appendix B. The findings from the screening are summarised in Table 2-1.

Table 2-1 Summary of Proforma

Indicator	Likely DI Impact	Recommendations
User Benefits	Yes	Proceed to Steps 2 and 3
Noise	Yes	Proceed to Steps 2 and 3
Air Quality	Yes	Proceed to Steps 2 and 3
Accidents	Yes	Proceed to Steps 2 and 3
Security	No	No further assessment
Severance	Yes	Proceed to Steps 2 and 3
Accessibility	No	No further assessment
Affordability	Yes	Proceed to Steps 2 and 3

2.3. Assessment (Steps 2) – Approach

Following on from the screening proforma (Step 1), the steps to complete the full DI appraisal, where required for each indicator, are described below.

2.3.1. Step 2a – Confirmation of the Area Impacted by the Intervention

The screening provides a broad understanding of the areas likely to experience impacts as a result of the Scheme. Within Step 2a, a more detailed examination is required to investigate the

spatial impacts of the Scheme. The area affected is likely to vary depending on the individual DI indicator being appraised.

2.3.2. Step 2b – Identification of the Social Groups in the Impact Area

Step 2b requires the analysis of socio-economic and demographic characteristics to develop a profile of:

- The **transport users** that will experience changes in travel generalised costs resulting from the intervention;
- **People living in those areas** identified as likely to be affected by the intervention; and
- **People travelling in areas** identified as likely to be affected by the intervention.

The analysis uses common datasets and plots the proportions of vulnerable groups within the impacted area for each indicator. Table 2-2 sets out the groups of people to be identified in the analysis for each indicator, as defined in WebTAG Unit 4.2.

Table 2-2 Scope of Socio-Demographic Analysis for DIs (Step 2b)

Social Group	User Benefits	Noise	Air quality	Accidents	Security	Severance	Accessibility	Affordability
Income Distribution	✓	✓	✓				✓	✓
Children: <16		✓	✓	✓	✓	✓	✓	
Young adults: aged 16-25				✓			✓	
Older people: aged 70+				✓	✓	✓	✓	
Population with a disability					✓	✓	✓	
Population of BME origin					✓		✓	
Households without access to a car						✓	✓	
Carers: households with dependent children							✓	

2.3.3. Step 2c – Identification of Amenities in the Impact Area

The concentration of social groups is based not only on the resident population but also on trip attractors/amenities that are within the impact area. Using desktop analysis, the local amenities which are likely to be used by the identified social groups for each DI indicator are identified. Amenity data allows qualitative assessments / statements to be made to add value to the DI appraisal and provides a wider assessment than just that of the resident population.

The output of Step 2 is summarised and presented in order to provide evidence for the appraisal of impacts in Step 3.

2.4. Appraisal of Impacts (Step 3)

This step examines information collated in the previous steps to assess the potential impacts of the intervention on each indicator's social groups.

2.4.1. Step 3a – Core Analysis of Impacts

An assessment score is given for each indicator and each of the social groups under consideration. The seven-point scoring system follows the standard DfT appraisal measures:

- Large beneficial;
- Moderate beneficial;
- Slight beneficial;
- Neutral;
- Slight adverse;
- Moderate adverse; or
- Large adverse.

2.4.2. Step 3b: Full appraisal of DIs

The analysis undertaken in Step 3a provides an assessment score for each indicator and each of the social groups under consideration. In addition, a qualitative assessment will be provided for each indicator to describe the key impacts in each case. These will be summarised in the DI appraisal matrix. The scores and qualitative assessment are summarised in the DI appraisal matrix of Distributional Impacts with key findings presented in the 'key impacts' column.

3. DI Assessment and Appraisal

3.1. User Benefits Assessment

3.1.1. Introduction

In the majority of cases, there are user benefits associated with a transport intervention but these are generally net outcomes. Within the net outcome, some people may experience disbenefits for example through longer journey times or lower public transport service frequencies.

Step 1, screening process, identifies the likely broad impact areas of the intervention and determines whether it needs to be appraised further, with Step 2a investigating these spatial impacts in more detail. Step 2b reviews the socio-demographic profile within the identified area, while Step 2c identifies amenities in the impact area of relevance. The outputs from Step 2 will feed into the core analysis of impacts (Step 3a) and the full appraisal of DIs (Step 3b).

3.1.2. Confirmation of Impacted Area (Step 2a)

The scheme area is defined by the area that is expected to experience a change in the cost of travel (including time-based costs) for users of the transport network (based on forecasts from the Trowbridge Traffic Model). This impact area is defined as the wider Trowbridge area.

Whilst guidance suggests using the entire modelled area for the DI assessment of user benefits, the highway model examines a core impact area but also encompasses a much wider area as a series of outer zones. Using this wider impact area would mean calculations in the outer zones requiring data aggregation and assumptions which may skew the user benefits DI appraisal. Consequently the core modelled local assessment area (see Figure 3-1) is being used, enabling a finer degree of accuracy. However, it is important to note that user benefits may be experienced by people living in areas outside of the modelled area, but these are not included in this appraisal.

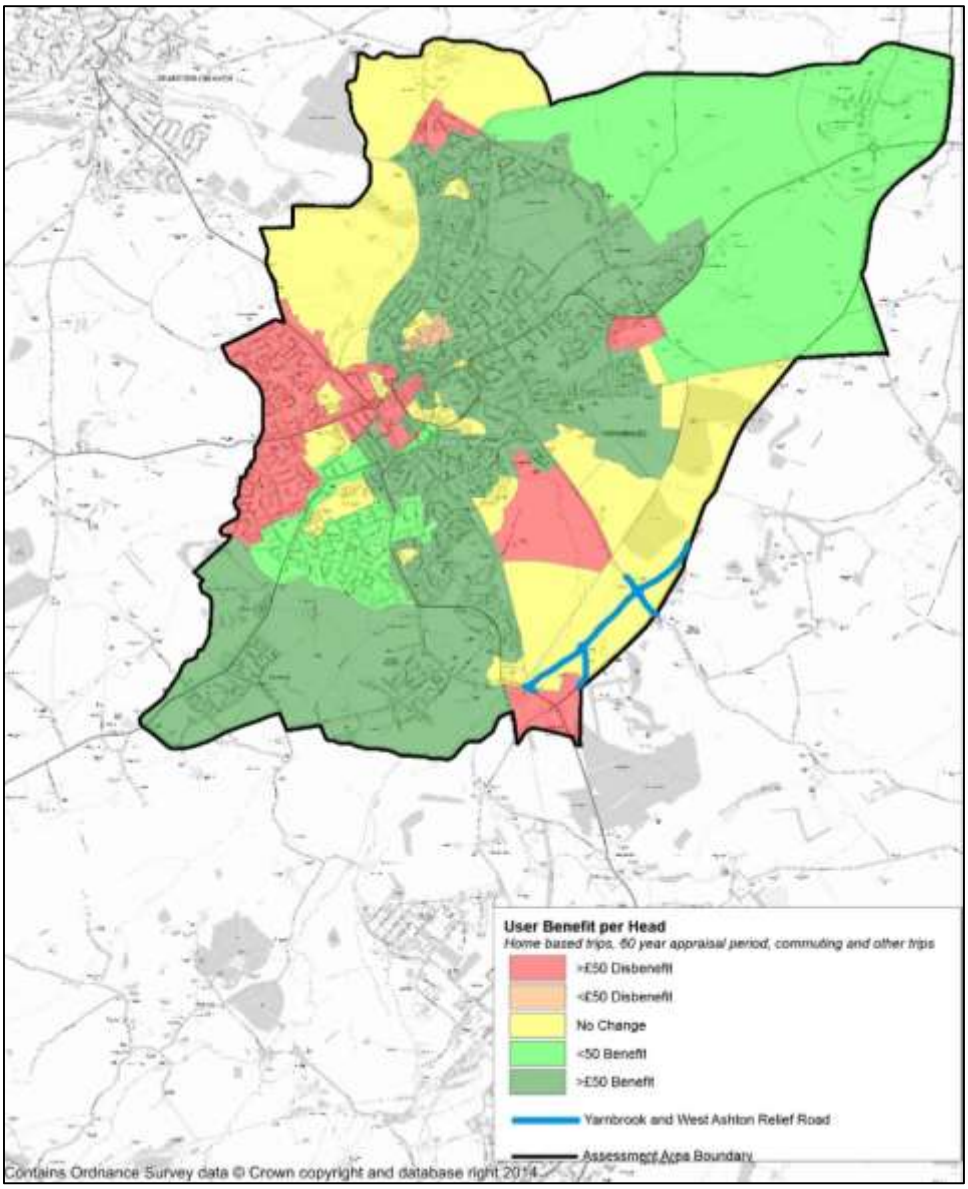
This user benefit assessment has been undertaken from a spreadsheet based tool[3] for appraising dependent development, which uses outputs from the Trowbridge Traffic Model. This tool has been validated against TUBA Version 1.9.4. The calculations for the DI assessment follow TAG Unit 4.2 and are based on the following:

- Home based trips (using AM origins as home location, PM destinations as home location and splitting IP trips equally);
- Home based trips calculated using ‘commuting and other’ trips from SATURN model (i.e. excluding business travel);
- Only internal to internal trips within the Scheme area; and
- 60 year appraisal period.

Figure 3-1 spatially demonstrates the calculated user benefits as a result of the proposed scheme. The majority of the wider Trowbridge area experiences benefits as a result of the Scheme, with much of central, south west and north east areas experiencing more than £50 benefits per head. There are small areas of disbenefits experienced to the west and south east of the town centre, as well as pockets with no change (although some of these are due to the fact that the zone in question has no resident population due to the land geography).

[3] Note that the benefits that would be expected to accrue to road users over the appraisal period were evaluated using a spreadsheet based method for dependent development – see the A350 Yarnbrook and West Ashton Relief Road Forecasting and Economic Appraisal Report. This spreadsheet based tool has been used to monetise the journey time and vehicle operating costs (and indirect tax and reliability) benefits of the Scheme and the inputs required for this are in line with TUBA software. Note that TUBA Version 1.9.4 was used for validation of this spreadsheet based method.

Figure 3-1 User benefit Impact Area



3.1.3. Identification of Social Groups in Impact Area (Step 2b)

In the case of user benefits, it is necessary to understand the income distribution of potential users in the assessment area. This has been undertaken by mapping variations in income deprivation using data from the Indices of Deprivation (IoD 2010) Income Domain at Lower Super Output Area (LSOA) level, according to their national rank.

As shown in Table 3-1, only around 13% of residents within the impact area are within the most deprived income quintile (quintile 1 – the 20% most deprived LSOAs nationally), while 30% of residents are within quintile 5, making them amongst the 20% least income deprived in England. Representation of residents in quintiles 2 and 3 are lower than national levels and the proportion of residents in quintile 4 is higher in the impact area than the national level.

Table 3-1 Proportions of Each Income Quintile within Impact Area

Income group	% impact area	% England
Quintile 1 (most deprived)	12.6%	20.0%
Quintile 2	12.3%	20.0%
Quintile 3	17.1%	20.0%
Quintile 4	28.2%	20.0%
Quintile 5 (least deprived)	29.9%	20.0%

3.1.4. Identification of Amenities in the Area - Step 2c

Identification of key amenities in the user benefits impact area has not been completed in depth due to the geographic expanse of the area. The TUBA analysis however considers the demand for all movements within the study area and therefore takes into account the impact of key amenities within the impact area. These amenities may include employment destinations, schools, retail centres, community centres, and health facilities, amongst others. This DI appraisal therefore assumes presence of all vulnerable groups within the assessment, both in terms of travelling around the assessment area and also within the daytime population whilst visiting local amenities.

3.1.5. Appraisal of User Benefits DIs – Step 3

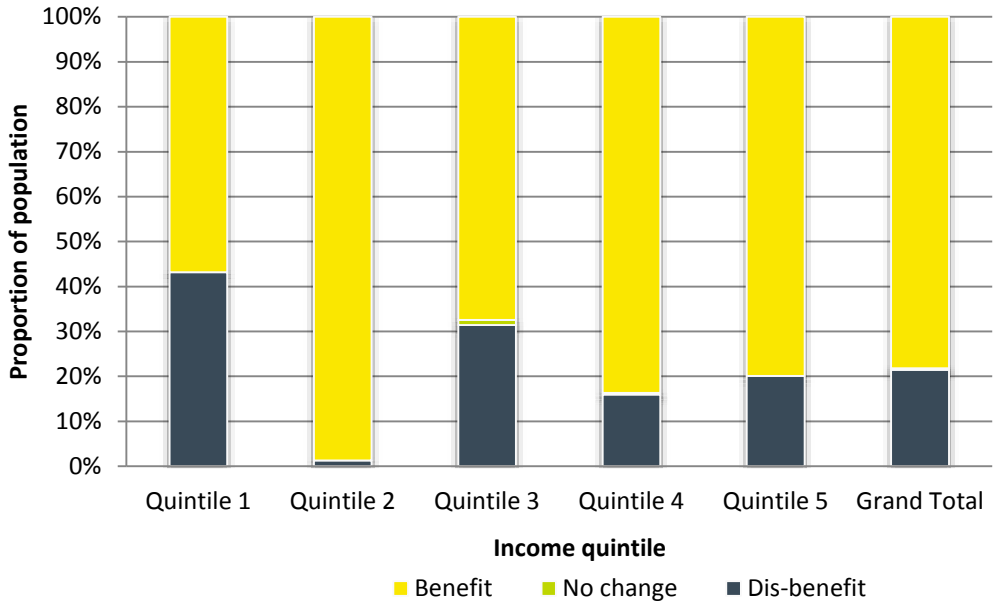
Just over 78% of residents experience a benefit as a result of the Scheme, and around 22% experience a disbenefit. A higher than expected proportion of residents in income quintile 2 experience benefits of the Scheme (99% of residents in income quintile 2 compared to 78% of residents overall), While residents in quintile 1 (the most deprived) and quintile 3 experience a lower than average proportion of the benefits and a higher than average proportion of the disbenefits. In fact, double the proportion of residents in income quintile 1 experience disbenefits compared to the overall statistics (43% compared to 22%). Residents in the other three quintiles experience benefits and disbenefits that are broadly in line with the overall proportion.

Table 3-2 Distribution of User Benefits Across Population by Income Deprivation Quintiles

Income quintile	Residents - number (%)			
	Benefit	No change	Disbenefit	Total in impact area
1 – Most Deprived	2,682 (56.8%)	0 (0.0%)	2,038 (43.2%)	4,720 (12.6%)
2	4,548 (98.7%)	0 (0.0%)	59 (1.3%)	4,607 (12.3%)
3	4,323 (67.4%)	71 (1.1%)	2,016 (31.5%)	6,410 (17.1%)
4	8,830 (83.6%)	41 (0.4%)	1,686 (16.0%)	10,557 (28.2%)
5 – Least Deprived	8,942 (79.9%)	0 (0.0%)	2,255 (20.1%)	11,198 (29.9%)
Total Population	29,326 (78.2%)	112 (0.3%)	8,054 (21.5%)	37,491

Figure 3-2 presents a graphical breakdown of the distribution of impacts across the five quintile groups for ease of interpretation.

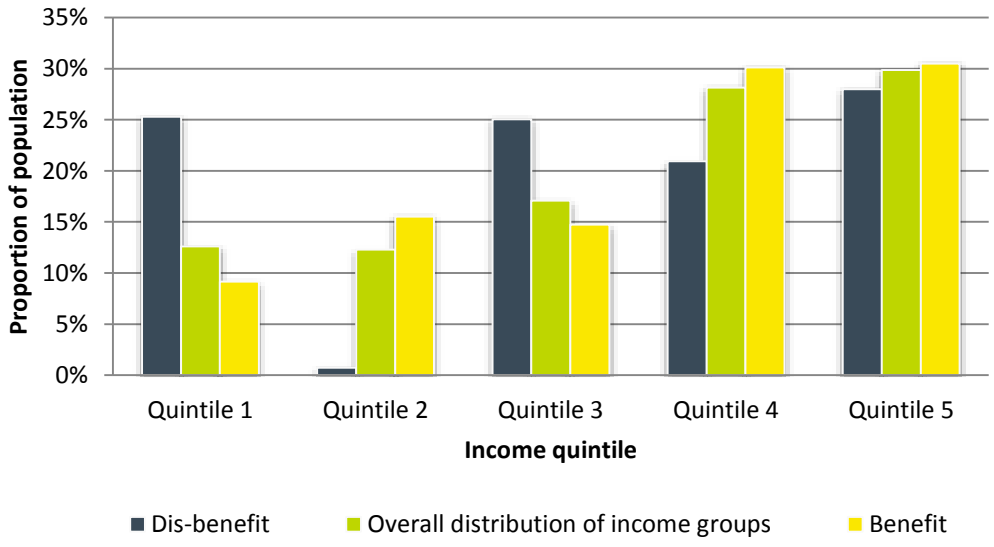
Figure 3-2 Distribution of User Benefits Across the Population by Income Deprivation Quintile



3.1.5.1. Distribution of Benefits Across the Population

The DI appraisal demonstrates whether the impacts are distributed evenly across the income groups and identifies the 'winners' and 'losers' of user benefits as a result of the proposed scheme. An examination of the distribution of benefits and disbenefits compared to what may be expected from the overall distribution across the populations within each income quintile is shown in Figure 3-3.

Figure 3-3 User Benefits - Distribution of Benefits Across the Population by Income Deprivation Quintile, Compared to Expected Distribution



A proportionate distribution of user benefits should see the benefits and disbenefits mirror the overall distribution of proportion of the population within each income group in the impact area (green column on Figure 3-3). In this instance, for income quintiles 1 and 3, a higher than expected proportion of the population experience disbenefits of the Scheme and a lower than expected proportion experience benefits. For income quintiles 2 and 4 the opposite is true. In fact a very low proportion of residents in income quintile 2 experience disbenefits of the Scheme, as identified in Table 3-2. Benefits and disbenefits in income quintile 5 are proportionate to the overall population distribution.

3.1.5.2. Value of Benefits

The information presented so far shows the number and proportion of residents within the impact area that are likely to experience a user benefit or disbenefit as a result of the Scheme. It is however important to understand the value of benefit and disbenefit the population in each income quintile are likely to experience as a result of the Scheme. Aggregating these figures across the income quintiles identifies whether the value of benefits and disbenefits are equally distributed across the five income quintiles, as shown in Table 3-3.

Overall there are net benefits from the Scheme, approximately £2.8 million over the 60 year appraisal period. Benefits considered in the user benefit appraisal consider both time and cost to the user. The majority of costs in this case are considered to be through journey time savings as a result of using the Scheme and the associated reduction in congestion on surrounding roads.

Following the WebTAG Unit 4.2 assessment criteria (as noted below), Table 3-3 outlines the assessment for each income quintile as follows:

- All of the income quintiles experience net user benefits overall;
- Income quintile 5 is scored as large beneficial as the proportion of the population experiencing benefits in this quintile is considerably larger than the proportion of the population in the impact area; and
- Income quintiles 1 to 4 are scored as slight beneficial as the proportion of the population experiencing benefits is less than the proportion of the group overall (5% or less).

There are net benefits overall. Although the value of benefits of the Scheme favour those in the least deprived income quintile, as there are net benefits for all quintile groups, the overall user benefits DI impacts has been appraised as **slight beneficial.**

Table 3-3 Distribution of User Benefit Costs, by Income Deprivation Quintile

	Income Quintile					Total
	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	
Total population	4,720	4,607	6,410	10,557	11,198	37,491
Proportion of overall population	12.6%	12.3%	17.1%	28.2%	29.9%	-
Overall net benefits	£193,593	£370,974	£143,278	£1,171,995	£878,747	£2,758,587
Sum of benefits	£452,157	£467,005	£674,185	£1,338,652	£2,068,579	£5,000,578
Distribution of benefits	9.0%	9.3%	13.5%	26.8%	41.4%	-
Sum of disbenefits	-£258,565	-£96,031	-£530,907	-£166,657	-£1,189,832	-£2,241,991
Distribution of disbenefits	11.5%	4.3%	23.7%	7.4%	53.1%	-
Assessment	✓	✓	✓	✓	✓✓✓	

Key to individual assessment of each Income quintile

Beneficial and 5% greater (or more) than the proportion of the group in the total population	*Large Beneficial*
Beneficial and in line (+/-5%) with the proportion of the group in the total population	*Moderate Beneficial*
Beneficial and 5% smaller (or less) than the proportion of the group in the total population	*Slight Beneficial*
There are no user benefits or disbenefits experienced by the group	*Neutral*
A disbenefit which is 5% smaller (or less) than the proportion of the group in the total population	*Slight Adverse*
A disbenefit which is in line (+/-5%) with the proportion of the group in the total population	*Moderate Adverse*
A disbenefit which is 5% greater (or more) than the proportion of the group in the total population	*Large Adverse*

3.2. Noise Assessment

3.2.1. Introduction

Any intervention that increases traffic levels and/or speeds or reduces physical distances between people and traffic will give rise to noise impacts within a localised area. This relates to new links such as the A350 Yarnbrook and West Ashton Relief Road, as well as impacts on the existing road network through the redistribution of traffic. Step 2a has been completed, however it has not been possible to complete the remaining steps.

3.2.2. Confirmation of Impacted Area – Step 2a

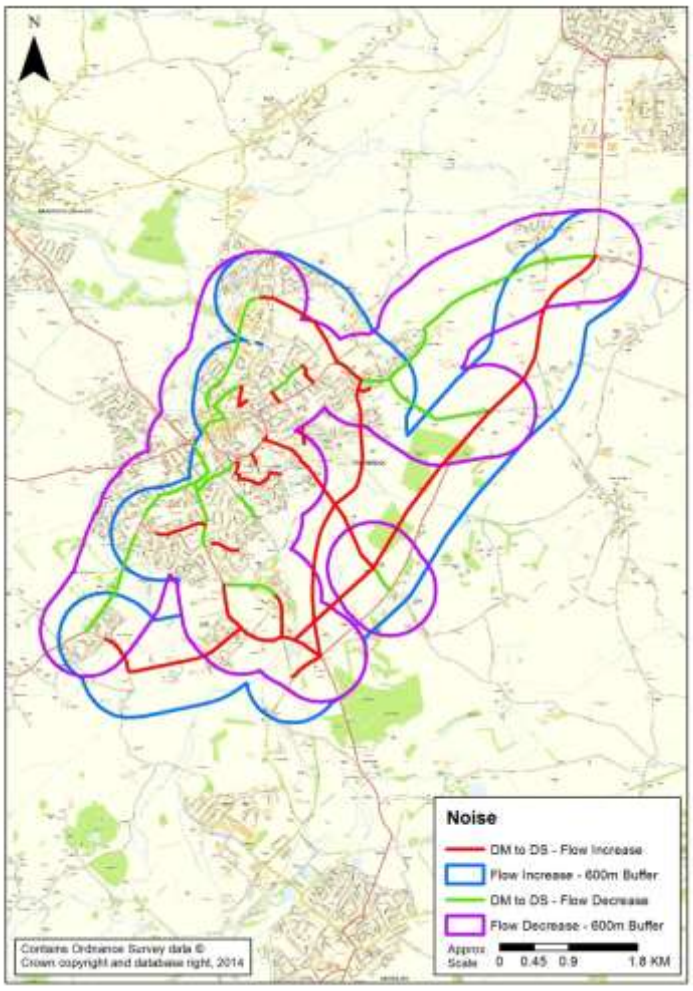
Determining the area affected by noise level changes usually involves extraction of outputs from the noise assessment model. Noise modelling was carried out for the Ashton Park Environmental Statement (ES) produced by Pegasus, which has been provided in draft for the OBC. As this noise work was carried out for planning, rather than WebTAG purposes, the noise ES assessment is based on receptors representing several properties; DI noise appraisal is normally undertaken based on noise modelling where properties have all been individually geocoded.

An approach for appraising noise DIs was considered, based on identifying highway links with significant changes in traffic levels (>+/-10%) as a result of the Scheme, and examine the impact of the population within a 600m distance of these transport links. This level of change in traffic flow is considered to result in noise impacts in the region of what would be considered within a noise assessment (>1dBA change).

Figure 3-4 identifies the links within the highway model with a >10% change in traffic flow, and the 600m buffer surrounding each of these links. Any links with a >10% decrease in traffic flow would be considered to have an improvement in noise levels, and those with a >10% increase in flow to have worsened noise levels as a result of the Scheme.

Due to the complexity of the Trowbridge Traffic Model, there is considerable overlap of the study areas considered to have an increase in flow and a decrease in flow (see Figure 3-4). It would therefore be inaccurate to undertake an appraisal using this approach without making a range of assumptions about the distribution of noise impacts within these 600m buffers. Due to the inaccuracies of this approach, no further analysis has been undertaken on noise DIs for the OBC.

Figure 3-4 Noise Impact Area[4]



3.3. Air Quality Assessment

3.3.1. Introduction

Any intervention that increases traffic levels (especially HGVs) and increases the amount of slow moving traffic or reduces physical distances between people and traffic may give rise to impacts on air quality. Step 2a has been completed, however it has not been possible to complete the remaining steps.

3.3.2. Confirmation of Impacted Area – Stage 2a

The impacted area for the DI appraisal would usually be defined by the air quality assessment. Air quality modelling was carried out for the Ashton Park ES by Pegasus, which has been provided in draft for the OBC. As this air quality work was carried out for planning, rather than WebTAG purposes, the air quality ES assessment is based on receptors representing several properties; air quality DI appraisal is normally undertaken based on air quality modelling where properties have all been individually geocoded.

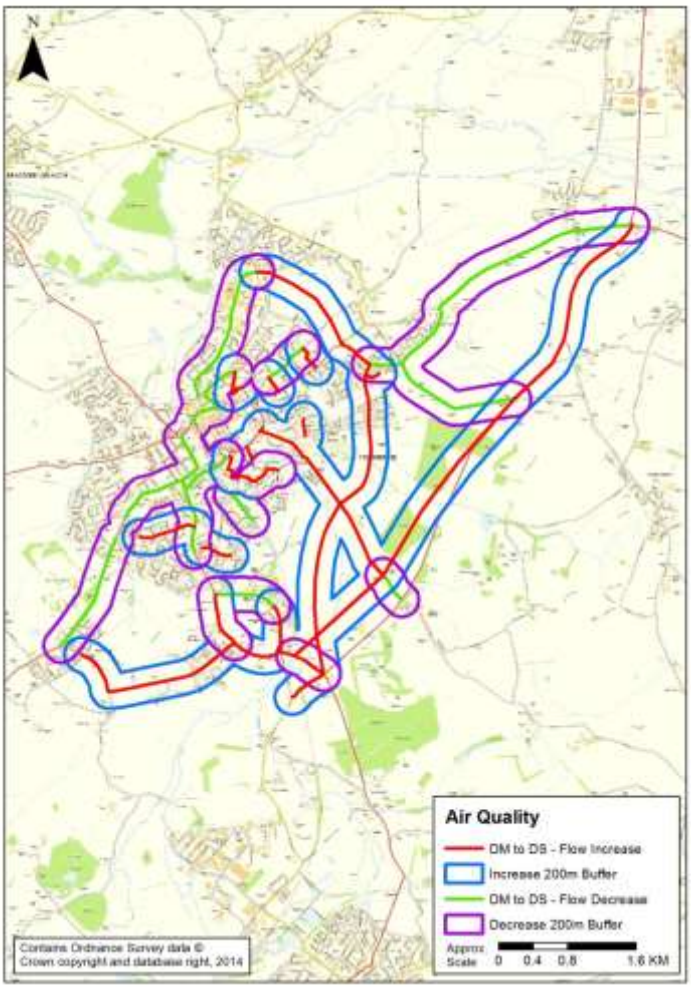
An alternative approach for appraising air quality DIs was considered approach (as specified in WebTAG DI unit A4.2) based on identifying the highway links with significant changes in traffic

[4] When interpreting this figure, it should be noted that the With Scheme (DS) scenario contains an additional 2,600 dwellings and 15 hectares of employment land compared with the Without Scheme (DM) scenario.

levels (>+/-10%) as a result of the Scheme, and examine the impact of the population within a 200m distance of these transport links. This level of change in traffic flow is considered to result in air quality impacts in the region of what would be usually be considered within an air quality assessment. Figure 3-5 identifies the links within the highway model experiencing a >10% change in traffic flow and a 200m buffer of each link.

Due to the complexity of the Trowbridge Traffic Model, there is considerable overlap of the study areas considered to have an increase in flow and a decrease in flow air quality levels (see Figure 3-5). It would therefore be inaccurate to undertake an appraisal using this approach without making a range of assumptions about the distribution of air quality impacts within these 200m buffers. Due to the inaccuracies of this approach, no further analysis has been undertaken on noise DIs for the OBC.

Figure 3-5 Air Quality Impact Area[5]



[5] When interpreting this figure, it should be noted that the With Scheme (DS) scenario contains an additional 2,600 dwellings and 15 hectares of employment land compared with the Without Scheme (DM) scenario.

3.4. Accidents Assessment

3.4.1. Introduction

Any intervention that increases traffic levels and speeds or reduces physical separation between people and traffic can give rise to increases in accidents. The approach for the DI appraisal of accidents uses data from the accident assessment as well as STATS 19 data from the DfT's Road Casualties online database[6]. The approach identifies accident locations (Step 2a) and, where available, the age and gender of casualties to assess any impacts on vulnerable groups (Step 2b). Step 2c identifies amenities within the impact area that are likely to be used by vulnerable groups. The outputs from this assessment then feed into the full appraisal process in Step 3 to determine the impacts and complete a matrix of DI findings.

3.4.2. Confirmation of Impacted Area – Step 2a

In order to identify the impact area for the accident assessment; analysis was undertaken to identify all links on the modelled network within a 1km boundary of the Scheme experiencing a change in traffic flow of +/- 10% as shown in Figure 3-6.

A smaller impact area has been considered within this appraisal for the following reasons:

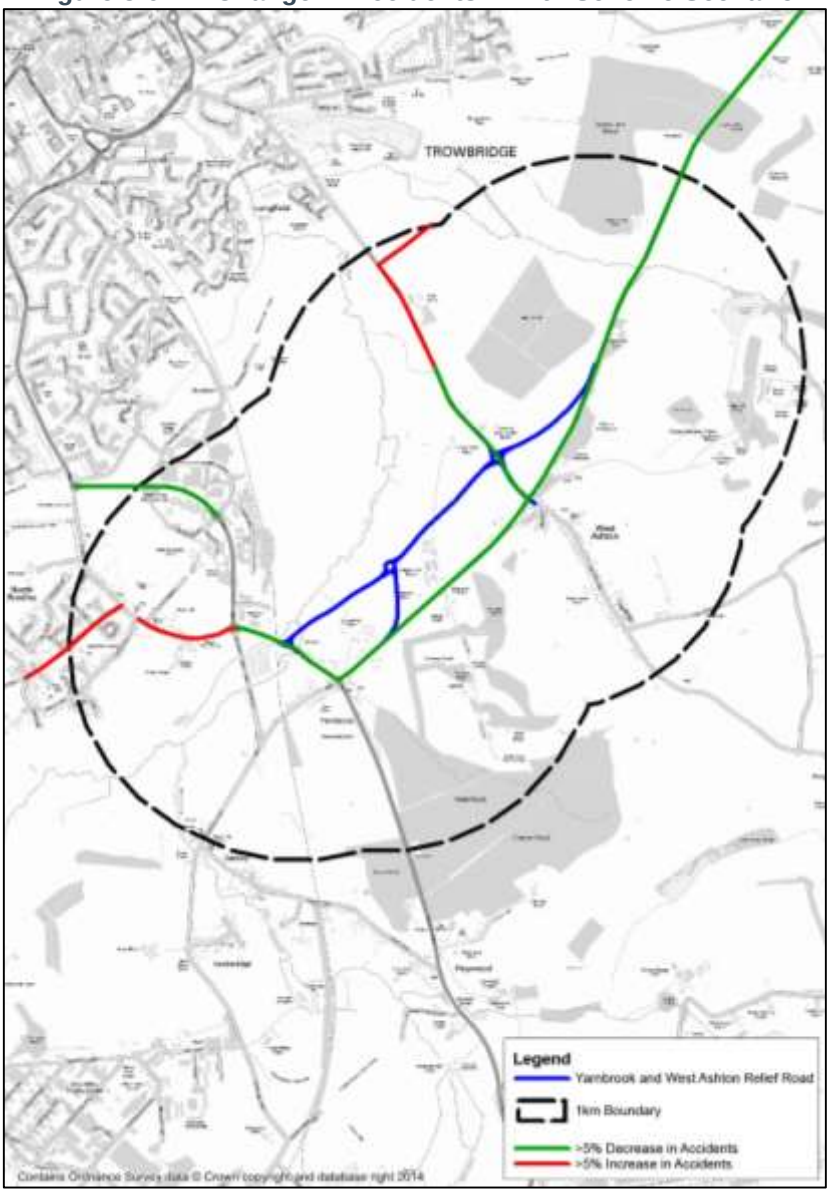
- It becomes increasingly inaccurate to predict the accident rate on traffic flow changes further away from the affected link; and
- Significant delays are forecast at the Staverton Signal Junction (to the north of the model) in all forecast years, time periods and scenarios. Detailed analysis of benefits by OD pair has indicated that the three zones (zones 110, 212 and 213) near the Staverton area are expected to have large disbenefits in the forecast years and are forecast to have an adverse impact on the overall scheme benefits. However, the performance of movements to and from these zones is not directly related to the Scheme, being at the far northern edge of the modelled area with limited movement between the Scheme and these zones. Zones 110, 212 and 213 in the Staverton area have therefore been excluded from the analysis.

Note that the outputs from the Sensitivity Test have been utilised to inform Accidents results for the Core Scenario. For Accidents in particular, the COBALT results for the Core Scenario showed that there is a large disbenefit resulting from the increased accidents due to increased traffic in the With Scheme scenario (which also has an additional 2,600 dwellings and 15 hectares of employment land). As this disbenefit can be attributed purely to the increase in the number of trips generated by the Ashton Park development, the accident benefits for the central case economic appraisal have been based on the Sensitivity Test results where the traffic in both Without Scheme and With Scheme is constrained to TEMPRO. Therefore the Sensitivity Test results have been used for Accidents.

Outputs from the COBALT were then used to identify the Without Scheme and With Scheme accident numbers for each affected link in the impact area. Each link was then classified according to the rate of change of the number of accidents between the Without Scheme and With Scheme scenarios.

[6] http://data.gov.uk/dataset/road-accidents-safety-data

Figure 3-6 Change in Accidents – With Scheme Scenario



3.4.3. Identification of Vulnerable Groups in the Area – Step 2b

There are several potential vulnerable groups in terms of accidents including children and younger people, young men (particularly as drivers) and older people as well vulnerable road users such as pedestrians, cyclists and motorcyclists. There is also evidence that people living in more deprived areas are more vulnerable to accidents on the highway network.

Figure 3-7 and Figure 3-8 highlight areas with the highest percentage of under 16s and older people within a 1km buffer of the A350 Yarnbrook and West Ashton Relief Road scheme alignment.

Analysis has been undertaken to identify concentrations of vulnerable groups that may be impacted as a result of the Scheme by using STATS 19 data on personal injury accidents for the five years from 2009 to 2013. This data profiles casualties by age, gender and type of road user and deprivation score and is used to identify the baseline conditions in terms of victim typology. Table 3-4 presents this data at a national and scheme area level for comparison.

Figure 3-7 Change in Accidents with Older People in the Impact Area

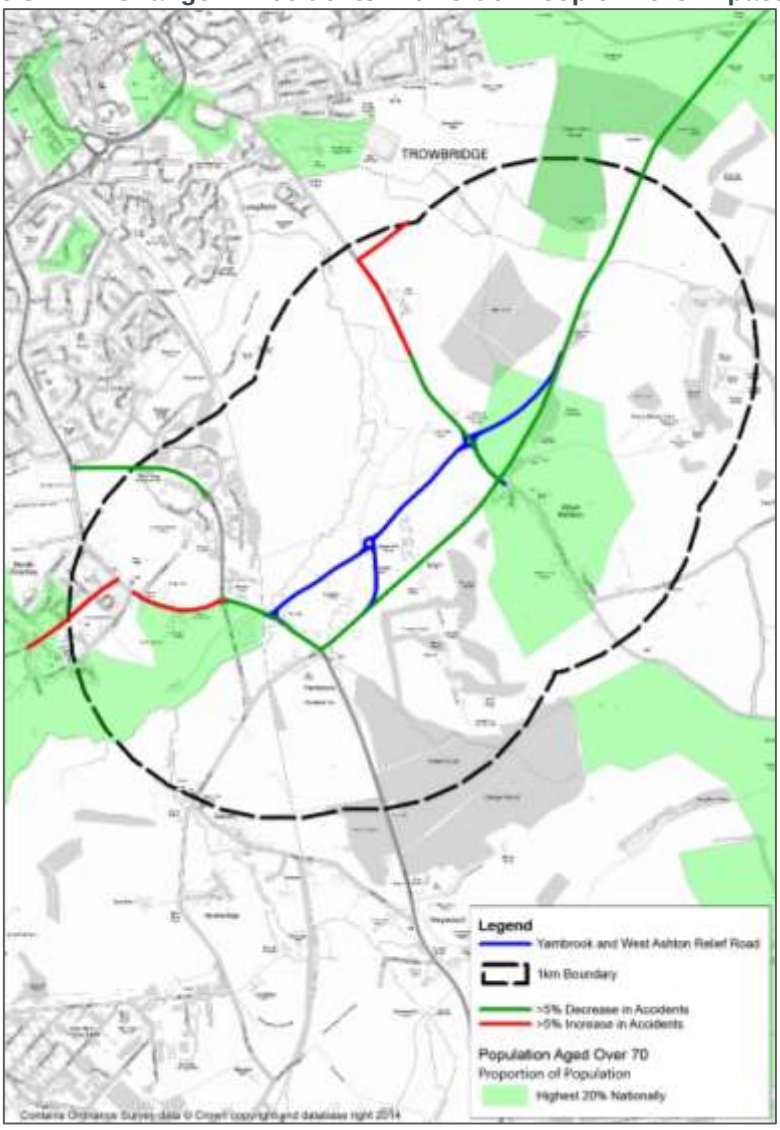


Figure 3-8 Change in Accidents with Children in the Impact Area

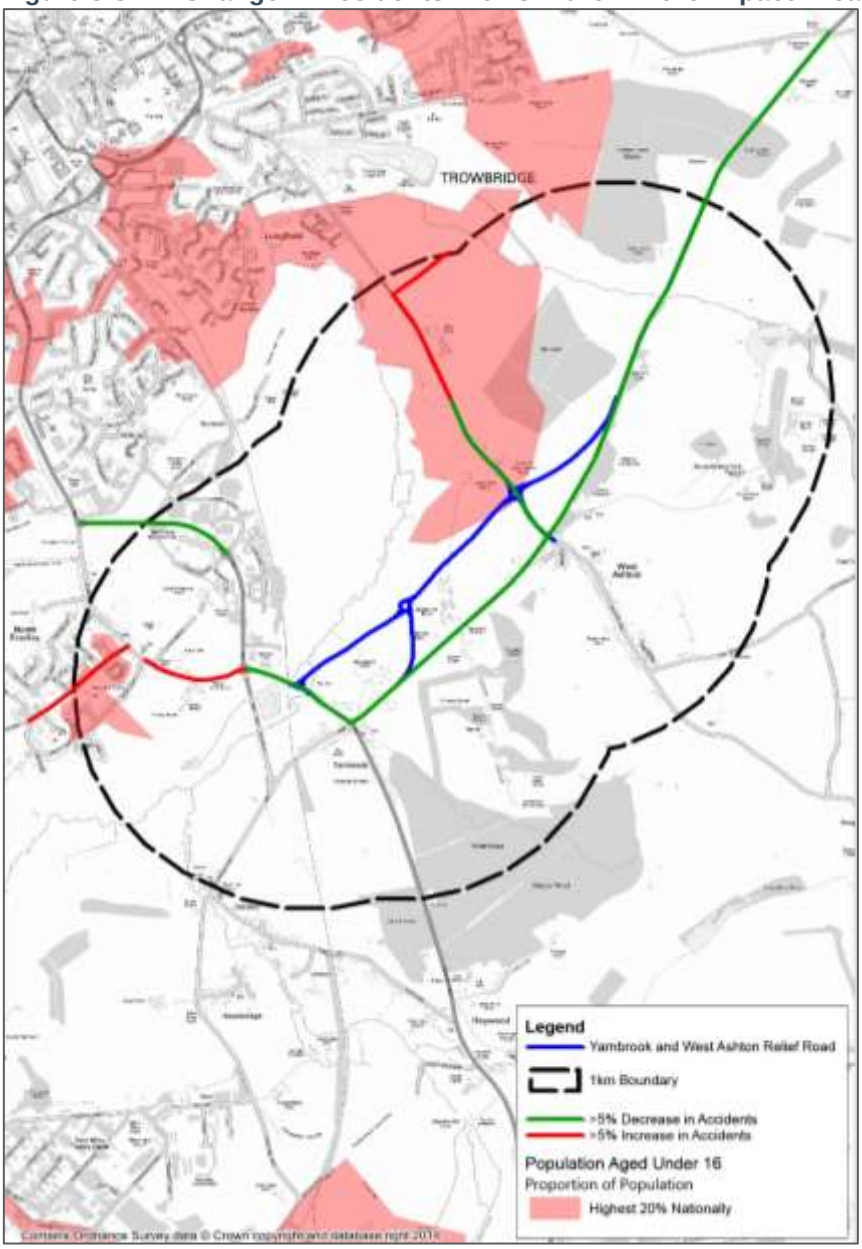


Table 3-4 All Accident Casualties (2009 – 2013)

	All casualties (national rate)		All casualties (impact area)	
	Number	% of all casualties	Number	%
Vulnerable Users				
Pedestrians	132,630	11.5%	12	29.3%
Cyclists	90,762	7.8%	3	7.3%
Motorcyclists	103,342	8.9%	4	9.8%
Male drivers aged 16-25	118,082	10.2%	3	7.3%
Vulnerable Groups				
Under 16	98,945	8.5%	14	34.1%
People aged 75+	35,110	3.0%	1	2.4%
Deprivation				
20% Most deprived LSOAs in UK	216,882	20.8%	2	4.9%
20% Least deprived LSOAs in UK	187,984	18.1%	10	24.4%

It should be noted that the total number of accidents in the impact area overall is quite small, with a maximum of 41 accidents. The highest number of accidents forecast on any one link is 9 and the average number of accidents forecast per link is 2.

Table 3-4 shows that the proportion of pedestrian casualties is higher in the impact area (29.3%) than nationally (11.5%), as is the proportion of child casualties (34.1% in the Scheme area, as compared to 8.5% nationally). The proportion of casualties in the impact area involving young male drivers aged 16-25 (7.3%) and people in the 20% most deprived LSOAs (4.9%) is lower than national levels (10.2% and 20.8% respectively). It should be noted however that due to the low number of accidents considered within this analysis, conclusions should be treated with some caution.

3.4.4. Identification of Amenities in the Area - Step 2c

Accident and casualty statistics relate to people travelling (by any mode) within the accident assessment area and therefore the impact of local amenities that attract vulnerable groups need to be considered within the DI appraisal. The main amenities relevant to the vulnerable groups in the area are two primary schools (in North Bradley and West Ashton) and Larkrise Community Farm.

3.4.5. Appraisal of Accident DIs – Step 3

Table 3-5 profiles casualties between 2009 and 2013 by vulnerable user type, age groups and residential deprivation score by the forecast change in accident rates (i.e. split by highway links forecast to experience benefits or disbenefits in accident savings).

Only three previous accidents between 2009 and 2013 happened on links forecast to experience an increase in accident rates (disbenefit). Therefore based on existing accident levels, all vulnerable groups may benefit as a result of the Scheme, and based on accidents occurring between 2009 and 2013, particular benefits are noted on links with a history of accidents involving pedestrians and children.

Table 3-5 Profile of Existing Casualties by Forecast Benefit in Accidents (2009 and 2013)

Casualty Type	Benefit		Disbenefit	
	N	%	N	%
Vulnerable User				
Pedestrians	7	30.4%	1	50.0%
Cyclists	2	8.7%	0	0.0%
Motorcyclists	1	4.3%	0	0.0%
Male drivers aged 16-25	2	8.7%	0	0.0%
Vulnerable Groups				
People aged under 16	8	34.8%	1	50.0%
People aged 75+	1	4.3%	0	0.0%
Deprivation				
20% Most deprived LSOAs in UK	0	0.0%	1	50.0%
20% Least deprived LSOAs in UK	8	34.8%	0	0.0%

The analysis of road casualty and accident data has shown that there are more links that will experience a decrease in accident rates ('benefit') than those experiencing an increase ('disbenefit'). Detailed analysis of existing accident data demonstrates that accidents involving the vulnerable groups are more likely to occur on links experiencing a decrease in accident rates as a result of the proposed scheme.

Due to the low number of accidents considered within this assessment, and the limitations associated with the model, the Scheme is considered to have a **slight beneficial** effect overall. All vulnerable groups are also considered to have a slight beneficial outcome individually as a result of the Scheme with the exception of those in the most deprived areas where a slight adverse score has been provided. As discussed earlier, this assessment is based on the sensitivity tests associated with the highway model and provides an indicative appraisal based on very few accidents occurring and therefore these results need to be taken with caution.
Severance Assessment

3.4.6. Introduction

Severance is often an unintended consequence of a measure intended to address other problems. Severance issues may be identified at an early stage and in many cases a design solution may reduce or eliminate impacts.

3.4.7. Confirmation of Impacted Area – Step 2a

The DI guidance (Unit A4.2) recommends that the impact area for severance should include any location with physical changes in road alignment or where links on the road network will experience significant changes in traffic flows and/or speeds (>10%). This assessment is based on an examination of the area adjacent to the main physical changes in road alignment as it becomes more difficult to attribute changes in traffic flow to the Scheme further away in the model.

The main physical change in road alignment is the new single carriage highway departing the A350 at north east of West Ashton and running parallel to the A350 before connecting to the A363 Westbury Road. This new road includes three roundabouts (at the junctions with West

Ashton Road, the Ashton Park Distributor Road and Westbury Road) and connections to the existing A350 to the east of Yarnbrook Roundabout. As severance affects those using non-motorised modes, especially pedestrians, a 1km buffer around the Scheme will be considered for severance impacts.

3.4.8. Identification of Vulnerable Groups in the Area – Step 2b

There are certain groups that are particularly vulnerable to the effects of severance. These include no car households, older people, children and people with disabilities. Analysis has been undertaken for the population within a 1km buffer of the proposed scheme alignment as shown in Appendix A. The results of the analysis are shown in Table 3-9.

Table 3-6 Concentration of Vulnerable Groups within Severance Impact Area

Vulnerable Group	% Scheme Area	% Wiltshire	% England
Older People (Aged 70+)	6.8%	8.6%	7.7%
Children (People Aged Under 16)	23.2%	19.3%	18.9%
No Car Households	6.7%	14.8%	25.8%
Disability Living Allowance Claimants	2.9%	6.5%	5.5%

Table 3-6 shows that there are high levels of car ownership and children in the Scheme area compared to the Wiltshire and national levels. Levels of older people in the Scheme area are roughly in line with local and national levels, and concentrations of DLA claimants are lower than the local and national levels.

3.4.9. Identification of Amenities in the Area - Step 2c

The scheme area is reasonably small and quite rural, but there are still amenities within the area that will attract vulnerable groups; hence adding to the movement and daytime population of those considered vulnerable to any impact on severance.

These amenities include Larkrise Community Farm (where visits are particularly encouraged for those considered vulnerable, including school trips, visits from community care homes, and a riding school for people with disabilities), a recreation ground in North Bradley and two primary schools. The presence of these amenities indicates that there will be movement from a range of vulnerable groups including older people, disabled, and children and their parents / carers around the locality.

3.4.10. Appraisal of Severance DIs – Step 3

The proposed scheme crosses principally rural land, and is intended to remove trips from the busy A350 nearby, prevent through traffic from passing through West Ashton and reduce through traffic levels in Yarnbrook, which will make the route more pleasant for pedestrians and cyclists. The new road does create severance in the wider area through the introduction of a new road, however the existing A350 is already creating this issue along a similar alignment and location. While there may be some localised changes to severance, there is no particular increase in the wider area due to the introduction of the new road.

There are some tracks in the area that will be severed, as well as the Public Right of Way (PRoW) NBRA44, although it appears that this PRoW would connect into the section of new foot/cycleway over the roundabout by the distributor road, so any negative impacts should be minimised. However, this might increase the walking distance to Yarnbrook marginally. This new section of foot/cycleway will also allow residents of Yarnbrook to connect into the network of foot/cycleways in the new development at Ashton Park, giving them a new mostly traffic free

route into central Trowbridge which is likely to provide a beneficial route to the existing option. The scheme does not pass through any existing residential developments, but is close to North Bradley, Yarnbrook and West Ashton, as well as the proposed Ashton Park Development. The majority of the existing A350 does not have any footway alongside suggesting that pedestrian flows in the area are currently low (although there could be suppressed demand for walking) or mostly use PRoWs away from the road.

Overall there are a higher number of links within the impact area forecast to experience an increase in traffic flows as a result of the Scheme than a decrease in traffic flow, and therefore this is likely to increase either actual or perceived severance for vulnerable groups. Areas of housing in North Bradley and Yarnbrook are located in areas where there is forecast to be an increase in traffic flow and therefore residents and those visiting facilities in these locations are likely to experience negative impacts as a result of the Scheme.

There are pockets within the impact area with high levels of children and older people – mainly located around the edges of the Scheme. To the west of the Scheme, the more residential nature of this area and the presence of a primary school may result in higher levels of walking. As can be seen in Figure 3-9 and Figure 3-10, these areas are close to links with forecast increased traffic flows and therefore there may be some severance issues, particularly for children.

The assessment of severance has considered not only the physical impact of changes to traffic flows on local roads, but also any associated impacts associated with the pedestrian and cycle facilities and improvements to the crossing facilities as part of the Scheme. There is limited new provision of new walking/cycling routes as part of the new road itself, but that which is provided connects in well to the proposed new development at Ashton Park which is to be designed to have good walking and cycling connections.

Figure 3-9 Over 70s

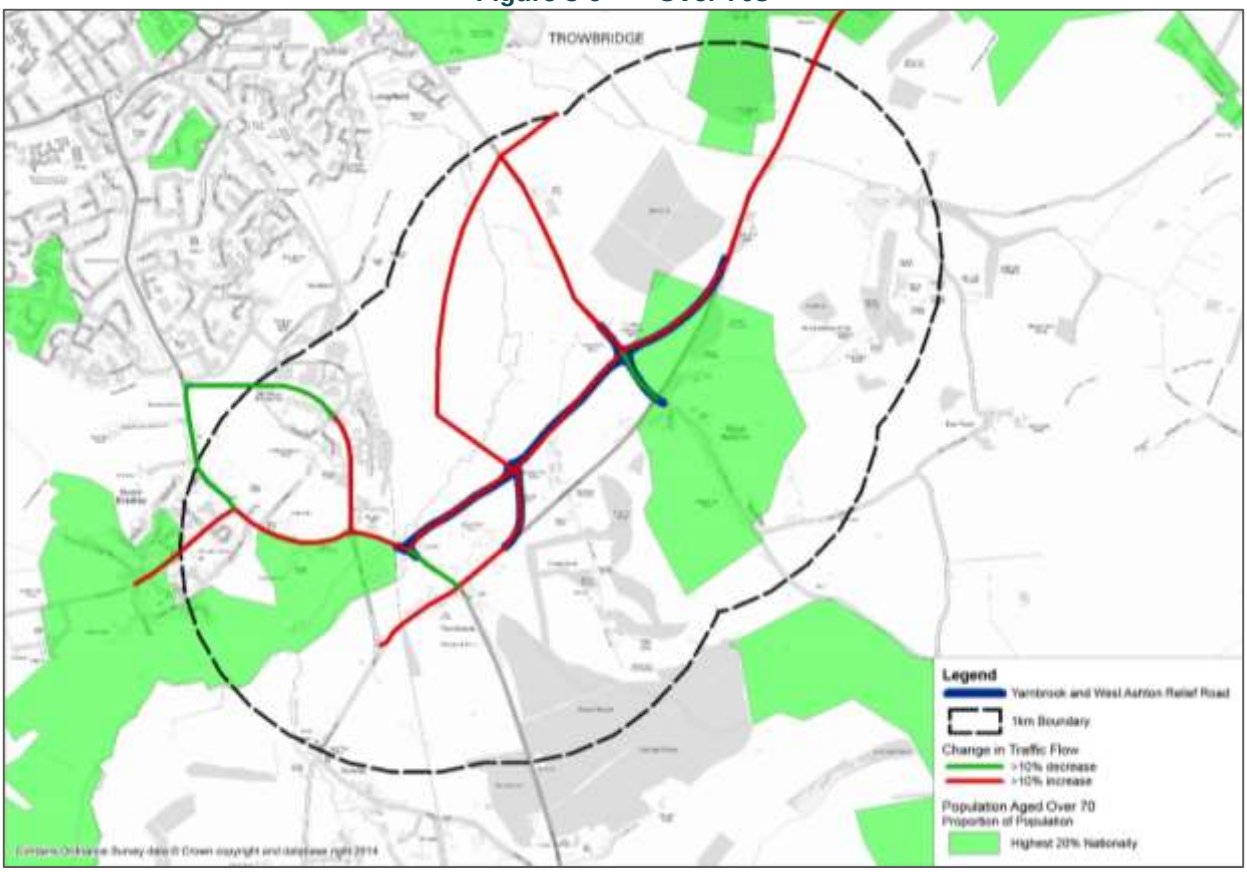
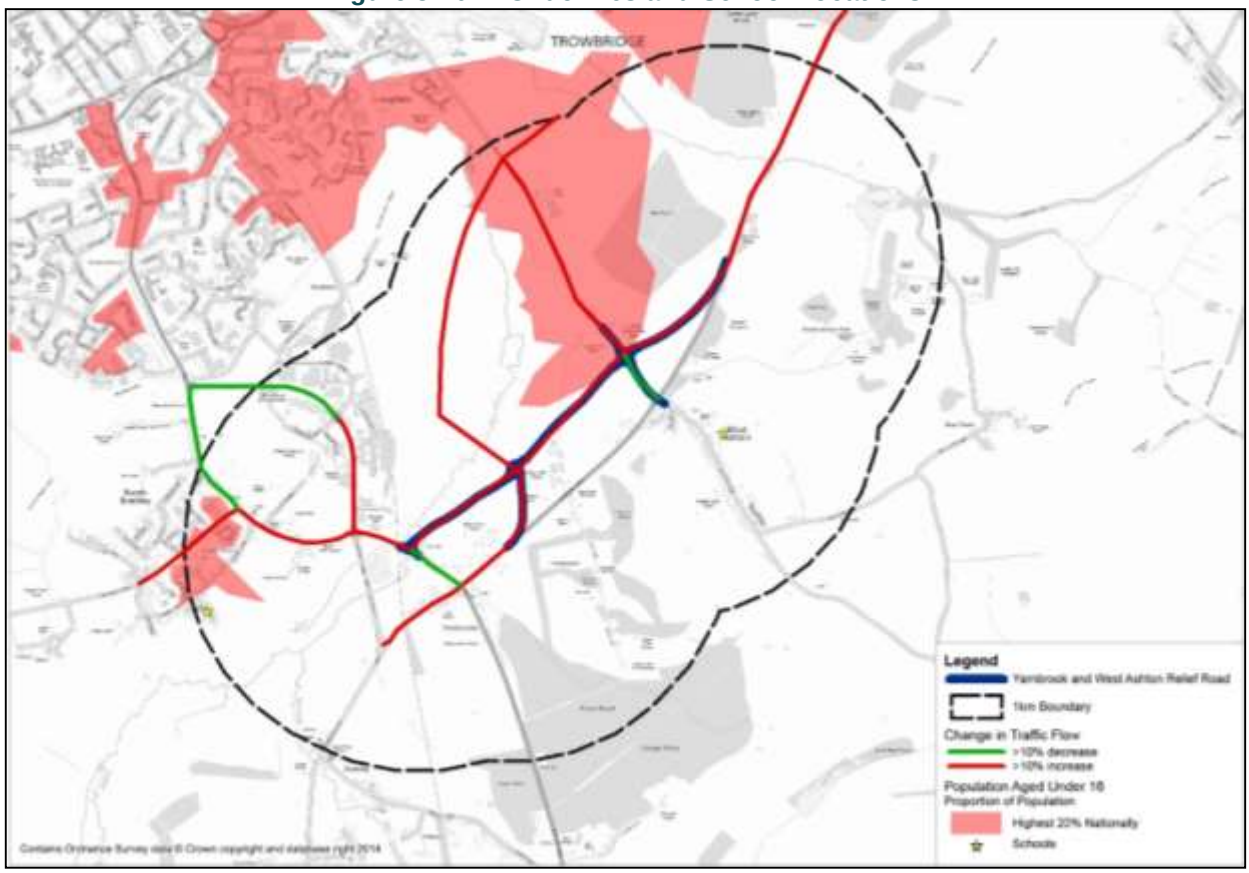


Figure 3-10 Under-16s and School Locations



There are areas where there is a predicted increase in traffic flow within the study area, and hence likely to be an increase in severance issues, however the provision of improved connections to the town centre (via Ashton Park) and the diversion of traffic away from Yarnbrook and West Ashton, means it is likely that there will be some improvement to the existing situation. It is therefore considered that the Scheme will have a **neutral** effect on severance overall and for all vulnerable groups, excluding children (Table 3-10). Due to the increase in traffic flows in North Bradley where there is a primary school and clear concentrations of children, there is considered to be a slight adverse impact on children as a result of the Scheme.

Table 3-7 Summary of Severance DI Impacts

Impact	Older People	Children	No car Households	People with disabilities
Large Beneficial				
Moderate Beneficial				
Slight Beneficial				
Neutral	✓		✓	✓
Slight Adverse		✓		
Moderate Adverse				
Large Adverse				

3.5. Personal Affordability Assessment

3.5.1. Introduction

Any intervention that changes transport costs may give rise to impacts on personal affordability, and may have disproportionate effects where there are few or no travel alternatives, especially where low income households preclude car ownership and use. Changes to transport costs can include public transport fares, parking charges, road user charges or impacts to the road network that impacts on the operating costs of cars.

Step 1, screening process, identifies the likely broad impact areas of the intervention and determines whether it needs to be appraised further, with Step 2a investigating these spatial impacts in more detail. Step 2b reviews the socio-demographic profile within the impact assessment area, while Step 2c identifies amenities in the impact area of relevance. The outputs from Step 2 will feed into the core analysis of impacts (Step 3a) and the full appraisal of DIs (Step 3b).

3.5.2. Confirmation of Impact Assessment Area (Step 2a)

The impact assessment area is defined as the modelled area within the Trowbridge Traffic Model. This assessment considers the change in the cost of travel (including time and financial based costs) for users of the transport network and covers the wider Trowbridge area.

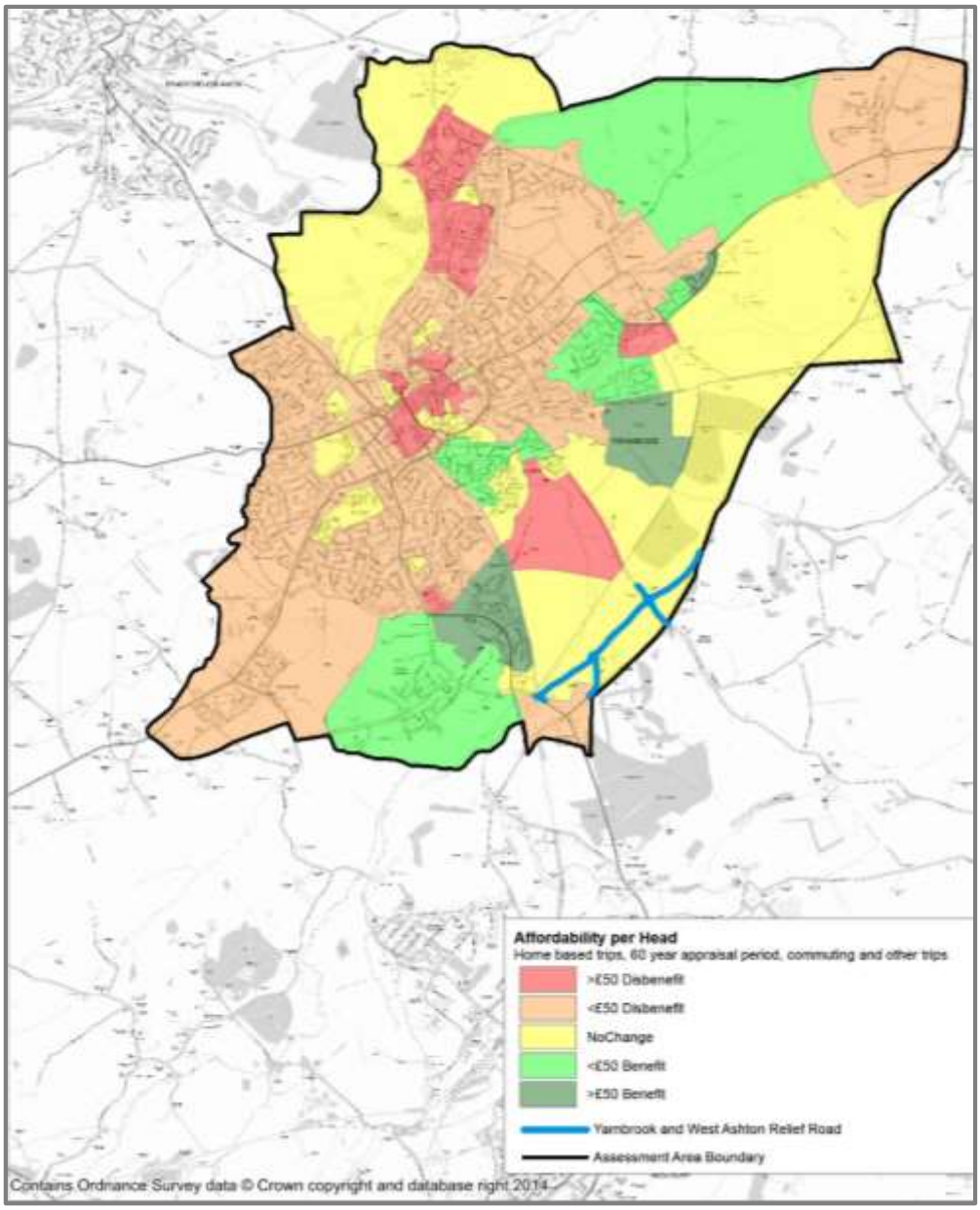
Whilst guidance suggests using the entire modelled area for the DI assessment of affordability, the highway model examines a core impact assessment area but also encompasses a much wider area as a series of outer zones. Using this wider impact assessment area would mean calculations in the outer zones requiring data aggregation and assumptions which may skew the affordability DI appraisal. Consequently the core modelled local impact assessment area (see Figure 3-11) is being used, enabling a finer degree of accuracy. However, it is important to note that affordability impacts may be experienced by people living in areas outside of the modelled area, but these are not included in this appraisal.

This affordability appraisal has been undertaken using TUBA outputs from the Trowbridge Traffic Model and follows TAG Unit 4.2. The TUBA outputs used are based purely on cost factors associated with travel, using the following TUBA calculations parameters:

- Home based trips (using AM origins as home location and PM destinations as home location);
- Home based trips calculated using ‘commuting and other’ trips from SATURN model (i.e. excluding business travel);
- Only internal to internal trips within the impact assessment area; and
- 60 year appraisal period.

Figure 3-11 overleaf spatially demonstrates the calculated affordability benefits as a result of the proposed scheme. Disbenefits are experienced in most of the centre and the south west of the impact area (with some areas receiving more than £50 disbenefits per head), while some areas in the south and north east of the impact area experience a benefit. There are quite a few areas that experience no change, but it should be noted that in some cases this is due to the lack of current residents in that zone.

Figure 3-11 Affordability Impact Area



3.5.3. Identification of Social Groups in Impact Area (Step 2b)

In the case of affordability, it is necessary to understand the income distribution of potential users in the impact area. This has been undertaken by mapping variations in income deprivation using data from the Indices of Deprivation (IoD 2010) Income Domain at Lower Super Output Area (LSOA) level, according to their national rank.

Overall, 13% of residents within the impact area are within the most deprived income quintile (quintile 1 – the 20% most deprived LSOAs areas nationally), and a further 12% are within income quintile 2 as shown in Table 3-8. Approximately 30% of residents in the Scheme impact area are in quintile 5, the least deprived 20% in England, Table 3-11.

Table 3-8 Proportions of Each Income Quintile within Study Area

Income group	% Assessment Area	% England
Quintile 1 (20% most deprived)	12.6%	20.0%
Quintile 2	12.3%	20.0%
Quintile 3	17.1%	20.0%
Quintile 4	28.2%	20.0%
Quintile 5 (least deprived)	29.9%	20.0%

3.5.4. Identification of Amenities in the Area - Step 2c

Identification of key amenities in the affordability benefits impact area (as with user benefits) has not been completed in depth due to the geographic expanse of the area. The TUBA analysis however considers the demand for all movements within the study area and therefore takes into account the impact of key amenities within the impact area. These amenities may include employment destinations, schools, retail centres, community centres, and health facilities, amongst others. This DI appraisal of affordability therefore assumes presence of all vulnerable groups within the assessment, both in terms of travelling around the assessment area and also within the daytime population whilst visiting local amenities.

3.5.5. Affordability DIs – Step 3

Around 84% of the population within the impact area experience disbenefits as a result of the Scheme, and only 14% of residents experience a benefit, as shown in Table 3-9 below.

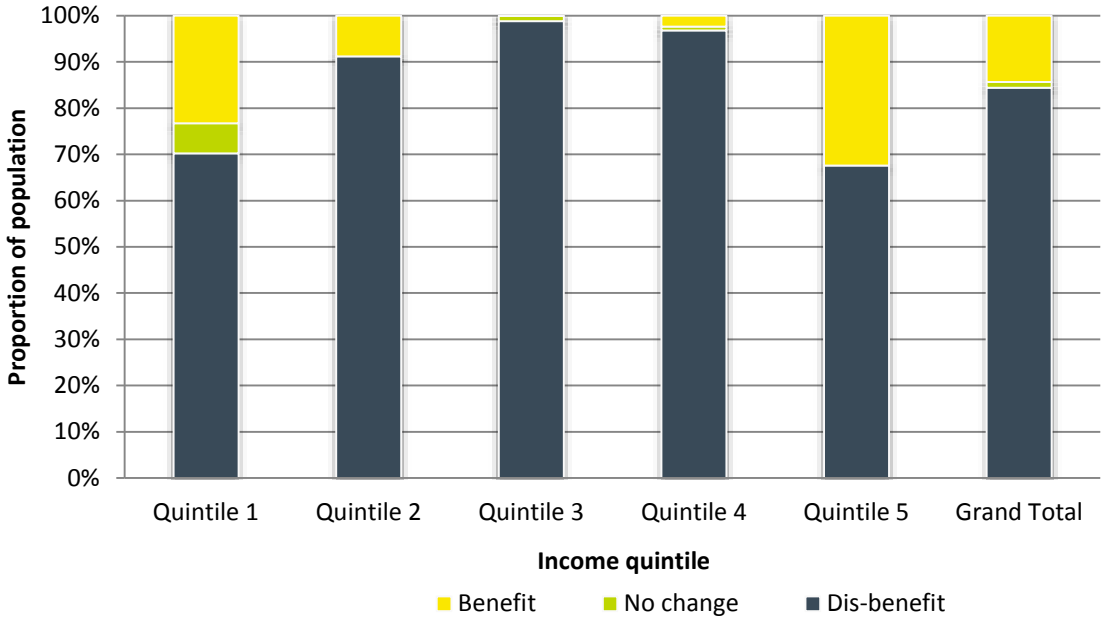
A higher proportion of residents in quintiles 1 and 5 (most and least income deprived areas nationally) experience benefits (23% and 32% respectively) of the Scheme compared to the overall distribution of benefits (14%). Those in income quintiles 2, 3 and 4, which experience higher disbenefits (92 – 99%) compared to the overall figures (84%).

Table 3-9 Distribution of Affordability Benefits by Income Deprivation Quintiles

Income Quintile	Residents - Number (%)			
	Benefit	No change	Disbenefit	Total in impact area
1 – Most Deprived	1,097 (23.2%)	308 (6.5%)	3,315 (70.2%)	4,720 (12.6%)
2	405 (8.8%)	0 (0.0%)	4,202 (91.2%)	4,607 (12.3%)
3	5 (0.1%)	71 (1.1%)	6,333 (98.8%)	6,410 (17.1%)
4	250 (2.4%)	86 (0.8%)	10,221 (96.8%)	10,557 (28.2%)
5 – Least Deprived	3,629 (32.4%)	0 (0.0%)	7,569 (67.6%)	11,198 (29.9%)
Total Population	5,386 (14.4%)	465 (1.2%)	31,640 (84.4%)	37,491

Figure 3-12 presents a graphical breakdown of the distribution of impacts across the five quintile groups for ease of interpretation.

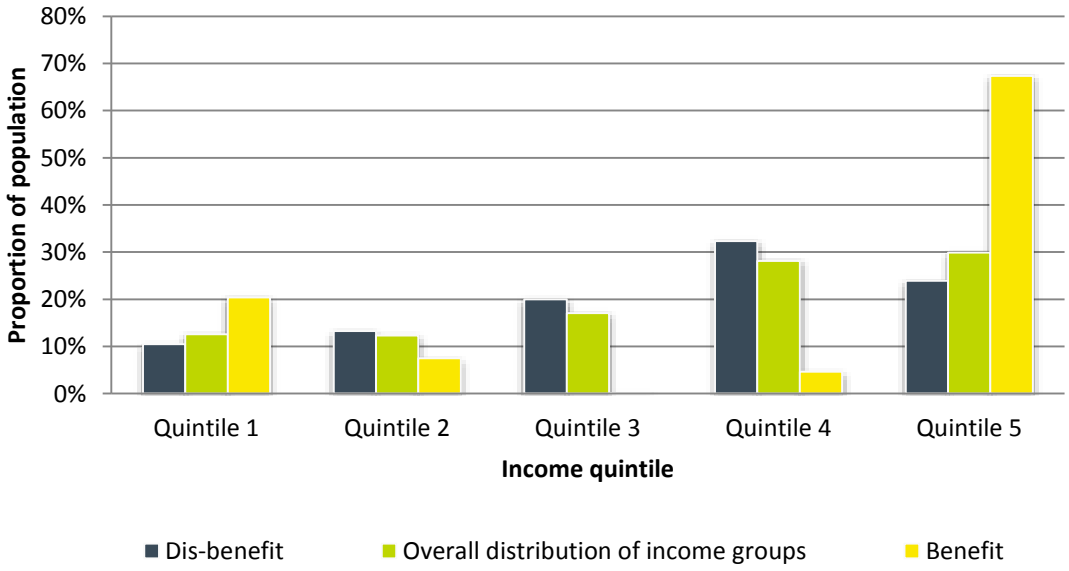
Figure 3-12 Distribution of Affordability Across the Population by Income Deprivation Quintile



3.5.5.1. Distribution of Benefits Across the Population

The DI appraisal demonstrates whether the impacts are distributed evenly across the vulnerable groups and identifies the 'winners' and 'losers' of affordability as a result of the proposed scheme. An examination of the distribution of benefits and disbenefits compared to what may be expected from the overall distribution of benefits (i.e. the overall distribution of income groups in the impact area) across the populations within each income quintiles is shown in Figure 3-13 below.

Figure 3-13 Affordability - Distribution of Benefits Across the Population by Income Deprivation Quintile, Compared to Expected Distribution



A proportionate distribution of affordability benefits as a result of the proposed scheme should see the benefits and disbenefits mirror the overall proportion of the population within each income group in the impact assessment area (green column on Figure 3-13). In this instance, a higher proportion of residents in quintile 1 (most deprived 20%) and quintile 5 (least deprived 20%) experience benefits than would be expected from an equal distribution, with a particularly high proportion (68%) of residents in income quintile 5 experiencing benefits. A lower than expected proportion of residents in income quintiles 2-4 experience benefits of the Scheme. The proportion of residents experiencing any disbenefits as a result of the Scheme is roughly in line with what would be expected from an equal distribution for all quintiles.

3.5.5.2. Value of Benefits

The information presented so far shows the number of residents within the impact area that are likely to experience an affordability benefit or disbenefit as a result of the Scheme. It is however also important to understand the value of benefit and disbenefit the population in each income quintile are likely to experience. Aggregating these figures across the income quintiles identifies whether the value of benefits and disbenefits are equally distributed across the five income quintiles, as shown in Table 3-10 overleaf.

Overall there are net affordability disbenefits from the Scheme, approximately -£1.9 million over the 60 year appraisal. This therefore shows that within the study area used for this user benefit appraisal, non-business trips incur additional vehicle operating costs as a result of the Scheme, This may be due to a number of reasons including re-routing to use the Scheme, travelling at faster speeds along the Scheme and local roads due to the reduction in congestion in the area. Following the WebTAG Unit 4.2 assessment criteria (as noted below), Table 3-10 the assessment for each income quintile as follows:

- All of the income quintiles experience net affordability disbenefits overall;
- Income quintiles 1, 2 and 4 are scored as slight adverse as the proportion of the population experiencing affordability disbenefits in each quintile is smaller than the proportion of the population of each group;
- Income quintile 3 is scored as moderate adverse as the proportion of the population experiencing affordability disbenefits within this quintile is in line with the proportion of the population of the group overall (i.e. within +/-5%); and
- Income quintile 5 is scored as large adverse as the proportion of the population experiencing affordability disbenefits within this quintile is more than 5% greater than the proportion of the population of the group overall.

As there are net disbenefits for all quintile groups, the overall impact on affordability is adverse. The majority of impacts from the Scheme (both benefits and disbenefits) are experienced by residents of quintile 5 (the least deprived income quintile). The most deprived quintiles (1 and 2), who are considered to be the most vulnerable in terms of any affordability impacts, receive disbenefits either in line with or below that expected proportionally. Consequently, the overall DI appraisal of affordability has been assessed as **slight adverse.**

Table 3-10 Distribution of Affordability Costs, by Income Deprivation Quintile

	Income Quintile					Total
	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	
Total population	4,720	4,607	6,410	10,557	11,198	37,491
Proportion of population	12.6%	12.3%	17.1%	28.2%	29.9%	-
Overall net benefits	-£142,875	-£95,884	-£359,658	-£202,891	-£1,055,130	-£1,856,437
Sum of benefits	£6,279	£1,625	£7	£10,877	£68,507	£87,293
Distribution of benefits	7.2%	1.9%	0.0%	12.5%	78.5%	-
Sum of disbenefits	-£149,153	-£97,509	-£359,664	-£213,768	-£1,123,636	-£1,943,730
Distribution of disbenefits	7.7%	5.0%	18.5%	11.0%	57.8%	-
Assessment	✗	✗	✗✗	✗	✗✗✗	

Key to individual assessment of each Income quintile	
Beneficial and 5% greater (or more) than the proportion of the group in the total popn	*Large Beneficial*
Beneficial and in line (+/-5%) with the proportion of the group in the total popn	*Moderate Beneficial*
Beneficial and 5% smaller (or less) than the proportion of the group in the total popn	*Slight Beneficial*
There are no user benefits or disbenefits experienced by the group	*Neutral*
A disbenefit which is 5% smaller (or less) than the proportion of the group in the total popn	*Slight Adverse*
A disbenefit which is in line (+/-5%) with the proportion of the group in the total popn	*Moderate Adverse*
A disbenefit which is 5% greater (or more) than the proportion of the group in the total popn	*Large Adverse*

4. Summary of Findings

Table 4-1 presents a summary of the key distributional impacts for inclusion in the Appraisal Summary Table and Table 4-2 contains the DI appraisal matrix.

Table 4-1 Summary of Key Impacts

Assessed Indicator	Summary of Key Impacts	Seven Point Scale Assessment
User Benefits	There are net benefits overall. Although the value of benefits of the Scheme favour those in the least deprived income quintile, as there are net benefits for all quintile groups, the overall user benefits DI impacts has been appraised as **slight beneficial**	Slight Beneficial
Noise	No noise DI assessment has been undertaken.	-
Air Quality	No air quality DI assessment has been undertaken.	-
Accidents	The analysis of road casualty and accident data has shown that there are more links that will experience a decrease in accident rates ('benefit') than those experiencing an increase ('disbenefit'). Detailed analysis of existing accident data has been undertaken to identify the number and any cluster of accidents involving vulnerable groups (children, older people, young males, pedestrians, etc.). In total, only 41 accidents have occurred within the last 5 years within the study area. Of these a higher proportion of accidents involving vulnerable groups have happened on links that are expected to experience a decrease in accident rates as a result of the proposed scheme. As a result the Scheme is considered to have a **slight beneficial** effect on accidents.	Slight Beneficial
Security	No assessment required – see Step 1 Screening Proforma in Appendix A.	N/A
Severance	The proposed scheme crosses principally rural land, and is intended to remove trips from the busy A350 nearby, prevent through traffic from passing through West Ashton and reduce through traffic levels in Yarnbrook, which will make the route more pleasant for pedestrians and cyclists. The new road does create severance in the wider area, but the existing A350 is already creating severance along a similar alignment and location, so while there may be some localised changes to severance, there is no particular increase in the wider area due to the introduction of the new road. There are areas where there is a predicted increase in traffic flow within the study area, and hence likely to be an increase in severance issues, however the provision of improved connections to the town centre (via Ashton Park) and the diversion of traffic away from Yarnbrook and West Ashton, means it is likely that there will be some improvement to the existing situation. It is therefore considered that the Scheme will have a **neutral** effect on severance overall and for all vulnerable groups, excluding children (Table 3-12). Due to the increase in traffic flows in North Bradley where there is a primary school and clear concentrations of children, there is considered to be a slight adverse impact on children as a result of the Scheme.	Neutral

Assessed Indicator	Summary of Key Impacts	Seven Point Scale Assessment
Accessibility	No assessment required – see Step 1 Screening Proforma in Appendix A.	N/A
Affordability	As there are net disbenefits for all quintile groups due to a slight increase in vehicle operating costs which may result from drivers re-routing to take advantage of the new road, or travelling faster on the relief and local roads due to a reduction in congestion, the overall impact on affordability is adverse. The majority of impacts from the Scheme (both benefits and disbenefits) are experienced by residents of quintile 5 (the least deprived income quintile). The most deprived quintiles (1 and 2), who are considered to be the most vulnerable in terms of any affordability impacts, receive disbenefits either in line with or below that expected proportionally. Consequently, the overall DI appraisal of affordability has been assessed as **slight adverse**	Slight Adverse

Table 4-2 Distributional Impacts: Output Summary Step 2

Social group and amenities indicators			User Benefits	Noise	Air quality	Accidents	Security	Severance	Accessibility	Affordability
Resident population in the impact area	Income distribution quintiles	0-20%	✓	-	-					×
		20-40%	✓	-	-					×
		40-60%	✓	-	-					××
		60-80%	✓	-	-					×
		80-100%	✓✓✓	-	-					×××
	Children (<16)			-	-	✓		x		
	Young Males					✓				
	Older people					✓		0		
	People with a disability							0		
	Black Minority Ethnic									
	No car households							0		
	Households with dependent children									

Key: ✓✓✓ = Large Beneficial
✓✓ = Moderate Beneficial
✓ = Slight Beneficial
0 = Neutral
× = Slight Adverse
×× = Moderate Adverse
××× = Large Adverse

	Distributional impact of income deprivation					Are the impacts distributed evenly?	Key impacts - Qualitative statements (example below)
	0-20%	20-40%	40-60%	60-80%	80-100%		
User benefits	✓	✓	✓	✓	✓✓✓	No	As there are overall net benefits for all quintile groups, the overall impact on user benefits is beneficial. The value of benefits favours those in the least deprived income quintiles and so the overall user benefits DI impacts has been appraised as **slight beneficial.**
Noise	-	-	-	-	-	-	No noise assessment undertaken and the alternative approach unsuitable for the DI appraisal.
Air quality	-	-	-	-	-	-	No air quality assessment undertaken and the alternative approach unsuitable for the DI appraisal.
Affordability	×	×	××	×	×××	No	As there are net disbenefits for all quintile groups, the overall impact on affordability is adverse. The majority of impacts from the Scheme (both benefits and disbenefits) are experienced by residents of quintile 5 (the least deprived income quintile). The most deprived quintiles (1 and 2), who are considered to be the most vulnerable in terms of any affordability impacts, receive disbenefits below that expected proportionally. Consequently, the overall DI appraisal of affordability has been assessed as **slight adverse**.

AST entry											
	Social groups						**User groups**				**Qualitative statement (including any impact on residential population AND identified amenities)**
Impact	Children & young people	Older people	No Car Households	Women	Disabled	BME	Pedestrians	Cyclists	Motor-cyclists	Young male drivers	
Noise	-										No detailed assessment undertaken. -
Air Quality	-										No detailed assessment undertaken. -
Accidents	✓	✓					✓	✓	✓	✓	There are more links in the assessment area that experience a reduction in accident rates (benefit) than an increase (disbenefit). There are also high proportions of vulnerable groups on the links experiencing benefits. Overall, the A350 Yarnbrook and West Ashton Relief Road has been appraised as having a **slight beneficial** impact on accidents.
Personal Security											No assessment required

Severance	×	✓	✓		✓						Although there are areas where there is a predicted increase in traffic flow within the study area, and hence likely to be an increase in severance issues, due to the provision of improved connections to the town centre (via Ashton Park) and the diversion of traffic away from Yarnbrook and West Ashton, it is likely that there will be some improvement in certain areas to the existing situation It is therefore considered that the Scheme has a **neutral** effect on severance for all vulnerable groups.
Accessibility											No assessment required.

Key: ✓✓✓ = Large Beneficial
✓✓ = Moderate Beneficial
✓ = Slight Beneficial
0 = Neutral
× = Slight Adverse
×× = Moderate Adverse
××× = Large Adverse

Appendix A. Socio-demographic Data

Table A-1 Socio-Demographic Profile of Scheme Area

Dataset/Social Group	Approx total % in 1km buffer of scheme alignment	% of Population in Wiltshire	England
Children: aged <16	23.2%	19.3%	18.9%
Young adults: aged 16-24	8.3%	10.1%	11.9%
Older people: aged 70+	6.8%	8.6%	7.7%
Disability Allowance Claimants	2.9%	6.5%	5.5%
No Car Households	6.7%	14.8%	25.8%
Women	50.8%	50.8%	50.8%
Black and Minority Ethnic	2.6%	3.4%	14.6%
Job Seekers allowance claimants (working age)	0.5%	1.9%	2.0%
Total Population	37,272	869,173	56,075,912

All of the following figures show the 20% most populated Output Areas for each of the vulnerable groups from all Output Areas in England.

Figure A-1 Under 16 Year Olds

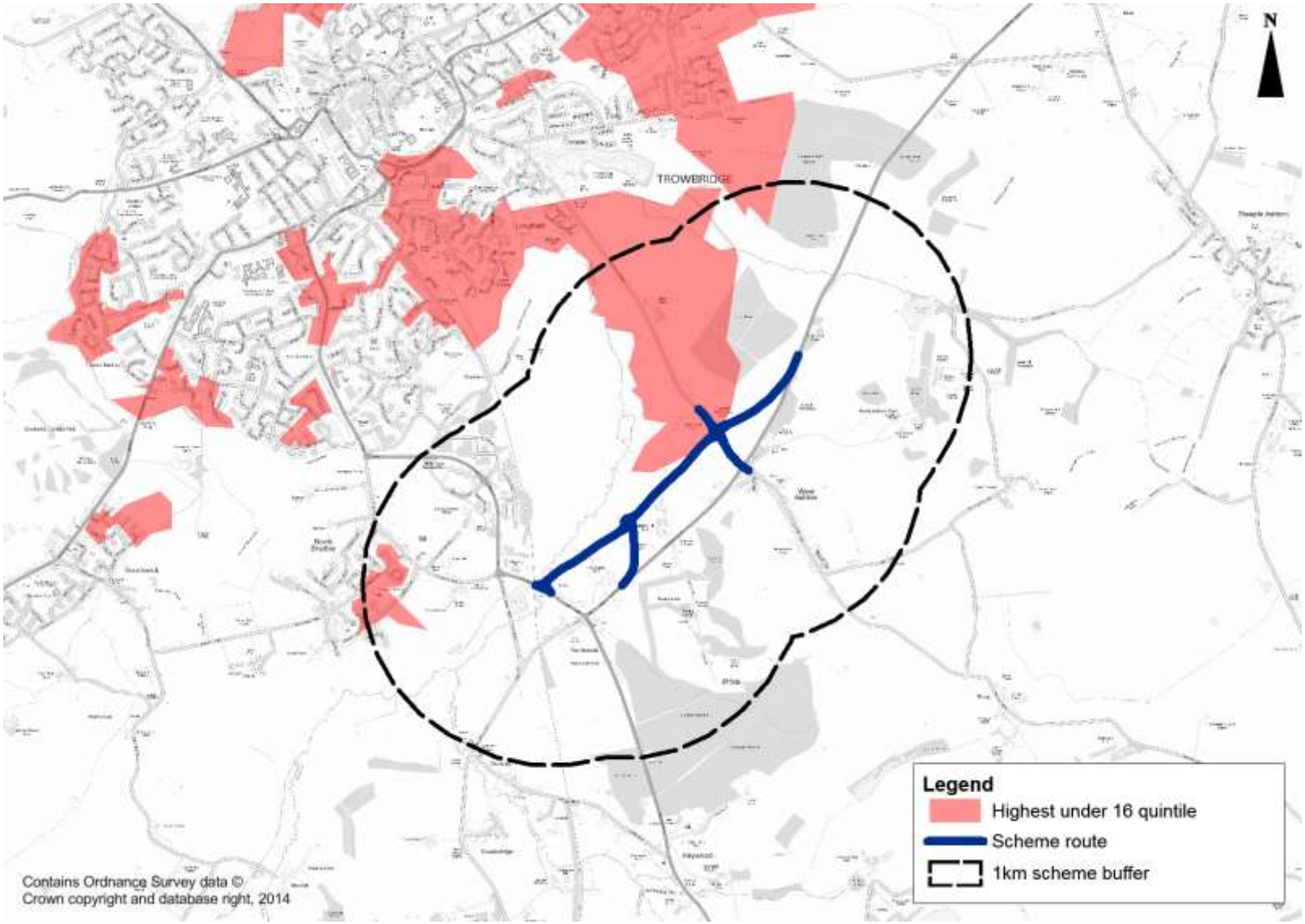


Figure A-2 Young People (16 to 24)

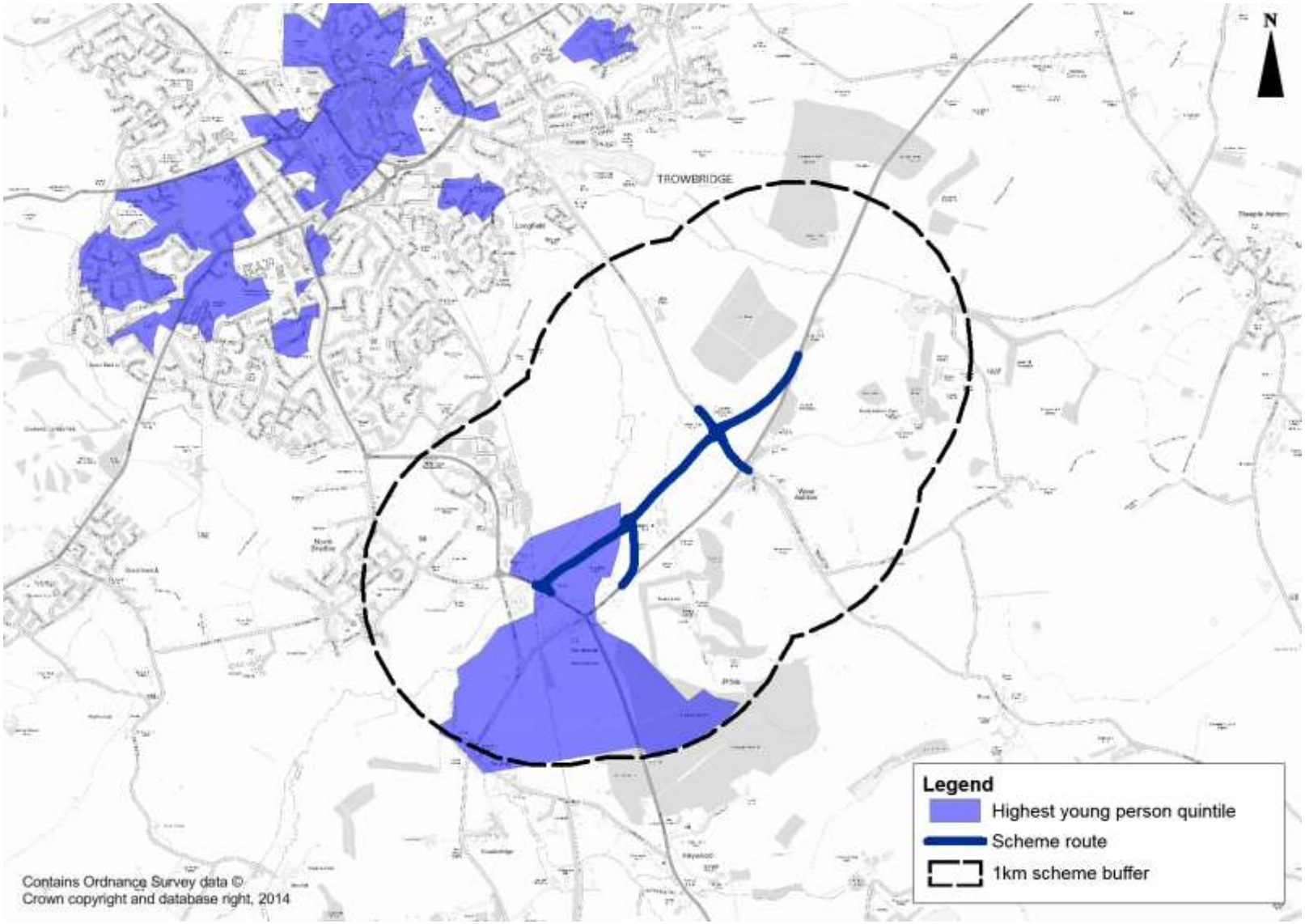


Figure A-3 Older People (70+)

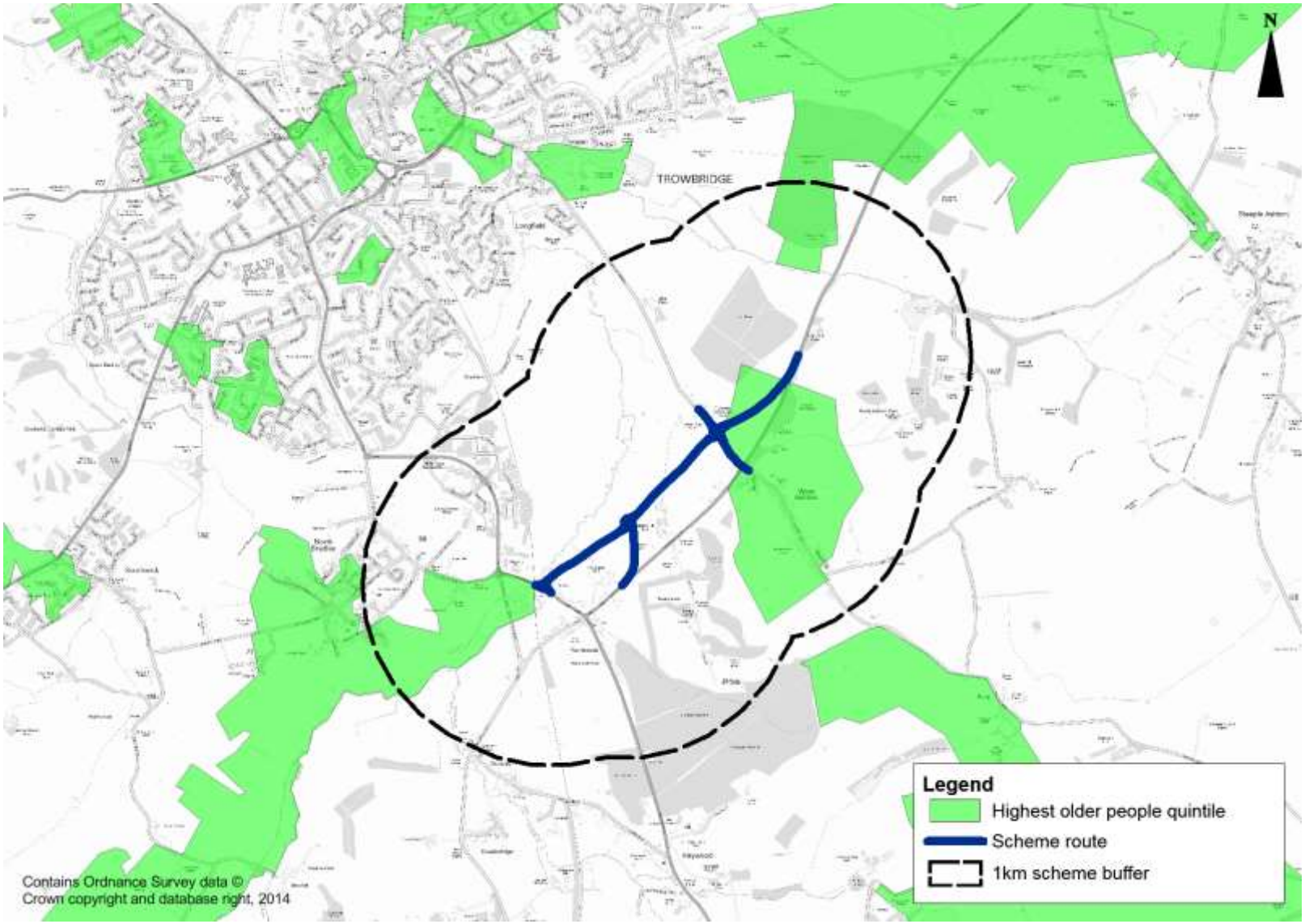


Figure A-4 Proportion of Females

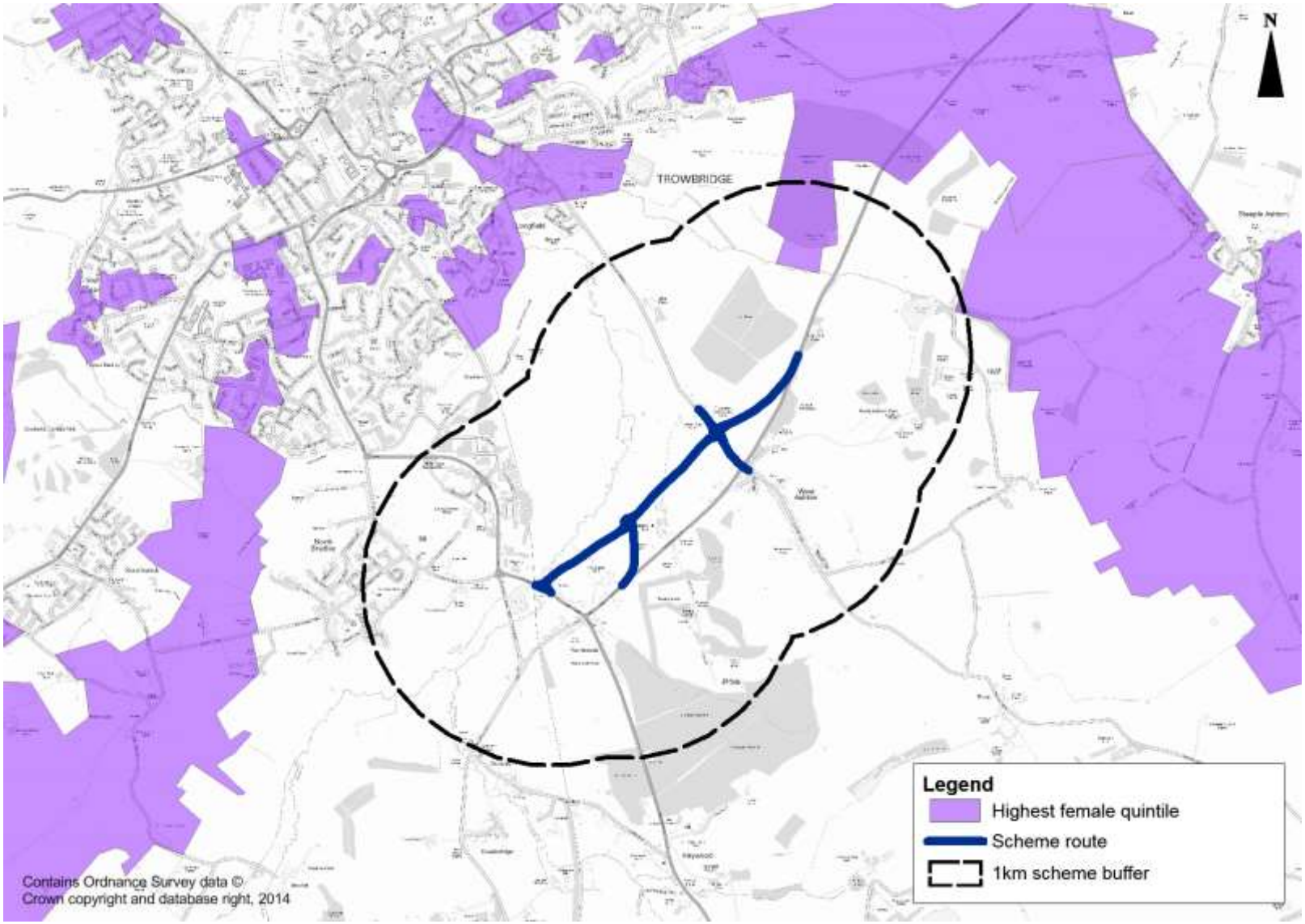


Figure A-5 Black and Minority Ethnic

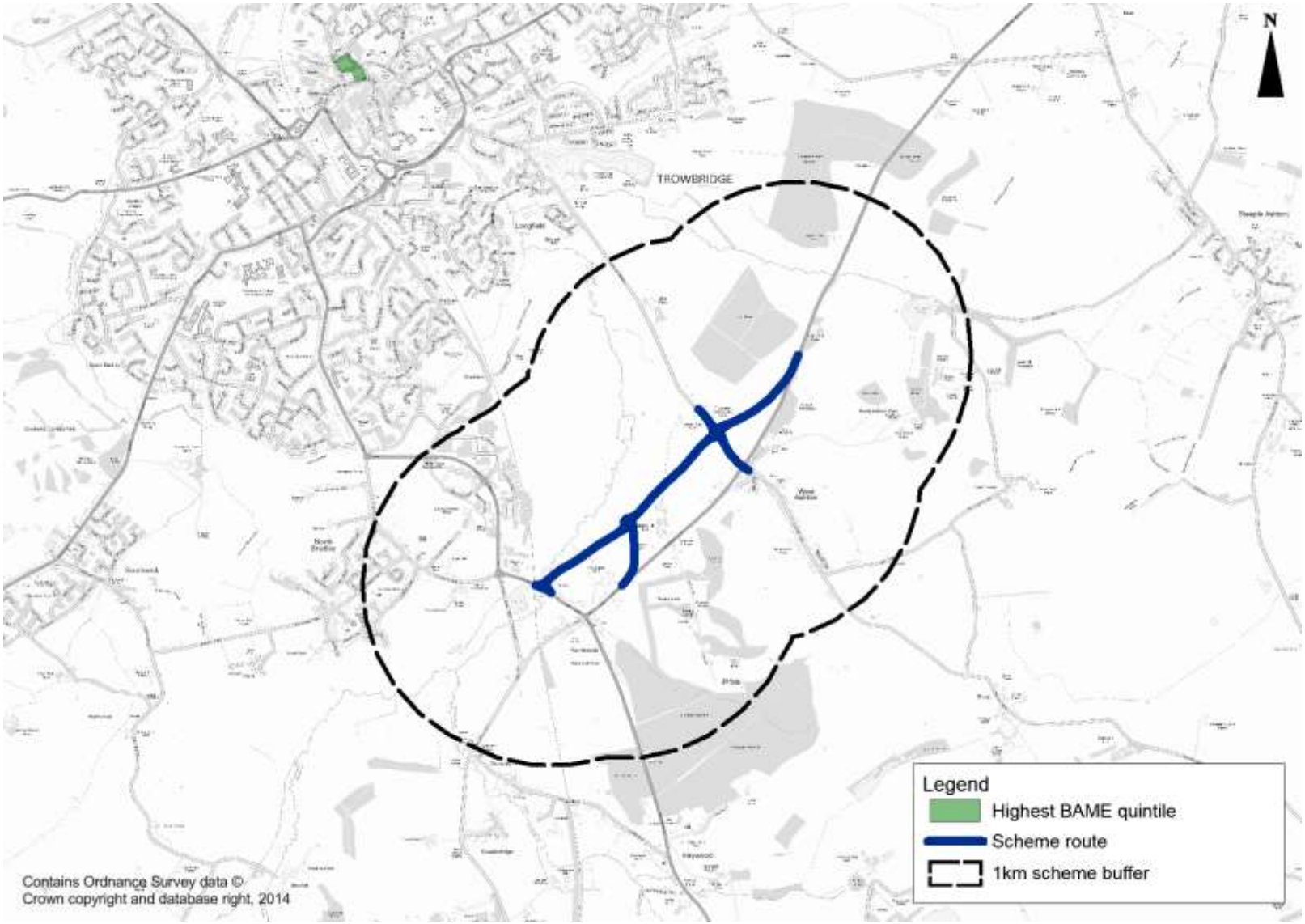


Figure A-6 No Car/Van Households

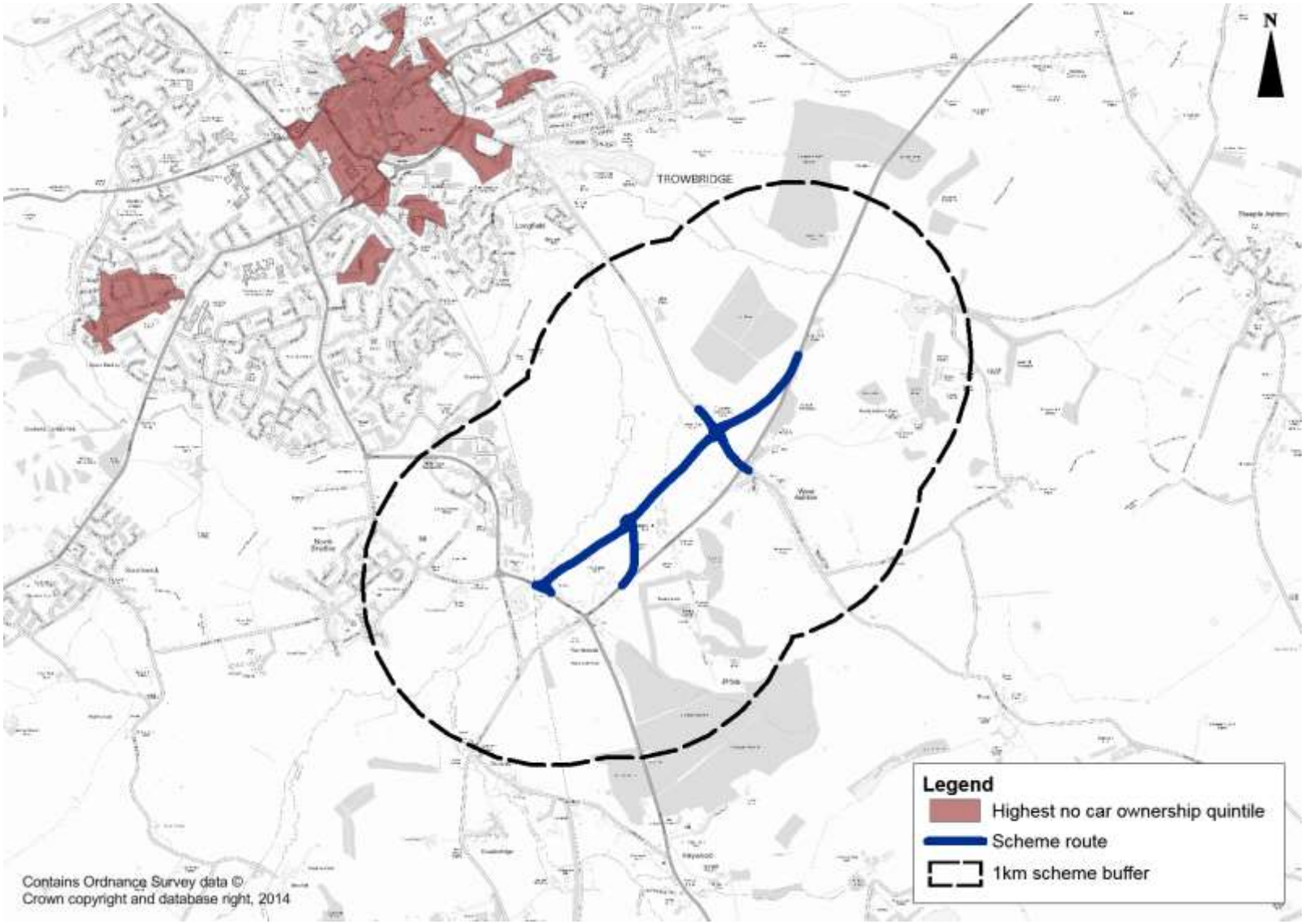


Figure A-7 Disability Allowance Claimants

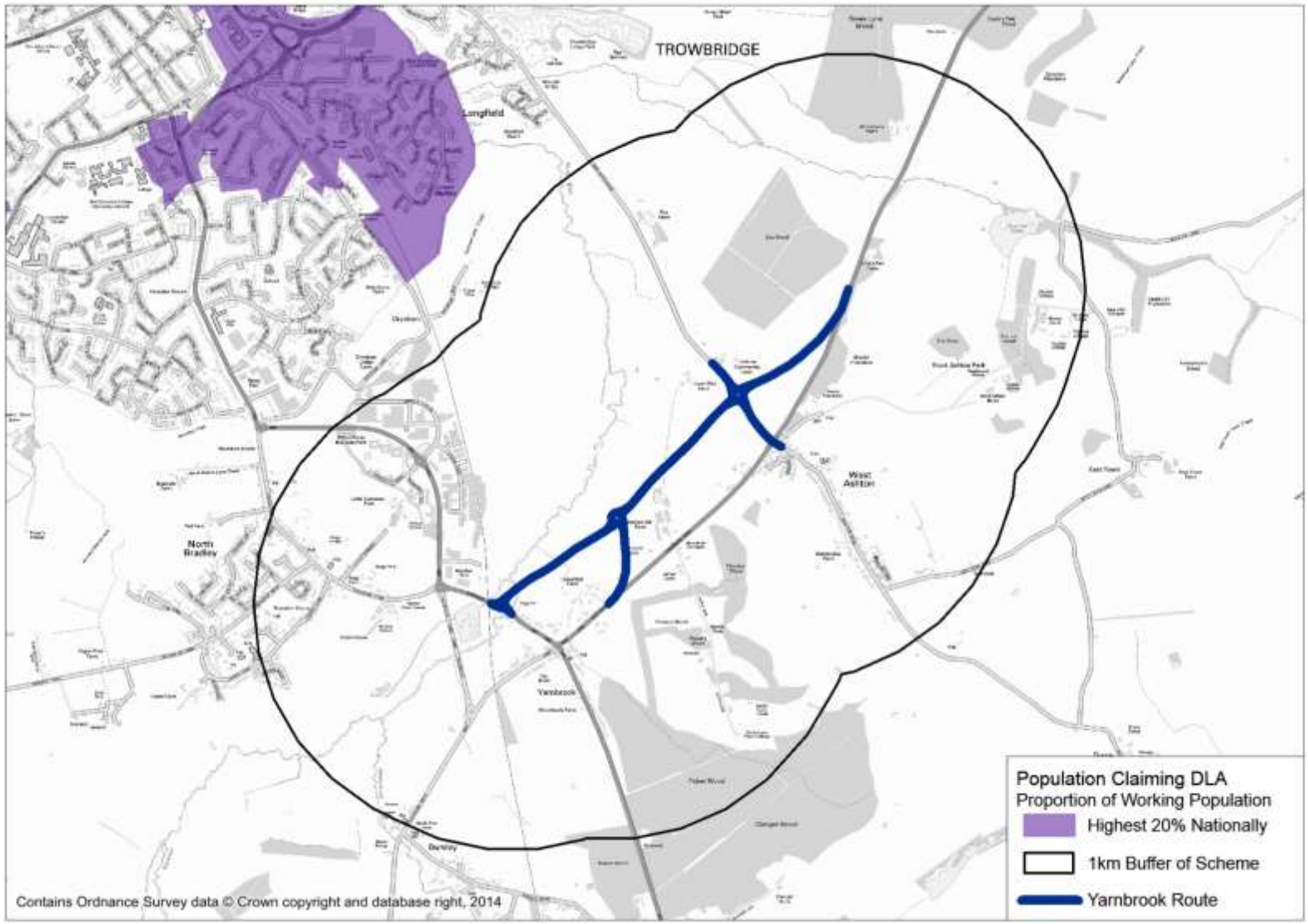


Figure A-8 Job Seekers Allowance Claimants

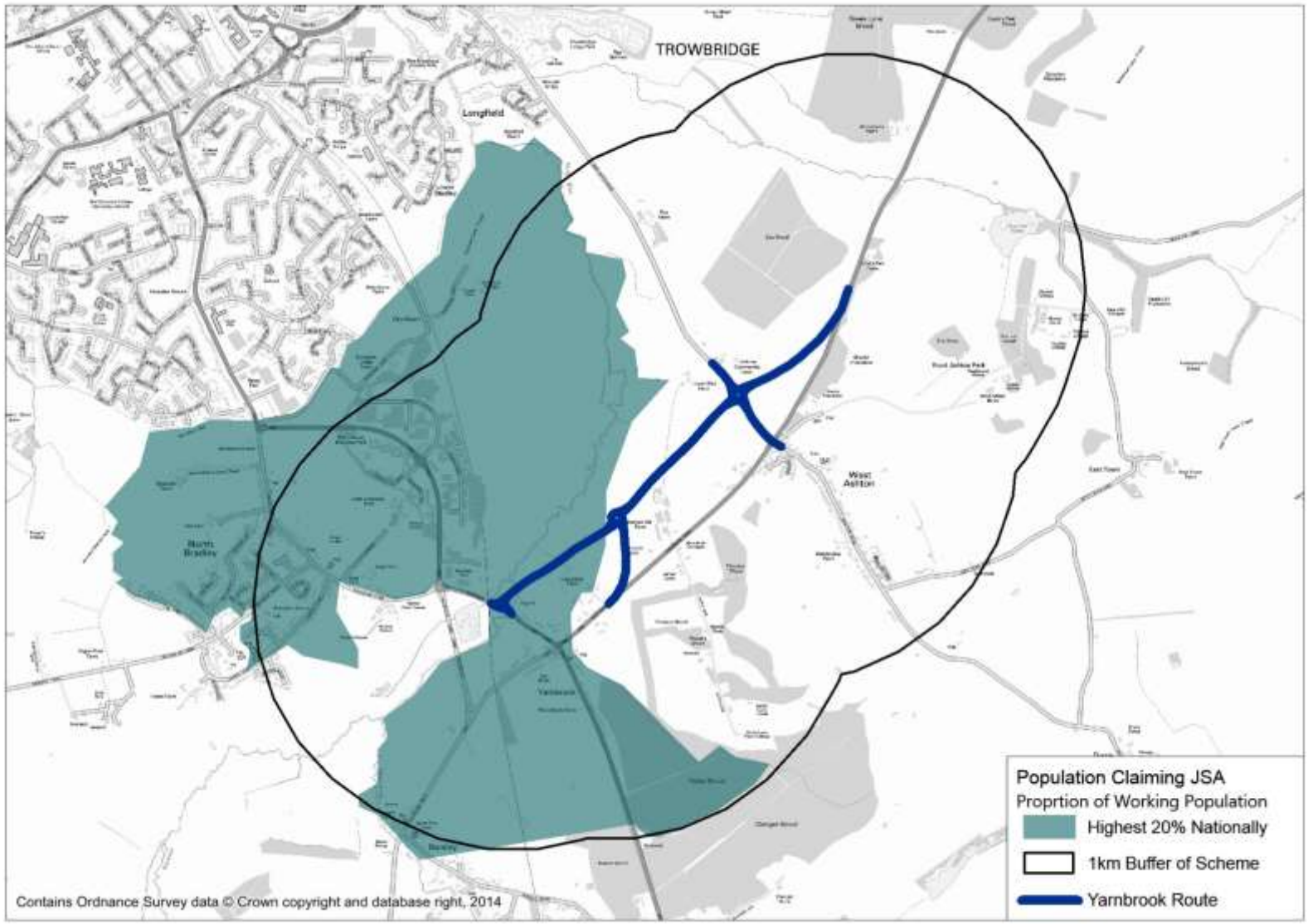


Figure A-9 Income Deprivation

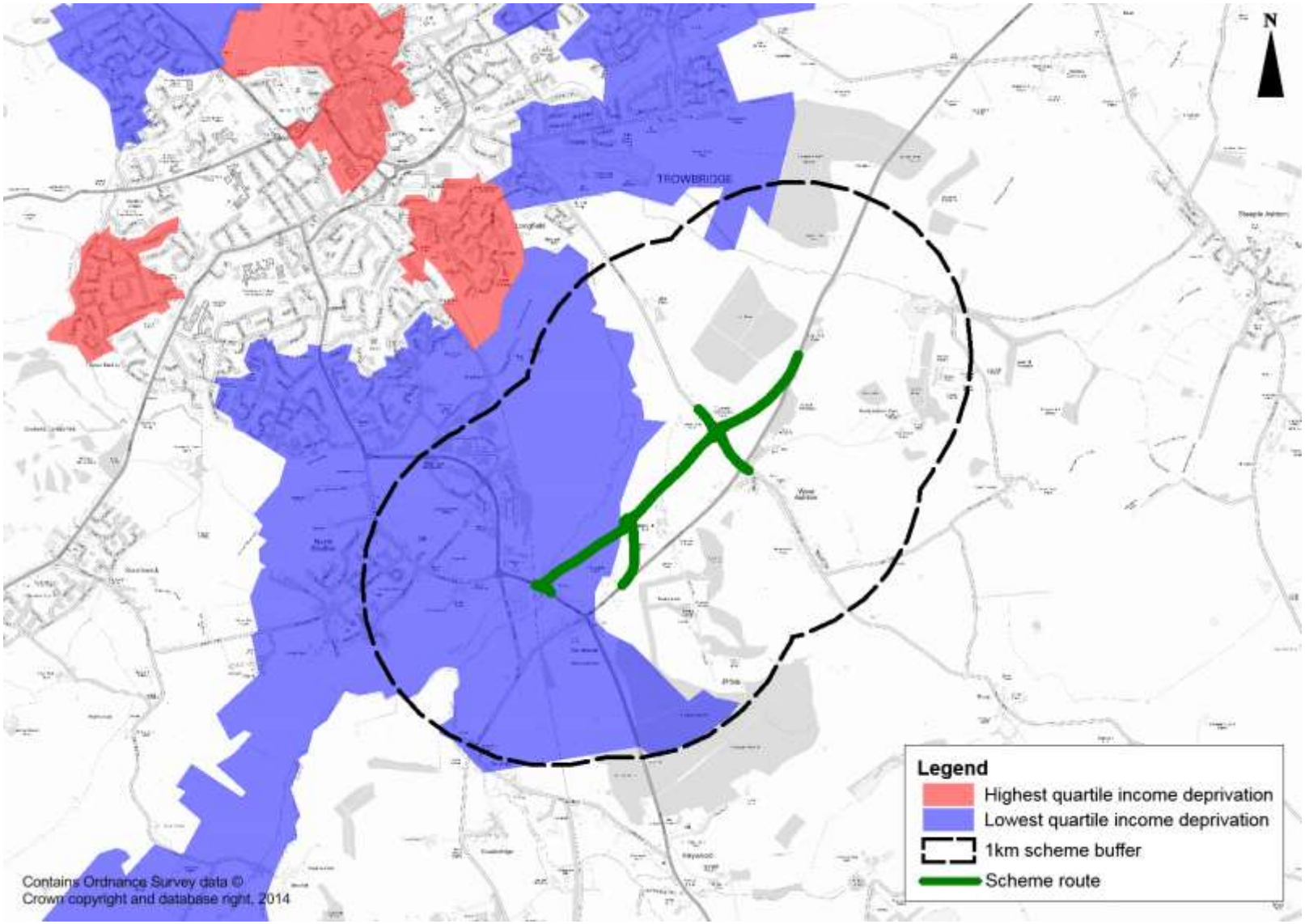
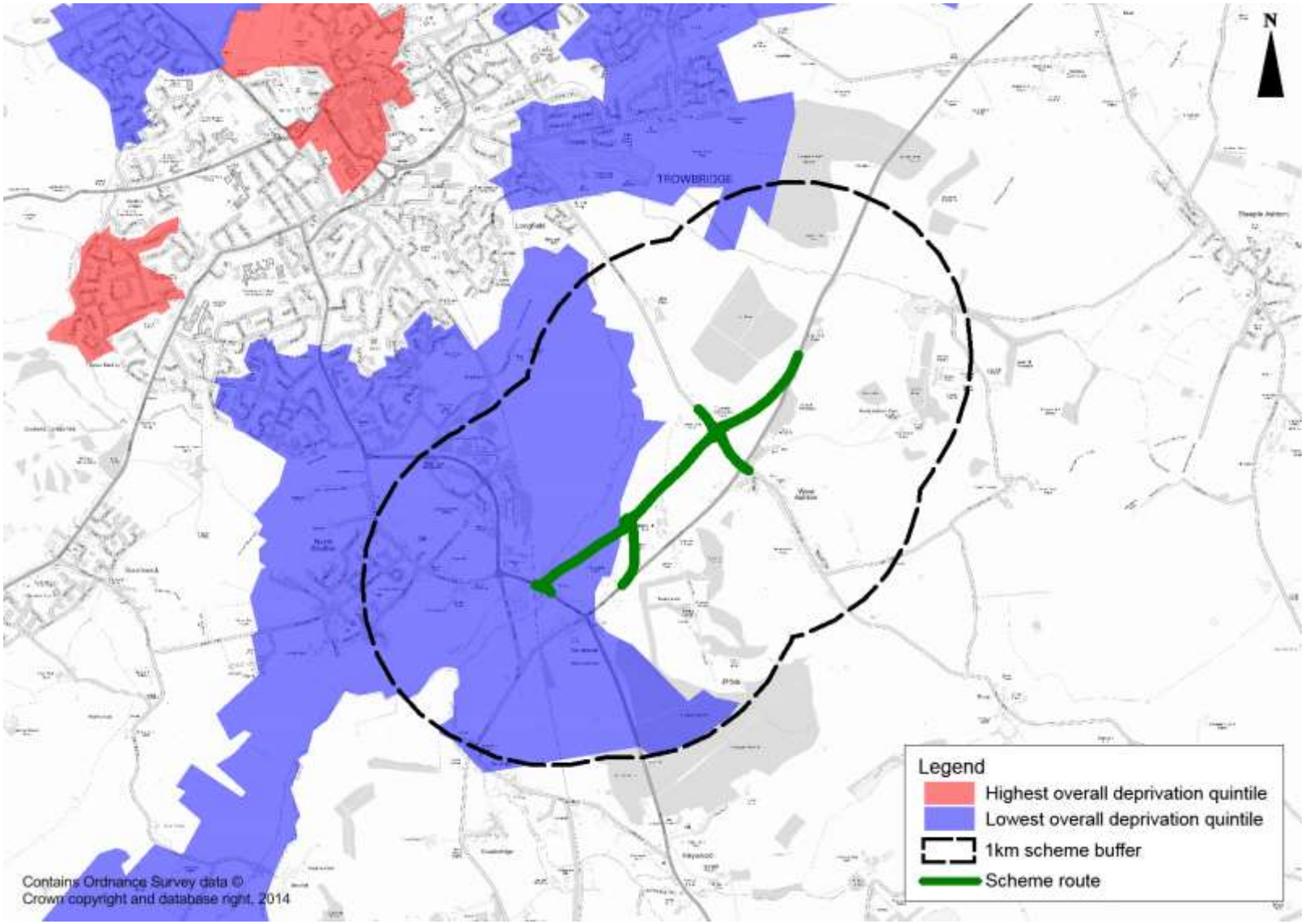


Figure A-10 Overall Deprivation



Appendix B. Screening Proforma

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: A350 Yarnbrook and West Ashton Relief Road

Brief description of scheme

The A350, which runs to the east of Trowbridge is a strategically important route providing connections to other towns to the north and south. There are long standing traffic issues that have been exacerbated by locally significant traffic growth in the last ten years. In particular queues occur at the West Ashton traffic signals and the Yarnbrook Roundabout, currently both of these junctions operate well over their capacity during the peak hours. There traffic congestion also results in localised environmental impacts, which affect residents near the Yarnbrook and West Ashton junctions. Additionally, there is a historic road safety problem, particularly at West Ashton.

The scheme will consist of a single carriageway road passing to the north west of West Ashton village and to the north of Yarnbrook village, connecting with the existing A350 alignment to the east and the A363 to the west. There will also be an at-grade junction with West Ashton Road and a further intermediate junction and link to tie-in with the A350 between Yarnbrook and West Ashton.

Scheme Objectives

- Reduce traffic queues and delays on the A350 corridor at West Ashton and approaching Yarnbrook Roundabout;
- Improve journey time reliability on the A350 corridor;
- Facilitate housing and employment growth in the Ashton Park (Trowbridge) Urban Extension; and
- Reduce the number of road accidents in the West Ashton area.

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 the Scheme is likely to deliver a net benefit to users as a result of journey time improvements. The Appraisal Specification Report (ASR) Sept 2013 suggested a moderate beneficial assessment for the economic sub-objectives. The DI appraisal will assess how these benefits are distributed across different income deprivation groups.	The modelled user benefits will be assessed for Highway Benefits only as no public transport services operate along or in the vicinity of the proposed scheme. The assessment will be in accordance with WebTAG Unit A4.2	Proceed to Step 2

Noise	Any change in alignment of transport corridor or any links with significant changes (>25% or <-20%) in vehicle flow, speed or %HDV content.	Yes, slight adverse. Initial appraisal reported in the ASR (Sept 2013) identified likely adverse impacts on a small number of sensitive receptors within 200m of the Scheme, including a school.	The small number of properties (under 20 properties) and one school does not lend itself to complete a full quantitative DI appraisal. A proportionate qualitative DI appraisal will be completed using noise model outputs plotted on demographic data.	Proceed to Step 2 (qualitative approach)
Air quality	Any change in alignment of transport corridor or any links with significant changes in vehicle flow, speed or %HDV content: • 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	Whilst the initial appraisal presented in ASR (Sept 2014) identified likely adverse and beneficial impacts on sensitive receptors within 200m of the proposed scheme and suggested an overall neutral assessment, there will be winners and losers which need to be examined. There are no AQMA or designated sites within 200m of the Scheme.	Previous assessment (ASR) suggests impacts on air quality for a number of properties (approx 60 properties) and school. A quantitative DI appraisal will be completed in accordance with WebTAG Unit A4.2	Proceed to Step 2

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.	The initial appraisal presented in ASR (Sept 2013) suggested and overall neutral assessment, however this would include winners and losers. Spreadsheet-based quantitative / monetised analysis, using local accident data in the area surrounding the Scheme and forecast changes in traffic flows from SATURN. This will confirm whether or not the neutral impact is likely to be correct.	The modelled accident outputs will be assessed to complete the DI appraisal in accordance with WebTAG Unit A4.2.	Proceed to Step 2
Security	Any change in public transport waiting/interchange facilities including pedestrian access expected to affect user perceptions of personal security.	No – no public transport element or improvement included within scheme.	No further appraisal.	No further appraisal.
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, slight adverse The scheme severs a public right of way.	The scheme severs a public right of way which will be appraised for social impacts using a qualitative approach.	Proceed to Step 2
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, neutral. No public transport services operate along the route, hence no improvement to journey times.	No further appraisal.	No further appraisal.

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]).	The initial appraisal presented in ASR (Sept 2013) suggested and overall neutral assessment, however this would include winners and losers. TUBA cost outputs will be assessed to complete a quantitative Distributional Impact appraisal.	The modelled network costs will be assessed to complete the DI appraisal in accordance with WebTAG Unit A4.2.	Proceed to Step 2

Appendix G. Appraisal Summary Table

Appraisal Summary Table

Date produced:	17/02/2015

Contact:	
Name	
Organisation	
Role	Promoter/Official

Name of Scheme:	A350 Yarnbrook and West Ashton Relief Road.
Description of Scheme:	New A350 relief road and associated junction improvements to the south of Trowbridge relieving congestion from the Yarnbrook Roundabout and West Ashton crossroads. The Scheme is essential to deliver the Ashton Park development of 2,600 residential dwellings and 15ha of mixed use (B1, B2 and B8) employment land.

Impacts		Summary of key impacts	Assessment					
			Quantitative				Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	Business users and transport providers are forecast to benefit from reduced journey times and vehicle operating cost savings in the AM and PM peak periods. 48% of the total user benefits are for Business Users. *Note that the it is not possible to split the journey time benefit by time category using the spreadsheet developed for dependent development (hence N/A).	Value of journey time changes(£)	£13.810 m			Beneficial	£14.488m	N/A
			Net journey time changes (£)						
			0 to 2min	2 to 5min	> 5min				
			N/A*	N/A*	N/A*				
	Reliability impact on Business users	Forecast decreases in journey time variability (measured through forecast changes in journey time standard deviation) would improve profit for business users and transport providers by increasing the certainty of journey times. Improvements in journey time reliability were computed using the WebTAG based method of assessing reliability on Urban Roads.	Reliability benefits to Business Users account for 44% of the total reliability benefits.				Beneficial	£1.787m	
	Regeneration	There are no regeneration areas in vicinity of Scheme. However, the Scheme is required to support the delivery of the planned Ashton Park development of 2,600 residential dwellings and 15 ha of employment (mixed B1,B2 and B8). Land value uplifts, whilst not part of the regeneration WebTAG unit, have been appraised.	This scheme is designed to enable development at a location which could not support large numbers of new trips with the existing transport infrastructure. Unlocking the development potential of this land will create an uplift in land values - a difference of £134.24m at 2014 prices.				N/A	£108.2m	
	Wider Impacts	Estimate of increased output in imperfect markets has been forecast as a proxy of 10% of business user benefits. Forecast benefits of £1.449 million over a 60 year period.	£1.449m				Beneficial	£1.449m	
	Noise	Short term impacts during construction phase. Overall noise benefits predicted for operational phase (compared to DM scenario). Some permanent long term increases are predicted but are regarded as negligible.	Operation: Negligible increase in noise at 56 properties, negligible decrease at 17, slight decrease at 6, moderate decrease at 20 and major decrease at 36 (daytime).				Slight Beneficial		N/A
	Air Quality	The Environmental Statement (ES) air quality assessment identified that no receptors are predicted to exceed the air quality objectives with and without the Scheme in place, even in the worst case scenario. The Scheme will lead to increases in air pollutant concentrations at some existing residential properties, primarily on West Ashton Road, however properties located close to the A350 in the village of West Ashton are predicted to experience an improvement in air quality with the Proposed Development in operation. Overall the air quality impact was determined as negligible. There are no AQMA or designated sites within 200 m of the affected road network.	N/A				Negligible	N/A	N/A
	Greenhouse gases	The adjusted carbon benefits are £0.699 million (2010 prices, discounted to 2010) over the 60-year appraisal period, which reflects the improved network performance of the With Scheme scenario in comparison to Without Scheme scenario at the same level of traffic demand.	Change in non-traded carbon over 60y	-15,102				£0.699m	
			Change in traded carbon over 60y (CO2e)	-12					

Impacts		Summary of key impacts	Assessment			
			Quantitative	Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp
Environmental	Landscape	No nationally designated landscape sites within 4km. Regionally designated sites within 2km but separated from site by existing features. Landscape character low lying land with higher undulating ground to south & east. Several nationally designated sites (SSSIs) present on higher ground & 1 SSSI approx. 400m from site. Impacts on designated sites likely to be negligible, impacts on landscape character likely to be slight adverse. Impact on views from existing properties and PRoW likely to be slight adverse, with some properties experiencing greater impact where located close to proposed junctions. Impact through additional lighting at junctions likely to be slight adverse. Opportunity to reduce some impacts through mitigation planting & landform.	N/A	Slight Adverse	N/A	
	Townscape	Scheme located out of the urban area and will be screened by existing buildings & landscape features, including existing railway. Coherence & character of the urban environment will not be affected.	N/A	Neutral	N/A	
	Historic Environment	There are no Scheduled Monuments, Listed buildings, World Heritage Sites, Registered Parks and Gardens of Special Historic Interest, Registered Battlefields or Conservation Areas within the Application Site or its vicinity. The proposed development would have a negligible adverse effect on the setting of 11 Grade II listed buildings. Overall residual effects upon below-ground archaeological remains will be minor adverse as development will lead to harm to non-designated heritage assets that can be adequately compensated through the implementation of a programme of industry standard mitigation measures for impacts to sub-surface archaeological remains. Overall residual effects upon designated heritage assets in the study area will be Negligible, as development will not lead to any adverse effects to the important elements of the setting of designated heritage assets.	N/A	Neutral impacts on known heritage features: slight adverse impacts on sub-surface archaeological remains	N/A	
	Biodiversity	- The Proposed Scheme has potential for significant impacts on several statutory designated sites of nature conservation importance, namely Salisbury Plain - SAC (approx. 5.2km south east), Bath and Bradford on Avon - Bats SAC (approx. 7.8 km north west) since a population of Bechstein's bats within the local area is known to be linked to this SAC. In addition, the statutory ecological designations Picket and Clanger Woods SSSI and Green Lane Wood LNR are present within the near vicinity of the Application Site (located 0.3km south and 0.2km north east respectively). - The Scheme may also results in direct loss and /or disturbance of habitats (ancient woodland, mature hedgerows & trees, watercourses, agricultural land & grassland) and potentially killing / injury of associated protected species.	N/A	Overall minor to moderate beneficial significance at the local to regional level (following mitigation and enhancement)	N/A	
	Water Environment	Flood Risk - ES states minor adverse/negligible impact with proposed mitigation based on flood storage. This is based on outline calculations and is likely to need more detailed modelling. The existing water quality (River Biss) is graded as moderate. Providing appropriate mitigation is implemented, the residual effect of the proposed road on local water quality is not deemed to be significant.	N/A	Slight Adverse	N/A	

Impacts		Summary of key impacts	Assessment					
			Quantitative			Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp
Social	Commuting and Other users	Forecast journey time savings with a small negative disbenefit attributable to vehicle operating costs (VOC) for commuting and other users. Marginal increases to VOC caused by traffic re-routeing to take advantage of the Scheme, leading to a slight increase in distance travelled. Benefits to commuters account for 17% of the total user benefits, whilst 35% are for other journey purposes (Other Users).	Value of journey time changes(£) £20.054 m Net journey time changes (£) 0 to 2min: N/A; 2 to 5min: N/A; > 5min: N/A			Beneficial	£15.911m	All User benefits: Slight Beneficial
	Reliability impact on Commuting and Other users	Forecast improvements in journey time reliability for Commuters and Other Users. Improvements in journey time reliability were computed using the WebTAG based method of assessing reliability on Urban Roads.	Reliability benefits to Commuters account for 18% of the total reliability benefits, whilst 38% are for other journey purposes (Other Users).			Beneficial	£2.225m	
	Physical activity	This highway improvement Scheme will not have a large impact on increasing physical activity however the improved connections to Trowbridge town centre provided by the proposed footway/cycleway and Ashton Park mean that the Scheme may help to facilitate extra walking/cycling journeys.	N/A			Slight Beneficial	Not monetised	
	Journey quality	The Scheme would improve the journey quality by reducing traveller stress for motorists, and potentially pedestrians and cyclists. This is due to forecast reductions in congestion and delays on the A350 at Yarnbrook and West Ashton.	N/A			Slight Beneficial	Not monetised	
	Accidents	Forecast decrease in fatal, serious and slight casualties over the appraisal period of 1.7, 16.2 and 178.1 respectively. This is due to improvements in highway network conditions as a result of the Scheme alleviating traffic from the A350 which is a known accident cluster site.	60 year benefit of £7.585m (NPV)			Beneficial	£7.585m	Slight Beneficial
	Security	Security has not been appraised; the Scheme does not include any public transport improvement.	N/A			N/A	N/A	N/A
	Access to services	Access to Services has not been appraised; no public transport services currently operate along the route.	N/A			N/A	N/A	N/A
	Affordability	Slight disbenefits are forecast due to marginal increases in vehicle operating costs for users.	N/A			Adverse	Not monetised	Slight Adverse
	Severance	Whilst increases in traffic flows in some locations have been forecast, which are likely to increase severance issues, the provision of improved connections to the town centre (via Ashton Park) and the diversion of traffic away from Yarnbrook and West Ashton is likely to improve the existing situation.	N/A			Neutral	Not monetised	Neutral
	Option and non-use values	No change in availability of transport services.	N/A			Neutral	Non-monetised.	
Public Accounts	Cost to Broad Transport Budget	The PVC comprises the public sector funded element of the Scheme, with the private sector contribution removed from the PVC and reflected in a reduced PVB.	£10.497m			N/A	£6.856m	
	Indirect Tax Revenues	A forecast marginal increase in traffic speeds and reduced journey times results in more optimal operating speeds. This means lower fuel consumption and tax revenues generated falls.	£1.855m			N/A	- £1.855m	

Appendix H. Cost Estimate

Table H.1 A350 Yarnbrook and West Ashton Relief Road BoQ Summary (2014 Prices)

Summary	Cost (2014 prices)
Preliminaries	
Series 100 total	*See below*
Site Clearance	
Series 200 total	£36,450
Fencing	
Series 300 total	£208,372
Road Restraint Systems	
Series 400 total	£127,340
Drainage and Service Ducts	
Series 500 total	£697,947
Earthworks	
Series 600 total	£2,760,152
Pavements	
Series 700 total	£2,306,656
Kerbs, Footways and Paved Areas	
Series 1100 total	£131,370
Traffic Signs and Road Markings	
Series 1200 total	£43,384
Electric & Street Lighting	
Series 1300 & 1400 total	£207,000
Special Structure	
Series 2500 total	£1,624,253
Landscape and Ecology	
Series 3000 total	£305,971
SUB-TOTAL (includes Contractor's Risk allowance) (A)	**£8,448,893**
Preliminaries (B)	**£2,027,734**
Traffic Management (C)	**£422,445**
Bond/Insurances (D)	**£231,222**
Provisional Sum for Statutory Undertakers (E)	**£300,000**
SUB-TOTAL (F) = (A)+(B)+(C)+(D)+(E)	**£11,430,294**
Risk / Contingency (G)	**£1,135,069**
Grand Total (H) = (F)+(G)	**£12,565,363**

Appendix I. Framework Communications Plan

I.1. Introduction

This draft Communications Plan covers the period from February 2015 (after OBC completion) through to the successful opening of the Scheme. This has been developed as an initial framework to be taken forwards by the developer and jointly developed with Wiltshire Council.

Communications Objectives and Key Messages

The communications objectives are:

1. To inform stakeholders of scheme progress and to enable feedback on the detailed design.
2. To communicate the Scheme benefits to all stakeholders at every opportunity.
3. To manage stakeholder expectations.

The key messages of this Communications Plan are:

The A350 Yarnbrook and West Ashton Relief Road will faciltate new development in Trowbridge, creating new jobs and the construction of affordable housing at Ashton Park. This supports Wiltshire Council's policy.	The Scheme is needed to facilitate 2,600 new dwellings and 15 hectares of employment land close to the A350 corridor (at Ashton Park).	The A350 Yarnbrook and West Ashton Relief Road is a priority of the Swindon & Wiltshire Local Enterprise Partnership's Growth Deal negotiations to secure funding for Wiltshire.
The A350 Yarnbrook and West Ashton Relief Road will replace the existing section of A350. It will encourage traffic heading towards the business park areas at North Bradley/Hawkeridge to stay on the A350 rather than travelling through Trowbridge town centre.	The current section of A350 through West Ashton will be downgraded, but still providing local access to properties and farms.	The scheme supports the principle of wider transport infrastructure investment along the A350, building upon the improvements around Chippenham.
This scheme will improve journey times on the A350 and make journey times more reliable.	The Scheme is a high priority for Wiltshire Council, and is specifically referred to in Wiltshire Council's emerging Core Strategy.	The developers of Ashton Park will contribute financially towards the scheme. Other sources of funding are being sought by Wiltshire Council, including the Local Growth Fund.

Communications Overview

Communication with all parties and individuals outside the Project Board, Task Managers and Project Team, during all but the construction phase, will only be undertaken with the express consent of the Project Manager, who will liaise with Wiltshire Council Communications if necessary.

During the construction period, day to day contact with the public will be undertaken by the Contractor. Details of the tenderers' proposals for Public Liaison will form part of the Quality Submission and will be assessed as part of the overall Quality Submission Assessment.

Opportunities will be taken wherever possible to act upon any lessons learnt from the communications aspect of preceding schemes, specifically the A350 Chippenham pinch-point and A350 Chippenham Bypass Improvements schemes.

The scheme is referred to as the A350 Yarnbrook and West Ashton Relief Road, or the Scheme. Other variations should not be used (e.g. YWARR, Yarnbrook/West Ashton relief road, etc).

I.2. Timeline

Consultation to-Date

The OBC Management Case provides details of consultation undertaken regarding the Scheme, which includes:

- Core Strategy consultation (six consultation stages, all of which included the Ashton Park Strategic Site); and
- Ashton Park Urban Extension consultation.

Communications Timeline

Milestones for the A350 Yarnbrook and West Ashton Relief Road that require communications management and support are set out in Table I.1.

A robust media programme is required to support the progress of the Scheme. Press releases will be issued proactively at key stages of the project. Press releases and statements will also be issued reactively as required in line with the key messages and risk mitigation.

Table I.1 Communications Timeline

Phase	Expected Date	Description	Proposed Method
SWLTB / SWLEP approval of OBC	21 April 2015	In principle approval, subject to finalising contractor and costs	Announcement on SWLEP / Wiltshire websites, with OBC published one month in advance of any decision date
Planning application submission	May 2015	Planning application to be uploaded onto Wiltshire Council planning web page. Public will have opportunity to submit comments.	Announcement press release
Outline planning consent	May 2015 to May 2016 inclusive	Decision notice.	Decision press release
Pre-construction	Early 2018	Preparation for the commencement of construction works	Advance warning of scheme construction; including potential for traffic delays during construction
Construction contractor appointment	February 2017	Date depends on final procurement option selected – February 2017 based on design and build	Announcement press release
Detailed design	March 2017 – March 2018 inclusive	Information sharing regarding detailed design specifics, including environmental mitigation measures	E-mails / meetings according to stakeholder preference
SWLTB / SWLEP approval of Full Business Case[3]:	July 2017	Guarantee of devolved funding release for scheme.	Decision press release

[3] This programme is based on design and build, hence FBC submission would take place after procurement, but before detailed design. If a decision was made at a later date to change to a traditional contract, then FBC submission would take place after detailed design and subsequent procurement. See OBC Management and Commercial Case chapters.

Phase	Expected Date	Description	Proposed Method
Construction	April 2018 - March 2021 inclusive	Construction work on site. Utility diversions and site compound works first.	Regular progress updates; including traffic delays associated with the construction works and rat running of surrounding road network. Photo montages showing the Scheme progress. Use of social media to distribute up-to-date information.
Construction ends	April 2021	Scheme complete, end of construction activity	Press release; giving proposed date of official opening
Opening	April 2021	Official 'opening' ceremony	Press release, photo opportunity.

I.3. Potential Risks, Sensitivities and Mitigation

Communications and public acceptability risks and sensitivities are outlined in Table I.2, along with suggested mitigation measures.

Table I.2 Communications - Potential Risks and Mitigation

Risk	Mitigation
Negative reaction to the road scheme from local environmental groups.	• Ensure environmental impacts are mitigated as much as possible, with information on mitigation measures provided at the detailed design stage.
Negative reaction to the road scheme from local residents	• Communications to highlight benefits of the Scheme, which include reduced journey times, improved journey time reliability, traffic reassignment away from Trowbridge town centre.
Procurement results in higher than expected costs	• Review scope of scheme.
Construction delays (for various reasons)	• Communicate all the Scheme issues to manage expectations.
Delay could cause the Scheme to overrun and result in cost increases	• Ensure that the liability of cost overruns is covered by the planning agreement. Design and build will place a certain amount of the risks onto the contractor, although this could result in higher tender prices. Also ensure robust planning agreement between Wiltshire Council and the developers. • Provide full details of reasons for delay, revised programme and any revised costs as necessary, in line with the planning agreement.

I.4. Key Stakeholders

The key stakeholders are shown in Table I.3.

Table I.3 Key Stakeholders

Who	How	Inform/involve/consult	When
SWLTB and SWLEP	Meetings, Highlight Reports, LTB meeting papers.	Inform, gain buy in	Regular updates as per PPM guidance, LTB meetings and papers.

Who	How	Inform/involve/consult	When
Cabinet	Briefings	Inform, involve and consult	As necessary, and at key decision points
Councillors local to scheme	E-mail updates	Consult and gain buy-in	As necessary, and at key decision points
All Councillors	Internal Member documents	Raise awareness and consult	At key points in the project
Local MPs and MEPs	One to one briefings	Consult and gain buy in	As necessary, and at key decision points
Trowbridge Area Board	Attendance at meetings	Inform, consult and gain buy in	As necessary, and at key decision points
Trowbridge Town Council	Attendance at meetings	Inform, consult and gain buy in	As necessary, and at key decision points
Parish Councils (West Ashton Parish Council, North Bradley Parish Council, Heywood Parish Council)	Attendance at meetings	Inform, consult and gain buy in	As necessary, and at key decision points
Public	Press releases, website and electronic newsletters	Inform, consult (via planning process), inform, raise awareness	Regular updates to web site; at least every two months, social media updates
Statutory bodies – Environment Agency, Natural England and English Heritage	Letters and meetings on key aspects of scheme design	Inform, consult (via planning process), and gain buy in	As necessary, especially as part of the planning process
Local environmental & sustainability groups e.g. White Horse Alliance, Wiltshire Wildlife Trust and Friends of the Earth	Email or meetings	Inform, consult (via planning process), and gain buy in	As necessary
Emergency services	Regular meetings, letters/e-mail updates	Consult and gain buy in	As project progresses
Media	Press releases.	Inform	As project progresses
Chamber of Commerce (Trowbridge and Wessex)	One to one briefings	Inform	As necessary
Wiltshire Council Staff	Internal newsletter	Inform	As necessary
Local large and small employers	Letters/e-mail updates	Inform	As necessary
Bus and coach operators	Letters/e-mail updates	Inform	As necessary
Cycle groups	Letters/e-mail updates	Inform	As necessary
Living Streets and other pedestrian groups	Letters/e-mail updates	Inform	As necessary
Disability Groups	Letters/e-mail updates	Inform	As necessary
Equality Groups- young people, ethnicity, women, older people, sexual orientation etc. Often hard to reach groups	Letters/e-mail updates	Inform	As necessary

I.5. Evaluation

An evaluation report will be produced for the overall project detailing the performance of the Communications Plan. This will include:

- Information on the media coverage of the A350 Yarnbrook and West Ashton Relief Road, with evidence of how the key messages identified in this Communications Plan are being used;
- Number of hits on appropriate Wiltshire Council web pages;
- Attendance and outcome from meetings / events; and
- Evidence of support for the Scheme including Member, resident and business support.

Appendix J. Risk Register

A350 Yarnbrook and West Ashton Relief Road OBC - Risk Register (DRAFT)

Key:

Likelihood
1 - Very Unlikely (5%)
2 - Unlikely (10%)
3 - Possible (20%)
4 - Very Possible (30%)
5 - Almost Certain (50%)

Impact
1 - Insignificant
2 - Minor
3 - Moderate
4 - Serious
5 - Catastrophic

Timescale Impact

	Min	Expected	Max
1	None	1 week	2 weeks
2	1 week	2 weeks	1 month
3	2 weeks	1 month	3 months
4	1 month	3 month	6 months
5	3 months	6 months	1 year

Scheme :	**Yarnbrook and West Ashton Relief Road**	**Project No.**	**5132933**

Milestone :	**Pre Construction**	**Review Ref**	**Draft**	**Date :**	**23-Jan-15**

Risk Ref.	Nature of Risk	Implications	Mitigation	Action Owner	Risk Owner	Likelihood	Impact	Cost Estimate £ Min	Cost Estimate £ Most Likely	Cost Estimate £ Max	Timecale Impact
D1	Availability of funding for the project - full scheme costs.	Scheme in current form does not happen - reducing delivery of housing in Wiltshire. Impact on scheme is neutral, since this doesn't effect the scenario in which the scheme goes ahead.	Robust and detailed OBC to demonstrate benefits to help secure funding. Develop robust OBC and satisfy the developer that scheme is viable, explore alternative funding options.	Atkins	Council / Developer	2	5				
D2	Returned tenders exceeds budget.	Additional funding would be required to cover the shortfall - LEP/LTB contributions would be capped.	Develop a plan identifying the maximum limit of construction tender cost and applicable split between parties (part of the planning agreement to be developed). Ensure cost estimates are as robust as can be at this stage. Select procurement process to ensure best value.	Atkins / Developer	Council / Developer	4	4	£150,000	£375,000	£600,000	2
D2	Local Enterprise Partnership decisions in the future are uncertain.	Potential delay to the scheme or doesn't happen at all. Timescale impact is potentially very large, but in this case the scheme in it's current form won't go ahead. Impact is restricted to the scenarios in which the scheme does go ahead.	Forming good relationship with the LEP, and provide compelling argument. Atkins to develop robust OBC, and Council to influence the LEP/LTB.	Atkins / Council	Council / Developer	3	4				2
D3	Outline Business Case / Generalised risk - no planning permission at present, timescales for this to happen.	Delay in the process, late delivery of housing in Wiltshire.	Agreeing the level of commitment to be provided by Council - increasing confidence. Continuous dialogue between developer and Council.	Council / Developer	Council / Developer	2	3				4
D4	Environmental challenge.	Objections from environmental bodies against the scheme. Potential delay to the programme.	Development of acceptable EIA as part of planning submission.	Developer	Council / Developer	2	3	£500,000	£750,000	£1,000,000	3
D5	Land required to construct the scheme that is not currently in developer's ownership.	Modification to the scheme to avoid the land in question.	Developer has land purchase options. Details of the agreements to be provided to Council.	Developer	Council / Developer	2	4				-
D6	Core Strategy not adopted. (Closed - Core Straregy has now	N/A - Core Strategy has now been adopted.	N/A - Core Strategy has now been adopted.	Council	Council / Developer	-	-				-
D7	Uncertainty of existing ground conditions in the area.	Cost increases.	Undertake ground investigation surveys. Ground conditions have been considered as part of Environmental Statement.	Developer	Council / Developer	3	4	£60,000	£100,000	£120,000	-

D8	Potential archaeology issues not identified.	Delays during construction if archaeology is discovered.	Review Environmental Statement.	Developer	Council / Developer	1	3	£10,000	£15,000	£22,000	3
D9	Statutory undertakers apparatus not identified - extent of diversions required. C2 searches being commissioned, but potentially services that are not shown.	Striking of underground cables causing additional costs and time delays required to fix breaks. Costs to divert services around proposed infrastructure.	C notice procedure, Early utility/contractor involvement and trial hole checks. CAT scan before careful dig. Designer to consult with Statutory undertakers using Specialist NRSWA Team.	Council / Developer	Council / Developer	3	3	£15,000	£20,000	£40,000	-
D10	Stakeholders viewpoints - both positive and negative, potential of leading to objections as part of the planning process.	Objections relating to following process could cause delay.	Develop communications strategy jointly with the developers.	Council / Developer	Council / Developer	3	4	£4,000	£10,000	£40,000	-
D11	Detail of the alignment to be agreed (overall alignment has been agreed).	Due diligence review has been undertaken. Further design work would delay the planning application submission. Potential impact on red line.	Discuss due diligence review findings with PFA to understand the design, prior to planning submission. Further design work may be required. Assume OBC will contain the current design (dated February 2014), and may be updated at a later date. An allowance for further work has bene included in the programme prior to planning submission, but it is assumed that the OBC would not require updating. .	Atkins/PFA	Council / Developer	1	3				3
D13	Market influence - need for housing reduces.	Could impact on case for the scheme, but scheme is a benefit to the A350 as well as unlocking development. If forecast housing levels changed, this would affect the economic appraisal.	Update modelling and economic appraisal if the forecast housing changed significantly.	Atkins	Council	1	3				3
D14	Timescales may differ between Council and Developer.	Could result in delays where tasks are on the critical path.	Atkins drafting programme, share this with the developer for feedback as part of finalising the OBC. Overall timescales in draft OBC programme are broadly based on Statement of Common Ground and the SEP.	Atkins/PFA	Council / Developer	1	3				3
D17	Reputational risk associated with potential non-delivery of the scheme.	Reputational risk, e.g. bad press.	Wiltshire Council and developer to work together to address any risks to delivery.	Council	Council	2	3				-
D18	Decision making process of Wiltshire Council - Committee / Cabinet.	Planning application could be rejected, jeopardising the scheme. Timescale impact is potentially very large, but in this case the scheme in it's current form won't go ahead. Impact is restricted to the scenarios in which the scheme does go ahead.	Pre-application discussions between the developer and Wiltshire Council.	PFA/Developer	Council / Developer	1	5				3
D22	Resurgence in construction market in the South West.	Increased tender prices.	Include an allowance in the risk budget to cover this.	Atkins	Council / Developer	3	4	£150,000	£375,000	£600,000	-
D23	Ecology surveys required to be undertaken - limited time windows to do this in.	If windows of opportunity are missed, this could put the programme back by a year, increasing costs.	Ensure any surveys are reflected in the programme. Atkins drafting programme, share this with the developer for feedback from PFA/Pegasus as part of finalising the OBC.	PFA/Pegasus	Developer	1	3				5
D25	Date of delivery is a long way down the line (2021 opening), standards relating to environmental issues etc. could change between now and then.	Environmental work and/or design work could have to be revised, putting back the programme and increasing the budget.	Review and revise design if required. Assume any changes can be dealt with as part of the detailed design process.	Council / Developer	Council / Developer	1	4				4
D26	Bill of quants errors in providing the works cost estimate.	LEP/LTB contribution would be capped - bill of quants errors could result in a shortfall in funding.	Consider commissioning independent cost review.	Council	Council / Developer	3	5	£85,000	£170,000	£210,000	-
D27	Public rights of way diversions and / Traffic Road Orders.	Statutory processes such as these must be followed. Potential for objections.	Ensure timescales these are reflected in the programme - Council/developer to review.	Council / Developer	Council / Developer	2	3				3
D28	Lead in times and availability of imported materials - becoming an issue in the construction industry.	Delays to the programme and increase costs.	Undertake quantified risk assessment, including this in the risk register. Plan for longer lead-in times.	Council / Developer	Council / Developer	2	1	£10,000	£20,000	£40,000	2

Scheme :	Yarnbrook and West Ashton Relief Road	Project No.	5132933

Milestone :	Construction	Review Ref	Draft	Date :	23-Jan-15

Risk Ref.	Nature of Risk	Implications	Mitigation	Action Owner	Risk Owner	Likelihood	Impact	Cost Estimate £			Timescale Impact
								Min	Most Likely	Max	
C1	Wiltshire Council not being able to provide a suitable area for the Contractor's site compound	Contractor would have to find their own site compound area and potentially agree rental charges with landowner - returned tender costs higher as a result.	Identify suitable area within Wiltshire Council's ownership that could be used.	Council / Developer	Council / Developer	1	2	£24,000	£36,000	£48,000	-
C2	Traffic Management – what will the impact of the construction works be on the operation of the existing road network and external pressures leading to change	Change to the Contractor's TM proposals could lead to a change in their method of working and additional time.	Contractor will have to clearly identify the planned TM and seek relevant approvals, adhering to all relevant notice periods etc. Communication is important to inform stakeholders of proposals and implications.	Council / Developer	Council / Developer	3	3	£35,000	£105,000	£175,000	2
C3	Statutory Undertakers Works - delays to main contractor when undertaking diversion works and unchartered apparatus discovered	Any change to the Statutory Undertakers works could result in change to the Contractor's programme and potentially lead to additional time and costs.	Provide as much information as possible during the tender period and undertake any necessary site investigation works. Close liaison required between Contractor, SUs and Employer in order to align the works and programmes.	Council / Developer	Council / Developer	3	4	£55,000	£140,000	£245,000	2
C4	Potential for design changes to come forward during construction	Could lead to a change in the Works Information and therefore lead to Compensation Events.	Ensure the Works Information is aligned with the requirements of the Employer/Wiltshire Council. Discussions between the relevant people in each organisation are important.	Council / Developer	Council / Developer	3	3	£35,000	£55,000	£80,000	2
C5	Compensation Event as a result of unforeseen ground conditions	The Contractor could be entitled to additional cost and/or time as a result .	This is a standard Clause in the NEC3 form of contract and could be removed, however, due to the current growth in the market, removal of this Clause may lead to certain Contractor's not tendering for the works. If the Clause is to be left in, undertake as much SI as possible.	Council / Developer	Council / Developer	4	3	£75,000	£130,000	£225,000	2
C6	Compensation Event as a result of adverse weather	The Contractor could be entitled to additional cost and/or time as a result.	This is a standard Clause in the NEC3 form of contract and could be removed, however, due to the current growth in the market, removal of this Clause may lead to certain Contractor's not tendering for the works. This Clause is deemed to be a fair share of risk between Employer and Contractor.	Council / Developer	Council / Developer	4	4	£22,500	£52,500	£150,000	2
C7	Environmental considerations – are advanced site clearance works required to 'manage' any potential impacts?	If advanced site clearance is not undertaken, depending on the starting date of the works, could determine the Contractor's programme as may not be able to undertake certain works until particular dates.	Look into the possibility of undertaking advanced site clearance works prior to the main contract. If this is not possible ensure all the relevant information is included in the Works Information.	Developer	Council / Developer	1	2	£20,000	£35,000	£50,000	3
C8	Unforeseen archaeology issues encountered during construction	Would be a Compensation Event and hence possible additional cost and / or time awarded to the Contractor.	This is a standard Clause in the NEC3 form of contract and could be removed, however, due to the current growth in the market, removal of this Clause may lead to certain Contractor's not tendering for the works. If the Clause is to be left in, undertake as much SI as possible in order to try and determine any archaeological features.	Developer	Council / Developer	2	2	£40,000	£90,000	£175,000	2
C9	Poor communications with local community / Area Boards? Public relations management	Could result in negative publicity for all parties involved in the project.	Ensure the Works Information identifies the importance and the need for suitable public liaison role to be provide by the Contractor. Have appropriate lines of communications in place between Employer / Wiltshire Council, Contractor and all relevant Parties.	Council	Contractor / Council / Developer	3	2				-

C10	Errors in Works Information / design	Could lead to a change in the Works Information and therefore lead to Compensation Events.	Ensure the Works Information is aligned with the requirements of the Employer/Wiltshire Council. Discussions between the relevant people in each organisation are important	Council / Developer	Council / Developer	3	2	£35,000	£60,000	£100,000	-
C11	Additional Accommodation works instructed during construction	Could lead to a change in the Works Information and therefore lead to Compensation Events.	Ensure all the stakeholders that require accommodation works to be undertaken are properly consulted prior to tender and agree what works are going to be undertaken.	Council / Developer	Council / Developer	4	2	£25,000	£40,000	£65,000	2
C12	Part One Claims	Potential costs payable by Wiltshire Council.	The draft ES states *"the relief road would generate an overall beneficial effect at properties within the vicinity of the new road"* but also notes that there would be an "*increase in noise levels at the rear of the properties, which are not presently affected by road traffic noise*". It then states "*to mitigate any potential adverse effects, it is proposed that the bat mitigation to be incorporated into the scheme, would take the form of a noise barrier alongside the southern side of the carriageway between the two western roundabouts*".	Council / Developer	Council / Developer	1	1				-
C13	Working adjacent to Network Rail land	Stringent conditions and restriction would be placed on the Contractor, if not made aware of these at tender stage this could lead to a Compensation Event.	Ensure suitable communication takes place with Network Rail prior to tender in order to identify any restrictions and include within the Works Information.	Council / Developer	Contractor / Council / Developer	3	3	£25,000	£55,000	£90,000	-
C14	Additional unknown Compensation Events	Cost and / or time payable to the Contractor.	Need to ensure the Works Information and all contract documents are as accurate as possible and all input received from relevant parties. Thoroughly check all information prior to tender.	Council / Developer	Council / Developer	5	2	£50,000	£125,000	£200,000	-
C15	Tender prices increasing above or below forecast between now and 2020	Increased tender prices, higher or lower than outturn scheme cost.	Include allowance in the risk budget. Potential delay if value engineering was required (however little scope to reduce cost due to highly contrained corridor).	Council / Developer	Council / Developer	3	5	-£515,423		£1,647,614	

Appendix K. Benefits Realisation, Monitoring & Evaluation Plan

K.1. Introduction

This document serves two key purposes, setting out both a draft 'Benefits Realisation Plan' and a draft 'Monitoring and Evaluation Plan' for the A350 Yarnbrook and West Ashton Relief Road. The Benefits Realisation Plan identifies the potential benefits of the Scheme and the way in which these benefits will be planned for, tracked and realised through scheme implementation. The Monitoring and Evaluation Plan identifies more broadly how actual scheme delivery, including wider scheme impacts, construction and budget management, are to be evaluated.

This is a working document, submitted in draft form alongside the OBC, which will be updated as the Scheme is implemented. The document will be kept under review throughout scheme implementation.

K.2. Benefits Realisation Plan

The Benefits Realisation Plan is designed to enable benefits that are expected to be derived from the Scheme to be planned for, tracked and realised. The benefits that are expected are identified. The Plan then details the key activities that are required to manage the successful realisation of these benefits – what needs to be done, when and by whom.

This section of the document:

- Summarises the Scheme objectives and associated expected outcomes - a Benefits Realisation Plan can only be developed if there is a clear set of objectives;
- Outlines the benefit measurement methods and associated data requirements; and
- Outlines the responsibilities and resources required to oversee the Plan.

The Benefits Realisation Plan will initially be owned by the Senior Responsible Owner (SRO), although ownership can be reviewed and delegated as necessary. It is the owner's responsibility to ensure that the benefits are aligned with the study objectives and that appropriate monitoring processes are adopted.

K.2.1. Expected Benefits

The A350 Yarnbrook and West Ashton Relief Road objectives have been used to develop the 'desired outputs and outcomes' for the Scheme. These desired outputs and outcomes are the actual benefits that are expected to be derived from the Scheme, and are directly linked to the original set of objectives:

- *Desired outputs* – tangible effects that are funded and produced directly as a result of the Scheme; and/or
- *Desired outcomes* – final impacts brought about by the Scheme in the short, medium and long term.

The Scheme's objectives and desired outputs / outcomes are summarised in Table K.1 and provide the starting point for the development of the Benefits Realisation Plan.

Table K.1 - Benefits Realisation Plan - Scheme Objectives, Desired Outputs and Outcomes

Scheme Objective	Desired Outputs	Desired Outcomes
• Reduce traffic queues and delays on the A350 corridor at West Ashton and approaching Yarnbrook Roundabout. • Improve journey time reliability on the A350 corridor. • Facilitate housing and employment growth in the Ashton Park (Trowbridge) Urban Extension. • Reduce the number of road accidents in the West Ashton area.	• A replacement to the existing section of A350, providing improved highway capacity on the A350 part between Yarnbrook and West Ashton, accommodating traffic associated with Ashton Park. • Closure of the existing parallel section of A350 to general traffic (local access only to farms/homes) • Delivery of 2,600 dwellings and 15ha of employment land, facilitated by the Scheme's implementation. • A scheme that will benefit planned Ashton Park Urban Extension by providing appropriate access to the strategic road network and accommodate increased levels of traffic.	• Reduction in average journey times along the A350 within scheme area. • Reduce queues and delays on the A350 within the Scheme area. • Enhanced north-south connectivity, maintaining A350's strategic role. • Enable housing and employment growth in Ashton Park (Trowbridge) urban expansion, and the longer term growth of Trowbridge as a Principal Settlement).

K.2.2. Benefit Measurement Methods

To determine whether the Scheme benefits are being realised, the desired outputs and outcomes have been converted into measurable indicators of scheme benefits, as set out in Table K.2. The data required to measure the extent to which benefits are being realised are also shown in Table K.2.

Benefits have been classified as 'quantitative' or 'qualitative'. Quantitative benefits are those which can be measured in terms of specific numerical values on a continuous scale, whether in absolute or percentage terms, whereas qualitative benefits are measured in category-based or descriptive terms.

Table K.2 Benefit Assessment Indicators

Ref #	Benefit (Desired Output / Outcome)	Benefit Indicator	Target	Type	Specific Data Requirements	Owner
Desired Outputs						
01	A replacement to the existing section of A350, providing improved highway capacity on the A350 part between Yarnbrook and West Ashton, accommodating traffic associated with Ashton Park	Delivery of a relief road passing to the north-west of West Ashton village and to the north of Yarnbrook village, connecting with the existing A350 alignment to the east and the A363 to the west	A new single carriageway road identified plus three new roundabouts	Qualitative	None	*All owners to be defined following scheme approval.*
02	Closure of the existing parallel section of A350 to general traffic (local access only to farms/homes)	Stopping up of the old A350 at its northern and southern extent (see drawing in OBC Appendix A). Volume of traffic through the Yarnbrook Roundabout	Closure of the old A350 to general traffic. Reduced traffic passing through the Yarnbrook Roundabout	Qualitative and Quantitative	None	*All owners to be defined following scheme approval*
03	Delivery of 2,600 dwellings and 15ha of employment land, facilitated by the Scheme's implementation.	Number of dwellings and area of employment land delivered at Ashton Park.	Approval of Ashton Park planning application. 2,600 dwellings and 15ha of employment land at Ashton Park.	Quantitative	Housing completions. Area of employment land delivered.	*All owners to be defined following scheme approval*
04	A scheme that will benefit planned Ashton Park Urban Extension by providing appropriate access to the strategic road network and accommodate increased levels of traffic.	Northern arm provided off roundabout 'R2', for access into Ashton Park. Journey times on the A350 once Ashton Park is fully built out.	A new single carriageway road identified, including access into Ashton Park from roundabout 'R2'.	Quantitative	None	*All owners to be defined following scheme approval*

Ref #	Benefit (Desired Output / Outcome)	Benefit Indicator	Target	Type	Specific Data Requirements	Owner
Desired Outcomes						
05	Reduction in average journey times along the A350 within scheme area	Reduction in average peak period (AM & PM) journey times, along the A350 in south east Trowbridge corridor, between Yarnbrook and West Ashton, in both directions.	Average peak period journey times along this length of road should have reduced by X% one year after scheme opening (% to be derived once level of housing in place upon opening has been formally agreed).	Quantitative	Journey time surveys *(pre- and post-opening)*	*All owners to be defined following scheme approval.*
06	Reduced peak period queue lengths on the A350 within scheme area.	Reduced time spent in queued traffic during peaks (AM & PM) at the Yarnbrook Roundabout and West Ashton junctions.	The extent of peak period queues approaching the Scheme's junctions should have reduced one year after Scheme opening.	Quantitative	Queue length figures *(pre- and post-opening)*	*All owners to be defined following scheme approval.*
07	Enhance north-south connectivity, maintaining A350's strategic role.	A350 to provide high service level traffic conditions as well as reliable travel times.	Maintain and further increase the viability of new development sites and impact positively on the area's economic growth, with increases in: • Housing units completed. • Commercial floorspace occupied. • Commercial rental values.	Qualitative	None	*All owners to be defined following scheme approval.*

Ref #	Benefit (Desired Output / Outcome)	Benefit Indicator	Target	Type	Specific Data Requirements	Owner
08	Enable housing and employment growth in Ashton Park (Trowbridge) urban expansion, and the longer term growth of Trowbridge as a Principal Settlement).	Delivery of housing and employment at Ashton Park, whilst providing appropriate access to and from the A350.	The 2,600 dwellings and the 15ha of employment land to be developed as well as Wiltshire Council's Core Strategy policy regarding housing and jobs in Trowbridge area to be achieved.	Quantitative	*Count actual dwellings and employment land developed*	*All owners to be defined following scheme approval.*
09	Reduce the number of road accidents[4] in the Yarnbrook and West Ashton areas by 2026.	Accidents on the A350 (taking into account increased trip generation due to Ashton Park).	Reduction in accidents on the A350 (adjusted for the increased trips due to Ashton Park).	Quantitative	*Accident data*	*All owners to be defined following scheme approval.*

K.2.3. Baseline Data Requirements

Baseline data, which will allow the pre-scheme opening situation to be quantified, is required for benefit assessment indicators #02, #03, #04, #06, #08, and #09.

K.3. Output Monitoring For BIS

The Department for Business, Innovation & Skills (BIS) has established a set of core monitoring metrics; the following table denotes which indicators are proposed to be monitored for this scheme (to be agreed with BIS once this Scheme is approved for LGF funding).

[4] There is an historic road safety problem at the West Ashton crossroads which represents an accident cluster. Note that the junction has been recently upgraded, and that accident data will need to be reviewed when data becomes available.

Table K.3 Proposed Output Monitoring for the Department for Business, Innovation & Skills (BIS)

Core Metrics	**Inputs**	**Outcomes**
	• Expenditure. • Funding breakdown. • In-kind resources provided.	• Jobs connected to the intervention. • Commercial floorspace constructed. • Housing unit starts. • Housing units completed.
Project Specific Outputs and Outcomes: Transport	**Outputs**	**Outcomes**
	• Total length of newly built roads. • Total length of new cycleways. • Type of infrastructure.	• Follow on investment at site. • Commercial floorspace occupied. • Commercial rental values.
Project Specific Outputs and Outcomes: Land, Property and Flood Protection	**Outputs**	**Outcomes**
	• Area of site reclaimed, (re)developed or assembled.	• Follow on investment at site. • Commercial floorspace occupied. • Commercial rental values.
Transport - to be collected for all projects/programmes involving more than £5m public funding and where these metrics and the collection points are relevant to the intervention		
	• Average daily traffic and by peak/non-peak periods. • Average AM and PM peak journey time per mile on key routes (journey time measurement). • Average AM and PM peak journey time on key routes (journey time measurement). • Day-to-day travel time variability • Average annual CO_2 emissions. • Accident rate. • Casualty rate.	

K.3.1. Responsibilities and Resources

The overall Benefits Realisation Plan is owned by the Senior Responsible Owner (SRO), with responsibility for overseeing particular benefits delegated as necessary. The owners for each benefit will be defined following scheme approval, with ownership remaining with the SRO at present.

The owners will be responsible for tracking the benefits being realised and for reporting any exceptions to the SRO. This will allow early identification of any particular areas where benefits are not being realised as expected. The SRO will then appoint someone with sufficient expertise to oversee remedial actions to try to bring benefits back in line with expectations.

K.4. Monitoring and Evaluation Plan

K.4.1. Introduction

The purpose of the Monitoring and Evaluation Plan is to identify how actual scheme delivery, including wider scheme impacts, construction and budget management, are to be evaluated. The Monitoring and Evaluation Plan therefore has a wider remit than the Benefits Realisation Plan. The Monitoring and Evaluation Plan will culminate with a brief Post-Implementation Review approximately one year after scheme opening.

This section of the document identifies the data collection requirements beyond those identified for the Benefits Realisation Plan and sets out the content of the Post-Implementation Review.

The Monitoring and Evaluation Plan is currently owned by the Senior Responsible Owner (SRO), although ownership will be delegated and reviewed as necessary.

K.4.2. Scheme Implementation

The first part of the Post-Implementation Review will focus on scheme delivery, covering the following aspects:

- **Construction** – including the efficiency and cost of the infrastructure contractor procurement exercise, and the extent to which the construction programme was delivered within the estimated timescales and budget; and
- **Project Management** – including the cost of project management resources, as well as the extent to which overall scheme timescales were adhered.

This review will be completed approximately one year of scheme opening. A key output of the review will be the lessons learnt log, which will assist in planning and delivering future schemes.

To ensure that an accurate and informative Post-Implementation Review can be undertaken, the SRO will maintain detailed records in relation to procurement processes, the Scheme budget and expenditure and project management meetings.

K.4.3. Wider Impacts

The second part of the Post-Implementation Review will focus on the wider set of impacts, whether positive or negative, that have been created by scheme:

- **Scheme Benefits** – a summary of the formal benefits review, which is planned for January 2022; and
- **Unexpected (Dis)benefits** – identifying any additional impacts that were not planned for as part of A350 the A350 Yarnbrook and West Ashton Relief Road.

K.5. Delivery Schedule

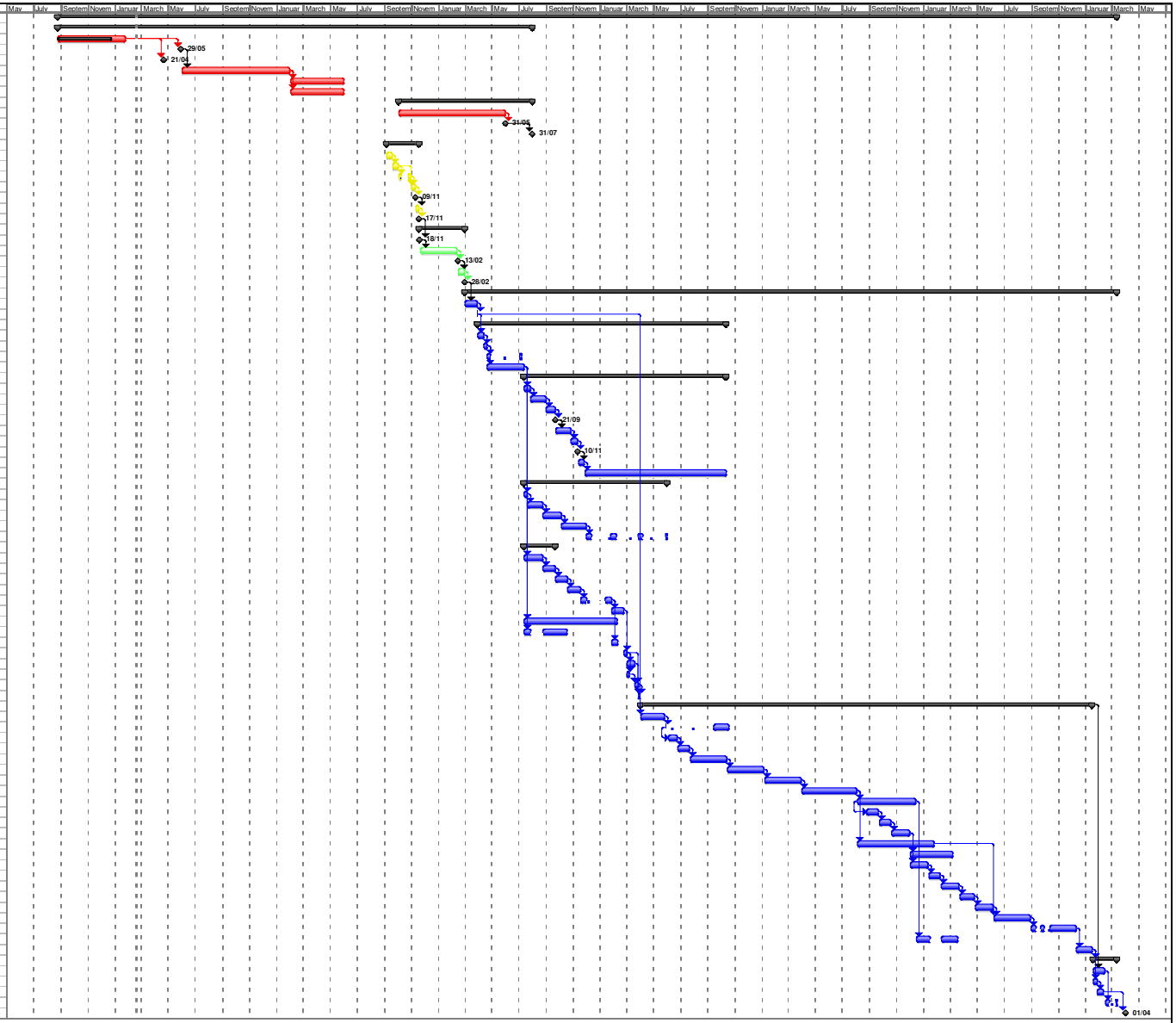
Benefits realisation and monitoring and evaluation will be an ongoing process throughout scheme implementation and will continue once the A350 Yarnbrook and West Ashton Relief Road have been implemented. Table K.4 shows the timescales proposed.

Table K.4 Benefits Realisation, Monitoring and Evaluation Delivery Schedule

Task	Timescale
Pre-Construction	
Draft Benefits Realisation Plan and Monitoring & Evaluation Plan prepared	January 2015
Finalise plans and appoint owners, update to reflect decisions made as part of planning process negotiations	June 2016 – August 2016 inclusive
Baseline data assembly	September 2017 – November 2017
During Construction	
Data assembly for Monitoring & Evaluation Plan relating to scheme delivery and project management	April 2018 – April 2021
Post-Construction	
Data assembly for Benefits Realisation Plan	September – November 2021
Formal benefits review	January 2022
Post-Implementation review	March 2022

Appendix L. Scheme Implementation Programme

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	**A350 Yarnbrook to West Ashton Relief Road**	**1710 days**	**Mon 25/08/14**	**Fri 12/03/21**		
2	**A350 Yarnbrook to West Ashton Relief Road**	**766 days**	**Mon 25/08/14**	**Mon 31/07/17**		
3	Outline Business Case	110 days	Mon 25/08/14	Fri 23/01/15		
4	Planning application submission by developer	21 days	Fri 01/05/15	Fri 29/05/15	3	
5	Outline Business Case Approval	1 day	Tue 21/04/15	Tue 21/04/15	3	
6	Planning Determination	175 days	Mon 01/06/15	Fri 29/01/16	4	
7	S106 aggrements	86 days	Tue 02/02/16	Tue 31/05/16	6	
8	Planning Consent	86 days	Tue 02/02/16	Tue 31/05/16	6	
9	**Full Business Case Approval**	**216 days**	**Mon 03/10/16**	**Mon 31/07/17**		
10	Develop full business case (FBC)	172 days	Mon 03/10/16	Tue 30/05/17		
11	FBC submission to the SWLTB	1 day	Wed 31/05/17	Wed 31/05/17	10	
12	FBC approval (SWLTB meeting)	21 days	Mon 03/07/17	Mon 31/07/17	11	
13	**Procurement**	**54 days**	**Mon 05/09/16**	**Thu 17/11/16**		
14	Pre-tender Qualification Questionaire	10 days	Mon 05/09/16	Fri 16/09/16		
15	Specification Preparation	10 days	Mon 19/09/16	Fri 30/09/16	14	
16	Bill of Quantities Preparation	10 days	Mon 03/10/16	Fri 28/10/16	15	
17	Preparation of Pre-Construction Information	7 days	Mon 31/10/16	Tue 08/11/16	15,16	
18	Issue Tender Pack to Willtshire Council	1 day	Wed 09/11/16	Wed 09/11/16	17	
19	Review PQQ submissions	5 days	Thu 10/11/16	Wed 16/11/16	18	
20	Notify successful applicants	1 day	Thu 17/11/16	Thu 17/11/16	19	
21	**Tender**	**73 days**	**Fri 18/11/16**	**Tue 28/02/17**		
22	Isue of tender pack to pre-qualified Contractors	1 day	Fri 18/11/16	Fri 18/11/16	20	
23	Tender period	60 days	Mon 21/11/16	Fri 10/02/17	22	
24	Tender return	1 day	Mon 13/02/17	Mon 13/02/17	23	
25	Tender review	10 days	Tue 14/02/17	Mon 27/02/17	24	
26	Tender Award to successful Contractor	1 day	Tue 28/02/17	Tue 28/02/17	25	
27	**Design & Build Commssioning**	**1053 days**	**Wed 01/03/17**	**Fri 12/03/21**		
28	Mobilisation	20 days	Wed 01/03/17	Tue 28/03/17	26	
29	D&B team meeting and design review	1 day	Wed 29/03/17	Wed 29/03/17	28	
30	**Completion of Detail Design**	**401 days**	**Thu 30/03/17**	**Thu 11/10/18**		
31	Stage 1 RSA	10 days	Thu 30/03/17	Wed 12/04/17	29	
32	Review & Response to RSA1	5 days	Thu 13/04/17	Wed 19/04/17	31	
33	Stakeholder Consultation	10 days	Thu 20/04/17	Thu 06/07/17	32	
34	MX Highway Design	60 days	Thu 20/04/17	Wed 12/07/17	32	
35	**Statutory Undertakers**	**326 days**	**Thu 13/07/17**	**Thu 11/10/18**		
36	Issue C3 Notices	10 days	Thu 13/07/17	Wed 26/07/17	34	
37	C3 Notice Period	25 days	Thu 27/07/17	Wed 30/08/17	36	
38	C3 Review	15 days	Thu 31/08/17	Wed 20/09/17	37	
39	Issue C4 Notices	1 day	Thu 21/09/17	Thu 21/09/17	38	
40	C4 Notice Period	25 days	Fri 22/09/17	Thu 26/10/17	39	
41	C4 Review Period	10 days	Fri 27/10/17	Thu 09/11/17	40	
42	Issue C5 Notices	1 day	Fri 10/11/17	Fri 10/11/17	41	
43	C5 Notice Period	10 days	Mon 13/11/17	Fri 24/11/17	42	
44	Service Diversions	229 days	Mon 27/11/17	Thu 11/10/18	43	
45	**Highway Drawings**	**231 days**	**Thu 13/07/17**	**Thu 31/05/18**		
46	Site Clearance	5 days	Thu 13/07/17	Wed 19/07/17	34	
47	Fencing & Barriers	25 days	Thu 20/07/17	Wed 23/08/17	46	
48	Safety Barrier Design	30 days	Thu 24/08/17	Wed 04/10/17	47	
49	Drainage Design	40 days	Thu 05/10/17	Wed 29/11/17	48	
50	Works and subcontract procurement	30 days	Thu 30/11/17	Thu 31/05/18	49	
51	**Geotech Design**	**50 days**	**Thu 13/07/17**	**Wed 20/09/17**		
52	Geotechnical Investigation	30 days	Thu 13/07/17	Wed 23/08/17	34	
53	Geotechnical Report & Design	20 days	Thu 24/08/17	Wed 20/09/17	52	
54	Pavement Design	20 days	Thu 21/09/17	Wed 18/10/17	53	
55	Kerbs & Footways	21 days	Thu 19/10/17	Thu 16/11/17	54	
56	Traffic Signs, Lines & TRO Preparation	20 days	Fri 17/11/17	Thu 25/01/18	55	
57	Street lighting	20 days	Fri 26/01/18	Thu 22/02/18	56	
58	**Bridge Design**	**150 days**	**Thu 13/07/17**	**Wed 07/02/18**	34	
59	**Retaining Structure(s)**	50 days	Thu 13/07/17	Tue 17/10/17	34	
60	Traffic Signal / Controlled Crossing Review	10 days	Fri 26/01/18	Thu 08/02/18	56	
61	Construction Drawing Preparation	5 days	Fri 23/02/18	Thu 01/03/18	57	
62	CDM Review	12 days	Fri 02/03/18	Mon 19/03/18	61	
63	Stage 2 Road Safety Audit	3 days	Fri 02/03/18	Tue 06/03/18	61	
64	Review & Response to RSA2	6 days	Tue 20/03/18	Tue 27/03/18	63,62	
65	Drawing Preparation(Inclusion of Exceptions)	3 days	Wed 28/03/18	Fri 30/03/18	64,61	
66	**Construction**	**730 days**	**Mon 02/04/18**	**Fri 15/01/21**		
67	Setup Site Compound	40 days	Mon 02/04/18	Fri 25/05/18	29	
68	Setup & Maintain Traffic Management	25 days	Mon 28/05/18	Wed 17/10/18	67	
69	Site Clearance	15 days	Mon 04/06/18	Fri 22/06/18	68SS+5 days	
70	Strip Topsoil	20 days	Mon 25/06/18	Fri 20/07/18	69	
71	Excavate to Formation	60 days	Mon 23/07/18	Fri 12/10/18	70	
72	Capping	60 days	Mon 15/10/18	Fri 04/01/19	71	
73	Drainage	60 days	Mon 07/01/19	Fri 29/03/19	72	
74	Road Base	90 days	Mon 01/04/19	Fri 02/08/19	73	
75	Kerbing	95 days	Mon 05/08/19	Fri 13/12/19	74	
76	Plane existing surfacing & prepare surfacing interfaces S/B Cway	20 days	Mon 26/08/19	Fri 20/09/19	75SS+15 days	
77	Regualing Course	20 days	Mon 23/09/19	Fri 18/10/19	76	
78	Surfacing	30 days	Mon 21/10/19	Fri 29/11/19	77	
79	Construction of Road bridges	125 days	Mon 05/08/19	Fri 24/01/20	74	
80	Footway & Footbridge Construction	70 days	Mon 02/12/19	Fri 06/03/20	78	
81	Plane existing surfacing & prepare surfacing interfaces N/B Cway	30 days	Mon 02/12/19	Fri 10/01/20	78	
82	Construct Splitter Islands	20 days	Mon 13/01/20	Fri 07/02/20	81	
83	Kerbing	30 days	Mon 10/02/20	Fri 20/03/20	82	
84	Regulating	25 days	Mon 23/03/20	Fri 24/04/20	83	
85	Surfacing	30 days	Mon 27/04/20	Fri 05/06/20	84	
86	Construction of VRS and Fencing	60 days	Mon 08/06/20	Fri 28/08/20	85,79	
87	Signs Lines & Studs	60 days	Mon 31/08/20	Thu 10/12/20	86	
88	Street Lighting	50 days	Mon 16/12/19	Tue 17/03/20	75	
89	Topsoiling & Seeding	26 days	Fri 11/12/20	Fri 15/01/21	87	
90	**Post Construction**	**40 days**	**Mon 18/01/21**	**Fri 12/03/21**	89	
91	Site Compound decommissioning	20 days	Mon 18/01/21	Fri 12/02/21	66	
92	Road Safety Audit Stage 3	7 days	Mon 18/01/21	Tue 26/01/21	89	
93	Review & Response to RSA3	10 days	Wed 27/01/21	Tue 09/02/21	92	
94	Final Account	10 days	Mon 15/02/21	Fri 12/03/21	91	
95	**Opening of Road**	0 days	Thu 01/04/21	Thu 01/04/21	93FS+5 days	



Project: A350 Yarnbrook to West Ashto
Date: 16-02-2015 Rev3

Task | Split | Milestone | Summary | Project Summary | External Tasks | External Milestone | Progress | Deadline

Atkins
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