Fareham Local Plan **22/10/2021**

Reference number 110702

FAREHAM LOCAL PLAN – SRTM STRATEGIC MODELLING

Solent Transport

SYSTRA

FAREHAM LOCAL PLAN

FAREHAM LOCAL PLAN – SRTM STRATEGIC MODELLING

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1. INTRODUCTION

1.1 Study Background

1.1.1 SYSTRA has been commissioned by Fareham Borough Council (FBC) to apply Solent Transport's Sub-Regional Transport Model (SRTM) to help inform the update to Fareham's Local Plan. The SRTM has been used to model the proposed land allocations and identify key transport implications resulting from the scale and location of the allocations. The SRTM outputs form inputs to a Transport Assessment undertaken by Hampshire Traded Services and reported in a separate document.

1.1.2 This application of the SRTM was commissioned by FBC in June 2021.

1.2 Fareham Borough Council Local Plan Development Scenarios

1.2.1 To assess the transport impacts of the Local Plan, three model scenarios have been commissioned:

- Scenario 1 – 2036 Baseline, no Fareham Local Plan development except for committed sites.
- Scenario 2 – 2036 Do Minimum, full Fareham Local Plan development without transport mitigation.
- Scenario 3 – 2036 Do Something, full Fareham Local Plan development with transport mitigation.

Scenario 1 – 2036 Baseline *No Fareham Local Plan Development Except Committed Sites*

1.2.2 The Baseline forms the scenario against which the proposed Local Plan development quantum scenarios will be assessed.

1.2.3 In this study the Baseline includes all current (at time of commissioning) completed development and infrastructure within Fareham, in addition to all committed development and infrastructure through to 2036. In the Baseline, no allowance is made for Local Plan allocations in Fareham. For clarity, the development at Welborne is considered to be committed and is included within the Baseline. This equates to 3,612 residential units within the Plan period up to 2036.

1.2.4 Outside of Fareham, development growth is assumed to continue as 'normal' and in accordance with the adopted Local Plan's for the respective Borough's and in accordance with TEMPro v7.2 growth projections for the modelled areas a whole.

1.2.5 Following discussions between FBC and Eastleigh Borough Council, the sites within Eastleigh at Woodhouse Lane, Hedge End (605 dwellings) and Land at Winchester Street, Botley (375 dwellings) are additionally included as committed developments.

Scenario 2 – 2036 Do Minimum *With Full Local Plan Development, Without Mitigation Measures*

1.2.6 The Do Minimum scenario builds on the Scenario 1 2036 Baseline with the addition of the full quantum of proposed development associated to the Fareham Local Plan. Growth

outside the borough is identical to the Baseline. By comparing the outputs of the Do Minimum scenario with the Baseline, the transport impacts resulting from the Local Plan proposals can be isolated.

Scenario 3 – 2036 Do Minimum *With Full Local Plan Development, With Mitigation Measures*

1.2.7 The outputs for Scenario 3 will be included in a later version of this report once proposed transport mitigation measures have been identified.

2. SOLENT TRANSPORT – SUB REGIONAL TRANSPORT MODEL (SRTM) BACKGROUND

2.1 Model Development

2.1.1 SYSTRA was commissioned, as part of a wider team, to support Solent Transport with the development and application of the SRTM for this nationally important area. An update to the original 2010 model was completed in early 2017 to bring the base year forward to 2015. In early 2021, a further update was completed to revalidate the model against a 2019 base year.

2.1.2 The SRTM has been developed to support a wide-ranging set of interventions across the Solent Transport sub-region, and is specifically required to be capable of:

- Forecasting changes in travel demand, road traffic, public transport patronage and active mode use over time as a result of changing economic conditions, land-use policies and development, and transport improvement and interventions (schemes);
- Testing the impacts of land-use and transport policies and strategies within a relatively short model run time; and
- Testing the impacts of individual transport interventions in the increased detail necessary for preparing submissions for inclusion in funding programmes.

2.2 Sub Regional Transport Model Context and Scope

2.2.1 The SRTM is a suite of linked models comprising the following components as shown in Figure 2-1:

- The Main Demand Model (MDM) which predicts when (time of day), where (destination choice) and how (choice of mode) journeys are made;
- the Gateway Demand Model (GDM) which predicts demand for travel from ports and airports;
- the Road Traffic Model (RTM) which determines the routes taken by vehicles through the road network and journey times, accounting for congestion;
- the Public Transport Model (PTM) which determines routes and services chosen by public transport passengers; and
- a Local Economic Impact Model (LEIM) which uses inputs including transport costs to forecast the quantum and location of households, populations and jobs.

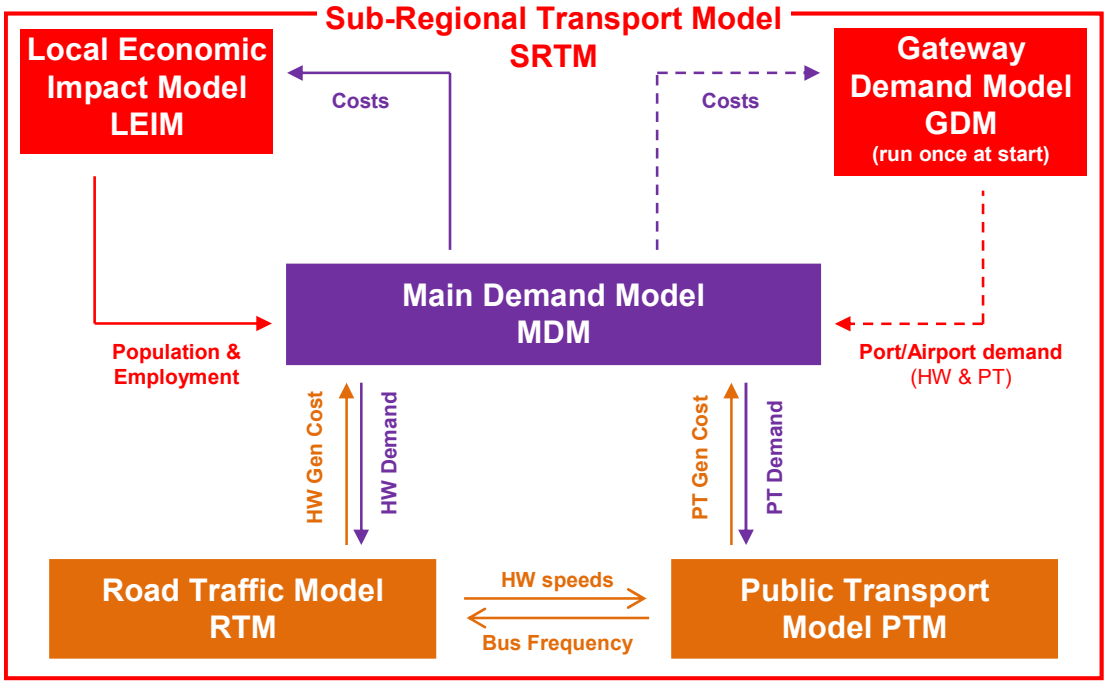


Figure 2-1 Solent Transport Sub-Regional Transport Model

2.2.2 The modelled area of the SRTM is divided into four regions, shown in Figure 2-2, which differ by zone aggregation and modelling detail. Fareham Borough is within the Core Fully Modelled Area (the most detailed region of the model). The zones within the borough are shown in Figure 2-3.

2.2.3 In accordance with guidance three weekday periods are modelled in the SRTM:

- AM peak: busiest hour between 07:00 and 10:00, (defined as 40.5% of the three hours for Highway and 40% for Public Transport);
- Inter peak: average of 10:00 to 16:00 (i.e. 16.7% of the six hours for both modes); and
- PM peak: busiest hour between 16:00 and 19:00, (defined as 36.8% of the three hours for Highway and 40% for Public Transport).

2.2.4 The SRTM has a base year of 2019, and forecast years of 2026, 2031, 2036, and 2041. For the Fareham Local Plan assessment, scenarios were forecast to 2036.

2.2.5 The SRTM is a strategic model and the scope of the model is extensive. As such the analysis of specific localised traffic conditions necessitates a degree of interpretation and a common-sense approach in conjunction with a knowledge of local baseline conditions.

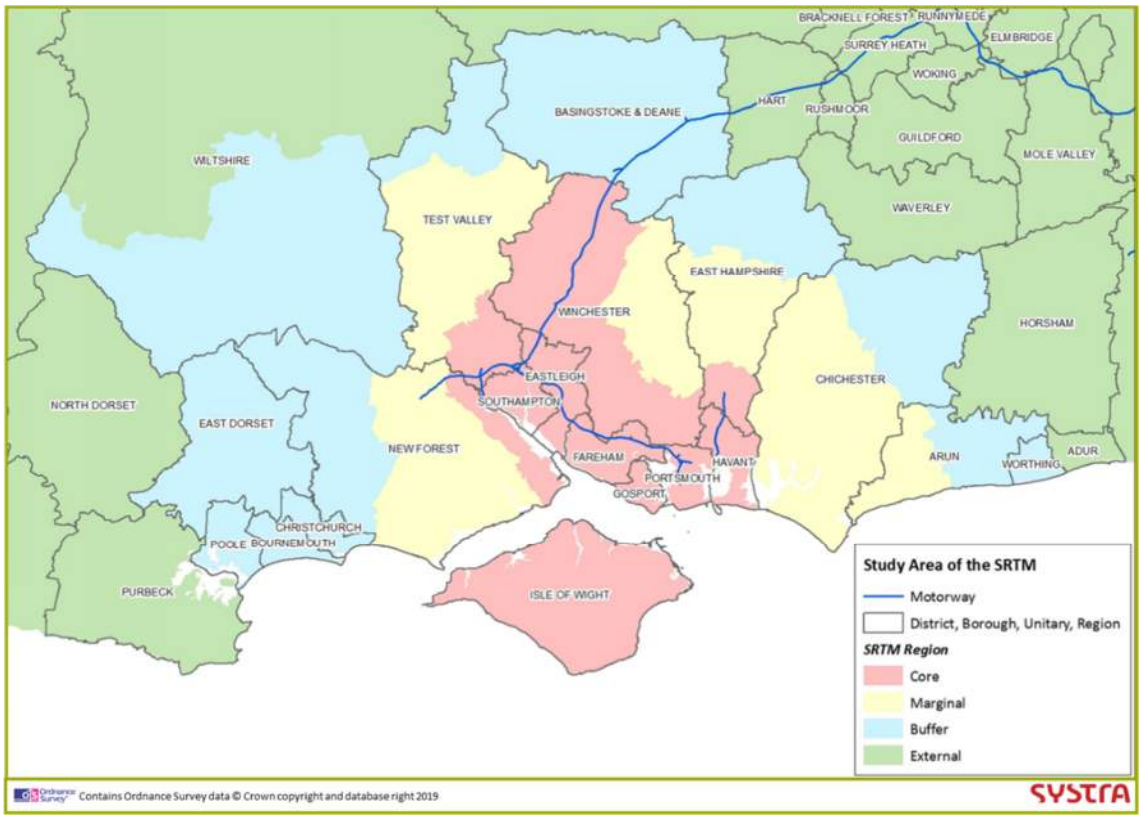


Figure 2-2 SRTM Study Area

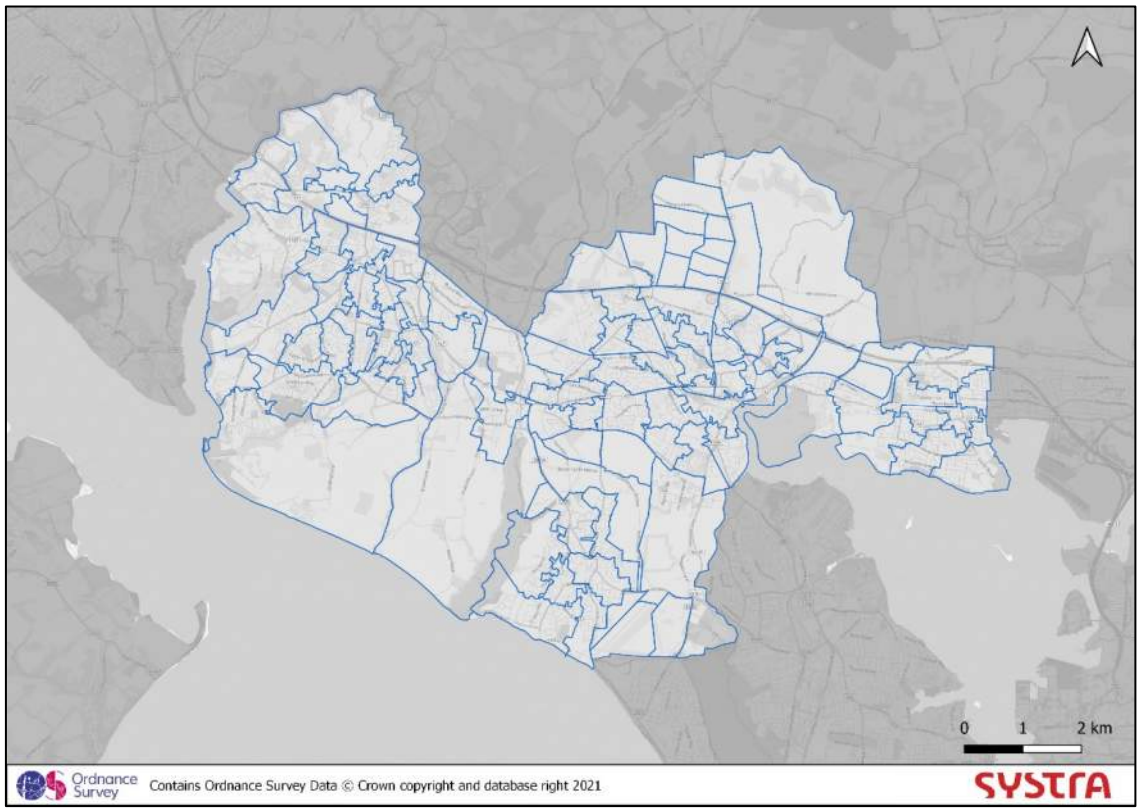


Figure 2-3 SRTM Fareham District Zone Structure

3. FAREHAM MODELLING ASSUMPTIONS

3.1 Introduction

3.1.1 This chapter summarises the development of the model scenarios, and their land use, highway and public transport (PT) inputs.

3.1.2 The following sections provide a breakdown of the key modelling processes, inputs and outputs. Committed development, and infrastructure information through to 2036 to be used in this study was provided and confirmed by FBC and HCC Officers in June 2021.

3.2 Scenario 1 – 2036 Baseline

Highway and PT network

3.2.1 As a starting point, the Baseline scenario uses standard SRTM reference case networks for all modelled years. The SRTM has a base year of 2019 and represents forecast conditions up to the year 2041. Known developments and committed highway schemes are included within the models' reference case scenarios (2026, 2031, 2036 and 2041) to provide the most accurate representation of future year conditions. A list of the committed (funded) highway schemes included in the Reference Case is provided as **Appendix A.**

3.2.2 Due to the inclusion of Welborne Garden Village in the Baseline scenario, the associated highway and PT networks have also been represented in this scenario, as agreed with FBC and Hampshire County Council (HCC). This includes the addition of the west facing slips at M27 Junction 10, the reconfiguration of Broadway Roundabout (on the A32), and BRT services between Welborne and Fareham rail station.

Non-Fareham Borough Land Use Assumptions

3.2.3 In this study, the SRTM Reference Case inputs populate the Baseline scenario for all model areas except Fareham Borough where the Reference Case inputs have been revised as detailed in Section 3.2.6.

3.2.4 Within the Reference Case land use (excluding Fareham), in addition to committed sites, "permissible" sites are included. These refer to those locations identified as suitable for future development but that have not yet been subject to planning approval. The locations and maximum land use quantum of the permissible sites are based on the inputs collated up to April 2018 in accordance with adopted Local Plans at that time. The take up of permissible developments is determined by the LEIM module of SRTM and is based on the local conditions (the relative 'attractiveness' of the development, e.g. accessibility).

3.2.5 LEIM controls the level of overall development growth within the model in accordance with TEMPro (v7.2) employment and population trajectories for the sub-region which conforms with WebTAG. This is equivalent to allowing for background traffic growth within the modelling process.

3.2.6 The starting point in the Baseline for all model data specific to Fareham Borough is to remove all the standard reference case inputs after 2019. In place of these, the actual site completions post-2019 have been added plus hard committed future developments. The total completions and total development, those with permission or resolution to grant, for Fareham Borough are summarised in Table 3-1. Figure 3-1 shows the location of the residential developments within the Borough by model zone.

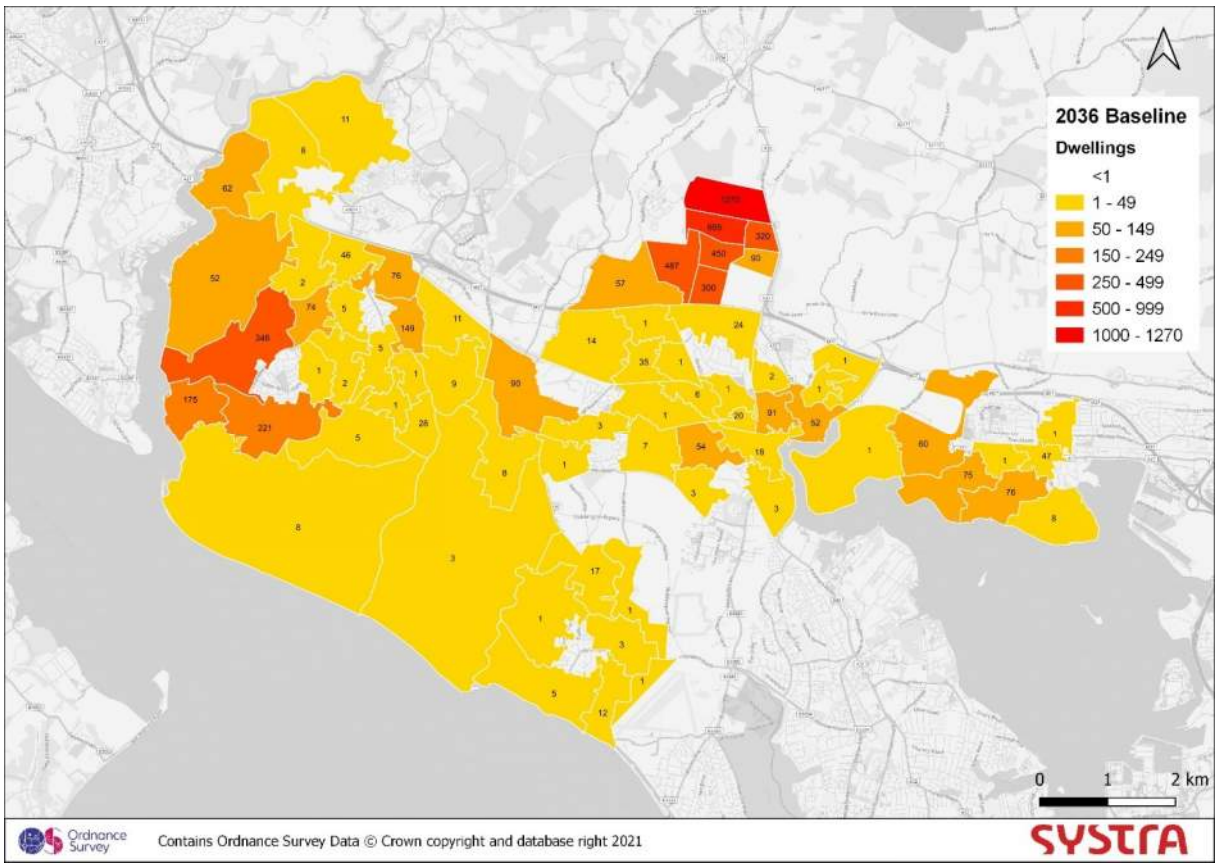


Figure 3-1 2036 Scenario 1 Baseline – Modelled Residential Growth by model zone for Fareham

Table 3-1 Baseline: Fareham Land Use Inputs 2019 – 2036

	RESIDENTIAL	EMPLOYMENT (SQM)							
	Dwellings	Retail	Office	Industrial	Warehousing	Primary & Secondary Education	Hotel & Other Accommod-ation	Healthcare	Leisure
SCENARIO 1 BASELINE (2019-2036 Completions and Committed Developments)	5,715	4,736	33,888	72,099	27,370	0	1,000	3,491	3,819

SRTM Ref: FKN

3.3 Scenario 2 – 2036 Do Minimum

Highway and PT network

3.3.1 All elements of the highway and PT networks remain unchanged between the Baseline and Do Minimum scenarios.

Non-Fareham Borough Land Use Assumptions

3.3.2 In the Do Minimum, the land use outside of the Fareham Borough is the same as in Scenario 1 Baseline. By assessing the Local Plan in this way, there are no changes to the number of households, jobs or population outside of Fareham. By ensuring land use inputs outside of Fareham are unchanged, the impacts of the Local Plan development can be isolated.

Fareham Borough Local Plan Land Use Assumptions

3.3.3 The Fareham Borough Local Plan development allocations are included within the Do Minimum scenario as 'exogenous' development meaning that they will be built in their specified location, regardless of local conditions. The Fareham Local Plan development totals for the Do Minimum scenario are shown in Figure 3-2 and Table 3-2. All totals account for full Local Plan growth (i.e. the totals also include for the Baseline growth).

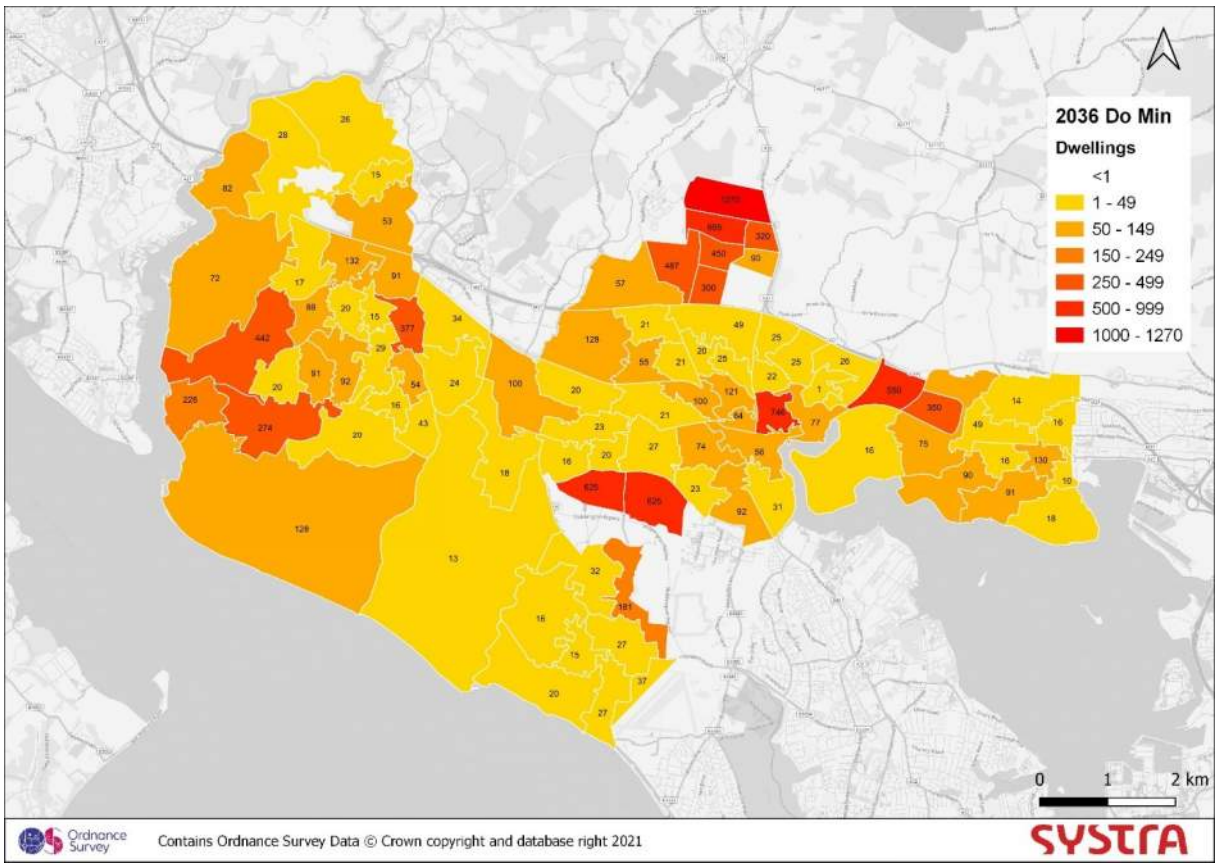


Figure 3-2 2036 Do Minimum Residential Dwelling growth

Table 3-2 Do Minimum: Fareham Land Use Assumptions 2019 – 2036 (include for Baseline values)

	RESIDENTIAL	EMPLOYMENT (SQM)							
	Dwellings	Retail	Office	Industrial	Warehousing	Primary & Secondary Education	Hotel & Other Accommod-ation	Healthcare	Leisure
SCENARIO 2 DO MINIMUM (2036 Local Plan Development)	11,291	4,736	45,688	182,949	27,370	4,800	1,000	3,491	3,819

SRTM Ref: FKP

3.4 Scenario 3 – 2036 Do Something

Highway and PT network

3.4.1 [Text to follow at a later date on completion of Scenario 3].

Land Use Assumptions

3.4.2 [Text to follow at a later date on completion of Scenario 3].

4. LAND USE MODEL RESULTS

4.1.1 This section summarises the outputs of the land use model for the Baseline and Do Minimum scenarios.

4.2 Population, Dwellings, Jobs (LEIM Module Outputs)

4.2.1 Table 4-1 summarises the forecasts produced by the LEIM module of the SRTM, for the population, number of dwellings, and number of jobs within the Fareham Borough. In the table, the 2036 Do Minimum scenario has been compared against the 2036 Baseline scenario.

4.2.2 Table 4-1 shows how Scenario 2 (DM) compares to Scenario 1 (Baseline) in 2036. The Local Plan proposes an increase of approximately 5,600 households between 2019 and 2036. The additional employment land use included in the local plan provides approximately 5,600 jobs in the borough during the same period.

Table 4-1 Change in LEIM outputs in Fareham, 2036 DM vs 2036 Baseline

	2036 SCENARIO 1 BASELINE	2036 SCENARIO 2 DO MINIMUM OPTION 1	DIFFERENCE	% DIFFERENCE
Population	127,534	139,813	12,278	9%
Dwellings	59,045	64,621	5,576	9%
Jobs	64,986	70,545	5,559	8%

5. MAIN DEMAND MODEL RESULTS

5.1 Introduction

5.1.1 This section summarises the forecasts produced by the MDM module of the SRTM for Scenarios 1 and 2 as well as their difference in order to isolate the impacts of the Local Plan development.

5.2 Main Demand Model (MDM) Results

5.2.1 The total person trips, and percentage mode share to, and from, Fareham Borough for a 24-hour period are summarised in Table 5-1.

5.2.2 Table 5-1 shows the trip generation associated directly to the Local Plan (Do Minimum scenario) against the 2036 Baseline. The Do Minimum scenario includes for an approximate increase of 5,600 dwellings within Fareham when compared to the Baseline. This is reflected in the number of person trips to / from and within Fareham over a 24-hour period.

5.2.3 The mode share across the 2036 Do Minimum scenarios remains similar to the 2036 Baseline. There are small increases in active mode share due to a more congested highway network in the Do Minimum scenario.

Table 5-1 Person Trips to / from Fareham – 2036 DM vs. 2036 Baseline

	SCENARIO	FROM FAREHAM			TO FAREHAM		
		HIGHWAY	PT	ACTIVE	HIGHWAY	PT	ACTIVE
ABSOLUTE	2036 Scenario 1 Baseline	321,442	12,559	62,831	323,532	12,797	62,724
	2036 Scenario 2 Do Minimum	344,482	14,483	71,699	345,860	14,700	71,574
	Difference DM – Baseline	*23,040*	*1,924*	*8,868*	*22,328*	*1,903*	*8,850*
MODE SHARE (%)	2036 Scenario 1 Baseline	81%	3%	16%	81%	3%	16%
	2036 Scenario 2 Do Minimum	80%	3%	17%	80%	3%	17%
	Difference DM – Baseline	*-1%*	*0%*	*1%*	*-1%*	*0%*	*1%*

6. HIGHWAY MODEL RESULTS

6.1 Introduction

6.1.1 This section summarises the highway outputs across the Fareham Borough as a whole for the following Scenarios:

- 2036 Scenario 2 Do Minimum vs. 2036 Scenario 1 Baseline;
- 2036 Scenario 3 Do Something vs 2036 Scenario 2 Do Minimum [to be added once Scenario 3 is completed].

6.1.2 For each comparison, four aspects of the model have been reviewed.

Highway Network Performance

6.1.3 The key network statistics for the full SRTM core study area have been summarised, including vehicle hours, vehicle kilometres, and average speed. Due to the size of the SRTM, the results for the Fareham Borough in isolation have also been provided.

Highway Link Flows, Delays and Capacity Hotspots (Road Traffic Model Module outputs)

6.1.4 The outputs of the Road Traffic Model (RTM) have been analysed with respect to highway link flow, delay and capacity. For clarity, the outputs shown are for those which exceed a given threshold which is specified in the following appropriate paragraphs. The plots included in the report, are an overview of the Fareham Borough – with more localised plots being provided in the relevant appendices.

6.1.5 In addition to the new traffic directly associated with the land use, these plots highlight any re-routing of traffic that may result from localised congestion or redistribution of existing trips. These plots identify where the net change to traffic flow is most pronounced.

Change in Traffic Flow

6.1.6 For the flow difference plots the absolute difference in passenger car units (PCUs) is identified adjacent to the appropriate link. Blue lines identify a reduction against the comparative scenario and pink/red lines an increase. In addition, the scale of the change is represented graphically with the coloured lines of varying bandwidth. Only flow differences of 25 PCUs or greater are displayed in the plots. Plots showing more localised areas are in **Appendix B**.

Highway Delay

6.1.7 The absolute difference in delay in seconds per PCU is identified adjacent to the appropriate link. Blue lines identify a reduction and pink/red lines an increase. In addition, the scale of the change is represented graphically with the coloured lines of varying bandwidth. All delay differences in excess of 5 seconds are displayed in the plots. More localised plots are provided in **Appendix C**.

Capacity Hotspots

6.1.8 In order to identify locations with potential capacity issues as a result of proposed Local Plan allocations, the operating capacity on all links on the approaches to junctions within the Fareham Borough have been assessed. Junction approaches have been reviewed based on the ratio of flow to capacity (RFC) (also known as volume vs capacity or V/C) on each approach – hence identifying links with a high RFC is a proxy for identifying junctions with capacity issues.

6.1.9 The following criteria has been used to identify junctions where future highway schemes may be required, for each scenario tested:

- Links where the RFC is greater than 80% in either AM or PM peak hour.

6.1.10 If the RFC is near, or in excess of 90%, then the junction may be subject to queuing and delays; a value of 90% is normally taken as the practical capacity value for design purposes. A value of >100% means that the junction is forecast over capacity and significant queues and delay could occur.

6.1.11 In peak hours, it is not unexpected that a relatively high number of junctions have an RFC in excess of 80%. The analysis has been refined further to identify the junction potentially impacted the most.

6.1.12 The change in RFC and delay between the scenarios has been calculated to identify locations where the forecast highway network performance deterioration is most pronounced in terms of junction performance. The following criteria has been applied to identify junctions where operational performance worsens either significantly or severely (these criteria have been used on similar SRTM commissions in agreement with HCC):

- 'Significant' increase in RFC is where the RFC is greater than 85% and has increased by more than 5% on any approach arm; and
- 'Severe' increase in RFC is where the RFC is greater than 95% and has increased by more than 10%, or where delay is greater than 120 seconds and has increased by more than 60 seconds on any approach arm.

6.1.13 It should be noted that the above criteria are not the only measure by which junction/ network performance or scale of impact associated to transport growth can be classified. They are considered a starting point (consistent with other SRTM commissions) for comparison of network performance from which subsequent more detailed assessment may refine those locations considered most impacted.

6.1.14 A detailed list of junction performance for each comparison is provided in **Appendix D**.

6.2 2036 Scenario 2 Do Minimum vs. 2036 Scenario 1 Baseline

Highway Network Performance

6.2.1 The performance of the highway network for the AM and PM periods for 2036 Scenario 1 Baseline, and 2036 Scenario 2 Do Minimum is shown in Table 6-1 and Table 6-2 . The highway traffic growth within Fareham, arising from the introduction of the Local Plan allocations, generates a forecast increase in vehicle hours of 8.45% in the AM and 6.90% in the PM. Vehicle kilometres are forecast to increase by approximately 2% in the AM Peak and 2.50% in the PM Peak, whilst average speed is forecast to decrease by 6% and 4% in the AM and PM peaks respectively due to the increased network delay.

6.2.2 The impact on the full Core model area is considered negligible as land use changes between the scenarios are focussed solely on Fareham District.

Table 6-1 AM Highway Model Statistics, 2036 Scenario 2 DM vs. 2036 Scenario 1 Baseline

		BASELINE 2036	DM 2036	DIFFERENCE	% DIFFERENCE
Vehicle Hours	Core Model Area	171,550	173,338	*724*	*1.04%*
	Fareham	18,439	19,998	*631*	*8.45%*
Vehicle kms	Core Model Area	6,887,990	6,906,598	*7,536*	*0.27%*
	Fareham	720,828	735,108	*5,784*	*1.98%*
Average Speed (kph)	Core Model Area	40	40	*-0.31*	*-0.76%*
	Fareham	39	37	*-2.33*	*-5.97%*

Table 6-2 PM Highway Model Statistics, 2036 Scenario 2 DM vs. 2036 Scenario 1 Baseline

		BASELINE 2036	DM 2036	DIFFERENCE	% DIFFERENCE
Vehicle Hours	Core Model Area	181,909	183,610	*626*	*0.94%*
	Fareham	18,473	19,747	*469*	*6.90%*
Vehicle kms	Core Model Area	7,515,034	7,540,217	*9,267*	*0.34%*
	Fareham	785,928	805,044	*7,035*	*2.43%*
Average Speed (kph)	Core Model Area	41	41	*-0.25*	*-0.59%*
	Fareham	43	41	*-1.78*	*-4.18%*

Highway Link Flows, Delays and Capacity Hotspots (RTM Module outputs)

Change in Traffic Flow

6.2.3 Figure 6-1 and Figure 6-2 identify the change in traffic flow in the AM and PM peak hours between the 2036 Scenario 2 Do Minimum and 2036 Scenario 1 Baseline scenarios, at an overall borough level.

6.2.4 The greatest changes in actual flows are south of the Peel Common Roundabout in the 2036 Scenario 2 Do Minimum AM Peak, with increase in flows of up to 246 PCUs in the southbound circulatory arm. There has also been an increase of around 160 PCUs in the southbound direction of the Stubbington Bypass in the same period due to traffic going to the Daedalus Access. An increase of 148 PCUs is experienced in the eastbound approach to the Longfield Avenue / Bishopsfield Road.

6.2.5 Another location with a significant increase of around 115 PCUs in both directions in the AM Peak is Whiteley Lane, with the Whiteley Lane / Barnes Wallis Road roundabout being one of the severely impacted junctions in the 2036 Scenario 2 Do Minimum when compared with the 2036 Scenario 1 Baseline.

6.2.6 In the AM Peak, there has been a significant decrease of 284 PCUs in the Segensworth Road East, on the westbound approach to the Cartwright Drive / Segensworth Road East junction. An increase in flows is experienced along the Cartwright Drive suggesting that some traffic rerouted to this road. There has also been a decrease of 151 PCUs in the A27 Southampton Road near Segensworth Roundabout, likely due to the delays experienced on the westbound approach as will be discussed in the next section.

6.2.7 In the 2036 Scenario 2 Do Minimum PM Peak, the greatest changes in actual flows are along the B3385 Newgate Lane East as a result of traffic leaving the Daedalus Access, with increase in flows of up to 150 PCUs. There has also been a significant increase in flows in the A27 Southampton Road with an increase of 220 PCUs in the southbound direction, near the severely impacted Segensworth Roundabout.

6.2.8 There has been a significant decrease of 131 PCUs in the northbound approach of the Segensworth Roundabout in the PM Peak. There has also been a decrease of 74 PCUs on the High Street southbound approach to the High Street / East Street junction near the Delme Roundabout, with a similar increase on Osborn Road also suggesting rerouting happened.

6.2.9 The Daedalus Access at the border of Fareham and Gosport, located on the B3385 Broom Way / Cherque Way also presents a great increase in flows. There is an increase of 96 PCUs and 300 PCUs on the eastbound approach in the AM and PM Peak, respectively, compared to 2036 Scenario 1 Baseline. Similarly, there is an increase in the southbound approach of 246 PCUs and 74 PCUs in the AM and PM Peak, respectively. This is mainly due to the additional industrial land use of around 65,000 sqm.

6.2.10 In the areas of Locks Heath, Stubbington and Portchester there are no major changes in flow differences between the two scenarios other than where traffic is joining the network from the new housing development sites. The magnitude of flow difference, beyond the zone connectors, is not more than +/-100 PCUs in either direction.

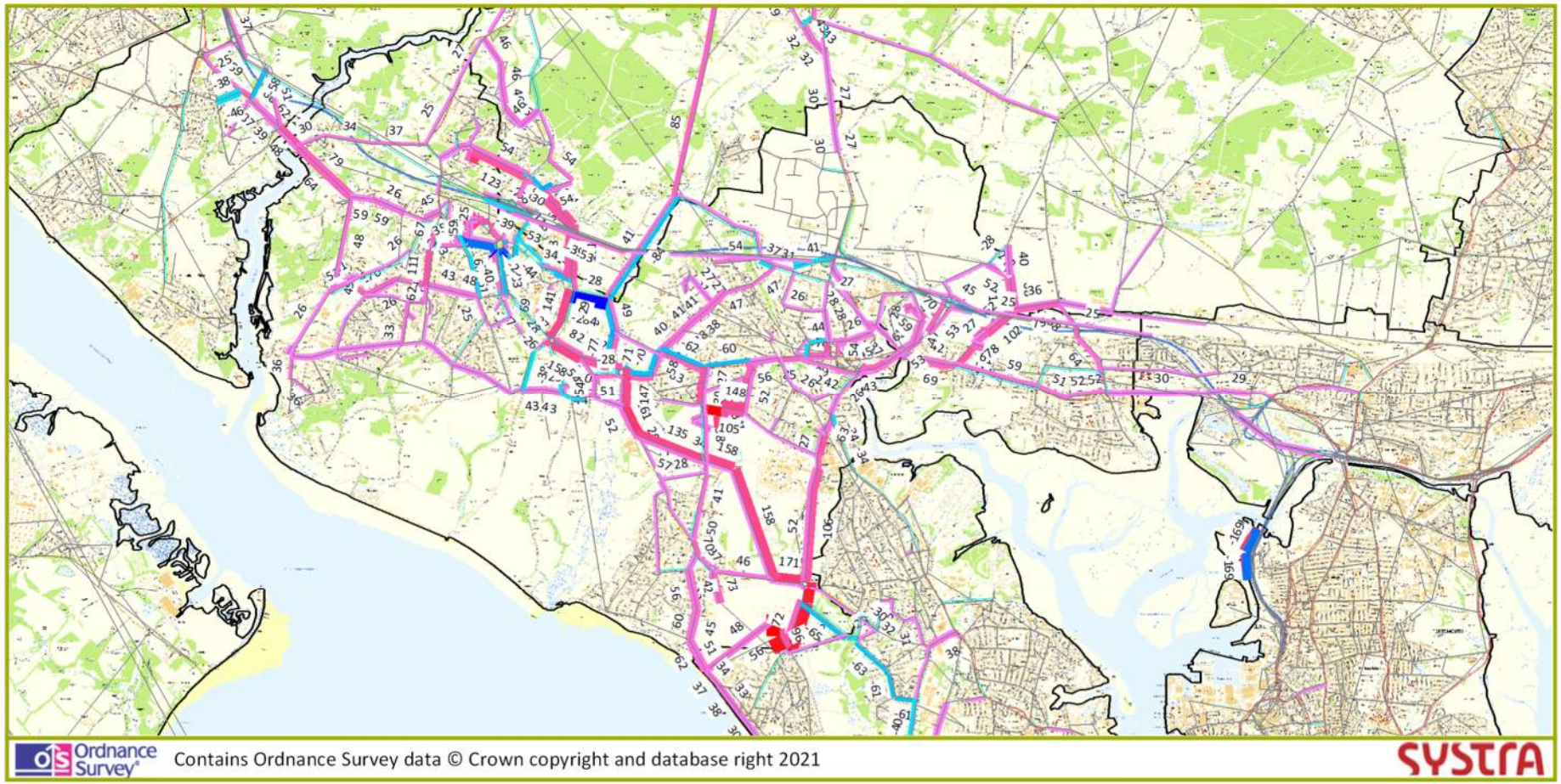


Figure 6-1 Flow Difference – 2036 Scenario 2 DM vs. 2036 Scenario 1 Baseline (AM)

(SRTM Ref: FKP vs. FKN)

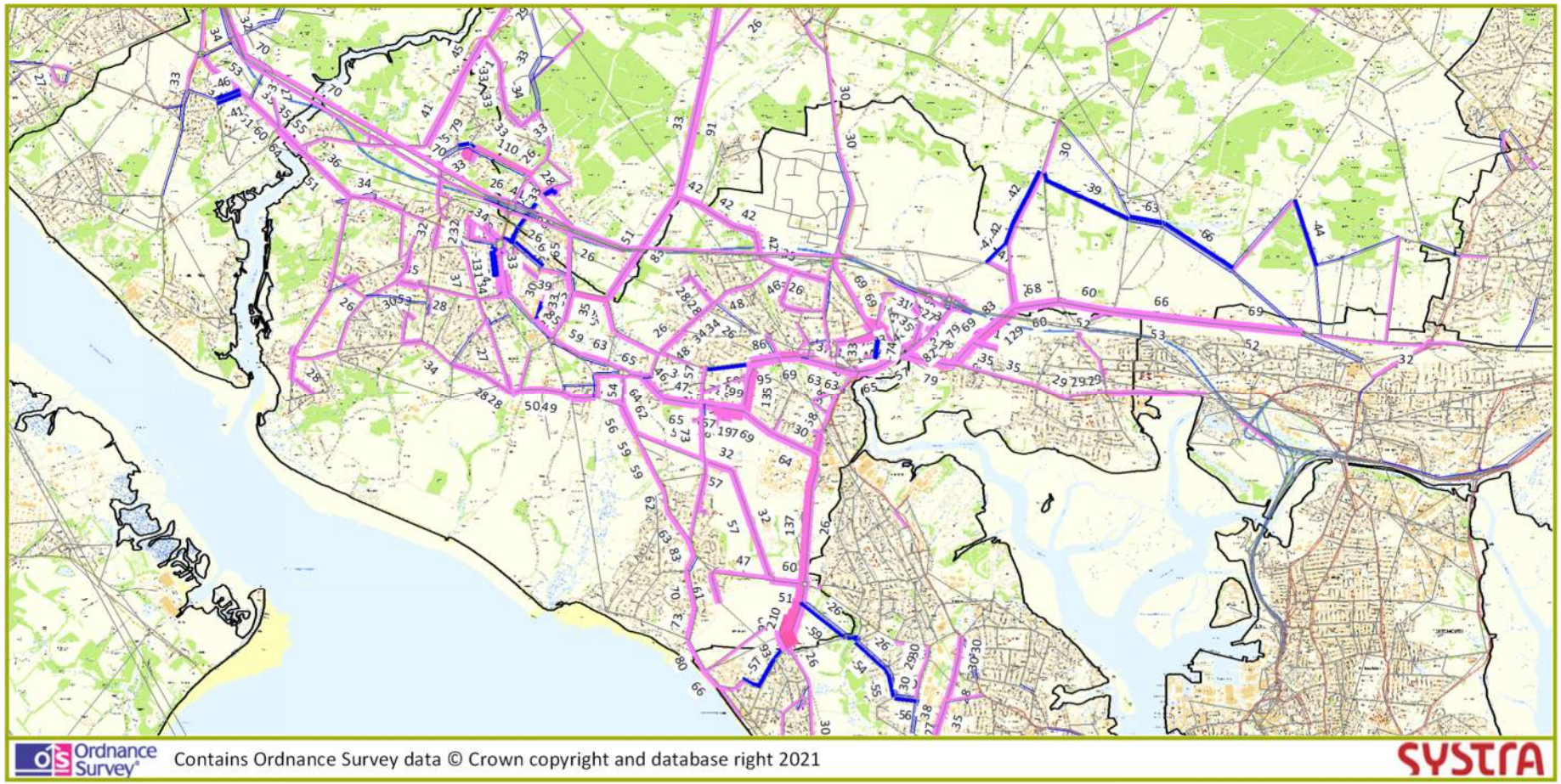


Figure 6-2 Flow Difference – 2036 Scenario 2 DM vs. 2036 Scenario 1 Baseline (PM)

(SRTM Ref: FKP vs. FKN)

Highway Delays

6.2.11 Figure 6-3 and Figure 6-4 display the forecast change in link delay, per PCU, for the AM and PM peak hours between the 2036 Scenario 2 Do Minimum and 2036 Scenario 1 Baseline.

6.2.12 The greatest increases in delays comparing the 2036 Scenario 2 Do Minimum with the 2036 Scenario 1 Baseline are situated on the Segensworth Roundabout in the AM Peak. The increase in delays on the westbound approach from Segensworth Road is 192 seconds, whilst the southbound circulatory arm has an increase in delays of 216 seconds. Another significant increase of 97 seconds is on the westbound approach to the Cartwright Drive / Segensworth Road East junction. Other significant increases in delays of around 60 seconds are located around the Titchfield Gyratory, B3385 Newgate Lane / Longfield Avenue, and on the A3051 Botley Road / Rookery Avenue junctions.

6.2.13 In the 2036 Scenario 2 Do Minimum compared with the 2036 Scenario 1 Baseline PM Peak, the greatest increase in delays happens in the northbound approach of the Warsash Road / Little Abshot Road mini-roundabout. Another great increase in delay of nearly 60 seconds happens in the northbound approach of the A27 The Avenue / Redlands Lane junction. Significant increases in delays of around 45 seconds also happen at the Barnes Wallis Road / Whiteley Lane north mini-roundabout and at the A3051 Botley Road / Yew Tree Drive roundabout.

6.2.14 In the areas of Locks Heath, Stubbington and Portchester there are no major changes in delay differences between the two scenarios other than where discussed previously. The magnitude of delay difference is usually not more than +/-10 seconds in either direction.

6.2.15 Within the Fareham District area the biggest forecast decrease in delay of 48 seconds in the AM Peak is observed on Leafy Lane on the northbound approach to the Leafy Lane / Parkway junction near the M27 J9. There has also been a decrease of 34 seconds on the northbound approach on the A27 Bridge Road / Hunts Pond Road / A3051 Botley Road junction, and a decrease of 18 seconds in the eastbound approach to the A27 The Avenue / Catisfield Road junction. There were no significant decreases in delays in the PM Peak. These decreases in delays are likely due to traffic rerouting in the highway network as there have been increases in actual flows on neighbouring routes.

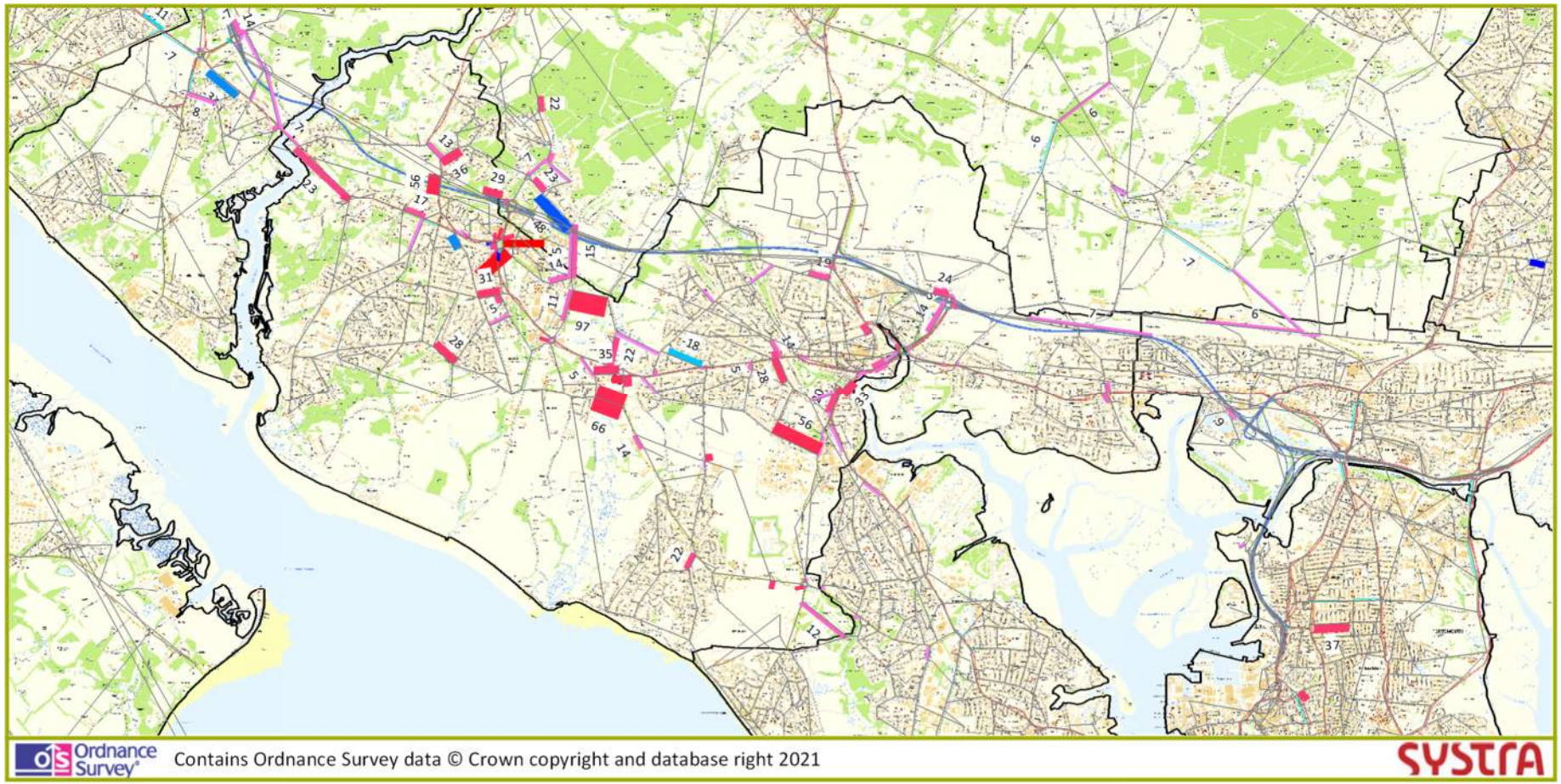


Figure 6-3 Delay Difference – 2036 Scenario 2 DM vs. 2036 Scenario 1 Baseline (AM)

(SRTM Ref: FKP vs. FKN)

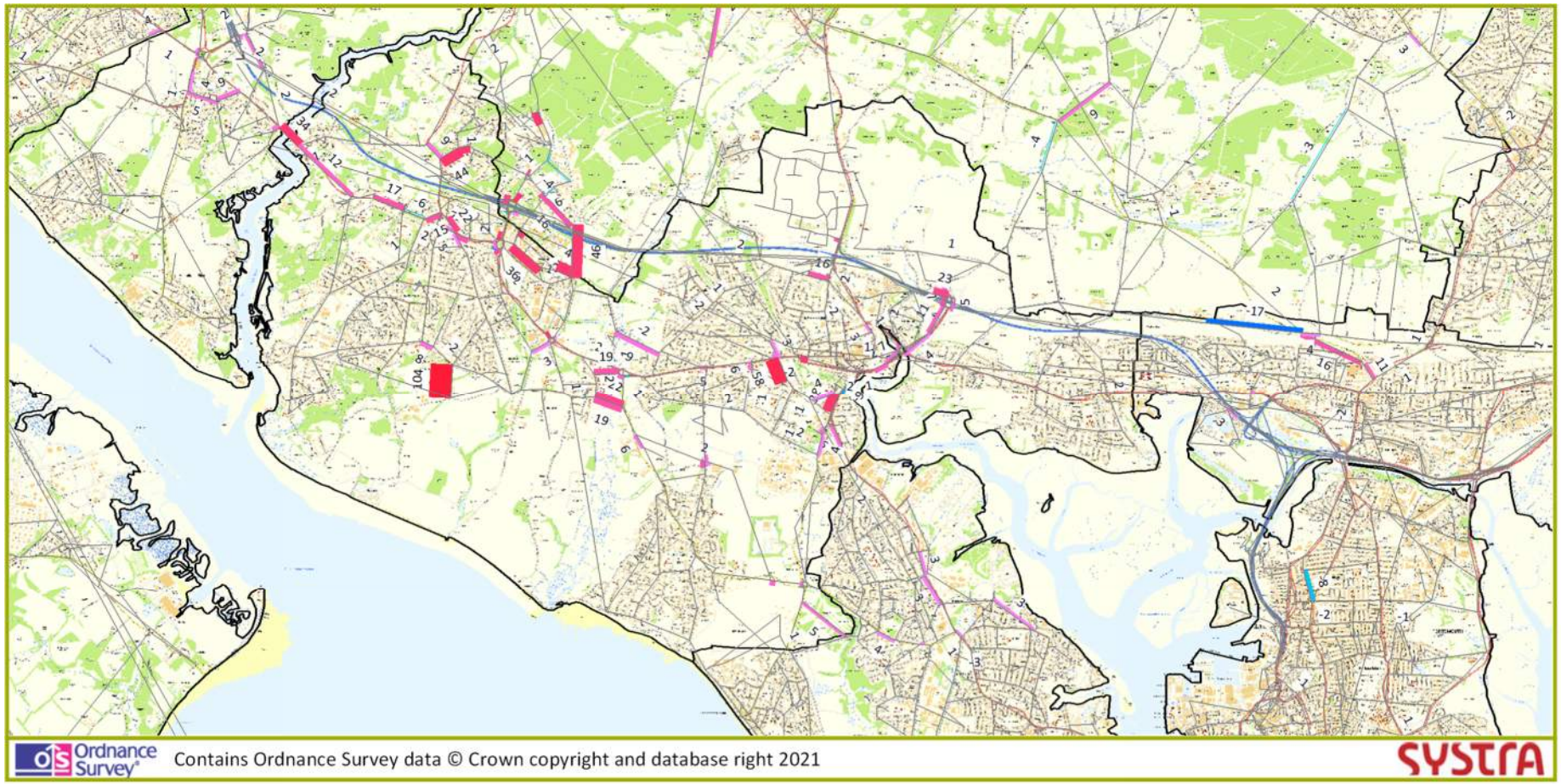


Figure 6-4 Delay Difference – 2036 Scenario 2 DM vs. 2036 Scenario 1 Baseline (PM)

(SRTM Ref: FKP vs. FKN)

Capacity Hotspots

6.2.16 Figure 6-5 and Figure 6-6 display the junctions forecast to have an RFC greater than 80% in the 2036 Scenario 1 Baseline and 2036 Scenario 2 Do Minimum respectively in any time period. 62 junctions meet this criteria in the 2036 Scenario 1 Baseline, with the 2036 Scenario 2 Do Minimum forecast to have 65 junctions meeting the criteria.

6.2.17 Junction 55 (Sweethills Crescent / Yew Tre Drive Roundabout) had RFC greater than 80% in the 2036 Scenario 1 Baseline when compared to the 2036 Scenario 2 Do Minimum, whilst 4 junctions (Junctions 63-66) had RFC greater than 80% in the 2036 Scenario 2 Do Minimum compared to the 2036 Scenario 1 Baseline, these are:

- Junction 63: Lockswood Road / Centre Way;
- Junction 64: Barnes Wallis Road / Brunel Way;
- Junction 65: Highlands Road / Fareham Park Road;
- Junction 66: Lower Church Road / Hunts Pond Road Roundabout (northern mini roundabout).

6.2.18 Further to the analysis identifying those junctions with V/C in excess of 80% in the 2036 Scenario 1 Baseline and 2036 Scenario 2 Do Minimum scenarios, we have applied the threshold detailed in Section 6.1.12 to identify those junctions within Fareham District most impacted by highway growth between both scenarios.

6.2.19 Applying the criteria set-out in Section 6.1.12, there are a total of 8 junctions that meet the 'severe' change criteria and 11 are classified as 'significant' as summarised in the locations shown in Figure 6-7, and Table 6-3.

6.2.20 It can be seen that of those junctions forecast to experience significant increases in RFC or delays, many of them are situated along the A27 Southampton Road and A27 Bridge Road.

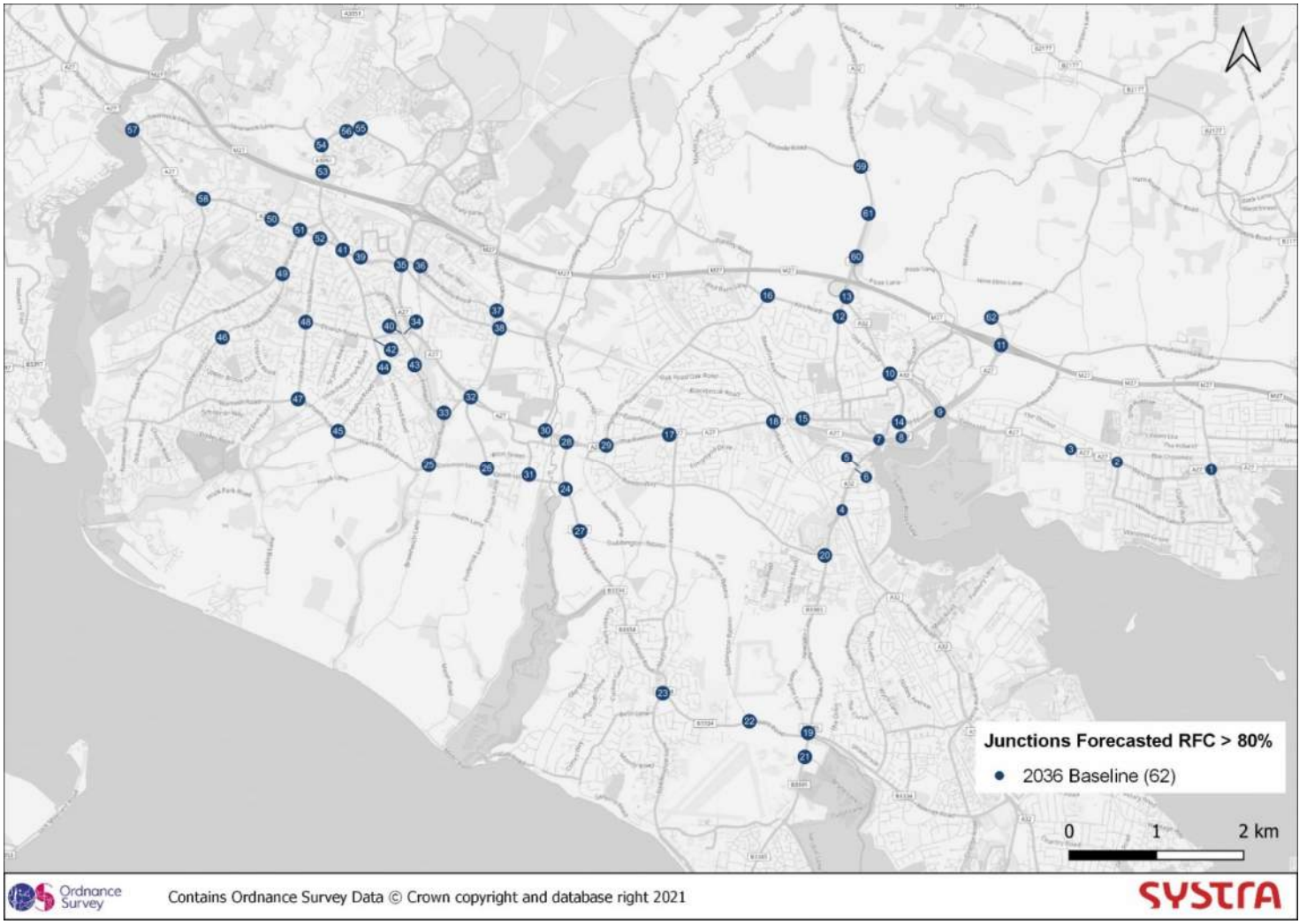


Figure 6-5 Junctions Forecast to have an RFC >80% in 2036 Scenario 1 Baseline

(SRTM Ref: FKN)

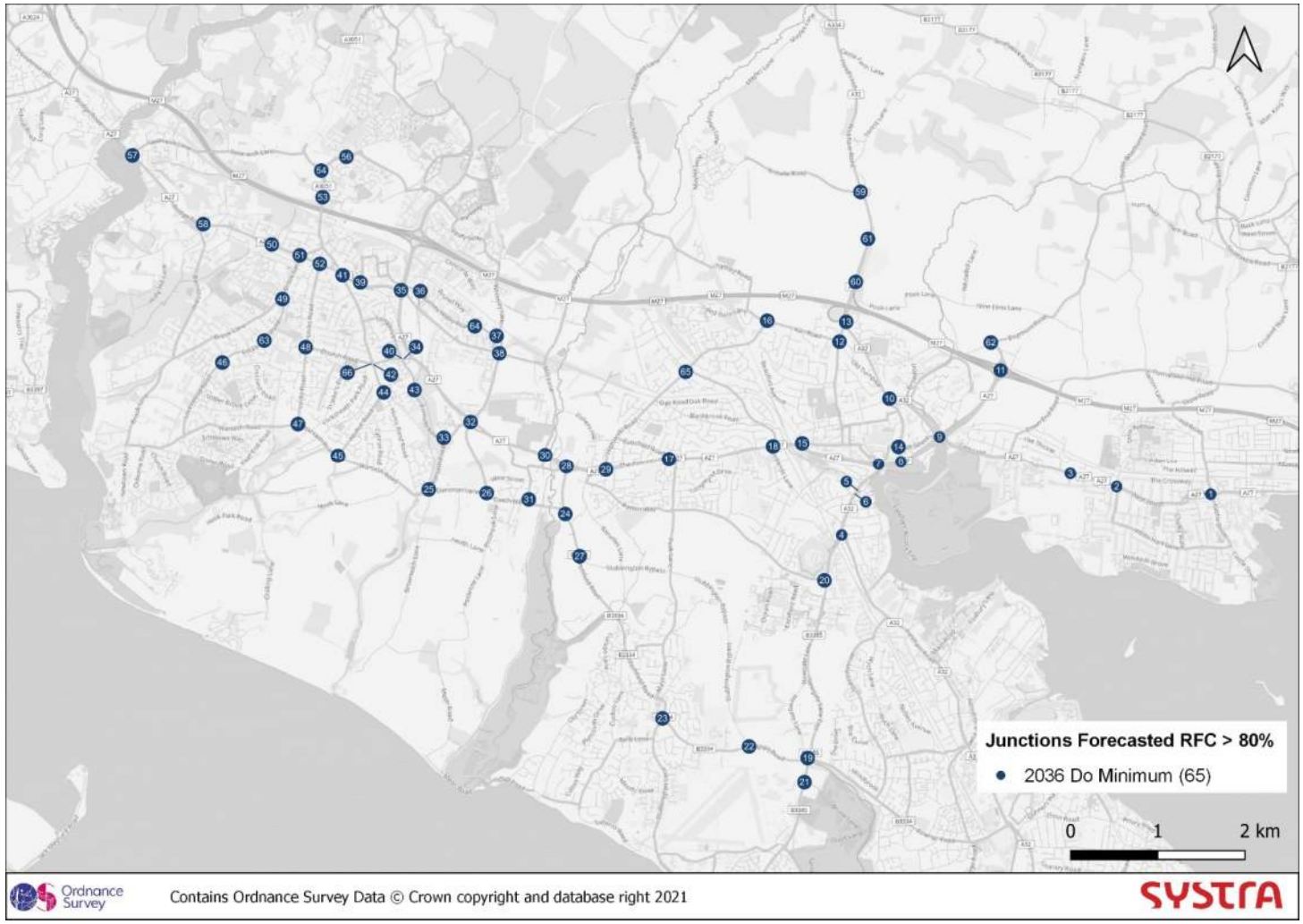


Figure 6-6 Junctions Forecast to have an RFC >80% in 2036 Scenario 2 DM

(SRTM Ref: FKP)

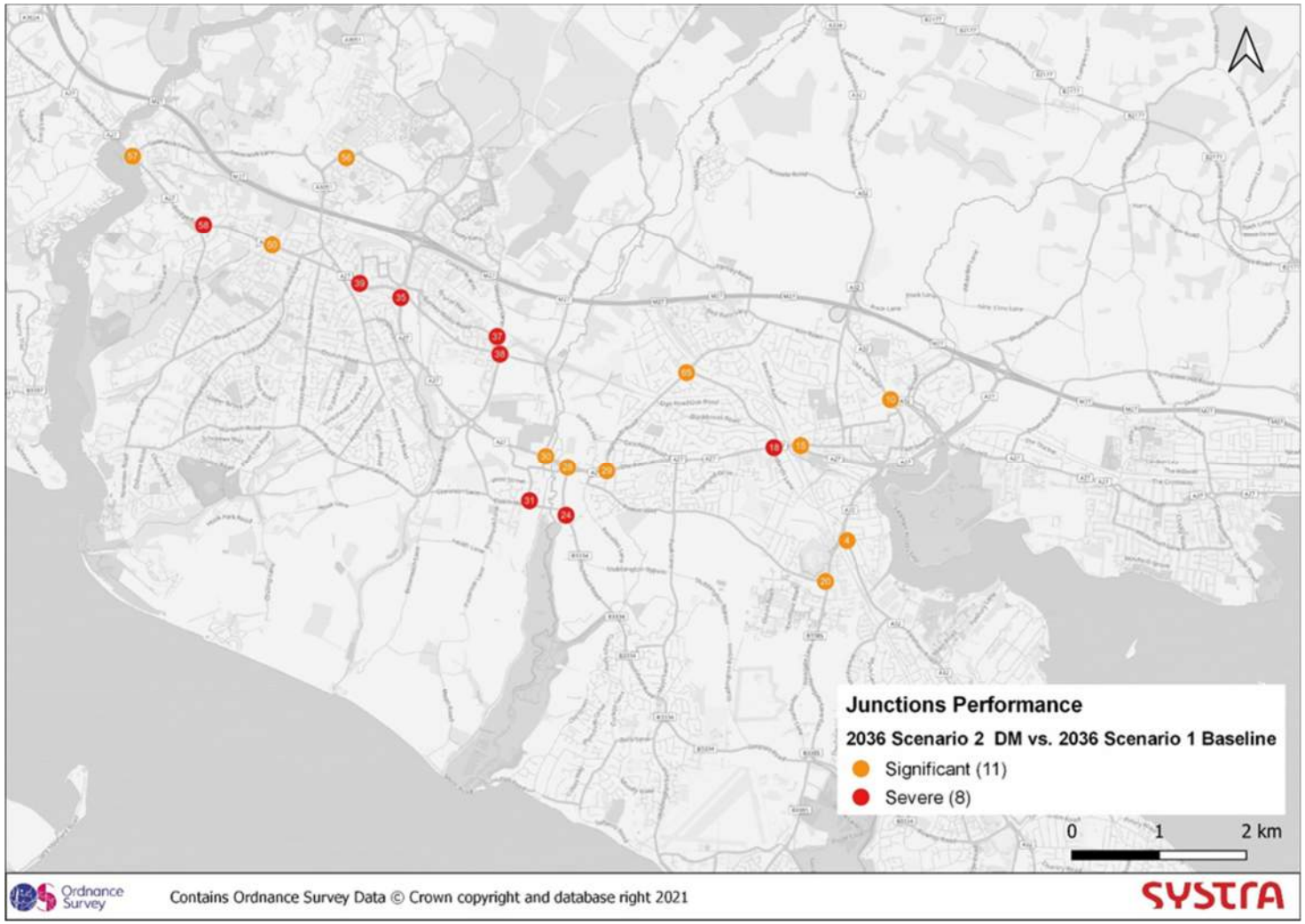


Figure 6-7 2036 Do Minimum vs 2036 Baseline Impacted Junction Locations

(SRTM Ref: FKP-FKN)

Table 6-3 2036 Do Minimum vs 2036 Baseline Impacted Junction List

ID	JUNCTION NAME	'SIGNIFICANTLY' IMPACTED	'SEVERELY' IMPACTED
4	A32 Gosport Road / Newgate Lane	Y	
10	A32 / High Street / Wallington Way	Y	
15	Station Roundabout	Y	
18	A27 The Avenue / Redlands Lane / Gudge Heath Lane		Y
20	Longfield Avenue / Newgate Lane	Y	
24	B3334 Titchfield Road / Bridge Street		Y
28	Titchfield Gyratory	Y	
29	A27 The Avenue / Highlands Road	Y	
30	A27 Southampton Road / Mill Lane	Y	
31	Coach Hill/South Street/Bridge Street		Y
35	Segensworth Roundabout		Y
37	Barnes Wallis Road / Whiteley Lane / Cartwright Drive		Y
38	Segensworth Road East/Carwright Drive		Y
39	Southampton Road / Telford Way Roundabout		Y
50	A27 Bridge Road / Coldeast Way	Y	
56	Sweethills Crescent / Yew Tree Drive	Y	
57	Bridge Road/Swanwick Lane	Y	
58	A27 Bridge Road/Barnes Lane		Y
65	Highlands Road / Fareham Park Road	Y	

6.3 2036 Scenario 3 Do Something vs. 2036 Scenario 2 Do Minimum

Highway Network Performance

6.3.1 [Text to follow at a later date once Scenario 3 completed].

Highway Link Flows, Delays and Capacity Hotspots (RTM Module outputs)

6.3.2 [Text to follow at a later date once Scenario 3 completed].

Change in Traffic Flow and Delay

6.3.3 [Text to follow at a later date once Scenario 3 completed].

7. SUMMARY AND CONCLUSIONS

7.1.1 Solent Transport's SRTM has been utilised to test three scenarios to help inform the development and appraisal of the update to Fareham's Local Plan:

- Scenario 1 – 2036 Baseline, no Fareham Local Plan development except for committed sites.
- Scenario 2 – 2036 Do Minimum, full Fareham Local Plan development without transport mitigation.
- Scenario 3 – 2036 Do Something, full Fareham Local Plan development with transport mitigation. [outputs to be included once Scenario 3 completed]

7.2 2036 Scenario 1 Baseline

7.2.1 The Baseline scenario includes residential (approximately 5,700 dwellings) and employment growth based on committed sites within the Fareham Borough, and any committed highway infrastructure schemes up to a forecast year of 2036. Outside of Fareham, growth continues in accordance with adopted Local Plans and TEMPro v7.2. This scenario confirms the forecast transport network performance without the proposed Fareham Local Plan allocation site growth.

7.2.2 Due to the general increase in traffic flows within the Fareham Borough though to 2036, a total of 62 junctions within Fareham district are forecast to operate with an RFC greater than 80% in the 2036 Baseline Scenario.

7.3 2036 Scenario 2 Do Minimum

7.3.1 The 2036 Do Minimum scenarios build off the Baseline, by including the proposed Fareham Local Plan allocations for residential and employment development. Growth outside of the Borough is unchanged from the Baseline. An additional approximate 5,600 dwellings have been included within the Do Minimum scenario over and above the Baseline.

7.3.2 The highway network tested within the Baseline and Do Minimum scenario remain consistent to assess the impact of the Local Plan allocations without any new mitigation.

7.3.3 Based on the SRTM modelling the majority of links within the district are forecast to experience changes no greater than +/-100 PCUs in either direction. Some exceptions to which being Peel Common roundabout, Stubbington Bypass, Longfield Avenue / Bishopsfield Road, and the Daedalus Access on the B3385 Broom Way / Cherque Way.

7.3.4 A total of 65 junctions within Fareham district are forecast to operate with an RFC greater than 80%. This is an increase of 3 junctions across the district in comparison to the 2036 Baseline. Of those 65 junctions, it is forecast that 11 will experience 'significant' impact and 8 junctions 'severe' impact in comparison to the 2036 Baseline.

7.3.5 The list of 19 junctions forecast with either 'significant' or 'severe' impact were recommended to form the starting point for more detailed review and development of potential mitigation measures.

7.4 2036 Scenario 3 Do Something

7.4.1 [Text to follow at a later date once Scenario 3 completed].

Appendix A – SRTM Committed Schemes

DISTRICT	SCHEME	2026	2031	2036	2041
Eastleigh	Botley Road / Burnett's Lane	✓	✓	✓	✓
Eastleigh	Allington Lane / B3037 Fair Oak Road	✓	✓	✓	✓
Eastleigh	A335 Leigh Road / Passfield Avenue	✓	✓	✓	✓
Eastleigh	Sundays Hill Bypass	✓	✓	✓	✓
Eastleigh	St John's Link Road	✓	✓	✓	✓
Eastleigh	Chestnut Avenue / Stoneham Lane Roundabout	✓	✓	✓	✓
Eastleigh	Chestnut Avenue / Passfield Avenue	✓	✓	✓	✓
Eastleigh	Burnett's Lane / B3037 Fair Oak Road / Sandy Lane	✓	✓	✓	✓
Eastleigh	Botley Bypass	✓	✓	✓	✓
Eastleigh	North Stoneham Park Development Access	✓	✓	✓	✓
Eastleigh	B3037 Mortimers Lane / B3354 Winchester Road Junction	✓	✓	✓	✓
Eastleigh	B3037 Eastleigh Road / B3354 Botley Road / Stubbington Way Junction	✓	✓	✓	✓
Eastleigh	Boorley Green development access	✓	✓	✓	✓
Eastleigh	Boorley Gardens development access	✓	✓	✓	✓
Eastleigh	Maypole Roundabout Hedge End	✓	✓	✓	✓
Eastleigh	M27 J7 improvements	✓	✓	✓	✓
Eastleigh	Winchester Road / Eastleigh Road / Stubbington Way junction, Fair Oak	✓	✓	✓	✓
Fareham	St Margaret's Rbt.	✓	✓	✓	✓
Fareham	Peel Common Rbt.	✓	✓	✓	✓
Fareham	Gudge Heath Lane	✓	✓	✓	✓
Fareham	A27 Southampton Road, Fareham	✓	✓	✓	✓
Fareham	Newgate Lane South, Fareham	✓	✓	✓	✓
Fareham	Station Roundabout (Avenue approach)	✓	✓	✓	✓
Fareham	Stubbington Bypass	✓	✓	✓	✓
Fareham	A27 Downend Road, Porchester	✓	✓	✓	✓
Fareham	M27 J10		✓	✓	✓
Fareham	Welborne Development		✓	✓	✓
Fareham, Gosport	Stubbington Bypass mitigation measures	✓	✓	✓	✓
Fareham, Winchester	M27 J9 and Parkway South roundabout	✓	✓	✓	✓

DISTRICT	SCHEME	2026	2031	2036	2041
Gosport	Privett Road / Bury Road junction	✓	✓	✓	✓
Gosport	Rowner Road / Carisbrooke Road junction	✓	✓	✓	✓
North Whiteley	Whiteley Way Extension and speed limits	✓	✓	✓	✓
Havant	Hulbert Rd/Purbook Way Jn (Dunsbury Hill)	✓	✓	✓	✓
Havant	Dunsbury Hill Farm Business Park	✓	✓	✓	✓
Havant	A3(M) J3	✓	✓	✓	✓
Havant	Purbook Way / College Road	✓	✓	✓	✓
Havant	Interbridges	✓	✓	✓	✓
Havant	Purbrook Way / Stakes Hill Road	✓	✓	✓	✓
Havant	Purbrook Way f. Stakes Hill Rd to College Rd	✓	✓	✓	✓
Havant	Hulbert Rd / Frendstaple Rd / Tempest Ave	✓	✓	✓	✓
Havant	Harts Farm Way / Southmoor Lane	✓	✓	✓	✓
Havant	Barncroft Way New Road	✓	✓	✓	✓
Havant	Ladybridge Roundabout	✓	✓	✓	✓
Havant	A259 Havant Road east of A27 Warblington Junction	✓	✓	✓	✓
Havant	A27 / A259 Warblington Junction	✓	✓	✓	✓
Havant	Eagle Avenue Wecock Farm mini roundabout	✓	✓	✓	✓
Havant	Bartons Road / Horndean Road Junction	✓	✓	✓	✓
Havant	Bartons Road right turn	✓	✓	✓	✓
Havant	Hambledon Road / Aston Road junction, Waterlooville	✓	✓	✓	✓
Havant	Park Road South / Solent Road junction	✓	✓	✓	✓
Havant	Park Road South / Elm Road / Parkway junction	✓	✓	✓	✓
Havant, Portsmouth	Hayling Island ferry service	✓	✓	✓	✓
Isle of Wight	Mill Street, Newport	✓	✓	✓	✓
Isle of Wight	St. Georges Way, Newport	✓	✓	✓	✓
Isle of Wight	Forest Road / Parkhurst Rd, Newport	✓	✓	✓	✓
Isle of Wight	Coppins Bridge - St Georges Approach	✓	✓	✓	✓
Isle of Wight	Pennyfeathers development network changes		✓	✓	✓
Portsmouth	Portsmouth Transforming Cities Fund schemes (TCF Core £56m) detailed below.	✓	✓	✓	✓
	- Spur Road Roundabout	✓	✓	✓	✓
	- Portsbridge Junctions	✓	✓	✓	✓
	- Lake Road	✓	✓	✓	✓

DISTRICT	SCHEME	2026	2031	2036	2041
	- Cirty Centre North	✓	✓	✓	✓
	- City Centre South	✓	✓	✓	✓
	- Rudmore Roundabout	✓	✓	✓	✓
	- Local Access plan - Leigh Park	✓	✓	✓	✓
	- Gosport Interchange	✓	✓	✓	✓
	- Havant Park Road South	✓	✓	✓	✓
	- Portchester Precinct toucan crossing + e/b bus stop	✓	✓	✓	✓
	- Delme Roundabout	✓	✓	✓	✓
	- Ladybridge Roundabout	✓	✓	✓	✓
	- Rusty Cutter Roundabout Bedhampton	✓	✓	✓	✓
	- Walk 80	✓	✓	✓	✓
	- Cycle 301	✓	✓	✓	✓
	- Cycle 801	✓	✓	✓	✓
	- Ryde Interchange	✓	✓	✓	✓
	- Fareham-Welborne	✓	✓	✓	✓
	- The Hard to Paulsgrove	✓	✓	✓	✓
	- Fareham - Portsmouth	✓	✓	✓	✓
	- Southampton - Portsmouth	✓	✓	✓	✓
	- Gosport- Fareham	✓	✓	✓	✓
	- Wecock Farm - University (Waterlooville Corridor)	✓	✓	✓	✓
	- Horndean - Clarence Pier (Waterlooville Corridor)	✓	✓	✓	✓
	- Southsea - Paulsgrove	✓	✓	✓	✓
	- Havant - The Hard	✓	✓	✓	✓
	- Leigh Park - The Hard (Havant Corridor)	✓	✓	✓	✓
	- Flansham Park - Portsmouth	✓	✓	✓	✓
	- Portsmouth PnR1	✓	✓	✓	✓
Portsmouth	Havant Road/Eastern Road	✓	✓	✓	✓
Portsmouth	The Hard, Queen St, Wickham St, Clock St	✓	✓	✓	✓
Portsmouth	Fratton Way	✓	✓	✓	✓
Portsmouth	Isambard Brunel Road	✓	✓	✓	✓
Portsmouth	Anglesea Road / Park Road	✓	✓	✓	✓
Portsmouth	A27 Souhtampton Road Compass Road Paulsgrove	✓	✓	✓	✓

DISTRICT	SCHEME	2026	2031	2036	2041
Portsmouth	A27 Southampton Road Port Way	✓	✓	✓	✓
Portsmouth	Aldi Store Access, Southampton Road Paulsgrove	✓	✓	✓	✓
Portsmouth	Anglesea Road, Queens Street, Alfred Road, Bishop Crispian Way	✓	✓	✓	✓
Portsmouth	Eastney Road, Bransbury Road, Devonshire Avenue	✓	✓	✓	✓
Portsmouth	Fratton Park Lake Road	✓	✓	✓	✓
Portsmouth	Goldsmith Avenue Milton Road Eastney Road	✓	✓	✓	✓
Portsmouth	Goldsmith Avenue Priory Crescent Winter Road	✓	✓	✓	✓
Portsmouth	Kingston Road Kingston Crescent - North End	✓	✓	✓	✓
Portsmouth	M275 A3 A27, Marriott Junction	✓	✓	✓	✓
Portsmouth	Market Way Alfred Road Unicorn Road	✓	✓	✓	✓
Portsmouth	Mile End Road Trafalgar Link Road	✓	✓	✓	✓
Portsmouth	Milton Road Velder Avenue	✓	✓	✓	✓
Portsmouth	Milton Rd/ Priory Crescent	✓	✓	✓	✓
Portsmouth	Fratton Road / Arundle Street junction	✓	✓	✓	✓
Portsmouth	Copnor Road / Norway Road junction	✓	✓	✓	✓
Portsmouth	London Road / Southwick Hill Road junction	✓	✓	✓	✓
Portsmouth	Copnor Road / Burrfields Road / Stubbington Avenue junction	✓	✓	✓	✓
Portsmouth	Fratton Road / Lake Road / St Mary's Road junction	✓	✓	✓	✓
Portsmouth	Eastern Road / Havant Road / Farlington Avenue junction	✓	✓	✓	✓
Southampton	Southampton Transforming Cities Fund Schemes (TCF DS Low) detailed below:	✓	✓	✓	✓
	- Scheme B1 (inc. Mountbatten Way Bus Lane (P&R), Portswood Rd Bus Priority Measures)	✓	✓	✓	✓
	- Scheme B10 (inc. New Express service from Fawley; St Mary's Road at RSH; Bevois Valley Road at Aldi; Portswood Road at Broadway; Portswood Road at Sirdar Rd; High Road at Fleming Road; Bishopstoke Road at Chickenhall Lane; Bishopstoke Road at Dulton Lane; Bishopstoke Road at Rugby Club)	✓	✓	✓	✓
	- Scheme B11 (inc. Totton Town Centre - Junction Road - Bus Priority; Improvements to Blue Star 2 bus stops)	✓	✓	✓	✓
	- Scheme B12 (inc. Blue Star 2 'super stops'; Millbrook Road West/Paynes Road; Millbrook Road West/Third Ave; Redbridge Road/Parkside Ave; Commercial Road Totton at McDonalds; A35 Totton Bypass at Rumbridge St)	✓	✓	✓	✓
	- Scheme B13 (inc. Romsey Road/Wimpson Lane; Lordshill Way o/s Fair Isle School; Lordshill Way at Sainsbury's; Lords Hill Way at Coxford; Coxford Road at Lords Hill Way)	✓	✓	✓	✓
	- Scheme B14 (inc. Thomas Lewis Way/St Denys Road)	✓	✓	✓	✓
	- Scheme B15 (inc. A3035 St Denys / Priory Road)	✓	✓	✓	✓
	- Scheme B15(L) (inc. Blue Star 3 'super stops')	✓	✓	✓	✓

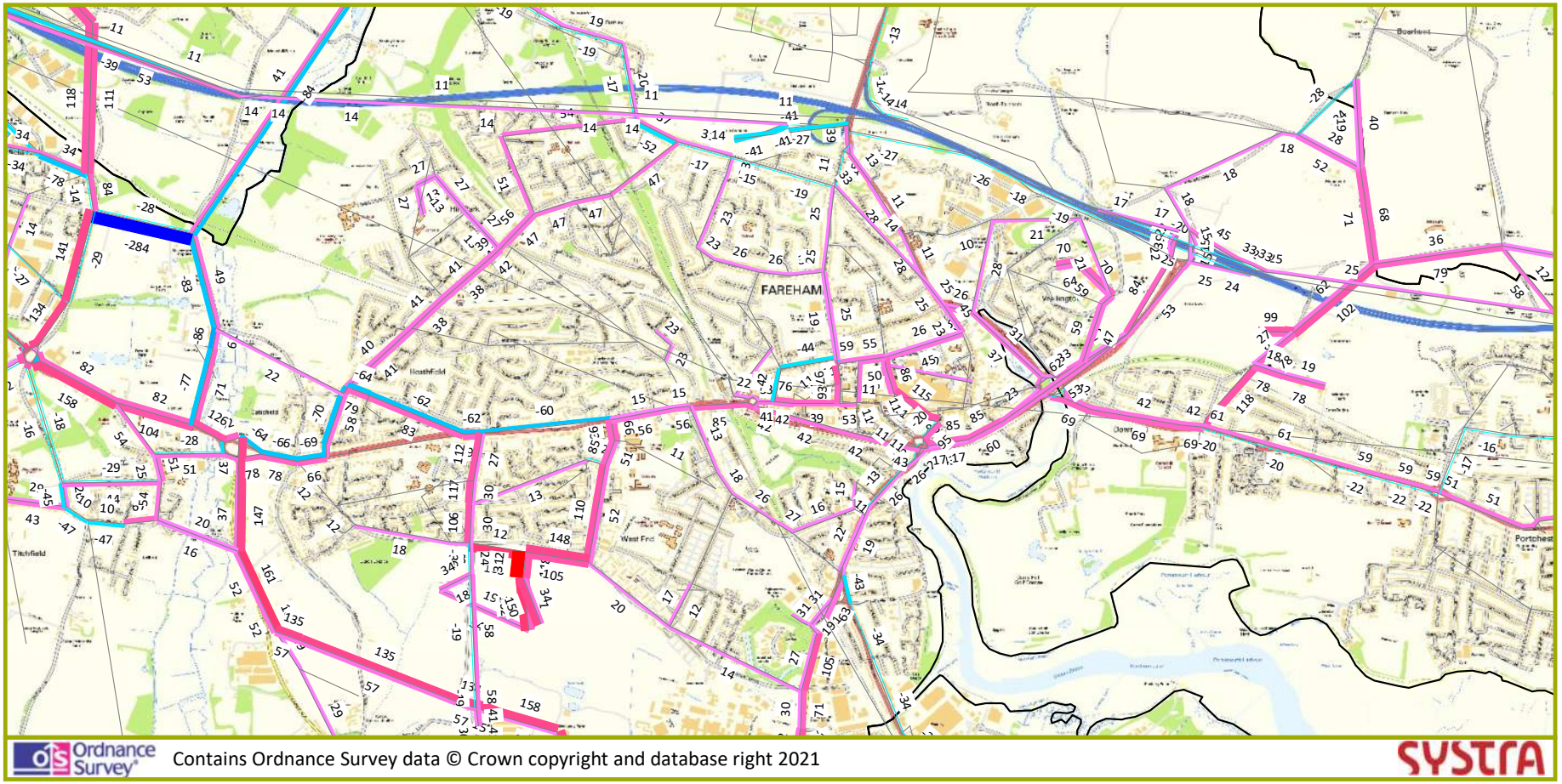
DISTRICT	SCHEME	2026	2031	2036	2041
	- Scheme B16 (inc. A3035 St Denys Bus Priority Corridor - St Denys Bus Stops)	✓	✓	✓	✓
	- Scheme B17 (inc. Swaythling Station Travel Hub; Northam Road at Britannia Road; Northam Road at Princes Street; Bitterne Road W at Quayside; Bitterne Road W at Rampart; Bitterne Road W at Garfield Rd; West End Road at Sainsbury's; Bursledon Road at North East Rd; A27 at Station Road; A27 at Long Lane; Portsmouth Road at Botley Road; Portsmouth Road at Butts Road)	✓	✓	✓	✓
	- Scheme B18 (inc. Langhorn Road / Burgess Road Signalisation)	✓	✓	✓	✓
	- Scheme B2 (inc. Langhorn Rd/ Woodmill Lane / Portswood Road Bus Priority Junction)	✓	✓	✓	✓
	- Scheme B2 (M) (inc. Bargain Farm P&R)	✓	✓	✓	✓
	- Scheme B3 (inc. A326/A35 Rushington Roundabout; High Road Swaythling)	✓	✓	✓	✓
	- Scheme B4 (inc. A33 Millbrook Road West//Regents Park Bus Lanes & C-ITS; Fair Oak-Eastleigh-Southampton Bus Priority - SCC parts)	✓	✓	✓	✓
	- Scheme B5 (inc. A33/A35 Millbrook Roundabout Bus Lanes & C-ITS; Wessex Lane Halls - Bus interchange hub improvements)	✓	✓	✓	✓
	- Scheme B6 (inc. A326 Marchwood By-Pass Northbound Bus Only Section; Southampton Airport Parkway Travel Hub; Hamble Station Interchange improvements)	✓	✓	✓	✓
	- Scheme B7 (inc. Southampton Airport Parkway - Park & Rail)	✓	✓	✓	✓
	- Scheme B8 (inc. Improvements to Blue Star 8, 9, 10 & 11 bus stops; A3035 St Denys Bus Priority Corridor in Portswood-Townhill)	✓	✓	✓	✓
	- Scheme B9 (inc. Fawley service 'Super Stops'; Fair Oak-Eastleigh-Southampton Bus Priority - HCC parts - Junction Changes; Winchester Road at ASDA)	✓	✓	✓	✓
	- Scheme B9 (L) (inc. A3025 Portsmouth Road Bus Priority Corridor)	✓	✓	✓	✓
	- Scheme C1 (inc. SCN6 Inner Avenue Cycle Quietways; SCN3 - Northam Road)	✓	✓	✓	✓
	- Scheme C11 (inc. Woolston Active Travel Zone)	✓	✓	✓	✓
	- Scheme C14 (inc. A27 Providence Hill-Bridge Road Cycle Route)	✓	✓	✓	✓
	- Scheme C15 (inc. The Avenue Segregated Cycle Lanes)	✓	✓	✓	✓
	- Scheme C16 (inc. The Avenue/Burgess Road Junction Alterations)	✓	✓	✓	✓
	- Scheme C2 (inc. SCN6 Bevios Valley Road)	✓	✓	✓	✓
	- Scheme C3 (inc. SCN1 A35 Redbridge Causeway; SCN6 Portswood Road)	✓	✓	✓	✓
	- Scheme C4 (inc. SCN6 Wide Lane-Airport-Eastleigh)	✓	✓	✓	✓
	- Scheme C5 (inc. SCN5 Winchester Road / Basset Avenue Roundabout - Cycle Improvements)	✓	✓	✓	✓
	- Scheme C6 (inc. St Denys Active Travel Zone; SCN3 - Burlsedon Road in Windhover-Botley Rd)	✓	✓	✓	✓
	- Scheme C7 (inc. Stoneham Lane Cycle Improvements)	✓	✓	✓	✓
	- Scheme C8 (inc. SCN1 Marchwood-Hythe-Fawley Cycle Route)	✓	✓	✓	✓
	- Scheme C9 (inc. SCN1 West Quay Road)	✓	✓	✓	✓
	- Scheme CC1 (M) (inc. A33/A3024 Six Dials Junction)	✓	✓	✓	✓

DISTRICT	SCHEME	2026	2031	2036	2041
	- Scheme CC3a (L) (inc. A3024 Northern Inner Ring Road Junctions - CITS & Bus Priority)	✓	✓	✓	✓
	- Scheme CC3b (inc. A3024 Northern Inner Ring Road Junctions - Civic Centre Junction)	✓	✓	✓	✓
	- Scheme CC3c (inc. A3024 Northern Inner Ring Road Junctions - Closure of Devonshire Road)	✓	✓	✓	✓
	- Scheme CC3d (inc. A3024 Northern Inner Ring Road Junctions - Charlotte Place Roundabout)	✓	✓	✓	✓
	- Scheme CC3f (inc. A3024 Northern Inner Ring Road - East Park Terrace)	✓	✓	✓	✓
	- Scheme CC4a (inc. Albion Place Bus Hubs)	✓	✓	✓	✓
	- Scheme CC4b (inc. Portland Terrace - Bus only section)	✓	✓	✓	✓
	- Scheme I1 (inc. A35-A33 Smart Technology Corridor; A335 Thomas Lewis Way Smart Technology Corridor)	✓	✓	✓	✓
	- Scheme I2 (inc. St Denys-Thomas Lewis Way Junction)	✓	✓	✓	✓
	- Scheme LB (inc. Service Changes in X4 - Southampton - Fareham; Nick Richardson City Centre Reorginisation)	✓	✓	✓	✓
	- Scheme M1 (inc. Portswood Local Mobility Hub - Westridge Road car park just off Portswood Road)	✓	✓	✓	✓
	- Scheme M2 (inc. Eastleigh Local Mobility Hub)	✓	✓	✓	✓
	- Scheme M5 (inc. Woolston local Mobility Hub. Location - land at Itchen Bridge/Portsmouth Road (former SCC Housing Office and car park))	✓	✓	✓	✓
	- Scheme RT (inc. Gosport - Fareham - Portsmouth (via Elson))	✓	✓	✓	✓
	- Scheme STN (M) (inc. Central Station Interchange)	✓	✓	✓	✓
Southampton	Commercial Rd/Morris Rd/Wyndham Place	✓	✓	✓	✓
Southampton	M271 Redbridge Rbt. (RIS)	✓	✓	✓	✓
Southampton	A33 W Approach/Redbridge Rd/Millbrook Rd W	✓	✓	✓	✓
Southampton	Woolston - Victoria Rd / Woodley Rd	✓	✓	✓	✓
Southampton	A3024 Improvements	✓	✓	✓	✓
Southampton	M27 J8	✓	✓	✓	✓
Southampton	Windhover Roundabout	✓	✓	✓	✓
Southampton	Swaythling A335 Junctions scheme	✓	✓	✓	✓
Southampton	Woolston Itchin Riverside development	✓	✓	✓	✓
Southampton	Wide Lane	✓	✓	✓	✓
Southampton	Inner Avenue Southbound	✓	✓	✓	✓
Southampton	A33 Millbrook Roundabout	✓	✓	✓	✓
Southampton	A33 Millbrook Road West / Regents Park Road	✓	✓	✓	✓
Southampton	A3057 Shirley High Street / Park Street	✓	✓	✓	✓
Southampton	Brownhill Way / Frogmore Lane	✓	✓	✓	✓
Southampton	Third Avenue	✓	✓	✓	✓

DISTRICT	SCHEME	2026	2031	2036	2041
Southampton	Northam Road /Union Street / Princes Street	✓	✓	✓	✓
Southampton	Saltmarsh Lane / Central Bridge / Albert Road North / Itchen Bridge	✓	✓	✓	✓
Southampton	A33 West Quay Road corridor	✓	✓	✓	✓
Test Valley	M27 J3	✓	✓	✓	✓
Test Valley	M271 Junction 1 / Brownhill Way	✓	✓	✓	✓
Test Valley	Abbotswood network changes	✓	✓	✓	✓
Test Valley	Winchester Road / Braishfield Road junction	✓	✓	✓	✓
New Forest	Ringwood Road / Calmore Road junction	✓	✓	✓	✓
New Forest	Rollestone cross roads, Blackfield	✓	✓	✓	✓
Various	Smart Motorways M27	✓	✓	✓	✓
Various	Smart Motorways M3	✓	✓	✓	✓

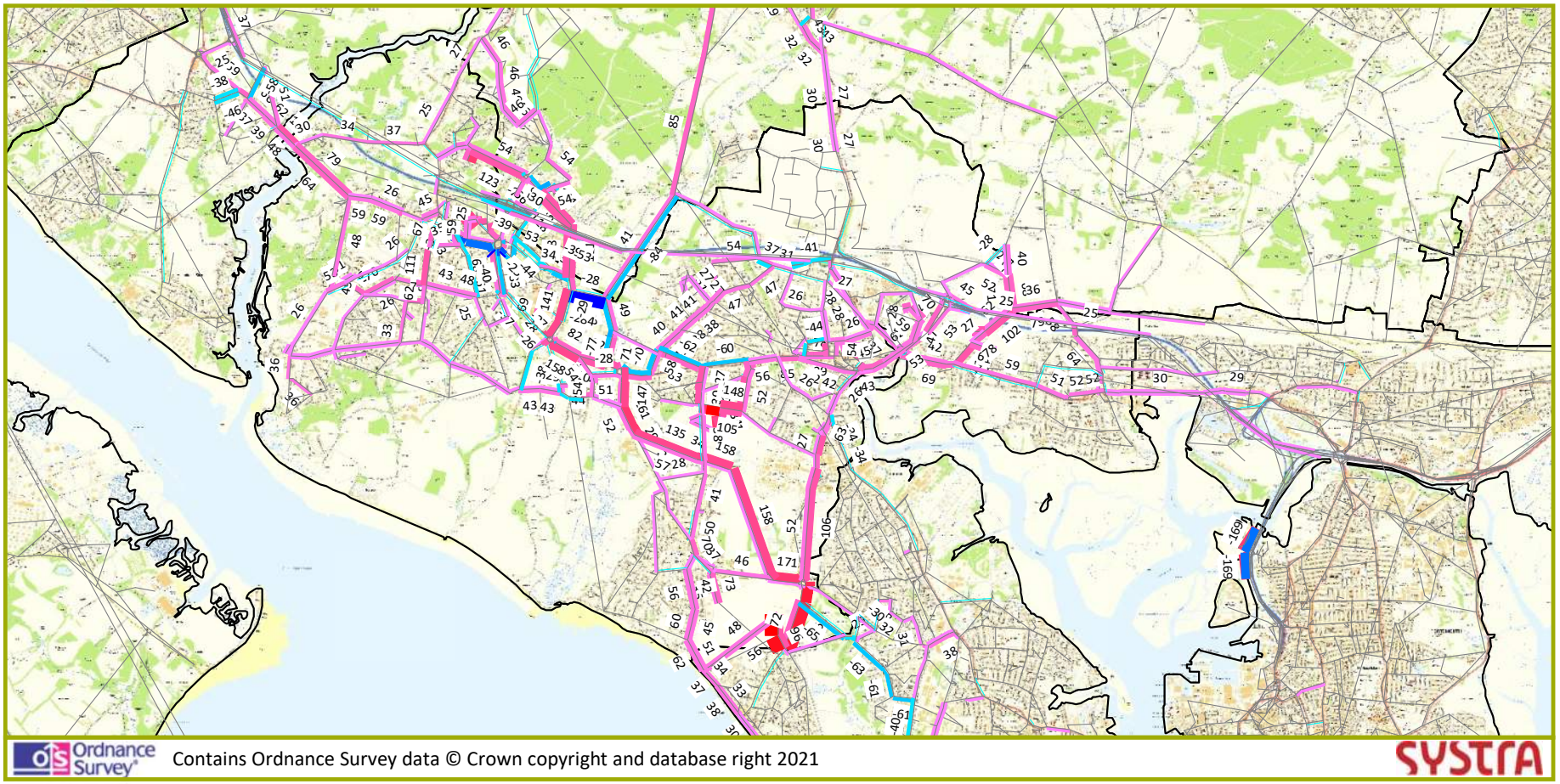
Appendix B – Flow Difference Plots

AM Flow Difference (>10 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham



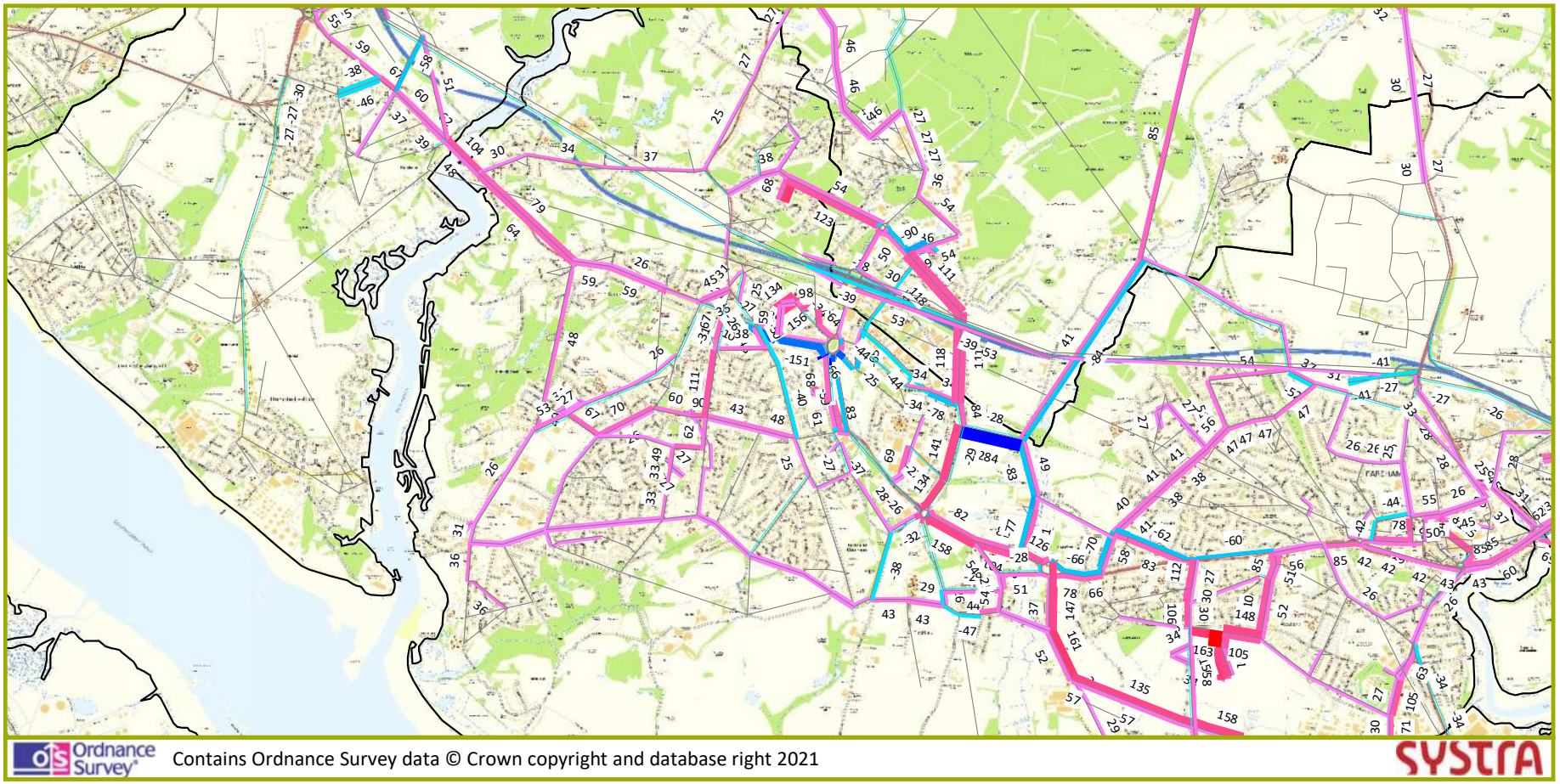
SYSTRA

AM Flow Difference (>25 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham District

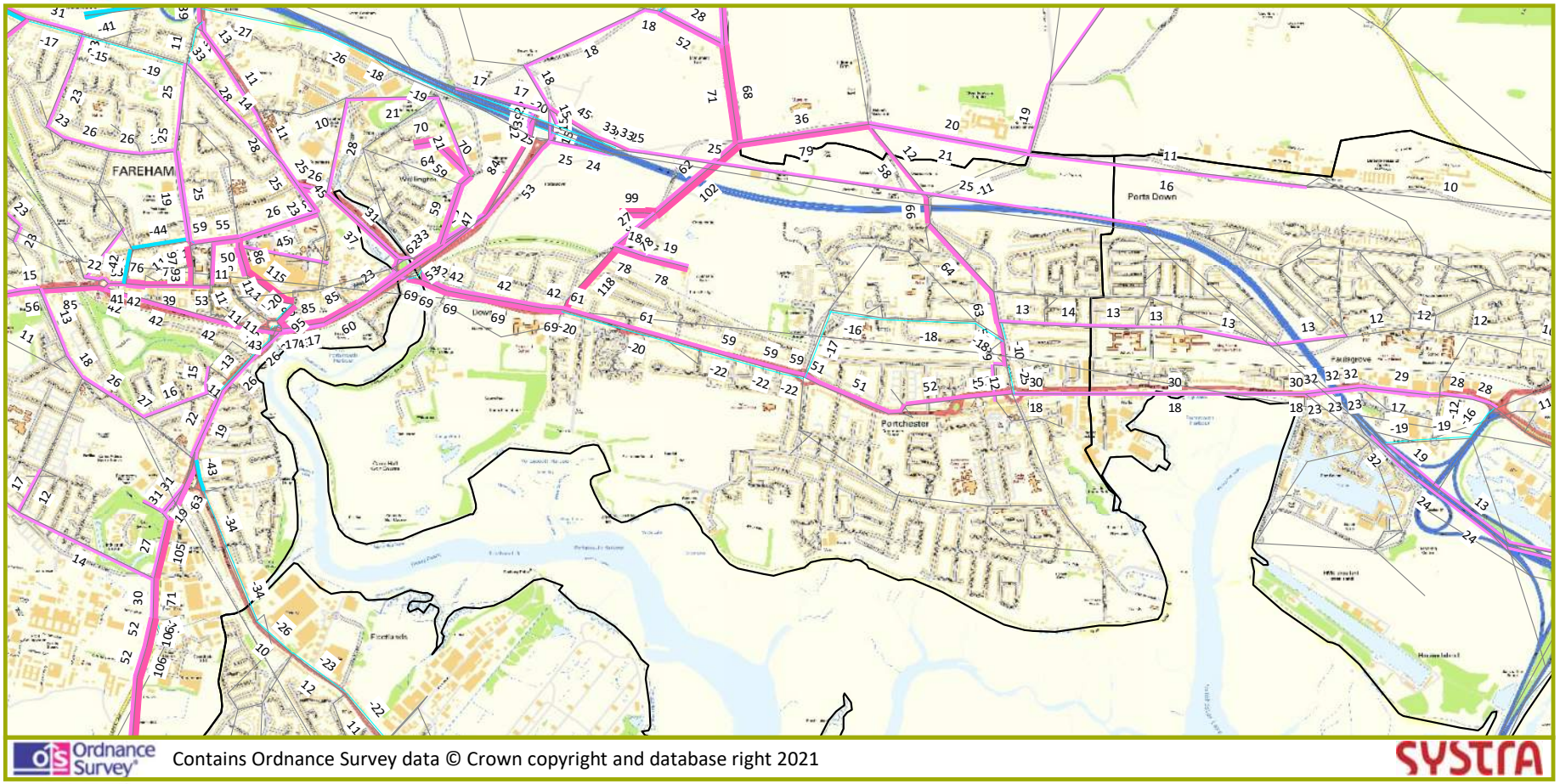


SYSTRA

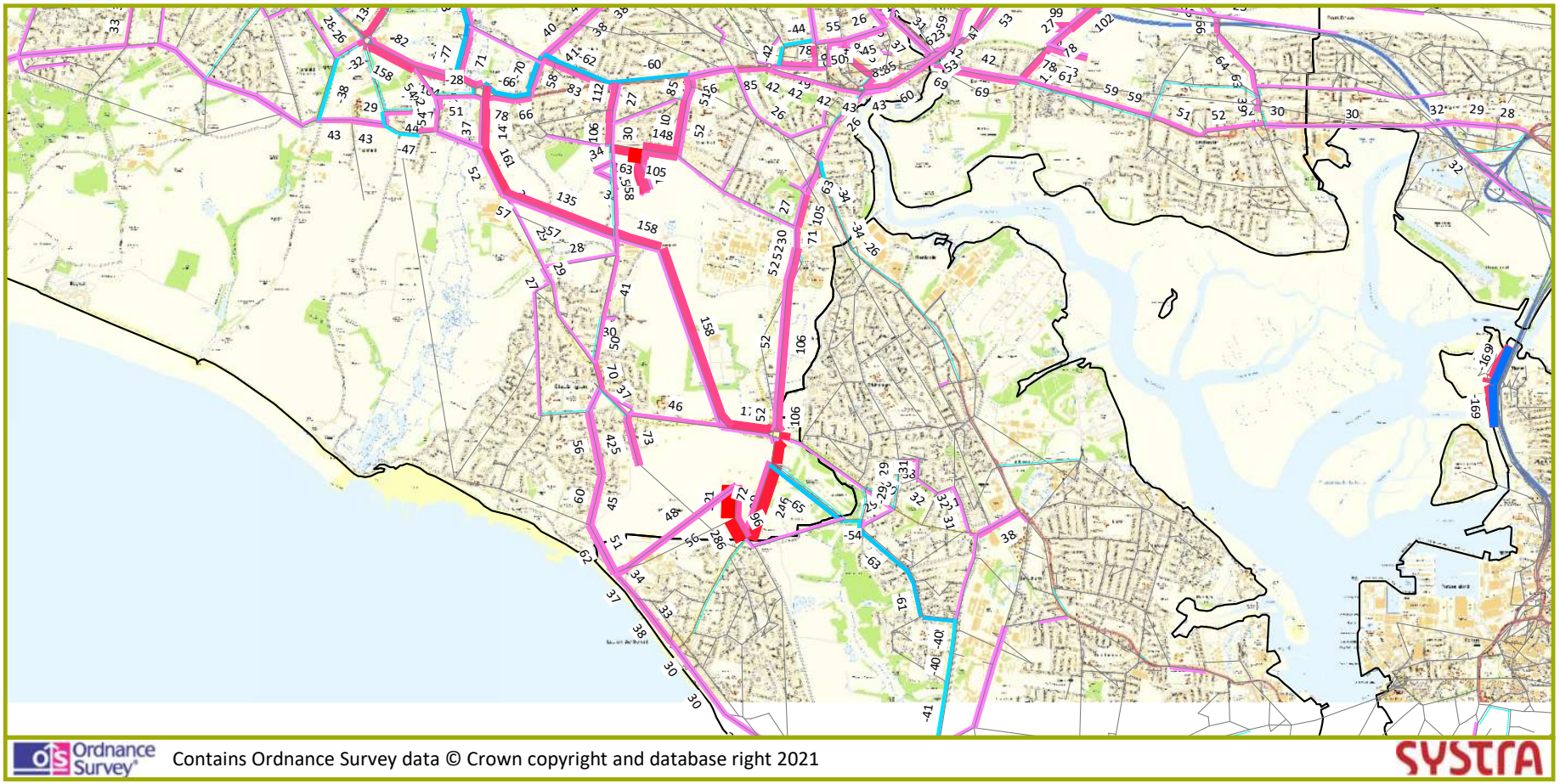
AM Flow Difference (>25 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Locks Heath



AM Flow Difference (>10 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Portchester

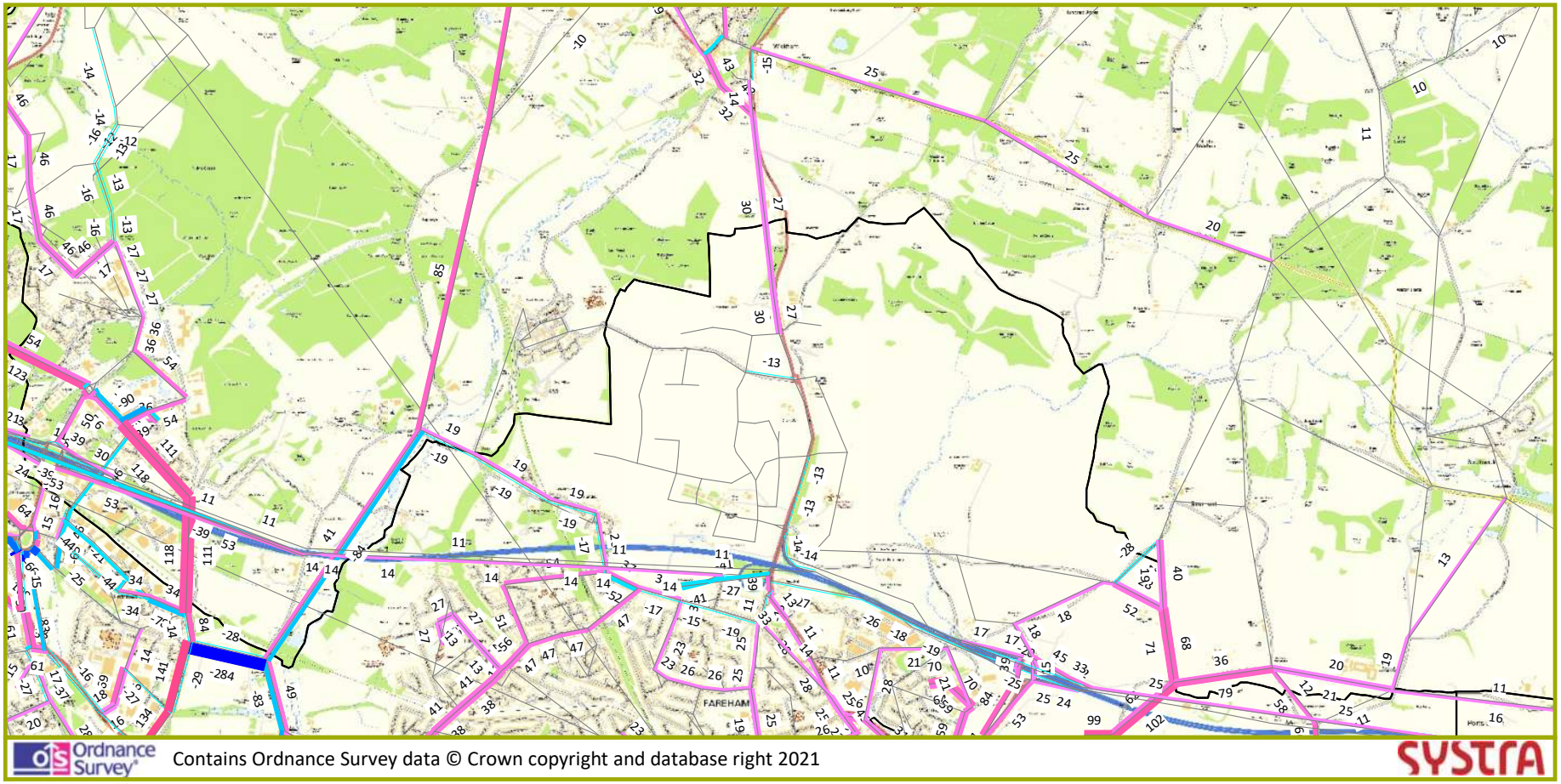


AM Flow Difference (>25 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Stubbington



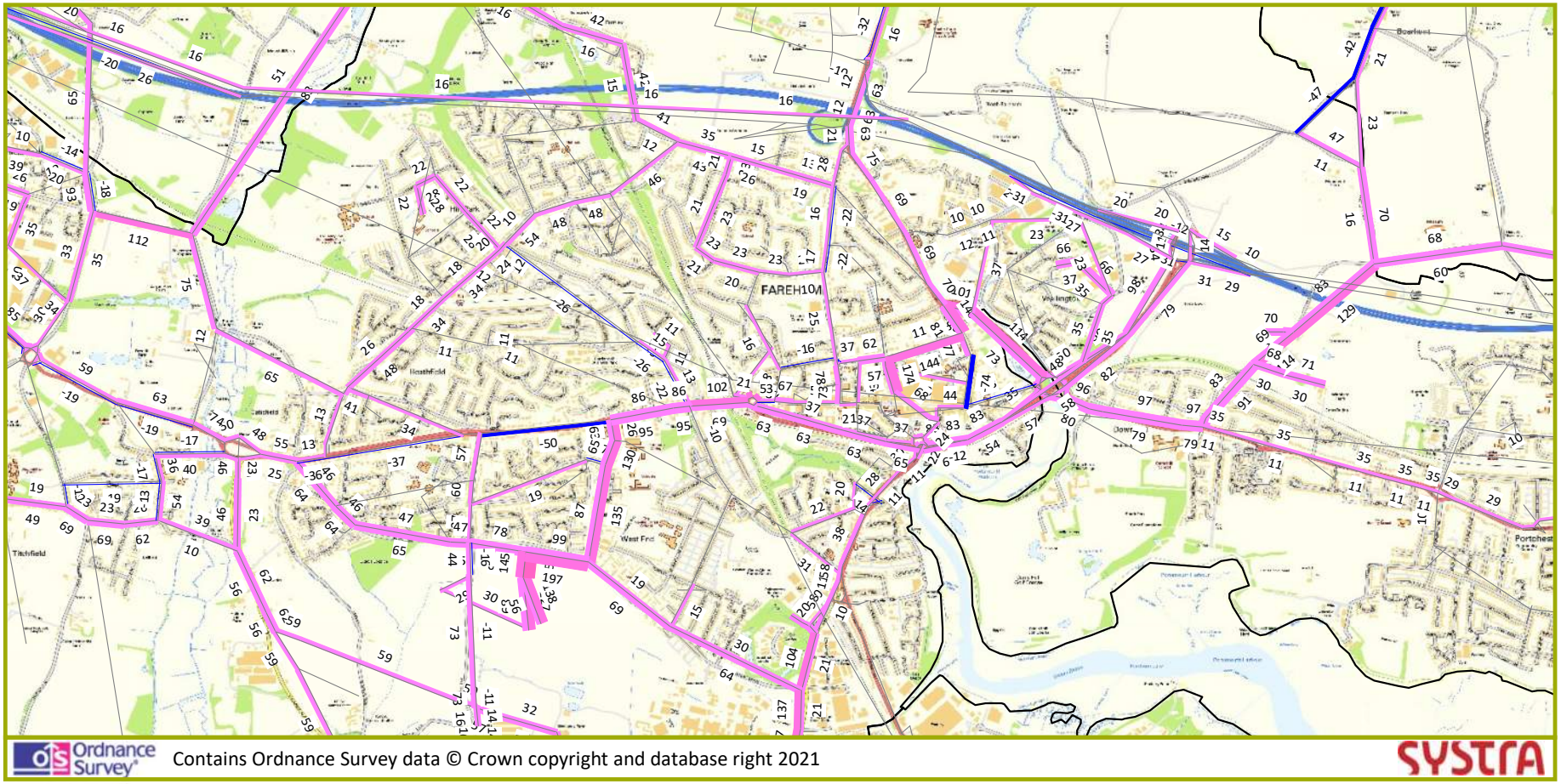
SYSTRA

AM Flow Difference (>10 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Welborne



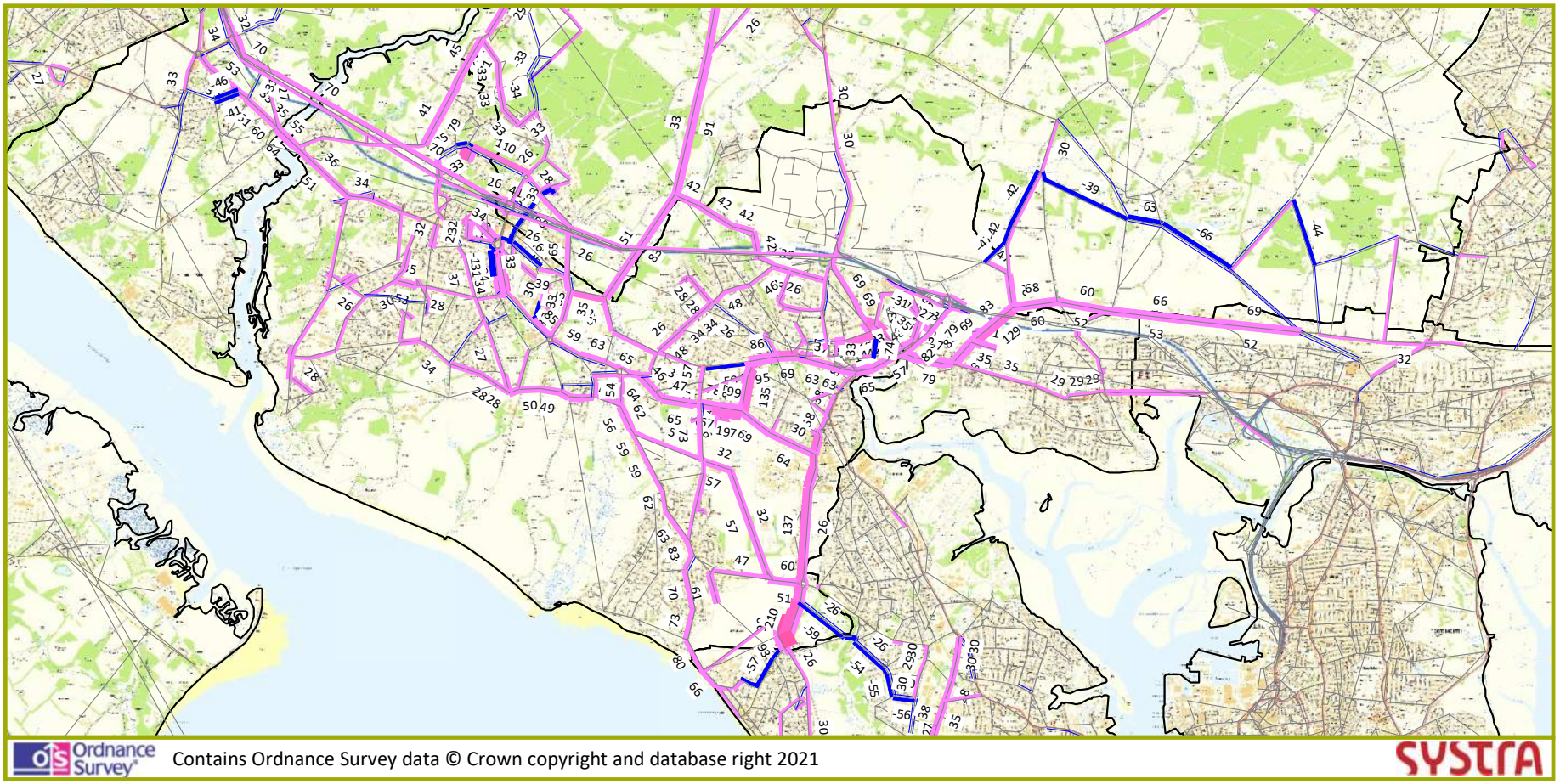
SYSTRA

PM Flow Difference (>10 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham

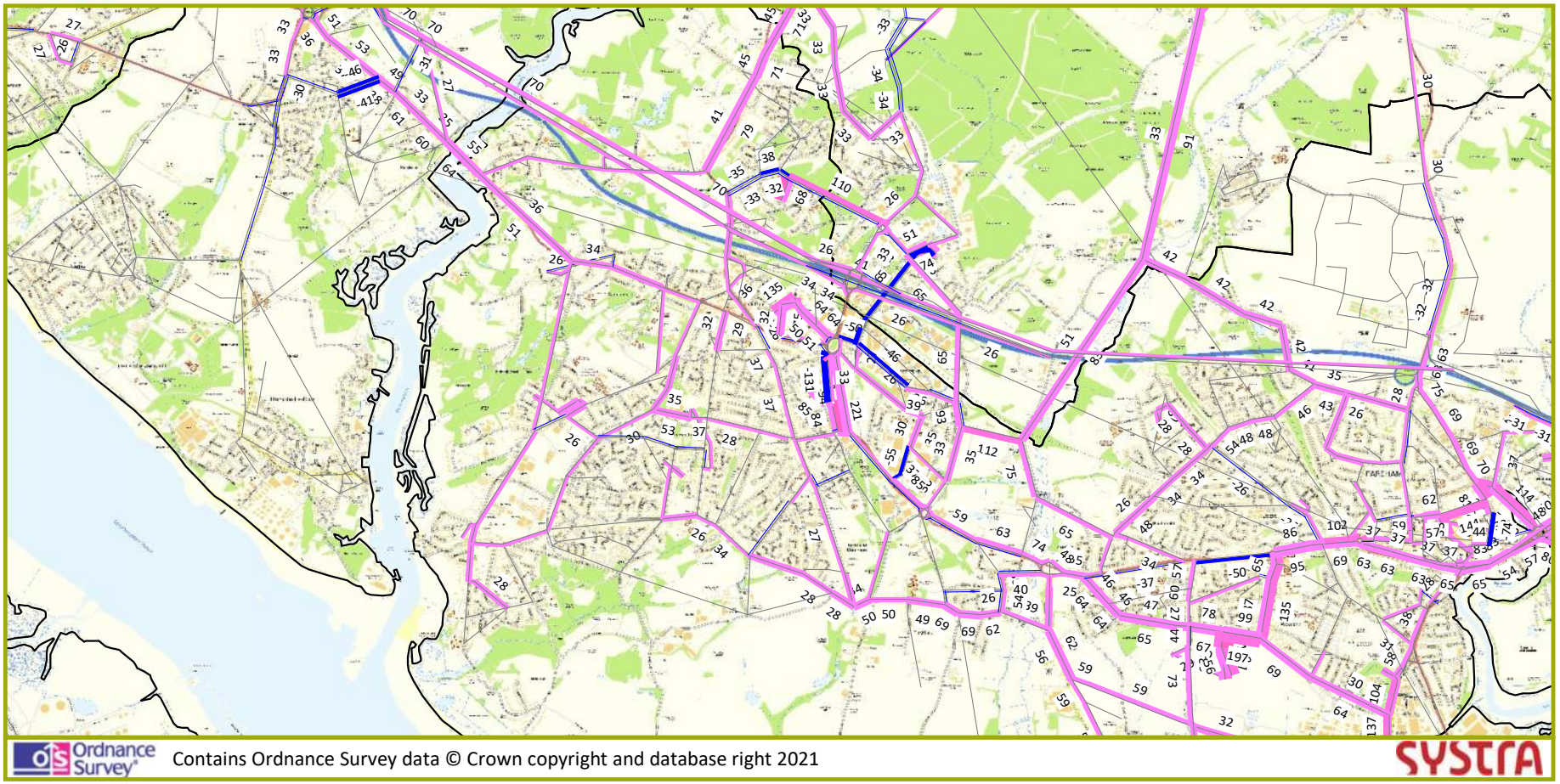


SYSTRA

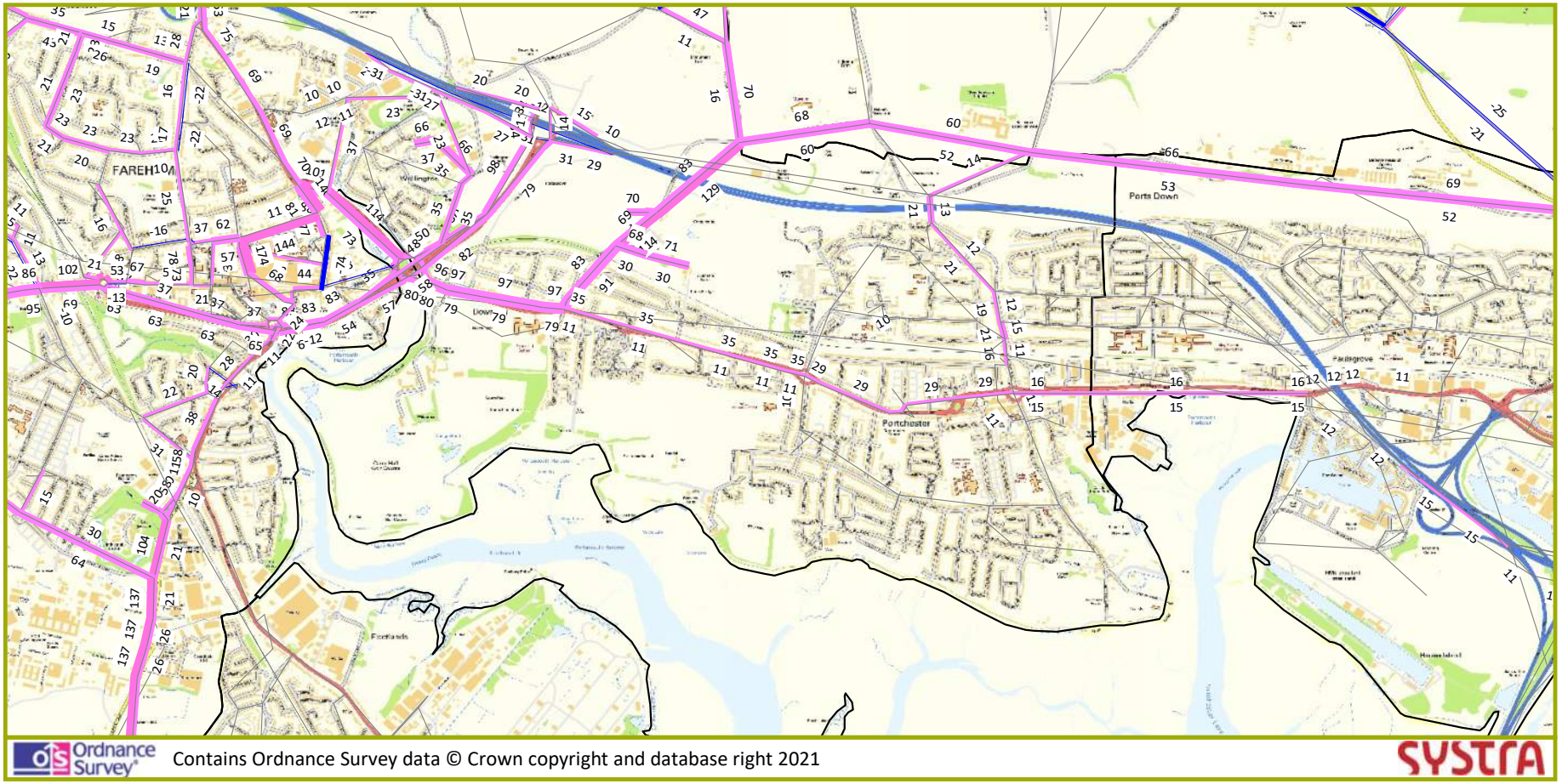
PM Flow Difference (>25 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham District



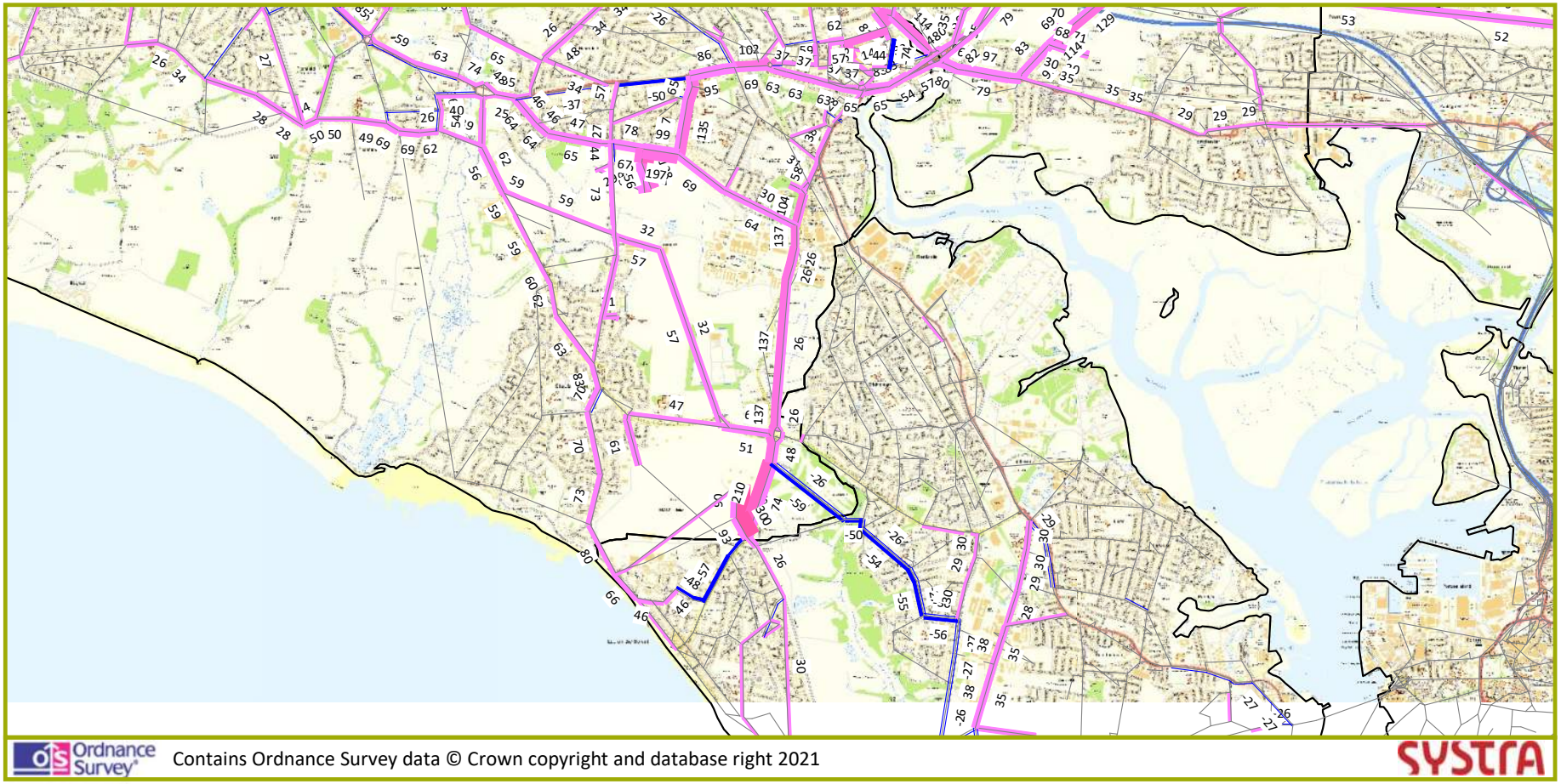
PM Flow Difference (>25 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Locks Heath



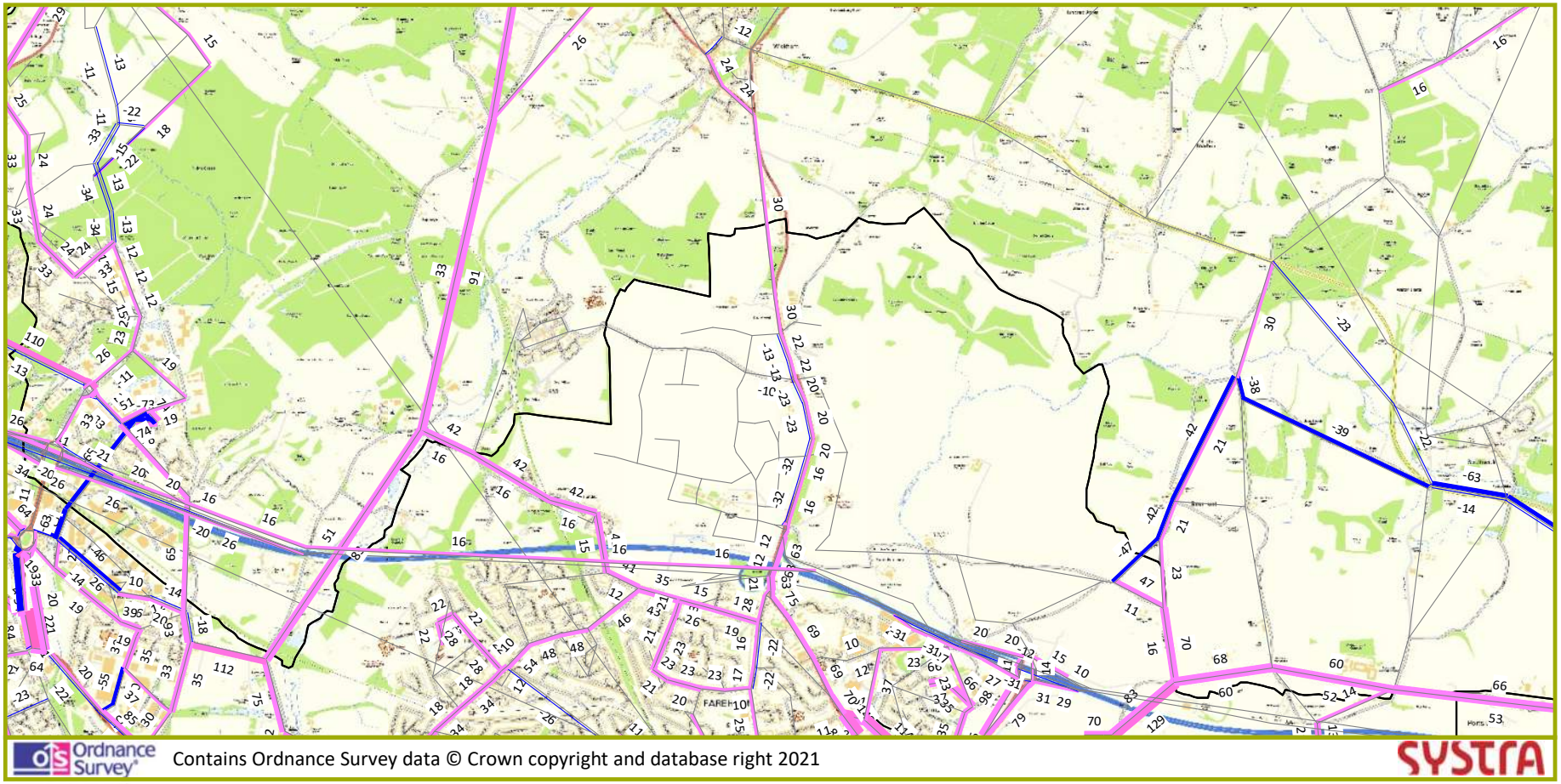
PM Flow Difference (>10 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Portchester



PM Flow Difference (>25 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Subbington

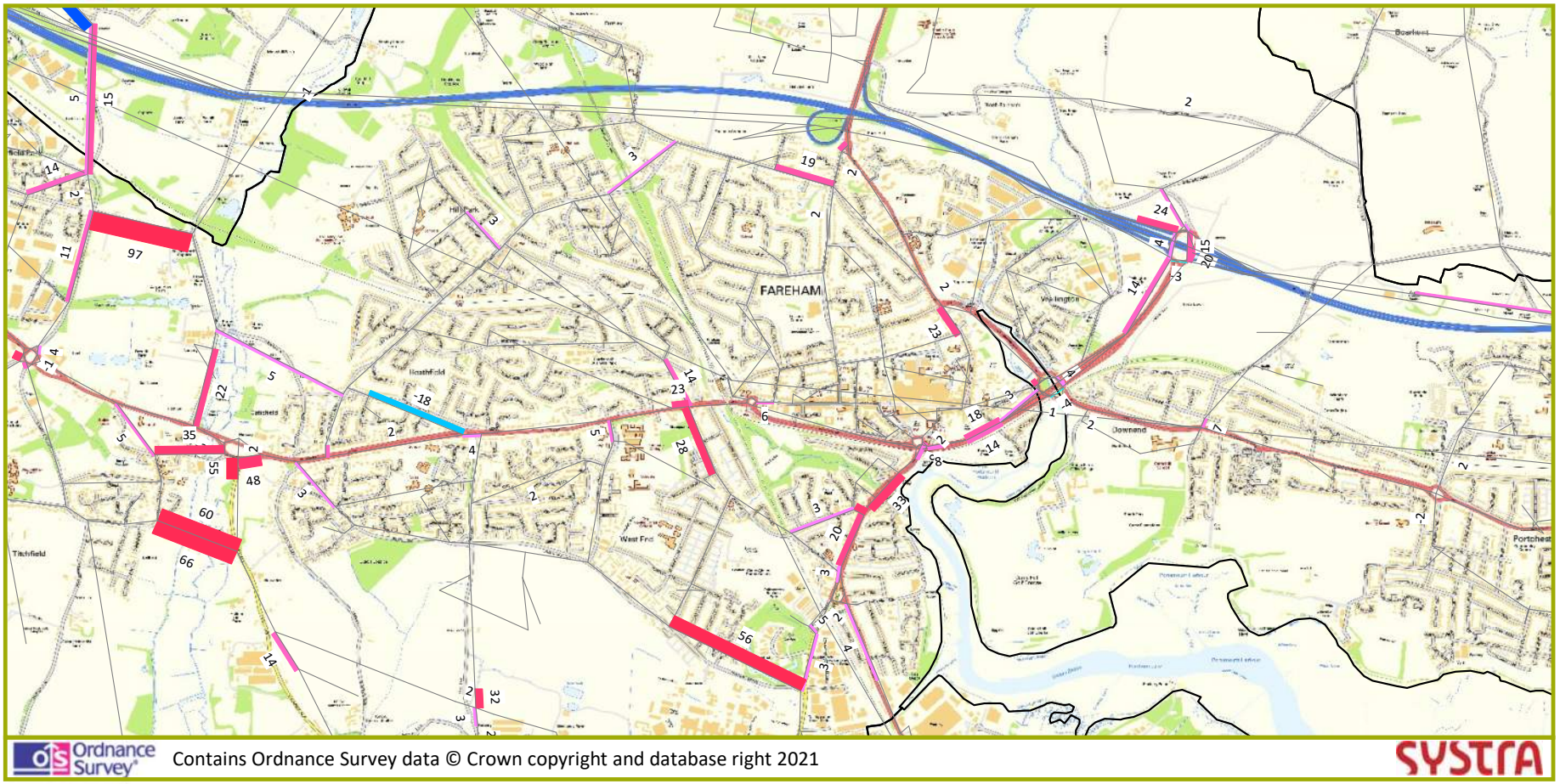


PM Flow Difference (>10 PCUs/h)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Welborne

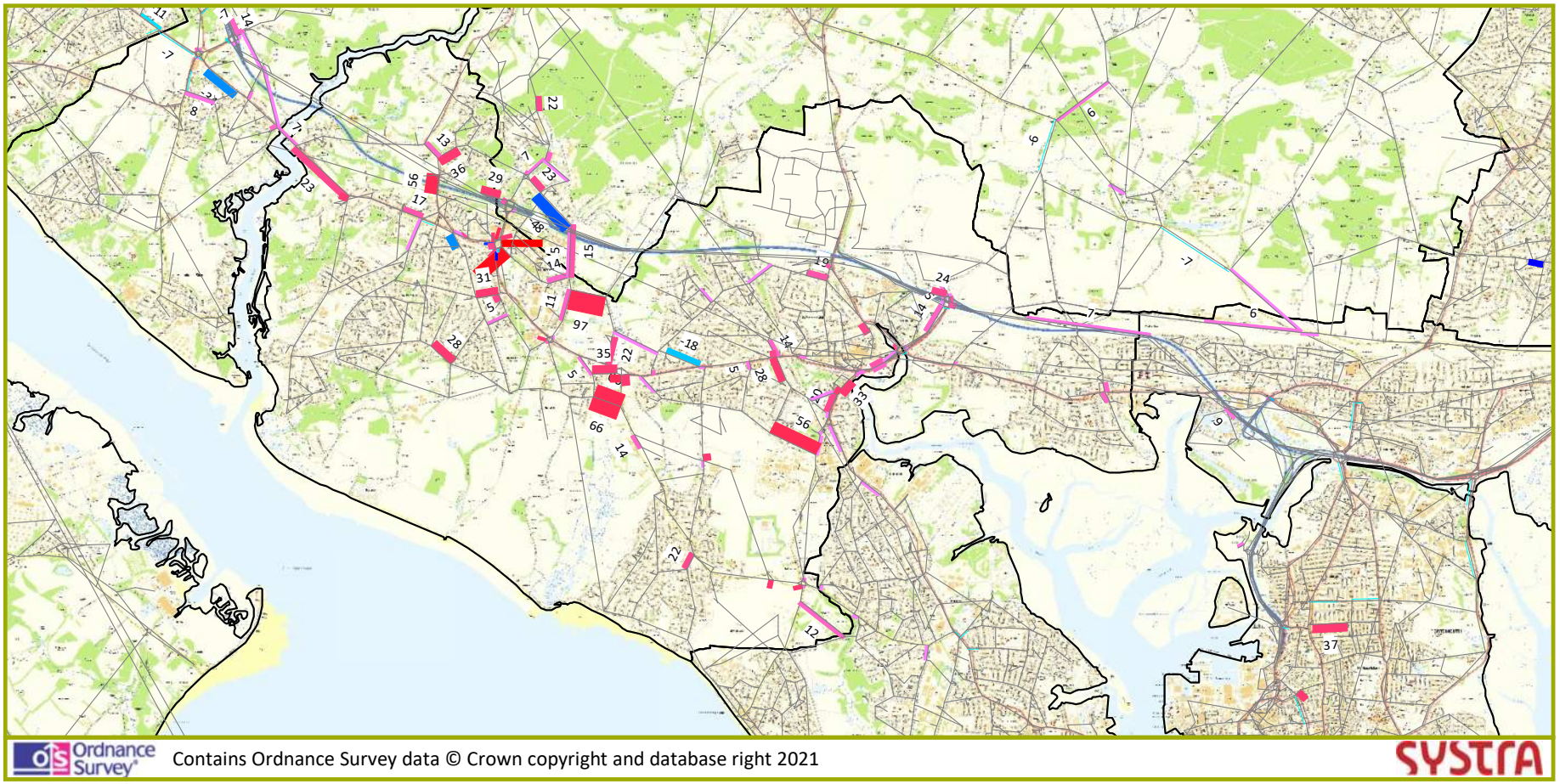


Appendix C – Delay Difference Plots

AM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham

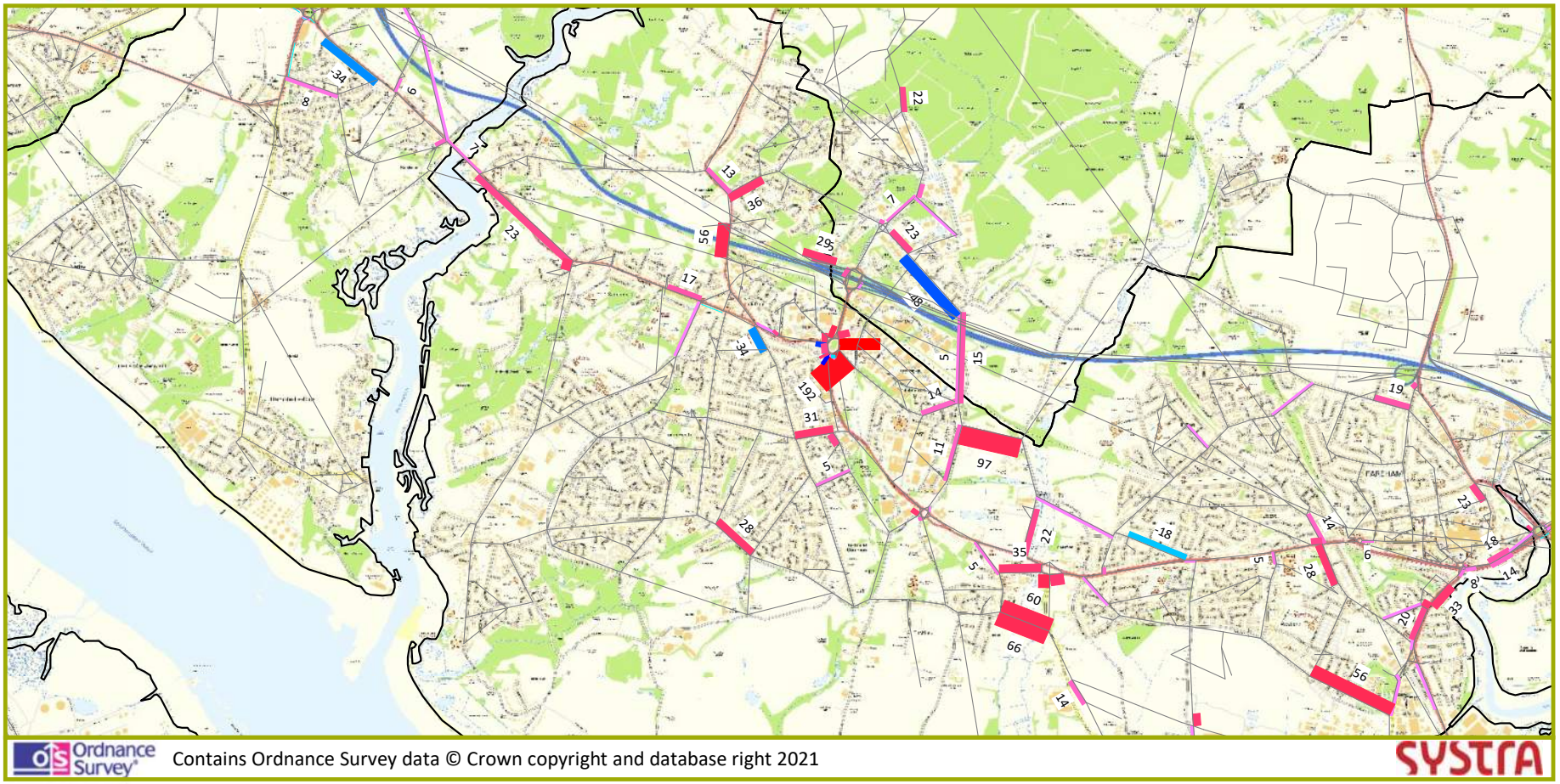


AM Delay Difference (>5 seconds)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham District

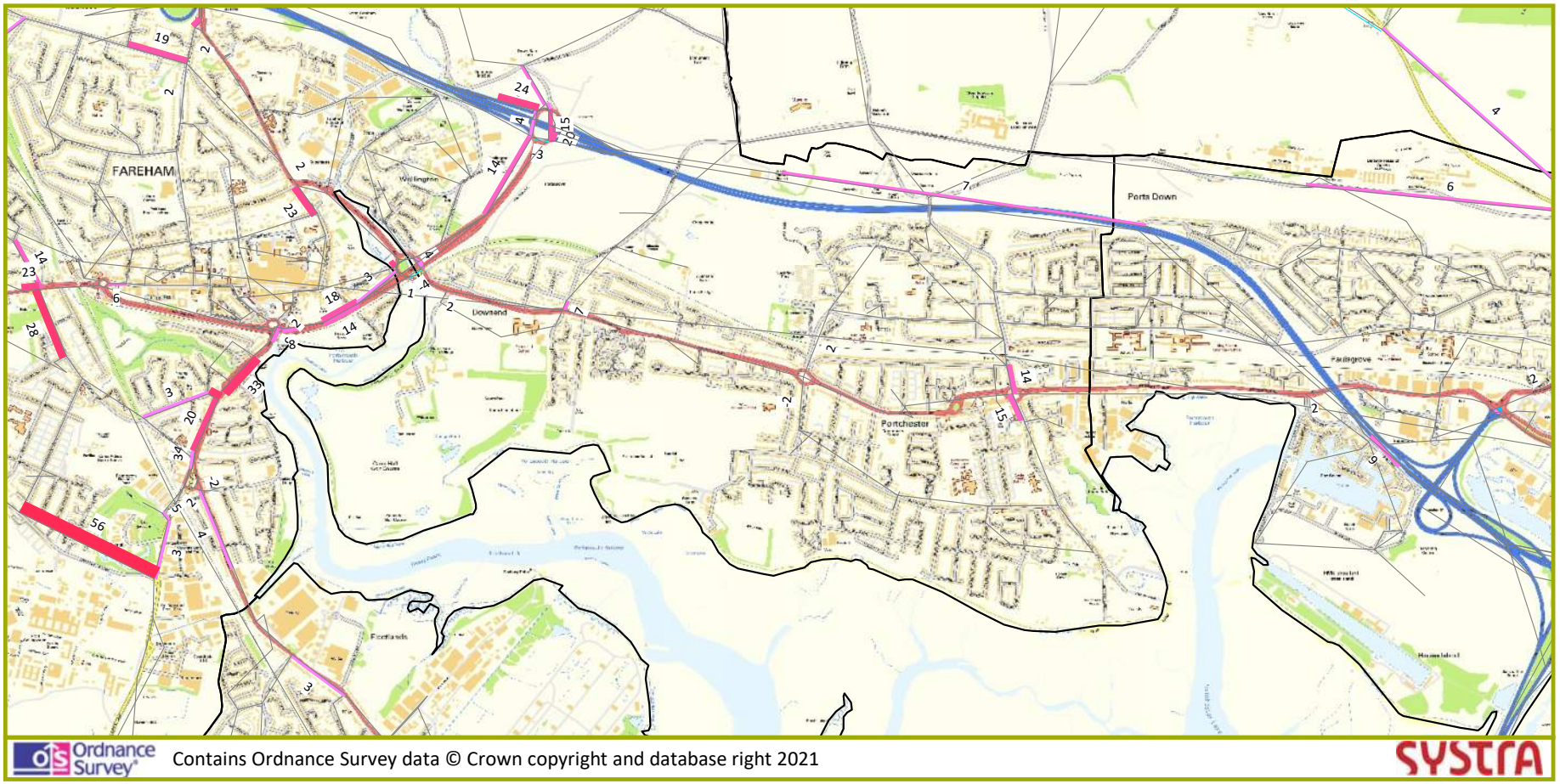


SYSTRA

AM Delay Difference (>5 seconds)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Locks Heath

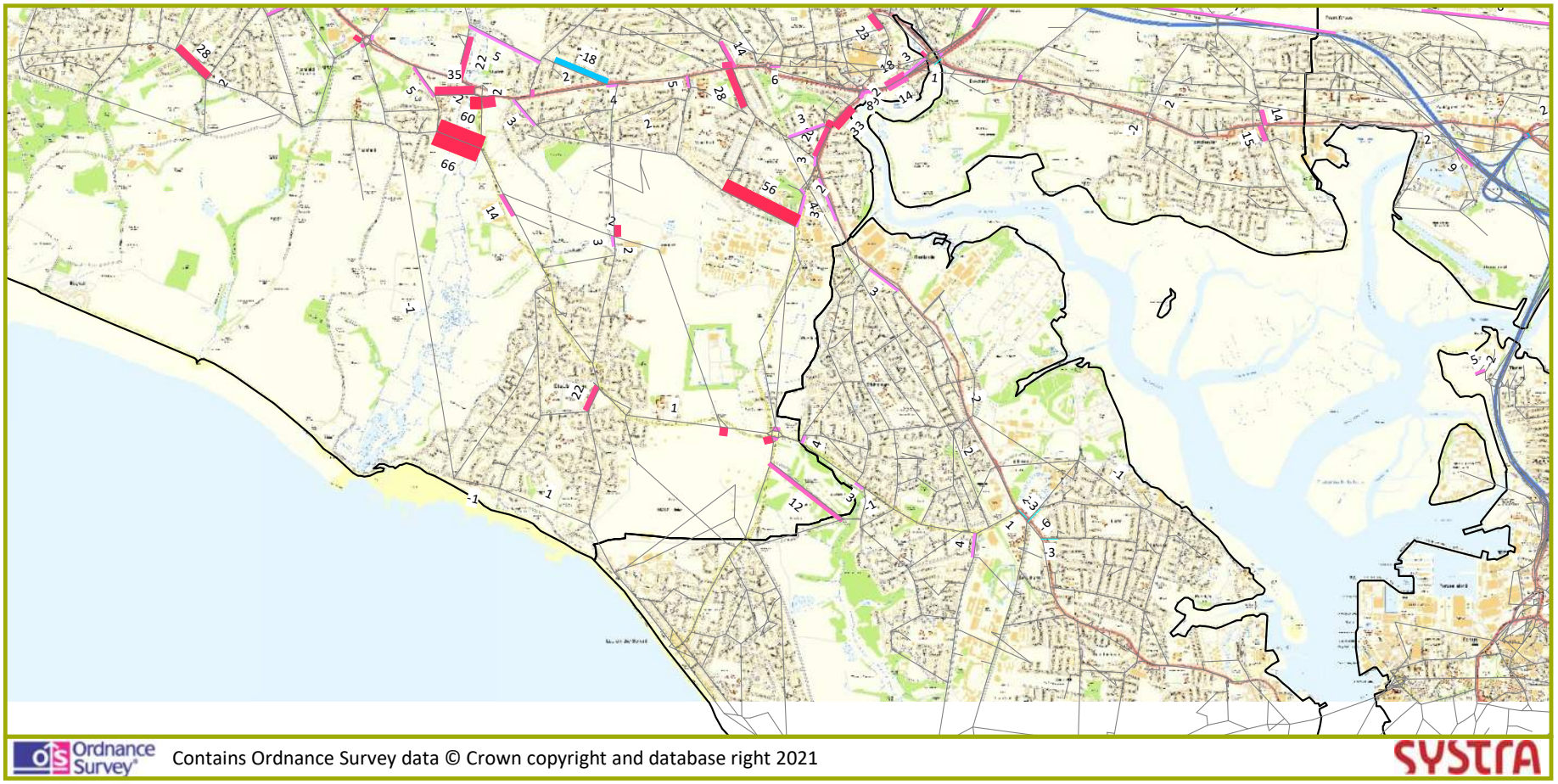


AM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Portchester



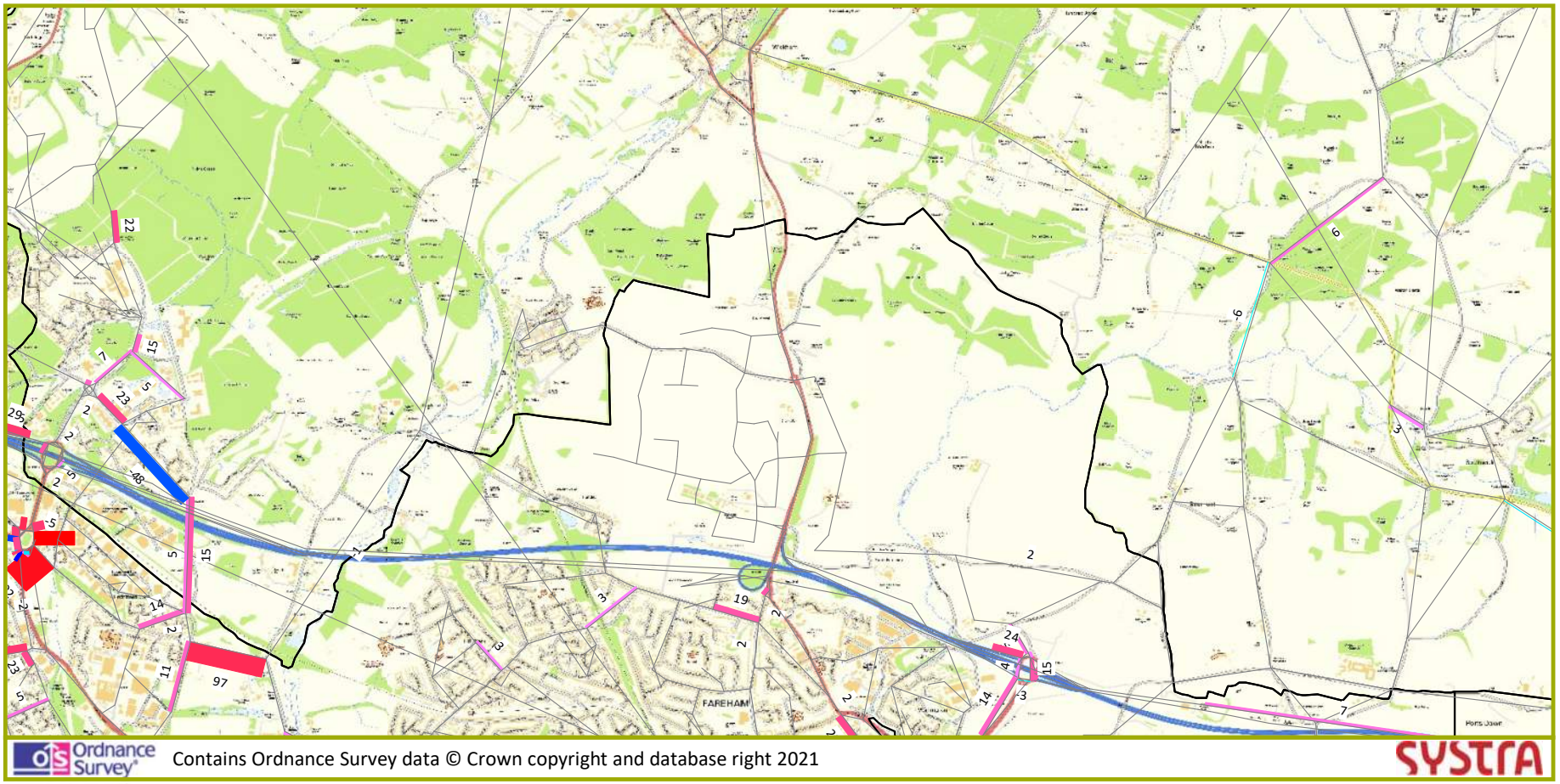
SYSTRA

AM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Stubbington

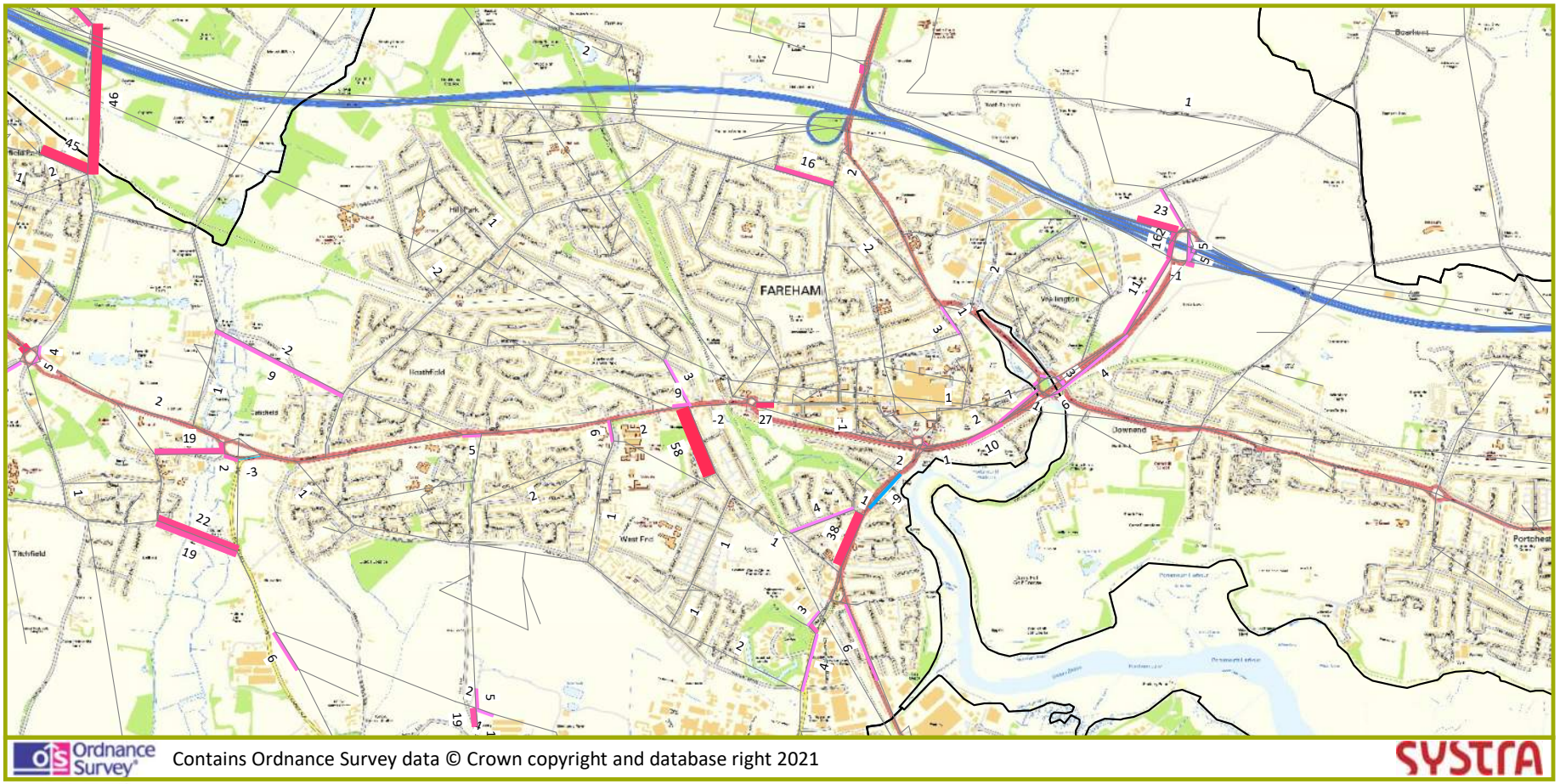


SYSTRA

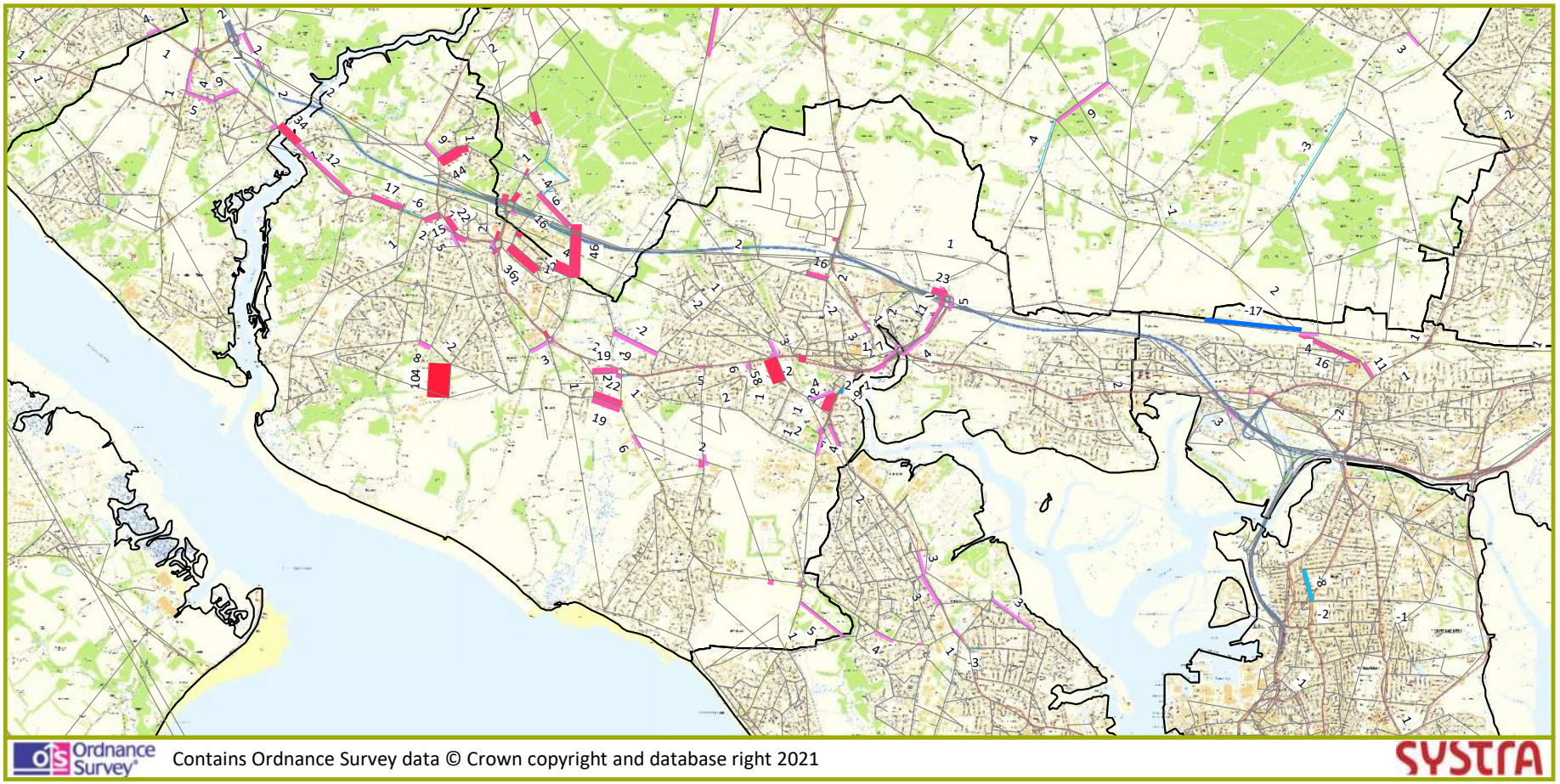
AM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Welborne



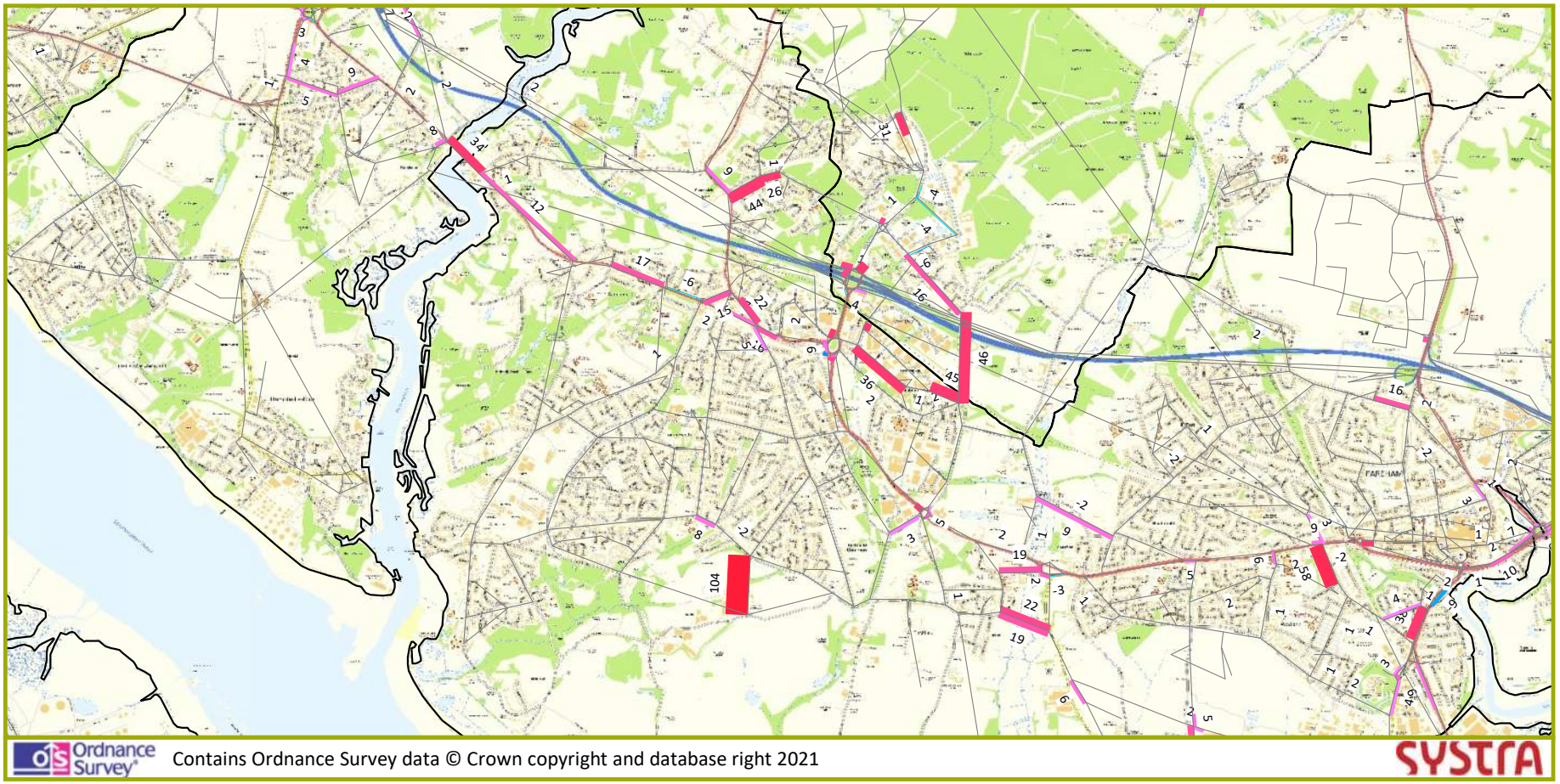
PM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham



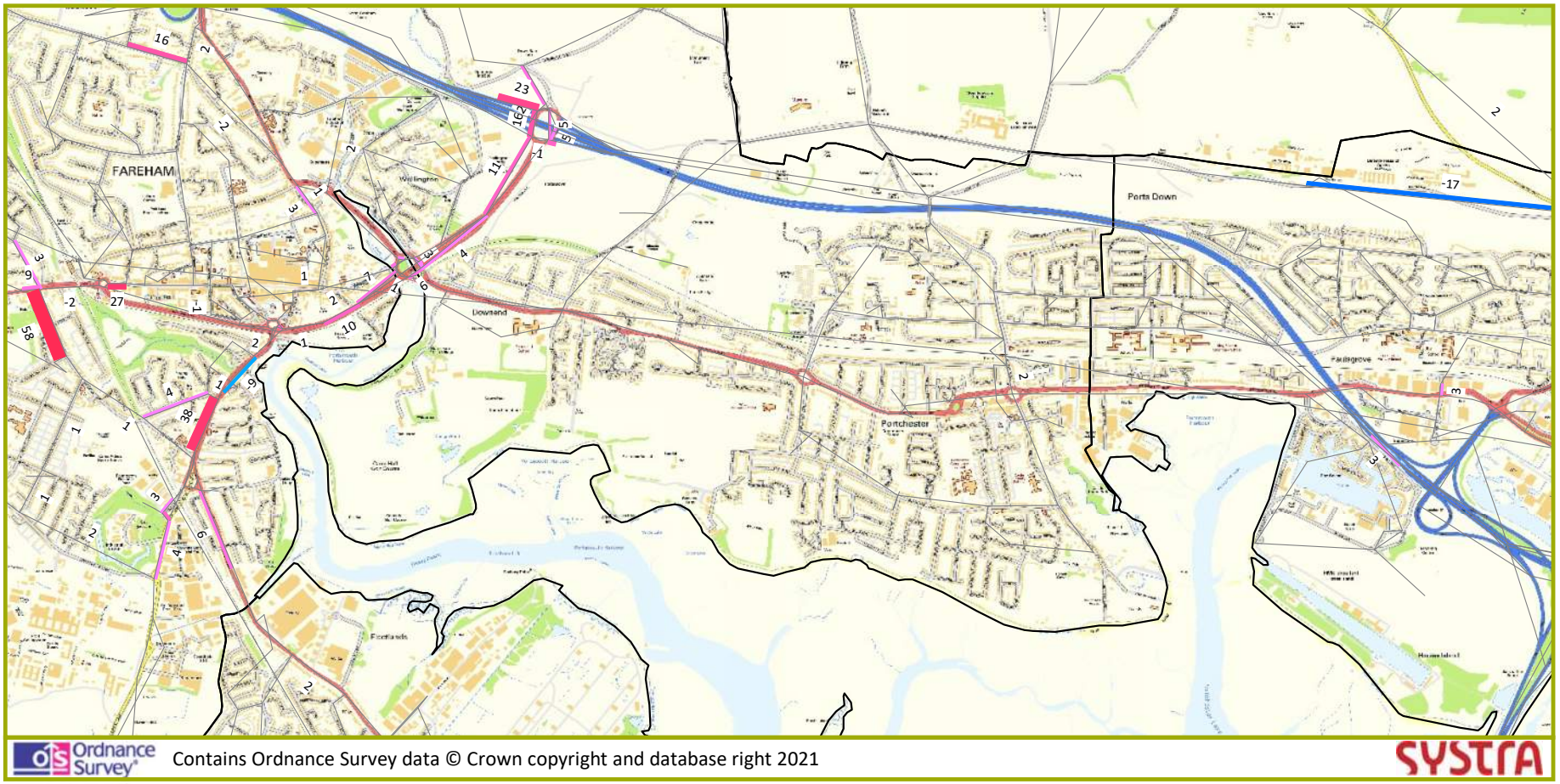
PM Delay Difference (>5 seconds)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Fareham District



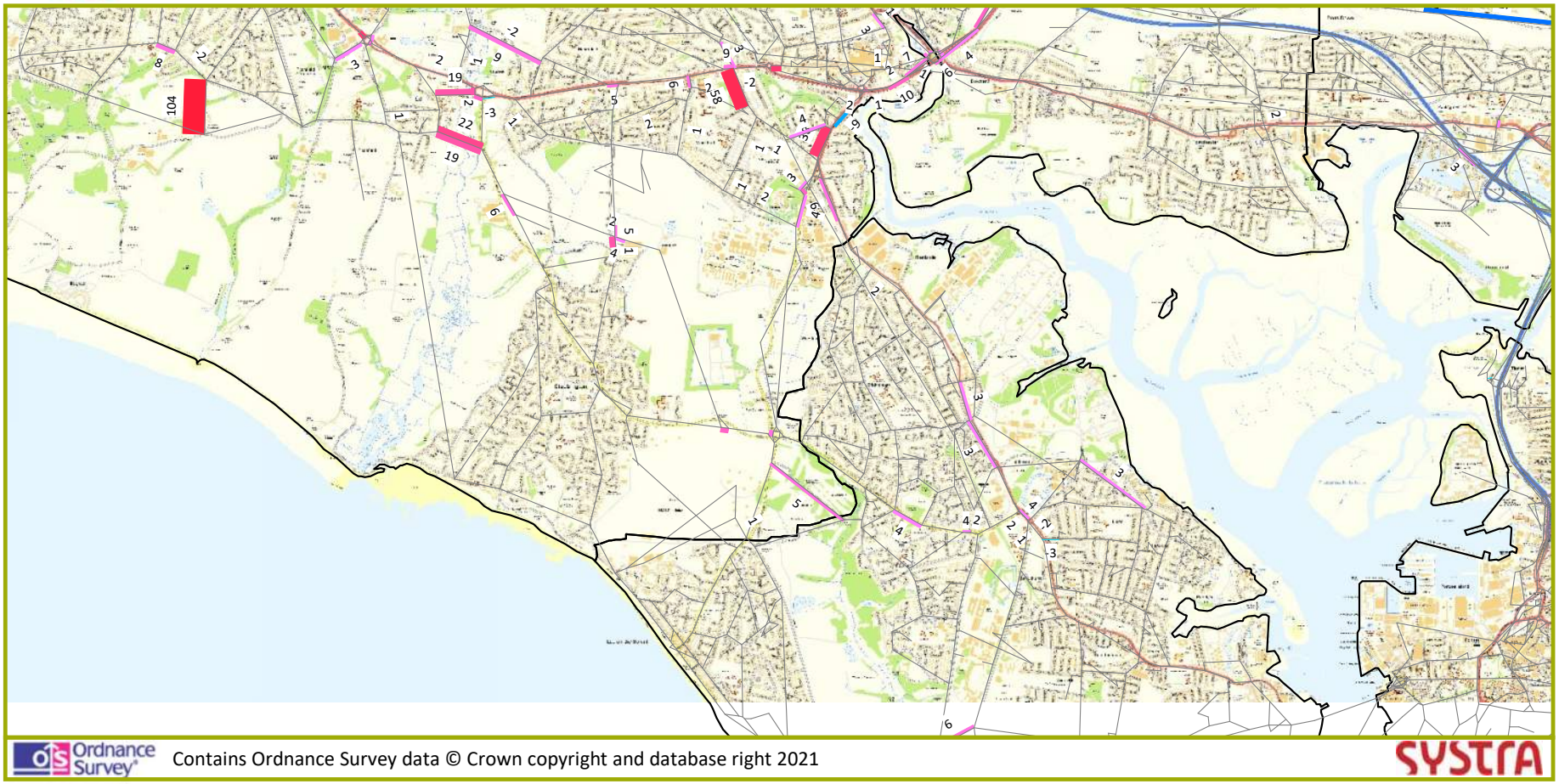
PM Delay Difference (>5 seconds)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Locks Heath



PM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Portchester

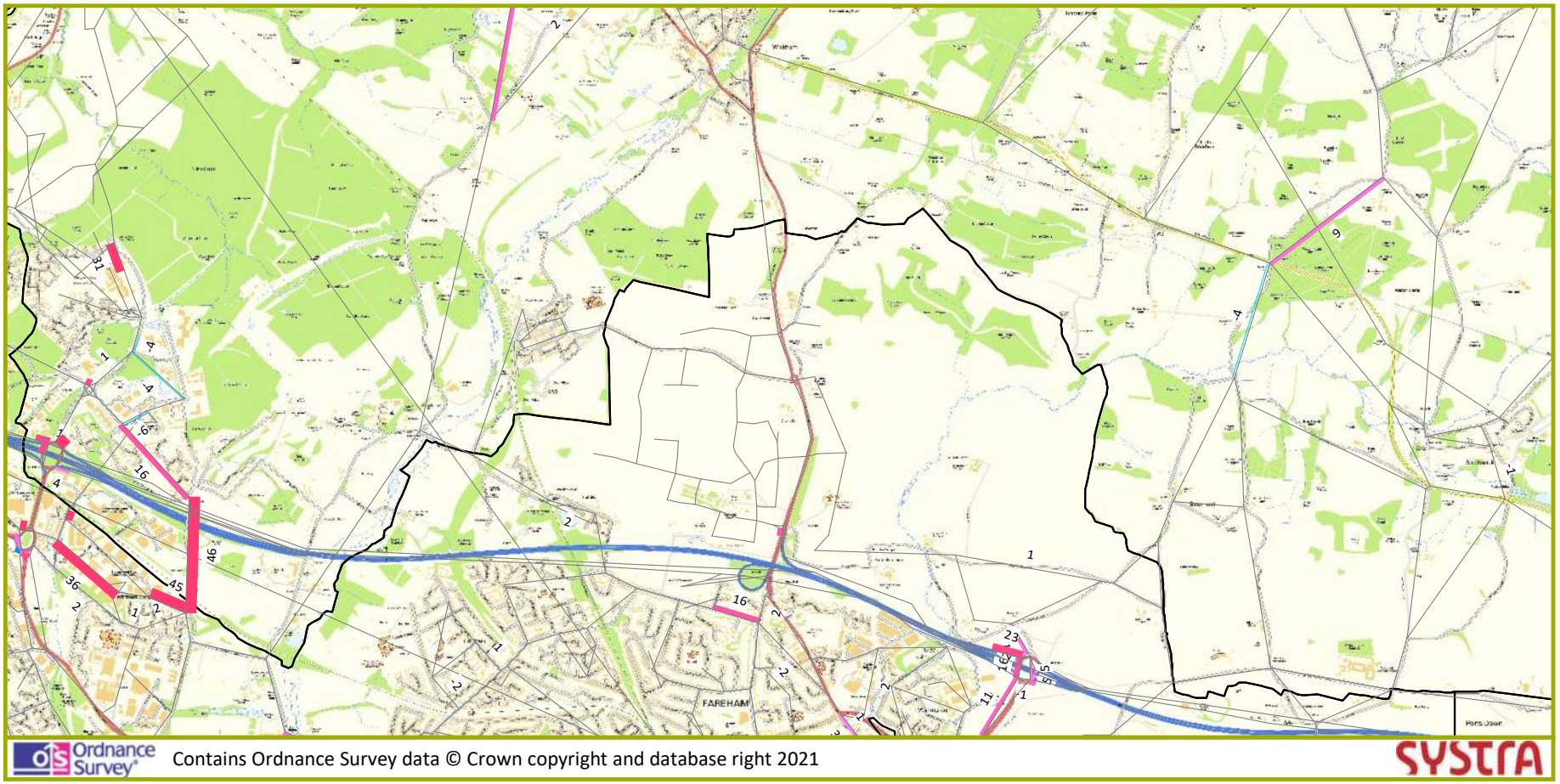


PM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Stubbington



SYSTRA

PM Delay Difference (>1 second)
2036 Scenario 2 DM vs 2036 Scenario 1 Baseline
Welborne



Do Minimum (2036) vs Baseline (2036)

V/C		
Significant	85	5
Severe	95	10
DELAY	120	60

FAREHAM LOCAL PLAN: Junction approach arm statistics for identified locations (Summary Sheet)

				2036 Baseline								2036 Do Minimum											
ID	Junction	Approach Arm	Junction Type	AM RFC (%)	AM Actual Flow (pcus)	AM Delay (s)	AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)	PM Delay (s)	PM Avg. Q (pcus)	AM RFC (%)	AM Actual Flow (pcus)		AM Delay (s)		AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)		PM Delay (s)		PM Avg. Q (pcus)
1	Castle Street Roundabout	Station Road	Roundabout	96	480	41	5.0	86	636	16	2.0	99	455	3	55	14	6.0	88	641	2	17	1	2.0
1		A27 East Street		79	1172	8	1.0	84	1218	9	1.0	80	1190	1	8	0	1.0	85	1233	1	9	0	1.0
1		Castle Street		101	670	46	7.0	103	629	88	14.0	101	668	0	61	15	10.0	103	624	0	88	0	14.0
1		A27 West Street		69	879	9	1.0	48	596	8	0.0	74	931	5	10	1	1.0	50	625	2	8	0	0.0
2	Cornaway Lane Roundabout	Dore Avenue	Roundabout	84	443	18	2.0	43	253	9	0.0	85	426	1	20	2	2.0	44	256	1	9	0	0.0
2		A27 West Street		88	593	13	1.0	80	563	9	1.0	87	590	-1	12	-1	1.0	81	569	1	9	0	1.0
2		Cornaway Lane		92	494	22	2.0	60	389	8	0.0	90	492	-2	20	-2	2.0	62	399	2	8	0	0.0
2		A27 Portchester Road		63	1051	5	0.0	70	1145	5	0.0	66	1110	3	5	0	0.0	72	1179	2	5	0	0.0
3	Porchester Road / Beaulieu	A27 Portchester Road (W)	Priority	59	984	3	0.0	70	1158	3	0.0	63	1045	4	3	0	0.0	72	1192	2	3	0	0.0
3	Avenue	Portchester Road (E)		95	1339	4	0.0	66	911	3	0.0	93	1317	-2	4	0	0.0	67	922	1	3	0	0.0
3		Beaulieu Avenue		6	342	3	0.0	3	231	3	0.0	6	342	0	3	0	0.0	4	232	1	3	0	0.0
4	A32 Gosport Road / Newgate	A32 Gosport Road (SE)	Gyratory	107	1556	175	52.0	101	1334	83	12.0	107	1563	0	180	5	54.0	102	1337	1	90	7	15.0
4	Lane	B3385 Newgate Lane		79	1048	6	0.0	48	1062	2	0.0	85	1056	6 Sig	9	3	0.0	51	1121	3	2	0	0.0
4		Palmerston Drive		19	90	8	0.0	13	68	7	0.0	25	120	6	8	0	0.0	16	87	3	7	0	0.0
4		A32 Gosport Road (N)		47	2071	2	0.0	47	2053	2	0.0	48	2091	1	2	0	0.0	47	2061	0	2	0	0.0
4		Redlands Lane		80	1066	7	0.0	43	948	1	0.0	87	1079	7 Sig	10	3	0.0	42	928	-1	1	0	0.0
5	A32 Gosport Road / Old Gosport	A32 Gosport Road (N)	Roundabout	106	2126	129	69.0	107	2045	148	77.0	108	2152	2	161	32	88.0	107	2056	0	140	-8	73.0
5	Road / Mill Road Roundabout	Old Gosport Road		2	79	7	0.0	2	81	7	0.0	2	83	0	8	1	0.0	2	83	0	7	0	0.0
5		A32 Gosport Road (S)		101	2072	34	18.0	101	2072	34	18.0	101	2072	0	34	0	18.0	101	2072	0	34	0	18.0
6	A32 Gosport Road/Mill Road	A32 Gosport Road (N)	Priority	47	2071	0	0.0	47	2053	0	0.0	48	2091	1	0	0	0.0	47	2061	0	0	0	0.0
6		Mill Road		104	134	142	5.0	75	96	46	1.0	105	136	1	170	28	6.0	77	99	2	47	1	1.0
6		A32 Gosport Road (S)		109	2114	198	85.0	102	2010	72	17.0	110	2135	1	219	21	96.0	104	2049	2	109	37	38.0
7	A32 Gosport Road/A27 Eastern	A32 Gosport Road	Priority	49	2173	0	0.0	46	2014	0	0.0	49	2157	0	0	0	0.0	46	2044	0	0	0	0.0
7	Way	A27 Eastern Way		83	1610	4	1.0	78	1498	4	0.0	84	1632	1	4	0	1.0	78	1488	0	4	0	0.0
7		A32 Gosport Road - underpass		87	516	22	0.0	78	547	11	0.0	91	520	4	31	9	0.0	80	569	2	12	1	0.0
8	A27 Eastern Way (SE)	A27 Eastern Way (SE)	Priority	97	2453	27	0.0	97	2440	25	0.0	99	2513	2	41	14	0.0	99	2493	2	35	10	0.0
9	Delme Roundabout	A32 Wallington Way	Roundabout	74	946	12	2.0	60	774	13	2.0	77	977	3	13	1	3.0	69	888	9	15	2	3.0
9		Wallington Shore Road		38	188	9	0.0	56	279	10	1.0	39	186	1	9	0	0.0	60	283	4	12	2	1.0
9		A27 Eastern Way SB offslip		42	597	17	2.0	50	523	25	2.0	42	596	0	17	0	2.0	58	606	8	28	3	3.0
9		A27 Cams Hill		68	1645	17	6.0	49	1073	16	4.0	71	1714	3	18	1	6.0	52	1154	3	17	1	4.0
9		A32 Eastern Way NB offslip		67	493	45	3.0	52	613	36	3.0	70	517	3	48	3	3.0	55	648	3	42	6	3.0
9		East Street		97	503	43	5.0	95	576	28	4.0	101	501	4	67	24	9.0	96	543	1	37	9	4.0
10	A32 / High Street / Wallington	A32 Wickham Road (N)	Roundabout	90	858	10	1.0	60	622	5	0.0	94	883	4	12	2	2.0	70	692	10	6	1	0.0
10	Way	Wallington Way		33	530	5	0.0	39	641	5	0.0	36	585	3	5	0	0.0	46	729	7	5	0	0.0
10		Wickham Road (S)		97	791	11	1.0	83	662	7	0.0	101	814	4	34	23	7.0	94	744	11 Sig	9	2	1.0
11	M27 J11 / Wallington Roundabout	M27 On-slip (circulatory eastern arm)	Roundabout /	98	700	74	4.0	95	784	49	3.0	100	715	2	89	15	4.0	97	798	2	54	5	4.0
11		M27 WB near Down End Road bridge	Motorway	75	6600	5	0.0	75	6600	5	0.0	75	6600	0	5	0	0.0	75	6600	0	5	0	0.0
11		A27 (S)	Junction	88	3025	35	9.0	92	2683	24	7.0	90	3109	2	49	14	21.0	95	2781	3	35	11	8.0
11		M27 EB offslip to Boardhunt Road		102	1365	98	17.0	101	1609	73	12.0	103	1382	1	122	24	26.0	102	1628	1	96	23	22.0
11		From Boardhunt Rd		70	611	18	3.0	69	578	25	4.0	74	629	4	21	3	3.0	71	587	2	26	1	4.0
11		M27 WB offslip		80	1159	22	5.0	96	1187	48	6.0	82	1184	2	23	1	5.0	99	1218	3	62	14	7.0

FAREHAM LOCAL PLAN: Junction approach arm statistics for identified locations (Summary Sheet)

			2036 Baseline								2036 Do Minimum											
ID	Junction	Approach Arm	Junction Type	AM RFC (%)	AM Actual Flow (pcus)	AM Delay (s)	AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)	PM Delay (s)	PM Avg. Q (pcus)	AM RFC (%)	AM Actual Flow (pcus)		AM Delay (s)		AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)		PM Delay (s)		PM Avg. Q (pcus)
12	Kiln Road / North Hill / Old Turnpike Lane	North Hill	Signalised	83	460	55	5.0	91	685	53	6.0	84	445	1	57	2	5.0	93	683	2	56	3	6.0
12		Old Turnpike		37	52	70	1.0	66	113	86	2.0	36	49	-1	70	0	1.0	65	112	-1	84	-2	2.0
12		Park Lane		50	235	46	2.0	32	176	37	2.0	55	260	5	47	1	3.0	35	192	3	38	1	2.0
12		Kiln Road		102	755	134	14.0	95	509	87	6.0	103	762	1	153	19	18.0	98	522	3	103	16	6.0
13	A32 Wickham Road / North Hill	A32 Wickham Road (N)	Roundabout	61	1037	6	0.0	64	1094	7	0.0	60	1033	-1	6	0	0.0	68	1157	4	7	0	0.0
13		A32 Wickham Road (S)		50	368	9	0.0	68	458	11	0.0	54	401	4	9	0	0.0	69	460	1	11	0	0.0
13		North Hill		97	739	16	2.0	78	564	8	1.0	100	750	3	31	15	6.0	82	593	4	9	1	1.0
14	West Street / High Street	West Street	Priority	100	823	19	3.0	91	749	7	1.0	99	823	-1	18	-1	3.0	95	793	4	8	1	1.0
14		High Street		3	68	1	0.0	9	199	1	0.0	3	60	0	1	0	0.0	6	125	-3	1	0	0.0
14		East Street		11	229	1	0.0	8	167	1	0.0	11	224	0	1	0	0.0	8	168	0	1	0	0.0
15	Station Roundabout	A27 The Avenue	Roundabout	94	1872	9	1.0	66	1328	5	0.0	94	1880	0	9	0	1.0	71	1430	5	5	0	0.0
15		Station Access		7	224	4	0.0	5	199	3	0.0	8	246	1	4	0	0.0	5	220	0	3	0	0.0
15		West Street		84	421	18	2.0	101	645	59	10.0	91	462	7 Sig	25	7	3.0	103	633	2	86	27	14.0
15		A27 Western Way		47	761	4	0.0	79	1038	7	1.0	51	803	4	4	0	0.0	83	1101	4	8	1	1.0
16	Highlands Road / Kiln Road	Kiln Road (E)	Priority	19	362	1	0.0	39	688	2	0.0	18	345	-1	1	0	0.0	41	731	2	2	0	0.0
16		Highlands Road		102	650	68	12.0	51	313	6	0.0	102	656	0	71	3	12.0	54	322	3	7	1	0.0
16		Kiln Road (W)		23	439	2	0.0	45	655	3	0.0	25	476	2	2	0	0.0	48	696	3	3	0	0.0
17	A27 The Avenue/Catisfield Road	A27 The Avenue (W)	Signalised junction	86	434	45	3.0	39	306	17	1.0	59	371	-27	27	-18	2.0	39	304	0	17	0	1.0
17		A27 The Avenue (E)		51	565	34	5.0	80	569	55	7.0	54	566	3	36	2	5.0	80	569	0	55	0	7.0
17		Catisfield Road		31	755	15	2.0	40	759	21	3.0	34	846	3	19	4	3.0	40	756	0	26	5	3.0
18	A27 The Avenue / Redlands Lane / Gudge Heath Lane	A27 The Avenue (E)	Signalised junction	56	1137	28	6.0	73	1760	34	9.0	59	1221	3	28	0	6.0	76	1829	3	32	-2	10.0
18		Redlands Lane		102	564	141	10.0	83	465	56	5.0	103	555	1	168	27	14.0	99	461	16 Sev	114	58	5.0
18		A27 The Avenue (W)		101	1208	104	17.0	81	801	45	8.0	102	1224	1	127	23	24.0	90	887	9 Sig	54	9	9.0
18		Gudge Heath Lane		105	259	245	9.0	77	339	53	3.0	106	260	1	259	14	10.0	80	352	3	56	3	4.0
19	Peel Common Roundabout	Gosport Road	Roundabout	73	1333	0	0.0	84	1526	0	0.0	83	1504	10	0	0	0.0	87	1586	3	0	0	0.0
19		Newgate Lane East		16	712	0	0.0	25	1084	0	0.0	19	818	3	0	0	0.0	25	1110	0	0	0	0.0
19		Rowner Road		33	1432	0	0.0	24	1048	0	0.0	33	1455	0	0	0	0.0	24	1057	0	0	0	0.0
19		Broom Way		11	1089	0	0.0	11	1093	0	0.0	11	1096	0	0	0	0.0	12	1244	1	0	0	0.0
20	Longfield Avenue / Newgate Lane	Newgate Lane (S)	Roundabout	78	1303	6	0.0	73	1216	6	0.0	81	1333	3	6	0	0.0	82	1354	9	6	0	0.0
20		Longfield Avenue		101	614	59	9.0	62	457	10	1.0	104	608	3	115	56	19.0	71	487	9	12	2	1.0
20		B3385 Newgate Lane (N)		83	813	8	1.0	95	985	10	2.0	93	918	10 Sig	10	2	1.0	98	1006	3	14	4	3.0
21	B2285 Broom Way / Brune Lane	B3385 Broom Way (N)	Priority	20	658	1	0.0	37	1083	1	0.0	28	888	8	1	0	0.0	39	1131	2	1	0	0.0
21		Brune Lane		91	401	27	3.0	84	287	28	2.0	93	336	2	39	12	3.0	81	229	-3	33	5	2.0
21		BB385 Broom Way (S)		31	688	1	0.0	37	806	1	0.0	35	760	4	1	0	0.0	46	1016	9	2	1	0.0
22	Stubbington Bypass (southern access)	B3334 Gosport Road (W)	Roundabout	66	427	12	1.0	50	371	8	0.0	74	474	8	13	1	1.0	58	419	8	9	1	1.0
22		Stubbington Bypass		4	27	6	0.0	3	20	6	0.0	6	47	2	6	0	0.0	4	29	1	6	0	0.0
22		B3334 Gosport Road (E)		104	1503	82	33.0	97	1400	5	0.0	106	1521	2	118	36	48.0	100	1451	3	18	13	6.0
23	B3334 Gosport Road / B3334 / Stubbington Lane	Stubbington Lane (S)	Roundabout	99	824	12	2.0	50	396	5	0.0	101	845	2	34	22	7.0	59	466	9	6	1	0.0
23		Stubbington Green (NW)		2	126	4	0.0	2	122	4	0.0	2	115	0	5	1	0.0	2	125	0	4	0	0.0
23		B334 (N)		69	545	6	0.0	53	429	5	0.0	78	615	9	6	0	0.0	53	432	0	5	0	0.0
23		B334 Gosport Road (SE)		16	122	5	0.0	41	313	6	0.0	14	107	-2	5	0	0.0	42	319	1	6	0	0.0
24	B3334 Titchfield Road / Bridge Street	B3334 Titchfield Road (S)	Signalised junction	75	1764	13	5.0	60	1289	12	4.0	79	1816	4	13	0	5.0	62	1345	2	13	1	4.0
24		Bridge Street		96	350	137	3.0	80	345	87	3.0	102	371	6 Sig	197	60 Sev	6.0	89	385	9 Sig	108	21	3.0
24		B3334 Titchfield Road (N)		36	852	9	2.0	57	1208	13	4.0	43	998	7	9	0	2.0	58	1231	1	13	0	4.0
25	Warsash Road / Common Lane	Warsash Road (S)	Priority	8	176	1	0.0	10	209	1	0.0	7	138	-1	1	0	0.0	10	215	0	1	0	0.0
25		Common Lane		32	439	1	0.0	67	777	1	0.0	35	482	3	0	-1	0.0	74	827	7	1	0	0.0
25		Warsash Road (W)		81	1090	5	0.0	58	654	4	0.0	82	1109	1	5	0	0.0	60	688	2	4	0	0.0
26	Common Lane / St Margarets Lane / Coach Hill	Common Lane	Priority	43	809	2	0.0	35	685	1	0.0	44	839	1	2	0	0.0	36	704	1	1	0	0.0
26		St Margarets Lane		22	150	5	0.0	90	527	16	2.0	28	176	6	5	0	0.0	90	507	0	18	2	2.0
26		Coach Hill		22	593	2	0.0	18	533	1	0.0	20	546	-2	2	0	0.0	21	602	3	1	0	0.0

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			2036 Baseline								2036 Do Minimum													
ID	Junction	Approach Arm	Junction Type	AM RFC (%)	AM Actual Flow (pcus)	AM Delay (s)	AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)	PM Delay (s)	PM Avg. Q (pcus)	AM RFC (%)	AM Actual Flow (pcus)			AM Delay (s)			AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)			PM Delay (s)			PM Avg. Q (pcus)
27	Stubbington Bypass (B3334	B3334 Titchfield Road (N)	Signalised	46	1202	19	5.0	54	1554	32	5.0	52	1363	6		19	0		5.0	56	1616	2		33	1		5.0
27	Titchfield Road)	Stubbington Bypass	junction	39	1102	24	6.0	32	1023	14	3.0	41	1159	2		25	1		7.0	32	1026	0		14	0		3.0
27		B3334 Titchfield Road (S)		98	749	90	8.0	62	327	46	3.0	100	748	2		104	14		8.0	74	386	12		52	6		4.0
28	Titchfield Gyratory	A27 Southampton Rd	Gyratory	39	1720	1	0.0	54	2375	1	0.0	42	1846	3		1	0		0.0	56	2449	2		1	0		0.0
28		A27 The Avenue		88	1392	4	0.0	87	1377	4	0.0	93	1470	5	Sig	5	1		0.0	89	1402	2		4	0		0.0
28		B334 Titchfiled Road		108	1306	215	55.0	80	867	27	5.0	111	1343	3		270	55		73.0	84	913	4		30	3		5.0
28		Titchfield Hill		100	472	56	7.0	45	370	8	0.0	102	444	2		91	35		11.0	90	353	45	Sig	27	19		2.0
29	A27 The Avenue / Highlands Road	A27 The Avenue (E)	Signalised	19	487	17	2.0	23	561	26	4.0	19	496	0		17	0		2.0	21	524	-2		25	-1		4.0
29		Highlands Road	junction	83	579	48	5.0	70	637	30	4.0	92	637	9	Sig	62	14		6.0	70	639	0		30	0		4.0
29		A27 The Avenue (W)		37	1171	19	5.0	39	1242	20	6.0	34	1102	-3		19	0		5.0	39	1255	0		20	0		6.0
30	A27 Southampton Road / Mill	A27 Southampton Rd (E)	Signalised	50	2244	13	7.0	37	1685	16	6.0	50	2238	0		12	-1		7.0	37	1678	0		16	0		6.0
30	Lane	Mill Lane	junction	72	293	58	4.0	99	375	134	5.0	89	364	17	Sig	80	22		5.0	99	376	0		135	1		5.0
30		A27 Southampton Rd (W)		69	1651	15	6.0	85	2101	19	8.0	72	1733	3		16	1		6.0	87	2164	2		21	2		9.0
31	Coach Hill/South Street/Bridge	Coach Hill	Priority	60	509	4	0.0	55	480	4	0.0	68	576	8		4	0		0.0	58	506	3		4	0		0.0
31	Street	South Street		9	64	4	0.0	39	293	5	0.0	10	71	1		5	1		0.0	47	347	8		5	0		0.0
31		Bridge Street		106	458	187	17.0	98	422	69	2.0	110	473	4		252	65	Sev	25.0	100	432	2		88	19		4.0
32	St Margarets Roundabout	Warsash Road	Roundabout	102	967	114	14.0	78	629	26	3.0	104	986	2		151	37		24.0	79	639	1		27	1		3.0
32		A27 Southampton Road (NW)		50	947	14	3.0	56	1776	7	3.0	50	947	0		14	0		3.0	59	1861	3		7	0		3.0
32		Cartwright Drive		74	466	25	2.0	101	652	108	7.0	74	464	0		29	4		2.0	101	654	0		112	4		7.0
32		A27 Southampton Road (SE)		63	2147	7	3.0	44	1429	6	2.0	67	2306	4		7	0		3.0	43	1409	-1		6	0		2.0
32		St Margarets Lane		95	290	56	4.0	28	109	11	0.0	97	274	2		68	12		5.0	28	109	0		11	0		0.0
33	Warwash Road [N] / Warwash	Warwash Road (N)	Roundabout	50	433	5	0.0	104	892	79	19.0	46	401	-4		5	0		0.0	104	894	0		83	4		19.0
33	Road [S] / Primate Road	Primate Road		79	593	7	1.0	73	628	5	0.0	83	621	4		8	1		1.0	73	620	0		5	0		0.0
33		Warwash Road (S)		37	388	6	0.0	15	123	6	0.0	36	381	-1		6	0		0.0	18	146	3		7	1		0.0
34	Lower Church Road /	Lower Church Road	Priority	101	744	37	7.0	48	406	3	0.0	101	698	0		39	2		7.0	51	386	3		4	1		0.0
34	Southampton Road	Southampton Road		3	71	1	0.0	3	72	1	0.0	6	132	3		1	0		0.0	6	137	3		1	0		0.0
35	Segensworth Roundabout	A27 Southampton Rd (S)	Signalised	100	2785	24	12.0	89	1511	31	9.0	100	2725	0		31	7		18.0	98	1604	9	Sig	56	25		10.0
35		Southampton Road (S)	Roundabout	21	126	53	2.0	37	263	35	2.0	29	194	8		36	-17		2.0	26	133	-11		22	-13		1.0
35		A27 Southampton Road (W)		109	1021	245	47.0	100	1191	85	11.0	111	1046	2		292	47		59.0	101	1207	1		96	11		13.0
35		Little Park Farm Rd		104	466	187	22.0	93	598	56	8.0	109	531	5	Sig	250	63	Sev	33.0	101	662	8	Sig	97	41		17.0
35		A27 (N)		106	2549	160	81.0	86	2567	20	11.0	109	2565	3		210	50		112.0	86	2567	0		20	0		11.0
35		Segensworth Rd		37	671	26	4.0	53	1346	74	14.0	36	604	-1		219	193	Sev	29.0	53	1365	0		75	1		15.0
36	Barnes Wallis Road / Brabazon	Barnes Wallis Road (W)	Roundabout	107	1807	128	62.0	70	1207	5	0.0	106	1803	-1		123	-5		59.0	67	1156	-3		5	0		0.0
36	Road / Witherbed Lane	Brabazon Road		59	407	10	1.0	105	813	128	28.0	52	361	-7		9	-1		0.0	105	808	0		129	1		28.0
36		Barnes Wallis Road (E)		48	498	5	0.0	100	751	41	8.0	45	472	-3		5	0		0.0	102	738	2		77	36		15.0
37	Barnes Wallis Road / Whiteley	Barnes Wallis Road	Roundabout	40	412	5	0.0	105	1135	111	34.0	45	446	5		6	1		0.0	108	1121	3		156	45		46.0
37	Lane / Cartwright Drive	Whiteley Lane (N)		81	639	24	0.0	103	31	317	3.0	95	750	14	Sev	40	16		1.0	106	32	3		364	47		3.0
37		Cartwright Drive		106	1110	132	39.0	34	389	5	0.0	106	1096	0		134	2		39.0	41	482	7		5	0		0.0
37		Whiteley Lane (S)		36	11	149	0.0	38	165	19	0.0	49	15	13		163	14		1.0	41	177	3		20	1		0.0
38	Segensworth Road East/Carwright	Segensworth Road East	Priority	92	603	41	4.0	48	594	2	0.0	104	318	12	Sev	137	96	Sev	10.0	62	705	14		2	0		0.0
38	Drive	Carwright Drive (N)		35	655	1	0.0	69	1249	3	0.0	39	740	4		2	1		0.0	68	1232	-1		3	0		0.0
38		Carwright Drive (S)		48	751	2	0.0	4	90	1	0.0	88	893	40	Sig	14	12		0.0	6	123	2		1	0		0.0
39	Southampton Road / Telford Way	Southampton Road (W)	Roundabout	77	1541	4	0.0	67	1349	3	0.0	96	1579	19	Sev	8	4		2.0	67	1343	0		3	0		0.0
39	Roundabout	Telford Way		39	243	6	0.0	44	218	9	0.0	43	261	4		7	1		0.0	58	293	14		11	2		1.0
39		Southampton Road (E)		70	1335	4	0.0	93	1704	7	1.0	63	1184	-7		4	0		0.0	94	1680	1		7	0		1.0

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			2036 Baseline								2036 Do Minimum											
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40	Lower Church Road / Primate	Lower Church Road	Priority	108	263	176	12.0	95	779	8	1.0	110	253	2	206	30	13.0	95	783	0	8	0	1.0
40	Road / Longacres	Primate Road		102	522	109	4.0	30	607	1	0.0	103	491	1	132	23	7.0	31	616	1	1	0	0.0
41	Botley Road / A27 / Hunts Pond	A3051 Botley Road	Roundabout	97	500	41	4.0	106	570	146	21.0	97	506	0	42	1	5.0	107	570	1	168	22	25.0
41	Road / Southampton Road	Southampton Road		68	1199	4	0.0	105	1709	113	50.0	57	1023	-11	3	-1	0.0	106	1706	1	129	16	56.0
41		Hunts Pond Road		102	558	73	11.0	91	406	29	3.0	99	601	-3	40	-33	6.0	93	409	2	34	5	3.0
41		A27 Bridge Road		92	915	15	3.0	99	991	26	5.0	89	889	-3	13	-2	2.0	100	1003	1	33	7	8.0
42	Lower Church Road / Hunts Pond	Lower Church Road	Roundabout	1	6	6	0.0	52	424	4	0.0	1	6	0	6	0	0.0	54	446	2	4	0	0.0
42	Road Roundabout (southern mini	Hunts Pond Road		42	364	3	0.0	25	176	5	0.0	45	390	3	3	0	0.0	28	200	3	5	0	0.0
42	roundabout)	North Mini Roundabout		100	874	5	1.0	103	865	63	15.0	101	885	1	33	28	8.0	103	861	0	64	1	15.0
43	Primate Road / Prelate Way	Primate Road (S)	Priority	16	272	1	0.0	39	773	1	0.0	16	279	0	1	0	0.0	38	773	-1	1	0	0.0
43		Prelate Way		101	922	23	10.0	14	180	2	0.0	102	921	1	28	5	12.0	13	157	-1	2	0	0.0
43		Primate Road (N)		8	138	2	0.0	26	556	1	0.0	10	154	2	2	0	0.0	26	557	0	1	0	0.0
44	Hunts Pond Road / Abshot Road	Hunts Pond Road (S)	Roundabout	38	323	4	0.0	31	256	4	0.0	40	343	2	4	0	0.0	33	275	2	4	0	0.0
44		Abshot Road		75	594	5	0.0	33	290	4	0.0	74	579	-1	5	0	0.0	34	293	1	4	0	0.0
44		Hunts Pond Road (N)		89	612	11	1.0	20	167	4	0.0	89	622	0	11	0	1.0	20	171	0	4	0	0.0
45	Warsash Road / Abshot Road	Warsash Road (W)	Roundabout	100	863	8	1.0	100	843	20	4.0	101	878	1	37	29	8.0	100	846	0	18	-2	4.0
45		Abshot Road		66	339	11	1.0	21	128	5	0.0	71	348	5	12	1	1.0	22	130	1	5	0	0.0
45		Warsash Road (E)		60	495	4	0.0	92	781	4	0.0	62	511	2	4	0	0.0	95	805	3	5	1	0.0
45		Little Abshot Road		0	0	5	0.0	0	0	15	0.0	0	0	0	5	0	0.0	0	0	0	119	104	0.0
46	Peters Road / Lockswood	Peters Road (W)	Roundabout	55	404	7	0.0	96	755	13	1.0	65	471	10	7	0	0.0	96	750	0	12	-1	1.0
46	Roundabout	Lockswood Road (N)		42	340	7	0.0	82	554	11	1.0	46	367	4	7	0	0.0	86	584	4	12	1	1.0
46		Peters Road (E)		15	144	6	0.0	16	120	8	0.0	14	131	-1	6	0	0.0	17	124	1	8	0	0.0
46		Lockswood Road (S)		81	632	8	0.0	50	404	6	0.0	84	648	3	8	0	1.0	52	412	2	6	0	0.0
47	Warsash Road / Locks Road	Warsash Road (W)	Priority	95	761	10	1.0	59	493	4	0.0	95	757	0	9	-1	1.0	61	507	2	4	0	0.0
47		Locks Road		54	280	9	0.0	89	651	9	1.0	58	305	4	9	0	1.0	89	646	0	9	0	1.0
47		Warsash Road (E)		76	645	3	0.0	97	786	9	1.0	78	666	2	3	0	0.0	100	812	3	17	8	3.0
48	Centre Way / Locks Road / Church	Centre Way	Roundabout	49	522	4	0.0	62	693	4	0.0	59	611	10	5	1	0.0	63	700	1	4	0	0.0
48	Road roundabout	Locks Road (N)		29	217	5	0.0	86	589	11	1.0	29	215	0	5	0	0.0	88	596	2	12	1	1.0
48		Church Road		32	253	5	0.0	48	296	7	0.0	34	275	2	5	0	0.0	53	324	5	8	1	0.0
48		Locks Road (S)		27	199	5	0.0	19	125	6	0.0	35	261	8	5	0	0.0	20	128	1	6	0	0.0
49	Lockswood Road / Brook Lane	Brook Lane (N)	Roundabout	75	641	7	0.0	98	775	15	2.0	72	609	-3	7	0	0.0	98	770	0	16	1	2.0
49	Roundabout	Lockswood Road		80	560	11	1.0	59	419	9	0.0	77	553	-3	11	0	1.0	62	439	3	9	0	0.0
49		Brook Lane (S)		75	482	11	1.0	87	626	11	1.0	79	508	4	11	0	1.0	89	637	2	12	1	1.0
50	A27 Bridge Road / Coldeast Way	A27 Bridge Road (E)	Signalised	61	750	15	2.0	60	726	15	2.0	67	817	6	17	2	3.0	61	749	1	15	0	2.0
50		Coldeast Way	junction	0	0	77	0.0	0	0	77	0.0	0	0	0	77	0	0.0	0	0	0	77	0	0.0
50		A27 Bridge Road (W)		56	665	16	2.0	86	886	35	5.0	59	690	3	17	1	3.0	92	899	6	Sig 52	17	6.0
51	A27 Bridge Road / Station Road /	A27 Bridge Road (W)	Roundabout	105	657	125	21.0	105	783	114	23.0	106	646	1	141	16	23.0	104	782	-1	107	-7	22.0
51	Brook Lane Roundabout	Station Road		84	546	12	1.0	102	651	76	13.0	88	582	4	14	2	2.0	103	654	1	91	15	15.0
51		A27 Bridge Road (E)		100	770	35	7.0	101	754	50	10.0	100	751	0	31	-4	6.0	101	757	0	52	2	10.0
51		Brook Lane		96	962	19	3.0	79	792	7	1.0	97	970	1	23	4	4.0	81	808	2	7	0	1.0
52	A27 Bridge Road / Locks Road	A27 Bridge Road (W)	Priority	42	915	0	0.0	45	991	0	0.0	40	889	-2	0	0	0.0	46	1003	1	0	0	0.0
52		A27 Bridge Road (E)		37	734	1	0.0	83	1344	6	0.0	32	626	-5	1	0	0.0	83	1344	0	7	1	0.0
52		Locks Road		36	285	4	0.0	18	96	5	0.0	42	352	6	4	0	0.0	24	128	6	5	0	0.0

FAREHAM LOCAL PLAN: Junction approach arm statistics for identified locations (Summary Sheet)

			2036 Baseline								2036 Do Minimum											
ID	Junction	Approach Arm	Junction Type	AM RFC (%)	AM Actual Flow (pcus)	AM Delay (s)	AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)	PM Delay (s)	PM Avg. Q (pcus)	AM RFC (%)	AM Actual Flow (pcus)		AM Delay (s)		AM Avg. Q (pcus)	PM RFC (%)	PM Actual Flow (pcus)		PM Delay (s)		PM Avg. Q (pcus)
53	A3051 Botley Road / Rookery	Land South of Swanwick Lane	Signalised	0	0	4	0.0	0	0	4	0.0	0	0	0	4	0	0.0	0	0	0	4	0	0.0
53	Avenue	A3051 Botley Road (N)	junction	13	959	0	0.0	19	1176	0	0.0	13	952	0	0	0	0.0	19	1200	0	0	0	0.0
53		Rookery Avenue		0	0	4	0.0	0	0	4	0.0	0	0	0	3	-1	0.0	0	0	0	4	0	0.0
53		A3051 Botley Road (S)		98	900	42	0.0	11	744	0	0.0	102	916	4	99	57	10.0	12	763	1	0	0	0.0
54	Botley Road / Yew Tree Drive	A3051 Botley Road (N)	Roundabout	104	726	105	20.0	108	872	165	38.0	105	719	1	118	13	23.0	109	879	1	175	10	40.0
54		Yew Tree Drive		102	681	62	11.0	119	597	394	57.0	104	698	2	98	36	18.0	122	563	3	438	44	59.0
54		A3051 Botley Road (S)		111	888	218	50.0	86	733	5	0.0	111	887	0	219	1	50.0	87	752	1	5	0	0.0
55	Sweethills Crescent / Yew Tree	Yew Tree Drive (W)	Roundabout	65	549	5	0.0	27	216	5	0.0	70	587	5	5	0	0.0	22	179	-5	5	0	0.0
55	Drive Roundabout	Sweethils Crescent		38	249	6	0.0	24	193	4	0.0	41	255	3	6	0	0.0	22	181	-2	4	0	0.0
55		Yew Tree Drive (E)		71	624	4	0.0	81	709	4	0.0	75	660	4	4	0	0.0	79	689	-2	4	0	0.0
56	Sweethills Crescent / Yew Tree	Yew Tree Drive (W)	Priority	31	647	1	0.0	13	276	1	0.0	31	662	0	1	0	0.0	12	241	-1	1	0	0.0
56	Drive	Sweethils Crescent		29	144	7	0.0	63	94	18	0.0	30	145	1	7	0	0.0	67	93	4	19	1	0.0
56		Yew Tree Drive (E)		24	537	1	0.0	93	503	39	0.0	25	553	1	1	0	0.0	98	471	5 Sig	64	25	0.0
57	Bridge Road/Swanwick Lane	Bridge Road (N)	Signalised	88	1541	26	7.0	98	1655	47	9.0	94	1645	6 Sig	33	7	8.0	101	1710	3	81	34	18.0
57		Bridge Road (S)	junction	103	1264	117	22.0	46	916	11	2.0	104	1329	1	141	24	32.0	49	968	3	11	0	2.0
57		Swanwick Lane		75	342	47	3.0	73	549	37	4.0	77	349	2	49	2	3.0	76	568	3	38	1	4.0
58	A27 Bridge Road/Barnes Lane	A27 Bridge Road (W)	Signalised	36	1104	3	0.0	52	1598	17	6.0	39	1183	3	4	1	1.0	53	1634	1	29	12	12.0
58		A27 Bridge Road (E)		34	688	1	0.0	35	659	1	0.0	37	747	3	1	0	0.0	36	680	1	1	0	0.0
58		Barnes Lane		90	781	16	3.0	52	577	2	0.0	102	772	12 Sev	56	40	11.0	56	609	4	2	0	0.0
59	A32 Wickham Road / Knowle	A32 Wickham Rd (S)	Roundabout	62	905	5	0.0	67	975	5	0.0	62	908	0	5	0	0.0	65	952	-2	5	0	0.0
59	Road	Chalk Lane		0	0	9	0.0	0	0	7	0.0	0	0	0	9	0	0.0	0	0	0	7	0	0.0
59		A32 Wickham Rd (N)		85	874	7	1.0	68	733	6	0.0	85	879	0	7	0	1.0	70	755	2	6	0	0.0
59		Knowle Rd		38	310	8	0.0	25	201	8	0.0	37	297	-1	8	0	0.0	25	200	0	8	0	0.0
60	A32 Wickham Road / Pook Lane /	A32 Wickham Rd (N)	Priority /	53	1233	4	0.0	46	934	4	0.0	52	1220	-1	4	0	0.0	48	950	2	4	0	0.0
60	M27 EB Onslip / Welborne	Pook Lane		0	0	0	0.0	0	0	0	0.0	0	0	0	0	0	0.0	0	0	0	0	0	0.0
60	development	A32 Wickham Rd (S)		94	1742	4	0.0	102	1879	38	18.0	95	1740	1	4	0	0.0	103	1891	1	53	15	26.0
60		Welborne Access		22	445	5	0.0	38	687	6	1.0	21	439	-1	5	0	0.0	38	685	0	6	0	1.0
61	A32 Wickham Road / Knowle	From Welborne Access (W)	Priority /	21	162	5	0.0	15	101	5	0.0	21	161	0	5	0	0.0	15	106	0	5	0	0.0
61	Road / Chalk Lane	A32 Wickham Road (N)	Roundabout	84	1184	3	0.0	65	934	3	0.0	83	1176	-1	3	0	0.0	67	954	2	3	0	0.0
61		North Fareham SDA (E of A32) access		0	0	9	0.0	0	0	5	0.0	0	0	0	8	-1	0.0	0	0	0	6	1	0.0
61		A32 Wickham Road (S)		76	869	3	0.0	90	1025	4	0.0	76	870	0	3	0	0.0	87	992	-3	3	-1	0.0
62	Boarhunt Road/M27 J11 Off slip	M27 J11 Off slip	Priority	106	1055	102	28.0	102	1021	48	13.0	106	1058	0	108	6	29.0	103	1025	1	55	7	15.0
62		Boarhunt Road (SW)		0	0	3	0.0	0	0	4	0.0	0	0	0	3	0	0.0	0	0	0	4	0	0.0
62		Boarhunt Road (NE)		37	611	2	0.0	35	578	2	0.0	38	629	1	2	0	0.0	36	587	1	2	0	0.0
63	Lockswood Road / Centre Way	Lockswood Road (N)	Priority	14	275	1	0.0	28	499	1	0.0	15	282	1	1	0	0.0	29	522	1	1	0	0.0
63		Centre Way		40	584	3	0.0	39	474	3	0.0	46	654	6	3	0	0.0	40	487	1	4	1	0.0
63		Lockswood Road (S)		42	324	4	0.0	73	586	5	0.0	42	326	0	4	0	0.0	80	640	7	6	1	0.0
64	Barnes Wallis Road / Brunel Way	Barnes Wallis (W)	Priority	19	412	1	0.0	33	735	1	0.0	20	446	1	1	0	0.0	34	746	1	1	0	0.0
64		Brunel Way		0	0	6	0.0	79	507	10	1.0	0	0	0	6	0	0.0	80	502	1	11	1	1.0
64		Barnes Wallis (E)		48	1009	2	0.0	14	312	1	0.0	43	932	-5	1	-1	0.0	15	332	1	1	0	0.0
65	Highlands Road / Fareham Park	Highlands Road (W)	Priority	34	684	1	0.0	34	669	1	0.0	35	722	1	1	0	0.0	35	689	1	1	0	0.0
65	Road	Fareham Park Road		79	491	10	1.0	67	353	10	1.0	86	518	7 Sig	13	3	1.0	72	375	5	11	1	1.0
65		Highlands Road (E)		34	534	2	0.0	66	1011	4	0.0	36	569	2	2	0	0.0	68	1037	2	4	0	0.0
66	Lower Church Road / Hunts Pond	Southern mini roundabout	Roundabout	43	370	4	0.0	59	496	4	0.0	46	396	3	4	0	0.0	63	530	4	4	0	0.0
66	Road Roundabout (northern mini	Church Road		77	637	4	0.0	68	565	4	0.0	82	682	5	5	1	0.0	69	562	1	4	0	0.0
66	roundabout)	Hunts Pond Road		51	313	7	0.0	67	441	7	0.0	47	272	-4	7	0	0.0	68	452	1	7	0	0.0

Volume over Capacity (V/C)	
Significant:	V/C above 85%, having increased by more than 5%
Severe:	V/C above 95%, having increased by more than 10%
Delay	Delay above 120 seconds, having increased by more than 60 seconds

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