

AtkinsRéalis



**Wiltshire Transport
Model: LPR (2024)**

Wiltshire Council

26 July 2024

WTM_LPR-2024

WILTSHIRE LOCAL PLAN REVIEW (2024)

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1. Introduction

To inform analysis of the ongoing Wiltshire Local Plan Review (LPR), AtkinsRéalis has been commissioned by Wiltshire Council (WC) to derive a series of model scenarios utilising the Wiltshire Transport Model (WTM). These WTM scenarios represent the most recent assumptions relating to the ongoing Wiltshire LPR, which are referred to in this document as 'LPR (2024)'.

In 2020, WC commenced a review of their current Local Plan, which was adopted as part of Wiltshire's Core Strategy in 2015. AtkinsRéalis provided support to WC through the production of a transport assessment, forming the 'LPR (2020)' transport evidence base¹. Subsequently in 2022, WC amended the Local Plan development assumptions. AtkinsRéalis undertook an updated transport assessment, forming the 'LPR (2022)' transport evidence base². The LPR (2022) transport assessment looked more deeply into how different packages of interventions could mitigate impacts and make changes in travel behaviour towards more sustainable outcomes.

This document summarises the input assumptions associated with the LPR (2024), followed by the presentation of model outputs extracted from the WTM LPR (2024) scenarios. The model outputs aim to provide an indication of the predicted impact of the LPR (2024) on the highway network in 2038 (i.e., LPR plan period). The intention of this document is to supplement the more detailed LPR (2022) transport assessment, rather than a complete replacement. The LPR (2022) Interim Strategic Model (ISM) mitigation packages previously documented are still relevant, this LPR (2024) exercise is intended to help understand the impacts of the revised Local Plan assumptions on the highway network.

Please refer to previously published documentation for details of the WTM (LMVR³ and TFR⁴), which are not repeated in this report. The technical details documented in this report are a summary of the changes made to previously documented scenarios.

1.1 Report structure

The following sections are included in this report:

- Section two outlines the LPR (2024) assumptions.
- Section three provides an overview of the WTM LPR (2024) scenarios developed.
- Section four presents the assumptions for the 2038 Core scenario.
- Section five presents the assumptions for the 2038 LPR (2024) scenarios.
- Section six presents the model outputs for all WTM LPR (2024) scenarios.
- Section seven provides a summary.

¹ Wiltshire LPR (2020) (January 2021): https://www.wiltshire.gov.uk/media/5725/Wiltshire-Local-Plan-Transport-Review/pdf/Wiltshire_Local_Plan_Transport_Review.pdf?m=637460675515330000

² Wiltshire LPR (2022) Transport Evidence Base (May 2023): Wiltshire LPR 2022 - Baseline Report TN v3.0.pdf

³ WTM Local Model Validation Report (LMVR) (March 2024): Wiltshire 2018 Base Model LMVR Issue 6c_v2.0.pdf

⁴ WTM Traffic Forecasting Report (TFR) (December 2023): Wiltshire Traffic Forecasting Report Issue 6c_v1.0.pdf



2. Local Plan Review (2024)

WC is in the process of developing a new Local Plan to set out the policies and strategies to demonstrate how growth in housing and employment will be accommodated across the county over the course of the new plan period up to 2038. This growth will generate additional demand on the transport network, which may require mitigation to limit adverse impacts resulting from forecast growth.

This Section summarises the impacts of the Local Plan Review growth in comparison to committed development (i.e., WC's Core strategy). It should be noted that the numbers presented in this section relating to current housing and employment allocations are under ongoing review and may change slightly from what is presented here. Although, it is not expected that the overall quantum would significantly change to require further revision or review.

2.1 Dwellings

The LPR (2024) includes an additional 15,235 (6%) dwellings between 2020 and 2038 compared to WC's current Core strategy. Table 2-1 presents the housing growth quantum for Wiltshire over the plan period to 2038, including the following data:

- **Base (2018):** extant (2018) number of dwellings.
- **Core growth (2038):** 'committed' dwellings between 2018 and 2038 (i.e., Uncertainty Log).
- **LP growth (2038):** dwellings associated with the LPR (2024) between 2020 and 2038.
- **2038 Core:** 'Base (2018) + Core growth (2038)' (i.e., modelled 'Core' scenario).
- **2038 LP:** 'Base (2018) + Core growth (2038) + LP growth (2038)' (i.e., modelled 'LP' scenarios).

Figure 2-1 provides an overview of the proposed geographic location of the LPR (2024) sites across Wiltshire, whilst more detailed figures for each Housing Market Area (HMA) are provided in Appendix D. The proposed dwellings associated with the LPR (2024) are distributed across individual settlements within each HMA. As such, there is no 'key development' region, with most settlements observing some form of increased provision ranging between 40 to 2,525 dwellings. The LPR (2024) dwelling allocations include:

- The main growth areas in Wiltshire are within Chippenham and Salisbury HMAs, notably Chippenham (2,525), Salisbury (1,530), Ludgershall (1,270), and Melksham (1,120).
 - Included in Salisbury HMA is a development specified as 'New Community' (1,600), the location of which is still under review.
- Swindon HMA excludes Swindon Borough Council, meaning the main growth area is Royal Wootton Bassett (1,230).
- Trowbridge HMA is allocated the smallest dwelling allocation associated with the LPR (2024), with the bulk of the allocation split across Trowbridge (840) and Westbury (570).

Table 2-1 – Total dwellings in Wiltshire (2018 – 2038)

HMA	Settlement	2018 Base	Core growth (2038)	LP growth (2038)	2038 Core	2038 LP
Chippenham	Calne	8,379	773	600	9,152	9,752
	Chippenham	15,452	3,617	2,525	19,069	21,594
	Corsham	2,700	170	260	2,870	3,130
	Devizes	6,416	713	40	7,129	7,169
	Malmesbury	8,772	350	-	9,122	9,122
	Melksham	8,618	1,340	1,120	9,958	11,078
	Rest of HMA	13,109	-	730	13,109	13,839
	Total	63,446	6,963	5,275	70,409	75,684
Salisbury	Amesbury		2,371	120		
	Salisbury		3,269	1,530		
	Ludgershall		1,483	1,270		
	Wilton	64,389	742	-	72,254	78,134
	Rest of HMA		-	1,360		
	'New Community'		-	1,600		
Total	64,389	7,865	5,880	72,254	78,134	
Swindon	Royal Wootton Bassett	6,059	-	1,230	6,059	7,289
	West of Swindon	-	-	-	-	-
	Marlborough		175	230		
	Rest of HMA	10,576	-	710	10,751	11,691
	Total	16,635	175	2,170	16,810	18,980
Trowbridge	Trowbridge	17,418	3,755	840	21,173	22,013
	Warminster	8,058	1,665	40	9,723	9,763
	Westbury	7,385	855	570	8,240	8,810
	Bradford on Avon		150	80		
	Rest of HMA	30,241	-	380	30,391	30,851
Total	63,102	6,425	1,910	69,527	71,437	
Wiltshire (Local Authority)		207,572	21,428	15,235	229,000	244,235

Source: Wiltshire Council



Figure 2-1 – Location of proposed LPR (2024) housing developments across Wiltshire

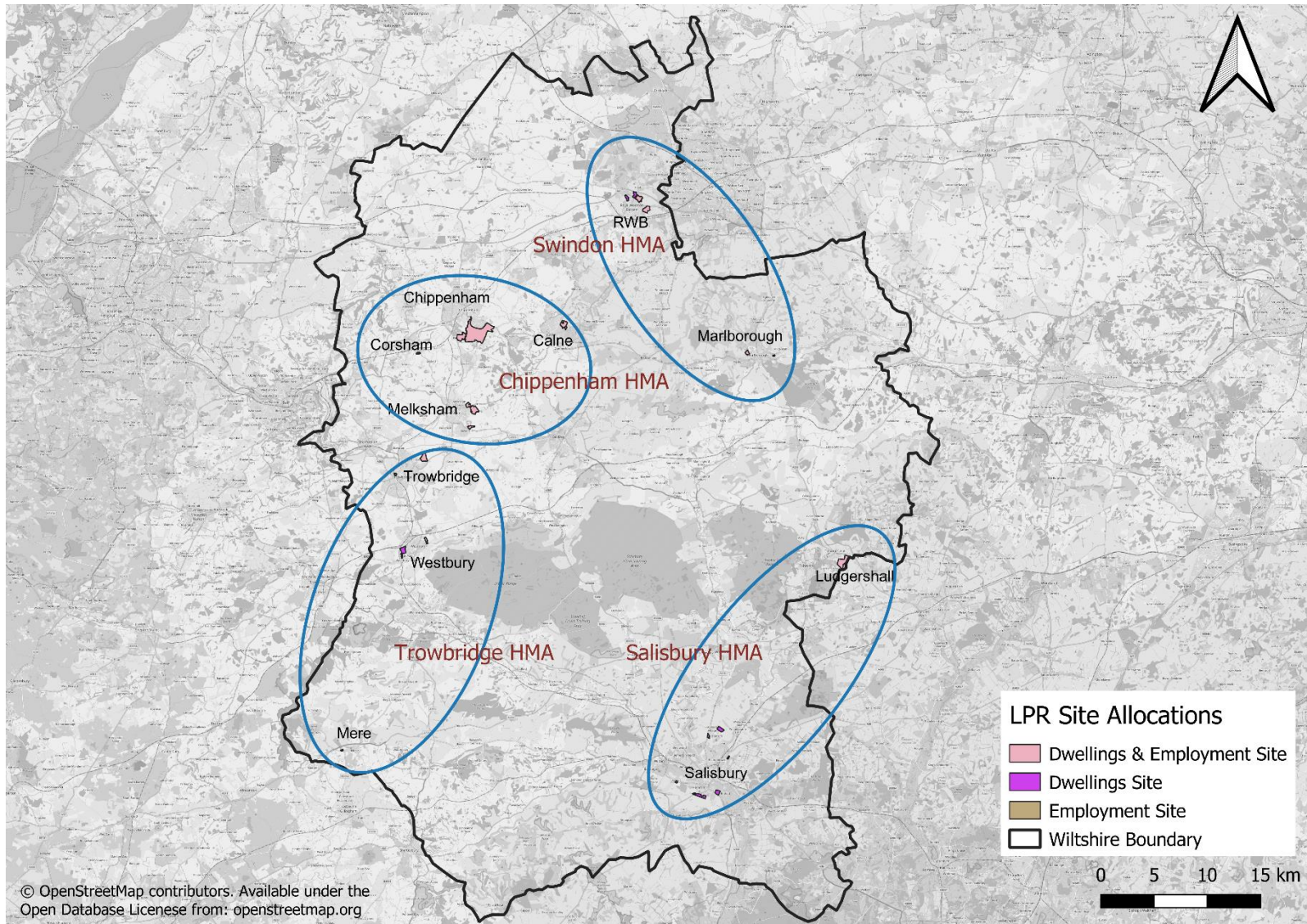


Table 2-2 shows the change in proposed dwelling allocations associated with the LPR (2024) in comparison to the previous LPR (2022)² assessment. The LPR (2024) includes an additional 270 dwellings to be constructed between 2020 and 2038 compared to the previous the LPR (2022) dwelling allocation. Although there is minimal change in the total dwelling allocation across Wiltshire (i.e., 270 dwellings), the quantum of change as to where these houses are to be built has been amended slightly:

- There is a slight reduction in dwelling provisions in Chippenham (-315) and Swindon (-275) HMAs, whilst there is a subsequent increase in Salisbury (+170) and Trowbridge (+690) HMAs.
- The greatest change in Chippenham HMA is the reduction of dwellings in Melksham (-445) and Devizes (-330), whilst an amendment to dwelling allocations in Royal Wootton Bassett (-445) is the main driver of change in Swindon HMA.
- There is an increase in dwellings allocated to Salisbury (+275) within the Salisbury HMA, plus the proposed Salisbury 'New Community' has also increased in size (+100).
 - The Salisbury 'New Community' was previous located at High Post in the LPR (2022), however the specific location of the development site is currently under review by WC.
- All settlements within Trowbridge HMA show an increased dwelling allocation, with Trowbridge (+475) being the greatest change.



Table 2-2 – Total dwellings in Wiltshire (2020-2038): LPR (2022) vs. LPR (2024)

HMA	Settlement	2022 Local Plan allocation	2024 Local Plan allocation	Difference
Chippenham	Calne	460	600	140
	Chippenham	2,345	2,525	180
	Corsham	195	260	65
	Devizes	370	40	-330
	Malmesbury	100	-	-100
	Melksham	1,565	1,120	-445
	Rest of HMA	555	730	175
	Total	5,590	5,275	-315
Salisbury	Amesbury	400	120	-280
	Salisbury	1,255	1,530	275
	Ludgershall	1,105	1,270	165
	Wilton	60	-	-60
	Rest of HMA	1,390	1,360	-30
	'New Community'*	1,500	1,600	100
	Total	5,710	5,880	170
Swindon	Royal Wootton Bassett	1,675	1,230	-445
	West of Swindon	-	-	-
	Marlborough	195	230	35
	Rest of HMA	575	710	135
	Total	2,445	2,170	-275
Trowbridge	Trowbridge	55	80	25
	Warminster	365	840	475
	Westbury	-	40	40
	Bradford on Avon	455	570	115
	Rest of HMA	345	380	35
Total	1,220	1,910	690	
Wiltshire (Local Authority)		14,965	15,235	270

* Salisbury 'New Community' was previously referred to as 'High Post' in the LPR (2022).



2.2 Employment

The LPR (2024) includes an additional 160 hectares (ha) of employment land between 2020 and 2038 compared to WC's current Core strategy.

Table 2-3 presents the allocation for office and industrial employment land for Wiltshire over the plan period to 2038. Employment developments are specified in hectares (ha) by HMA and settlement. Figure 2-1 provides an overview of the proposed geographic location of the LPR (2024) sites across Wiltshire, whilst more detailed figures for each HMA are provided in Appendix D. The LPR (2024) employment allocations include:

- There is total of 160ha of employment land to be developed and constructed by 2038, of which 29ha has been allocated to specific sites within a settlement. The remaining 131ha of employment land is to be assigned to specific sites over the course of the LPR (2024) being enacted.
- Most employment growth is yet to be allocated to specific sites, with the one notable exception being Chippenham HMA. There is a total of 22.7ha of industrial land allocated to specific sites in Chippenham (15ha) and Melksham (5ha).



Table 2-3 – Total LPR (2024) employment land requirements (2020-2038)

HMA	Settlement	Office (ha)	Industrial (ha)	Total (ha)
Chippenham	Calne	0.5	2.7	3.2
	Chippenham	-	15.0	15.0
	Corsham	-	-	-
	Devizes	-	-	-
	Malmesbury	-	-	-
	Melksham	-	5.0	5.0
	Rest of HMA	-	-	-
	Total		0.5	22.7
Salisbury	Amesbury	-	-	-
	Salisbury	-	1.5	1.5
	Ludgershall	-	0.7	0.7
	Wilton	-	-	-
	Rest of HMA	-	-	-
	'New Community'*	-	-	-
	Total		0.0	2.2
Swindon	Royal Wootton Bassett	1.8	-	1.8
	West of Swindon	-	-	-
	Marlborough	-	1.8	1.8
	Rest of HMA	-	-	-
	Total	1.8	1.8	3.6
Trowbridge	Trowbridge	-	-	-
	Warminster	-	-	-
	Westbury	-	-	-
	Bradford on Avon	-	-	-
	Rest of HMA	-	-	-
Total	0.0	0.0	0.0	
Wiltshire Allocated		2.3	26.7	29.0
Wiltshire Unallocated		10.4	120.6	131.0
Wiltshire (Local Authority)		12.7	147.3	160.0

Source: Wiltshire Council

* Salisbury 'New Community' was previously referred to as 'High Post' in the LPR (2022).

Table 2-4 shows the change in proposed employment allocations associated with the LPR (2024) in comparison to the previous LPR (2022) assessment. The LPR (2024) includes an additional ~52ha of employment land to be constructed between 2020 and 2038, compared to the previous the LPR (2022) employment allocation. The most significant difference is that most employment land is yet to be allocated to specific HMAs.



Table 2-4 - Comparison between LPR (2022) and LPR (2024) employment land requirements (ha)

HMA	2022 Local Plan allocation	2024 Local Plan allocation	Difference
Chippenham	44.4	23.2	-21.2
Salisbury	32.7	2.2	-30.5
Swindon	16.3	3.6	-12.7
Trowbridge	14.0	0.0	-14
Wiltshire (Local Authority)	107.4	29.0	-78.4

3. WTM scenarios

3.1 Model Scenarios

AtkinsRéalis have developed a series of WTM scenarios to assess the impacts of the LPR (2024) and proposed mitigation on the highway network. A summary of the WTM scenarios developed is presented in Table 3-1. Further details of the specific assumptions relating to the Core scenario are documented in Section 4, whilst details of the LPR (2024) scenarios (i.e., DM, DS1, DS2) are documented in Section 5.

The model scenarios are separated into two categories: 'planning' scenarios to reflect proposed changes to housing and employment growth, and 'intervention' scenarios defined by WC to determine the level of infrastructure required to accommodate changes in housing and employment growth.

Planning scenarios

- **Base (2018)**: 'existing' scenario as of 2018.
- **Core (2038)**: committed development and highway infrastructure scheduled to be completed in or before 2038, as specified in the WTM Uncertainty Log.
- **LP Do-Minimum (DM) (2038)**: the 'Core' scenario, plus development and highway infrastructure associated with the Wiltshire LPR (2024).

Intervention scenarios

- **LP Do-Something (DS) 1 (2038)**: the LP DM scenario, plus inclusion of the Chippenham Southern Distributor Road (SDR).
- **LP Do-Something (DS) 2 (2038)**: the LP DS1 scenario, plus an infrastructure mitigation package intended to alleviate congestion across the county. The additional infrastructure interventions include the Major Road Network (MRN) schemes and previously identified LPR (2020) mitigation measures.



Table 3-1 – WTM scenario definitions

Scenario	Assignment	Year	Time periods (average hour)	Demand assumptions	Network assumptions
2018 Base	Fixed demand (SATURN)	2018	<ul style="list-style-type: none"> • AM (07:00 – 10:00) • IP (10:00 – 16:00) • PM (16:00 – 19:00) 	2018 Base year demand	2018 Base year highway infrastructure
2038 Core	Fixed demand (SATURN)	2038	<ul style="list-style-type: none"> • AM (07:00 – 10:00) • IP (10:00 – 16:00) • PM (16:00 – 19:00) 	Base demand + Core demand, with background growth constrained to NTEM 8.0.	2018 Base + Core infrastructure (i.e., Uncertainty Log v6.0, Appendix A)
2038 LPR DM	Fixed demand (SATURN)	2038	<ul style="list-style-type: none"> • AM (07:00 – 10:00) • IP (10:00 – 16:00) • PM (16:00 – 19:00) 	Base demand + Core demand + LPR demand, with background growth constrained to an 'alternative' NTEM 8.0 scenario.	2038 Core + LPR site specific access points.
2038 LPR DS1	Fixed demand (SATURN)	2038	<ul style="list-style-type: none"> • AM (07:00 – 10:00) • IP (10:00 – 16:00) • PM (16:00 – 19:00) 	Same as LPR DM.	2038 LPR DM + Chippenham SDR.
2038 LPR DS2	Fixed demand (SATURN)	2038	<ul style="list-style-type: none"> • AM (07:00 – 10:00) • IP (10:00 – 16:00) • PM (16:00 – 19:00) 	Same as LPR DM.	LPR DS1 + MRN schemes and LPR (2024) highway mitigations.



4. Model assumptions: Core

The Core scenario is intended to provide the foundation for evidenced based decision-making using a central traffic forecast. It provides a representation of forecast highway network conditions associated with committed development and infrastructure as part of WC's core strategy.

Table 4-1 provides an overview of the 'Core' scenario documented in this section. The subsequent sub-headings provide details of what has changed in the latest version of the Core scenario. For full details of the Core model development, refer to Chapter 3 of the WTM TFR⁴.

Table 4-1 - WTM scenario definitions: Core

Scenario	Demand assumptions	Infrastructure assumptions
2038 Core	Base demand + Core demand, with background growth constrained to NTEM 8.0.	2018 Base + Core infrastructure (i.e., Uncertainty Log v6.0, Appendix A)

4.1 Demand

The demand assumptions associated with the Core scenario are split into two categories:

- Local growth (Section 4.1.1): specific developments in Wiltshire as identified in the WTM Uncertainty Log (v6.0).
- Regional growth (Section 4.1.2): the impact of changes in demographic and traveller behaviour derived from NTEM v8.0.

4.1.1 Local growth

TAG recommends that all known assumptions and uncertainties in the modelling and forecasting approach should be set out in an Uncertainty Log. The purpose of the Uncertainty Log is to record the central forecasting assumptions that underpin the Core scenario and record the degree of uncertainty around these central assumptions.

An updated Uncertainty Log (i.e., v6.0) was provided by WC to inform the revised Core scenario (Appendix A), with each development allocated to a WTM sector (Figure 4-1). Figure 4-2 provides an overview of the proposed geographic location of developments within the Uncertainty Log that meet the TAG criteria of 'more than likely' or 'near certain' (see Section 3.4.2 of the TFR⁴ for details), whilst more detailed figures for each Housing Market Area (HMA) are provided in 7.Appendix B.

Figure 4-1 - WTM 20 sector system

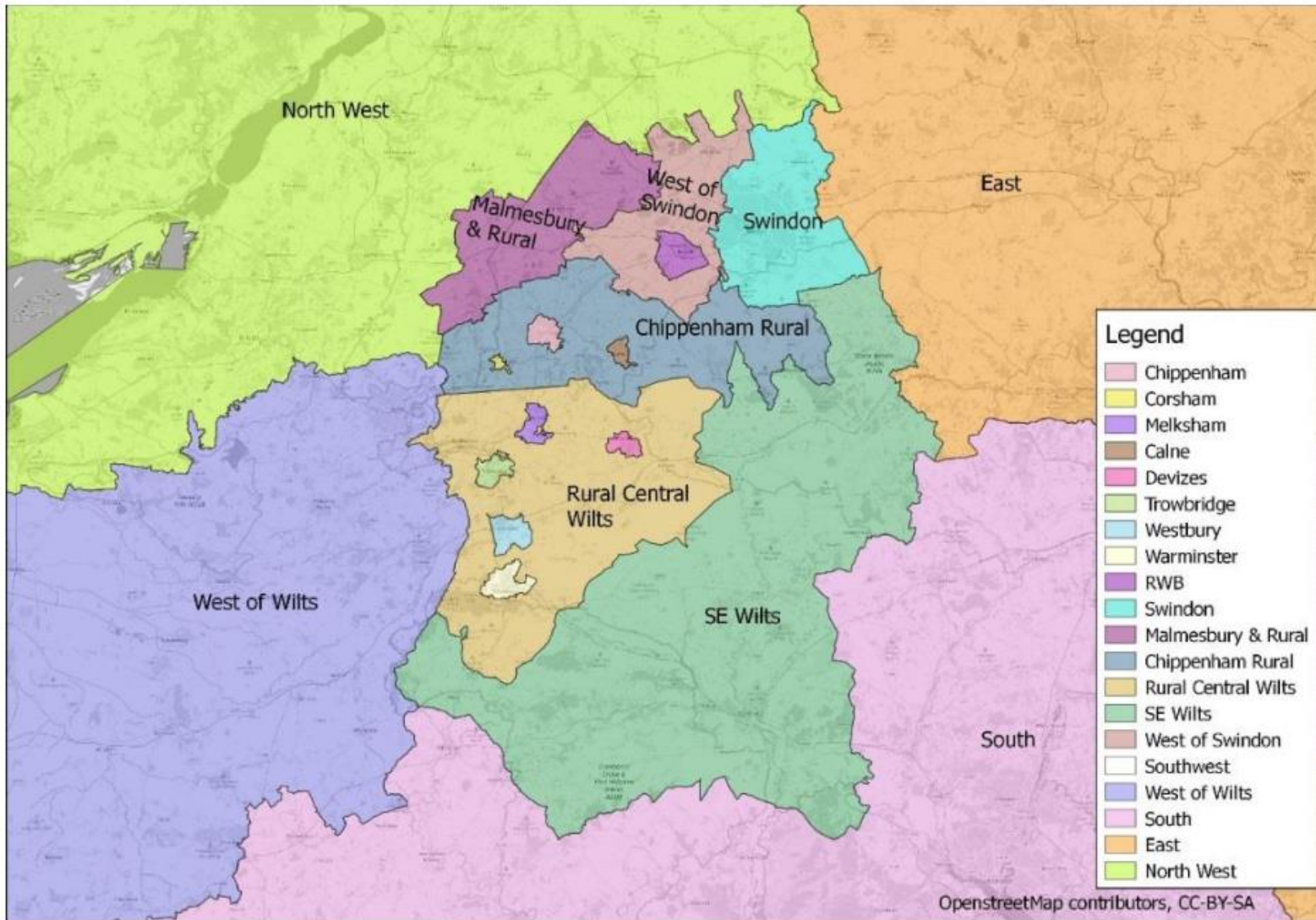
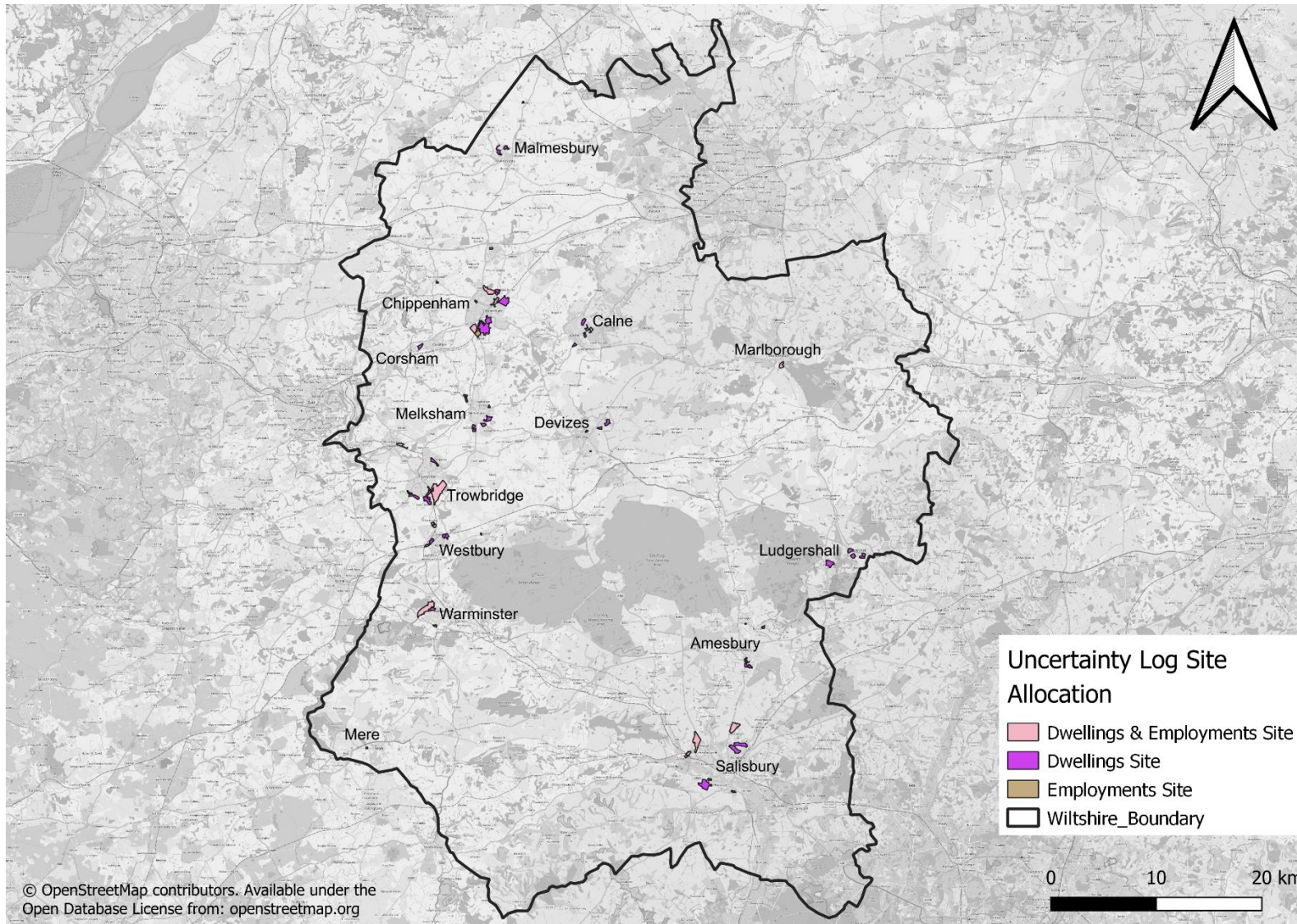


Figure 4-2 - Location of key developments included in the Uncertainty Log



4.1.1.1 Dwellings

Table 4-2 presents the projected dwelling totals included in the Uncertainty Log for Wiltshire, between 2018 and 2038. This includes the number of households identified within the Uncertainty Log that meet the TAG criteria of 'more than likely' or 'near certain'. The table includes the following data:

- **Base (2018):** extant (2018) number of dwellings.
- **Uncertainty Log (2038):** 'committed' dwellings between 2018 and 2038 (i.e., Uncertainty Log).
- **2038 Core:** 'Base (2018) + Uncertainty Log (2038)' (i.e., modelled 'Core' scenario).

Dwelling totals in Chippenham, Trowbridge, Warminster, and Swindon are expected to increase by over 20% between 2018 and 2038. This excludes any potential growth anticipated as part of the emerging LPR, which is in addition to the Core land-use assumptions.

Table 4-2- Projected dwellings included in the Uncertainty Log (v6.0) by sector

Model sector	Base (2018)*	Uncertainty Log (2018 - 2038)	Core (2038)	Difference (%) (Core - Base)
Chippenham	15,452	3,587	19,039	23%
Corsham	2,700	170	2,870	6%
Melksham	8,618	1,340	9,958	16%
Calne	8,379	773	9,152	9%
Devizes	6,416	713	7,129	11%
Trowbridge	17,418	3,755	21,173	22%
Westbury	7,385	855	8,240	12%
Warminster	8,058	1,665	9,723	21%
Royal Wootton Bassett	6,059	0	6,059	0%
Malmesbury	8,772	350	9,122	4%
Chippenham rural	13,109	205	13,314	2%
Rural central	30,241	150	30,391	0%
South-east Wiltshire	64,389	8,020	72,409	12%
West of Swindon	10,576	0	10,576	0%
Wiltshire (Local Authority)	207,572	21,583	229,155	10%
Swindon	96,257	19,762	116,019	21%
Wiltshire & Swindon	303,829	41,345	345,174	14%

*The number of houses in the 2018 base year is derived from AddressBaseTM.

4.1.1.2 Employment

Table 4-3 presents the projected employment land (ha) totals included in the Uncertainty Log for Wiltshire, between 2018 and 2038. This includes the employment developments identified within the Uncertainty Log that meet the TAG criteria of 'more than likely' or 'near certain'.



Employment land in Wiltshire (county) is expected to increase by 142.3ha between 2018 and 2038, most of which is allocated within Swindon Borough (86.3ha). The remaining 56ha are distributed across several sites in Chippenham (11.5ha) and 'Chippenham Rural' (9.3ha), 'Rural central Wiltshire' (17.7ha), Trowbridge (10ha), and Warminster (6ha). The main location within 'Chippenham Rural' is the land south-east of M4 J17 (9.3ha), whilst the main location within 'Rural central Wiltshire' is the Hawkeridge Business Park (14.7ha).

Table 4-3 - Projected employment land (ha) included in the Uncertainty Log (v6.0) by sector

Model sector	Uncertainty Log (2018-2038)
Chippenham	11.5
Corsham	0.0
Melksham	0.0
Calne	0.0
Devizes	0.0
Trowbridge	10.0
Westbury	0.0
Warminster	6.0
Royal Wootton Bassett	0.3
Malmesbury	0.0
Chippenham rural	9.3
Rural central	17.7
South-east Wiltshire	1.2
West of Swindon	0.0
Wiltshire (Local Authority)	56.0
Swindon	86.3
Wiltshire & Swindon	142.3

4.1.2 Regional growth

Following the inclusion of specific local developments, overall growth is constrained to NTEM v8.0 (car trips) and the 2022 DfT Road Traffic Forecasts (LGV and HGV trips).

4.1.2.1 NTEM v8.0 planning data

NTEM v8.0 has been utilised as the basis for constraining the 2038 Core car trip matrices. These forecasts act as control on the overall growth in Wiltshire, after applying the growth from local known developments in the Uncertainty Log to the base demand (as described in Section 4.1.1). Essentially, the overall growth in car trips is constrained to NTEM v8.0 Core assumptions.

Origin-Destination (OD) growth factors derived from NTEM 8.0 are presented in Table 4-4. OD factors were used to calculate constraining factors to be applied to the Reference Case fixed demand matrices by user class, dependent on location.

Table 4-4 - NTEM 8.0: OD car driver trip growth (2018 to 2038)

Time Period	Location	UC1: Business		UC2: Commute		UC3: Other	
		O	D	O	D	O	D
AM	Wiltshire	1.09	1.11	1.08	1.11	1.16	1.17
AM	Swindon	1.11	1.11	1.10	1.11	1.19	1.19
AM	South-West	1.12	1.12	1.12	1.12	1.17	1.17
IP	Wiltshire	1.11	1.11	1.09	1.09	1.17	1.17
IP	Swindon	1.11	1.11	1.10	1.10	1.20	1.20
IP	South-West	1.12	1.12	1.11	1.11	1.18	1.18
PM	Wiltshire	1.11	1.09	1.10	1.07	1.15	1.15
PM	Swindon	1.11	1.11	1.11	1.09	1.17	1.17
PM	South-West	1.12	1.12	1.11	1.11	1.16	1.16

4.1.2.2 Growth in freight

The DfT Road Traffic Forecasts (2022 RTF) were used to constrain the overall growth of freight (LGV & HGV) traffic in a similar way to constraints using NTEM. The resulting factors are summarised in Table 4-5.

Table 4-5 - Freight vehicle growth factors from 2018

Period	LGV Factor	HGV Factor
2038	1.28	1.07

DfT RTF22 for Southwest region, all road types

4.1.3 Development trip rates

A new WTM zone was created for each development included within the Uncertainty Log that meets the TAG criteria of 'more than likely' or 'near certain'. Trip rates were derived from TRICS (v7.11.1) for all sites in England and Wales, excluding London. These were applied dependent on development type and modelled time period. Table 4-6 identifies the standard trip rates used to derive Origin-Destination (OD) development matrices.

Trip distributions are assumed to remain consistent with existing settlement patterns in Wiltshire, and do not allow for changes in internalisation or attractions.

Table 4-6 - Development TRICS trip rates per hour

Development Type	AM (08:00-09:00)			IP (10:00-16:00)			PM (17:00-18:00)		
	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot
Residential ¹	0.15	0.37	0.51	0.16	0.15	0.31	0.34	0.16	0.50
Mixed commercial ²	0.58	0.32	0.90	0.72	0.65	1.37	0.80	0.86	1.66

1. Residential rates are per dwelling. Trip rates are calculated based on private owned houses only.
2. Mixed commercial trip rates are per 100 sqm and it is average of retail, B1, B2 and B8 uses.

4.2 Networks

An updated Uncertainty Log (i.e., v6.0) was provided by WC to inform the revised Core scenario (Appendix A), including a list of all highway infrastructure schemes that meet the TAG criteria of 'more than likely' or 'near certain'. However, the highway infrastructure schemes included in the Uncertainty Log are consistent with those assumed in the existing WTM 2036 Core scenario (i.e., 'F11-B61 2036 DM') developed as part of the A350 Chippenham Bypass FBC (see Section 5.1.1 of the TFR⁴). Therefore, there was no change to the highway infrastructure schemes included in the Core scenario.

4.3 TAG Databook

The generalised cost of travel represents travellers' value of time by purpose (in pence per minute: PPM) and the relative distance (by pence per kilometre: PPK). Values are derived based on TAG Databook v1.22 (November 2023), as shown in Table 4-7 (Value of time, PPM) and Table 4-8 (vehicle operating costs, PPK). The methodology associated with the implementation of the TAG Databook parameters are documented in Section 5.2 of the TFR⁴.

Table 4-7 - Value of Time (VoT) (in pence per minute) by time period and user class in 2038

User class	2038		
	AM	IP	PM
Car Business	37.92	38.86	38.47
Car Commute	25.43	25.84	25.52
Car Other	17.54	18.69	18.37
LGV	28.20	28.20	28.20
HGV	58.91	58.91	58.91

HGV PPM values are adjusted as per guidance in TAG

Table 4-8 - Vehicle Operating Costs (VOC) (pence per kilometre) by user class: 2038 AM

User class	2038
Car Business	9.44
Car Commute	4.81
Car Other	4.81
LGV	11.84
HGV	37.81

Values are consistent for all time periods



5. Model assumptions: LPR (2024)

The WTM LPR (2024) scenarios provide a representation of forecast highway network conditions associated with the proposed LPR (2024), in addition to the committed development and infrastructure as part of WC's Core Strategy. Three WTM scenarios have been developed to incrementally test the highway network response to demand associated with the LPR (2024).

Table 5-1 provides an overview of the LPR (2024) scenarios documented in this section. The subsequent sub-headings provide details of what has changed from the Core scenario documented in Section 4.

Table 5-1 - WTM scenario definitions: LPR (2024)

Scenario	Demand assumptions	Infrastructure assumptions
2038 LPR DM	Base demand + Core demand + LPR demand, with background growth constrained to an 'alternative' NTEM 8.0 scenario.	2038 Core + LPR site specific access points.
2038 LPR DS1	Same as LPR DM.	2038 LPR DM + Chippenham SDR.
2038 LPR DS2	Same as LPR DM.	LPR DS1 + MRN schemes and LPR (2024) highway mitigations.

5.1 Demand

The dwelling and employment demand associated with the LPR (2024) is considered to be in addition to the local growth included in the Core scenario (see Section 4.1.1). As such, an alternative growth scenario has been derived utilising NTEM v8.0. This ensures the local demand associated with the LPR (2024) is essentially built on top of the Core, with overall trip totals constrained to a higher alternative NTEM v8.0 growth scenario.

The demand assumptions associated with the LPR scenarios are split into two categories:

- Local growth (Section 5.1.1): specific developments in Wiltshire as identified in the LPR (2024).
- Regional growth (Section 5.1.2): the impact of changes in demographic and traveller behaviour derived from an 'alternative' NTEM v8.0 growth scenario.

5.1.1 Local growth

The dwelling and employment developments associated with the LPR (2024) are documented in Section 2, including details of size and location.

A new WTM zone was created for each development site with a specific geographic location, whilst trip rates consistent with those presented in Section 4.1.3 were utilised to derive OD development demand matrices. Trip distributions are assumed to remain consistent with existing settlement patterns in Wiltshire, and do not allow for changes in internalisation or attractions.

The LPR (2024) allocations include unallocated dwelling and employment developments currently without a specific geographic location. Unallocated dwelling developments are specified as 'Rest of HMA' to be distributed across (yet to be defined) sites within each of the four HMAs (Table 2-1), whilst unallocated employment developments are to be distributed across the whole of Wiltshire Local Authority (i.e., 'Wiltshire Unallocated' in Table 2-3). Although these unallocated developments are not assigned to specific sites, the

resultant demand is reflected through the application of an alternative NTEM v8.0 growth scenario (i.e., NTEM growth rates for Wiltshire have been revised to include the unallocated developments).

5.1.2 Regional growth

An alternative NTEM 8.0 growth scenario was derived utilising TEMPro (v8.1), with the purpose of constraining the LPR (2024) demand matrices to a higher trip total reflective of the additional developments. The local demand associated with the LPR (2024) is essentially built on top of the Core scenario, with overall trips constrained to a higher alternative NTEM v8.0 growth scenario.

The TEMPro (v8.1) software includes functionality to adjust input assumptions for households or jobs to derive alternative growth scenarios for a given forecast year. In the preparation of a forecast scenario where the provision of dwellings / employment differs from the Core NTEM (v8.0) projections (i.e., a Local Plan Review), alternative input assumptions can be utilised in TEMPro (v8.1) to produce revised growth factors. Alternative assumptions for dwellings should result in adjustments to the number of households, whilst those for employment result in adjustments to the total number of jobs.

TEMPro (v8.1) requires household and job input data to calculate alternative scenarios, whereas the LPR (2024) input data is specified as dwellings and employment land (ha). To derive the LPR (2024) alternative NTEM 8.0 growth scenario, dwellings and households have been assumed to be consistent, whilst LPR (2024) employment data has been converted from land (ha) to jobs.

To convert employment land (ha) to jobs for input into TEMPro (v8.1), a relationship between 'trips per job' and 'trips per GFA' (i.e., employment land) was established utilising TRICS (v7.11.1) trip rates. 12-hour (07:00-19:00) trip rates were calculated based on gross floor area (GFA) and the number of employees, for office (B1) and industrial (B2) employment types (Table 5-2). The value for industrial trips was calculated based on an average of 'industrial estate' and 'industrial unit'.

Table 5-2 - Development TRICS trip rates (07:00-19:00)

Employment type	GFA (100 sqm)	Employee
B1 - Office	4.61	0.77
B2 - Industrial (average)	4.11	2.75

It was assumed that there is a consistent relationship between GFA and employee trip rates, meaning that the same number of jobs would be calculated regardless of whether the LPR (2024) employment data was provided in units of land (ha) or employees. Table 5-3 shows the total number of jobs used as an input to TEMPro (v8.1), based on the following process:

- TRICS trip rates based on GFA were applied to the LPR (2024) employment land allocations (see Section 2.2) to derive the total number of trips for office and industrial developments.
- The total number of trips (i.e., 66,439) were divided by the TRICS employee trip rates to provide an estimation of jobs generated across the day (i.e., 29,647).

Table 5-3 – Total estimated job requirements (2020-2038): LPR (2024)

	B1-Office	B2-Industrial	Total
Employment (ha)	13	147	160
Total trips (07:00-19:00)	5,855	60,584	66,439
Number of jobs	7,584	22,063	29,647

Therefore, the alternative NTEM 8.0 growth scenario is based on an additional 15,235 dwellings (Table 2-1) and 29,647 jobs (Table 5-3). Origin-Destination (OD) growth factors derived from the 'alternative' NTEM 8.0 scenario are presented in Table 5-4. OD factors were used to calculate constraining factors to be applied to the LPR (2024) fixed demand matrices by user class.

Table 5-4 - NTEM 8.0: Alternate OD car driver trip growth (2018 to 2038)

Time Period	Location	UC1: Business		UC2: Commute		UC3: Other	
		O	D	O	D	O	D
AM	Wiltshire	1.17	1.23	1.16	1.23	1.25	1.28
AM	Swindon	1.11	1.11	1.10	1.11	1.19	1.19
AM	South-West	1.13	1.13	1.13	1.13	1.18	1.18
IP	Wiltshire	1.21	1.21	1.19	1.18	1.27	1.27
IP	Swindon	1.11	1.11	1.10	1.10	1.20	1.20
IP	South-West	1.13	1.13	1.12	1.12	1.19	1.19
PM	Wiltshire	1.23	1.18	1.22	1.15	1.25	1.24
PM	Swindon	1.11	1.11	1.11	1.09	1.17	1.17
PM	South-West	1.13	1.13	1.12	1.12	1.17	1.17

5.2 Networks

The proposed highway infrastructure schemes included in the various WTM LPR (2024) scenarios are considered to be in addition to the highway schemes included in the Core scenario (see Section 4.2). Table 5-5 provides a brief overview of the highway schemes included in the following WTM LPR (2024) scenarios, whilst Figure 5-1 provides geographic context:

- **2038 LPR DM:** consistent with the Core scenario except for the inclusion of development access points for LPR specific sites. No LPR specific schemes are included in the DM scenario.
- **2038 LPR DS1:** the LPR DM scenario, plus inclusion of the Chippenham SDR only (see Section 5.2.1).
- **2038 LPR DS2:** the LPR DS1 scenario, plus inclusion of the MRN schemes (see Section 5.2.2) and previously identified LPR (2020) mitigation measures (see Section 5.2.3).

The subsequent sub-headings in this Section provide more detail of the individual highway schemes included in the WTM. The Chippenham SDR is included in the WTM LPR DS1 and DS2 scenarios, whereas the MRN schemes and LPR (2020) mitigation measures are only included in the WTM LPR DS2 scenario.

Table 5-5 - Overview of highway network interventions included in the LPR (2024) DS scenarios

Type	Scheme	Description	Scenarios
Chippenham SDR	Chippenham SDR	Distributor road to the south of Chippenham, between the A350 and the A4 (London Road).	DS1 and DS2
MRN Schemes	A350 Chippenham Bypass Phases 4 and 5 dualling	Dualling of the A350 between Bumpers Farm roundabout and Sandown Drive.	DS2
	M4 J17	Junction improvements including widening and signals.	DS2
	A350 Melksham Bypass	Bypass to the east of Melksham.	DS2
LP Mitigation Schemes	A350 Lacock dualling	Dualling of the A350 between Lackham roundabout and the northern terminus of Melksham Bypass.	DS2
	A350 Melksham dualling	Dualling of the A350 between Littleton roundabout and the southern terminus of Melksham Bypass.	DS2
	Staverton Bridge	Improvements to the operation of Staverton Bridge (B3105 / B3016 junction).	DS2

Figure 5-1 – Location of LPR (2024) highway infrastructure schemes



5.2.1 Chippenham SDR

The Chippenham SDR is a key component to facilitate the LPR (2024) allocations to the south of Chippenham, whilst reducing congestion in the town centre. The route provides a connection between the A350 (Lackham Roundabout) and the A4 (London Road), in addition to a connection to Pewsham Way.

Based on the schematic included in Appendix E, the following assumptions have been made to code the SDR scheme:

- The full extent of the SDR is coded as a single lane in both directions, with varying 30mph and 40mph sections. From the A350 to the A4:
 - The first ~750m is coded with a 40mph speed limit.
 - The second ~1,750m is coded with a 30mph speed limit, plus a ~450m spur to Pewsham Lane.
 - The third ~900m is coded with a 40mph speed limit.
- The four new junctions coded in the WTM are assumed to be roundabouts with a capacity reflective of a single lane approach with two lanes at the stop line.

5.2.2 MRN schemes

WC are exploring a package of MRN schemes as part of a strategy to improve regional connectivity. These schemes are in the process of seeking DfT funding and are at varying stages of assessment. All schemes are included in the WTM LPR DS2 scenario.

5.2.2.1 A350 Chippenham Bypass: phases 4 and 5 dualling

The A350 Chippenham Bypass forms the western boundary of Chippenham, from Lackham roundabout in the south to Malmesbury roundabout in the north, including junctions with the A4 at Chequers roundabout and the A420 at Bumpers Farm roundabout. An overview of the proposed A350 Chippenham Bypass scheme is included in Appendix E, which includes the following elements:

- A350 dualling: 60mph dual carriageway sections between Lackham roundabout and Chequers roundabout, and between Chequers roundabout and Bumpers farm roundabout.
- Junction Improvements: signalisation and increased capacity at Bumpers farm roundabout.

5.2.2.2 M4 J17

An overview of the proposed M4 J17 scheme is included in Appendix E, which includes the following elements:

- Introduction of traffic signals to all approaches to the roundabout (i.e., full signalisation).
- Carriageway widening and additional traffic capacity on all approaches to the junction.
- Increase in the number of traffic lanes across the motorway bridges from two to three.
- Widening of the circulatory carriageway and introduction of additional lanes and capacity around the junction.

5.2.2.3 A350 Melksham Bypass

The proposed Melksham Bypass will form the eastern boundary of Melksham, from the A350 south of Bowerhill to the A350 north of Beanacre. An overview of the proposed A350 Melksham Bypass scheme is included in Appendix E, which includes the following elements:

- Melksham bypass: 50mph single carriageway to the east of Melksham. This includes:
 - Two new roundabouts where the proposed bypass intersects the A350:
 - A350 (N) at Lacock.
 - A350 (S) between Littleton and Bowerhill roundabouts.
 - A signalised roundabout where the bypass intersects the A3102.
 - A conventional roundabout where the bypass intersects the A365.
- A350 dualling: 60mph dual carriageway between Littleton roundabout and the southern junction of the bypass (i.e., between Littleton and Bowerhill roundabouts).
- Littleton roundabout improvements: capacity improvements at Littleton roundabout including a dedicated left-turn from the A361 to the A350 northbound.
- A342 / A3102 signalisation: introduction of signals at the junction.

5.2.3 LPR (2020) mitigation measures

A package of mitigation measures was previously identified as part of the LPR (2020)¹, including highway infrastructure schemes to help accommodate proposed growth associated with the LPR (2024). These include the following schemes, all of which are included in the WTM LPR DS2 scenario:

- **A350 Lacock dualling:** dualling of the A350 between Lackham roundabout and the northern terminus of Melksham Bypass.
- **A350 Melksham dualling:** dualling of the A350 between Littleton roundabout and the southern terminus of Melksham Bypass.
 - In combination with the 'A350 Lacock dualling', the A350 is continuously dualled from M4 J17 to Littleton roundabout.
- **Staverton Bridge:** Improvements to the operation of Staverton Bridge (B3105 / B3016 junction).
 - Construction of a new bridge parallel to the existing bridge, intended to carry westbound traffic. The existing bridge will be altered to carry only eastbound flows.

6. Model outputs

This Section provides a summary of model outputs extracted from the WTM to provide an indication of the predicted impact of the LPR (2024) on the highway network in 2038. Comparisons are drawn incrementally between the three WTM LPR (2024) scenarios, as follows:

- The **2038 LPR DM** scenario is compared against the **2038 Core** scenario to understand the predicted impact of the demand associated with the LPR (2024) allocations.
- The **2038 LPR DS1** scenario is compared against the **2038 LPR DM** scenario to understand the predicted impact of introducing the Chippenham SDR.
- The **2038 LPR DS2** scenario is compared against the **2038 LPR DS1** scenario to understand the predicted impact of introducing the MRN schemes and previously identified LPR (2020) mitigation measures.

The following WTM outputs are summarised in the subsequent sub-headings of this section:

- WTM convergence (Section 6.1).
- Simulation network statistics (Section 6.2).
- Traffic (actual) flow (Section 6.3).
- Volume over Capacity ratio (V/C) (Section 6.4).
- Journey time analysis (Section 6.5).

Due to the large network coverage of the WTM, these outputs will mainly focus on the direct impact of the scenarios on Wiltshire. To avoid an abundance of repetitive figures and associated narrative, the traffic flow (Section 6.3) and V/C (Section 6.4) analysis focuses on the AM peak only, whilst all other time periods are included in the relevant appendices.

For more detailed link flow, link V/C and zonal demand comparisons, the Atkins Data Visualisation (ADV) tool is also included as an accompanying file (Appendix F). The ADV is a web-based platform which permits the interactive visualisation and interrogation of the WTM without the need for specialist SATURN modelling software.

6.1 WTM convergence

Guidance on the degree of model convergence is given in TAG and is presented in the LMVR3 above. The main measure of the convergence of a traffic assignment is the Delta statistic, or %GAP. This is the difference between the costs along the chosen routes and those along the minimum cost routes, expressed as a percentage of the minimum costs. TAG recommends a guideline target for the %GAP value of 0.1% or less. In addition, TAG recommends that the proportion of links for which the changes in traffic volumes is less than 1% should be at least 98% for four consecutive iterations.

Table 6-1 presents the convergence statistics for all WTM LPR (2024) highway assignment scenarios. The table shows that TAG criteria has been met for all scenarios and time periods.

Table 6-1 – WTM highway assignment scenarios - convergence statistics

Time Period		AM	IP	PM
2038 Core	Ass. Sim. Loops	24	20	19
	P (%)	99.1	99	98.5
	Gap%	0.005	0.007	0.012
2038 DM	Ass. Sim. Loops	20	18	20
	P (%)	98.2	98.7	98.8
	Gap%	0.01	0.006	0.011
2038 DS1	Ass. Sim. Loops	25	18	24
	P (%)	98.9	99.2	99.1
	Gap%	0.006	0.003	0.007
2038 DS2	Ass. Sim. Loops	25	18	23
	P (%)	98.6	99.2	98.8
	Gap%	0.005	0.003	0.011

6.2 Simulation network statistics

Summary network statistics extracted from the highway assignment model provide a consistent set of metrics to draw comparisons between model scenarios. Table 6-2 presents high-level network statistics for the WTM simulation area (i.e., AoDM) (see Section 4 of the LMVR³), whilst Table 6-3 presents the change between WTM LPR (2024) scenarios. The following network statistics have been summarised:

- **Matrix totals** (PCUs): the total number of highway trips.
- **Total travel time** (PCU hours): total travel time of all highway trips across the network.
- **Travel distance** (PCU kms): total distance travelled of all highway trips across the network.
- **Average speed** (kph): average speed of all highway trips across the network.
- **Delay** (PCU hours): total link delay of all highway trips across the network.

In terms of the change in simulation network statistics, the WTM predicts the following:

- In comparison to the Core scenario, LPR **matrix totals** increase by ~5% in all time periods due to the additional demand associated with the LPR (2024). There is no change in demand between LPR (2024) scenarios (i.e., DM, DS1, DS2).
- **2038 DM – 2038 Core**: the greater level of demand associated with the LPR (2024) is predicted to result in greater travel times and delay, whilst vehicles are also predicted to travel greater distances to avoid the increase in delay. Consequently, there is a reduction in the average speed of vehicles across the highway network.
- **2038 DS1 – 2038 DM**: the introduction of the Chippenham SDR is predicted to alleviate congestion in and around Chippenham, which results in a reduction in travel times, distances, and delay across the highway network.
- **2038 DS2 – 2038 DS1**: the introduction of the MRN schemes and previously identified LPR (2020) mitigation measures are predicted to alleviate capacity constraints at key locations in Wiltshire, resulting in a reduction in travel times and delay across the highway network. However, despite the congestion improvements there is an increase in travel distances, which can be attributed to the inclusion of the

Melksham Bypass scheme. Journey time savings are expected for vehicles travelling via Melksham Bypass, but the travel distance is greater than the existing A350 alternative.



Table 6-2 – Simulation network statistics

Scenario	Parameters	AM	IP	PM
2038 Core	Matrix totals (pcus/hr)	260,669	216,456	267,945
	Total Travel Times (Total - pcu.hrs)	54,900	42,236	63,946
	Travel Distance (Total pcu-kms)	2,766,898	2,313,859	2,751,917
	Average Speed (Overall- kph)	50	55	43
	Delay (Total - pcu.hrs)	13,094	8,618	22,253
2038 DM	Matrix totals (pcus/hr)	274,539	228,488	282,699
	Total Travel Times (Total - pcu.hrs)	60,661	45,626	70,313
	Travel Distance (Total pcu-kms)	2,934,845	2,448,477	2,944,021
	Average Speed (Overall- kph)	48	54	42
	Delay (Total - pcu.hrs)	15,655	9,519	24,996
2038 DS1	Matrix totals (pcus/hr)	274,539	228,488	282,699
	Total Travel Times (Total - pcu.hrs)	60,200	45,411	69,696
	Travel Distance (Total pcu-kms)	2,928,058	2,444,609	2,932,908
	Average Speed (Overall- kph)	49	54	42
	Delay (Total - pcu.hrs)	15,342	9,419	24,599
2038 DS2	Matrix totals (pcus/hr)	274,539	228,488	282,699
	Total Travel Times (Total - pcu.hrs)	59,544	45,157	68,977
	Travel Distance (Total pcu-kms)	2,933,238	2,448,520	2,935,882
	Average Speed (Overall- kph)	49	54	43
	Delay (Total - pcu.hrs)	14,889	9,345	24,161



Table 6-3 – Simulation network statistics: comparison between WTM LPR (2024) scenarios

Scenario	Parameters	Absolute difference			Percentage difference		
		AM	IP	PM	AM	IP	PM
DM - Core	Matrix totals (pcus/hr)	13,870	12,032	14,754	5.3%	5.6%	5.5%
	Total Travel Times (Total - pcu.hrs)	5,761	3,390	6,368	10.5%	8.0%	10.0%
	Travel Distance (Total pcu-kms)	167,948	134,618	192,105	6.1%	5.8%	7.0%
	Average Speed (Overall- kph)	-2	-1	-1	-4.0%	-2.0%	-2.6%
	Delay (Total - pcu.hrs)	2,561	901	2,743	19.6%	10.5%	12.3%
DS1 - DM	Matrix totals (pcus/hr)	0	0	0	0.0%	0.0%	0.0%
	Total Travel Times (Total - pcu.hrs)	-462	-215	-617	-0.8%	-0.5%	-0.9%
	Travel Distance (Total pcu-kms)	-6,787	-3,867	-11,113	-0.2%	-0.2%	-0.4%
	Average Speed (Overall- kph)	0	0	0	0.4%	0.2%	0.5%
	Delay (Total - pcu.hrs)	-314	-100	-397	-2.0%	-1.1%	-1.6%
DS2 - DS1	Matrix totals (pcus/hr)	0	0	0	0.0%	0.0%	0.0%
	Total Travel Times (Total - pcu.hrs)	-655	-254	-719	-1.1%	-0.6%	-1.0%
	Travel Distance (Total pcu-kms)	5,179	3,910	2,974	0.2%	0.2%	0.1%
	Average Speed (Overall- kph)	1	0	1	1.4%	0.7%	1.2%
	Delay (Total - pcu.hrs)	-452	-75	-438	-3.0%	-0.8%	-1.8%



6.3 Actual flow

Actual flow analysis provides an indication of the change in vehicle volumes across the highway network as a result of increased demand associated with the LPR (2024). As new dwelling / employment sites are added, as well as alterations are made to the highway network, the flow patterns of vehicles may be impacted.

This Section compares the differences in actual flow between WTM LPR (2024) scenarios, with a focus on the four HMA areas (Chippenham, Trowbridge, Salisbury, and Swindon). Figure 6-1 to Figure 6-3 present the change in link actual flow (PCUs) between WTM LPR (2024) scenarios, in the AM peak hour. The equivalent figures for the IP and PM peak are presented in Appendix G, whilst detailed analysis is provided in the ADV tool (Appendix F).

In terms of the change in link actual flow (PCUs) on the localised highway network, the WTM predicts the following:

- **2038 DM – 2038 Core** (Figure 6-1): the increase in demand associated with the LPR (2024) has resulted in an increase in vehicle volumes across Wiltshire, particularly in and around towns with the largest developments (e.g., Chippenham).
 - There is an increase in vehicle volumes on two of the key east-west routes in Wiltshire (i.e., the M4 and A303) as a response to the revised land-use assumptions.
- **2038 DS1 – 2038 DM** (Figure 6-2): the inclusion of the SDR in the DS1 scenario leads to the re-routing of vehicles in and around Chippenham.
 - The SDR acts as a partial southern bypass for Chippenham, re-routing some vehicles away from the town centre. This is particularly apparent on the A4 between London Road and Chequers roundabout (A350), which is a parallel alternative to the SDR for vehicles travelling east-west.
 - The DS1 network does not result in significant changes elsewhere in Wiltshire.
- **2038 DS2 – 2038 DS1** (Figure 6-3): the introduction of the MRN schemes and previously identified LPR (2020) mitigation measures are predicted to lead to the re-routing of vehicles across Wiltshire. These changes are mainly focussed on the A350 corridor (i.e., north-western quadrant of the county):
 - There are significant changes in vehicle volumes in and around Melksham following implementation of the new bypass and dualling of the A350. This results in the re-routing of vehicles away from the town centre and existing A350, whilst reducing traffic flow on competing rural routes as vehicles no longer seek an alternative to avoid the A350 through Melksham.
 - Improvements and to M4 J17 result in an increase in vehicle volumes at this location.

Figure 6-1 - Change in traffic flow (PCUs): 2038 DM – 2038 Core (AM peak hour)

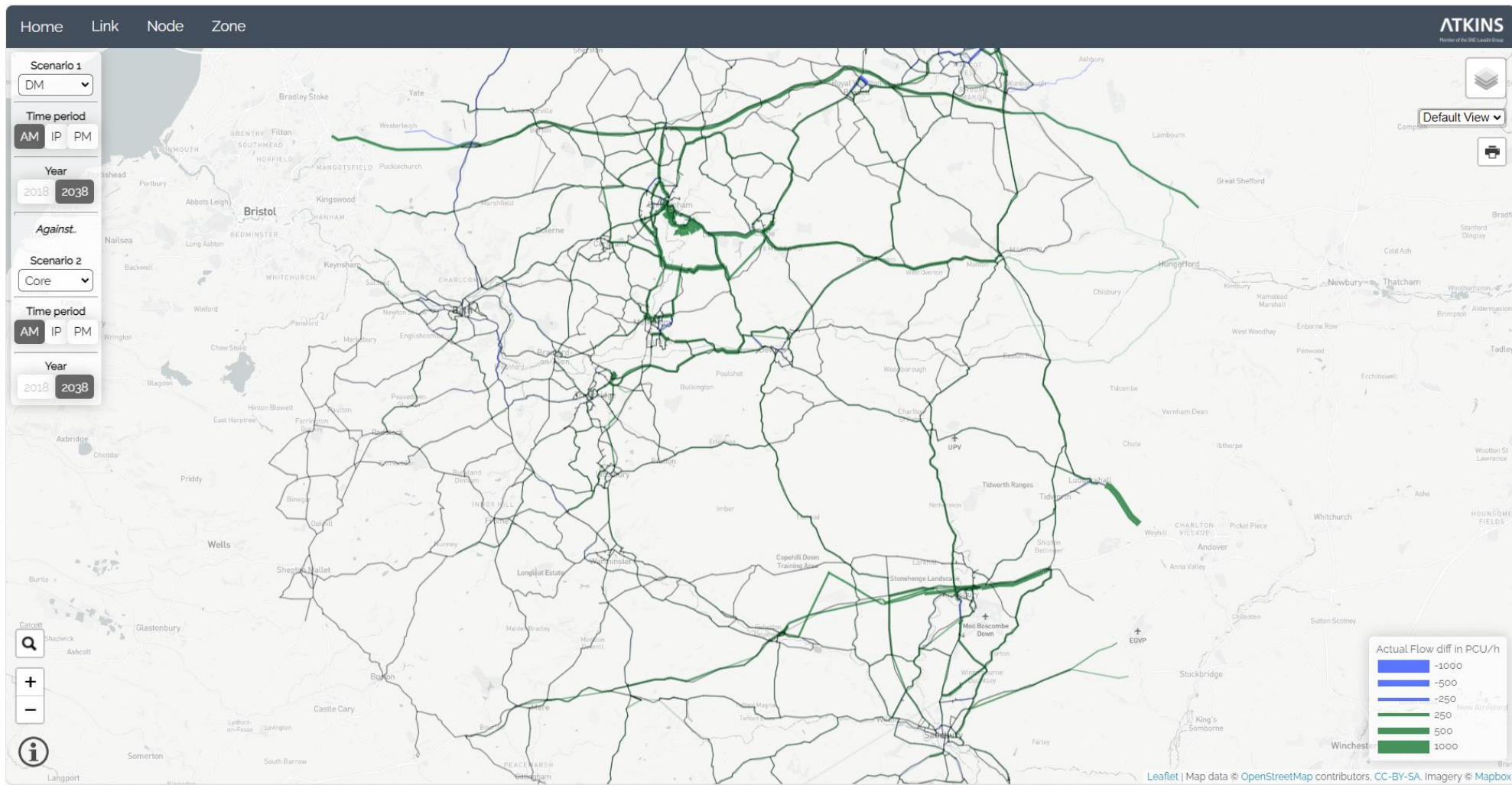


Figure 6-2 - Change in traffic flow (PCUs): 2038 DS1 – 2038 DM (AM peak hour)

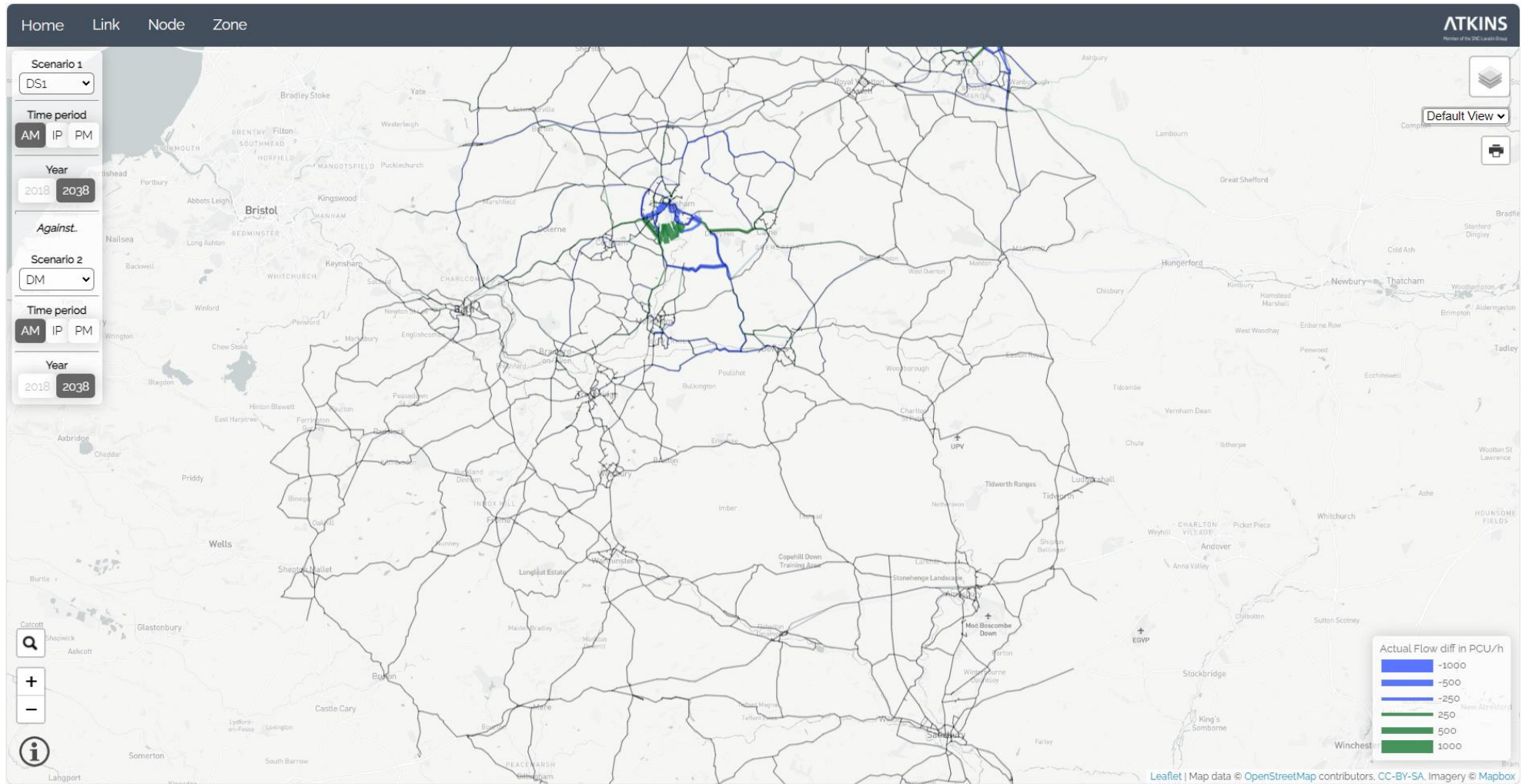
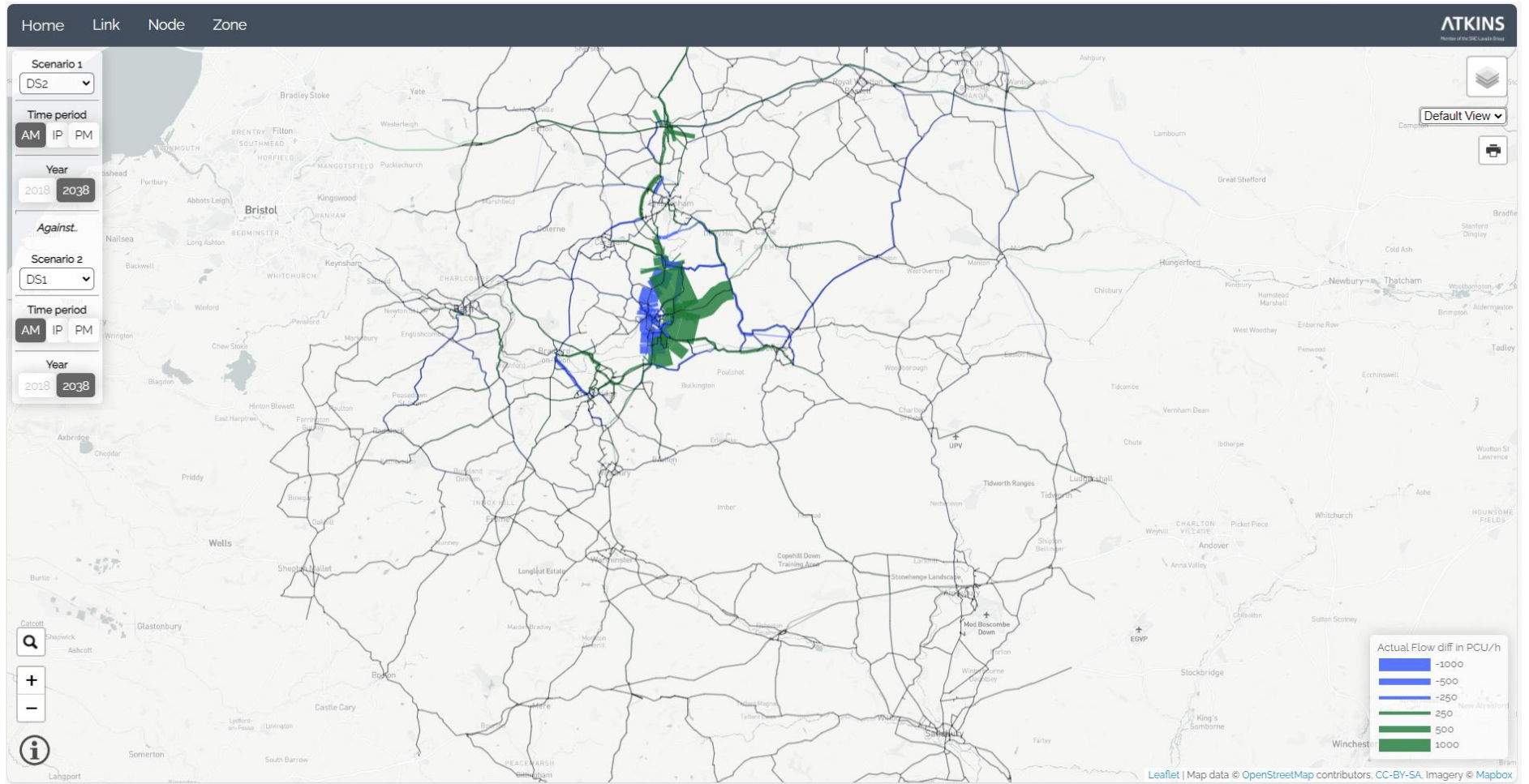


Figure 6-3 - Change in traffic flow (PCUs): 2038 DS2 – DS1 (AM peak hour)



The subsequent sub-sections present the change in link actual flow (PCUs) between the Core and LPR (2024) DM scenarios, with a focus on the four Wiltshire HMAs:

- Chippenham HAM (Figure 6-4).
- Trowbridge HMA (Figure 6-5).
- Salisbury HMA (Figure 6-6).
- Swindon HMA (Figure 6-7).

Values quoted are the change in flow (to the nearest 10 PCU) in the AM peak, but observations are relevant for all time periods.

6.3.1 Chippenham HMA

This area of the model is of particular focus, due to both the large developments assumed as part of the LPR (2024) as well as the highway interventions implemented to mitigate the impact on the highway network. The increase in demand associated with the LPR (2024) is predicted to change vehicle volumes at the following key locations within Chippenham HMA:

- **2038 DM – 2038 Core:** there is an increase in vehicle volumes across the highway network. This is especially apparent in Chippenham, which observes increases in flow due to the large housing and employment site allocated to the south of the town (i.e., the ‘South Chippenham’ development).
 - Without the inclusion of the SDR, trips generated by the South Chippenham development are loaded onto the highway network at Pewsham Way and the A4 (London Road). Vehicles travelling north are routed via the town centre leading to an increase in vehicle volumes (e.g., up to +520 PCUs northbound on Avenue de la Fleche).
 - There is a moderate increase in vehicle volumes in Melksham due to the additional demand associated with the LPR (2024). The main increase is attributable to vehicles routing through the town centre to head northwards via the A350 (+80 to +100 PCUs, both directions) and New Road / Lower Woodrow (southbound: +110 PCUs).
 - There are more vehicles travelling between the town and the south-east towards Devizes via the A365 (Bath Road) (eastbound: +140 PCUs, westbound: +100 PCUs).
- **2038 DS1 – 2038 DM:** the inclusion of the Chippenham SDR allows vehicles travelling to / from the South Chippenham development to avoid the town centre, plus provides an alternative route to the A4 / A420 through the town:
 - Vehicle volumes in Chippenham town centre are reduced by as much as 460 PCUs (Bath Road), as vehicles choose to utilise the SDR instead as an alternative. There is a reduction in vehicle volumes on the A4 between London Road and Chequers roundabout (A350), which is a parallel alternative to the SDR for vehicles travelling east-west.
 - Flows parallel to the south of the SDR, along Bowden Hill, are also reduced (by approximately 150 PCUs in both directions). Without the SDR infrastructure, flows to / from Calne utilise this road to avoid Chippenham town centre. This pattern is reduced somewhat with the construction of the SDR, which is preferable compared to the rural road conditions provided along Bowden Hill.
- **2038 DS2 – 2038 DS1:** the DS2 scenario involves several transport network interventions (Sections 5.2.2 and 5.2.3) which are focussed mainly within the Chippenham HMA.
 - The greatest changes are observed around Melksham, where the new bypass diverts traffic away from the existing A350 and the town centre. There is an increase in vehicle volumes to the north (+650 PCUs) and south (+290 PCUs) of Melksham on the A350 where the bypass rejoins the present-day road network.

- The highway network improvements included in DS2 are predicted to result in a reduction in vehicle volumes on competing rural routes, as vehicles are less likely to seek alternatives to avoid congestion on the A350 corridor.



Figure 6-4 - Change in traffic flow (PCUs): 2038 DM - 2038 Core (AM-peak hour) - Chippenham HMA

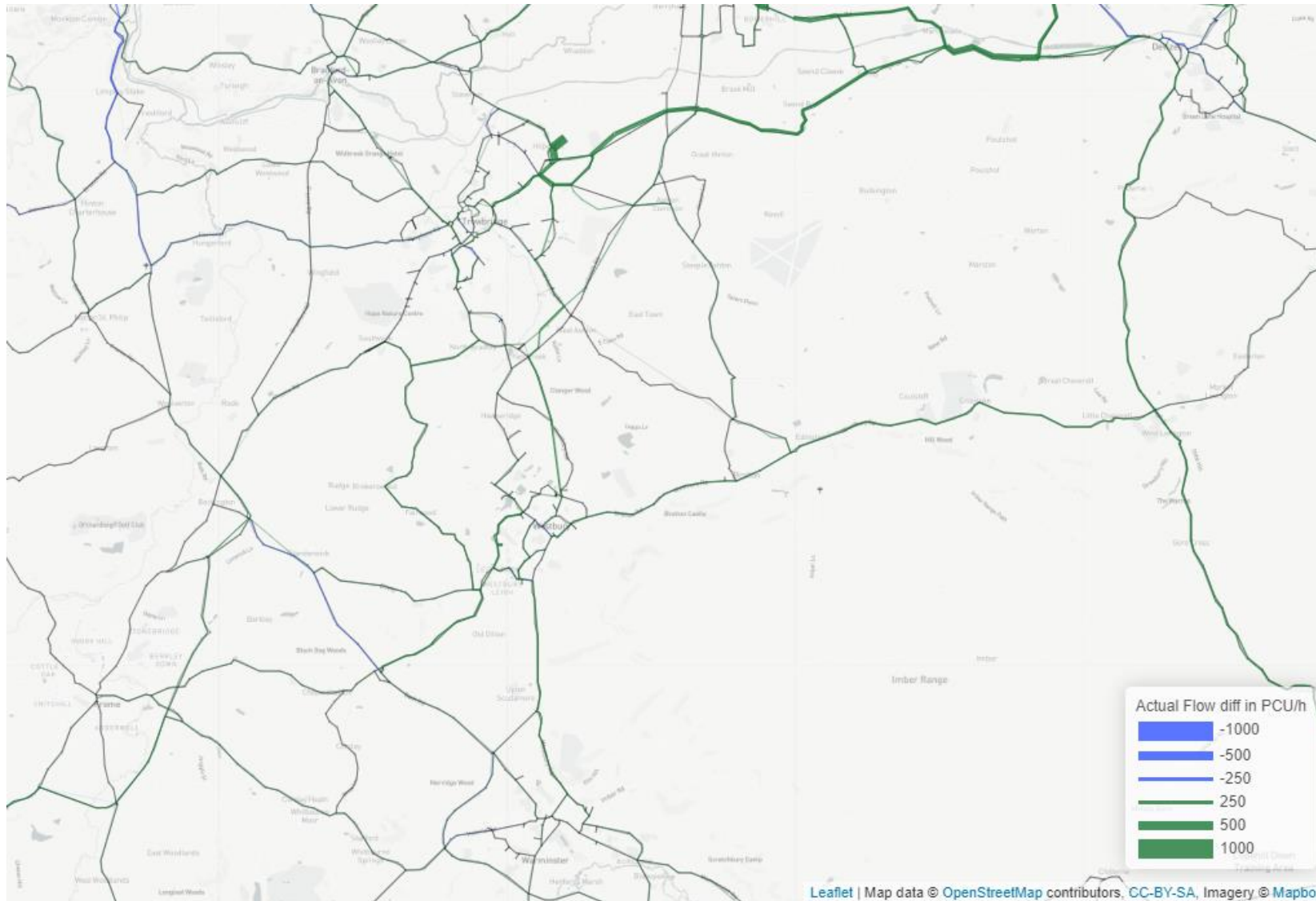


6.3.2 Trowbridge HMA

The increase in demand associated with the LPR (2024) is predicted to change vehicle volumes at the following key locations within Trowbridge HMA:

- **2038 DM – 2038 Core:** there are fewer dwellings allocated within Trowbridge HMA, therefore there is minimal change in flow due to the additional demand associated with the LPR (2024).
 - The greatest change in flow is predicted to occur to the north of Trowbridge (up to +240 PCUs on Church Street), due to the increased development allocated at Hilperton.
 - There is an increase in flow on the A361 between Trowbridge and Devizes (eastbound: +120 PCUs, westbound: +80 PCUs).
 - There is minimal change in vehicle volumes between Trowbridge and Froome, including along the A36.
- **2038 DS1 – 2038 DM:** the inclusion of the SDR is not predicted to materially change traffic flow patterns in the Trowbridge area.
- **2038 DS2 – 2038 DS1:** the Staverton Bridge enhancements influence traffic flow patterns in the Trowbridge HMA. The additional crossing alleviates capacity constraints, resulting in an increase in vehicle volumes travelling between Bradford-on-Avon and Trowbridge via Staverton (eastbound: +120 PCUs, westbound: +160 PCUs). This is mirrored by a reduction in vehicle volumes travelling between Bradford-on-Avon and Trowbridge via the parallel A363 (Trowle) (eastbound: -120 PCUs, westbound: -140 PCUs).

Figure 6-5 - Change in traffic flow (PCUs): 2038 DM - 2038 Core (AM-peak hour) - Trowbridge HMA



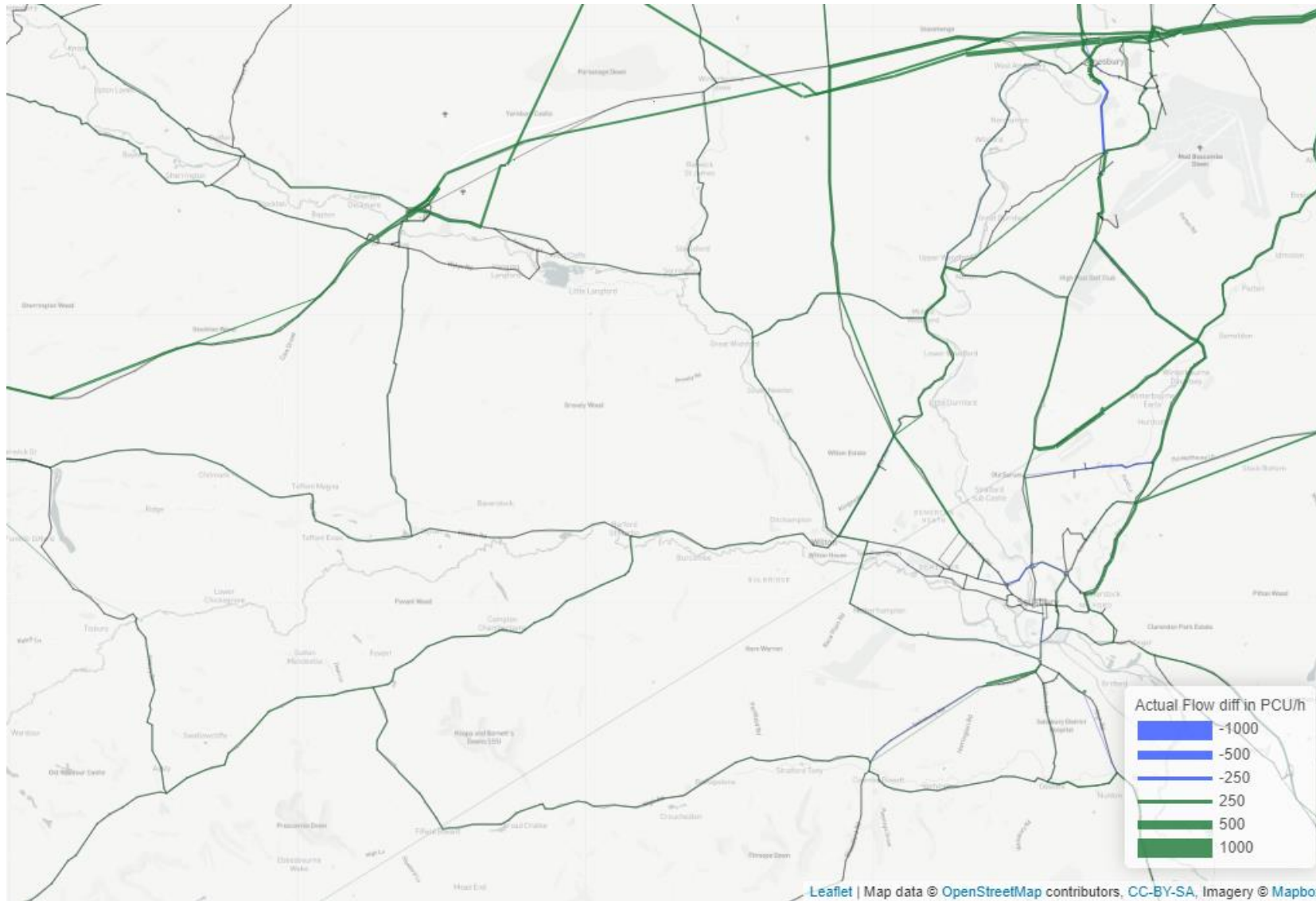
6.3.3 Salisbury HMA

Salisbury HMA is the main growth area in terms of dwellings associated with the LPR (2024). This includes 1,600 dwellings classified as a 'New Community', with a yet to be specified location (see Section 2.1). For this LPR (2024) exercise, trips associated with the 'New Community' are assigned to the highway network on the A345 (Salisbury Road) between Stockport Avenue and Salisbury Street.

The increase in demand associated with the LPR (2024) is predicted to change vehicle volumes at the following key locations within Salisbury HMA:

- **2038 DM – 2038 Core:** there are increases in vehicle volumes in Salisbury and Amesbury at the following locations due to the additional demand associated with the LPR (2024):
 - Church Road (Salisbury) between the A338 / A30 junction and Elm Close (southbound: +160 PCUs).
 - The A354 (Coombe Road) on approach to the Odstock Road junction (eastbound: +110 PCUs).
 - The A303 due to the inclusion of the 'New Community' in Amesbury, particularly to the east of the town between Amesbury Bypass and the A303 / A338 junction (westbound: +300 PCUs).
 - The A338 to the north of Laverstock at Winterbourne (southbound: +130 PCUs).
 - The A342 (Andover Road) between Andover and Ludgershall (southbound: +280 PCUs) following inclusion of the proposed Ludgershall development.
- Due to the location of the highway interventions included in the **2038 DS1** and **2038 DS2** scenarios, there are no significant changes to vehicle volumes within Swindon HMA.

Figure 6-6 - Change in traffic flow (PCUs): 2038 DM - 2038 Core (AM-peak hour) - Salisbury HMA



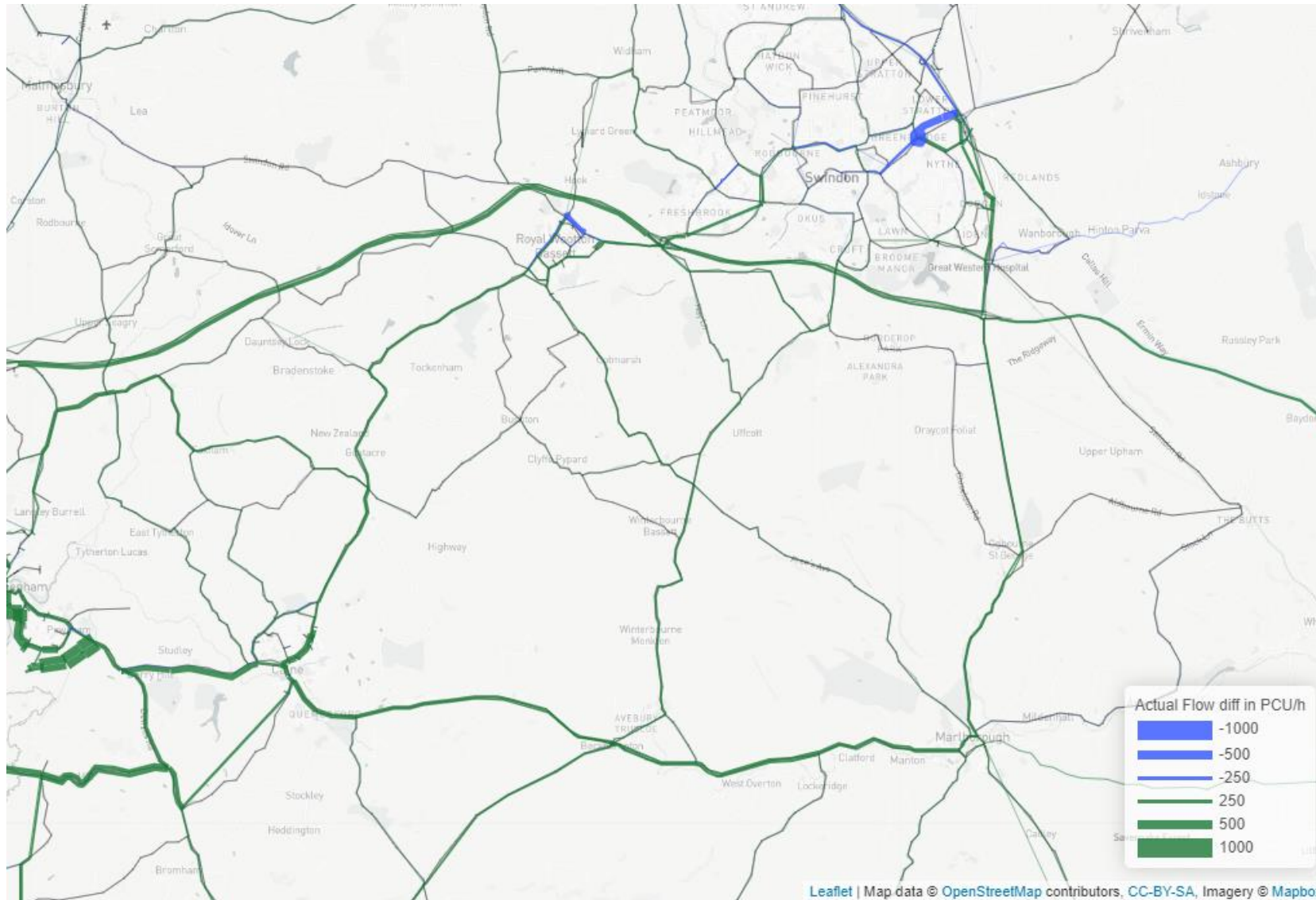
6.3.4 Swindon HMA

The main area of focus within Swindon HMA is Royal Wootton Bassett. It is important to note that the Swindon HMA does *not* include the town of Swindon, which is part of its own unitary authority area separate from the jurisdiction of WC.

The increase in demand associated with the LPR (2024) is predicted to change vehicle volumes at the following key locations within Swindon HMA:

- **2038 DM – 2038 Core:** there is minimal change in vehicle volumes in Swindon HMA, except for on the M4 and re-routing within Royal Wootton Bassett.
 - There is a slight increase in vehicle volumes on the M4, particularly between J16 and J17 (eastbound: +100 PCUs, westbound +125 PCUs). This is the main east-west route option for the north of Wiltshire and carries a significant amount of traffic in all time periods.
 - There is a reduction in flow on the A3102 (Swindon Road) in Royal Wootton Bassett between A3102 / B4042 roundabout and Stoneover Lane (eastbound: -220 PCUs, westbound: -60 PCUs), whilst there is a corresponding increase in flow on Bincknoll Lane between Garraways and the A3102 / Bincknoll Lane junction (northbound: +210 PCUs, southbound: +70 PCUs). The increase in flow on Bincknoll Lane is due to the LPR (2024) development site allocations in Royal Wootton Bassett, which is predicted to worsen capacity constraints at the A3102 / Bincknoll Lane junction. Consequently, vehicles are re-routing away from the A3102 (eastbound) (Swindon Road) to avoid the need to give-way to the additional demand travelling towards M4 J16 from Bincknoll Lane.
- Due to the location of the highway interventions included in the **2038 DS1** and **2038 DS2** scenarios, there are no significant changes to vehicle volumes within Swindon HMA.

Figure 6-7 - Change in traffic flow (PCUs): 2038 DM - 2038 Core (AM-peak hour) - Swindon HMA



6.4 Volume over Capacity (V/C)

Link Volume / Capacity (V/C) analysis provides an indication of network capacity constraints as a result of increased demand associated with the LPR (2024). A link V/C (%) ratio of greater than 85% suggests the potential for severe capacity constraints in the highway network.

This Section compares the change in link V/C (%) between WTM LPR (2024) scenarios, with a focus on the four HMA areas (Chippenham, Trowbridge, Salisbury, and Swindon). Figure 6-8 to Figure 6-10 present the change in link V/C (%) between WTM LPR (2024) scenarios, in the AM peak hour. The equivalent figures for the IP and PM peak are presented in Appendix H, whilst detailed analysis is provided in the ADV tool (Appendix F).

In terms of the change in link V/C (%) on the localised highway network, the WTM predicts the following:

- **2038 DM – 2038 Core** (Figure 6-8): the increase in demand associated with the LPR (2024) has resulted in an increase in vehicle volumes at several locations across the Wiltshire highway network (see Section 6.3). Consequently, there is an increase in congestion, exacerbating capacity constraints at several key locations:
 - In and around Chippenham, including the town centre, the A4 (London Road and Bath Road) and A350.
 - The A350 corridor between Littleton roundabout and M4 J17.
- **2038 DS1 – 2038 DM** (Figure 6-9): the introduction of the Chippenham SDR is predicted to alleviate capacity constraints in and around Chippenham. This is particularly apparent at locations worsened by the increased demand associated with the LPR (2024) (i.e., the town centre, the A4 and A350).
- **2038 DS1 – 2038 DM** (Figure 6-10): the introduction of the MRN schemes and previously identified LPR (2020) mitigation measures are predicted to alleviate capacity constraints at key locations in Wiltshire:
 - The A350 corridor between Littleton roundabout and M4 J17, particularly around Melksham and Chippenham. The capacity of the A350 corridor has increased following the inclusion of continuous dualling between Littleton roundabout and M4 J17.
 - The introduction of the M4 J17 MRN scheme has alleviated capacity constraints at the junction.

Figure 6-8 – Link V/C%: 2038 Core vs. 2038 DM (AM peak hour)

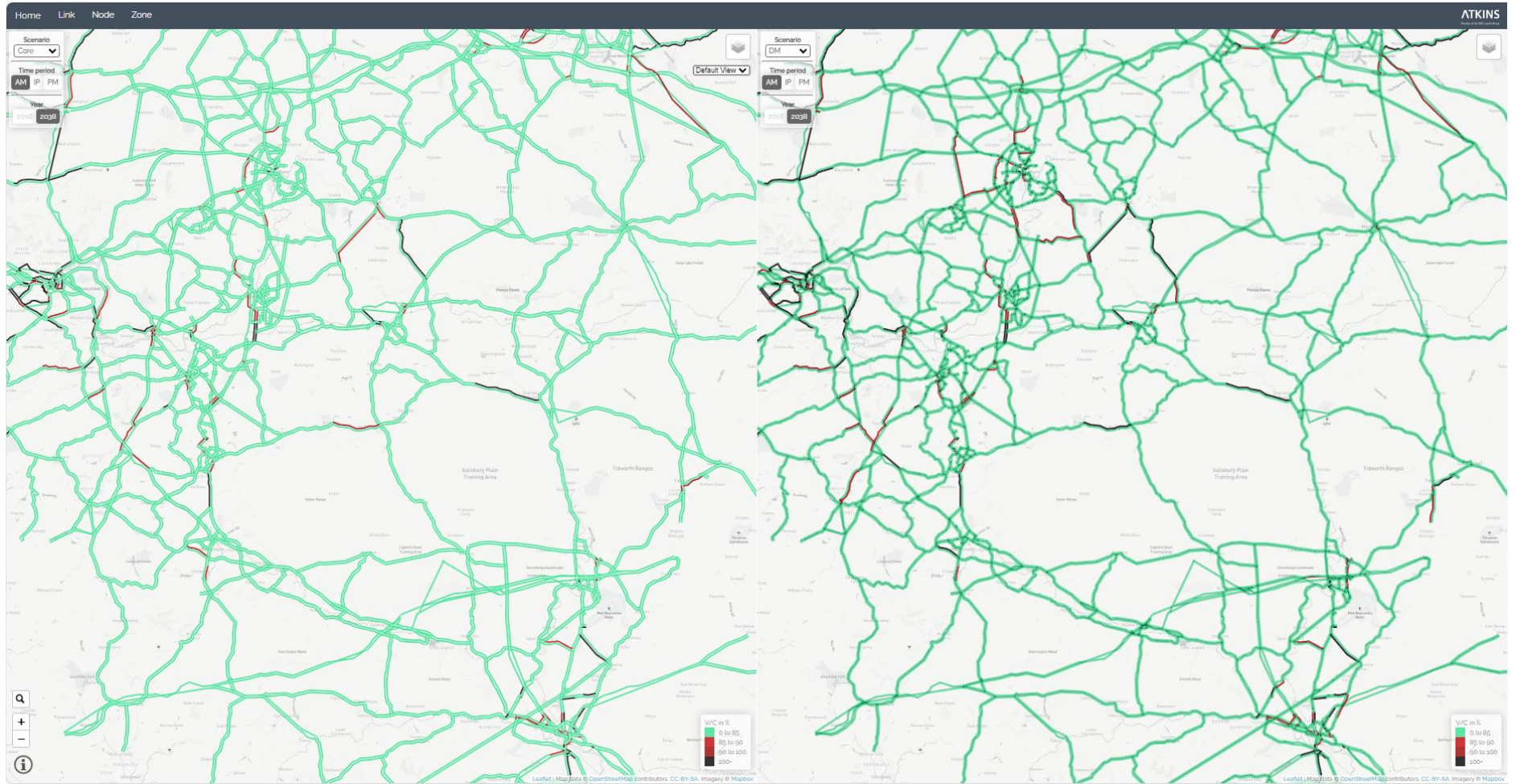


Figure 6-9 – Link V/C%: 2038 DM vs. 2038 DS1 (AM peak hour)

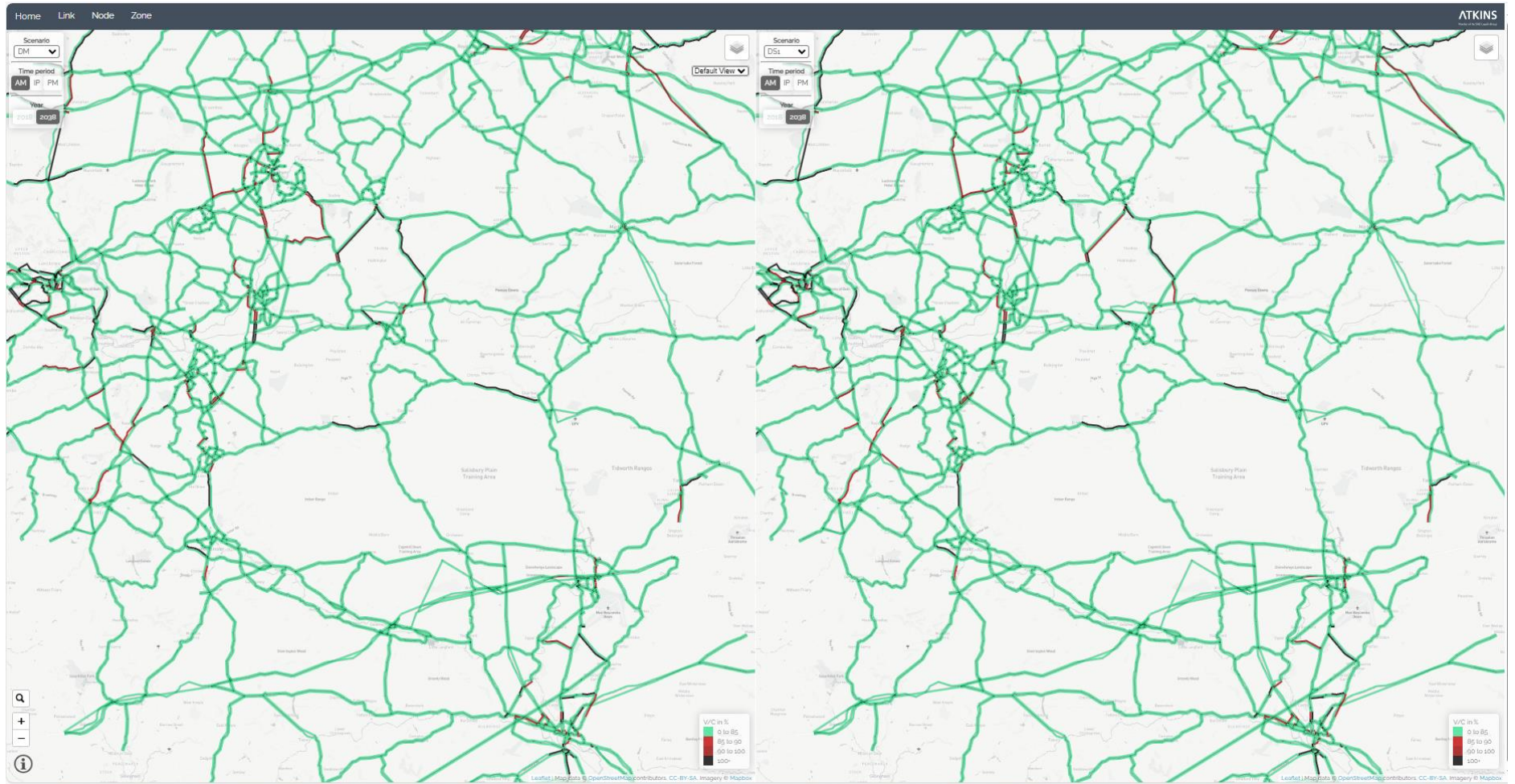
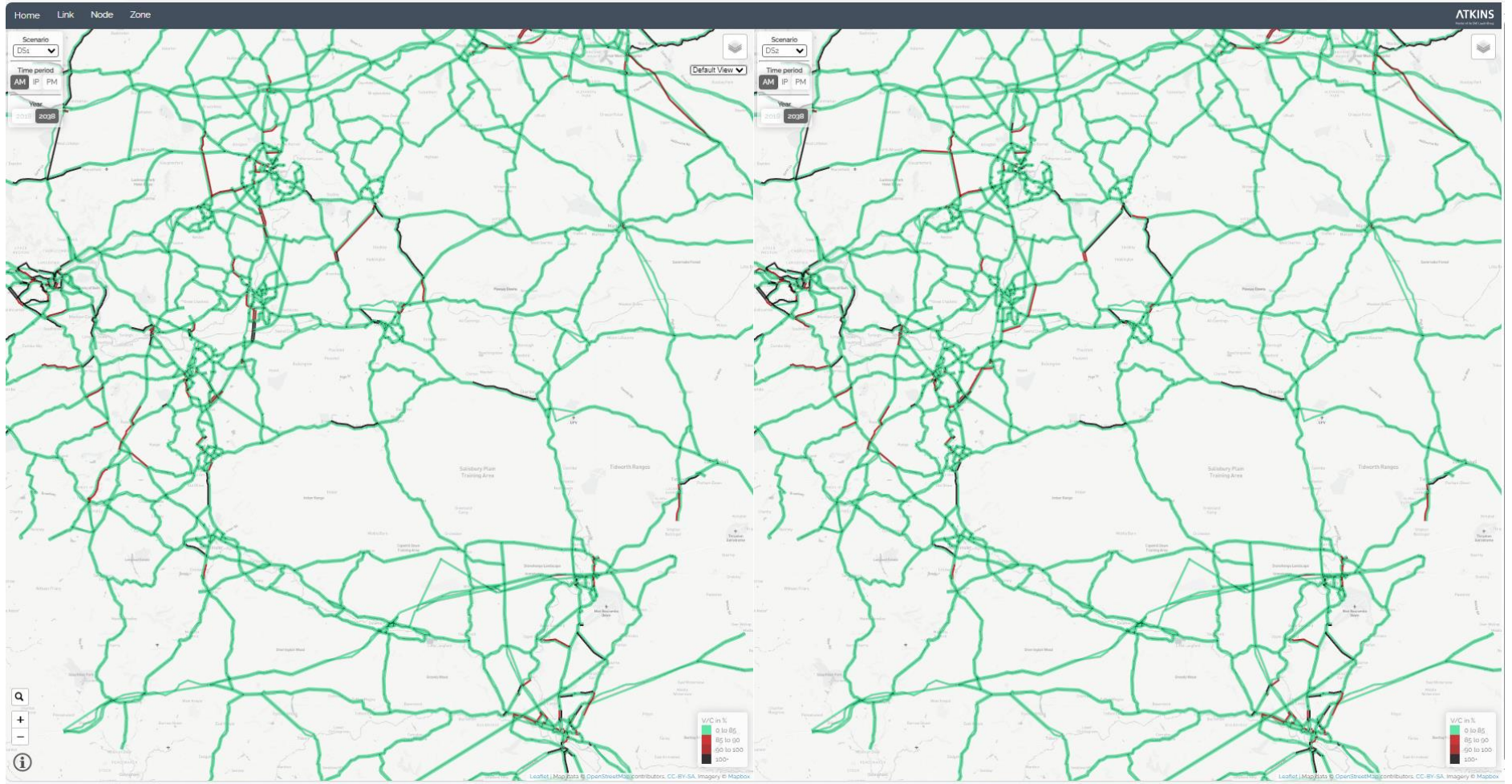


Figure 6-10 – Link V/C%: 2038 DS1 vs. 2038 DS2 (AM peak hour)



The subsequent sub-headings present the change in link V/C (%) between the Core and LPR (2024) DM scenarios, with a focus on the four Wiltshire HMAs:

- Chippenham HAM (Figure 6-11).
- Trowbridge HMA (Figure 6-12).
- Salisbury HMA (Figure 6-13).
- Swindon HMA (Figure 6-14).

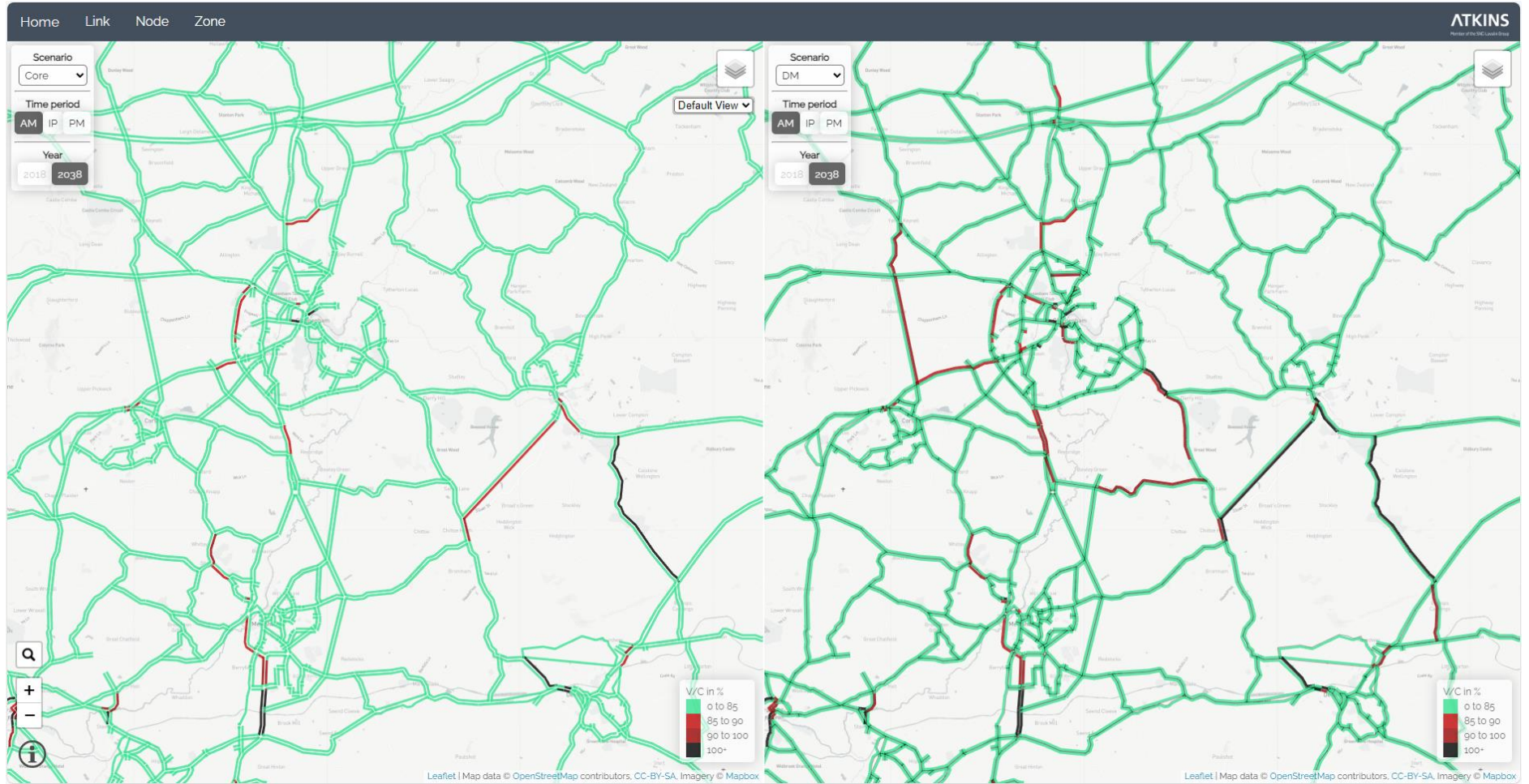
Values quoted are the change in percentage points in the AM peak, but observations are relevant for all time periods.

6.4.1 Chippenham HMA

The increase in demand associated with the LPR (2024) is predicted to increase V/C (%) above 85%, or exacerbate existing links with already high V/C (%), at the following key locations within Chippenham HMA:

- Several locations within Chippenham town centre, notably the approach arms of the Avenue La Fleche / Gladstone Road junction, as demand from the South Chippenham development site travels through the town centre (i.e., without the Chippenham SDR):
 - Avenue La Fleche (S) (northbound: 44% to 105%).
 - Gladstone Road (westbound: 61% to 105%).
 - Avenue La Fleche (N) (southbound: 72% to 88%).
- The A4 / A350 junction, as many vehicles travelling to / from the South Chippenham development site are predicted to access the town via this junction. Consequently, there is an increase in V/C (%) on the A4 approach arms:
 - A4 (Bath Road) between Chequers and the A350 (eastbound: 83% to 98%).
 - A4 (Bath Road) between Sandown Road and the A350 (westbound: 83% to 94%).
- The A350 immediately north of Chippenham at Malmesbury roundabout, and immediately south of Chippenham at Lackham roundabout:
 - A350 between Malmesbury roundabout and Plough Lane (northbound: 69% to 88%, southbound: 54% to 57%).
 - A350 between Lackham roundabout and Notton (northbound: 77% to 89%, southbound: 85% to 97%).
- The A4 (London Road) on the eastern periphery of Chippenham between New Road and Pewsham Way (northbound: 67% to 89%, southbound: 71% to 97%).
- The A342 (Devizes Road) between the A3102 (Westbrook Road) and A3102 (Silver Street) (northbound: 80% to 94%, southbound: 92% to 102%). Improvements to the A342 (Devizes Road) / A3102 (Westbrook Road) junction are proposed as part of the Melksham Bypass scheme implemented in DS2.

Figure 6-11 - Link V/C%: 2038 Core vs. 2038 DM (AM peak hour) - Chippenham HMA

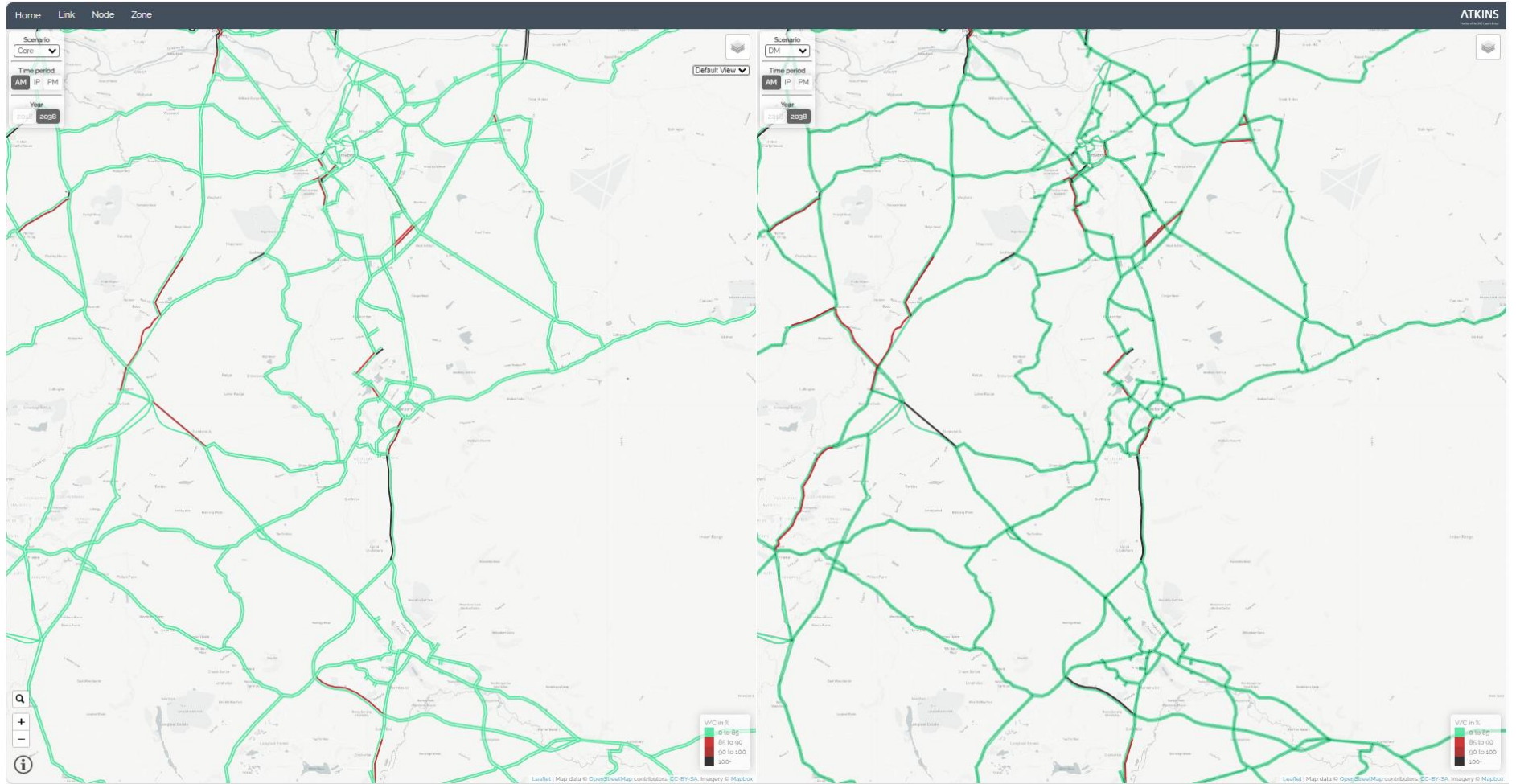


6.4.2 Trowbridge HMA

The increase in demand associated with the LPR (2024) is predicted to increase V/C (%) above 85%, or exacerbate existing links with already high V/C (%), at the following key locations within Trowbridge HMA:

- In general, there is minimal change in V/C (%) due to the additional demand associated with the LPR (2024). The few changes in link V/C (%) categorisation involve small changes (1-5 % points) to areas of the highway network on the category boundary (e.g., 84% to 85%).
- All approach arms of the B3105 / B3106 junction in Staverton, which is already predicted to be operating at capacity in the Core scenario:
 - New Terrace (W) (B3105) (eastbound: 96% to 103%).
 - B3106 (southbound: 91% to 97%).
 - New Terrace (S) (B3105) (northbound: 105% to 107%).
- Capacity constraints on the A36 are predicted to slightly worsen at two locations (i.e., 3 % points), both of which are external to Wiltshire. This change is considered to be immaterial, and has only been identified in Figure 6-12 as they are locations close to the category boundary in the Core scenario:
 - A36 between the A36 / A361 junction and Standerwick (southbound: 97% to 100%).
 - A36 between the A36 / A361 junction and Wolverton (southbound: 82% to 85%).

Figure 6-12 - Link V/C%: 2038 Core vs. 2038 DM (AM peak hour) - Trowbridge HMA

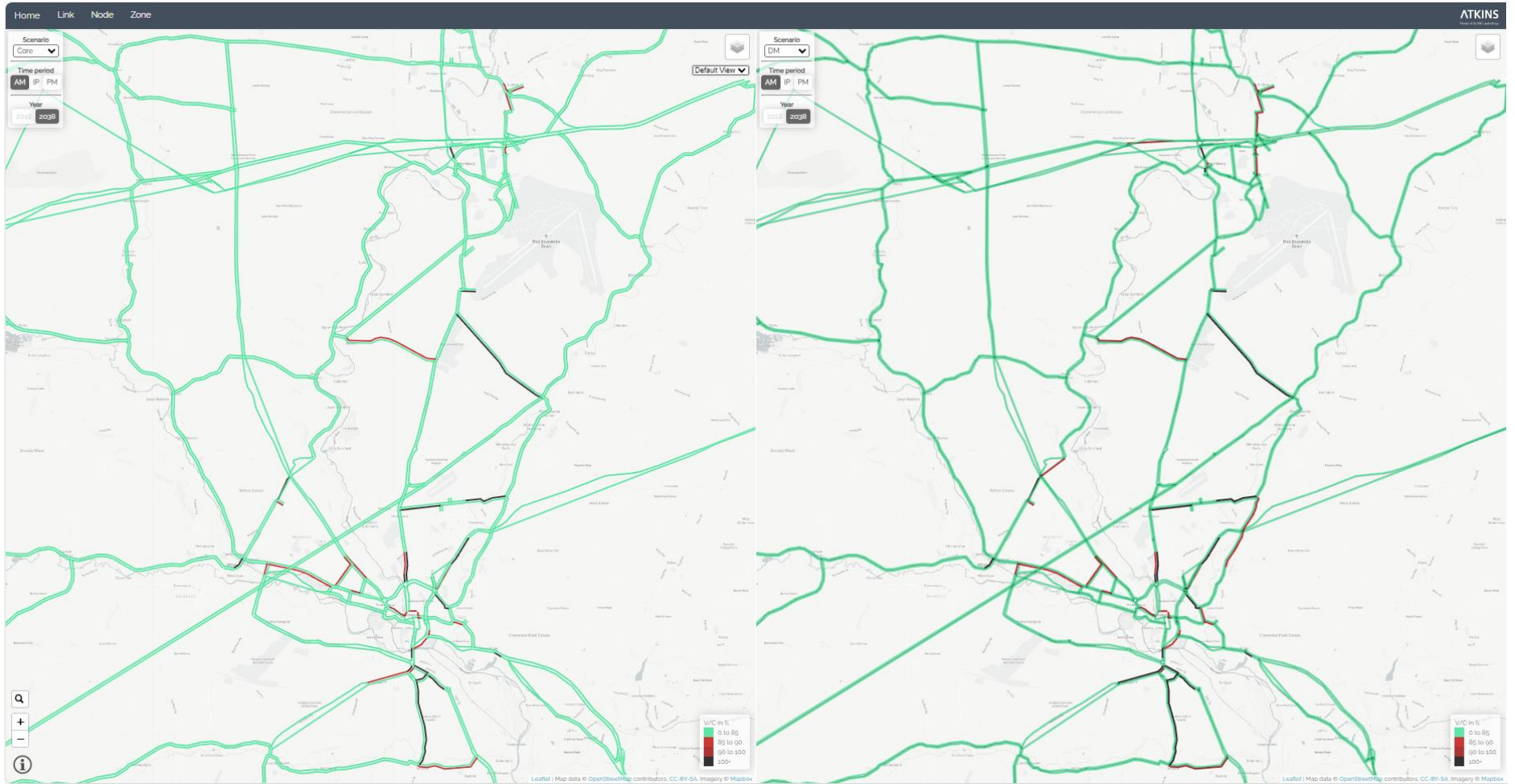


6.4.3 Salisbury HMA

The increase in demand associated with the LPR (2024) is predicted to increase V/C (%) above 85%, or exacerbate existing links with already high V/C (%), at the following key locations within Salisbury HMA:

- In general, there is minimal change in V/C (%) due to the additional demand associated with the LPR (2024).
- There is minimal impact on the highway network in Salisbury, including all junctions along the A36 corridor between Petersfinger and Wilton. Capacity constraints exist on this section of the A36 in the Core scenario, but they are not expected to significantly worsen due to additional LPR (2024) demand. However, there are locations where capacity constraints are predicted to slightly worsen:
 - The A338 between the A338 / A30 junction and Old Malthouse Lane (southbound: 82% to 90%).
 - Church Road between the A338 / A30 junction and Elm Close (southbound: 71% to 88%).
 - The A354 (Coombe Road) on approach to the Odstock Road junction (eastbound: 86% to 102%).
 - Harnham Gyratory and Exeter Street roundabout are already predicted to be operating at capacity in the Core scenario, which will likely worsen with increased demand associated with the LPR (2024).
- Several locations in and around Amesbury following inclusion of the Salisbury HMA 'New Community' (see Section 2.1). Trips associated with the 'New Community' are assigned to the highway network on the A345 (Salisbury Road) between Stockport Avenue and Salisbury Street. The inclusion of this proposed development has exacerbated capacity constraints on the localised highway network:
 - The A345 (Salisbury Road) between Flower Lane and the A345 / Salisbury Street roundabout (southbound: 76% to 101%), and the A345 (The Centre) between the High Street and Smithfield Street (southbound: 83% to 88%).
 - Porton Road between London Road roundabout and Boscombe Road roundabout (southbound: 82% to 87%).
 - Salisbury Road between the A3028 (Bulford) and the A303 (southbound: 79% to 88%).
 - The A303 (Amesbury Bypass) between Stonehenge Road and Countess roundabout (eastbound: 79% to 92%). This is the only location on the A303 that is predicted to be adversely impacted by the additional demand associated with the LPR (2024), plus it is already operating close to capacity in the Core scenario.

Figure 6-13 - Link V/C%: 2038 Core vs. 2038 DM (AM peak hour) - Salisbury HMA

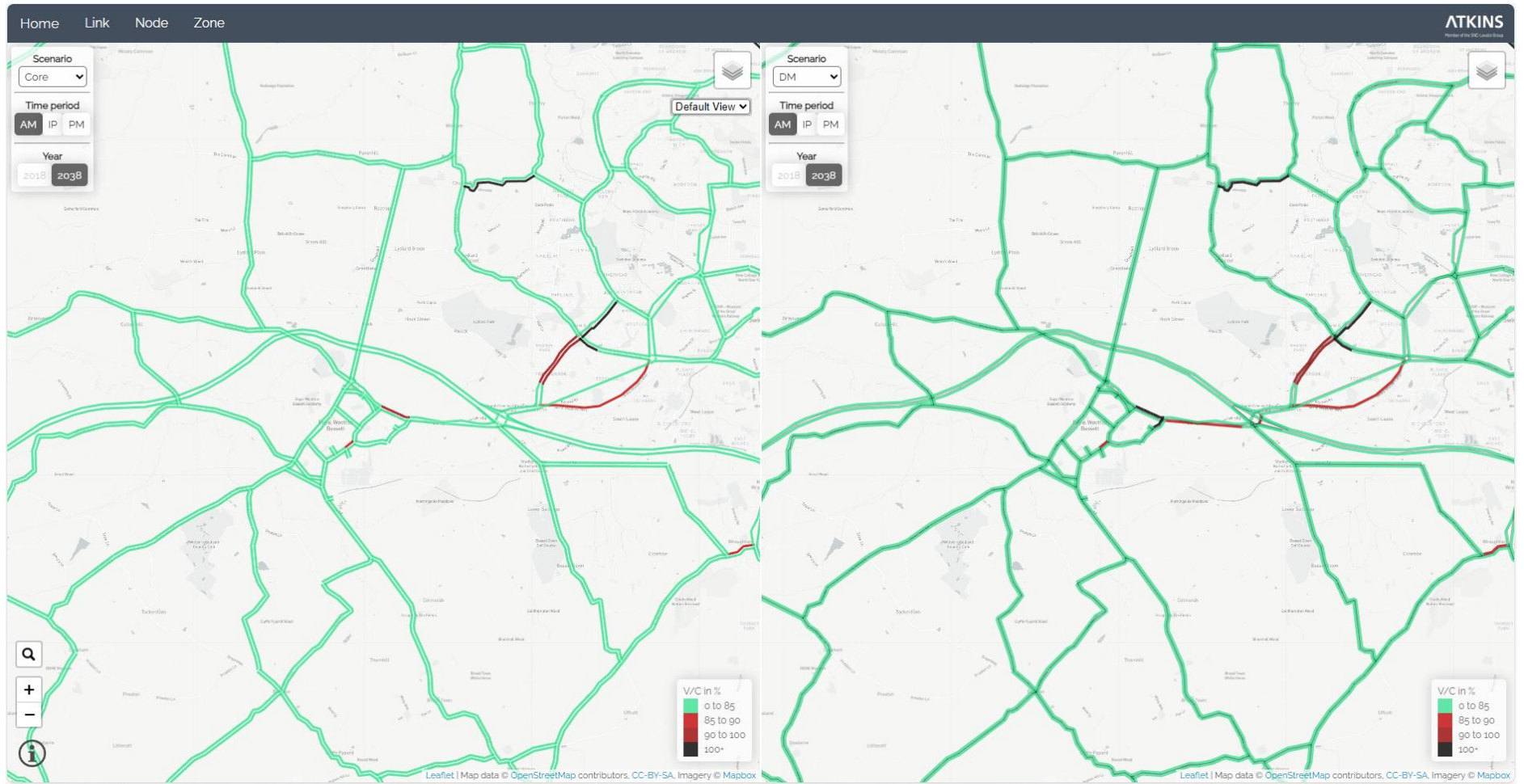


6.4.4 Swindon HMA

The increase in demand associated with the LPR (2024) is predicted to increase V/C (%) above 85%, or exacerbate existing links with already high V/C (%), at the following key locations within Salisbury HMA (i.e., Royal Wootton Bassett area):

- In general, there is minimal change in V/C (%) due to the additional demand associated with the LPR (2024).
- All approach arms of the A3102 / Bincknoll Lane junction in Royal Wootton Bassett, which are already predicted to be operating close to or over capacity in the Core scenario:
 - Swindon Road (W) (eastbound: 100% to 104%).
 - Swindon Road (E) (westbound: 83% to 88%).
 - Bincknoll Lane (northbound: 81% to 100%).
- The M4 J16 gyratory between the east facing slip roads (southbound: 61% to 95%). This is attributable to blocking back on the A3102 (Swindon Road) from the signalised A3102 / B4005 junction, which is already operating at capacity in the Core scenario (westbound: 99% to 103%). The relationship between flow and delay doesn't follow a linear trend when junctions are operating at capacity. When a link is operating at capacity in the WTM, delay observed on that link is highly sensitive to a small change in flow. It is likely this issue could be mitigated through the optimisation of the signal timings at the A3102 / B4005 junction.

Figure 6-14 - Link V/C%: 2038 Core vs. 2038 DM (AM peak hour) - Swindon HMA



6.5 Journey times

Journey time analysis provides an indication of the predicted impact of changes in vehicle flow and / or network capacity. Table 6-4 presents journey times for all WTM LPR (2024) scenarios in the morning and evening peak hours, whilst Figure 6-15 highlights the extent of the journey time routes that have been included in the analysis. Values quoted are the biggest change in journey time (mm:ss) by direction and time period.

In terms of the change in journey times on the localised highway network, the WTM predicts the following:

- In general, the increased demand associated with the LPR (2024) results in an increase in journey times across Wiltshire. The incremental inclusion of highway infrastructure mitigation in DS1 followed by DS2, increasingly alleviates congestion at key pinch-points and subsequently reduces journey times in comparison to the DM. However, regardless of the inclusion of highway infrastructure mitigation, journey times in DS1 and DS2 are still predicted to be higher than the Core scenario, due to the increase in demand associated with the LPR (2024).
- **2038 DM – 2038 Core:** there is an increase in journey times on all routes in the AM and PM peak hours. This is particularly apparent on the following journey time routes:
 - **Route 01 (A303):** the inclusion of the Salisbury 'New Community' in Amesbury is predicted increase congestion on Amesbury Bypass (A303), leading to an increase in journey times (e.g., eastbound PM peak: +02:07).
 - **Route 03 (A350):** capacity constraints are predicted to worsen on the A350 corridor, which results in an increase in journey times (e.g., southbound AM peak: +05:21).
 - **Route 04 (A4-A420):** many vehicles travelling to / from the South Chippenham development site utilise this route to access the A4 (e.g., eastbound PM peak: +13:08).
 - **Route 08 (A3102):** this journey time route connects Melksham and Royal Wootton Bassett via Calne, which is directly impacted by the LPR (2024) development sites allocated to the three towns (eastbound PM peak: +07:36). Additionally, some trips to / from the South Chippenham development are predicted to utilise this route.
- **2038 DS1 – 2038 DM:** following the introduction of the Chippenham SDR, there is minimum change to journey times on all routes in the AM and PM peak hours, except for the 'A350' and 'A4-A420':
 - **Route 03 (A350):** capacity constraints are predicted to worsen on the A350 corridor, as trips generated by the South Chippenham development have direct access to the A350 at Lackham roundabout (e.g., northbound PM peak: +01:37).
 - **Route 04 (A4-A420):** the Chippenham SDR provides a competitive alternative to the A4 / A420, reducing the need for vehicles to travel through Chippenham town centre to access the A350 (eastbound PM peak: -10:07).
- **2038 DS2 – 2038 DS1:** the introduction of the MRN schemes and previously identified LPR (2020) mitigation measures are predicted to improve journey times on many routes in the AM and PM peak hours. However, there are instances where journey times are predicted to increase slightly:
 - **Route 03 (A350):** journey times are predicted to improve following the alleviation of capacity constraints on the A350 corridor (e.g., northbound PM peak: -08:59).
 - Similarly, the package of highway infrastructure schemes is predicted to alleviate capacity constraints along '**Route 07: A361**' (eastbound PM peak: -01:55), '**Route 08: A3102**' (eastbound PM peak: -01:58), and '**Route 09: A46-A36**' (northbound AM peak: -02:15).
 - **Route 04 (A4-A420):** there is a slight increase in journey time on the A4-A420 following the signalisation of Bumpers roundabout as part of the A350 Chippenham Phases 4 & 5 MRN scheme (e.g., westbound PM peak: +00:59).
 - **Route 02 (A36):** there is a slight increase in journey time on the A36 (eastbound) in the PM peak (+01:07). This is attributable to a small change in flow (10 PCUs) on the A36 eastbound approach

arm of the St. Paul's roundabout in Salisbury junction. The relationship between flow and delay doesn't follow a linear trend when junctions are operating at capacity. When a link is operating at capacity in the WTM, delay observed on that link is highly sensitive to a small change in flow.



Figure 6-15 – Journey time routes

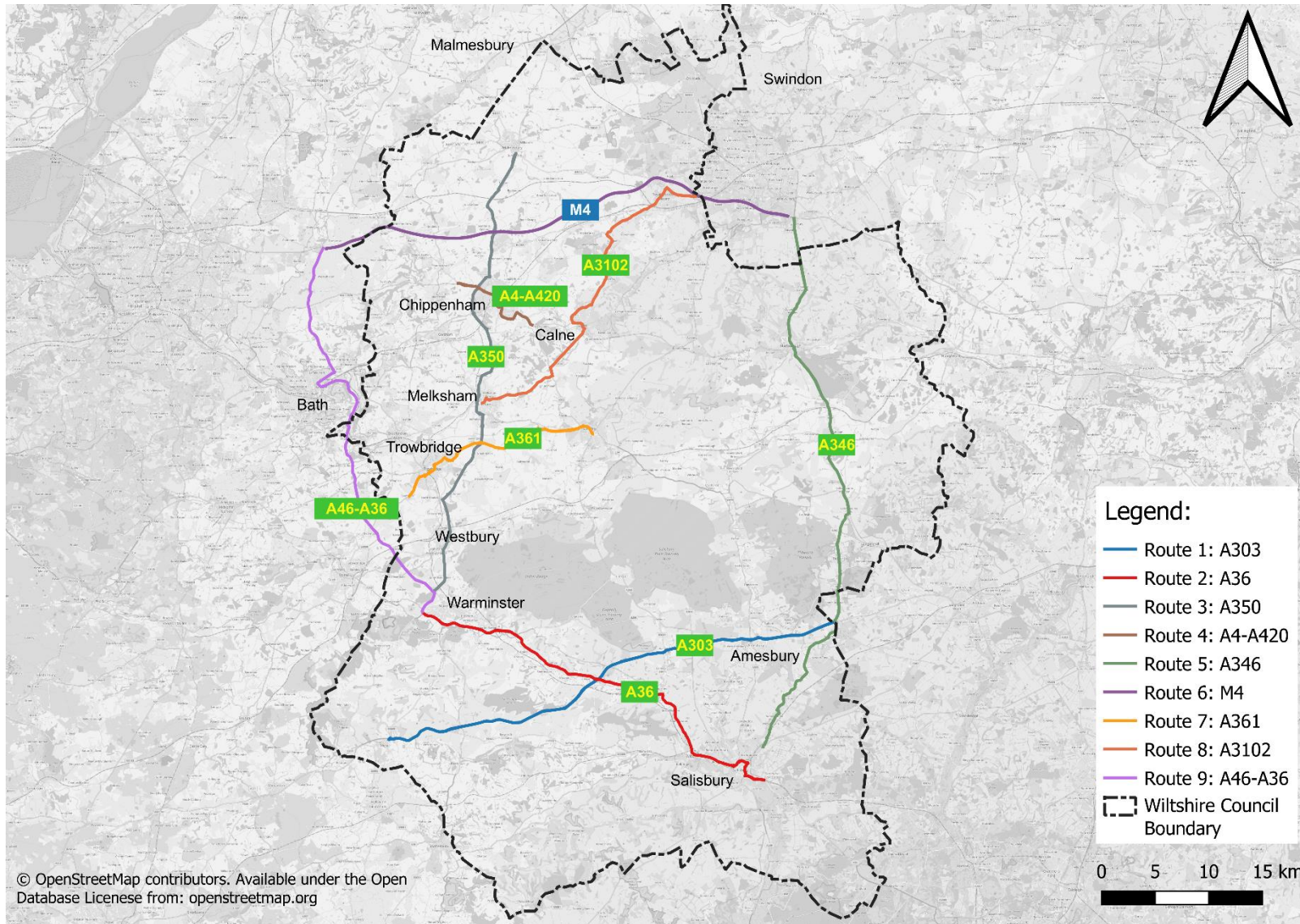


Table 6-4 - Journey Times (mm:ss) and differences – all routes

Route	Direction	2038 Core		2038 DM		2038 DS1		2038 DS2		DM - Core		DS1 - DM		DS2 - DS1	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
01: A303	Eastbound	40:30	44:51	41:57	46:58	41:58	46:58	41:58	46:58	01:27	02:07	00:00	-00:00	00:00	00:01
	Westbound	42:26	37:47	44:20	39:41	44:18	39:40	44:19	39:36	01:54	01:54	-00:02	-00:01	00:01	-00:04
02: A36	Eastbound	53:47	48:01	54:29	50:59	54:30	49:44	54:29	50:51	00:43	02:59	00:00	-01:15	-00:00	01:07
	Westbound	48:31	53:18	49:12	54:51	49:12	54:46	49:14	54:52	00:40	01:33	-00:00	-00:05	00:03	00:06
03: A350	Northbound	64:31	67:56	69:14	73:46	70:09	75:23	63:08	66:24	04:43	05:49	00:55	01:37	-07:02	-08:59
	Southbound	69:11	63:25	74:32	68:53	75:19	70:18	68:47	64:23	05:21	05:28	00:47	01:25	-06:33	-05:55
04: A4-A420	Eastbound	18:39	18:27	27:54	31:35	21:48	21:27	20:25	21:29	09:15	13:08	-06:07	-10:07	-01:22	00:02
	Westbound	16:38	17:09	23:15	26:39	18:55	19:11	19:22	20:11	06:36	09:30	-04:20	-07:27	00:27	00:59
05: A346	Northbound	58:12	57:20	61:11	59:18	61:03	59:11	60:42	59:04	02:59	01:58	-00:08	-00:07	-00:21	-00:07
	Southbound	61:24	62:17	64:30	65:55	64:25	65:41	63:57	65:31	03:07	03:38	-00:06	-00:14	-00:28	-00:09
06: M4	Eastbound	30:57	28:31	31:27	28:55	31:18	28:52	31:36	29:02	00:30	00:24	-00:10	-00:03	00:18	00:09
	Westbound	28:38	30:31	28:58	31:30	28:58	31:26	28:57	31:37	00:19	00:59	00:01	-00:04	-00:01	00:11
07: A361	Eastbound	33:17	32:48	36:49	38:01	36:13	36:59	36:17	35:04	03:32	05:13	-00:36	-01:02	00:04	-01:55
	Westbound	34:01	34:33	34:37	36:35	34:59	36:31	34:47	36:29	00:36	02:02	00:23	-00:04	-00:13	-00:01
08: A3102	Eastbound	47:10	46:14	50:56	53:50	49:50	52:34	49:18	50:36	03:46	07:36	-01:06	-01:15	-00:32	-01:58
	Westbound	46:46	48:06	52:19	54:57	51:52	53:33	51:55	53:11	05:33	06:51	-00:27	-01:24	00:03	-00:22
09: A46-A36	Northbound	67:45	69:31	69:24	72:45	69:39	72:57	67:24	71:33	01:38	03:14	00:15	00:13	-02:15	-01:24
	Southbound	55:26	56:58	57:24	59:32	57:16	59:47	57:00	59:16	01:58	02:35	-00:07	00:15	-00:17	-00:31



7. Summary

To inform analysis of the ongoing Wiltshire Local Plan Review (LPR), AtkinsRéalis has been commissioned by Wiltshire Council (WC) to derive a series of model scenarios utilising the Wiltshire Transport Model (WTM). These WTM scenarios represent the most recent assumptions relating to the ongoing Wiltshire LPR (2024). This document summarises the input assumptions associated with the LPR (2024), followed by the presentation of model outputs extracted from the WTM LPR (2024) scenarios. The model outputs aim to provide an indication of the predicted impact of the revised Local Plan assumptions on the Wiltshire highway network in 2038.

WC is in the process of developing a new Local Plan to set out the policies and strategies to demonstrate how growth in housing and employment will be accommodated across the county over the course of the new plan period up to 2038. This growth will generate additional demand on the transport network, which may require mitigation to limit adverse impacts resulting from forecast growth. The LPR (2024) includes an additional 15,235 dwellings and 160ha of employment land between 2020 and 2038 (Section 2).

AtkinsRéalis have developed four WTM scenarios to assess the impacts of the LPR (2024) and proposed mitigation on the highway network (i.e., 2038 Core, LPR DM, LPR DS1, LPR DS2) (Section 3). The 2038 Core scenario has been updated to reflect the latest version of the Wiltshire Core strategy (i.e., Uncertainty Log v6.0) (Section 4), whilst the 2038 LPR scenarios (i.e., DM, DS1, DS2) have been developed to reflect the revised Local Plan proposals (Section 5).

Outputs extracted from the WTM LPR (2024) scenarios provide an indication of the predicted impact of the revised Local Plan assumptions on the highway network in 2038 (Section 6). Comparisons were drawn incrementally between the three WTM LPR (2024) scenarios, with key predictions as follows:

- **2038 DM – 2038 Core:** the increase in demand associated with the LPR (2024) has resulted in an increase in vehicle volumes across Wiltshire, increasing congestion and further exacerbating capacity constraints at several key locations (e.g., the A350 corridor and Chippenham town centre). Vehicle volumes and journey times have slightly increased on the M4 and A303, whilst there is no material impact on the A36 through Wiltshire.
- **2038 DS1 – 2038 DM:** the inclusion of the SDR in the DS1 scenario leads to the re-routing of vehicles in and around Chippenham, alleviating capacity constraints in Chippenham town centre, the A4 and A350.
- **2038 DS2 – 2038 DS1:** the introduction of the MRN schemes and previously identified LPR (2020) mitigation measures are predicted to lead to the re-routing of vehicles across Wiltshire, alleviating capacity constraints at several key locations (e.g., the A350 Corridor and M4 J17).



WILTSHIRE LOCAL PLAN REVIEW (2024)



Appendix A. Uncertainty Log

A.1 Developments

Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Rural Central	Land at Kingston Farm	W/13/00643/FUL	150	Mixed Use	3	Near Certain	2020	Yes
Calne	Land east of Beversbrook Farm	-	0	Mixed Use	3.2	Reasonably foreseeable	Unknown	No
Chipp Rural	East of Farrells Field	-	30	-	-	Near Certain	2026	Yes
Chippenham	Birds Marsh	N/12/00560/OUT	750	A1, B1, B2, B8	2.7	Near Certain	2027	Yes
Chippenham	Rawlings Green	15/12351/OUT	650	-	-	More than likely	2035	Yes
Chippenham	Rowden Park	14/12118/OUT	1000	-	-	More than likely	2030	Yes
Chippenham	Hunters Moon	16/12493/FUL	450	B1, B2, B8	2.3	More than likely	2027	Yes
Melksham	Land North of Sandridge Common	17/01096/REM	100	-	-	More than likely	2022	Yes
Melksham	Land East of Spa Road	14/10461/OUT	450	-	-	More than likely	2025	Yes
Melksham	Land East of Semington Road	17/10416/VAR	150	-	-	More than likely	2023	Yes
Melksham	Land South of Western Way	16/01123/OUT	235	-	-	More than likely	2025	Yes



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Rural Central	Hawkeridge Business Park Land North and South of Mill Lane Hawkeridge Westbury BA13 4LD	14/03118/OUT	0	Mixed Use	14.7	More than likely	2030	Yes
Rural Central	North Acre Industrial Estate	-	0	Mixed Use	3.8	Reasonably foreseeable	Unknown	No
Trowbridge	Elizabeth Way	-	406	-	-	More than likely	2029	Yes
Trowbridge	West Ashton Road	W/11/01663/REM	0	B1, B2, B8	10	Reasonably foreseeable	Unknown	No
Trowbridge	Elm Grove Farm	-	250	-	-	More than likely	2033	Yes
Trowbridge	Ashton Park Urban Extension	15/04736/OUT	2600	A1-A5, B1, B2, B8, C2, C3, D1	10	More than likely	2043	Yes
Trowbridge	Land off A363 at White Horse Business Park	-	150	-	-	More than likely	2030	Yes
Trowbridge	Southwick Court	-	180	-	-	More than likely	2033	Yes
Trowbridge	Church Lane	-	45	-	-	More than likely	2029	Yes
Trowbridge	Upper Studley	-	20	-	-	More than likely	2027	Yes
Westbury	Land at Station Road	17/12194/REM	300	-	-	Near Certain	2028	Yes
Westbury	Off B3098, adjacent to Court Orchard/Cassways Braton	-	35	-	-	More than likely	2029	Yes



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
SE Wilts	Drummond Park Depot	E/11/0001/OUT	475	-	-	More than likely	2031	Yes
SE Wilts	North of Tidworth Road	K/042723/O	0	Commercial	12	Reasonably foreseeable	Unknown	No
SE Wilts	Ludgershall	15/02770/FUL	246	-	-	Near Certain	2024	Yes
SE Wilts	Ludgershall Garden Centre Granby Gardens	E/2013/0234/OUT	181	-	-	More than likely	2021	Yes
SE Wilts	Riverbourne Fields, Tidworth	-	311	-	-	Near Certain	2020	Yes
SE Wilts	Riverbourne Fields	14/05389/VAR	289	-	-	Near Certain	2016	No
SE Wilts	Larkhill	-	444	-	-	Near Certain	2024	Yes
SE Wilts	Bulford	-	227	-	-	Near Certain	2024	Yes
SE Wilts	Land immediately to the south and west of Archers Gate	15/02530/OUT	400	-	-	Near Certain	2027	Yes
SE Wilts	Kings Gate	-	1300	-	-	Near Certain	2027	Yes
SE Wilts	Fugglestone	S/2012/0814	1250	Commercial	0.08	Near Certain	2029	Yes
SE Wilts	Hampton Park	S/2009/1943	500	-	-	Near Certain	2018	Yes
SE Wilts	Longhedge	13/00673/OU	673	Commercial	0.08	Near Certain	2024	Yes
SE Wilts	UKLF	S/2011/0517	450	Commercial	0.03	Near Certain	2021	Yes
SE Wilts	Netherhampton Road	-	640	-	-	More than likely	2033	Yes
SE Wilts	Churchfields & Engine Sheds	-	1100	-	-	Reasonably foreseeable	2036	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
SE Wilts	Central Car Park	-	200	Commercial	0.04	Reasonably foreseeable	2024	No
SE Wilts	Erskine	13/04870/OUT	292	-	-	Near Certain	2021	Yes
Swindon	Central Swindon	-	3000	A1, A2 & B1a	14.37	Near Certain	2021	Yes
Swindon	Wichelstowe	S/13/1524	3178	B1, A1,A2,A3	7.34	Near Certain	2021	Yes
Swindon	Commonhead	S/10/0842	890	B1 and/or B2, A1	13.28	Near Certain	2021	Yes
Swindon	NEV	-	8270	B1a, B1b/c or B2, B8, A1	41.2	Near Certain	2021	Yes
Swindon	Tadpole Farm	S/11/1588	1695	B1 and/or B2, A1	5.1	Near Certain	2021	Yes
Swindon	Kingsdown	-	1650	A1	0.1	Near Certain	2021	Yes
Swindon	Highworth (Blackworth Industrial Estate)	-	200	B8	5	Near Certain	2021	Yes
Swindon	Wroughton	S/03/1887	179	-	-	Near Certain	2021	Yes
Swindon	Delta 300	S/08/1897	0	B8	0.5	Near Certain	2021	No
Swindon	Edison Rd, Dorcan	S/15/1024 and S/OUT/17/0069	1	C2	0.6	Near Certain	2021	No
Swindon	Penny Ln, Drakes Way	S/06/0968	0	B1	0.6	Near Certain	2021	No
Swindon	Europa/Brittania	S/07/1828	0	Manufacturing	0.06	Near Certain	2021	No
Swindon	Adjacent to Abbey Stadium	-	0	Office – business park	4	Near Certain	2021	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Swindon	Hilmead (excluding planning application 17/0507 zone - 2056)	-	0	Light industrial	7.9	Near Certain	2021	No
Swindon	Keypoint - K3	S/10/1780	0	Distribution/office	2.6	Near Certain	2021	No
Swindon	Rivermead	-	0	Light industrial	1.3	Near Certain	2021	No
Swindon	Site 10a - South Marston Park	S/06/0054	0	Office	0.6	Near Certain	2021	No
Swindon	Site 10b - South Marston Park	S/03/0860	0	B2.B8.B1	0.5	Near Certain	2021	No
Swindon	Site 4 - South Marston Park	-	0	Light industrial	0.7	Near Certain	2021	No
Swindon	G - Park (remainder)	-	0	Large Distribution	15.25	Near Certain	2021	No
Swindon	Plot 9 Windmill Hill (allocation)	S/11/1624	0	Office	2.38	Near Certain	2021	No
Swindon	Hreod Burna North	S/09/2196	273	-	-	Near Certain	2021	No
Swindon	Okus Industrial Estate, Okus Road	-	26	-	-	Near Certain	2021	No
Swindon	GWR Sports Ground, Shrivenham Rd	-	201	-	-	Near Certain	2021	No
Swindon	Tilley's Lane West, Lower Stratton	-	55	-	-	Near Certain	2021	No
Swindon	Westlea Police Station, Shaw Road	S/06/0054	70	-	-	Near Certain	2021	No
Swindon	Bampton's, Stratton Road	S/OUT/15/0377	61	-	-	Near Certain	2021	No
Swindon	Tilley's Lane Industrial Estate	-	37	-	-	Near Certain	2021	No
Swindon	Tilley's Lane East	-	37	-	-	Near Certain	2021	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Swindon	Ferndale Road/Norman Road	-	34	-	-	Near Certain	2021	No
Swindon	East Side of Highworth Road	-	32	-	-	Near Certain	2021	No
Swindon	Locarno Ballroom, The Square, Old Town	S/TIME/11/1272	115	A3/A4	0.12	Near Certain	2021	No
Swindon	Ridgeway School, Inverary Road, Wroughton	-	60	-	-	Near Certain	2021	No
Swindon	South of Kiln Lane, Swindon	S/15/2014 and S/02/3792	32	-	-	Near Certain	2021	No
Swindon	Pipers Way (Burmah Castrol)	S/05/1720	616	-	-	Near Certain	2021	No
Swindon	83 Ermin Street Blunsdon	S/13/0364	57	-	-	Near Certain	2021	No
Swindon	89, 91, 93 Ermin Street Blunsdon	S/17/0458	15	-	-	Near Certain	2021	No
Swindon	99 Ermin Street Blunsdon (Hills)	S/13/1223	61	-	-	Near Certain	2021	No
Swindon	Land North of Ermin Street and High Street Blunsdon (Linden Homes).	14/1304	69	-	-	Near Certain	2021	No
Swindon	Land off High Street Blunsdon	S/OUT/16/2034	52	-	-	Near Certain	2021	No
Swindon	Abbey Farm	14/0080	350	A1, D1	1.9	Near Certain	2021	No
Swindon	Abbey Stadium	S/RES/16/0272	100	-	-	Near Certain	2021	No
Swindon	Triangle site, Lady lane	15/1025	52	-	-	Near Certain	2021	No
Swindon	Land north of Latham land	17/0211	0	B1a	0.3	Near Certain	2021	No
Swindon	Holdcroft Broadbush	S/17/0528	54	-	-	Near Certain	2021	No
Swindon	Swindon Gateway North	S/16/0505	0	A1	0.07	Near Certain	2021	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Swindon	Market House, Market Square (Tented Market)	17/0673	101	A1/A3	0.1	Near Certain	2021	No
Swindon	Aspen House	17/0665	118	A	0.06	Near Certain	2021	No
Swindon	Burderop Park (former ch2m)	17/0128	79	-	-	Near Certain	2021	No
Swindon	Hillmead Drive	17/0507	0	B2, B1, B8	0.67	Near Certain	2021	No
Swindon	Croft Road Business Village	-	0	A2, B1	0.2271	More than likely	2021	No
Swindon	North Star - circa 1,000 homes + strategic lesiure facility	-	1000	D2	16	Near Certain	2021	No
Swindon	Land Adjacent To 160 Croft Road	S/OUT/17/0882	62	-	-	Near Certain	2021	No
Swindon	Blagrove Service Station	-	102	-	-	Near Certain	2021	No
Swindon	Berkeley Farm	S/RES/17/0635	100	-	-	Near Certain	2021	No
Swindon	Abbey Stadium 2	s/12/1826	121	-	-	Near Certain	2021	No
Swindon	The Plantation Broad Bush Blunsdon	-	70	-	-	Near Certain	2021	No
Swindon	Grove Farm, Tadpole Lane, Swindon	-	250	-	-	Near Certain	2021	No
Swindon	Tented Market Site, Market Street, Swindon TC	-	0	-	-	Near Certain	2021	No
Swindon	Falcon House, Debenhams Building, Swindon TC	-	70	-	-	Near Certain	2021	No
Swindon	Railway Station regeneration	-	250	-	-	Near Certain	2021	No
Swindon	Brunel Centre	-	370	-	-	Near Certain	2021	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Swindon	Newburn Sidings	-	100	-	-	Near Certain	2021	No
Swindon	Hill Cottage Blunsdon Hill	S/OUT/17/1032	0	-	-	Near Certain	2021	No
Devizes	Underhill Nursery, Market Lavington	-	50	-	-	Hypothetical	Unknown	No
Warminster	East of the Dene	-	100	-	-	Hypothetical	Unknown	No
Warminster	Bore Hill Farm	-	70	-	-	More than likely	2030	Yes
Malmesbury	Ridgeway Farm, Crudewell	-	50	-	-	Hypothetical	Unknown	No
SE Wilts	Land at Rowbarrow	-	100	-	-	More than likely	2027	Yes
Chippenham	Langley Park	16/04269/FUL	0	A1	0.0174	Near Certain	Unknown	Yes
Chippenham	Langley Park - Additional	16/03515/OUT	400	A1, A3, C1, C3	1.3656	More than likely	2033	Yes
Chipp Rural	Land South-East of Junction 17 of M4	17/03417/OUT	0	B8	9.290304	More than likely	Unknown	Yes
Chippenham	Hullavington Airfield	18/08271/OUT	0	B1	4.415	Reasonably foreseeable	Unknown	No
Chippenham	Land at Hungerdown Lane	17/09445/FUL	35	A1	Unkown	Near Certain	2021	Yes
Chippenham	Land at Showell Farm	N/13/00308/OUT	0	B1 (a), (b) & (c), B2, B8	5	More than likely	2036	Yes
Chippenham	Forest Farm	15/11153/OUT	200	B1	Unknown	Hypothetical	Unknown	No
Chippenham	Land at Patterdown Road	16/09277/OUT	72	-	-	More than likely	2024	Yes



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Chippenham	Riverside	15/12363/OUT	1500	A1, A2, A3, A4, B1, B2, C2, C3, D1, D2	5	Hypothetical	Unknown	No
Devizes	Lay Wood	15/12095/REM	220	-	-	Near Certain	2021	Yes
Devizes	Land at Quakers Road	15/01388/OUT	123	-	-	More than likely	2022	Yes
Chipp Rural	Land west of Salisbury Road	15/02026/OUT	175	C1	-	Near Certain	2023	Yes
SE Wilts	Land at Empress Way	E/2013/0234/OUT	270	-	-	More than likely	2029	Yes
Melksham	Former George Ward School	14/11295/REM	261	-	-	Near Certain	2020	Yes
Corsham	Land at Bradford Road	16/09292/REM	170	-	-	More than likely	2020	Yes
Corsham	Land north of Bath Road	13/05188/OUT	130	-	-	Reasonably foreseeable	2025	No
Westbury	Land at The Mead	14/10977/REM	220	-	-	Near Certain	2020	Yes
Westbury	Land north of Bitham Park	14/09262/OUT	300	-	-	More than likely	2024	Yes
Calne	Land at Prince Charles Drive	14/11179/OUT	130	-	-	More than likely	2021	Yes
Calne	Land off Abberd Lane	15/05254/REM	124	-	-	Near Certain	2019	Yes
Calne	Land to east of Oxford Road	16/07209/VAR	200	-	-	More than likely	2024	Yes



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Calne	Land north of Low Lane	17/00679/OUT	165	A1	-	More than likely	2024	Yes
Malmesbury	Land to south of Filands	15/05015/REM	180	-	-	Near Certain	2020	Yes
Malmesbury	Backbridge Farm	-	170	-	-	More than likely	2026	Yes
Warminster	West of Warminster urban extension	Various	1550	A1-A5, B1, B2, B8	6	Near Certain	2034	Yes
Swindon	Ridgeway Farm	-	700	D1	-	Near Certain	2021	Yes
Devizes	Land to the north of Marshall Road, Devizes, Wiltshire	16/12285/OUT	50	-	-	More than likely	2028	No
SE Wilts	Land off Firs Road, Alderbury, Wiltshire	17/04001/OUT	50	-	-	Near Certain	2026	No
SE Wilts	Harnham Park, Netherhampton Road, Salisbury, SP2 8PF	18/04067/OUT	82	-	-	Near Certain	2028	No
SE Wilts	Land to the East of A345 and West of Old Sarum Salisbury Wiltshire SP4 6BW	19/00537/FUL	65	-	-	Near Certain	2022	No
Westbury	Land at Westbury Sailing Lake Station Road Westbury Wiltshire	17/01314/VAR	300	-	-	Near Certain	2028	No
Malmesbury	Land at Burton Hill Burton Hill Malmesbury Wiltshire	16/11603/OUT	59	-	-	Near Certain	2028	No
Corsham	Land South of Bradford Road Rudloe	17/01661/VAR	88	-	-	Near Certain	2021	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Warminster	Land north of Grovelands Way Warminster BA12 8TB	17/05360/OUT	45	-	-	Near Certain	2029	Yes
Malmesbury	Land south of Filands Malmesbury	19/11569/OUT	71	-	-	Near Certain	2022	No
North of Royal Wootton Bassett	Land at Pound Farm South View Lyneham Wiltshire	20/02387/OUT	50	-	-	Near Certain	2022	No
Corsham	Land south of Westwells Road, Neston, Corsham	18/09884/OUT	81	-	-	Near Certain	2022	No
SE Wilts	E V Naish Ltd Crow Lane Wilton Salisbury Wiltshire	16/07192/FUL	62	-	-	Near Certain	2025	No
SE Wilts	UK House Complex including 79 and 89 Endless Street Castle Street Salisbury Wiltshire	17/03957/FUL	91	-	-	Near Certain	2021	No
SE Wilts	Land Adjoining the Old Manor Hospital Wilton Road Salisbury Wiltshire	16/12244/FUL	56	-	-	Near Certain	2022	No
SE Wilts	Land at Hillbrush Company Ltd Woodlands Road Mere	17/00047/VAR	59	-	-	Near Certain	2021	No
SE Wilts	Land Adjoining the Old Manor Hospital Wilton Road Salisbury Wiltshire	16/10838/FUL	51	-	-	Near Certain	2023	No
SE Wilts	141 Castle Street, Salisbury, SP1 3TB	18/12068/FUL	66	-	-	Near Certain	2022	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Trowbridge	Ex West Wiltshire District Council Offices Bradley Road Trowbridge Wiltshire	17/05669/FUL	79	-	-	Near Certain	2022	No
Westbury	Westbury and District Hospital The Butts Westbury BA13 3EL	17/05669/FUL	56	-	-	Near Certain	2022	No
Trowbridge	The Pavilions White Horse Business Park Windsor Road Trowbridge Wiltshire	17/05497/PNCOU	104	-	-	Near Certain	2025	Yes
Calne	Land at Silver Street Calne Wiltshire	16/04124/FUL	154	-	-	Near Certain	2025	Yes
SE Wilts	Land Adjacent to High Post Business Park	PL/2021/11914	-	E(g), B2, B8, Sui Generis	1.2744	Reasonably foreseeable	Unknown	No
SE Wilts	Land north of Tidworth Road, Ludgershall (Castledown Business park)	K/042723/O	-	B1, B2, B8	10	Reasonably foreseeable	Unknown	No
SE Wilts	Land Adjacent to Dead Maid Quarry Industrial Estate, Mere	20/03877/REM	-	B1, B8	1	More than likely	2030	Yes
Westbury	Hawkeridge Business Park Land North and South of Mill Lane Hawkeridge Westbury BA13 4LD	14/03118/OUT	-	B1, B2, B8	14	More than likely	2030	No
Devizes	Land at Horton Road, Devizes	PL/2021/08425	-	B2, B8, E(G 1-3)	7	Reasonably foreseeable	Unknown	No
North of Royal Wootton Bassett	Land at Green Farm, Chippenham Road, Lyneham SN15 4PA	19/03199/OUT	200	B1	0.26	Near certain	2029	Yes



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
Melksham	Land at Semington Road, Melksham, Wilts	20/01938/OUT	144			Near Certain	2028	Yes
Chipp Rural	Former MOD Rudloe No.2, Westwells Road, SN13 9RA	19/07339/REM	166			Reasonably foreseeable	2028	No
Devizes	Land at Marshall Road, Devizes	PL/2021/07203	170			More than likely	2030	Yes
Chippenham	Land off the B4069 East of Barrow Farm, Chippenham	PL/2022/04681	230			More than likely	2031	Yes
Devizes	Land off Coate Road, Devizes	PL/2021/04774	200			More than likely	2031	Yes
Warminster	Land North West of Boreham Mill, Bishopstrow Road (H2.8)	19/07647/REM	34			Near Certain	2024	No
	Former Commercial Nursery, Barters Farm, High Street, Chapmanslade, Wiltshire, BA13 4AL (H2.10)	18/06223/FUL	43			Near Certain	2023	No
SE Wilts	North of Netherhampton Road, Salisbury (H3.3)	PL/2021/06594	106			Near Certain	2026	Yes
SE Wilts	Clover Lane, Durrington (H3.6)		45			More than likely	2029	No
SE Wilts	Yard and buildings to the rear of Neal Close / Gibbs Close, Hampton Park, Salisbury (H3.5)	PL/2021/09292	14			Near Certain	2024	No
SE Wilts	Land north of Hilltop Way, Salisbury, Wilts, SP1 3QX (H3.2)	PL/2021/09660	10			Near Certain	2025	No



Model Sector	Development site name	Planning Permission	No. of dwellings (2018 onwards)	Non-res land use	Employment (ha)	Uncertainty Category	Completion Date	Include in Model
SE Wilts	Larkhill Road, Durrington (H3.7)		15			More than likely	2029	No



A.2 Infrastructure

Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Melksham	A350 Farmers Roundabout Improvements	A350 Melksham Bypass - Traffic and Economics Assessment Report	Signalisation introduced at the roundabout which will be linked to traffic signals at the Asda entrance and A365 junction. Alterations to entry traffic lanes and circulatory carriage.	2019	Near Certain	-	Y
Trowbridge	A350 Yarnbrook and West Ashton Relief Road	A350 Melksham Bypass - Traffic and Economics Assessment Report	Construction of 2.5km of new carriageway, conversion of West Ashton signals into three-arm junction, stopping up the existing A350 and construction of three new roundabouts.	2021	Near Certain	v4.0: Is the Source / Link reference correct here? Yarnbrook / West Ashton OBC?	Y
Chippenham	A350 Chippenham Phase 3 - Bypass Improvements	A350 Melksham Bypass - Traffic and Economics Assessment Report	Widening of the A350 to dual two-lane between Cepen Park South and Chequers roundabout, additional widening for approximately 250m north of Cepen Park South roundabout and 250m south of Chequers roundabout, widening of A4 approach and exit to Chequers roundabout, widening of the A350 to dual twolane between Badge and Brook roundabout.	2018	Near Certain	v4.0: Incorrect Source / Link.	Y
Chippenham	A350 Chippenham Phase 1 - Malmesbury Road Roundabout Amendments	A350 Melksham Bypass - Traffic and Economics	Increased capacity and signalisation of Malmesbury Road roundabout.	-	Near Certain	v4.0: Completed (Incorrect	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
		Assessment Report				Source / Link reference)	
Chippenham	M4 J17 Improvements	A350 Melksham Bypass - Traffic and Economics Assessment Report	Signalling of the two M4 slip road arms to the roundabout and the corresponding circulatory carriageway.	-	Near Certain	v4.0: Completed (Incorrect Source / Link reference)	Y
Chippenham	A350 Chippenham Phase 2 - Bypass Improvements	A350 Melksham Bypass - Traffic and Economics Assessment Report	Upgrade the existing two-lane A350 Chippenham Bypass to dual two-lane standard between Bumpers Farm Roundabout and Brook Roundabout	-	Near Certain	v4.0: Completed (Incorrect Source / Link reference)	Y
Badbury Wick	M4 J15 Improvements	A303 Stonehenge - Amesbury to Berwick Down	Upgrading capacity and changing layout of gyratory at J15 (Swindon East). £4.5m 3rd party scheme required to accommodate nearby urban extension of Swindon at Commonhead. Additional lane on gyratory, additional lane on A419 southbound approach, and dedicated turning lane onto eastbound M4 slip. Enhanced £8.7m scheme with additional improvements to approach roads the subject of bid for Highways England HGF.	2020	More than likely	v4.0: Unclear why Report and Source / Link references are to A303 Stonehenge scheme?	Y
New Eastern Villages	Nythe Road / Oxford Road	CH2M_2017_NEV Masterplan	The proposed junction would consist of two 3.25m wide lane approach in both	2036	Near Certain	v4.0: scheme not included	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
			directions, with cycling facilities and a bus stop. (See source page for details)			in strategic model	
New Eastern Villages	A419 White Hart Junction Improvements	Atkins Designs	Proposes to widen the existing circulatory carriageway on White Hart roundabout to three lanes around the whole roundabout. Closes two links leading in to the roundabout, including Merlin Way and Ermin Street and introduce two new links, the first offslip from A419 northbound and the second a slip road leading onto the A419 northbound. (See source page for details)	2021	Near Certain	-	Y
New Eastern Villages	Gablecross	Atkins Designs	Removing the existing roundabout arrangements and implement a large signalised 4 arm junction. (See source page for details)	2021	Near Certain	-	Y
New Eastern Villages	(Gablecross) Police Station Access	CH2M_2017_NEV Masterplan	Situated off the A420 east of Gablecross junction. At present there are no facilities for vehicles to turn right into the police station access for the A420 east (westbound). (See source page for details)	2021	Near Certain	v4.0: scheme not included in strategic model	N
New Eastern Villages	Old Vicarage Lane / A420	CH2M_2017_NEV Masterplan	Widen the existing priority junction and introduce signal control. The junction would be widened to allow two lanes in either direction on the A420 to be	2036	Near Certain	v4.0: scheme not included in strategic model	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
			introduced. (See source page for details)				
New Eastern Villages	New Eastern Villages Eastern Access	Estimated Design	Flared approach to each of the New Eastern Villages access in both directions on the A420 and signalization of the Western and Eastern access junctions. (See source page for details)	2036	Near Certain	v4.0: Southern element may be in by 2021	Y
New Eastern Villages	Southern Connector Road (SCR)	CH2M_2017_NEV Masterplan	The different test variants have different priority movements associated with the SCR. (See source page for details)	2021	Near Certain	-	Y
New Eastern Villages	Southern Connector Road (SCR) - with SCR movements having priority	CH2M_2017_NEV Masterplan	The different test variants have different priority movements associated with the SCR. (See source page for details)	2021	Near Certain	-	N
New Eastern Villages	SCR junction with Wanborough Road to provide straight through movements only	CH2M_2017_NEV Masterplan	The different test variants have different priority movements associated with the SCR. (See source page for details)	2021	Near Certain	-	N
New Eastern Villages	SCR junction with Wanborough Road to provide Wanborough Road northbound traffic left turn access to SCR and SCR northbound traffic right turn	CH2M_2017_NEV Masterplan	The different test variants have different priority movements associated with the SCR. (See source page for details)	2021	Near Certain	-	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
	access to Wanborough Road						
New Eastern Villages	SCR junction with Wanborough Road to provide all turning movements	CH2M_2017_NEV Masterplan	The different test variants have different priority movements associated with the SCR. (See source page for details)	2021	Near Certain	-	N
New Eastern Villages	Great stall bridge to accommodate Public Transport, cyclists, and pedestrian movements only	CH2M_2017_NEV Masterplan	Provide a link between Merlin Way to the west of the A419 and the New Eastern Villages site to the east. In some test variants the bridge is only open to public transport and nonmotorised users, which would have two lanes. (See source page)	2036	Near Certain	-	N
New Eastern Villages	Great stall bridge to accommodate all traffic movements	CH2M_2017_NEV Masterplan	Provide a link between Merlin Way to the west of the A419 and the New Eastern Villages site to the east. (See source page)	-	Hypothetical	-	N
New Eastern Villages	Improvements to the Covingham Road/Dorcan Way transport corridors;	SLP	Roadway improvements	2036	Near Certain	v4.0: Not sure what we are coding for this until the rest of 419 package is decided	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
New Eastern Villages	A new road link under the Bristol to London railway line connecting the development north and south at Rowborough;	SLP	Roadway improvements	2036	Near Certain	-	N
New Eastern Villages	1000 (3ha.) space Park and Ride site	SLP	Park and Ride site	2021-26	Reasonably foreseeable	v4.0: some developer and bus operator interest in developing the site.	N
New Eastern Villages	NEV QBC	Rapid Transit programme	Package of measures to support bus services from NEV to the town centre	2020	Reasonably foreseeable	v4.0: Package to be worked up, but funding secured.	N
Central Swindon	Whalebridge from the east	SLP	Junction Enhancement	Unknown	Near Certain	-	N
Central Swindon	Groundwell Road/Victoria Road from the south and east	SLP	Junction Enhancement	Unknown	Near Certain	-	N
Central Swindon	Whitehouse Roundabout	SLP	Junction Enhancement	Unknown	Near Certain	-	N
Central Swindon	Westcott Place	SLP	Junction Enhancement	Unknown	Near Certain	-	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Central Swindon	1000 space car park	SLP	To the north of the railway line	2021-26	Reasonably foreseeable	v4.0: General support from Network Rail, but funding package not yet identified.	N
Central Swindon	Swindon Bus Exchange	LGF scheme	New Bus Station facility at western end of Fleming Way.	2020	Near Certain	v4.0: SBC Pledge. LGF funding secured. Design underway.	N
Central Swindon	Kimmerfields Phase 2 Car Park	TC Regen Scheme	New car park on the Kimmerfields site. Approx. 450 spaces.	2036	Near Certain	v4.0: Forms part of Kimmerfields Phase 2 development. Outline planning approval secured.	N
Central Swindon	Fleming Way re-modelling	TC Regen Scheme	Alteration to Fleming Way layout including removal of subway at The Parade and creation of two way bus route closed to general traffic.	2020	Near certain	v4.0: SBC Pledge. Forms part of Kimmerfields development.	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Central Swindon	Swindon Station Regeneration	One Public Estate programme	Re-development of Swindon Railway Station to provide enhanced passenger and operational capacity, improved transport interchange for bus, taxi and cycle, new Multi-storey Car Park at North Star, and new bridge / tunnel crossing of the railway.	2021-26	Hypothetical	v4.0: Work underway on the development of the concept design (2017/18). Funding for the full scheme not yet secured.	N
Central Swindon	Regent Circus Bus Lane	Rapid Transit programme	Bus lane at Regents Circus to Princes Street	2018	Near Certain	v4.0: Detailed design underway. Funding secured.	N
Wichelstowe	Express bus link to Swindon Town Centre and additional public transport links within the site;	SLP	Public Transport links	Unknown	Reasonably foreseeable	-	N
Wichelstowe	Walking and cycle links to Swindon's existing communities and the wider countryside	SLP	Walking and Cycling links	Unknown	Reasonably foreseeable	-	N
Wichelstowe	Link to Junction 16 of the M4	SLP	New road linking Wichelstowe to M4 J16 including new crossing of the M4.	2022	More than likely	v4.0: Design being prepared. LGF funding	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						secured subject to Full Business Case being approved by DfT.	
Wichelstowe	Link from Croft Road to Hay Lane	SLP	Internal road layout linking to the above.	2022	Near Certain	v4.0: Internal road layout needed to access West Wichel development	Y
Wichelstowe	Park and Ride site	SLP	Park and Ride site	Unknown	Reasonably foreseeable	v4.0: Included in Wichelstowe Masterplan, but firm interest from bus operators yet to be confirmed.	N
Commonhead	Public transport links to Swindon Town Centre	SLP	Public Transport links	Unknown	Reasonably foreseeable	-	N
Commonhead	Walking and cycle links to Swindon's existing communities, Coate Water Country Park and Great Western Hospital	SLP	Walking and Cycling links	Unknown	Reasonably foreseeable	-	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Commonhead	Access to the site from Marlborough Road	SLP	Access	Already complete	Near Certain	v4.0: in base model	N
Coate	Coatewater Junction	-	-	2021	Near Certain	v4.0: scheme not included in strategic model	N
Tadpole Farm	Contributions towards mitigation on the highway network;	SLP	Highway network mitigations	-	Hypothetical	-	N
Tadpole Farm	Access routes from Tadpole Lane and a new route north	SLP	Vehicular access routes from Tadpole Lane and a new route north to connect to Swindon via Ermin Street, Blunsdon (the former A419) and under the new A419(T) at the existing underpass;	2021	Near Certain	-	Y
Tadpole Farm	Measures to discourage through traffic from Thamesdown Drive to Blunsdon via Tadpole Lane;	SLP	Access	2021	Near Certain	v4.0: scheme not included in strategic model	N
Tadpole Farm	Tadpole Farm QBC	Rapid Transit programme	Package of measures to support bus services	2019	Reasonably foreseeable	v4.0: Package to be worked up, but funding secured.	N
Kingsdown	A new all vehicular bridge across the A419 to connect to the Swindon urban area	SLP	New Bridge	2036	Reasonably foreseeable	-	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
	as the primary access route;						
Kingsdown	Vehicular access routes from Cold Harbour Junction and the B4019 east of Broad Blunsdon, designed in such a way to discourage additional trips through Broad Blunsdon and Broadbush and protect the amenity of Kingsdown Lane including appropriate green infrastructure;	SLP	Access	2036	Reasonably foreseeable	-	N
Kingsdown	Mitigation contributions for the highway network	SLP	Highway network mitigations	Unknown	Reasonably foreseeable	-	N
Haydon	Thamesdown Drive to Barnfield Link	LLMTS Bid	A new road connecting the Thamesdown Drive / Purton Road junction with the Barnfield Roundabout on Great Western Way. Standard likely to be SC2 7.3 metre width.	Unknown	Hypothetical	v4.0: SBC Pledge. Large Local Major Transport Scheme bid in 2016 - unsuccessful. No funding source currently available.	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Peatmoor	Mead Way Junction Improvements	NPIF Bid (in preparation)	Improvements to the Mead Way / Purton Road junction (conversion to signals), the Withymead and Westmead Roundabouts (conversion to signals) and the Mead Roundabout on Great Western Way.	2019/20	Hypothetical	v4.0: NPIF funding bid to be submitted by end of June 2017. Govt decision expected Autumn 2017.	N
Toothill	Mannington Roundabout improvement	Rapid Transit programme	Junction improvement to provide increased capacity.	2018	Near Certain	v4.0: Detailed design underway. Funding secured.	Y
East Wichel	Pipers Way Bus Lane	Rapid Transit programme	Bus lane and associated improvements on Pipers Way	2018	Near Certain	v4.0: Detailed design underway. Funding secured.	N
Upper Stratton	Moonrakers Roundabout	Rapid Transit programme	Re-modelling of junction to provide increased capacity and bus priority	2019	Reasonably foreseeable	v4.0: Funding secured, but design solution yet to be worked up.	N
Blagrove	M4 J16 Improvement	LGF scheme	Junction improvement at J16 involving slip road widening, crculatory carriageway widening and new layout	2018	Near Certain	v4.0: Under construction.	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
			improving access between Wroughton and Wootton Bassett.				
Bristol Channel	Severn River Crossing Toll	-	Toll charge to be ended by beginning of 2019.	2019	Near Certain	-	Y
Amesbury	Stonehenge Tunnel	Highways England Website	To move the A303 into a tunnel that would run below Stonehenge	Unknown	More than likely	v4.0: Site construction forecast to start 2021.	Y
Chippenham	A350 Chippenham Phase 4 - Bypass Improvements	Early MRN 'pen picture'	Further dualling and junction improvements	2023	Reasonably Foreseeable	v4.0: To be considered as part of (early) MRN proposals.	N
Chippenham	A350 Chippenham Phase 5 - Bypass Improvements	Early MRN 'pen picture'	Further dualling and junction improvements	2023	Reasonably Foreseeable	v4.0: To be considered as part of (early) MRN proposals.	N
Chippenham	Bumpers Farm Roundabout Improvements	-	Signalisation of Bumpers Farm Roundabout.	2022	Near Certain	v4.0: Planned	Y
Chippenham	Little George Roundabout Improvements	-	Signalisation of Little George roundabout.	Unkown	Near Certain	v4.0: Committed - To be delivered as part of the Lidl application	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						(16/04269/FU L) of the Langley development	
Chippenham	Pew Hill and Foundry Lane through road	-	New through road between Pew Hill and Foundry Lane	Unkown	Near Certain	v4.0: Committed - To be delivered as part of the Langley redevelopment application (16/03515/OUT)	Y
Chippenham	Pheasant Roundabout capacity improvement	Hunter's Moon, Chippenham Transport Assessment - Apendix B	Introduction of toucan crossing and new turn allocations.	2026	Near Certain	v4.0: Committed - To be delivered as part of Hunters Moon application (16/12493/FUL)	Y
Chippenham	Malmesbury Road roundabout - Bird's Marsh Access	Drawing	New arm for Bird's Marsh Development	2026	Near Certain	v4.0: Committed - part of Birds Marsh development	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						(N/12/00560/OUT)	
Chippenham	A350 - B4258 Link Road	Chippenham Design Sketches v2	New junction on A350 and link road through to B4528	Unkown	Near Certain	v4.0: Committed - Delivered as part of Showel Farm development (N/13/00308/OUT)	Y
Chippenham	Roundabout on B4528	-	Delivered as part of Rowden Park - to link to Showel Farm access road	2026	Near Certain	v4.0: Committed - Part of Rowden Park Development	Y
Chippenham	Station Hill/New Road Junction	Chippenham Design Sketches v2	Conversion of mini-roundabout to signalised t-junction.	Unknown	More than likely	v4.0: Planned - Chippenham Transport Strategy	Y
Chippenham	Rowden Hill roundabout improvements	Chippenham Design Sketches v2	Flare on approach from south	Unknown	More than likely	v4.0: Planned - Chippenham Transport Strategy	Y
Chippenham	Pewsham Way/Ave La Fleche roundabout improvements.	Chippenham Design Sketches v2	2 lane exit on Ave la Fleche	Unknown	More than likely	v4.0: Planned - Chippenham Transport Strategy	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Chippenham	Malmesbury Road roundabout improvements	Chippenham Design Sketches v2	Elongation and further signalisation	Unknown	More than likely	v4.0: Planned - Chippenham Transport Strategy - requires land from Birds Marsh in current format.	Y
Chippenham	Hospital link road - Ave la Fleche to Bath Road	-	Cuts into Rowden Park country park land	Unknown	Reasonably Foreseeable	v4.0: At pre-feasibility stage.	N
Chippenham	Bridge Centre Gyratory	-	Several options	Unknown	More than likely	v4.0: Planned - tied up with redevelopment of Bridge centre	Y
Chippenham	M4 J17 - amendments. Three lanes on circulatory carriageway.	Drawing - Chippenham Gateway - M4 J17 - Proposed Mitigation for Junc 17	Includes a flare on A350, 3 lane on southern circulatory, 3 lane flare on B4122, signalisation of A350 and B4122 arms	Unknown	Near Certain	v4.0: Committed - To be delivered as part of the Chip Gateway development.	Y
Chippenham	Birds Marsh spine road (s/b termed North Chippenham Link Road)	Drawing	First link of northern distributor from Malmesbury Rd rdbt to Mauds Heath Causeway.	2026	Near Certain	v4.0: Committed - delivered as part of Birds	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						Marsh (s/b North Chippenham) development (N/12/00560/OUT)	
Chippenham	Parsonage Way realignment	Drawing Title - Landscape Proposals 683-02A	Double roundabout on Mauds Heath, linked to Birds Marsh.	Unknown	Near Certain	v4.0: Committed - delivered as part of Wavin application	Y
Chippenham	Further M4 17 Ammendments	Drawing Title - M4 Jct 17 Signalisation of A429 Approach (Hullavington Airfield Project)	Three lanes on northern circulatory carriageway and a singalised A249 arm	Unknown	More than likely	v4.0: Planning in progress.	Y
Chippenham	Hullavington Access	Drawing Title - Vehicular access from A429 - Three Arm (Hullavington Airfield Project)	New roundabout at A429 and Hullavington Road Junction, and then a further roundabout on Hullavington Road for access to site.	Unknown	More than likely	v4.0: Planning in progress.	N
Trowbridge	Staverton Bypass	Atkins Feasibility	-	Unknown	Hypothetical	v4.0: Undertaking sub-SOBC work.	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Trowbridge	Longfield Gyratory Capacity Improvements	Trowbridge Transport Strategy	-	Unknown	Hypothetical	-	N
Trowbridge	Trinity Rbout Capacity Improvements	Trowbridge Transport Strategy	-	Unknown	Hypothetical	-	N
Trowbridge	Wicker Hill / Broad Street	Atkins Detailed Design	One way reversal scheme	Unknown	Hypothetical	-	N
Devizes	A361 London Road / Windsor Drive	Atkins Detailed Design	Capacity improvements	2018	Near Certain	v4.0: Being constructed	Y
Salisbury	H01 Harnham Gyratory - remodelling	Salisbury Transport Strategy		2026	Reasonably Foreseeable	v5.4: as instructed by Rob Rossiter as part of the A338 Salisbury Junction Change Control.msg', see v5.4 'Versions' tab), Harham Gyratory / Exeter Street roundabout	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						should not be included in the Core. Reduced from 'More Than Likely' to 'Reasonably Forseeable'.	
Salisbury	H02 Exeter Street roundabout enhancements	Salisbury Transport Strategy	-	2026	Reasonably Foreseeable	v5.4: as instructed by Rob Rossiter as part of the A338 Salisbury work ('RE_A338 Salisbury Junction Change Control.msg', see v5.4 'Versions' tab), Harham Gyatory / Exeter Street roundabout should not be included in the Core.	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						Reduced from 'More Than Likely' to 'Reasonably Forseeable'.	
Salisbury	H03 St Pauls Roundabout enhancements	Salisbury Transport Strategy	MOVA upgrade	2026	Reasonably Forseeable	v4.0: -	N
Salisbury	H04 Route hierarchy	Salisbury Transport Strategy	Development of a hierarchy of routes that restricts traffic movements in the city	2026	Reasonably Forseeable	v4.0: -	N
Salisbury	H05 UTMC improvements	Salisbury Transport Strategy	Use and improve UTMC in accordance with the route user hierarchy in Core Policy 61	2026	More than likely	v4.0: -	Y
Salisbury	H06 College Roundabout capacity enhancement	Salisbury Transport Strategy	-	2026	Hypothetical	v4.0: -	N
Salisbury	H07 A36 Bourne Way capacity enhancements (Petersfinger P&R junction)	Salisbury Transport Strategy	-	2026	Hypothetical	v4.0: -	N
Salisbury	H08 St Marks Roundabout capacity enhancements	Salisbury Transport Strategy	-	2026	More than likely	v4.0: -	Y



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Salisbury	H09 Park Wall Junction (A36/A3094) improvements	Salisbury Transport Strategy	-	2026	More than likely	v4.0: -	Y
Salisbury	H10 Clean Air Zone	Salisbury Transport Strategy	-	2026	Unknown	v4.0: -	N
Salisbury	H11 Freight management scheme (hierarchy / routes)	Salisbury Transport Strategy	-	2026	Hypothetical	v5.3: People Friendly Streets scheme withdrawn - unclear what will replace it/ Churchfields redevelopment uncertain.	N
Salisbury	H12 Castle Roundabout capacity enhancements	Salisbury Transport Strategy	-	2026	More than likely	-	Y
Salisbury	H14 Maltings/Central car park redevelopment	Salisbury Transport Strategy	Long stay car parking replaced by multi-storey short stay car park	2026	More than likely	-	Y
Salisbury	SC01 - 05 Smarter Choices measures	Salisbury Transport Strategy	Workplace, residential and school travel planning, car clubs and support for electric vehicles	2026	Reasonably Foreseeable	-	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Salisbury	PC01 Pedestrian improvements	Salisbury Transport Strategy	Improve pedestrian facilities and pedestrian priority in the city centre (bus routes to be maintained - pedestrianisation could be considered as part of this).	2026	Unknown	v4.0: Pedestrian improvements in progress but pedestrianisation scheme subject to review / consultation v5.0: People Friendly Streets scheme withdrawn - unclear what will replace it	N
Salisbury	PC02 - PC15 Pedestrian and cycle route improvements	Salisbury Transport Strategy	Various walking and cycling route improvements.	2026	Reasonably Foreseeable	-	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Salisbury	PT03 - Bus priority measures on Park & Ride routes (Salisbury Road / Wilton Road, Castle Road, London Road, Southampton Road, Downton Road / Exeter Street)	Salisbury Transport Strategy		2026	Reasonably Foreseeable	v4.0: London Road bus lane (700m). Bus priority measures through UTC on other routes, the centre and potentially Exeter Street bus lane. v5.3: Bus priority through city centre (PFS) withdrawn; minor measures through UTC on some routes to be rolled out. Exeter St or London Rd bus lane now very unlikely. Bus lane from Harnham Business	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
						Park to Netherhampt on more than likely.	
Salisbury	PT04 - Bus link between the hospital and Britford Park & Ride	Salisbury Transport Strategy		2026	Reasonably Foreseeable	v5.3 Likely if Site 7 on Downton Road is included as core strategy site, if not, delivery may take longer.	N
Salisbury	PT05 - High frequency buses serving all new development sites - at least 4 buses per hour (PR3, Red 10, PR11, PR7, Red 5)	Salisbury Transport Strategy		2026	Reasonably Foreseeable	v5.3 Pandemic has reduced patronage and thus commercial viability of frequent services.	N



Location / Development Site	Transportation intervention/name	Source / Link	Description of the intervention	Estimated opening year (Ready for use)	Uncertainty Category	Comments	Include in Core Model
Salisbury	PT09 - Salisbury Rail Station Interchange Improvements - details subject to ongoing work being conducted in partnership between Wiltshire Council, Network Rail and public transport operators	Salisbury Transport Strategy		2026	Reasonably Foreseeable	v5.3 Southern forecourt more than likely. Northern entrance re-opening uncertain.	N
Salisbury	A36 Southampton Road upgrades		Depends on options - increased capacity; bus lanes; service lane for retail facilities along A36	Unknown	Hypothetical	-	N
Wilton	Wilton Rail Station	Atkins study		Unknown	Hypothetical	-	N
Porton	Porton Rail Station			Unknown	Hypothetical	-	N
Amesbury	Boscombe Down access	Atkins study			Reasonably Foreseeable	-	N



Appendix B. Uncertainty Log development locations

B.1 Chippenham HMA



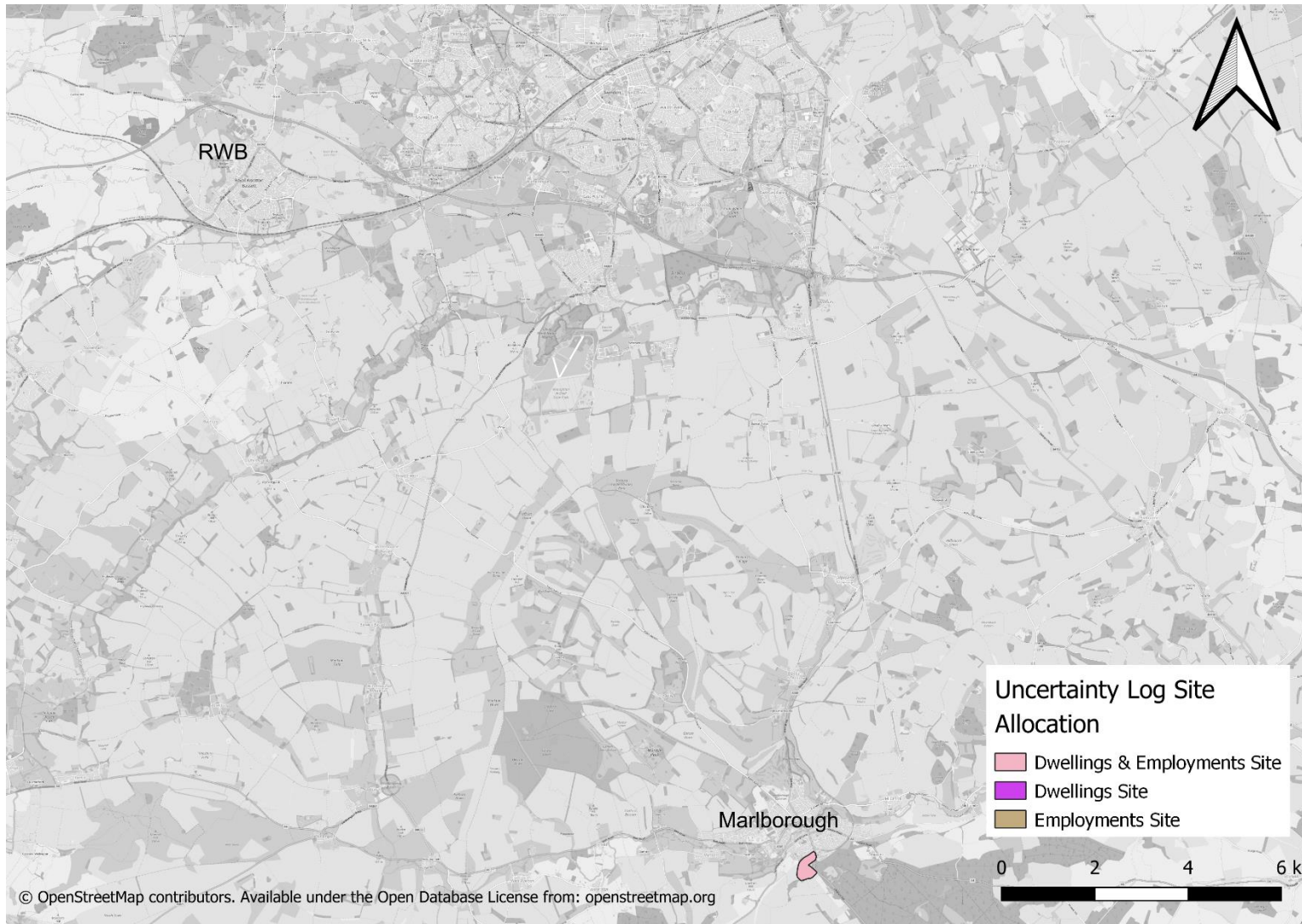
B.2 Trowbridge HMA



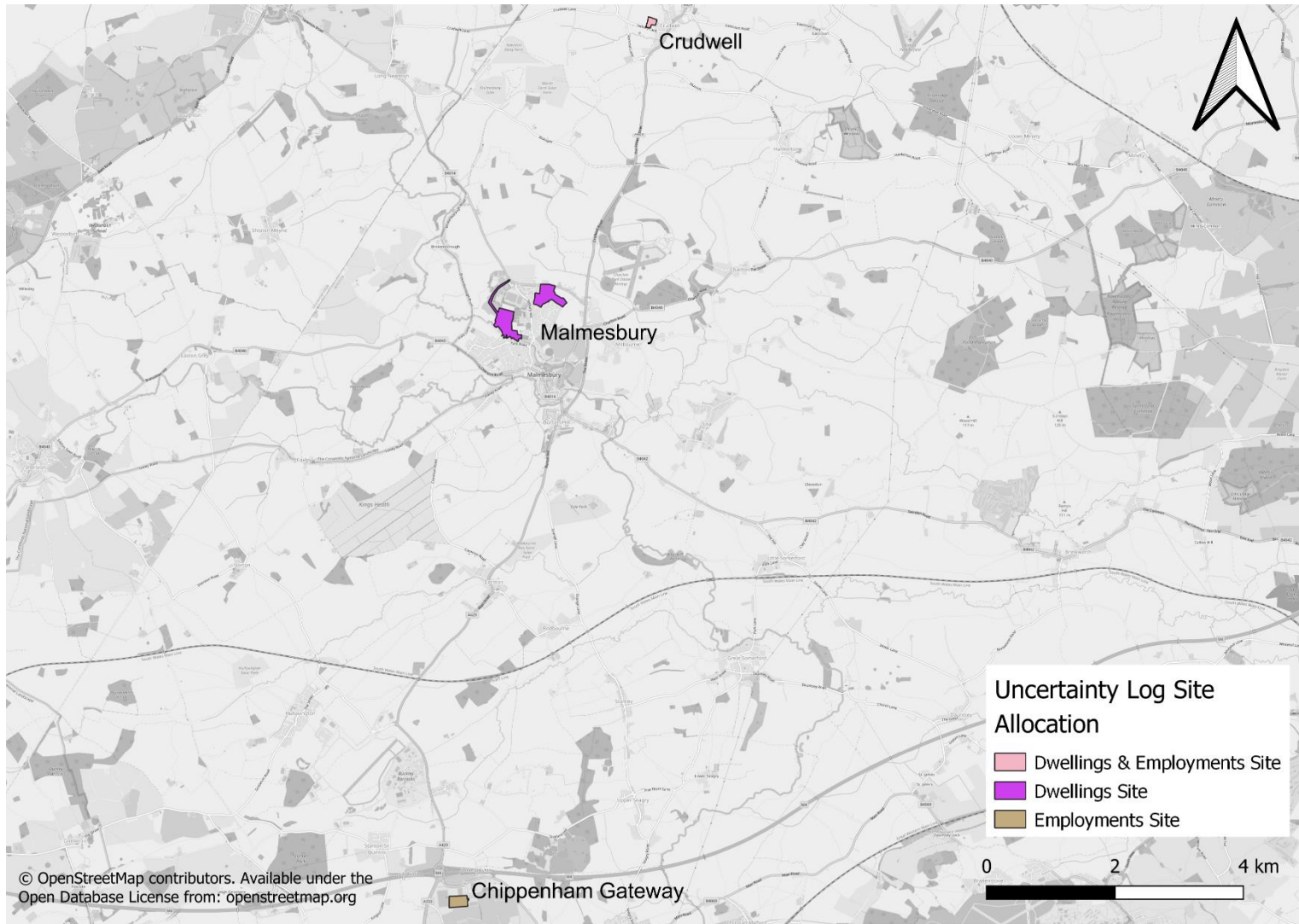
B.3 Salisbury HMA



B.4 Marlborough Swindon HMA



B.5 Malmesbury and Crudwell



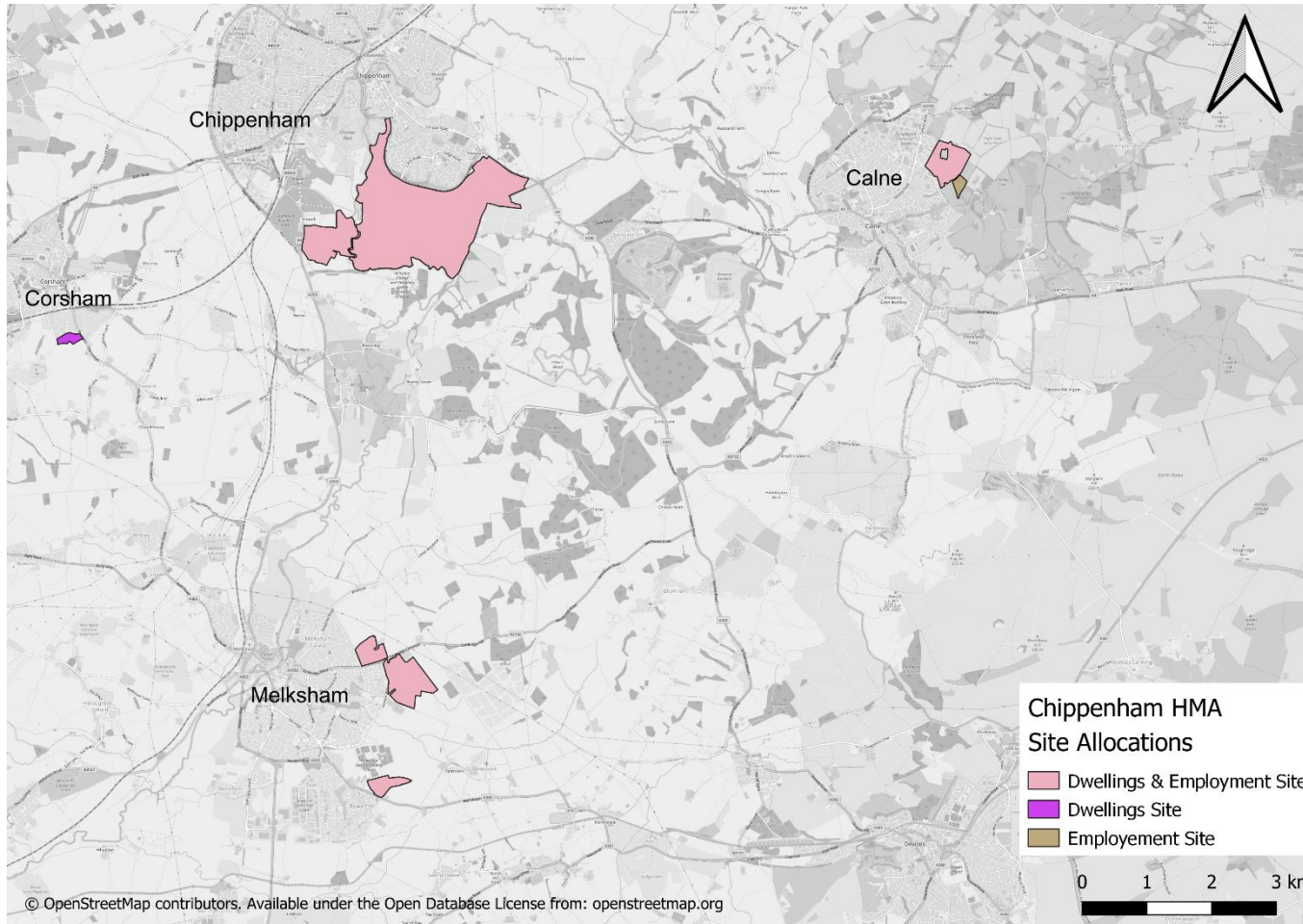
Appendix C. LPR (2024) Developments

Policy Reference	Development Number	Site Address	Settlement	Employment (ha)	Dwelling Allocation
Policy 10	LP1	Land off Spitfire Road	Calne	2.7	0
Policy 11	LP2	Land to the north of Spitfire Road	Calne	0.5	600
Policy 7	LP3	Land South of Chippenham and East of Showell Farm	Chippenham	15	2525
Policy 13	LP4	Land south of Dicketts Road	Corsham	0	260
Policy 30	LP6	Land at Church Road, Laverstock	Laverstock	0	70
Policy 40	LP7	Land South East of Empress Way	Ludgershall	0.7	1270
Policy 45	LP8	Land at Chopping Knife Lane, Marlborough	Marlborough	0	144
Policy 46	LP9	Land off Barton Dene	Marlborough	1.8	86
Policy 18	LP10	Land East of Melksham	Melksham	5	563
Policy 20	LP11	Land North of the A3102	Melksham	0.4	378
Policy 19	LP12	Land off Bath Road, Melksham	Melksham	2	179
Policy 42	LP13	Land at Dead Maid Quarry Employment Area, Mere	Mere	1.5	0
Policy 51	LP14	Land at Woodshaw	Royal Wootton Bassett	0.4	507
Policy 50	LP15	Land West of Maple Drive	Royal Wootton Bassett	0	80
Policy 48	LP16	Land at Marsh Farm	Royal Wootton Bassett	0	171
Policy 49	LP17	Land at Midge Hall Farm	Royal Wootton Bassett	1.8	473
Policy 25	LP18	Land North of the Beehive Park and Ride, Old Sarum	Salisbury	0	140
Policy 26	LP19	Land North of Downton Road	Salisbury	0	309
Policy 27	LP20	Land South of Harnham	Salisbury	0	372
Policy 23	LP21	Land North East of Old Sarum, Salisbury	Salisbury	0	491
Policy 28	LP22	Land West of Coombe Road, Harnham	Salisbury	0	63

Policy Reference	Development Number	Site Address	Settlement	Employment (ha)	Dwelling Allocation
Policy 24	LP23	Land at Netherhampton Road Garden Centre	Salisbury	0	84
Policy 55	LP25	Land at Innox Mills, Trowbridge	Trowbridge	0	190
Policy 53	LP26	Land North of Trowbridge	Trowbridge	1.8	650
Policy 61	LP28	Land West of Mane Way	Westbury	0	261
Policy 62	LP29	Land at Bratton Road, Westbury	Westbury	0.3	309
	LP30	Area of Search	Area of Search	0	1600

Appendix D. LPR (2024) development locations

D.1 Chippenham HMA



D.2 Trowbridge HMA



D.3 Salisbury HMA



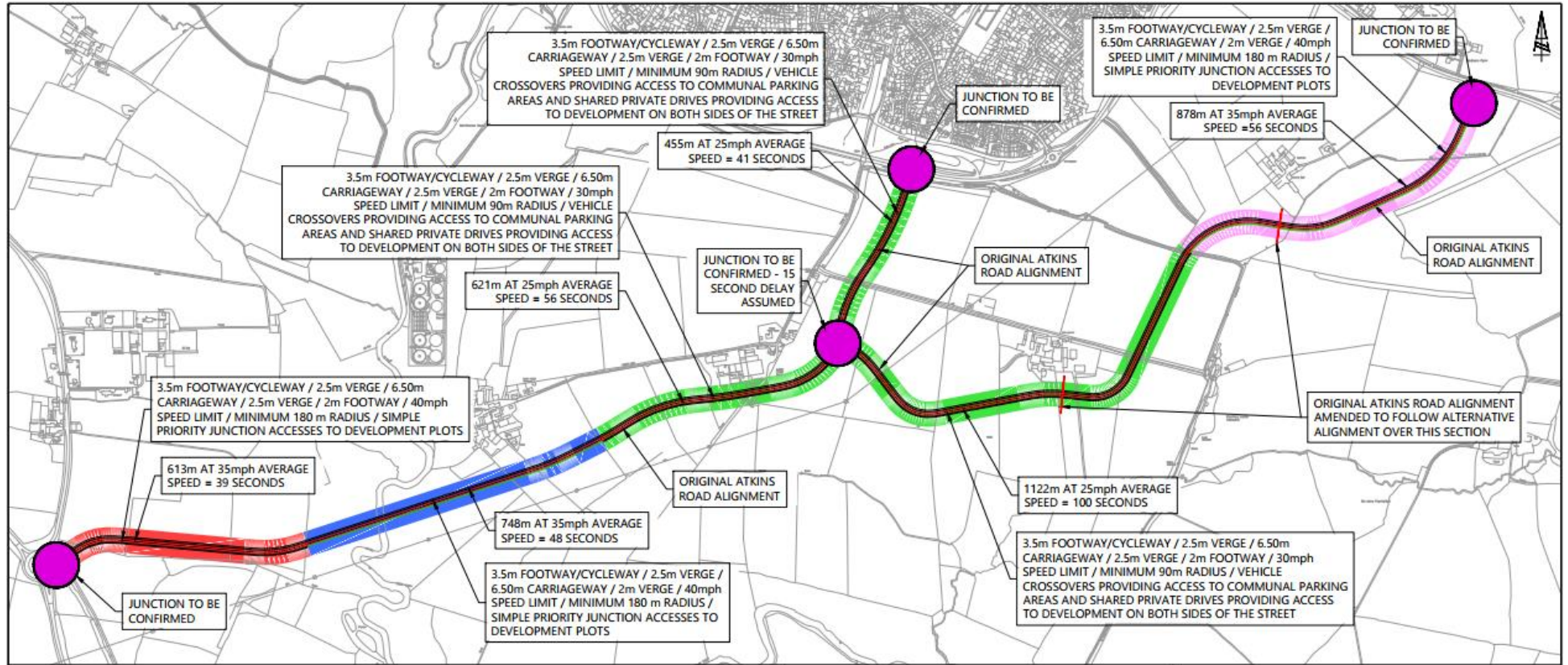
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D.4 Swindon HMA

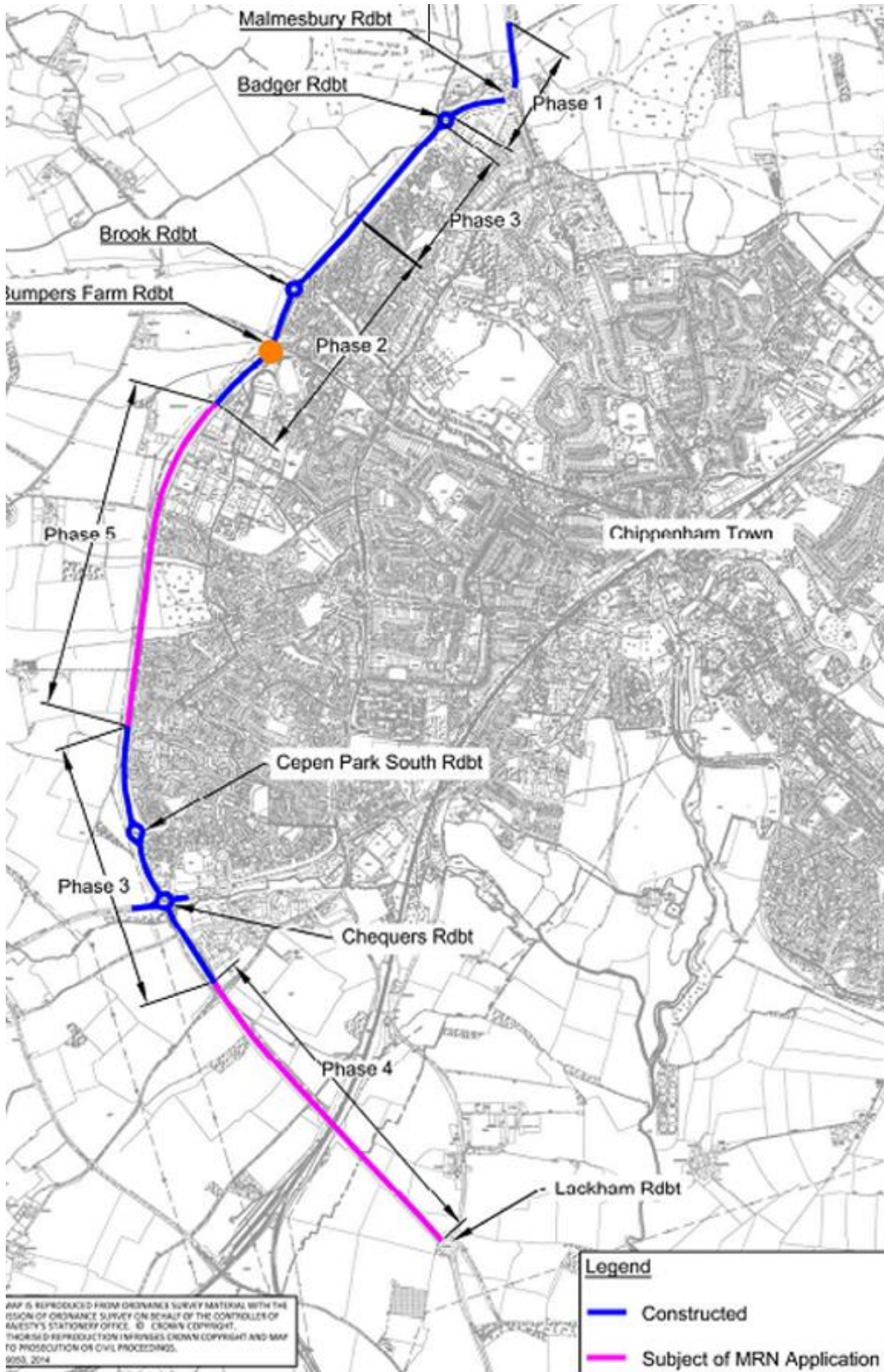


Appendix E. Highway scheme drawings

E.1 Chippenham SDR

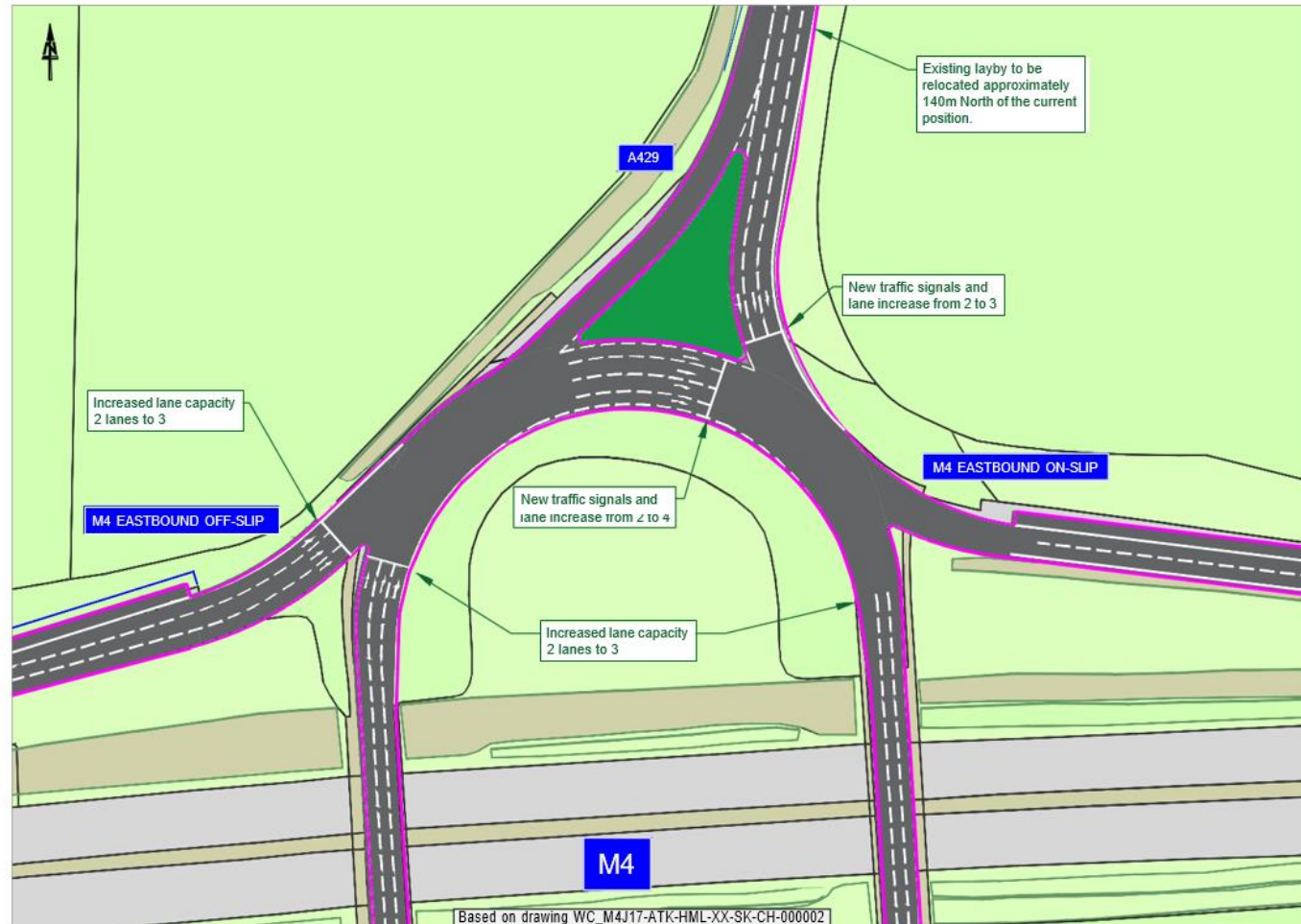


E.2 A350 Chippenham Bypass: Phase 4 and 5 Dualling

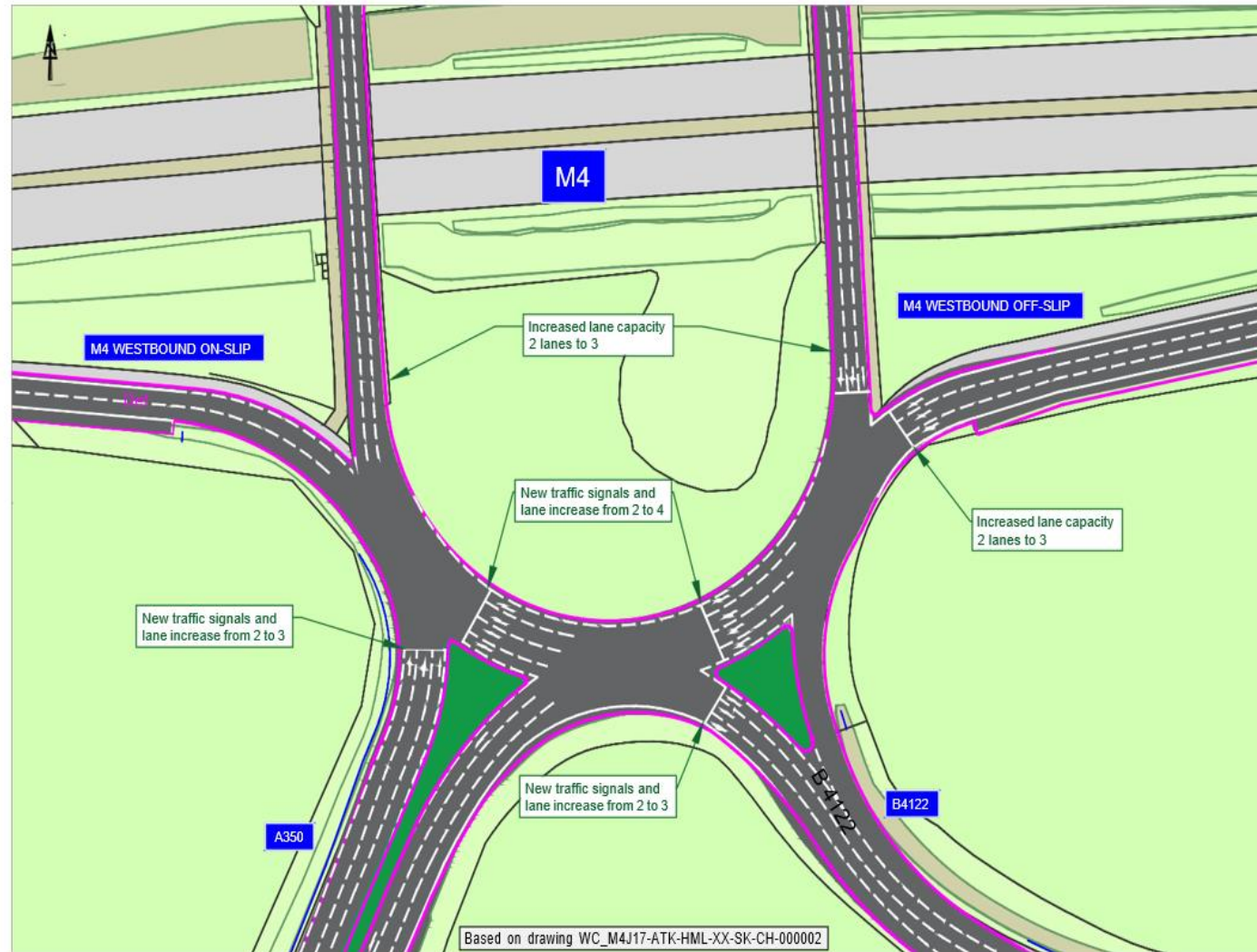


E.3 M4 J17

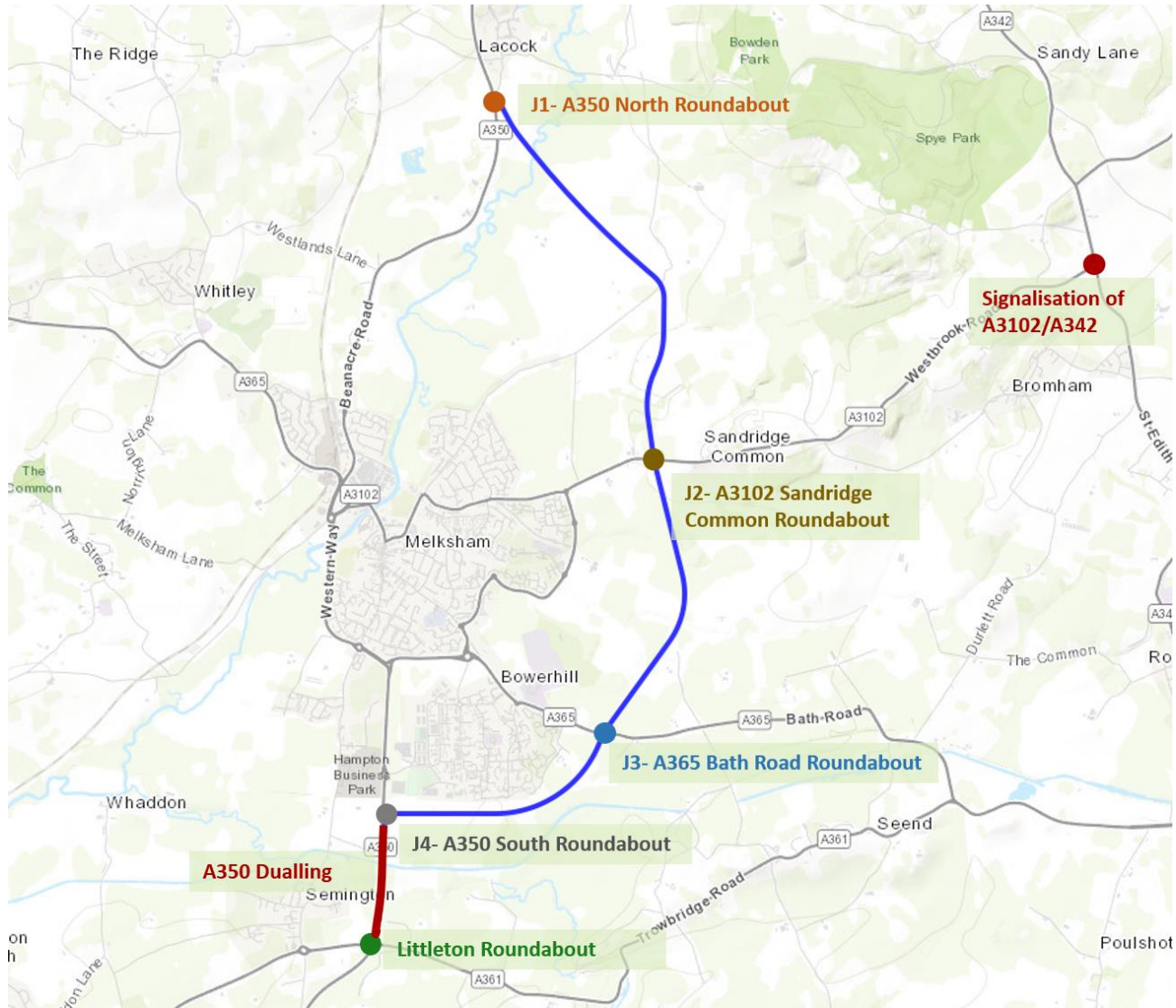
E.3.1 M4 J17 - North



E.3.2 M4 J17 - South



E.4 Melksham Bypass



Appendix F. Atkins Data Visualisation

The AtkinsRéalís Data Visualisation (ADV) tool is provided as an accompanying file ('F15-B61_LPR-2024_ADV_v1.0').

AtkinsRéalís agree to provide an instance of the ADV to assist with the visualisation element of the project, on the basis that its use is limited to this project only, and it won't be copied off the Wiltshire Council virtual network or modified in any way.

Appendix G. Actual flow

G.1 Actual flow changes in Core vs DM

Figure 7-1 – Difference in actual flow (PCUs): DM - Core (2038 IP peak)

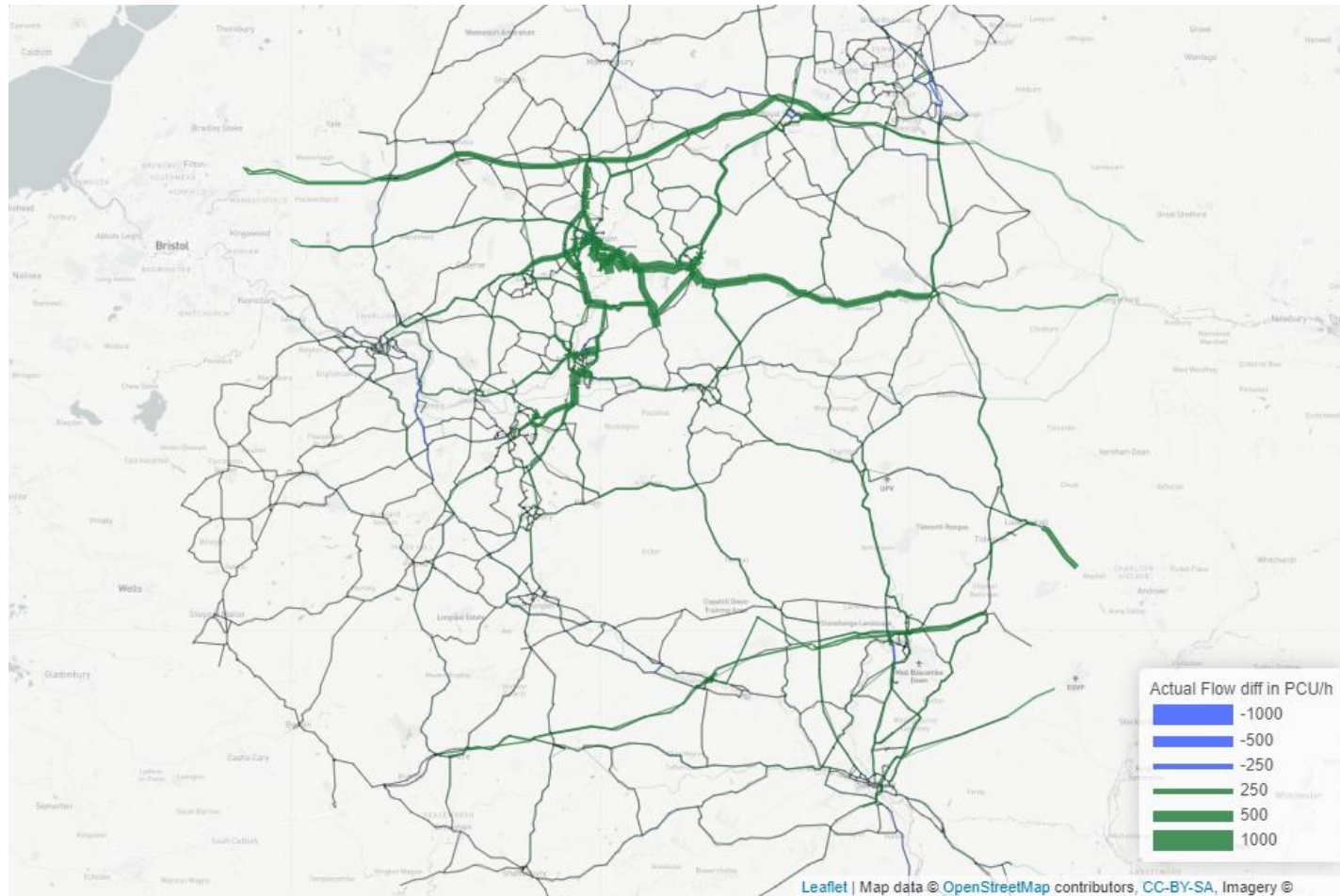
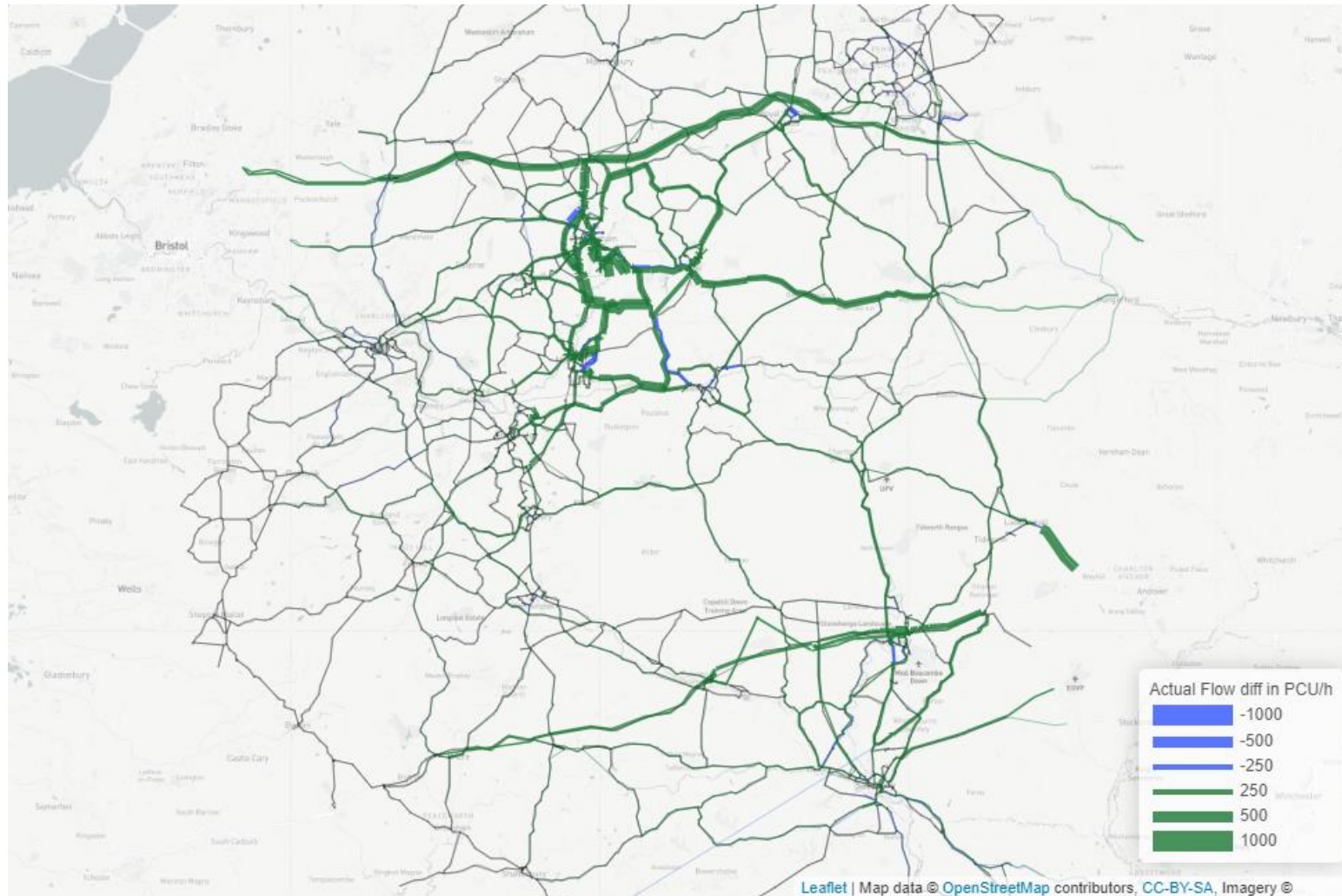


Figure 7-2 – Difference in actual flow (PCUs): DM - Core (2038 PM peak)



G.2 Actual flow changes in DS1 vs DM

Figure 7-3 – Difference in actual flow (PCUs): DS1 - DM (2038 IP peak)

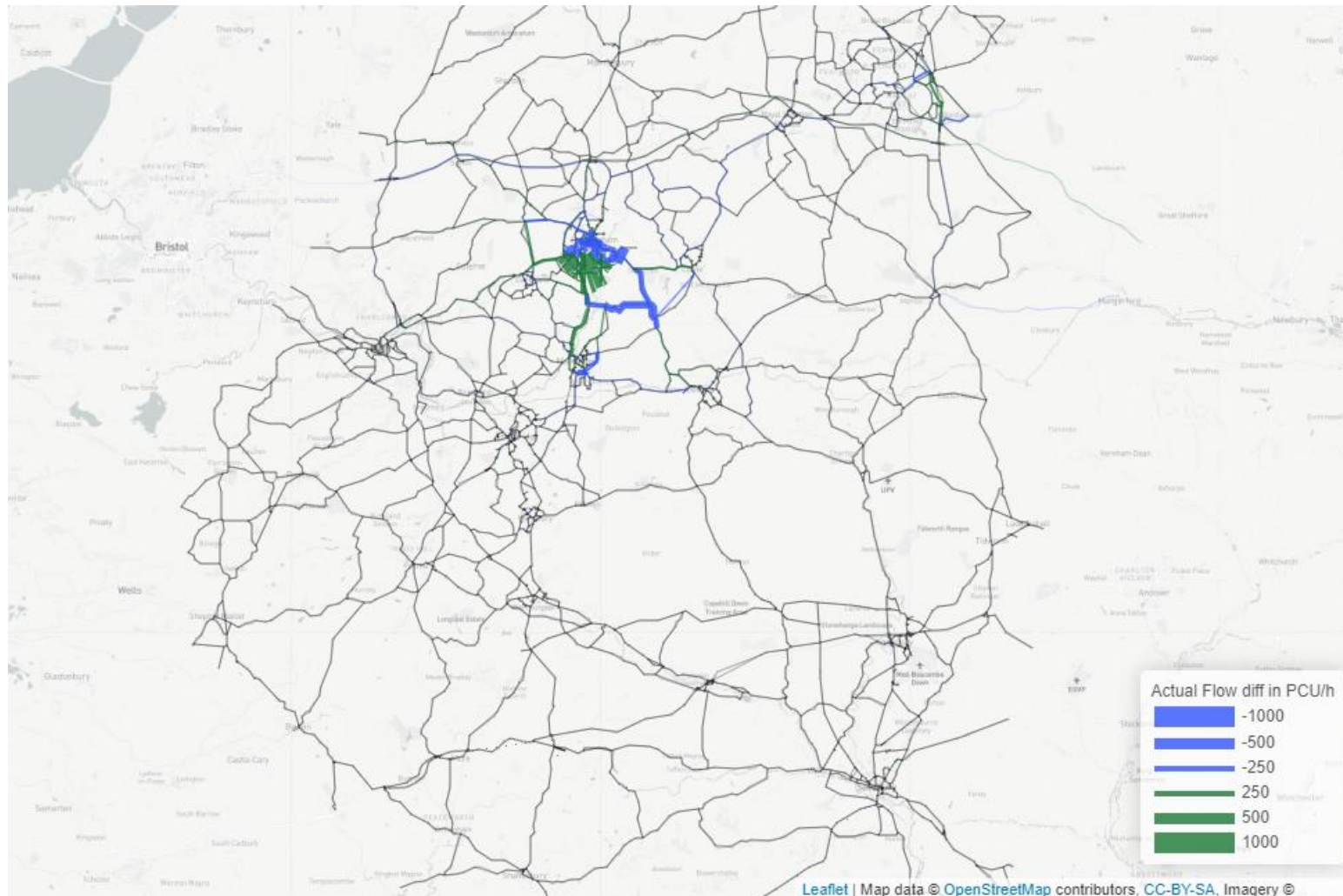
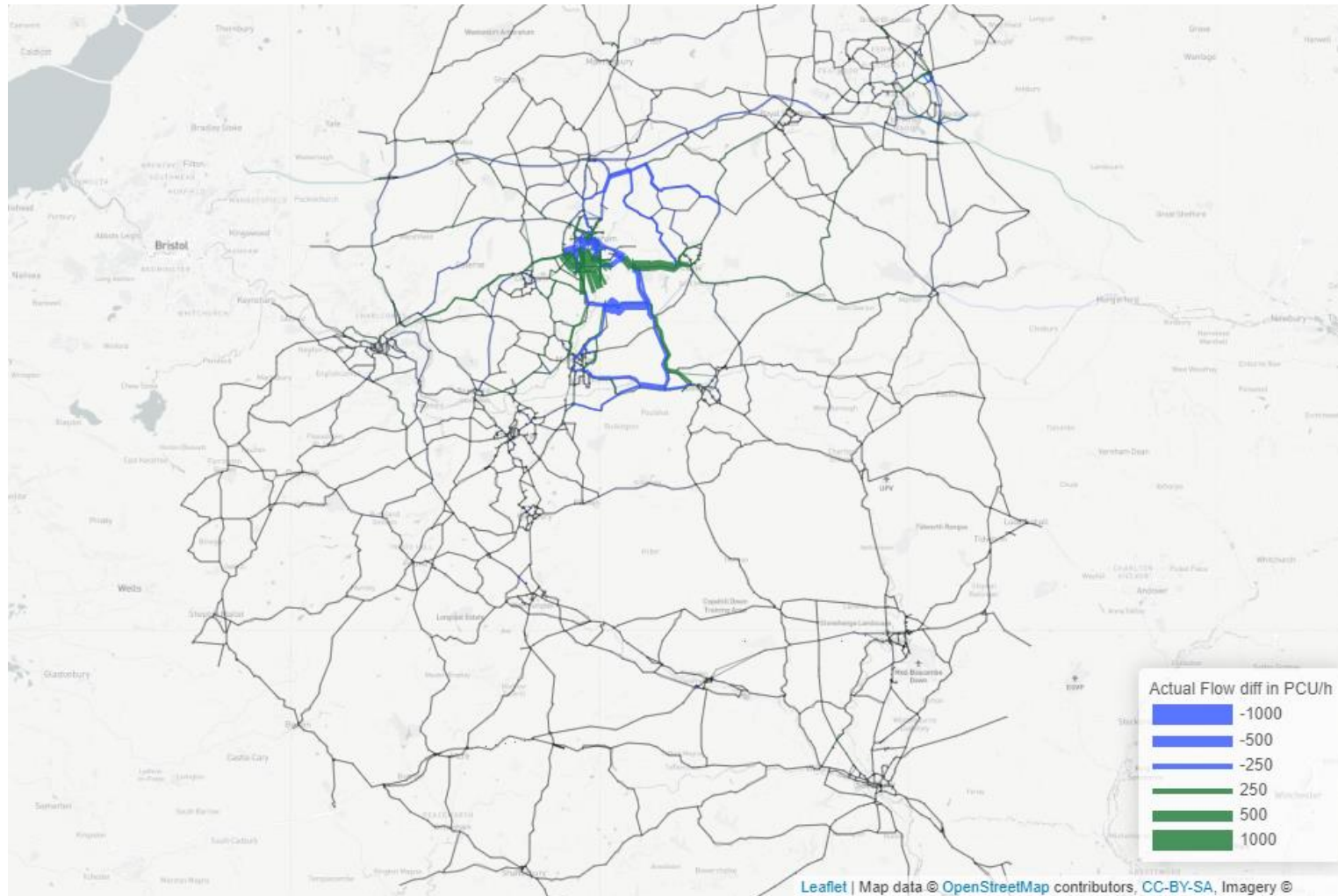


Figure 7-4 – Difference in actual flow (PCUs): DS1 - DM (2038 PM peak)



G.3 Actual flow changes in DS2 vs DS1

Figure 7-5 – Difference in actual flow (PCUs): DS2 – DS1 (2038 IP peak)

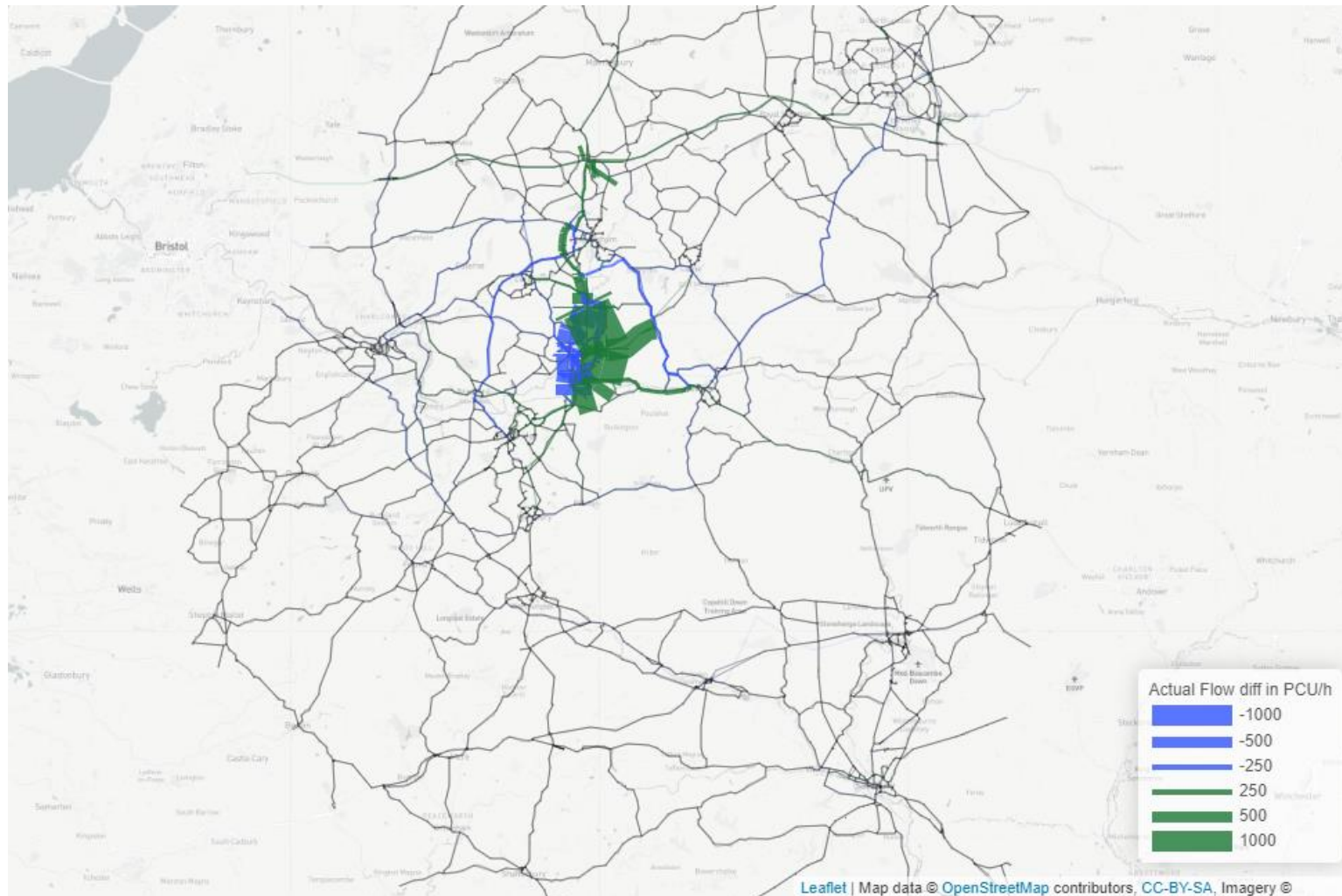
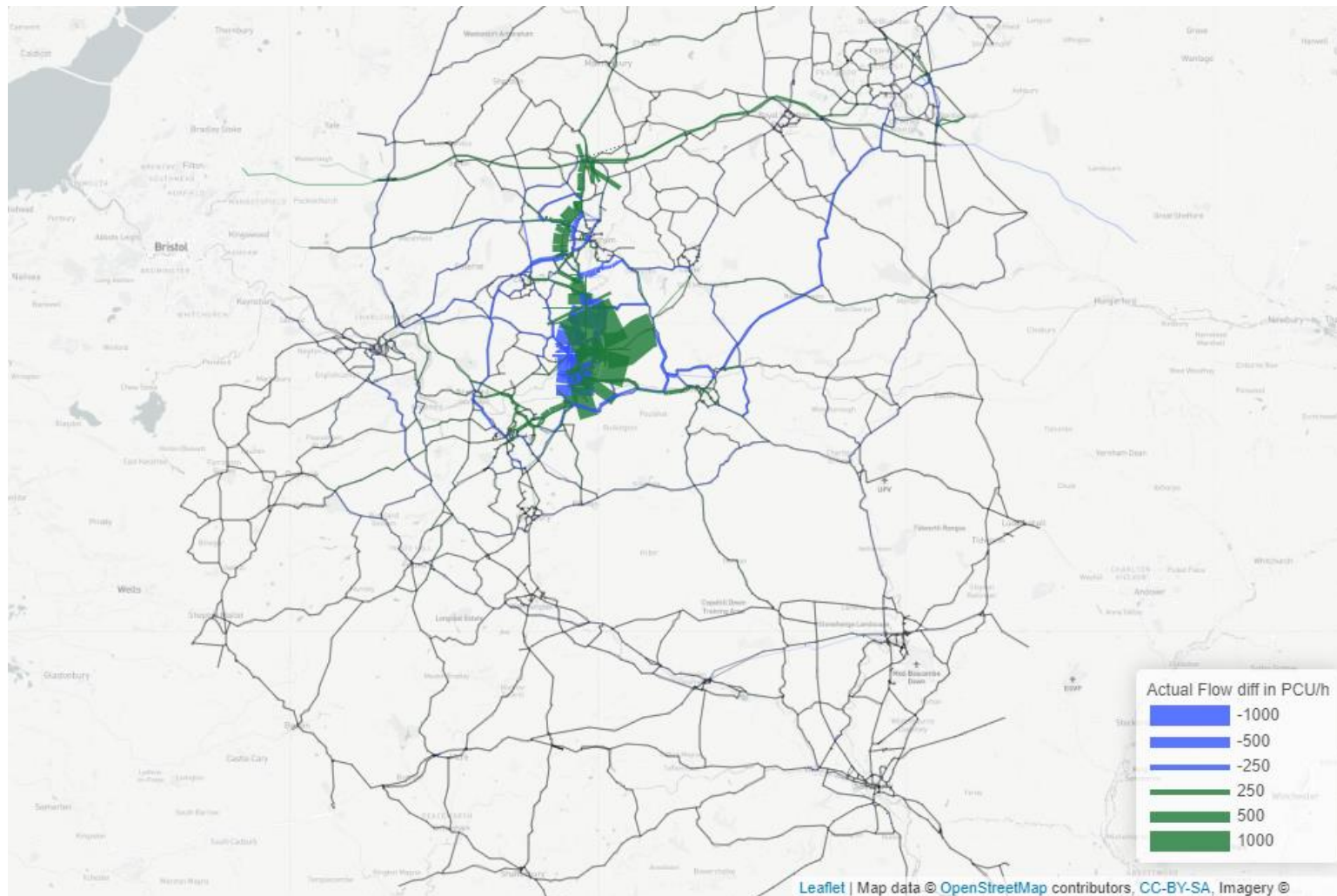


Figure 7-6 – Difference in actual flow (PCUs): DS2 – DS1 (2038 PM peak)



Appendix H. V/C

H.1 V/C changes Core vs DM

Figure 7-7 – V/C%: 2038 Core vs 2038 DM, IP peak hour

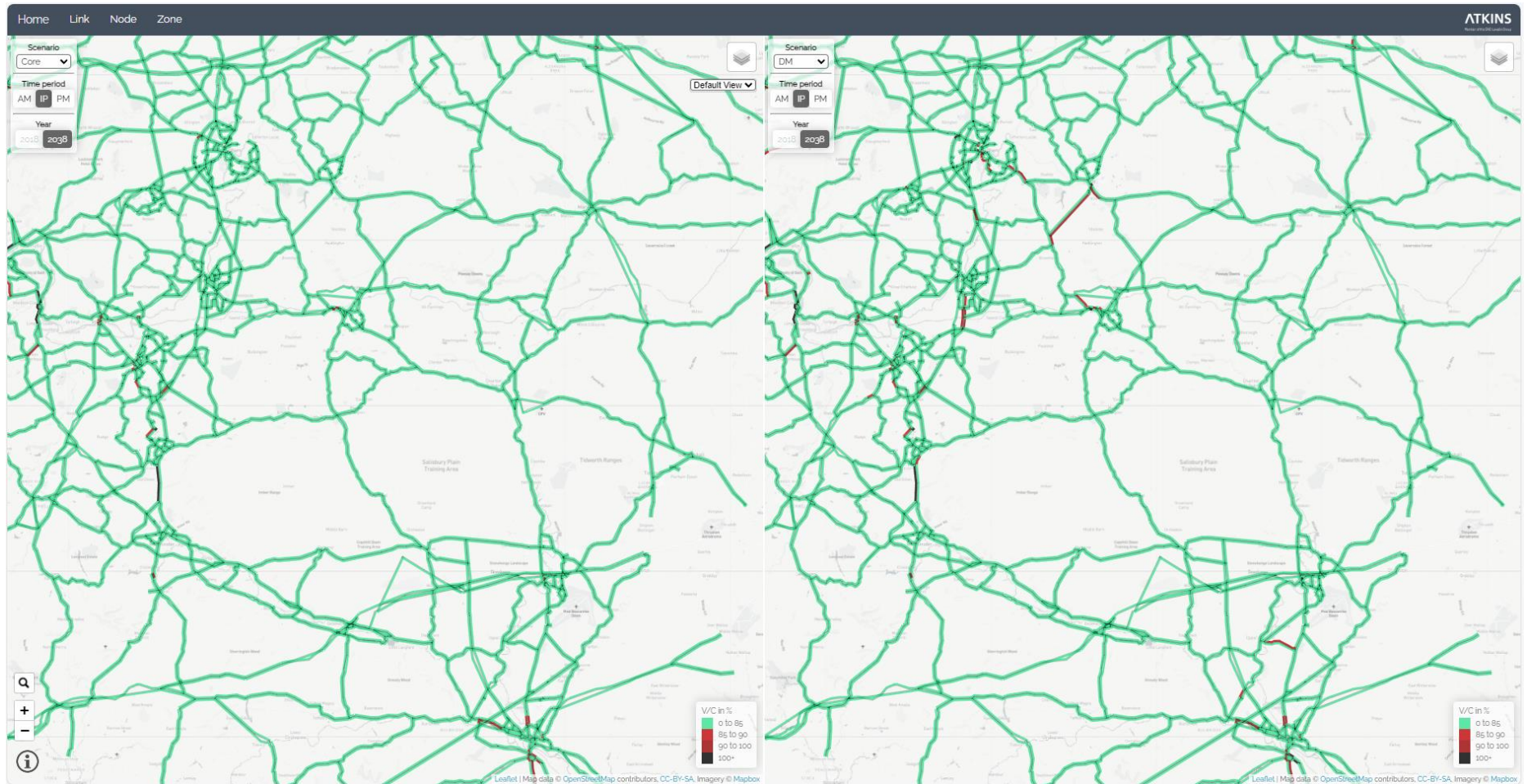
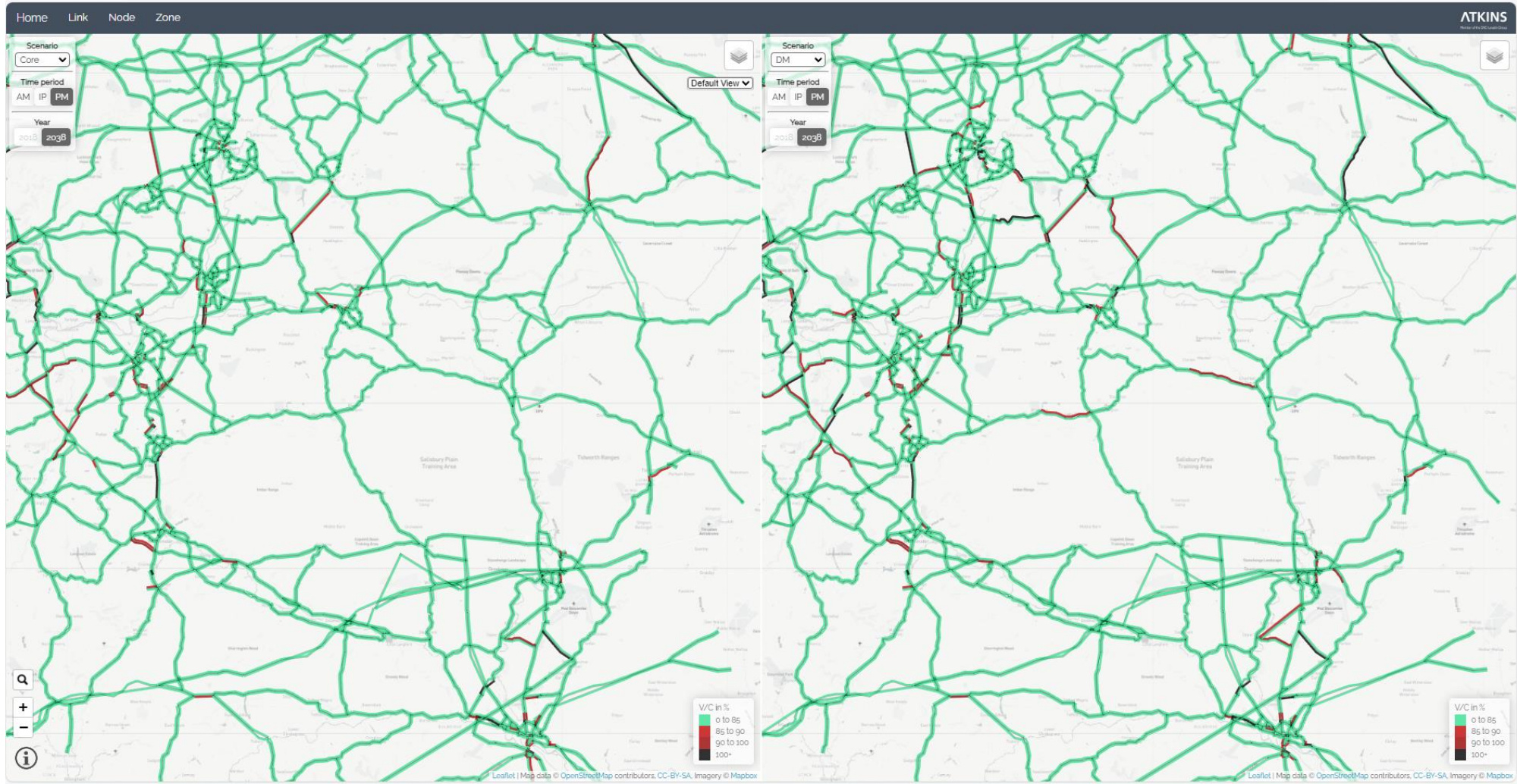


Figure 7-8 – V/C%: 2038 Core vs 2038 DM, PM peak hour



H.2 V/C changes DS1 vs DM

Figure 7-9 – V/C%: 2038 DM vs 2038 DS1, IP peak hour

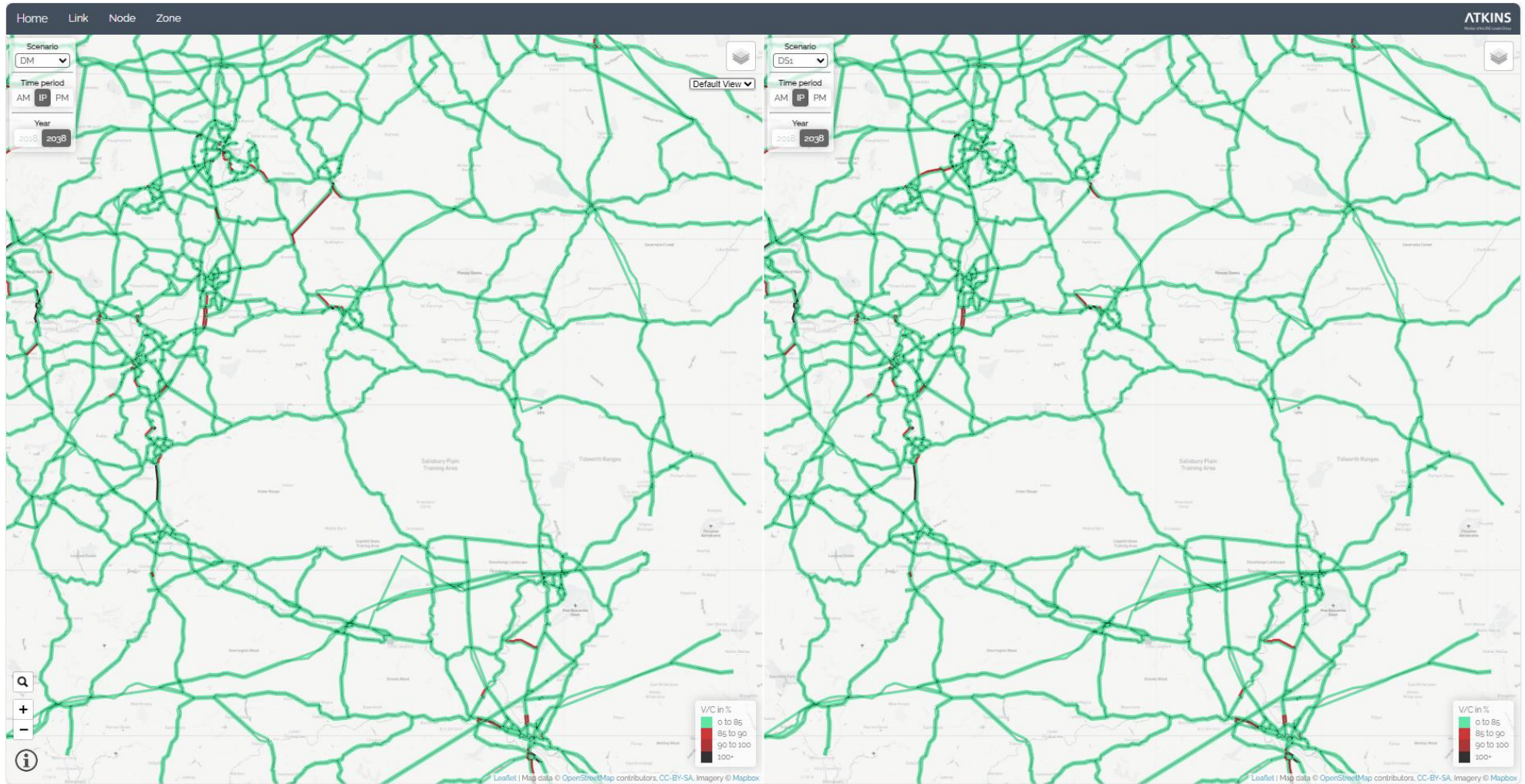
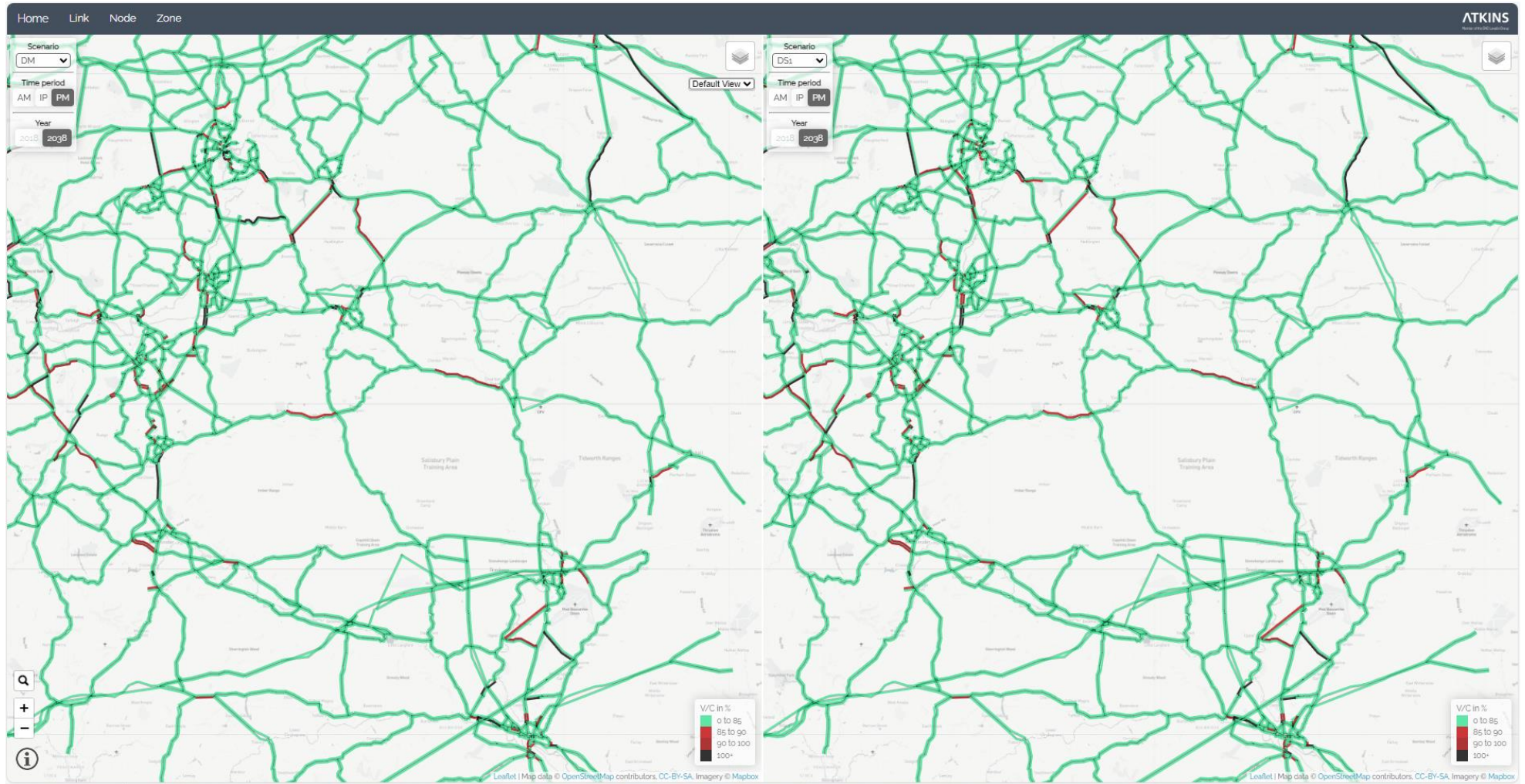


Figure 7-10 – V/C%: 2038 DM vs 2038 DS1, PM peak hour



H.3 V/C changes DS1 vs DS2

Figure 7-11 – V/C%: 2038 Core vs 2038 DS2, IP peak hour

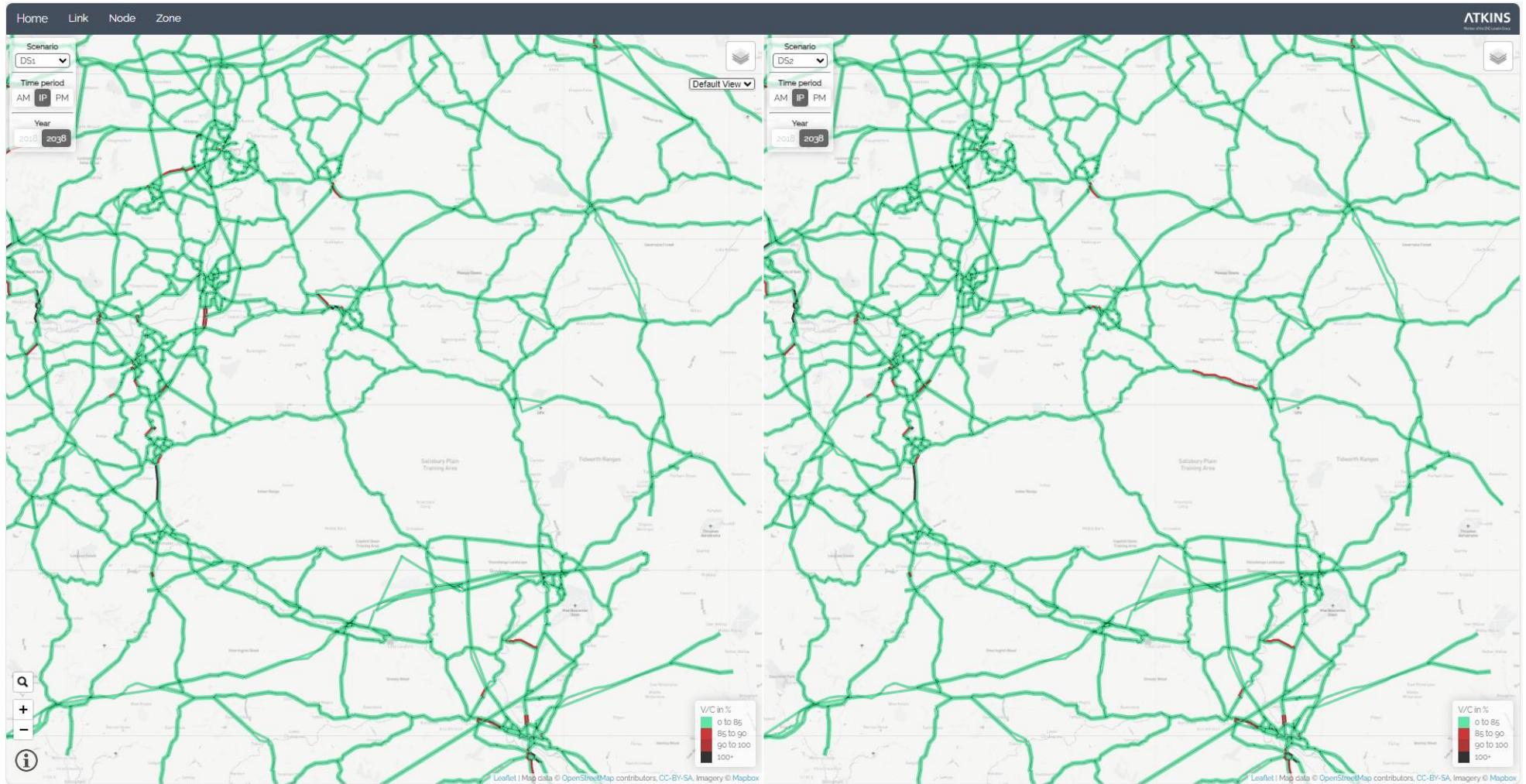
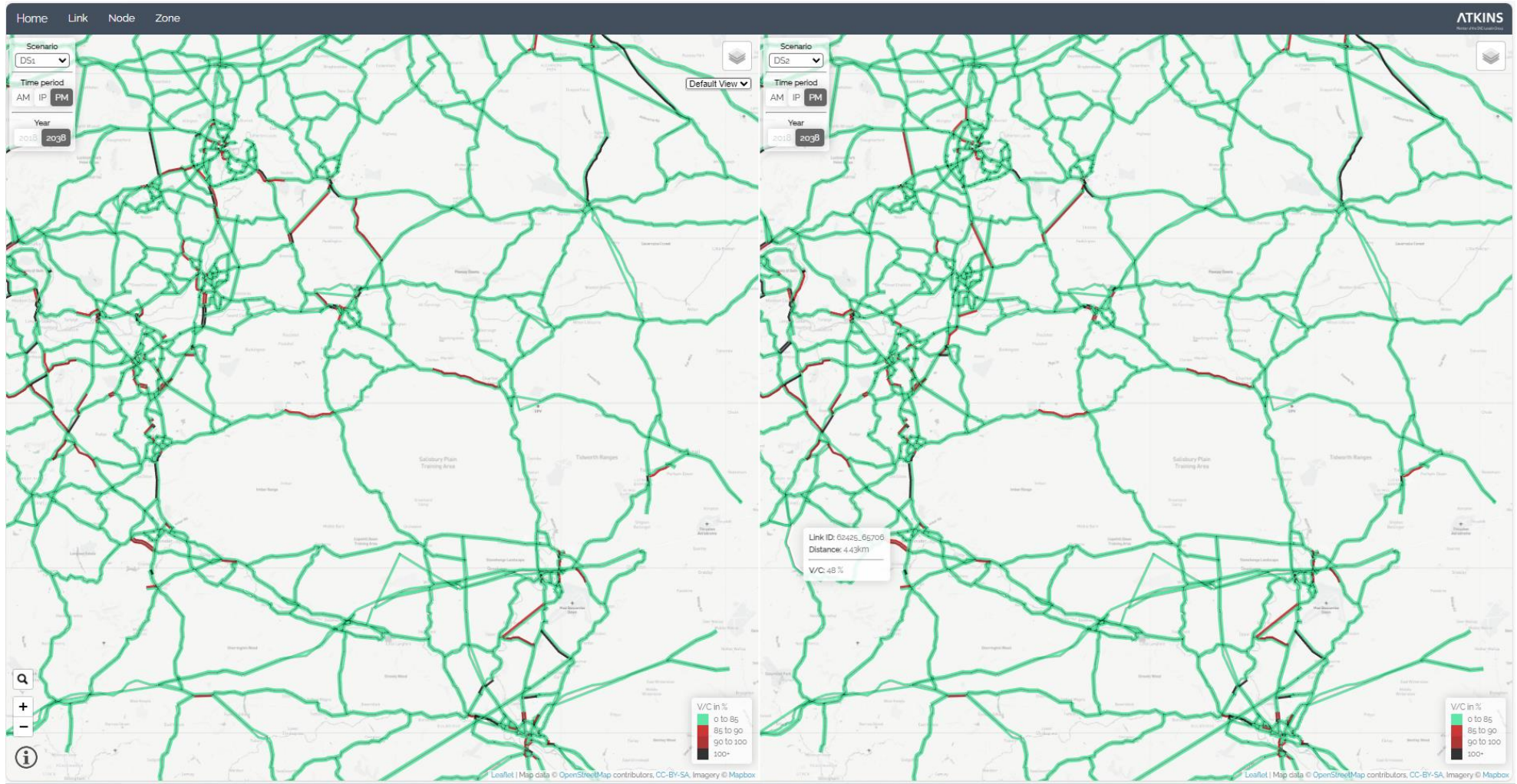


Figure 7-12 – V/C%: 2038 Core vs 2038 DS2, PM peak hour



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