

# Bilbohall Masterplan, Elgin

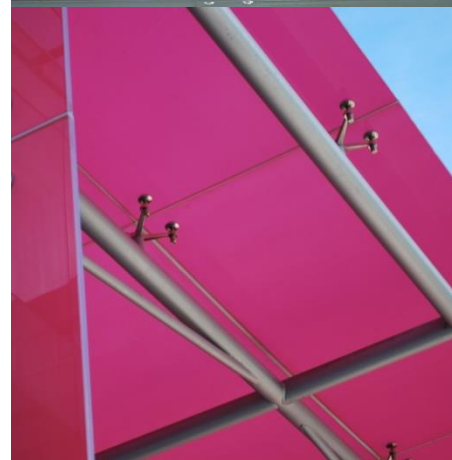
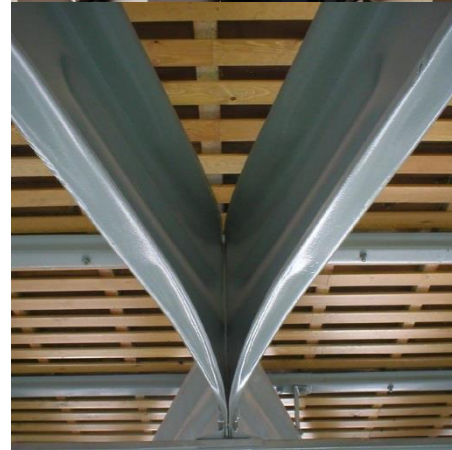
## Strategic Modelling Report

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## 1.0 Introduction

This report presents the results of a strategic traffic modelling exercise which has been undertaken to assess the impact of the Bilbohall Masterplan development across Elgin.

The Bilbohall Consortium has commissioned runs of the Elgin Traffic Model (ETM). The model is owned by Moray Council and maintained and operated on their behalf by Jacobs.

The scope of the required model runs has been agreed between Curtins, Jacobs and Moray Council.

## 2.0 Methodology

An overview of the methodology is provided below. Further details are available in Jacobs memo included as **Appendix A**.

### 2.1 Masterplan phasing

376 residential units were modelled on the Bilbohall site, as assumed in the Draft Masterplan. Construction was assumed to start on site in 2019, and be completed in 2024 as per Figure 2.1 and detailed in Table 2.1.

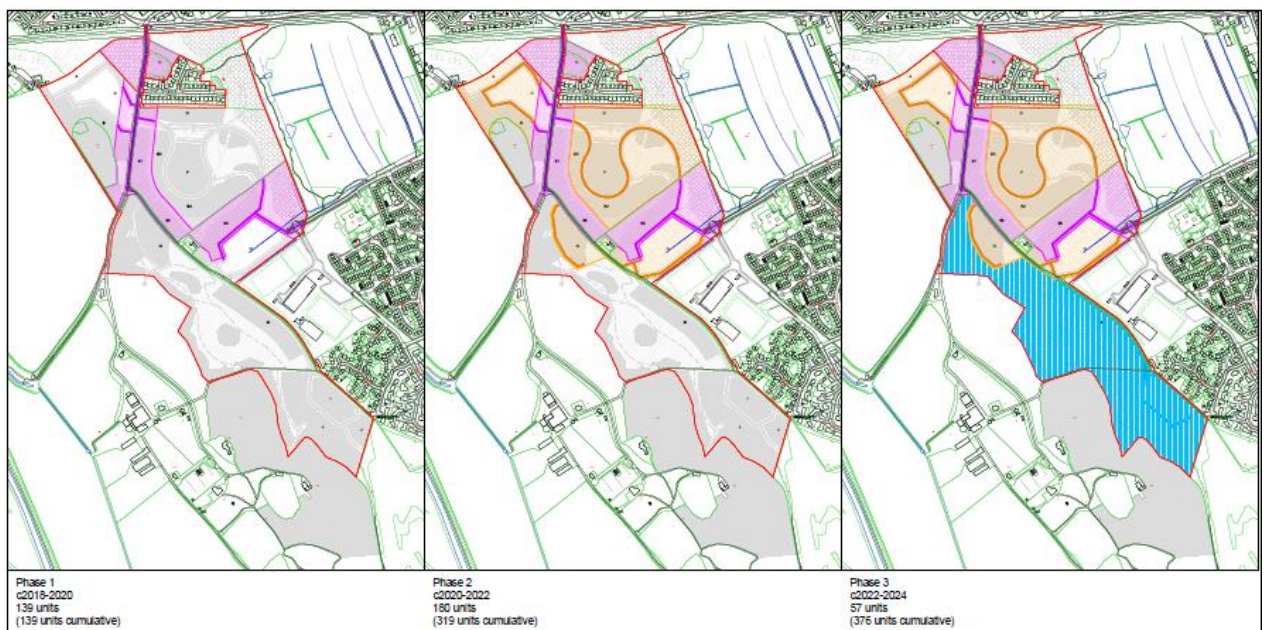


Figure 2.1 – Masterplan phasing

	2020	2022	2024
Total completions	139	319	376

Table 2.1 – Masterplan phasing

## 2.2 Scenarios

The following scenarios were modelled

Scenario	2018	2024	2030	Notes
Do Minimum	x	x	x	Does not include Bilbohall Masterplan
Do Something		x	x	Includes Bilbohall Masterplan
Do Something plus Elgin Transport Strategy interventions		x	x	Scenarios run with and without Bilbohall Masterplan

Table 2.2 – Scenarios

All future year models include all of the developments within the Moray Local Development Plan (LDP 2015), as well as the latest information relating to the Elgin South development.

Background traffic growth included in the assessment scenarios was taken from the Scottish Trip End Program and local growth was included based on the 2008 local plan development assumptions.

The Do Minimum (DM) models do not include the Bilbohall Masterplan development. They provide the baseline against which the Do Something (DS) model results are compared.

The 2024 and 2030 DS models include all 376 units at Bilbohall, and assume that all of the associated road network has been constructed.

The Elgin Transport Strategy (ETS) sets out a series of measures to improve Elgin's transport network. These include a new bridge over the Inverness to Aberdeen railway line at Ashgrove Road, connecting Linkwood Road to Maisondieu Road. The impact of the ETS interventions is shown by comparing the results from the DS with the DS + ETS model runs.

## 2.3 Trip Generation

The trip rates used in the Elgin Traffic Model were applied to the Bilbohall development, resulting in the numbers of vehicular trips set out in Table 2.3.

	Morning Peak (0800-0900)		Evening Peak (0800-0900)	
	Arriving	Departing	Arriving	Departing
Trip rate / unit	0.168	0.532	0.596	0.297
No. Trips (376 units)	63	200	224	112

Table 2.3 – Trip generation

## 2.4 Modelled Periods

The modelled periods were:

- AM peak hour (0800-0900)
- PM peak hour (1630-1730)

## 3.0 Results

The following section summarises the results of the 2024 and 2030 model runs. The 2030 plus ETS runs are not discussed below, but are available on request if required.

**Appendix B** provides detailed tabulated results in terms of modelled link flow and volume to capacity ratio, whilst **Appendix C** presents Volume / Capacity Ratio (VCR) diagrams for each of the scenarios.

### 3.1 2024 Morning Peak

#### Do Minimum (i.e. without Bilbohall)

The 2024 Do Minimum model results show that only one link within the model has a VCR of  $>1^1$ . This is the A941 between Linkwood Roundabout and Maisondieu Road.

A number of links have VCRs of  $>0.7$ , most notably:

- Sections of the northbound A941 as it heads into Elgin from the south.
- Sections of the southbound A941 to the north of the River Lossie.
- Sections of the A96 to the east of the city centre.

#### Do Something (with Bilbohall)

The 2024 Do Something model results show that the pattern of VCR's change very little across Elgin as a whole compared to the Do Minimum scenario.

Table B5 in Appendix B presents detailed modelled results from a selection of links for the 2024 DM and DS scenarios. It highlights those links where the VCR's increases by more than 5%, which are:

- Mayne Farm Road in both directions
- Eastbound Edgar Road in the vicinity of the High School and on the approach to Glen Moray Drive.

These links are all in the vicinity of Bilbohall, suggesting that the most significant impact of the development will be confined to the local road network around the site.

Some links are expected to experience reductions in traffic as the result of local re-routing within the area.

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<sup>1</sup> A number of zone connectors have  $v/c >1$ , but these are notional links which load traffic onto the network.



### Traffic flows on selected links

Link Ref	Link	Flow (pcu)		Comment
		2024 DM	2024 DS	
1	Mayne Farm Road at access point	NB – 28 SB - 14	NB – 109 SB - 90	In DS, 84 northbound pcu's are from the development and 42 southbound. In total <b>44%</b> of development traffic uses Mayne Farm Road.
7	Edgar Road access point	EB – 3 WB - 21	EB – 165 WB - 53	In DS, 119 eastbound pcu's are from the development and 44 westbound In total <b>56%</b> of development traffic uses Edgar Road.
21	Primary Route through the development	-	EB – 41 WB - 81	In DS, 32 eastbound pcu's are from the development and 35 westbound. The model suggests that 9 eastbound pcu's and 46 westbound pcu's will be through traffic on the Primary Route.
31	Fleurs Road	EB – 23 WB - 24	EB – 44 WB - 25	Little change on Fleurs Road
33	Mayne Road	EB – 29 WB - 6	EB – 105 WB - 16	In DS, 79 eastbound pcu's are from the development – representing all the increase on this link. This result highlights the need to address the issue of development traffic using this residential street. Solution is likely to involve routing traffic east or west onto Wards Road or Fleurs Road.
2	Wards Road	EB – 219 WB - 253	EB – 201 WB - 256	The model predicts little development impact on Wards Road.
34	Wittet Drive	NB – 252 SB - 258	NB – 298 SB - 281	The model predicts a slight increase on Wittet Drive northbound.
8	Edgar Road	EB – 176 WB - 237	EB – 226 WB - 231	50 pcu increase in the AM peak hour on Edgar road eastbound. Model shows that 113 pcus of total EB flow is development traffic, with a reduction in 'Other' traffic between DM and DS.
9	The Wards	NB – 371 SB - 313	NB – 421 SB - 295	50 pcu increase in the AM peak hour on The Wards northbound.
11	Glen Moray Drive	NB – 357 SB - 109	NB – 502 SB - 195	145 pcu increase in the AM peak hour northbound. 96 pcu southbound

## 3.2 2024 Evening Peak

### Do Minimum (i.e. without Bilbohall)

The 2024 Do Minimum model results show that there are three links in the model with VCRs of >1. These are:

- A941 North Street on the approach to Boroughbriggs Road.
- A941 between the Linkwood Roundabout and Maisondieu Road.
- A96 East Road to the west of Reiket Lane.

Elsewhere the A96 has a VCR >0.7 on most sections as it passes into and through the town, and the A941 has a VCR of >0.7 on sections to the north of North Street.

### Do Something (with Bilbohall)

The 2024 Do Something model results show that the pattern of VCRs change very little across Elgin compared to the Do Minimum.

Table B6 in Appendix B presents detailed modelled results from a selection of links for the 2024 DM and DS scenarios. It highlights those links where the VCR's increases by more than 5%, which are:

- Mayne Farm Road in both directions
- Edgar Road in both directions in the vicinity of the High School and on the approach to Glen Moray Drive.

As per the morning peak these links are all in the vicinity of Bilbohall, suggesting that the most significant impact of the development will be confined to the local road network around the site.

Some links are expected to experience reductions in traffic as the result of local re-routeing within the area.

### Traffic flows on selected links

Link Ref	Link	Flow (pcu)		Comment
		2024 DM	2024 DS	
1	Mayne Farm Road at access point	NB – 30 SB - 15	NB – 94 SB - 90	In DS, 33 northbound pcu's are from the development and 73 southbound. In total 30% of development traffic uses Mayne Farm Road.
7	Edgar Road access point	EB – 5 WB - 7	EB – 107 WB - 210	In DS, 85 eastbound pcu's are from the development and 116 westbound In total 70% of inbound development traffic uses Edgar Road.
21	Primary Route through the development	-	EB – 99 WB - 71	In DS, 45 eastbound pcu's are from the development and 49 westbound. The model suggests that 44 eastbound pcu's and 22 westbound pcu's will be through traffic on the Primary Route.
31	Fleurs Road	EB – 4 WB - 57	EB – 59 WB - 55	Small increase on Fleurs Road eastbound primarily development traffic accessing the development.
33	Mayne Road	EB – 17 WB - 11	EB – 80 WB - 26	In DS, 33 eastbound pcu's are from the development.
2	Wards Road	EB – 273 WB - 329	EB – 310 WB - 298	The model predicts little development impact on Wards Road.
34	Wittet Drive	NB – 299 SB - 284	NB – 321 SB - 328	The model predicts increases of 22 pcu's northbound and 44 pcu's southbound on Wittet Drive.
8	Edgar Road	EB – 154 WB - 134	EB – 176 WB - 300	166 pcu increase in the PM peak hour on Edgar road westbound. Model shows that 144 pcus of total WB flow is development traffic.
9	The Wards	NB – 330 SB - 492	NB – 280 SB - 680	50 pcu increase in the PM peak hour on The Wards northbound and 188 pcu increase southbound.
11	Glen Moray Drive	NB – 273 SB - 509	NB – 391 SB - 605	118 pcu increase in the PM peak hour northbound and 96 pcu increase southbound.

### 3.3 2030 Morning Peak

#### Do Minimum (i.e. without Bilbohall)

The 2030 Do Minimum model results show that only one link within the model has a volume / capacity ratio (VCR) of  $>1^2$ . This is the A941 between Linkwood Roundabout and Maisondieu Road.

A number of links have VCRs of  $>0.7$ , most notably:

- Sections of the northbound A941 as it heads into Elgin from the south.
- Sections of the southbound A941 to the north of the River Lossie.
- Sections of the A96 to the east and west of the city centre.

#### Do Something (with Bilbohall)

The 2030 Do Something model results show that the pattern of VCRs change very little across Elgin compared to the Do Minimum.

Table B7 in Appendix B presents detailed modelled results from a selection of links for the 2030 DM and DS scenarios. It highlights those links where the VCR's increases by more than 5%, which are:

- Mayne Farm Road in both directions
- Edgar Road eastbound in the vicinity of the High School (in both directions) and on the eastbound approach to Glen Moray Drive

These links are all in the vicinity of Bilbohall, suggesting that the impact of the development will primarily be confined to the local road network around the site.

Some links are expected to experience reductions in traffic as the result of local re-routeing within the area.

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<sup>2</sup> A number of zone connectors have  $v/c > 1$ , but these are notional links which load traffic onto the network.

### Traffic flows on selected links

Link Ref	Link	Flow (pcu)		Comment
		2030 DM	2030 DS	
1	Flows on Mayne Farm Road at access point	NB – 28 SB - 14	NB – 139 SB - 89	In DS, 86 northbound pcu's are from the development and 40 southbound. In total 44% of development traffic uses Mayne Farm Road.
7	Flows at Edgar Road access point	EB – 3 WB - 21	EB – 166 WB - 79	In DS, 119 eastbound pcu's are from the development and 43 westbound In total 56% of development traffic uses Edgar Road.
21	Primary Route through the development	-	EB – 71 WB - 82	In DS, 35 eastbound pcu's are from the development and 35 westbound. The model suggests that 36 eastbound pcu's and 46 westbound pcu's will be through traffic on the Primary Route.
31	Fleurs Road	EB – 18 WB - 27	EB – 27 WB - 34	Little change on Fleurs Road
33	Mayne Road	EB – 23 WB - 6	EB – 124 WB - 17	In DS, 77 eastbound pcu's are from the development – representing most of the increase on this link. This result highlights the need to address the issue of development traffic using this residential street. Solution is likely to involve routeing traffic east or west onto Wards Road or Fleurs Road.
2	Wards Road	EB – 227 WB - 274	EB – 224 WB - 251	The model predicts little development impact on Wards Road.
34	Wittet Drive	NB – 261 SB - 267	NB – 313 SB - 318	The model predicts modest increases on Wittet Drive of 52 pcu northbound and 51 pcu southbound
8	Edgar Road	EB – 186 WB - 242	EB – 212 WB - 239	26 pcu increase in the AM peak hour on Edgar road eastbound. Model shows that 113 pcus of total EB flow is development traffic, with a reduction in 'Other' traffic between DM and DS.
9	The Wards	NB – 384 SB - 324	NB – 402 SB - 322	18 pcu increase in the AM peak hour on The Wards northbound.
11	Glen Moray Drive	NB – 367 SB - 142	NB – 530 SB - 221	163 pcu increase in the AM peak hour northbound.

### 3.4 2030 Evening Peak

#### Do Minimum (i.e. without Bilbohall)

The 2030 Do Minimum model results show that there are four locations in the model with VCRs of >1. These are:

- A941 North Street on the approach to Boroughbriggs Road.
- A941 between the Linkwood Roundabout and Maisondieu Road.
- A96 East Road to the west of Reiket Lane.
- A96 to the west of Dr Gray's Roundabout.

Elsewhere the A96 has a VCR >0.7 on most sections as it passes into and through the town, and the A941 has a VCR of >0.7 on sections to the north of North Street. Pansport Road to the north of the A96 also has a VCR in excess of 0.7.

#### Do Something (with Bilbohall)

The 2030 Do Something model results show that the pattern of VCRs change very little across Elgin compared to the Do Minimum.

Table B8 in Appendix B presents detailed modelled results from a selection of links for the 2030 DM and DS scenarios. It highlights those links where the VCR's increases by more than 5%, which are:

- Mayne Farm Road in both directions.
- Edgar Road eastbound in the vicinity of the High School (in both directions) and on the eastbound approach to Glen Moray Drive.

As per the morning peak these links are all in the vicinity of Bilbohall, suggesting that the most significant impact of the development will be confined to the local road network around the site.

Some links are expected to experience reductions in traffic as the result of local re-routeing within the area.

### Traffic flows on selected links

Link Ref	Link	Flow (pcu)		Comment
		2030 DM	2030 DS	
1	Flows on Mayne Farm Road at access point	NB – 29 SB - 16	NB – 101 SB - 94	In DS, 31 northbound pcu's are from the development and 72 southbound. In total 30% of development traffic uses Mayne Farm Road.
7	Flows at Edgar Road access point	EB – 5 WB - 8	EB – 104 WB - 218	In DS, 82 eastbound pcu's are from the development and 154 westbound In total 70% of development traffic uses Edgar Road.
21	Primary Route through the development	-	EB – 107 WB - 70	In DS, 44 eastbound pcu's are from the development and 48 westbound. The model suggests that 73 eastbound pcu's and 22 westbound pcu's will be through traffic on the Primary Route.
31	Fleurs Road	EB – 4 WB - 62	EB – 22 WB - 69	Small increase on Fleurs Road eastbound primarily development traffic accessing the development.
33	Mayne Road	EB – 16 WB - 12	EB – 79 WB - 37	In DS, 31 eastbound pcu's are from the development.
2	Wards Road	EB – 278 WB - 322	EB – 319 WB - 289	The model predicts little development impact on Wards Road.
34	Wittet Drive	NB – 281 SB - 290	NB – 303 SB - 373	The model predicts increases of 22 pcu's northbound and 83 pcu's southbound on Wittet Drive.
8	Edgar Road	EB – 161 WB - 139	EB – 175 WB - 310	171 pcu increase in the PM peak hour on Edgar road westbound. Model shows that 143 pcus of total WB flow is development traffic.
9	The Wards	NB – 341 SB - 501	NB – 278 SB - 695	194 pcu increase in the PM peak hour on The Wards southbound.
11	Glen Moray Drive	NB – 281 SB - 546	NB – 425 SB - 635	144 pcu increase in the PM peak hour northbound and 89 pcu increase southbound.

## 4.0 Conclusions

At 376 units, the Bilbohall Development will have an impact on traffic levels and conditions across Elgin, proportionate with the scale of the proposed development. The following points have emerged from runs of the Elgin Traffic Model:

- Most development traffic is predicted to use the Edgar Road access point, with 163 trips (56%) passing through in the AM peak and 241 (70%) in the PM peak.
- The model predicts that 126 development trips (44%) will pass through the Mayne Farm Road access in the AM peak and 106 trips (30%) in the PM peak.
- The model predicts a limited amount of through traffic on the primary route – 36 pcu's eastbound and 46 pcu's westbound in the 2030 AM peak and 73 pcu's eastbound and 22 pcu's westbound in the 2030 PM peak. The design of traffic calming and speed reduction measures will be important to restrict through traffic.
- The model predicts that development traffic will use Mayne Road to travel to and from Bilbohall, highlighting the need to address the issue of development traffic using this residential street. The solution is likely to involve routeing traffic east or west onto Wards Road and Fleurs Road.
- The model predicts noticeable increases on Edgar Road (westbound in the PM peak), The Wards (southbound in the PM peak) and Glen Moray Drive (GMD) (both directions in the AM and PM peaks). This reinforces the need for future capacity at the Edgar Road / Wards Road / GMD junction to be assessed as part of the detailed planning applications.
- The 2030 models predicts changes in flow on selected links on the A96 of between -2% to 3% in the AM peak and -7% to 3% in the PM peak.
- The 2030 models predicts changes in flow on selected links on the A941 of between -10% to 2% in the AM peak and -11% to 2% in the PM peak.
- The changes in flows (both positive and negative) between the DS and DM are a combination of new Bilbohall traffic and changes in traffic routeing as a result of Bilbohall.
- Percentage changes where existing flows are low are not the best way of assessing the true impact of a development. In this instance looking at the change in V/C or the change in GEH value are perhaps more useful.
- The Elgin Traffic Model may be rerun as part of future detailed planning applications in order to inform potential developer contributions.



## Appendices



**Appendix A    Jacobs Technical Memo**



**Appendix B    Tabulated Model Results**

## Link References Plan

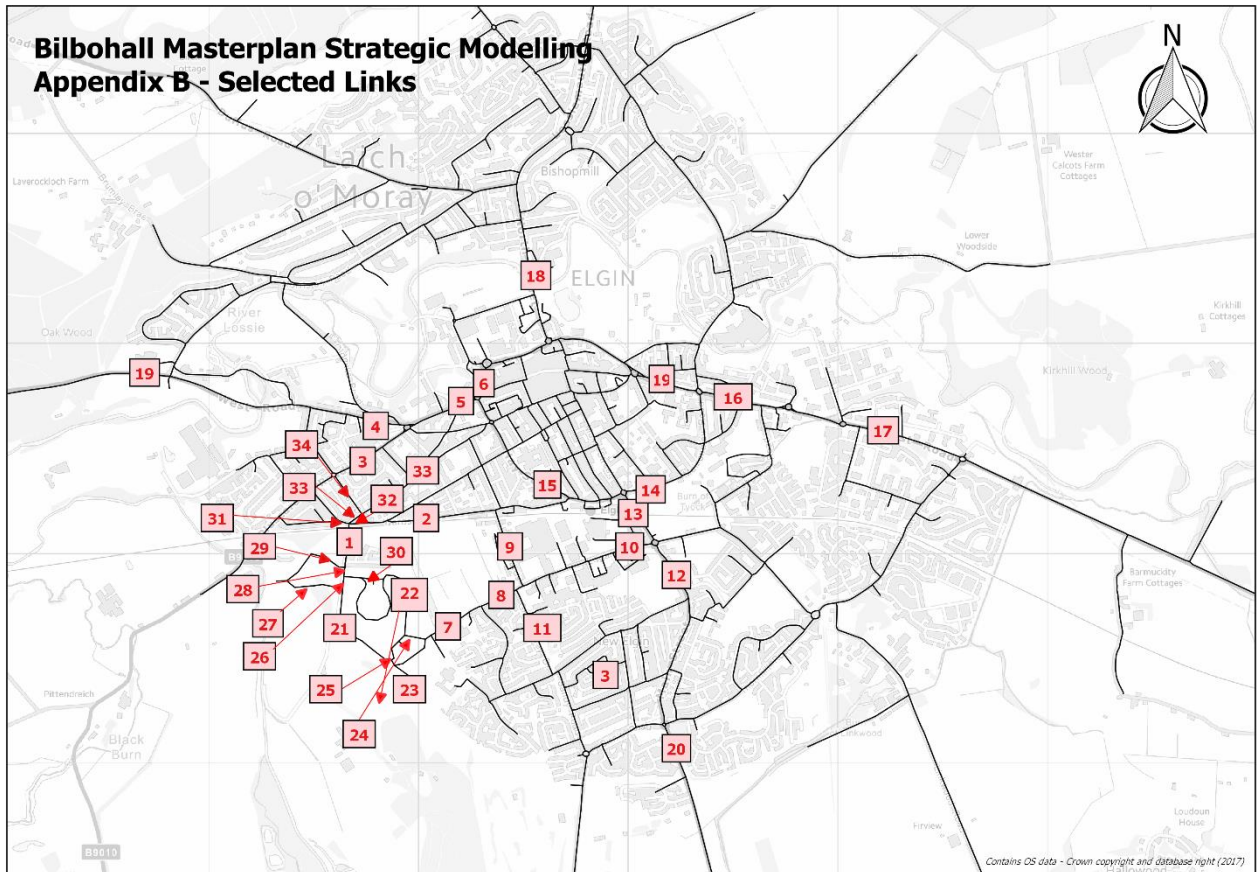


Figure B1 – Link References

## Modelled Traffic Flows

Tables B1-B4 present modelled traffic flows for the following scenarios:

- MP DM 2024 vs MP DS 2024
- EP DM 2024 vs EP DS 2024
- MP DM 2030 vs MP DS 2030
- EP DM 2030 vs EP DS 2030

The changes in flows (both positive and negative) between the DS and DM are a combination of new Bilbohall traffic and changes in traffic routing as a result of Bilbohall.

Percentage changes where existing flows are low are perhaps not the best way of assessing the true impact of a development. In this instance looking at the change in V/C or the change in GEH value are perhaps more useful.

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Ref	Link	Dir	DM 2024	DS 2024	Diff	% change DM-DS	Bilbohall Dev Traffic	Other traffic	Change in other traffic
1	Mayne Farm Rd	NB	28	109	81	289%	84	25	-3
		SB	14	90	76	543%	42	48	34
2	Wards Road east of Wittet Drive	EB	219	201	-18	-8%	3	198	-21
		WB	253	256	3	1%	6	250	-3
3	B9010 Pluscarden	NB	232	248	16	7%	28	220	-12
		SB	75	98	23	31%	8	90	15
4	A96 West Road	EB	645	626	-19	-3%	0	626	-19
		WB	637	646	9	1%	0	646	9
5	A96 Hill Street	EB	638	653	15	2%	39	614	-24
		WB	533	538	5	1%	0	538	5
6	A96 Alexandra Road	NB	946	963	17	2%	39	924	-22
		SB	928	926	-2	0%	8	918	-10
7	Edgar Road west of High School	EB	3	165	162	5400%	119	46	43
		WB	21	53	32	152%	44	9	-12
8	Edgar Road west of Glen Moray Drive	EB	176	226	50	28%	113	113	-63
		WB	237	231	-6	-3%	43	188	-49
9	The Wards	NB	371	421	50	13%	4	417	46
		SB	313	295	-18	-6%	2	293	-20
10	Edgar Road east of A941	EB	376	410	34	9%	48	362	-14
		WB	497	492	-5	-1%	18	474	-23
11	Glen Moray Drive	NB	357	502	145	41%	9	493	136
		SB	109	195	86	79%	33	162	53
12	A941 south of Linkwood	NB	731	701	-30	-4%	1	700	-31
		SB	341	312	-29	-9%	5	307	-34
13	A941 south of Maisondieu	NB	1314	1318	4	0%	10	1308	-6
		SB	746	707	-39	-5%	4	703	-43
14	Maisondieu Road east of Linkwood	EB	286	315	29	10%	11	304	18
		WB	496	504	8	2%	9	495	-1
15	A941 north of Wards Road	NB	616	590	-26	-4%	0	590	-26
		SB	546	525	-21	-4%	2	523	-23
16	A96 east of Maisondieu Road	EB	901	912	11	1%	18	894	-7
		WB	908	906	-2	0%	2	904	-4
17	A96 east of Moycroft Road	EB	648	651	3	0%	3	648	0
		WB	961	958	-3	0%	1	957	-4
18	A941 North Street	NB	676	685	9	1%	4	681	5
		SB	946	941	-5	-1%	4	937	-9
19	A96 west of Morriston Road	EB	852	836	-16	-2%	10	826	-26
		WB	751	762	11	1%	13	749	-2
20	A941 New Elgin	NB	507	524	17	3%	2	522	15
		SB	285	316	31	11%	7	309	24
21	Development Primary Street	EB	0	41	41	-	32	9	9
		WB	0	81	81	-	35	46	46
22	Development Secondary Street	NB	0	10	10	-	10	0	0
		SB	0	28	28	-	28	0	0
23	Development Secondary Street towards Hardhillock	NB	0	59	59	-	59	0	0
		SB	0	31	31	-	31	0	0
24	Development Primary Street	EB	0	121	121	-	75	46	46
		WB	0	33	33	-	24	9	9
25	Development Primary Street	NB	0	70	70	-	24	46	46
		SB	0	26	26	-	17	9	9
26	Development Primary Street	NB	0	36	36	-	27	9	9
		SB	0	73	73	-	27	46	46
27	Development Secondary Street - Knockmasting	EB	0	19	19	-	19	0	0
		WB	0	16	16	-	16	0	0
28	Development Primary Street nr Knockmasting	NB	0	76	76	-	56	20	20
		SB	0	87	87	-	42	45	45
29	Development Secondary Street - Knockmasting	EB	0	33	33	-	27	6	6
		WB	0	3	3	-	0	3	3
30	Development Secondary Street - Loop	EB	0	16	16	-	16	0	0
		WB	0	30	30	-	30	0	0
31	Fleurs Road	EB	23	44	21	91%	9	35	12
		WB	24	25	1	4%	1	24	0
32	Wards Road east of MFR	EB	22	17	-5	-23%	3	14	-8
		WB	32	67	35	109%	22	45	13
33	Mayne Road	EB	29	105	76	262%	79	26	-3
		WB	6	16	10	167%	11	5	-1
34	Wittet Drive	NB	252	298	46	18%	53	245	-7
		SB	258	281	23	9%	17	264	6

Table B1 – MP 2024 Results – DM vs DS

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Ref	Link	Dir	DM 2024	DS 2024	Diff	% change DM/DS	Bilbohall Dev Traffic	Other traffic	Change in 'other' traffic
1	Mayne Farm Rd	NB	30	94	64	213%	33	61	31
		SB	15	90	75	500%	73	17	2
2	Wards Road east of Wittet Drive	EB	273	310	37	14%	0	310	37
		WB	329	298	-31	-9%	16	282	-47
3	B9010 Pluscarden	NB	200	179	-21	-11%	17	162	-38
		SB	116	128	12	10%	6	122	6
4	A96 West Road	EB	431	409	-22	-5%	0	409	-22
		WB	923	933	10	1%	0	933	10
5	A96 Hill Street	EB	489	480	-9	-2%	16	464	-25
		WB	647	650	3	0%	0	650	3
6	A96 Alexandra Road	NB	958	947	-11	-1%	11	936	-22
		SB	1251	1271	20	2%	11	1260	9
7	Edgar Road west of High School	EB	5	107	102	2040%	85	22	17
		WB	7	210	203	2900%	156	54	47
8	Edgar Road west of Glen Moray Drive	EB	154	176	22	14%	83	93	-61
		WB	134	300	166	124%	144	156	22
9	The Wards	NB	330	280	-50	-15%	0	280	-50
		SB	492	680	188	38%	15	665	173
10	Edgar Road east of A941	EB	933	984	51	5%	4	980	47
		WB	750	671	-79	-11%	27	644	-106
11	Glen Moray Drive	NB	273	391	118	43%	36	355	82
		SB	509	605	96	19%	20	585	76
12	A941 south of Linkwood	NB	630	580	-50	-8%	9	571	-59
		SB	750	690	-60	-8%	3	687	-63
13	A941 south of Maisondieu	NB	1134	1121	-13	-1%	5	1116	-18
		SB	1365	1194	-171	-13%	0	1194	-171
14	Maisondieu Road east of Linkwood	EB	437	434	-3	-1%	1	433	-4
		WB	493	496	3	1%	22	474	-19
15	A941 north of Wards Road	NB	716	711	-5	-1%	0	711	-5
		SB	717	643	-74	-10%	0	643	-74
16	A96 east of Maisondieu Road	EB	1124	1130	6	1%	2	1128	4
		WB	974	998	24	2%	14	984	10
17	A96 east of Moycroft Road	EB	1147	1149	2	0%	1	1148	1
		WB	713	719	6	1%	4	715	2
18	A941 North Street	NB	1209	1220	11	1%	2	1218	9
		SB	811	823	12	1%	3	820	9
19	A96 west of Morriston Road	EB	797	810	13	2%	20	790	-7
		WB	1061	1065	4	0%	8	1057	-4
20	A941 New Elgin	NB	497	505	8	2%	11	494	-3
		SB	556	568	12	2%	2	566	10
21	Development Primary Street	EB	0	99	99	-	45	54	54
		WB	0	71	71	-	49	22	22
22	Development Secondary Street	NB	0	43	43	-	43	0	0
		SB	0	24	24	-	24	0	0
23	Development Secondary Street towards Hardhillock	NB	0	35	35	-	35	0	0
		SB	0	68	68	-	68	0	0
24	Development Primary Street	EB	0	82	82	-	60	22	22
		WB	0	160	160	-	108	52	52
25	Development Primary Street	NB	0	51	51	-	30	21	21
		SB	0	88	88	-	36	52	52
26	Development Primary Street	NB	0	69	69	-	15	54	54
		SB	0	73	73	-	51	22	22
27	Development Secondary Street - Knockmasting	EB	0	20	20	-	20	0	0
		WB	0	51	51	-	51	0	0
28	Development Primary Street nr Knockmasting	NB	0	80	80	-	25	55	55
		SB	0	89	89	-	73	16	16
29	Development Secondary Street - Knockmasting	EB	0	14	14	-	9	5	5
		WB	0	2	2	-	0	2	2
30	Development Secondary Street - Loop	EB	0	22	22	-	22	0	0
		WB	0	10	10	-	10	0	0
31	Fleurs Road	EB	4	59	55	1375%	39	20	16
		WB	57	55	-2	-4%	0	55	-2
32	Wards Road east of MFR	EB	16	7	-9	-56%	0	7	-9
		WB	61	53	-8	-13%	16	37	-24
33	Mayne Road	EB	17	80	63	371%	33	47	30
		WB	11	26	15	136%	18	8	-3
34	Wittet Drive	NB	299	321	22	7%	28	293	-6
		SB	284	328	44	15%	0	328	44

Table B2 – EP 2024 Results – DM vs DS

Strategic Modelling Report

Ref	Link	Dir	DM 2030	DS 2030	Diff	% change DM-DS	Bilbohall Dev Traffic	Other traffic	Change in 'other' traffic
1	Mayne Farm Rd	NB	28	139	111	396%	86	53	25
		SB	14	89	75	536%	40	49	35
2	Wards Road east of Wittet Drive	EB	227	224	-3	-1%	4	220	-7
		WB	274	251	-23	-8%	5	246	-28
3	B9010 Pluscarden	NB	260	275	15	6%	27	248	-12
		SB	72	95	23	32%	8	87	15
4	A96 West Road	EB	688	671	-17	-2%	0	671	-17
		WB	683	681	-2	0%	0	681	-2
5	A96 Hill Street	EB	692	701	9	1%	38	663	-29
		WB	564	552	-12	-2%	0	552	-12
6	A96 Alexandra Road	NB	988	1017	29	3%	38	979	-9
		SB	930	931	1	0%	7	924	-6
7	Edgar Road west of High School	EB	3	166	163	5433%	119	47	44
		WB	21	79	58	276%	43	36	15
8	Edgar Road west of Glen Moray Drive	EB	186	212	26	14%	113	99	-87
		WB	242	239	-3	-1%	42	197	-45
9	The Wards	NB	384	402	18	5%	1	401	17
		SB	324	322	-2	-1%	2	320	-4
10	Edgar Road east of A941	EB	350	436	86	25%	50	386	36
		WB	513	516	3	1%	18	498	-15
11	Glen Moray Drive	NB	367	530	163	44%	9	521	154
		SB	142	221	79	56%	33	188	46
12	A941 south of Linkwood	NB	803	755	-48	-6%	1	754	-49
		SB	353	318	-35	-10%	5	313	-40
13	A941 south of Maisondieu	NB	1399	1401	2	0%	10	1391	-8
		SB	804	761	-43	-5%	5	756	-48
14	Maisondieu Road east of Linkwood	EB	320	342	22	7%	13	329	9
		WB	526	539	13	2%	9	530	4
15	A941 north of Wards Road	NB	608	593	-15	-2%	0	593	-15
		SB	585	555	-30	-5%	3	552	-33
16	A96 east of Maisondieu Road	EB	953	963	10	1%	17	946	-7
		WB	914	927	13	1%	3	924	10
17	A96 east of Moycroft Road	EB	688	692	4	1%	3	689	1
		WB	984	977	-7	-1%	1	976	-8
18	A941 North Street	NB	697	708	11	2%	4	704	7
		SB	973	969	-4	0%	3	966	-7
19	A96 west of Morriston Road	EB	935	923	-12	-1%	9	914	-21
		WB	792	792	0	0%	13	779	-13
20	A941 New Elgin	NB	636	654	18	3%	3	651	15
		SB	333	358	25	8%	8	350	17
21	Development Primary Street	EB	0	71	71	-	35	36	36
		WB	0	82	82	-	35	47	47
22	Development Secondary Street	NB	0	10	10	-	10	0	0
		SB	0	28	28	-	28	0	0
23	Development Secondary Street towards Hardhillock	NB	0	59	59	-	59	0	0
		SB	0	29	29	-	29	0	0
24	Development Primary Street	EB	0	122	122	-	75	47	47
		WB	0	60	60	-	24	36	36
25	Development Primary Street	NB	0	72	72	-	25	47	47
		SB	0	56	56	-	19	37	37
26	Development Primary Street	NB	0	66	66	-	30	36	36
		SB	0	72	72	-	25	47	47
27	Development Secondary Street - Knockmasting	EB	0	20	20	-	20	0	0
		WB	0	16	16	-	16	0	0
28	Development Primary Street nr Knockmasting	NB	0	107	107	-	59	48	48
		SB	0	86	86	-	40	46	46
29	Development Secondary Street - Knockmasting	EB	0	32	32	-	26	6	6
		WB	0	3	3	-	0	3	3
30	Development Secondary Street - Loop	EB	0	15	15	-	15	0	0
		WB	0	30	30	-	30	0	0
31	Fleurs Road	EB	18	27	9	50%	3	24	6
		WB	27	34	7	26%	4	30	3
32	Wards Road east of MFR	EB	23	19	-4	-17%	5	14	-9
		WB	35	83	48	137%	26	57	22
33	Mayne Road	EB	23	124	101	439%	77	47	24
		WB	6	17	11	183%	11	6	0
34	Wittet Drive	NB	261	313	52	20%	49	264	3
		SB	267	318	51	19%	21	297	30

Table B3 – MP 2030 Results – DM vs DS

Strategic Modelling Report

Ref	Link	Dir	DM 2030	DS 2030	Diff	% change DM-DS	Bilbohall Dev Traffic	Other traffic	Change in other traffic
1	Mayne Farm Rd	NB	29	101	72	248%	31	70	41
		SB	16	89	73	456%	72	17	1
2	Wards Road east of Wittet Drive	EB	278	319	41	15%	0	319	41
		WB	322	289	-33	-10%	15	274	-48
3	B9010 Pluscarden	NB	214	200	-14	-7%	17	183	-31
		SB	119	128	9	8%	6	122	3
4	A96 West Road	EB	450	417	-33	-7%	0	417	-33
		WB	990	999	9	1%	0	999	9
5	A96 Hill Street	EB	492	478	-14	-3%	16	462	-30
		WB	660	668	8	1%	0	668	8
6	A96 Alexandra Road	NB	968	955	-13	-1%	11	944	-24
		SB	1259	1303	44	3%	10	1293	34
7	Edgar Road west of High School	EB	5	104	99	1980%	82	22	17
		WB	8	218	210	2625%	154	64	56
8	Edgar Road west of Glen Moray Drive	EB	161	175	14	9%	80	95	-66
		WB	139	310	171	123%	143	167	28
9	The Wards	NB	341	278	-63	-18%	0	278	-63
		SB	501	695	194	39%	15	680	179
10	Edgar Road east of A941	EB	941	1030	89	9%	4	1026	85
		WB	762	683	-79	-10%	26	657	-105
11	Glen Moray Drive	NB	281	425	144	51%	35	390	109
		SB	546	635	89	16%	20	615	69
12	A941 south of Linkwood	NB	675	603	-72	-11%	9	594	-81
		SB	767	713	-54	-7%	2	711	-56
13	A941 south of Maisondieu	NB	1205	1195	-10	-1%	5	1190	-15
		SB	1470	1294	-176	-12%	0	1294	-176
14	Maisondieu Road east of Linkwood	EB	464	439	-25	-5%	1	438	-26
		WB	540	543	3	1%	22	521	-19
15	A941 north of Wards Road	NB	744	728	-16	-2%	0	728	-16
		SB	724	667	-57	-8%	0	667	-57
16	A96 east of Maisondieu Road	EB	1172	1175	3	0%	1	1174	2
		WB	1019	1046	27	3%	14	1032	13
17	A96 east of Moycroft Road	EB	1199	1201	2	0%	0	1201	2
		WB	730	736	6	1%	4	732	2
18	A941 North Street	NB	1280	1289	9	1%	2	1287	7
		SB	833	843	10	1%	3	840	7
19	A96 west of Morriston Road	EB	830	841	11	1%	19	822	-8
		WB	1096	1100	4	0%	8	1092	-4
20	A941 New Elgin	NB	576	586	10	2%	12	574	-2
		SB	607	621	14	2%	3	618	11
21	Development Primary Street	EB	0	107	107	-	44	63	63
		WB	0	70	70	-	48	22	22
22	Development Secondary Street	NB	0	43	43	-	43	0	0
		SB	0	23	23	-	23	0	0
23	Development Secondary Street towards Hardhillock	NB	0	33	33	-	33	0	0
		SB	0	67	67	-	67	0	0
24	Development Primary Street	EB	0	80	80	-	58	22	22
		WB	0	169	169	-	107	62	62
25	Development Primary Street	NB	0	51	51	-	29	22	22
		SB	0	97	97	-	35	62	62
26	Development Primary Street	NB	0	78	78	-	14	64	64
		SB	0	72	72	-	50	22	22
27	Development Secondary Street - Knockmasting	EB	0	19	19	-	19	0	0
		WB	0	51	51	-	51	0	0
28	Development Primary Street nr Knockmasting	NB	0	88	88	-	23	65	65
		SB	0	88	88	-	72	16	16
29	Development Secondary Street - Knockmasting	EB	0	13	13	-	8	5	5
		WB	0	2	2	-	0	2	2
30	Development Secondary Street - Loop	EB	0	22	22	-	22	0	0
		WB	0	9	9	-	9	0	0
31	Fleurs Road	EB	4	22	18	450%	8	14	10
		WB	62	69	7	11%	0	69	7
32	Wards Road east of MFR	EB	16	5	-11	-69%	0	5	-11
		WB	65	82	17	26%	36	46	-19
33	Mayne Road	EB	16	79	63	394%	31	48	32
		WB	12	37	25	208%	28	9	-3
34	Wittet Drive	NB	281	303	22	8%	27	276	-5
		SB	290	373	83	29%	30	343	53

Table B4 – EP 2030 Results – DM vs DS



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## Volume / Capacity Results

In the following tables, links with a VCR between 0.7 and 0.99 are highlighted in orange, and links with a VCR greater than 1.0 are highlighted in red. This is consistent with the diagrams presented in Appendix C.

Table B1 – MP 2024 Results – DM vs DS

Link	Dir	MP DM 2024		MP DS 2024			
		Flow	V/C	Flow	% flow change	V/C	V/C change
1. Mayne Farm Rd	NB	28	0.06	109	289.3%	0.15	<b>0.09</b>
	SB	14	0.02	90	542.9%	0.11	<b>0.09</b>
2. Wards Road east of MFR	EB	219	0.23	201	-8.2%	0.19	-0.04
	WB	253	0.24	256	1.2%	0.23	-0.01
3.B9010 Pluscarden Road	NB	232	0.25	248	6.9%	0.29	0.04
	SB	75	0.08	98	30.7%	0.1	0.02
4.A96 West Road	EB	645	0.65	626	-2.9%	0.64	-0.01
	WB	637	0.66	646	1.4%	0.66	0.00
5.A96 Hill Street	EB	638	0.54	653	2.4%	0.56	0.02
	WB	533	0.45	538	0.9%	0.44	-0.01
6.A96 Alexandra Road	NB	946	0.78	963	1.8%	0.82	0.04
	SB	928	0.49	926	-0.2%	0.48	-0.01
7.Edgar Road west of High School	EB	3	0.06	165	5400.0%	0.25	<b>0.19</b>
	WB	21	0.04	53	152.4%	0.08	0.04
8.Edgar Road west of Glen Moray Drive	EB	176	0.24	226	28.4%	0.39	<b>0.15</b>
	WB	237	0.29	231	-2.5%	0.29	0.00
9.The Wards	NB	371	0.36	421	13.5%	0.35	-0.01
	SB	313	0.33	295	-5.8%	0.26	<b>-0.07</b>
10.Edgar Road west of A941	EB	376	0.2	410	9.0%	0.21	0.01
	WB	497	0.5	492	-1.0%	0.54	0.04
11.Glen Moray Drive	NB	357	0.34	502	40.6%	0.3	-0.04
	SB	109	0.13	195	78.9%	0.17	0.04
12.A941 south of Linkwood	NB	731	0.74	701	-4.1%	0.76	0.02
	SB	341	0.35	312	-8.5%	0.34	-0.01
13.A941 south of Maisondieu	NB	1314	1.11	1318	0.3%	1.12	0.01
	SB	746	0.62	707	-5.2%	0.62	0.00
14.Maisondieu Road east of Linkwood	EB	286	0.3	315	10.1%	0.31	0.01
	WB	496	0.5	504	1.6%	0.52	0.02
15.A941 north of Wards Road	NB	616	0.61	590	-4.2%	0.62	0.01
	SB	546	0.46	525	-3.8%	0.46	0.00
16.A96 east of Maisondieu Road	EB	901	0.75	912	1.2%	0.76	0.01
	WB	908	0.76	906	-0.2%	0.77	0.01
	EB	648	0.54	651	0.5%	0.54	0.00

Link	Dir	MP DM 2024		MP DS 2024			
		Flow	V/C	Flow	% flow change	V/C	V/C change
17.A96 east of Moycroft Road	WB	961	0.81	958	-0.3%	0.81	0.00
18.A941 North Street	NB	676	0.56	685	1.3%	0.57	0.01
	SB	946	0.78	941	-0.5%	0.78	0.00
19.A96 west of Morriston Road	EB	852	0.41	836	-1.9%	0.42	0.01
	WB	751	0.5	762	1.5%	0.51	0.01
20.A941 New Elgin	NB	507	0.49	524	3.4%	0.47	-0.02
	SB	285	0.3	316	10.9%	0.32	0.02
21.Development Primary Street	EB	-	-	41	-	0.07	-
	WB	-	-	81	-	0.12	-
22.Development Secondary Street	NB	-	-	10	-	0.01	-
	SB	-	-	28	-	0.03	-
23. Development Secondary Street towards Hardhillock	NB	-	-	59	-	0.13	-
	SB	-	-	31	-	0.05	-
24. Development Primary Street	EB	-	-	121	-	0.15	-
	WB	-	-	33	-	0.04	-
25. Development Primary Street	NB	-	-	70	-	0.1	-
	SB	-	-	26	-	0.04	-
26. Development Primary Street	NB	-	-	36	-	0.06	-
	SB	-	-	73	-	0.1	-
27. Development Secondary Street - Knockmasting	EB	-	-	19	-	0.04	-
	WB	-	-	16	-	0.03	-
28. Development Primary Street – nr Knockmasting	NB	-	-	76	-	0.1	-
	SB	-	-	87	-	0.11	-
29. Development Secondary Street - Knockmasting	EB	-	-	33	-	0.06	-
	WB	-	-	3	-	0	-
30. Development Secondary Street - Loop	EB	-	-	16	-	0.02	-
	WB	-	-	30	-	0.05	-
31. Fleurs Road	EB	23	0.02	44	91.3%	0.02	0.00
	WB	24	0.02	25	4.2%	0.05	0.03
32. Wards Road east of Mayne Farm Road	EB	22	0.04	17	-22.7%	0.02	-0.02
	WB	32	0.04	67	109.4%	0.1	0.06
33. Mayne Road	EB	29	0.05	105	262.1%	0.11	0.06
	WB	6	0.01	16	166.7%	0.02	0.01



Link	Dir	MP DM 2024		MP DS 2024			
		Flow	V/C	Flow	% flow change	V/C	V/C change
<b>34. Wittet Drive</b>	NB	252	0.25	298	18.3%	0.29	0.04
	SB	258	0.26	281	8.9%	0.29	0.03

Table B2 – EP 2024 Results – DM vs DS

Link	Dir	EP DM 2024		EP DS 2024			
		Flow	V/C	Flow	% flow change	V/C	V/C change
1. Mayne Farm Rd	NB	30	0.05	94	213.3%	0.13	<b>0.08</b>
	SB	15	0.05	90	500.0%	0.27	<b>0.22</b>
2. Wards Road east of MFR	EB	273	0.28	310	13.6%	0.17	-0.11
	WB	329	0.35	298	-9.4%	0.3	<b>-0.05</b>
3.B9010 Pluscarden Road	NB	200	0.21	179	-10.5%	0.19	-0.02
	SB	116	0.12	128	10.3%	0.13	0.01
4.A96 West Road	EB	431	0.44	409	-5.1%	0.41	-0.03
	WB	923	0.93	933	1.1%	0.94	0.01
5.A96 Hill Street	EB	489	0.39	480	-1.8%	0.41	0.02
	WB	647	0.54	650	0.5%	0.54	0.00
6.A96 Alexandra Road	NB	958	0.78	947	-1.1%	0.81	0.03
	SB	1251	0.65	1271	1.6%	0.69	0.04
7.Edgar Road west of High School	EB	5	0.04	107	2040.0%	0.32	<b>0.28</b>
	WB	7	0.07	210	2900.0%	0.32	<b>0.25</b>
8.Edgar Road west of Glen Moray Drive	EB	154	0.21	176	14.3%	0.4	<b>0.19</b>
	WB	134	0.22	300	123.9%	0.39	<b>0.17</b>
9.The Wards	NB	330	0.32	280	-15.2%	0.29	-0.03
	SB	492	0.51	680	38.2%	0.4	<b>-0.11</b>
10.Edgar Road west of A941	EB	933	0.49	984	5.5%	0.47	-0.02
	WB	750	0.76	671	-10.5%	0.75	-0.01
11.Glen Moray Drive	NB	273	0.27	391	43.2%	0.26	-0.01
	SB	509	0.52	605	18.9%	0.49	-0.03
12.A941 south of Linkwood	NB	630	0.65	580	-7.9%	0.66	0.01
	SB	750	0.75	690	-8.0%	0.77	0.02
13.A941 south of Maisondieu	NB	1134	0.97	1121	-1.1%	0.91	<b>-0.06</b>
	SB	1365	1.15	1194	-12.5%	1.11	-0.04
14.Maisondieu Road east of Linkwood	EB	437	0.44	434	-0.7%	0.41	-0.03
	WB	493	0.52	496	0.6%	0.52	0.00
15.A941 north of Wards Road	NB	716	0.73	711	-0.7%	0.72	-0.01
	SB	717	0.59	643	-10.3%	0.57	-0.02
16.A96 east of Maisondieu Road	EB	1124	0.94	1130	0.5%	0.95	0.01
	WB	974	0.82	998	2.5%	0.83	0.01

Link	Dir	EP DM 2024		EP DS 2024			
		Flow	V/C	Flow	% flow change	V/C	V/C change
17.A96 east of Moycroft Road	EB	1147	0.96	1149	0.2%	0.97	0.01
	WB	713	0.6	719	0.8%	0.6	0.00
18.A941 North Street	NB	1209	1.01	1220	0.9%	1.02	0.01
	SB	811	0.68	823	1.5%	0.69	0.01
19.A96 west of Morriston Road	EB	797	0.38	810	1.6%	0.39	0.01
	WB	1061	0.71	1065	0.4%	0.71	0.00
20.A941 New Elgin	NB	497	0.5	505	1.6%	0.51	0.01
	SB	556	0.56	568	2.2%	0.56	0.00
21.Development Primary Street	EB	-	-	99	-	0.16	-
	WB	-	-	71	-	0.27	-
22.Development Secondary Street	NB	-	-	43	-	0.05	-
	SB	-	-	24	-	0.03	-
23. Development Secondary Street towards Hardhillock	NB	-	-	35	-	0.07	-
	SB	-	-	68	-	0.14	-
24. Development Primary Street	EB	-	-	82	-	0.26	-
	WB	-	-	160	-	0.22	-
25. Development Primary Street	NB	-	-	51	-	0.23	-
	SB	-	-	88	-	0.14	-
26. Development Primary Street	NB	-	-	69	-	0.1	-
	SB	-	-	73	-	0.24	-
27. Development Secondary Street - Knockmasting	EB	-	-	20	-	0.03	-
	WB	-	-	51	-	0.06	-
28. Development Primary Street – nr Knockmasting	NB	-	-	80	-	0.11	-
	SB	-	-	89	-	0.23	-
29. Development Secondary Street - Knockmasting	EB	-	-	14	-	0.03	-
	WB	-	-	2	-	0.05	-
30. Development Secondary Street - Loop	EB	-	-	22	-	0.04	-
	WB	-	-	10	-	0.01	-
31. Fleurs Road	EB	4	0	59	1375.0%	0.05	0.05
	WB	57	0.06	55	-3.5%	0.06	0.00
32. Wards Road east of Mayne Farm Road	EB	16	0.03	7	-56.3%	0	-0.03
	WB	61	0.09	53	-13.1%	0.24	0.15
33. Mayne Road	EB	17	0.02	80	370.6%	0.12	0.10
	WB	11	0.02	26	136.4%	0.03	0.01



Link	Dir	EP DM 2024		EP DS 2024			
		Flow	V/C	Flow	% flow change	V/C	V/C change
<b>34. Wittet Drive</b>	NB	299	0.3	321	7.4%	0.33	0.03
	SB	284	0.29	328	15.5%	0.35	0.06

Table B3 – MP 2030 Results – DM vs DS

Link	Dir	MP DM 2030		MP DS 2030			
		Flow	V/C	Flow	% flow change	V/C	V/C change
1. Mayne Farm Rd	NB	28	0.07	139	396.4%	0.2	<b>0.13</b>
	SB	14	0.03	89	535.7%	0.12	<b>0.09</b>
2. Wards Road east of MFR	EB	227	0.25	224	-1.3%	0.2	<b>-0.05</b>
	WB	274	0.27	251	-8.4%	0.21	<b>-0.06</b>
3.B9010 Pluscarden Road	NB	260	0.28	275	5.8%	0.27	-0.01
	SB	72	0.08	95	31.9%	0.1	0.02
4.A96 West Road	EB	688	0.69	671	-2.5%	0.68	-0.01
	WB	683	0.7	681	-0.3%	0.7	0.00
5.A96 Hill Street	EB	692	0.59	701	1.3%	0.6	0.01
	WB	564	0.47	552	-2.1%	0.47	0.00
6.A96 Alexandra Road	NB	988	0.84	1017	2.9%	0.85	0.01
	SB	930	0.5	931	0.1%	0.49	-0.01
7.Edgar Road west of High School	EB	3	0.07	166	5433.3%	0.27	<b>0.20</b>
	WB	21	0.05	79	276.2%	0.13	<b>0.08</b>
8.Edgar Road west of Glen Moray Drive	EB	186	0.28	212	14.0%	0.41	<b>0.13</b>
	WB	242	0.3	239	-1.2%	0.34	0.04
9.The Wards	NB	384	0.38	402	4.7%	0.34	-0.04
	SB	324	0.34	322	-0.6%	0.27	<b>-0.07</b>
10.Edgar Road west of A941	EB	350	0.2	436	24.6%	0.22	0.02
	WB	513	0.52	516	0.6%	0.54	0.02
11.Glen Moray Drive	NB	367	0.34	530	44.4%	0.35	0.01
	SB	142	0.15	221	55.6%	0.19	0.04
12.A941 south of Linkwood	NB	803	0.84	755	-6.0%	0.84	0.00
	SB	353	0.36	318	-9.9%	0.36	0.00
13.A941 south of Maisondieu	NB	1399	1.2	1401	0.1%	1.2	0.00
	SB	804	0.67	761	-5.3%	0.66	-0.01
14.Maisondieu Road east of Linkwood	EB	320	0.32	342	6.9%	0.35	0.03
	WB	526	0.52	539	2.5%	0.53	0.01
15.A941 north of Wards Road	NB	608	0.62	593	-2.5%	0.61	-0.01
	SB	585	0.49	555	-5.1%	0.49	0.00
16.A96 east of Maisondieu Road	EB	953	0.8	963	1.0%	0.8	0.00
	WB	914	0.77	927	1.4%	0.77	0.00
	EB	688	0.58	692	0.6%	0.58	0.00



Link	Dir	MP DM 2030		MP DS 2030			
		Flow	V/C	Flow	% flow change	V/C	V/C change
17.A96 east of Moycroft Road	WB	984	0.82	977	-0.7%	0.82	0.00
18.A941 North Street	NB	697	0.58	708	1.6%	0.6	0.02
	SB	973	0.81	969	-0.4%	0.81	0.00
19.A96 west of Morriston Road	EB	935	0.45	923	-1.3%	0.45	0.00
	WB	792	0.53	792	0.0%	0.54	0.01
20.A941 New Elgin	NB	636	0.64	654	2.8%	0.63	-0.01
	SB	333	0.34	358	7.5%	0.35	0.01
21.Development Primary Street	EB	-	-	71	-	0.12	-
	WB	-	-	82	-	0.13	-
22.Development Secondary Street	NB	-	-	10	-	0.01	-
	SB	-	-	28	-	0.03	-
23. Development Secondary Street towards Hardhillock	NB	-	-	59	-	0.13	-
	SB	-	-	29	-	0.06	-
24. Development Primary Street	EB	-	-	122	-	0.17	-
	WB	-	-	60	-	0.1	-
25. Development Primary Street	NB	-	-	72	-	0.11	-
	SB	-	-	56	-	0.09	-
26. Development Primary Street	NB	-	-	66	-	0.11	-
	SB	-	-	72	-	0.11	-
27. Development Secondary Street - Knockmasting	EB	-	-	20	-	0.05	-
	WB	-	-	16	-	0.04	-
28. Development Primary Street – nr Knockmasting	NB	-	-	107	-	0.14	-
	SB	-	-	86	-	0.11	-
29. Development Secondary Street - Knockmasting	EB	-	-	32	-	0.07	-
	WB	-	-	3	-	0	-
30. Development Secondary Street - Loop	EB	-	-	15	-	0.02	-
	WB	-	-	30	-	0.05	-
31. Fleurs Road	EB	18	0.02	27	50.0%	0.03	0.01
	WB	27	0.03	34	25.9%	0.03	0.00
32. Wards Road east of Mayne Farm Road	EB	23	0.04	19	-17.4%	0.03	-0.01
	WB	35	0.04	83	137.1%	0.09	0.05
33. Mayne Road	EB	23	0.05	124	439.1%	0.17	0.12
	WB	6	0.02	17	183.3%	0.02	0.00



Link	Dir	MP DM 2030		MP DS 2030			
		Flow	V/C	Flow	% flow change	V/C	V/C change
<b>34. Wittet Drive</b>	NB	261	0.28	313	19.9%	0.29	0.01
	SB	267	0.27	318	19.1%	0.3	0.03

Table B4 – EP 2030 Results – DM vs DS

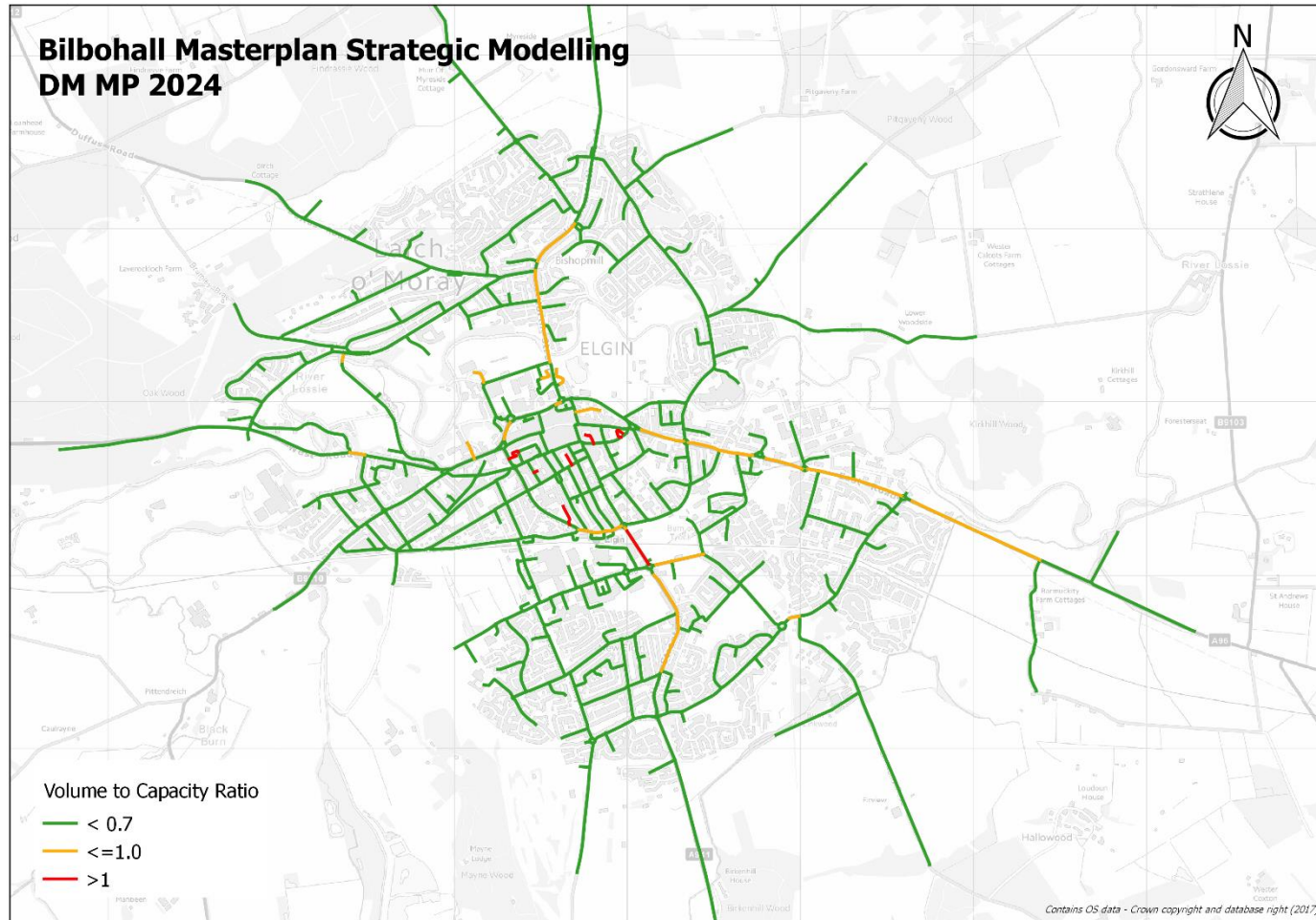
Link	Dir	EP DM 2030		EP DS 2030			
		Flow	V/C	Flow	% flow change	V/C	V/C change
1. Mayne Farm Rd	NB	29	0.05	101	248.3%	0.13	<b>0.08</b>
	SB	16	0.07	89	456.3%	0.27	<b>0.20</b>
2. Wards Road east of MFR	EB	278	0.29	319	14.7%	0.19	<b>-0.10</b>
	WB	322	0.35	289	-10.2%	0.3	<b>-0.05</b>
3.B9010 Pluscarden Road	NB	214	0.22	200	-6.5%	0.21	-0.01
	SB	119	0.13	128	7.6%	0.14	0.01
4.A96 West Road	EB	450	0.45	417	-7.3%	0.42	-0.03
	WB	990	<b>1</b>	999	0.9%	<b>1.01</b>	0.01
5.A96 Hill Street	EB	492	0.43	478	-2.8%	0.42	-0.01
	WB	660	0.56	668	1.2%	0.56	0.00
6.A96 Alexandra Road	NB	968	<b>0.79</b>	955	-1.3%	<b>0.83</b>	0.04
	SB	1259	0.67	1303	3.5%	0.69	0.02
7.Edgar Road west of High School	EB	5	0.04	104	1980.0%	0.32	<b>0.28</b>
	WB	8	0.08	218	2625.0%	0.33	<b>0.25</b>
8.Edgar Road west of Glen Moray Drive	EB	161	0.26	175	8.7%	0.39	<b>0.13</b>
	WB	139	0.23	310	123.0%	0.41	<b>0.18</b>
9.The Wards	NB	341	0.33	278	-18.5%	0.3	-0.03
	SB	501	0.52	695	38.7%	0.43	<b>-0.09</b>
10.Edgar Road west of A941	EB	941	0.51	1030	9.5%	0.49	-0.02
	WB	762	<b>0.77</b>	683	-10.4%	<b>0.76</b>	-0.01
11.Glen Moray Drive	NB	281	0.25	425	51.2%	0.28	0.03
	SB	546	0.54	635	16.3%	0.51	-0.03
12.A941 south of Linkwood	NB	675	0.69	603	-10.7%	<b>0.7</b>	0.01
	SB	767	<b>0.79</b>	713	-7.0%	<b>0.81</b>	0.02
13.A941 south of Maisondieu	NB	1205	<b>1.04</b>	1195	-0.8%	<b>0.98</b>	<b>-0.06</b>
	SB	1470	<b>1.25</b>	1294	-12.0%	<b>1.19</b>	<b>-0.06</b>
14.Maisondieu Road east of Linkwood	EB	464	0.45	439	-5.4%	0.45	0.00
	WB	540	0.55	543	0.6%	0.56	0.01
15.A941 north of Wards Road	NB	744	<b>0.75</b>	728	-2.2%	<b>0.75</b>	0.00
	SB	724	0.61	667	-7.9%	0.58	-0.03
16.A96 east of Maisondieu Road	EB	1172	<b>0.98</b>	1175	0.3%	<b>0.99</b>	0.01
	WB	1019	<b>0.86</b>	1046	2.6%	<b>0.87</b>	0.01
	EB	1199	<b>1</b>	1201	0.2%	<b>1.01</b>	0.01

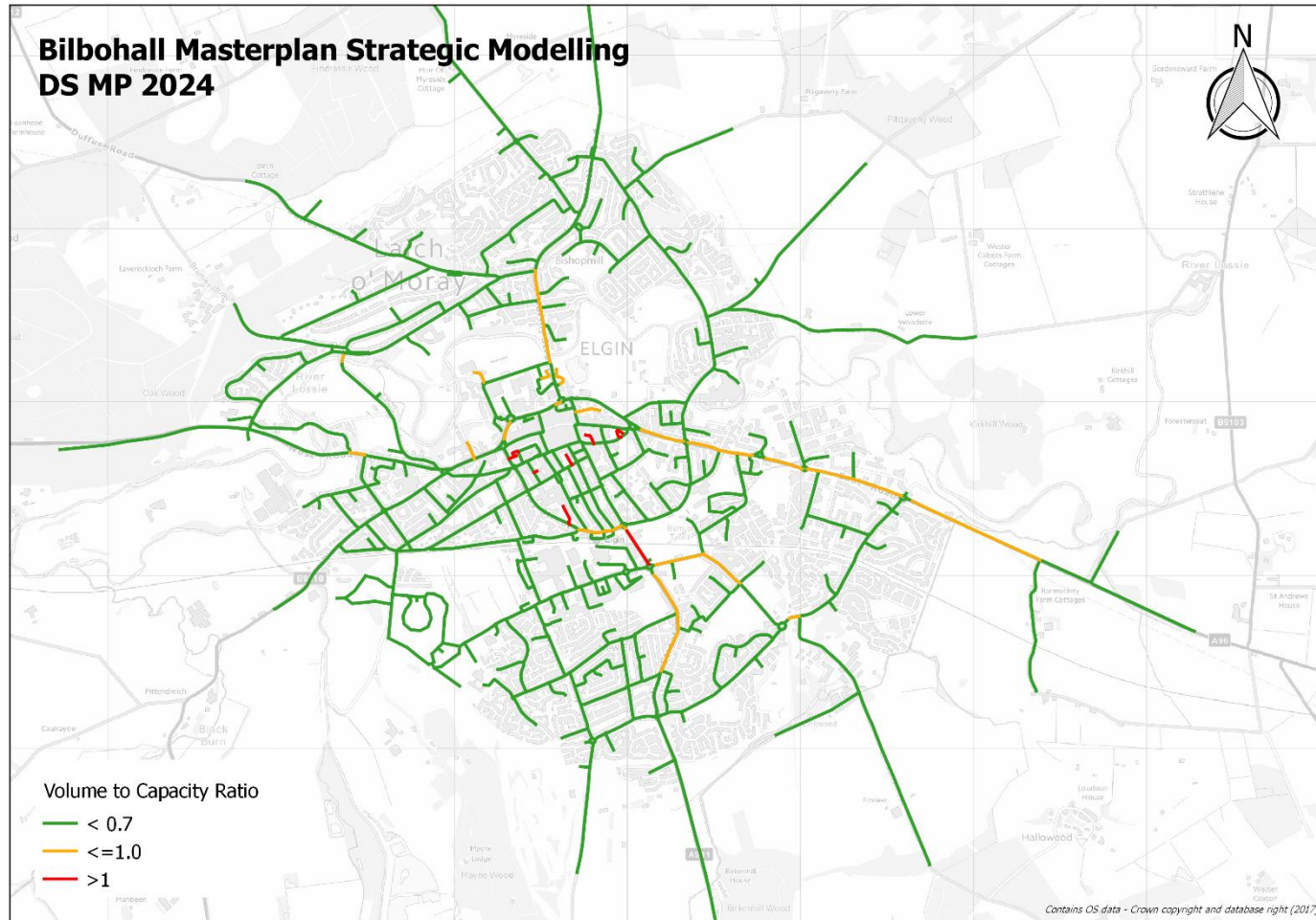
Link	Dir	EP DM 2030		EP DS 2030			
		Flow	V/C	Flow	% flow change	V/C	V/C change
17.A96 east of Moycroft Road	WB	730	0.61	736	0.8%	0.62	0.01
18.A941 North Street	NB	1280	1.07	1289	0.7%	1.08	0.01
	SB	833	0.7	843	1.2%	0.7	0.00
19.A96 west of Morrision Road	EB	830	0.4	841	1.3%	0.4	0.00
	WB	1096	0.73	1100	0.4%	0.74	0.01
20.A941 New Elgin	NB	576	0.58	586	1.7%	0.59	0.01
	SB	607	0.61	621	2.3%	0.62	0.01
21.Development Primary Street	EB	-	-	107	-	0.17	-
	WB	-	-	70	-	0.28	-
22.Development Secondary Street	NB	-	-	43	-	0.05	-
	SB	-	-	23	-	0.03	-
23. Development Secondary Street towards Hardhillock	NB	-	-	33	-	0.08	-
	SB	-	-	67	-	0.15	-
24. Development Primary Street	EB	-	-	80	-	0.26	-
	WB	-	-	169	-	0.23	-
25. Development Primary Street	NB	-	-	51	-	0.23	-
	SB	-	-	97	-	0.15	-
26. Development Primary Street	NB	-	-	78	-	0.1	-
	SB	-	-	72	-	0.24	-
27. Development Secondary Street - Knockmasting	EB	-	-	19	-	0.04	-
	WB	-	-	51	-	0.07	-
28. Development Primary Street – nr Knockmasting	NB	-	-	88	-	0.1	-
	SB	-	-	88	-	0.23	-
29. Development Secondary Street - Knockmasting	EB	-	-	13	-	0.03	-
	WB	-	-	2	-	0.05	-
30. Development Secondary Street - Loop	EB	-	-	22	-	0.04	-
	WB	-	-	9	-	0.01	-
31. Fleurs Road	EB	4	0	22	450.0%	0.06	0.06
	WB	62	0.06	69	11.3%	0.06	0.00
32. Wards Road east of Mayne Farm Road	EB	16	0.03	5	-68.8%	0	-0.03
	WB	65	0.1	82	26.2%	0.23	0.13
33. Mayne Road	EB	16	0.03	79	393.8%	0.12	0.09
	WB	12	0.02	37	208.3%	0.04	0.02



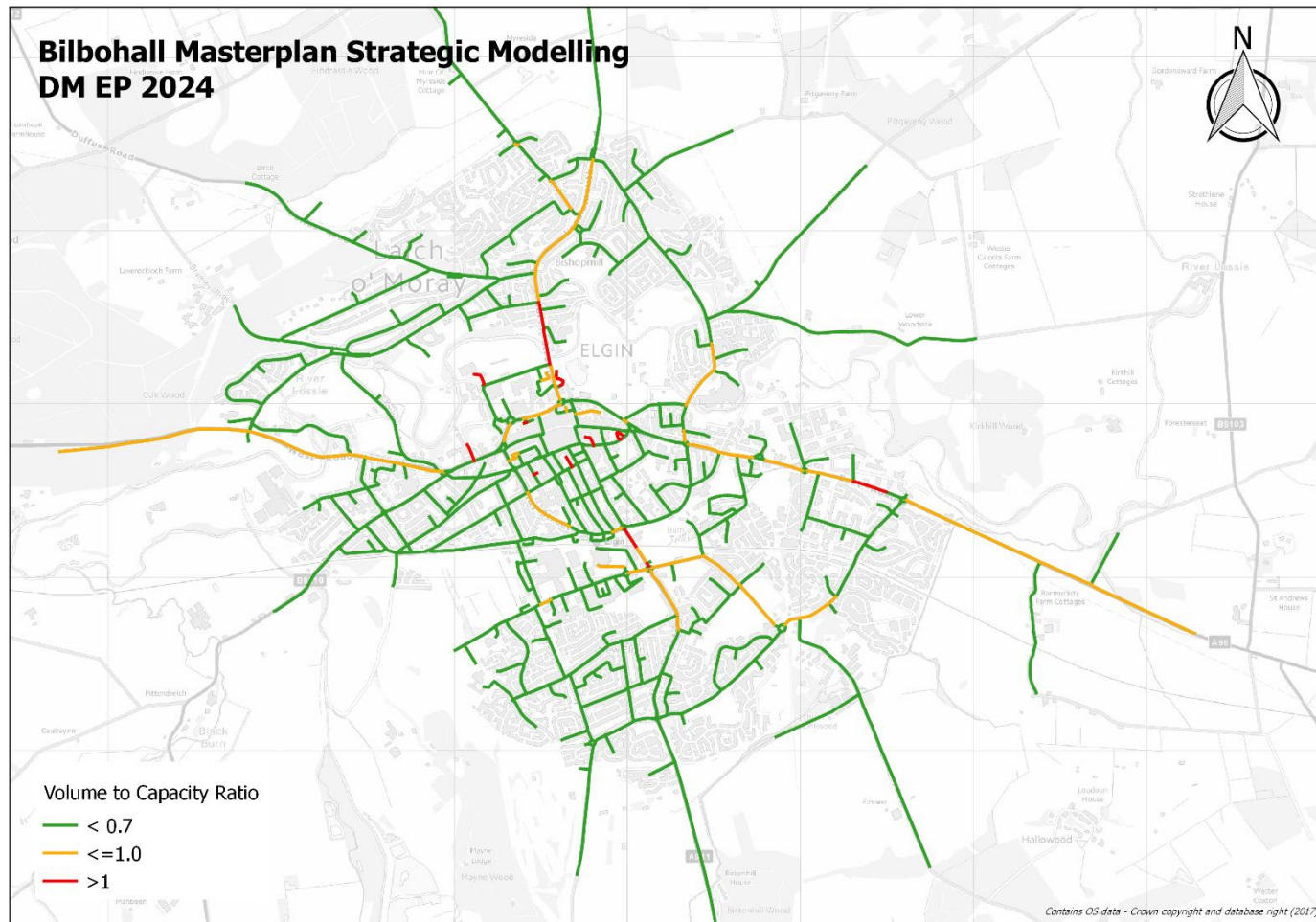
Link	Dir	EP DM 2030		EP DS 2030			
		Flow	V/C	Flow	% flow change	V/C	V/C change
<b>34. Wittet Drive</b>	NB	281	0.28	303	7.8%	0.32	0.04
	SB	290	0.3	373	28.6%	0.36	0.06

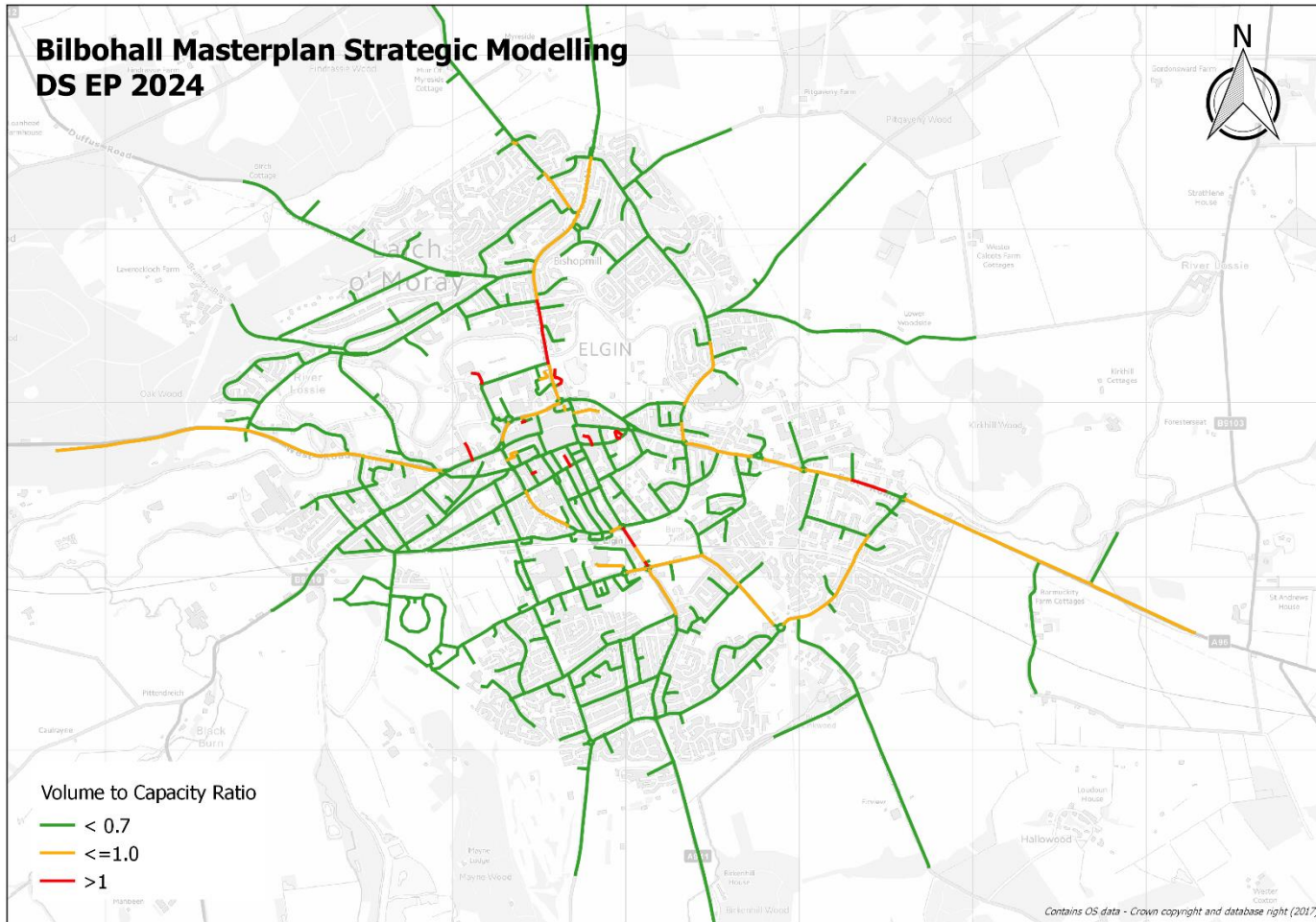
**Appendix C   Volume / Capacity Diagrams**

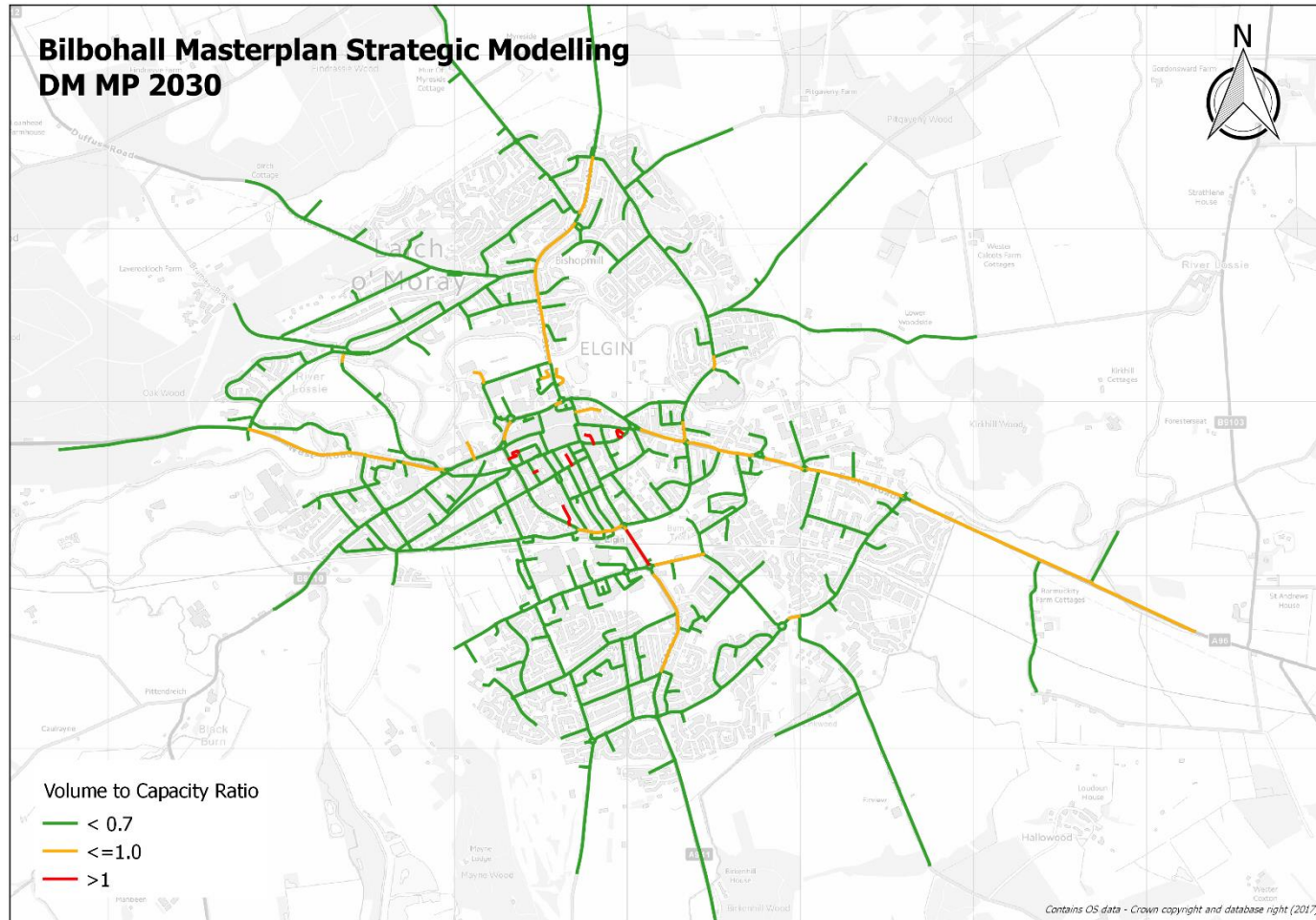


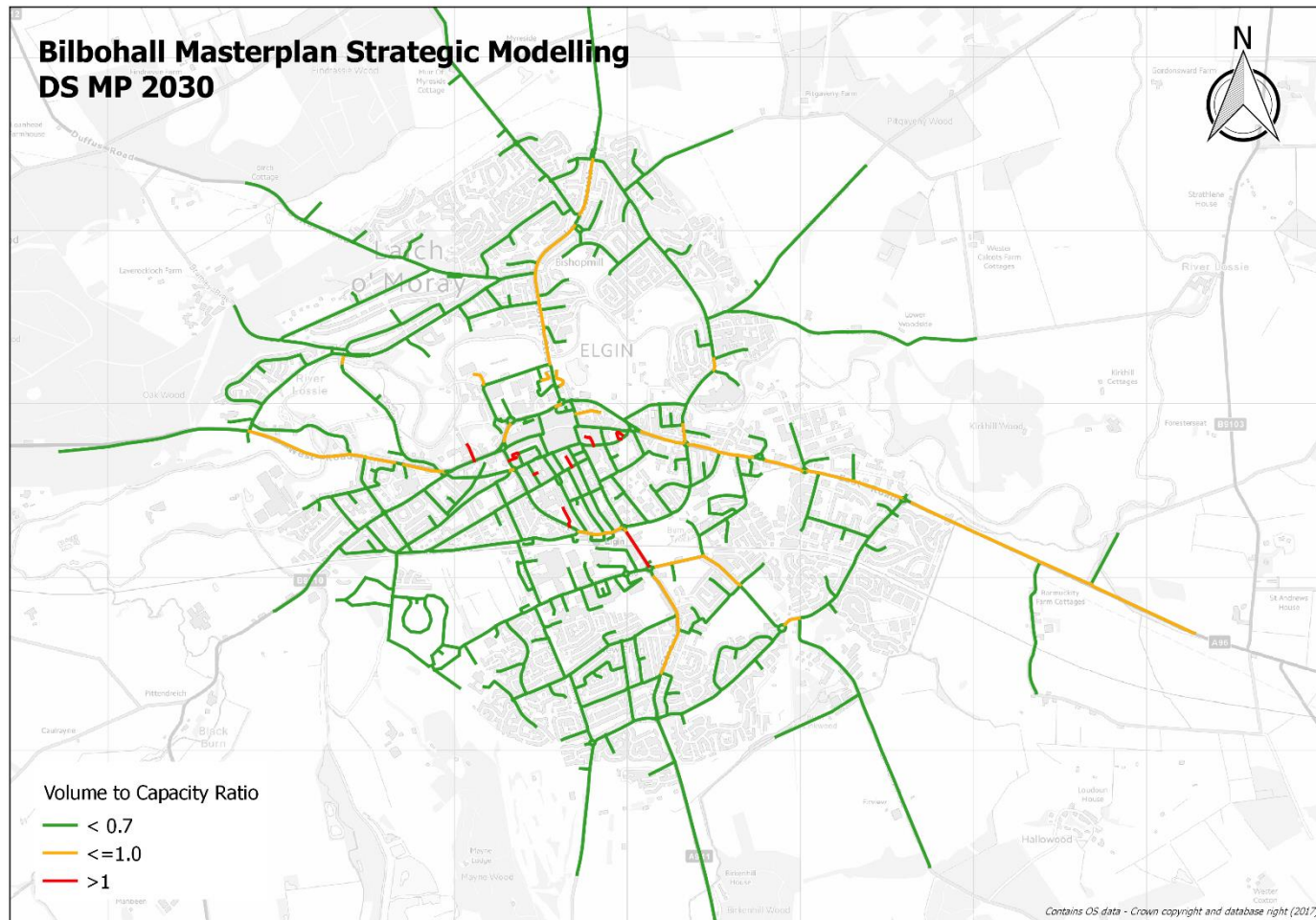


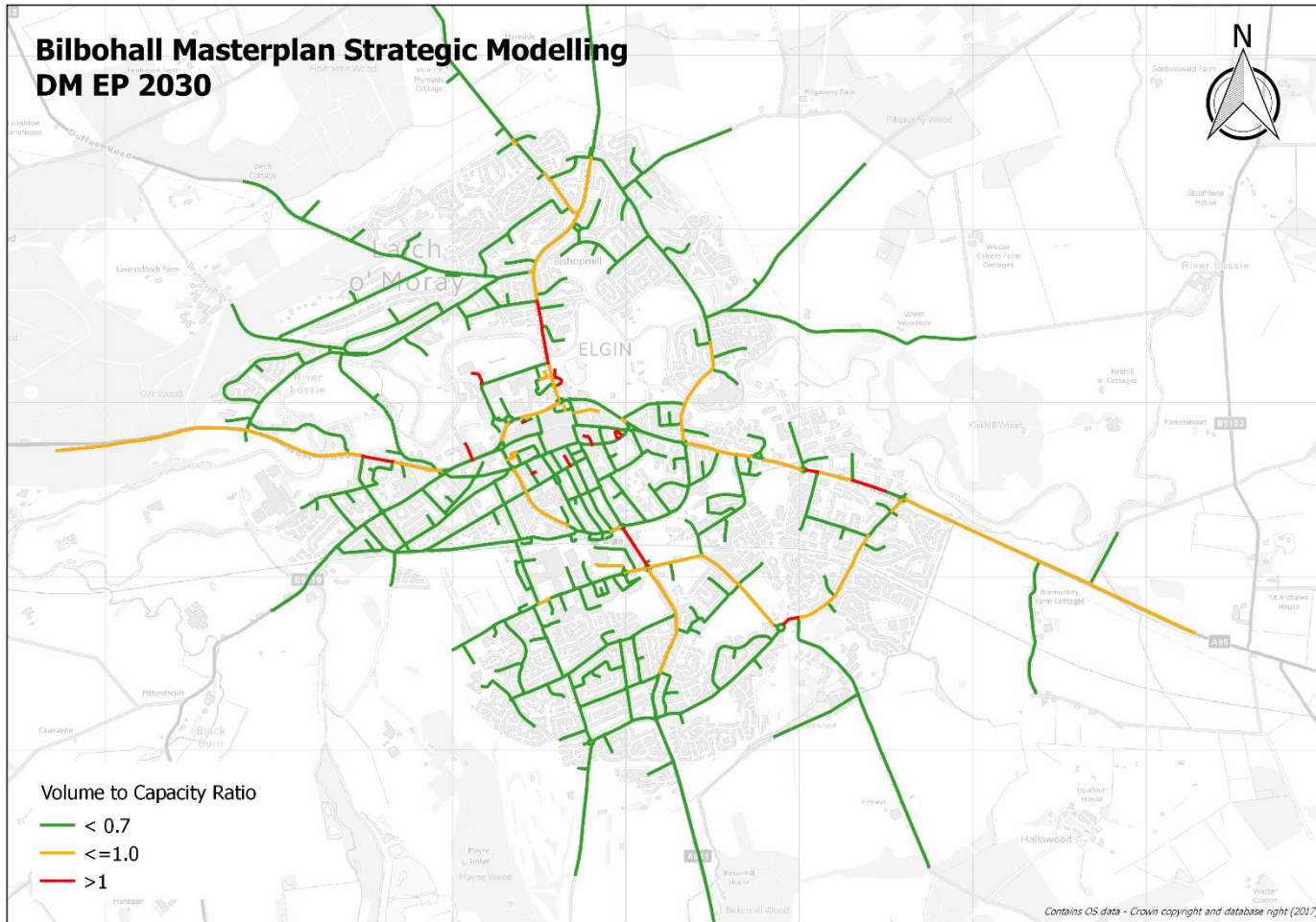


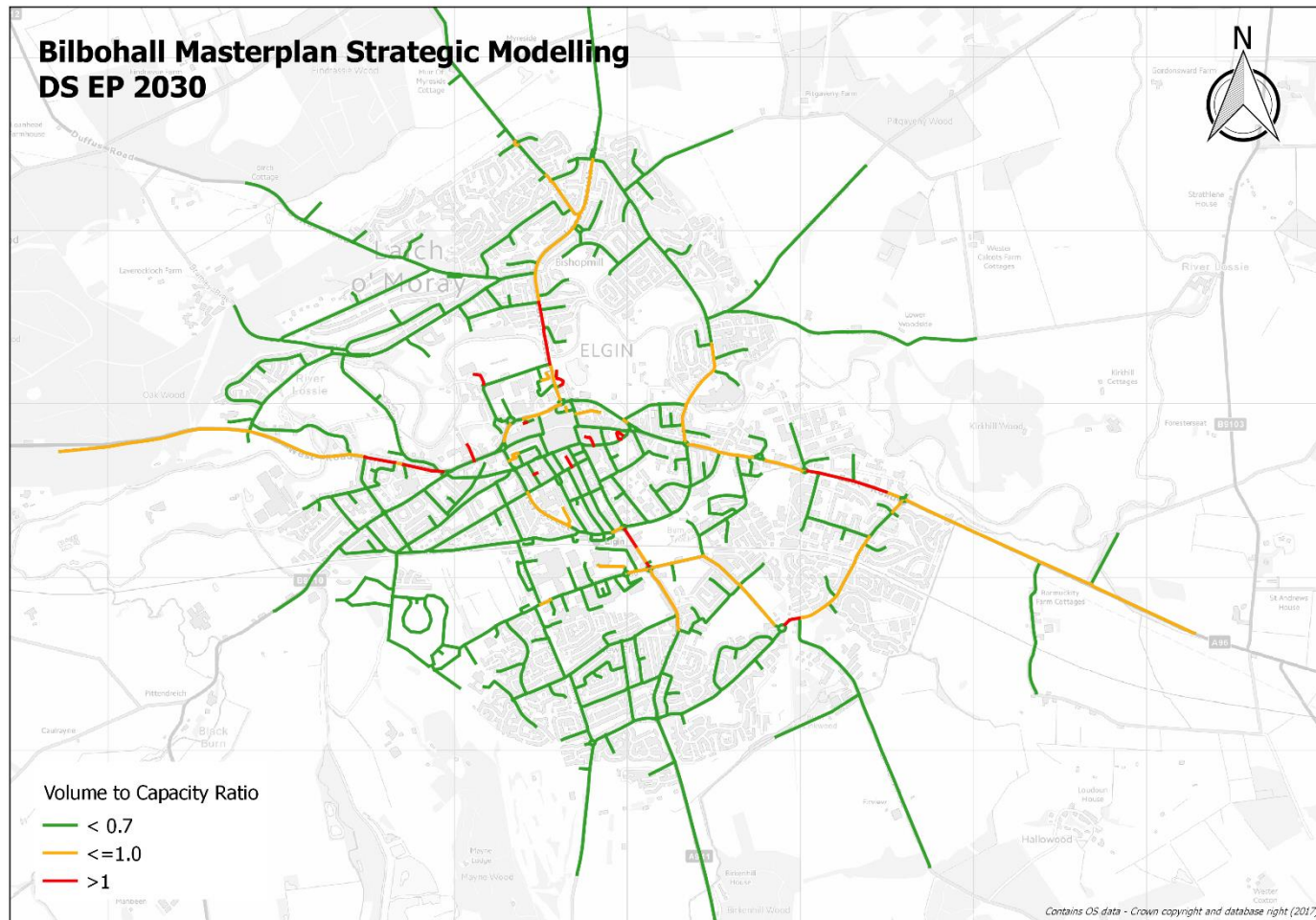










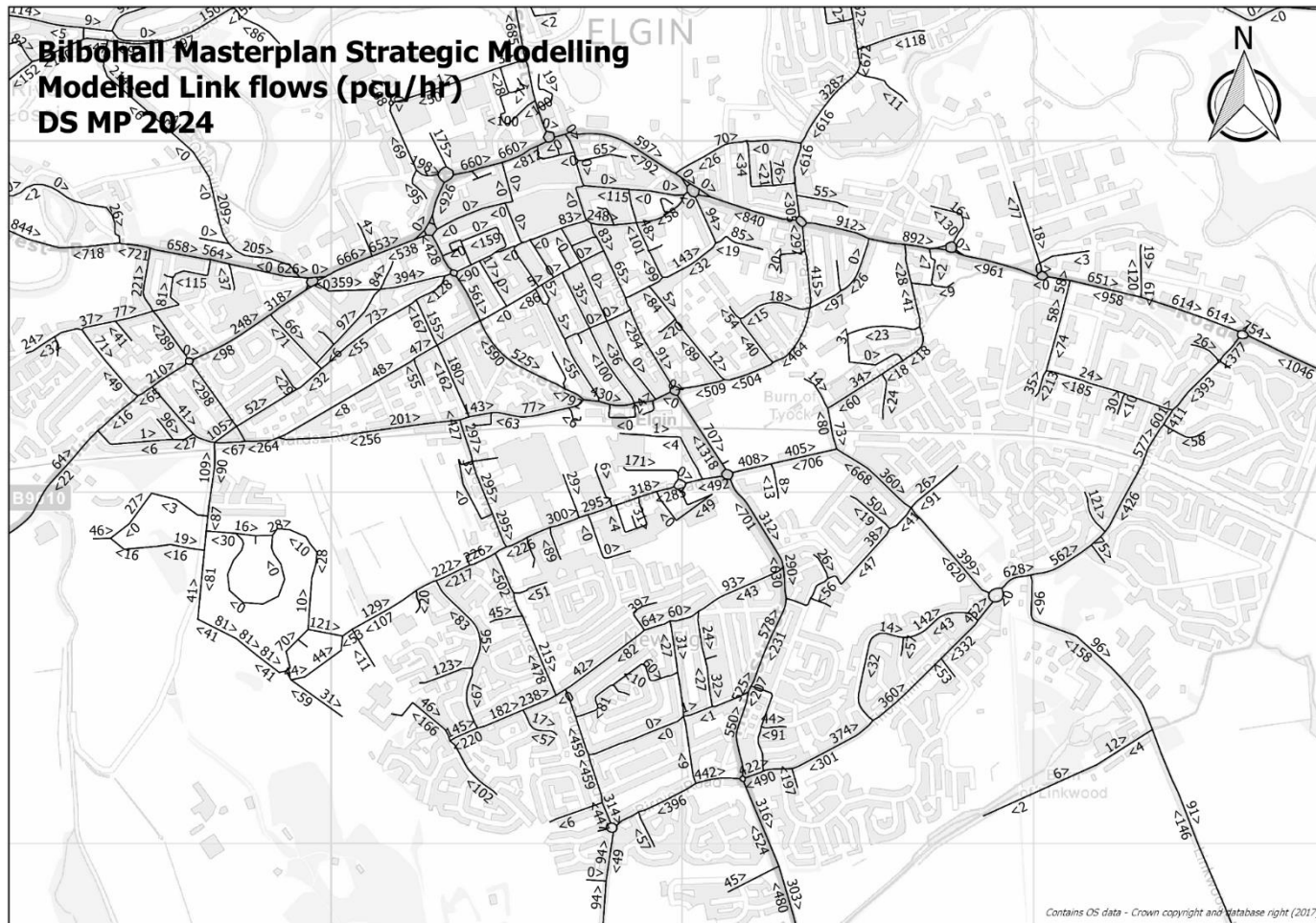


**Appendix D Link Flow Diagrams**



















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063268-CUR-00-XX-RP-TP-001 Bilbohall Masterplan, Elgin

Strategic Modelling Report

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