

## **Appendix A Sheffield Local Plan Employment Development Schedule**

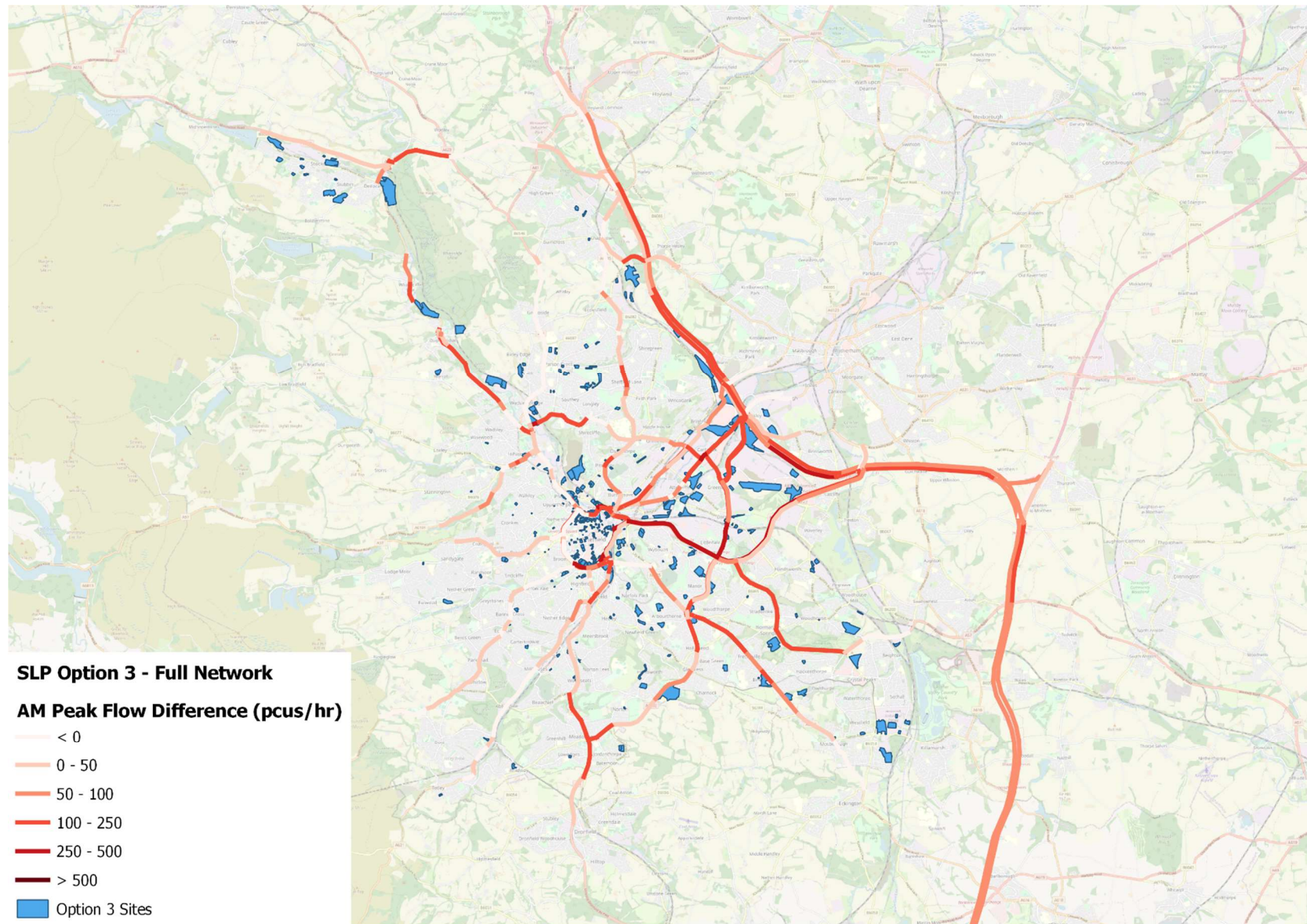
Site_ref	Address	Site_use	Employment Floorspace (sqm)
S00746	West Bar Square	Mixed Use	110000
S03165	Land to the south of Meadowhall Way, S9 2FU	General Employment	100000
S03764	Sheffield Olympic Legacy Park	Office	93400
S04101	Land to the south of the M1 Motorway Junction 35, Ecclesfield	Employment	88080
S03061	Handsworth Hall Farm	Mixed Use	80000
S03112	Land bordered by M1, Thorncliffe Road, Warren Lane, and White Lane	Employment	71880
S03176	Outokumpu, Shepcote Lane	Industrial	61320
S04639	Hesley Wood, North of Cowley Hill, Chapeltown	Employment	56480
S03195	Smithywood, Cowley Hill, Chapeltown	General Employment	45280
S03765	AMRC Campus, Land to the north west of Europa Link	General Employment	40160
S02852	Former Sheffield Ski Village, S3 9QX	Leisure and Recreation	40000
S03453	Land and buildings at St Mary's Gate and Eyre Street, S1 4QZ	Mixed Use	32000
S00822	Land to the north of Station Road, S20 3GR	Industrial	31600
S03180	Sheffield Business Park Phase 2	General Employment	31185
S04392	Buildings at Cross Turner Street, S2 4AB	Office	29000
S03219	Land to the west of Blackburn Road, S61 2DW	Industrial	25800
S03081	Alsing Road Car Park and Meadowhall Interchange, S9 1EA	General Employment	22160
S04632	Land to the east of Eckington Way, S20 1XE	General Employment and Traveller Site	21400
S03454	Decathlon, Eyre Street, S1 3HU	Mixed Use	16800
S03159	Land at Wallace Road, S3 9SR	General Employment	16160
S03451	Gas Works, Newman Road, S9 1BT	Industrial	15640
S04066	Land to the east of New Street, S20 3GH	Industrial	15000
S03450	Land at Europa Way, S9 1TQ	Industrial	13520
S02464	M1 Distribution Centre and The Source, Vulcan Road, S9 1EW	General Employment	12960
S04146	Orchard Square Shopping Centre, S1 2FB	Retail	12200
S03189	Beeleywood, Claywheels Lane	General Employment	11050
S02093	Land at Cross Turner Street, S1 2BP	Office	10600
S04390	Buildings at Dixon Lane and Haymarket, S2 5TS	Mixed Use	10600
S03175	Land adjacent to Veolia Sheffield, Lumley Street, S9 3JB	Industrial	10400

Site_ref	Address	Site_use	Employment Floorspace (sqm)
S02416	Land and buildings at Penistone Road North, S6 1QW	General Employment	9728
S03185	Land at Beeley Wood Lane, S6 1QT	General Employment	9440
S04102	Allotments to the south of Wardsend Road North, S6 1LX	General Employment	9400
S03714	710 Brightside Lane, S9 2UB	Industrial	8560
S04126	Land between Grange Mill Lane and Ecclesfield Road, S9 1HW	Industrial	8040
S02893	Darnall Works, Darnall Road, S9 5AB	Mixed Use	8000
S03154	Upwell Street/Colliery Road (North)	Industrial	7755
S02098	Land at Carver Street and Carver Lane, S1 4FS	Office	7400
S03647	NCP Furnival Gate Car Park, Matilda Street, S1 4QY	Mixed Use	6800
S03449	Land to the north of Europa Link, S9 1TN	Industrial	6400
S03646	Curtilage Of BOC Ltd, Rother Valley Way	General Employment	6370
S03170	Land at Shepcote Lane, S9 5DE	Industrial	5480
S03078	Castlegate (Shude Hill)	Office	5200
S03173	Land at Orgreave Place, S13 9LU	General Employment	5160
S04136	Land at Sheffield Road, S9 2YL	General Employment	4880
S01222	Land at Parkwood Road, S3 8AB	General Employment	4800
S03184	Land adjacent to 232 Woodbourn Road, S9 3LQ	Industrial	4760
S03169	Land at Lumley Street, S4 7ZJ	Industrial	4400
S03196	Land to the north of Loicher Lane, S35 9XN	Industrial	4240
S00739	K.T Precision Engineering and land adjacent, Turner Street, S2 4AB	Mixed Use	4200
S03177	Land to the north of Darnall Road, S9 5AH	General Employment	4000
S03166	Land to the east of Prince of Wales Road, S9 4BT	Industrial	3560
S03192	Land adjacent to the River Don, Station Road, S36 2UZ	General Employment	3560
S00063	Rock Christian Centre Lighthouse and 105-125 Spital Hill, S4 7LD	Mixed Use	3360
S03215	Land adjacent to the River Rother, Rotherham Road, S20 1AH	General Employment	3280
S02911	Land at Harmer Lane and Sheaf Street, S1 2BS	Office	3000
S03590	Land to the northwest of Wardsend Road, S6 1RQ	General Employment	2960
S03158	Oakham Drive	General Employment	2924
S03655	Parkhead House 26 Carver Street Sheffield S1 4FS	Office	2800
S03190	Land adjacent to Chapelton Academy, Nether Lane, S35 9ZX	General Employment	2680
S03167	Land to the northeast of Barleywood Road, S9 5FJ	Industrial	2680
S03767	Ancon Building Products, 9 President Way	General Employment	2650
S00827	Land at Brompton Road, S9 2PF	Industrial	2560
S03099	Former Asda site Orgreave Place 1	General Employment	2462
S03179	Land at Ripon Street, S9 3LX	Industrial	2360

Site_ref	Address	Site_use	Employment Floorspace (sqm)
S03213	Warehouse and land adjacent, Meadowbrook Park, S20 3PJ	Industrial	2280
S02711	10-22 Regent Street and 2 Pitt Street, S1 4EU	Mixed Use	2200
S03178	Land between Prince of Wales Road and Station Road, S9 4JT	Mixed Use	2200
S00036	22 Stannington Road, Malin Bridge Sports And Social Club And Land To The Side And Rear Sheffield S6 5FL	Retail	2125
S03181	Shepcote Lane/Europa Link	General Employment	2050
S03212	Land at New Street and Longacre Way, S20 3FS	Industrial	2040
S03186	Land at Wardsend Road, S6 1RQ	General Employment	2000
S03464	2 Rotherham Road, S13 9LL	General Employment	1939
S03171	Land at Catley Road, S9 5NF	Industrial	1920
S00122	South Yorkshire trading Standards Unit	Mixed Use	1900
S03902	Site Of 68-82 Pinstone Street, 1-19 Charles Street, Laycock House - 14 Cross Burgess Street Sheffield	Mixed Use	1875
S03494	Former Hartwells Site, Savile Street/Spital Hill	Office	1840
S03444	Land adjacent to Elsworth House, Herries Road South, S6 1PD	General Employment	1680
S03168	Land adjacent to 58-64 Broad Oaks, S9 3HJ	Industrial	1640
S03194	Land adjacent to Yarra Park Industrial Estate and Station Road, S35 9YR	Industrial	1600
S03080	Castlegate (Exchange Place)	General Employment	1600
S03160	Land at Rear of No 2 Hunsley Street	Industrial	1480
S04670	29-57 King Street, S3 8LF	Mixed Use	1400
S00044	113-125, Pinstone Street, S1 2HL	Mixed Use	1000
S02379	178 West Street, Sheffield, S1 4ET	General Employment	1000
S03496	Land at Club Mill Road / River Don A	General Employment	969
S01521	2 Haymarket And 5-7 Commercial Street, S1 1PF	Mixed Use	600
S02576	First Floor To Third Floors, 19 - 21 Haymarket, S1 2AW	Mixed Use	400
S04697	Ecclesall Rd Sunday School, 605 Ecclesall Road, Sheffield S11 8PT	Mixed Use	357
S04169	147-154 Harvest Lane, S3 8EF	General Employment	240
S04548	Land At Junction With Cobden View Road, Northfield Road, Sheffield S10 1QQ	Mixed Use	224
S02090	Land at Wordsworth Avenue and Buchanan Road, S5 8AU	Mixed Use	200
S04379	George Marshall (Power Tools) Ltd, 18 Johnson Street	Mixed Use	85
S00174	Land adjacent to 112 London Road, S2 4LR	Mixed Use	80

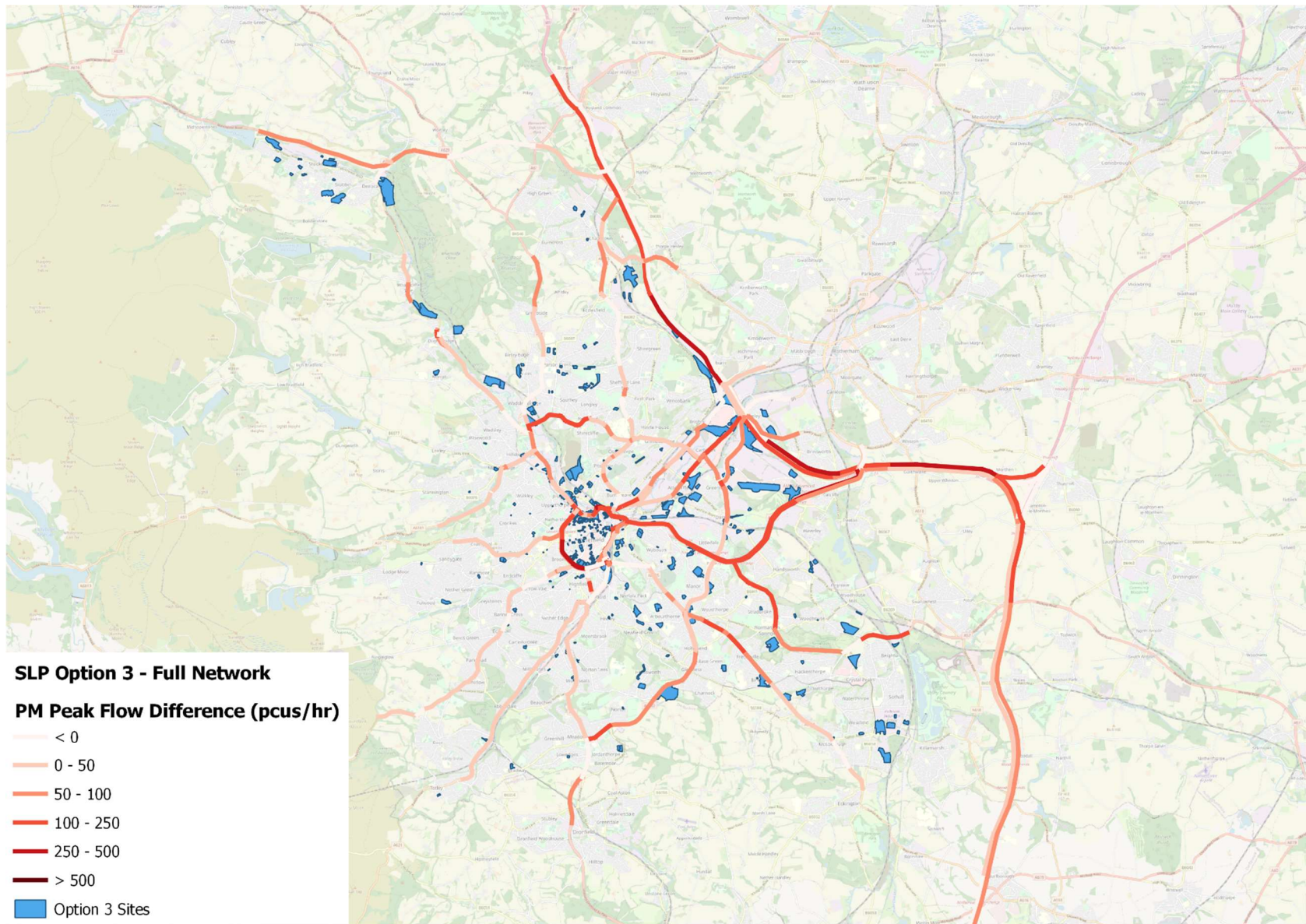


## **Appendix B 2029 Forecast Model Flows**



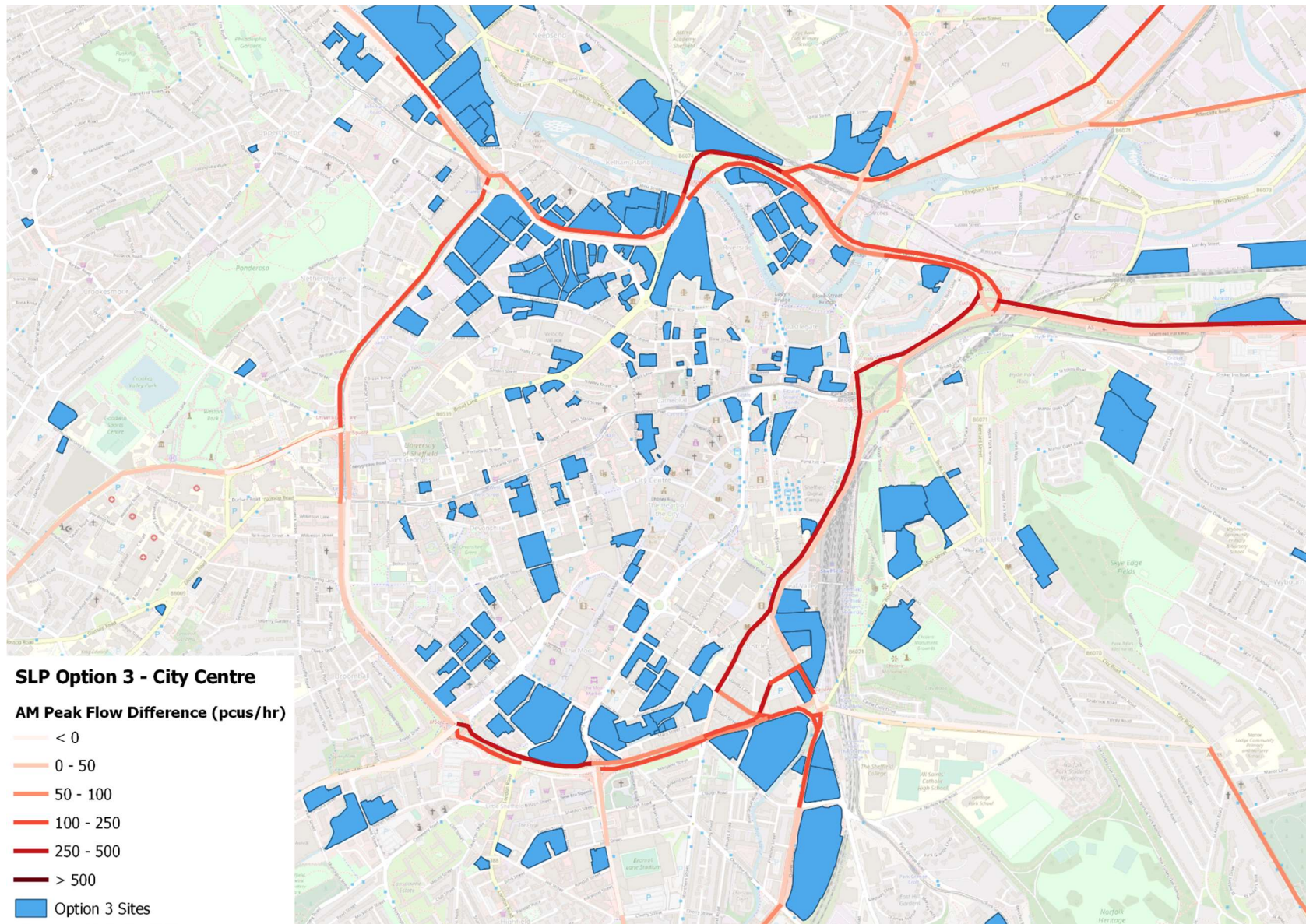
**Figure 1. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Full Model**





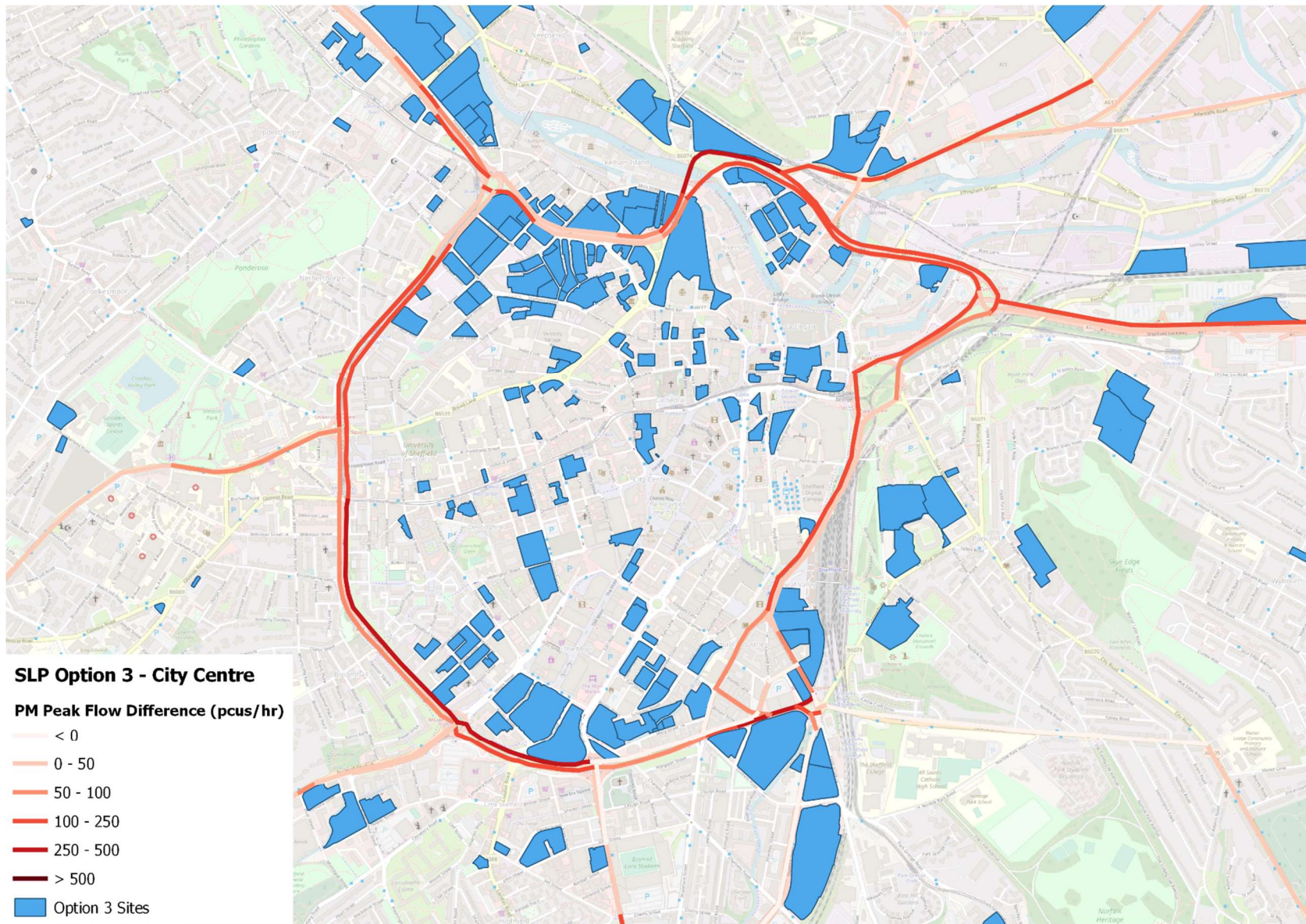
**Figure 2. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Full Model**





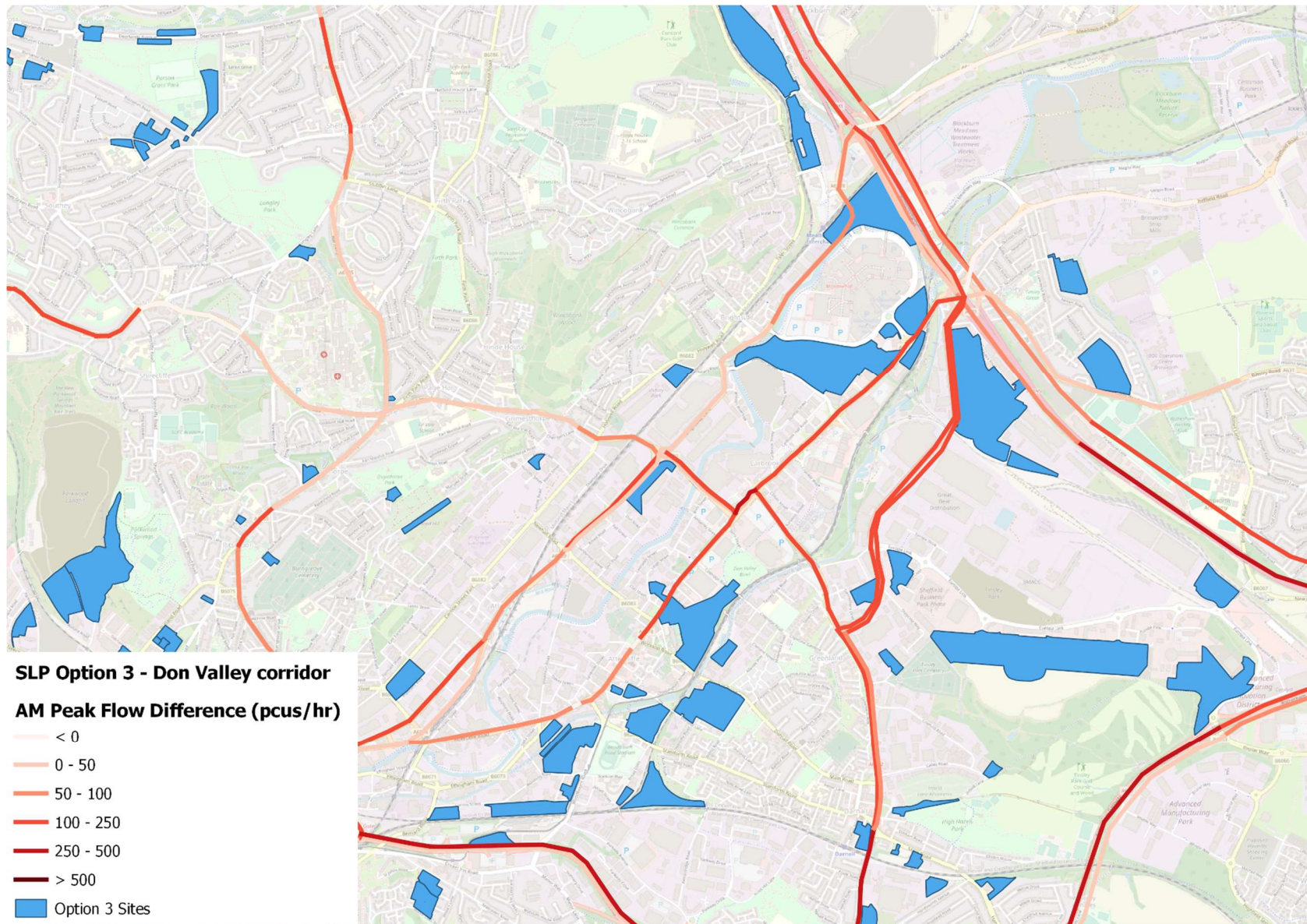
**Figure 3. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Sheffield City Centre**





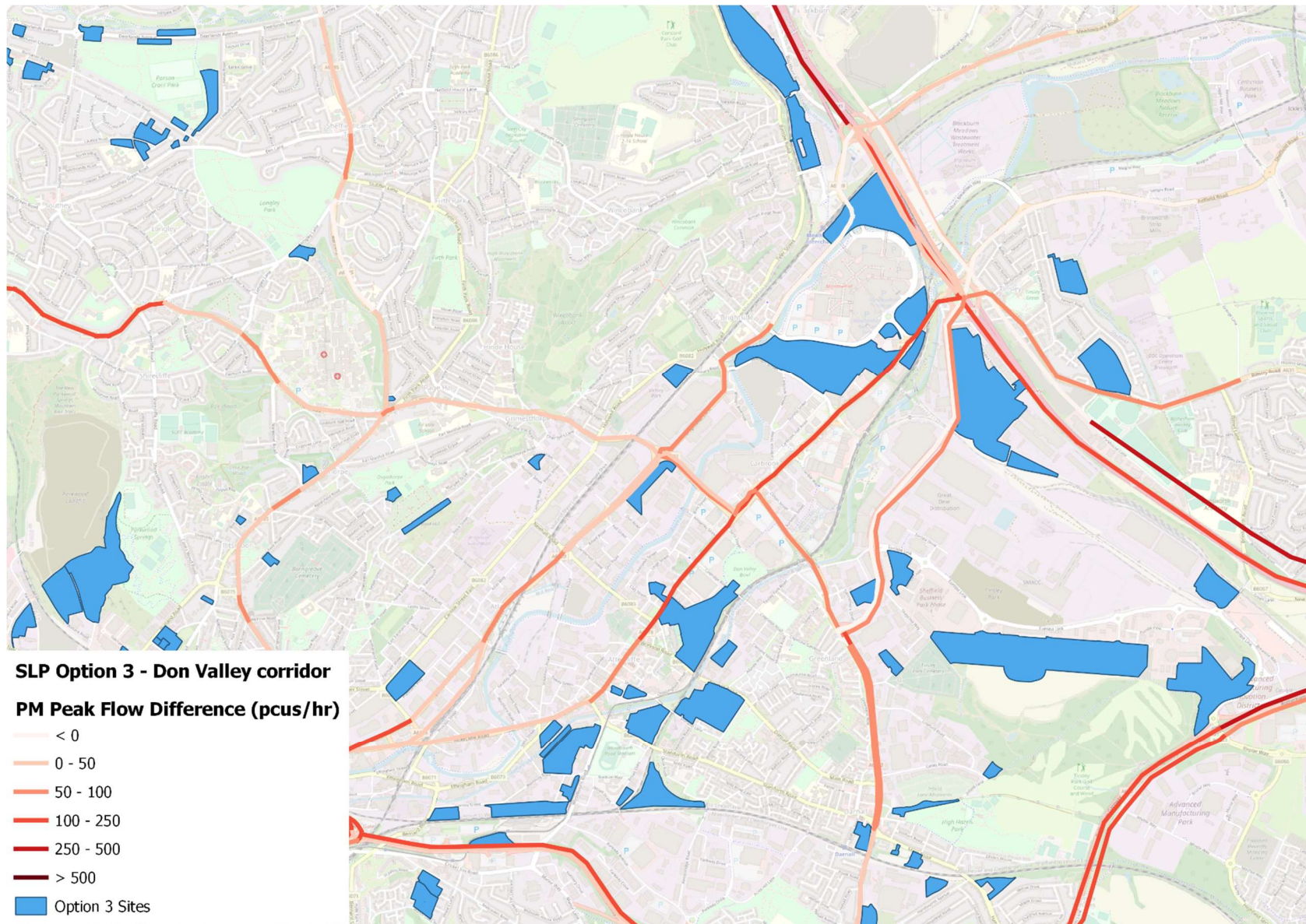
**Figure 4. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Sheffield City Centre**





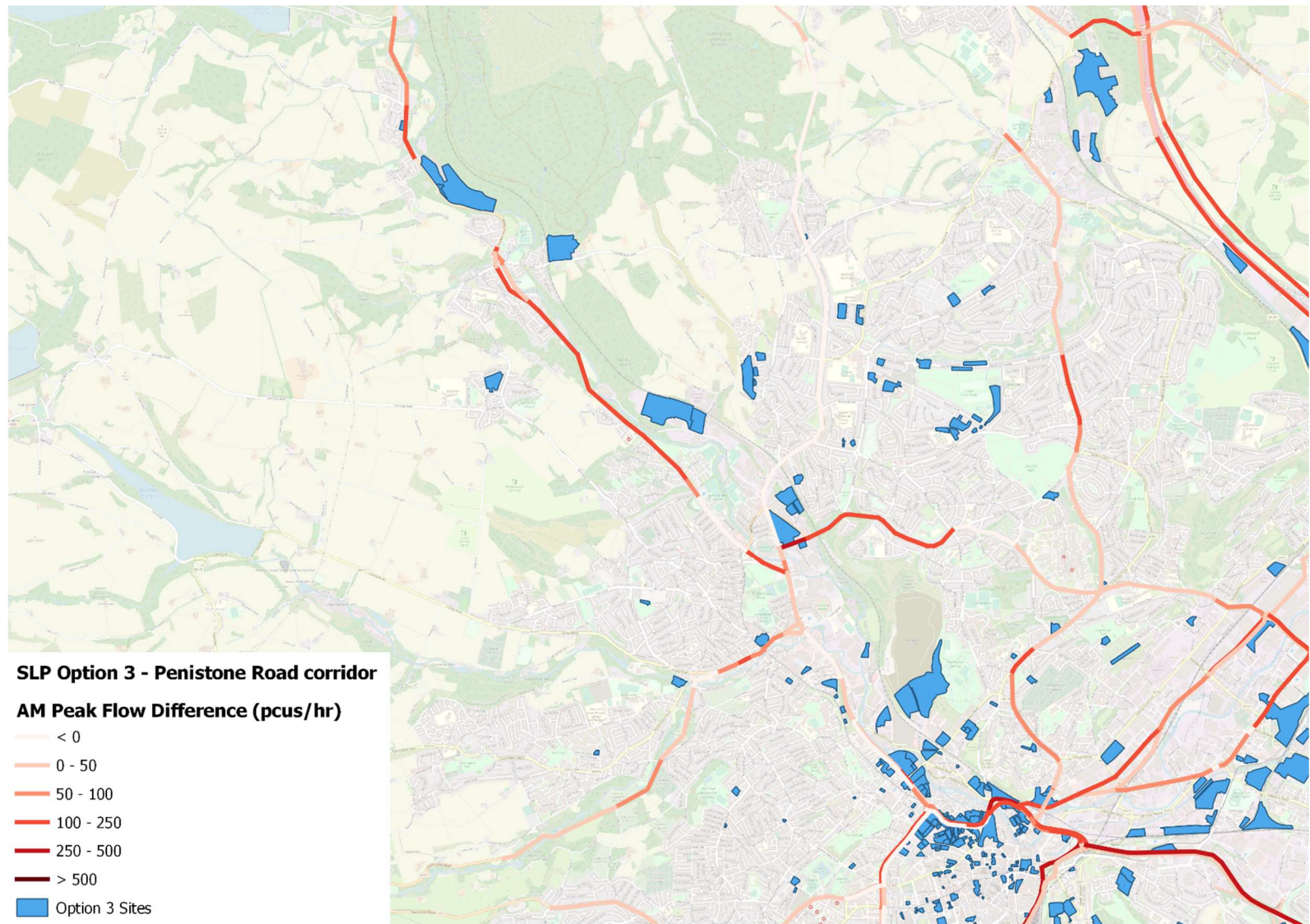
**Figure 5. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Don Valley Corridor**





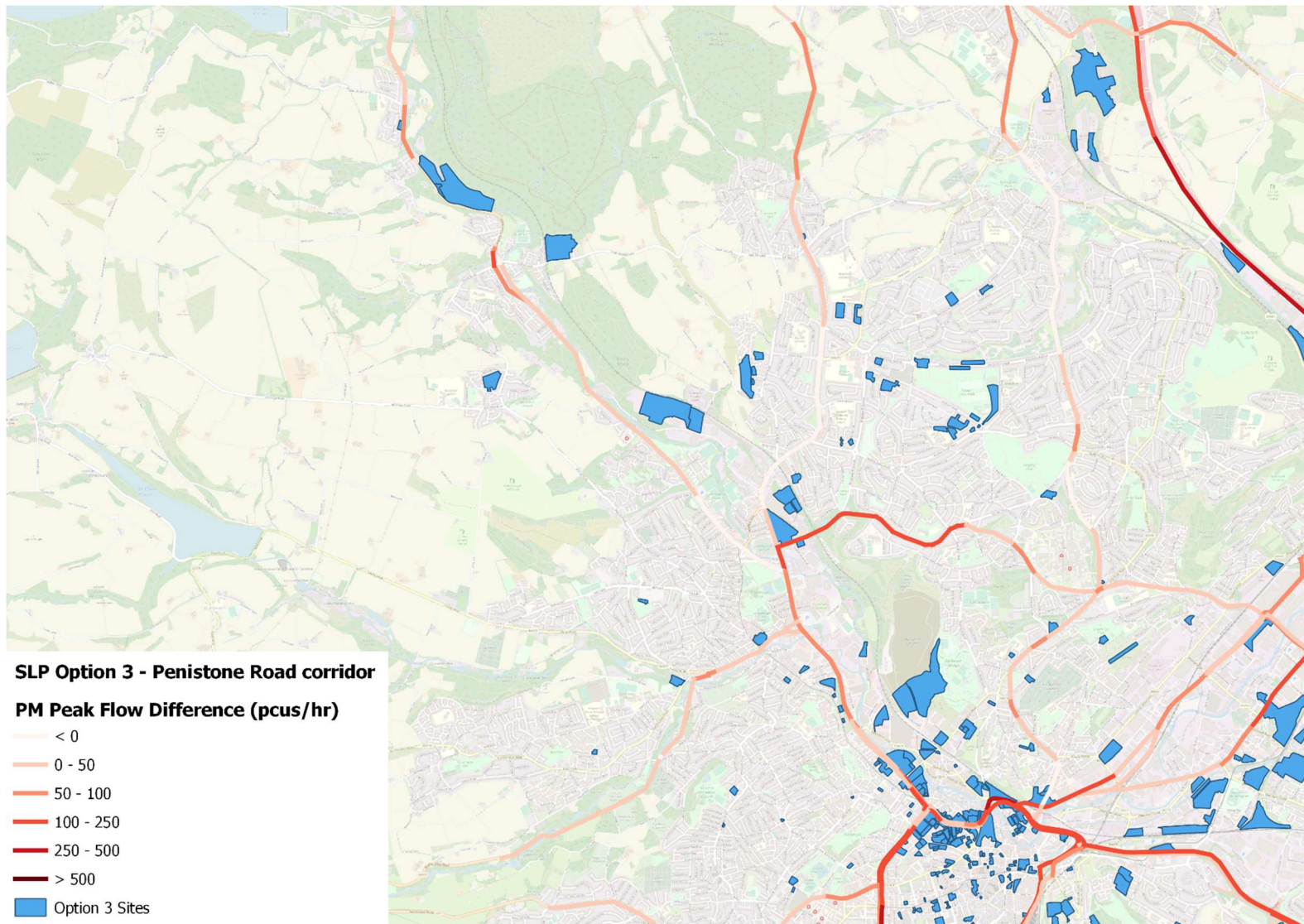
**Figure 6. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Don Valley Corridor**





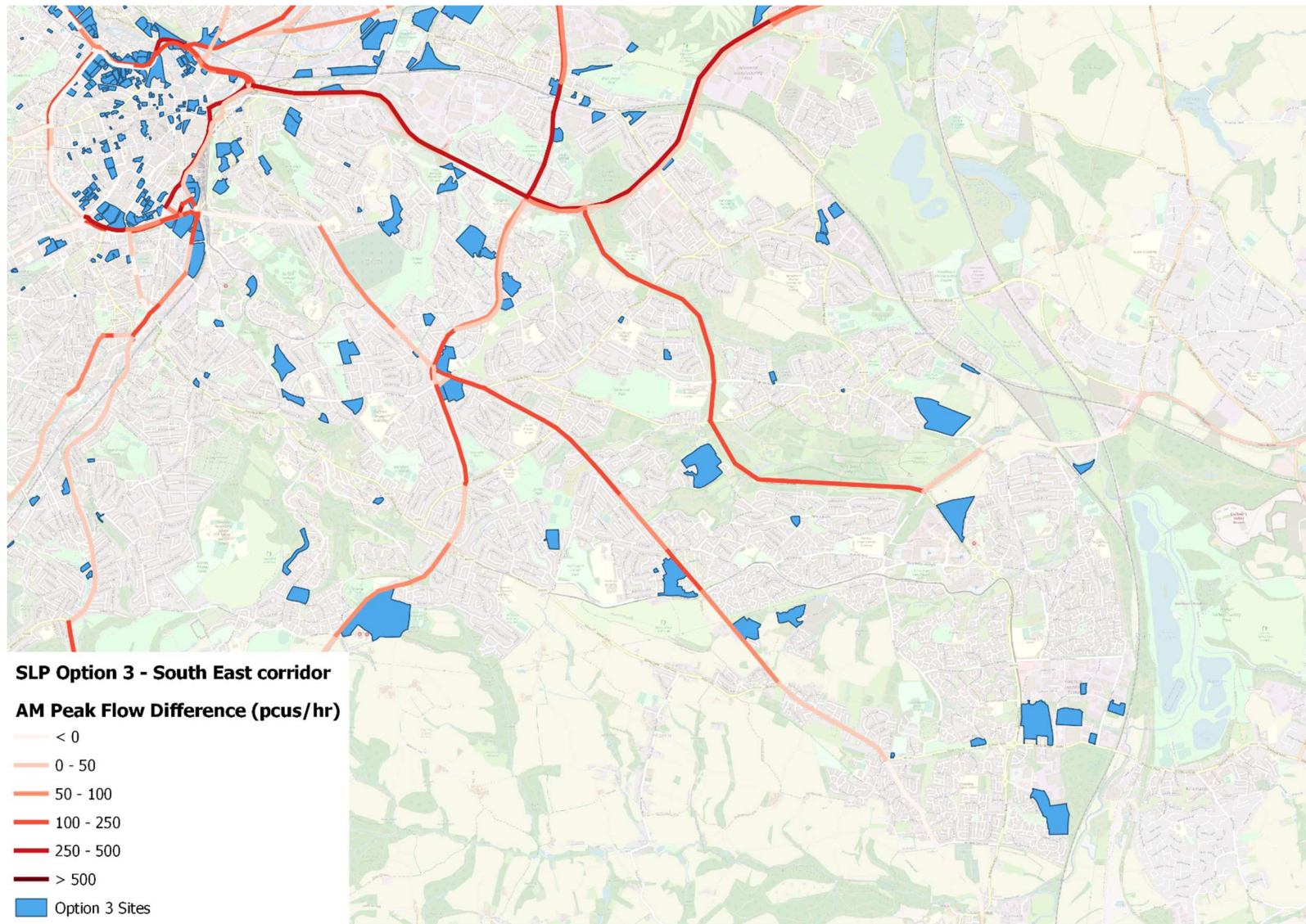
**Figure 7. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Penistone Road Corridor**





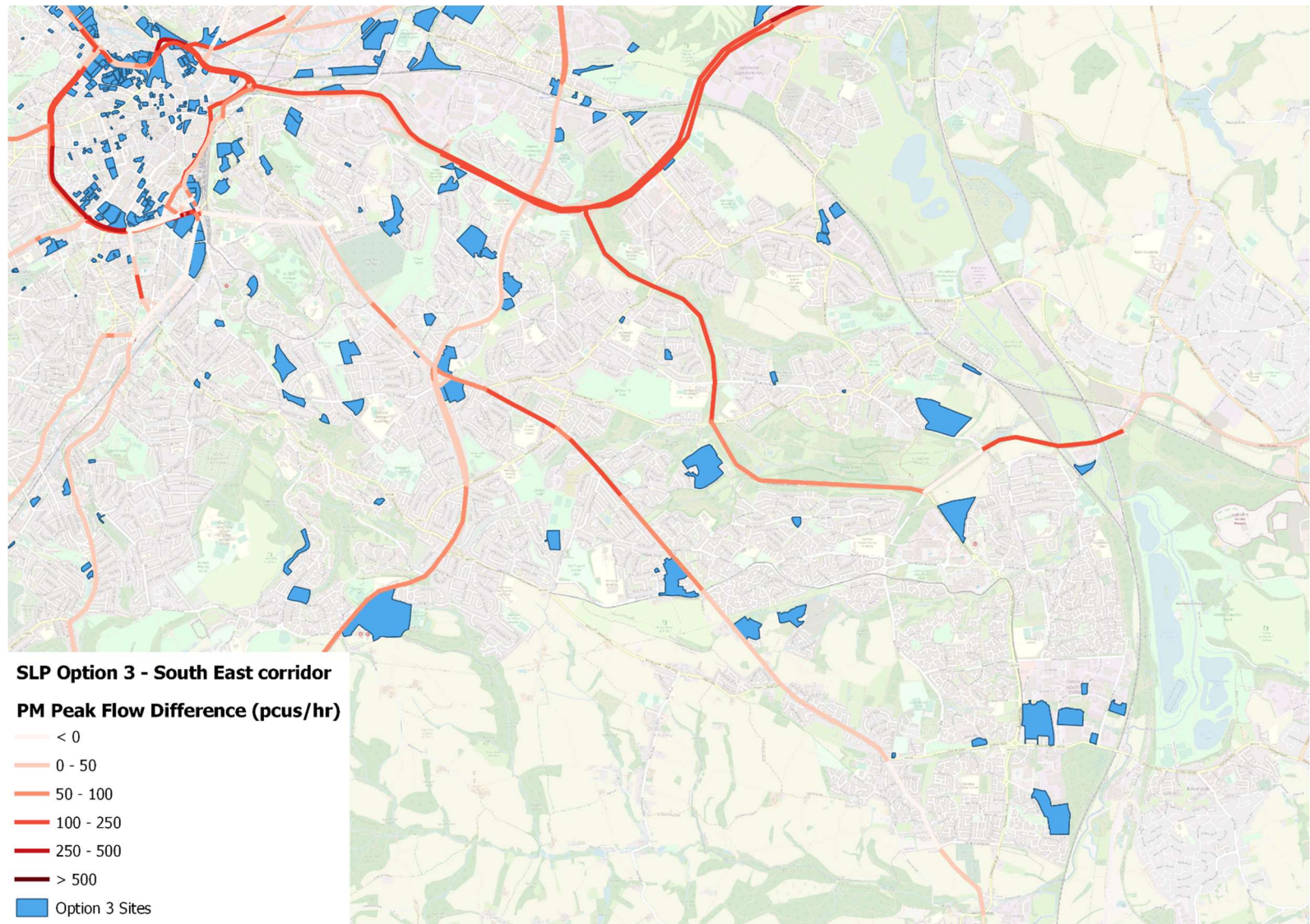
**Figure 8.** Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Penistone Road Corridor





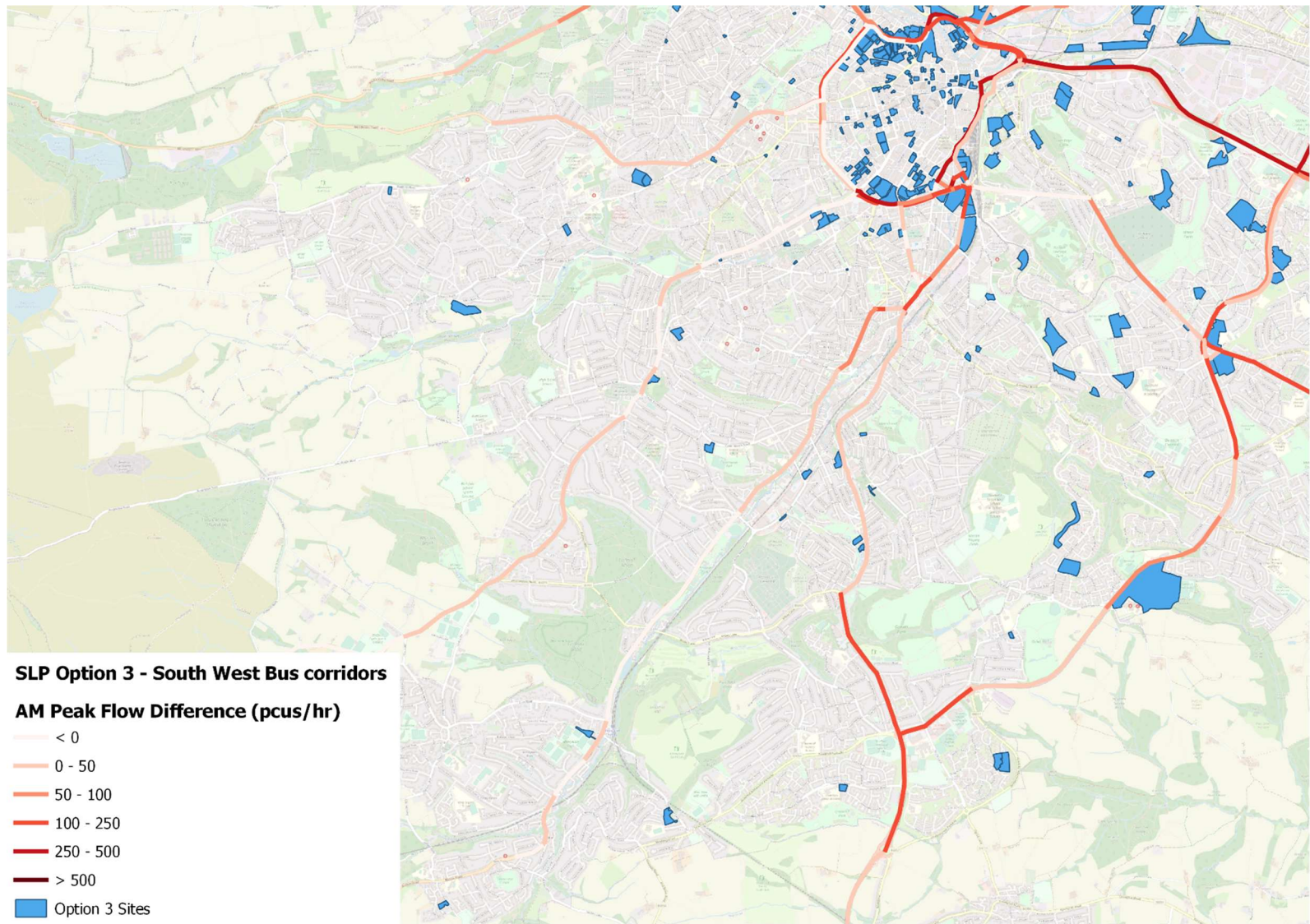
**Figure 9. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – South East Sheffield Corridor**





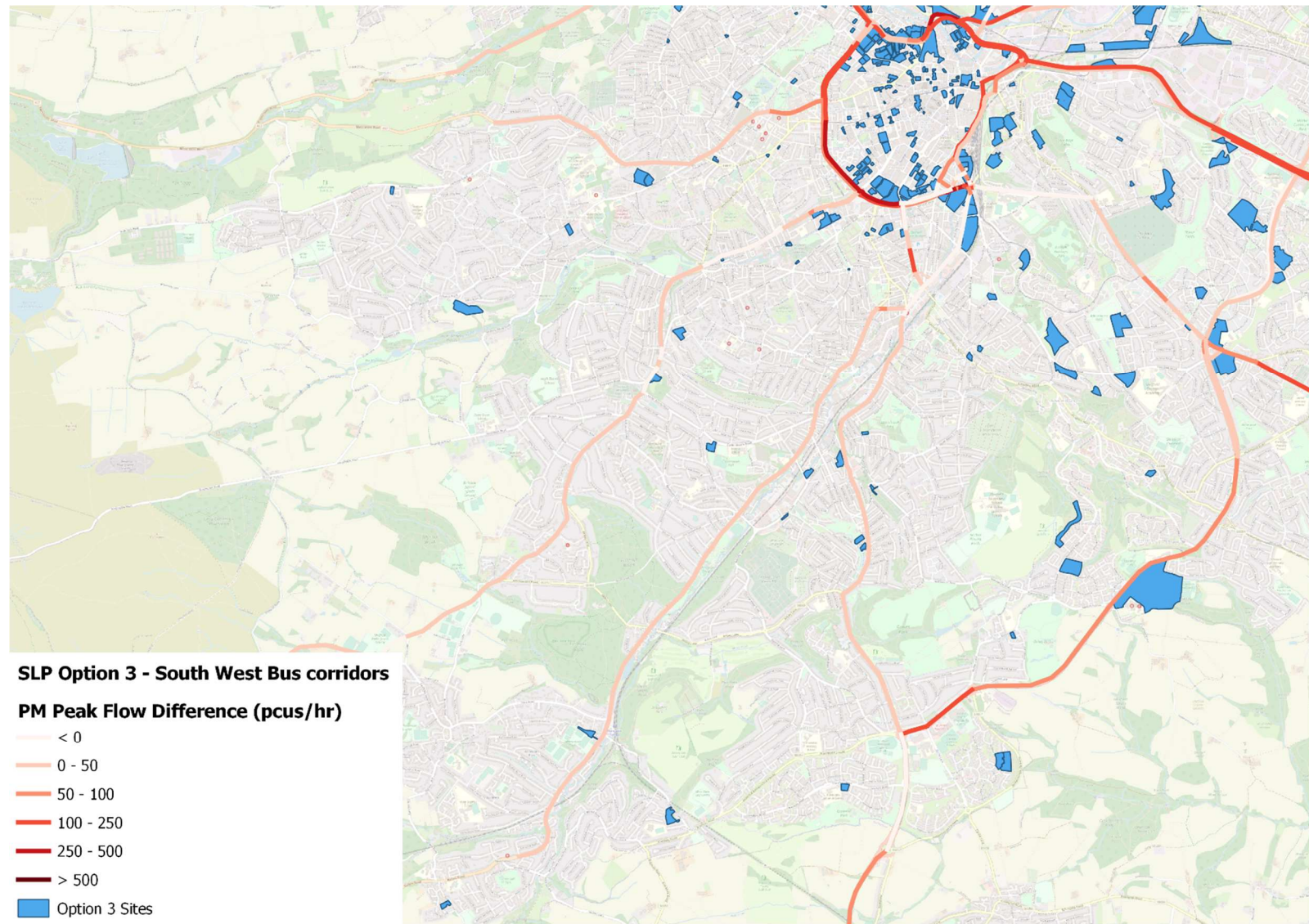
**Figure 10. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – South East Sheffield Corridor**





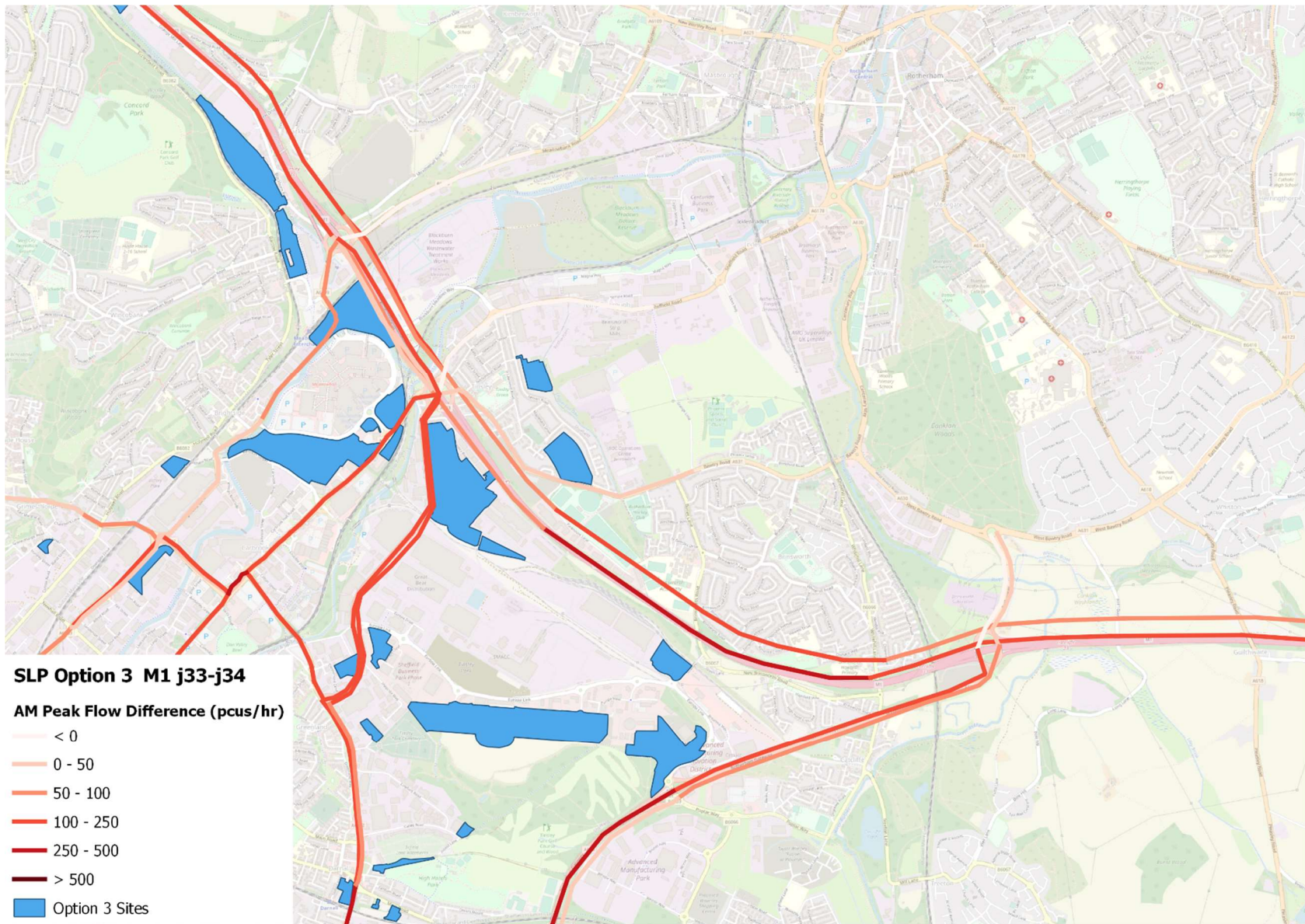
**Figure 11. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – South West Bus Corridors**





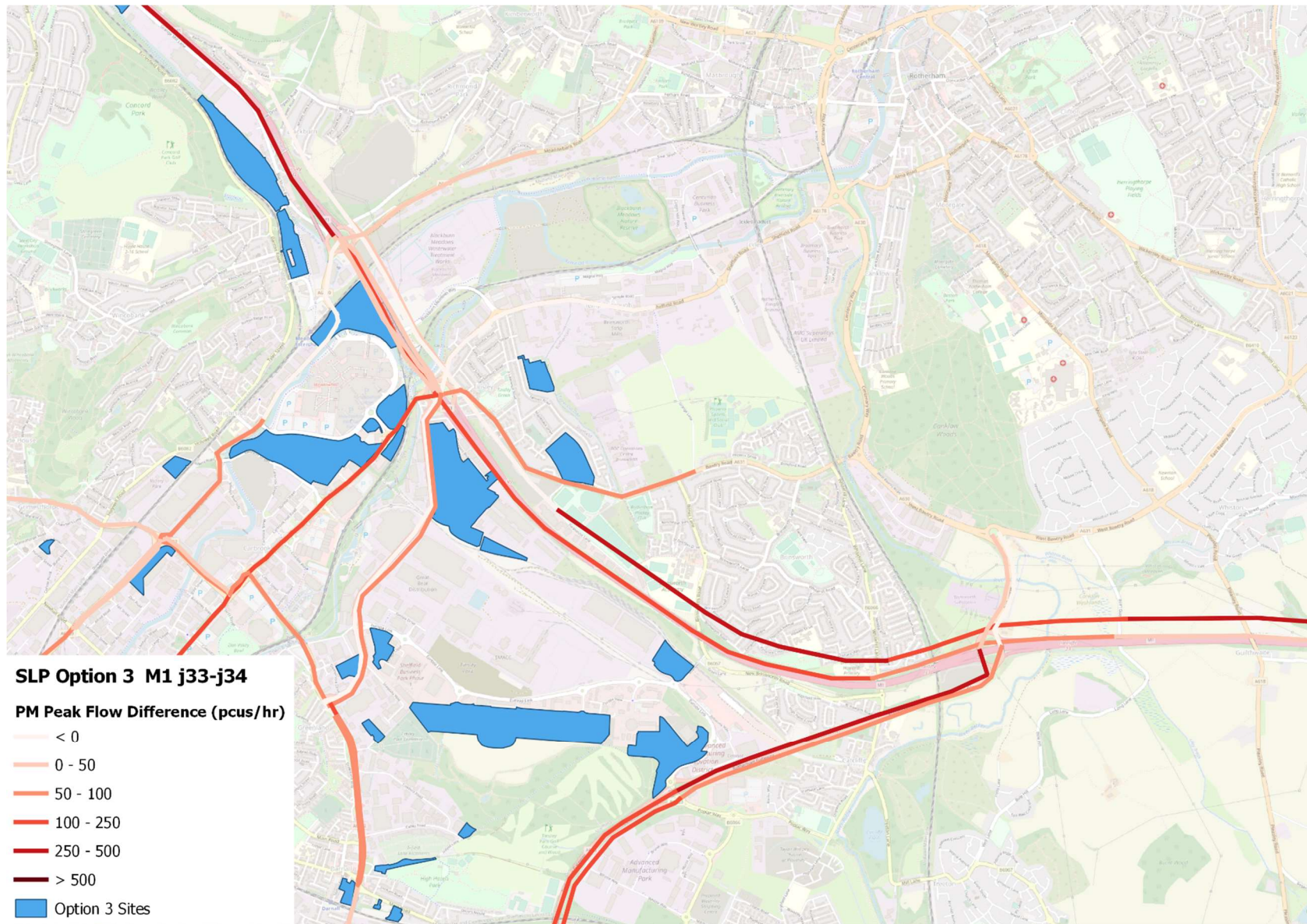
**Figure 12. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – South West Bus Corridors**





**Figure 13. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – SRN**

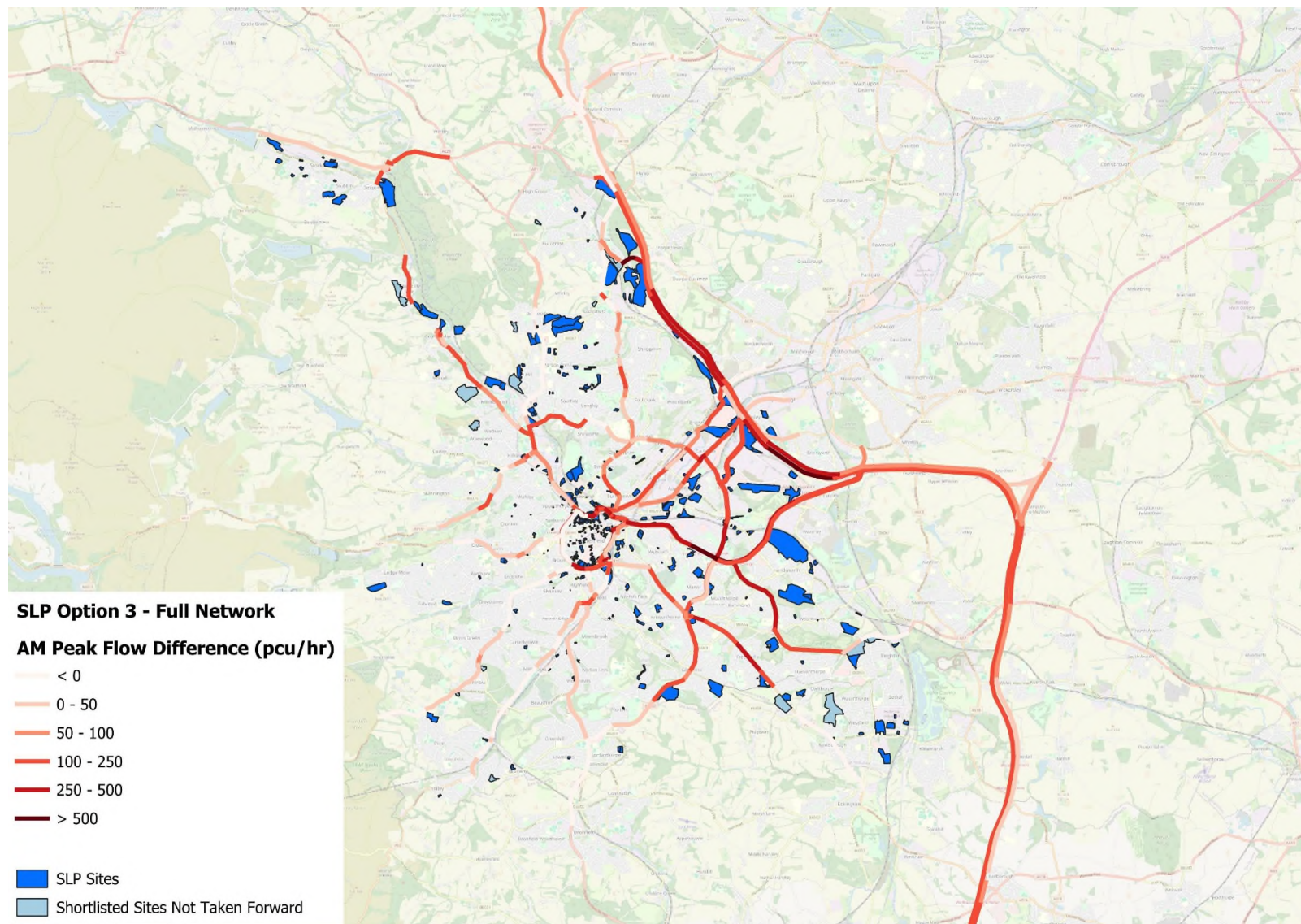




**Figure 14. Forecast NET Changes in 2029 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – SRN**

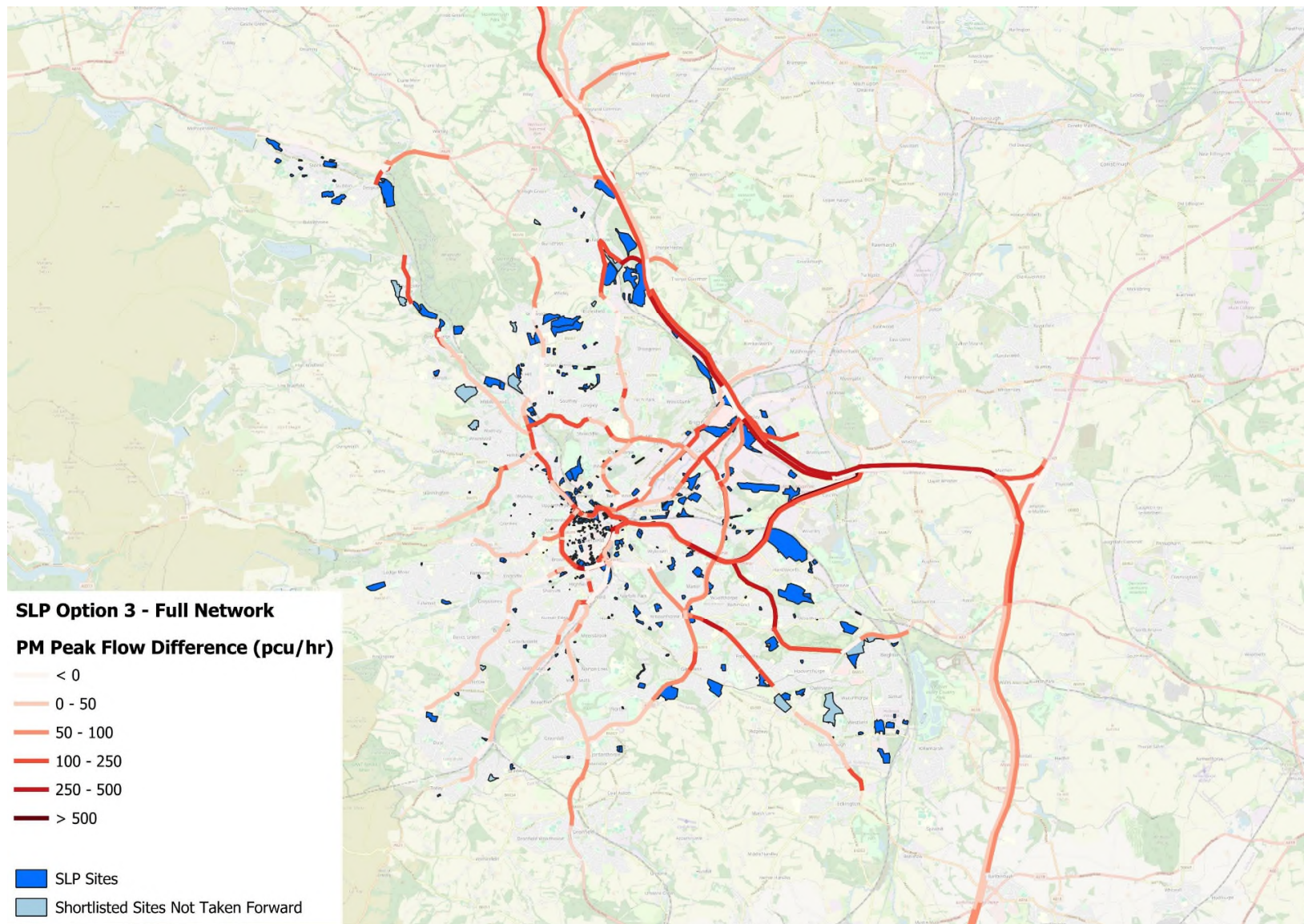
## **Appendix C 2039 Forecast Model Flows**





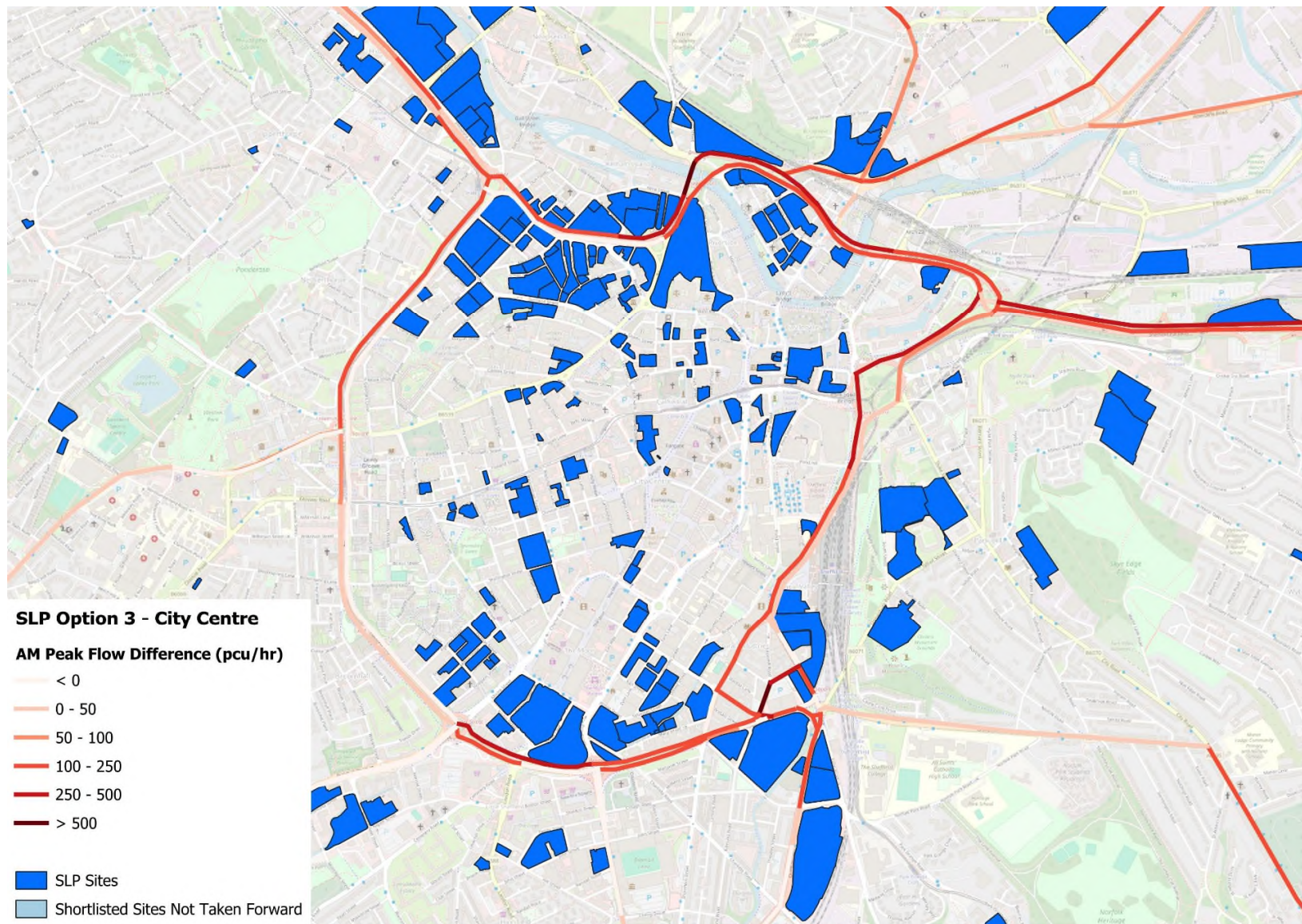
**Figure 1. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Full Model**





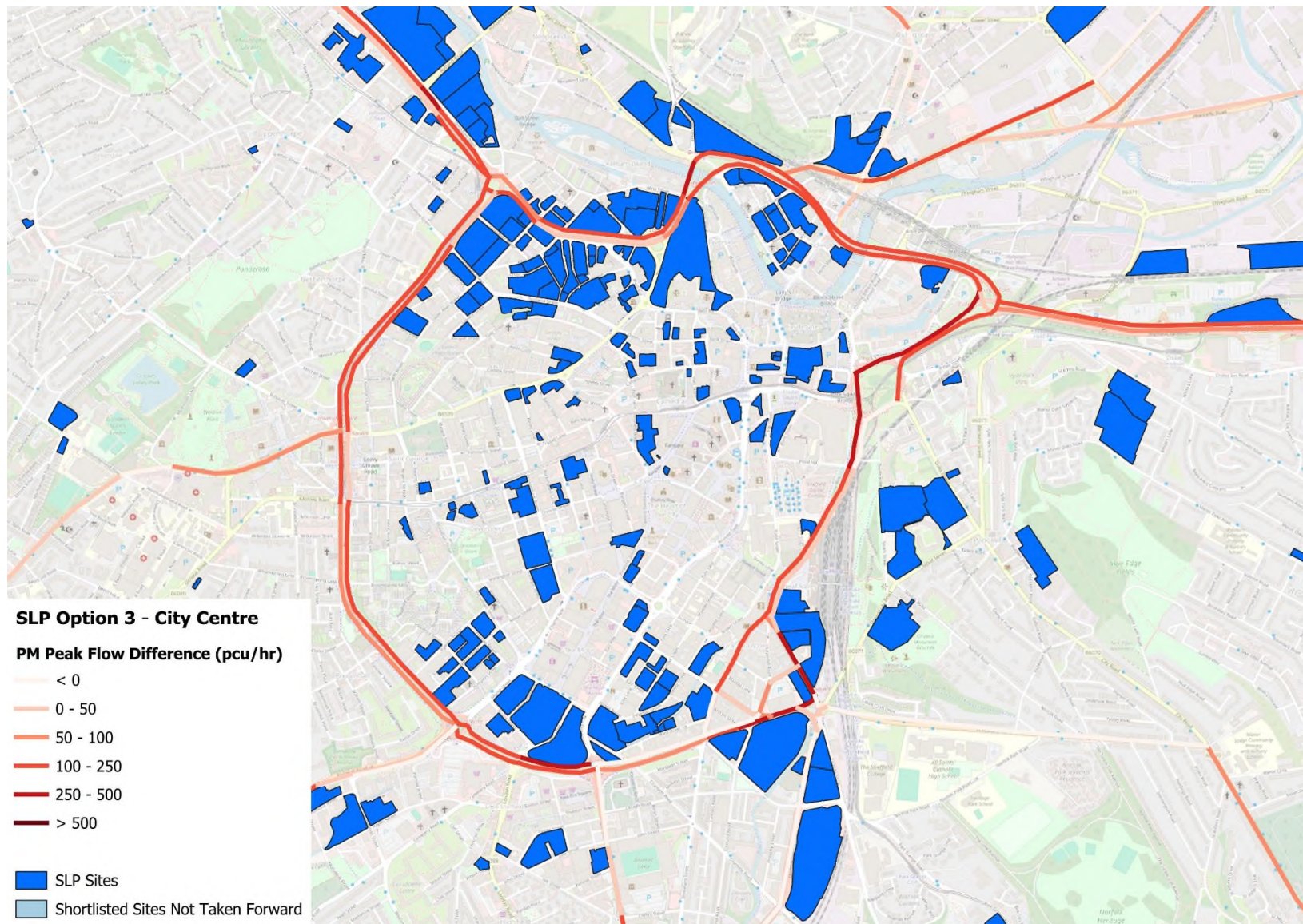
**Figure 2. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Full Model**





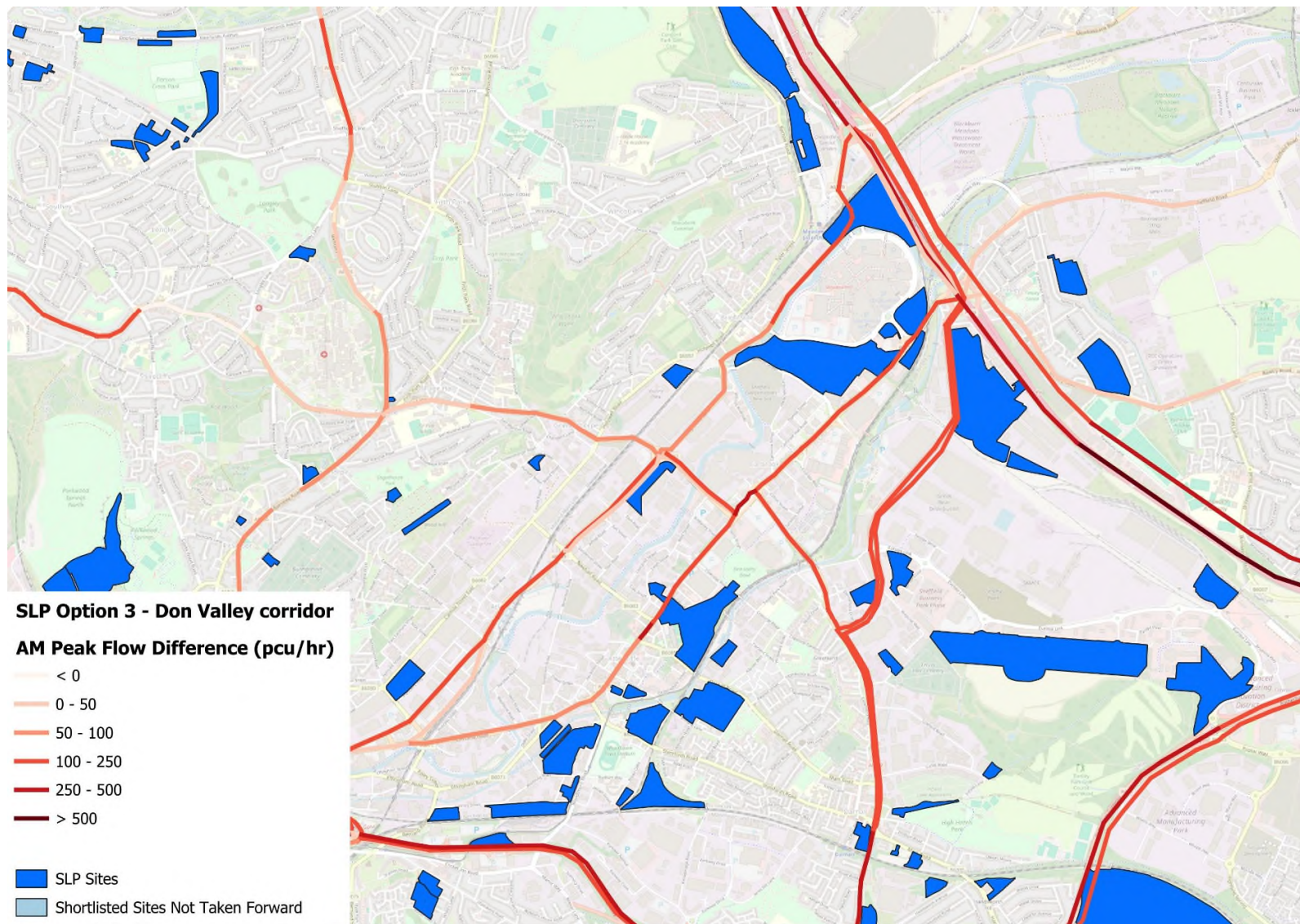
**Figure 3. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Sheffield City Centre**





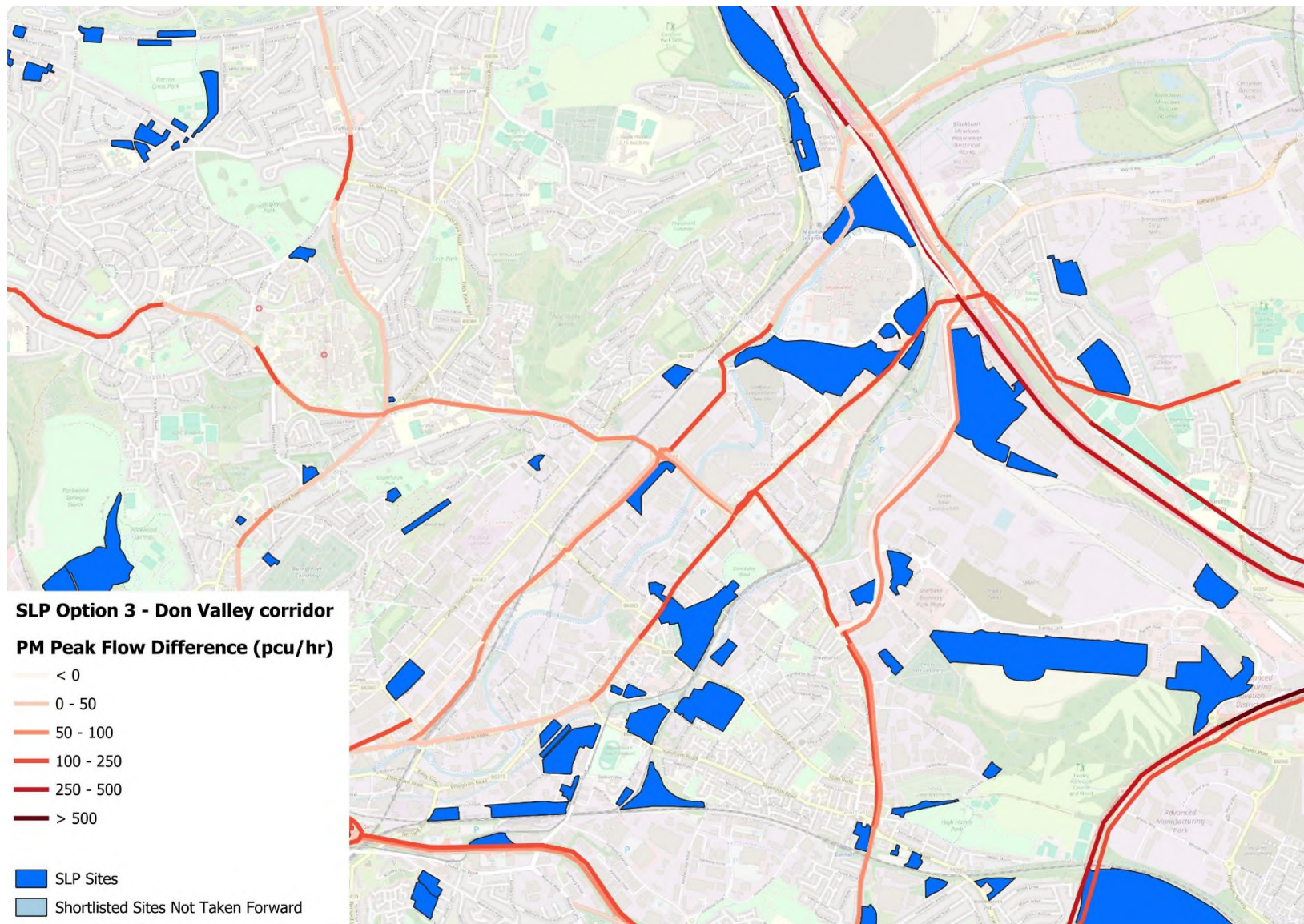
**Figure 4. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Sheffield City Centre**





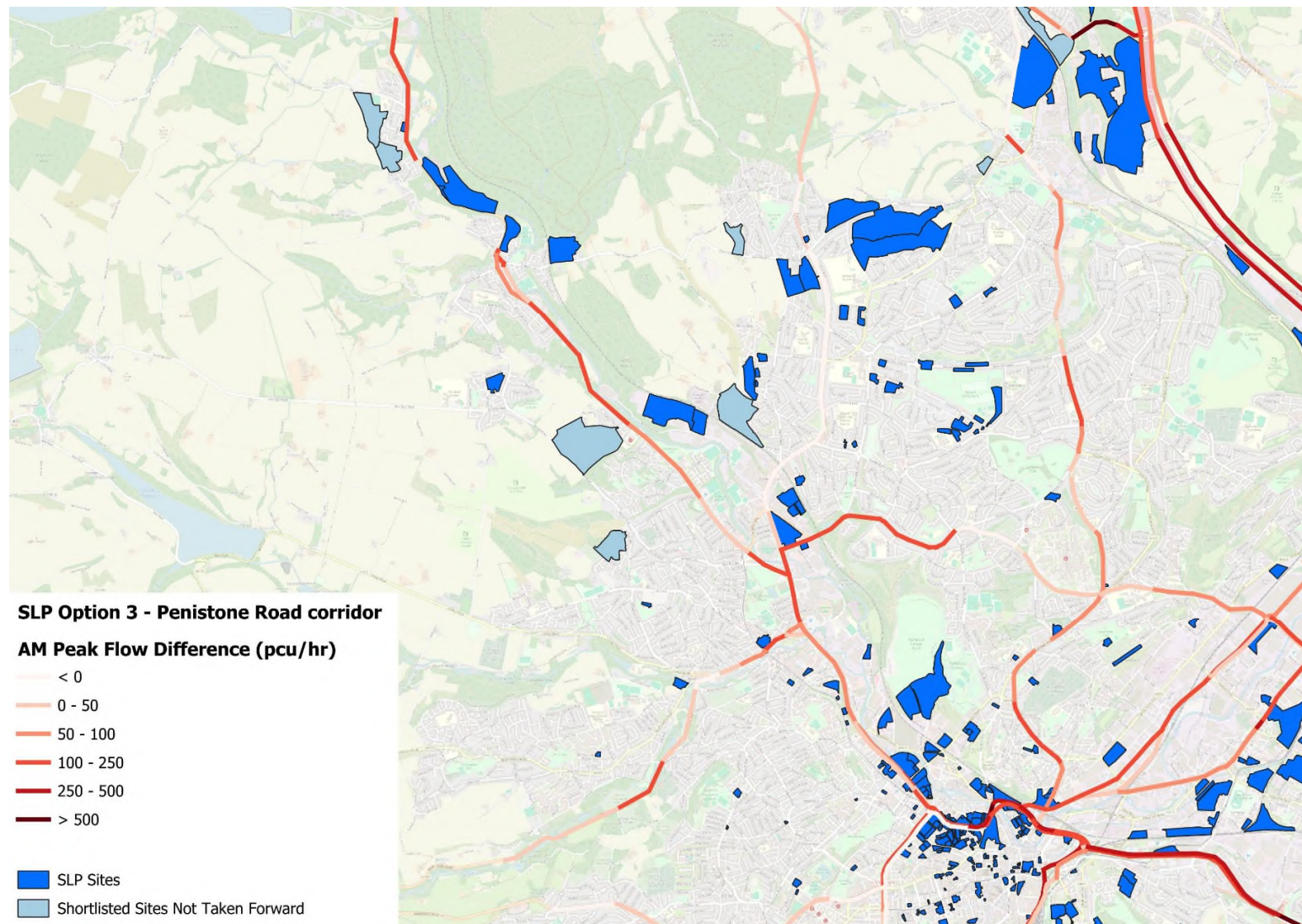
**Figure 5. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Don Valley Corridor**





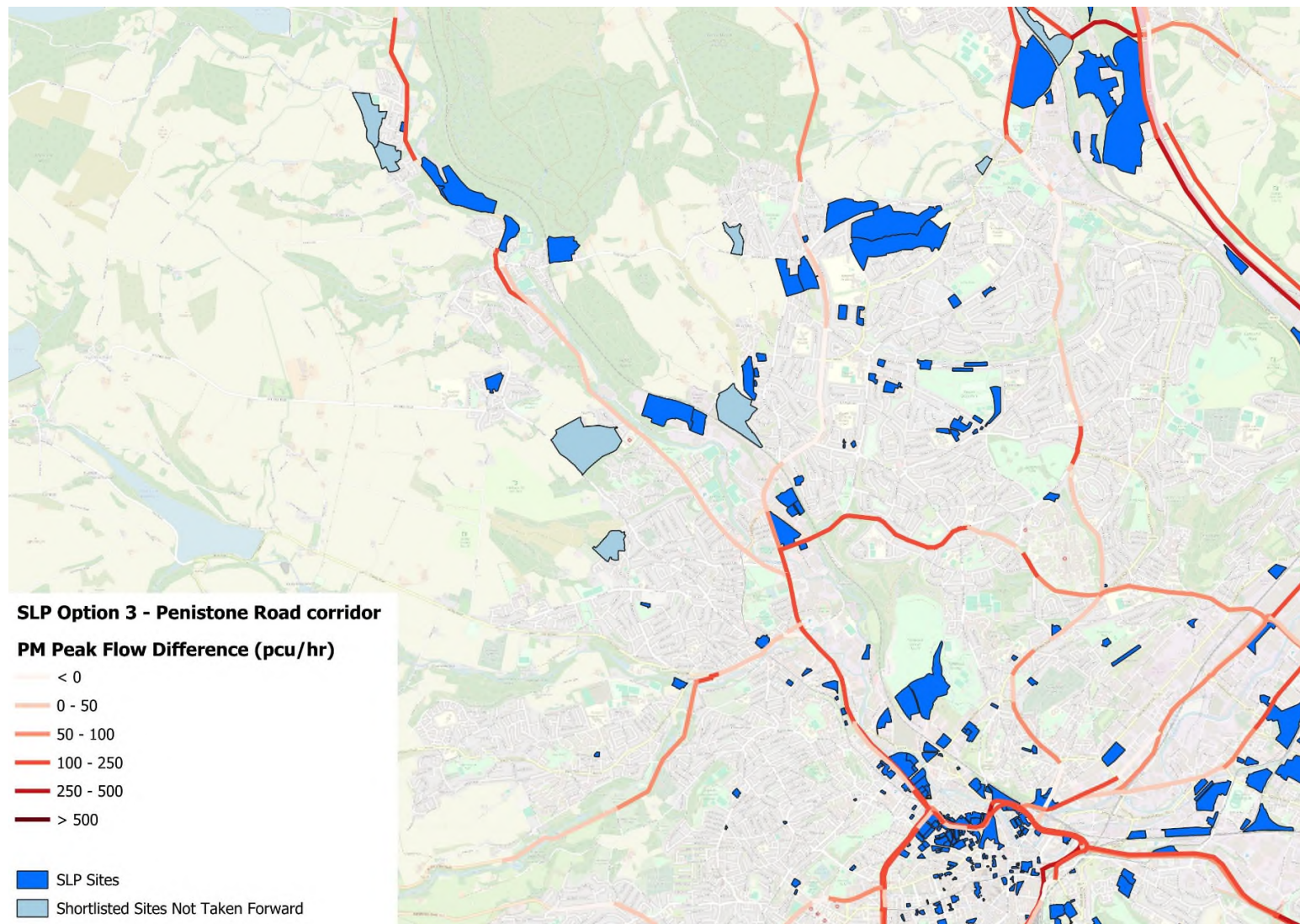
**Figure 6. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Don Valley Corridor**





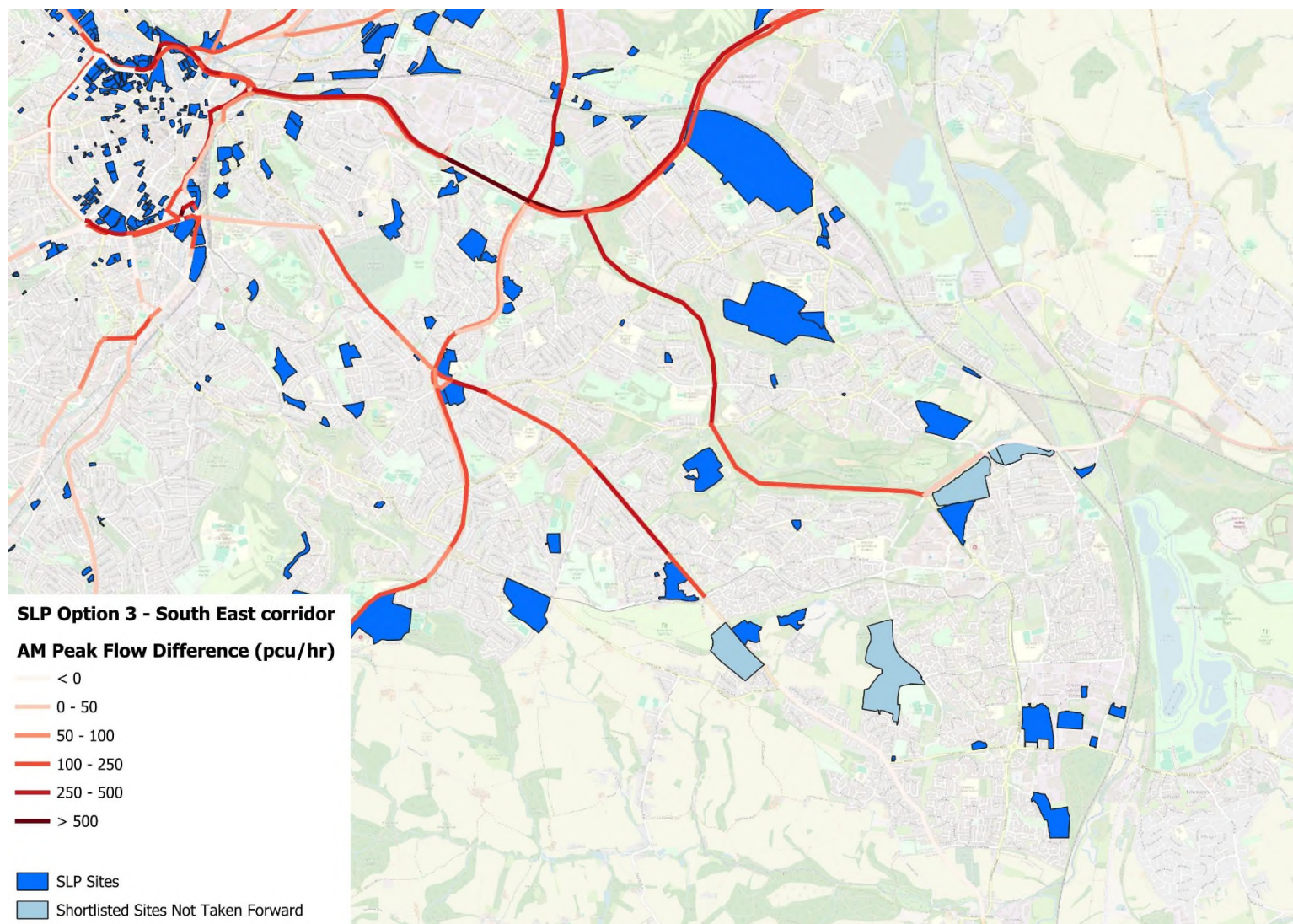
**Figure 7. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – Penistone Road Corridor**





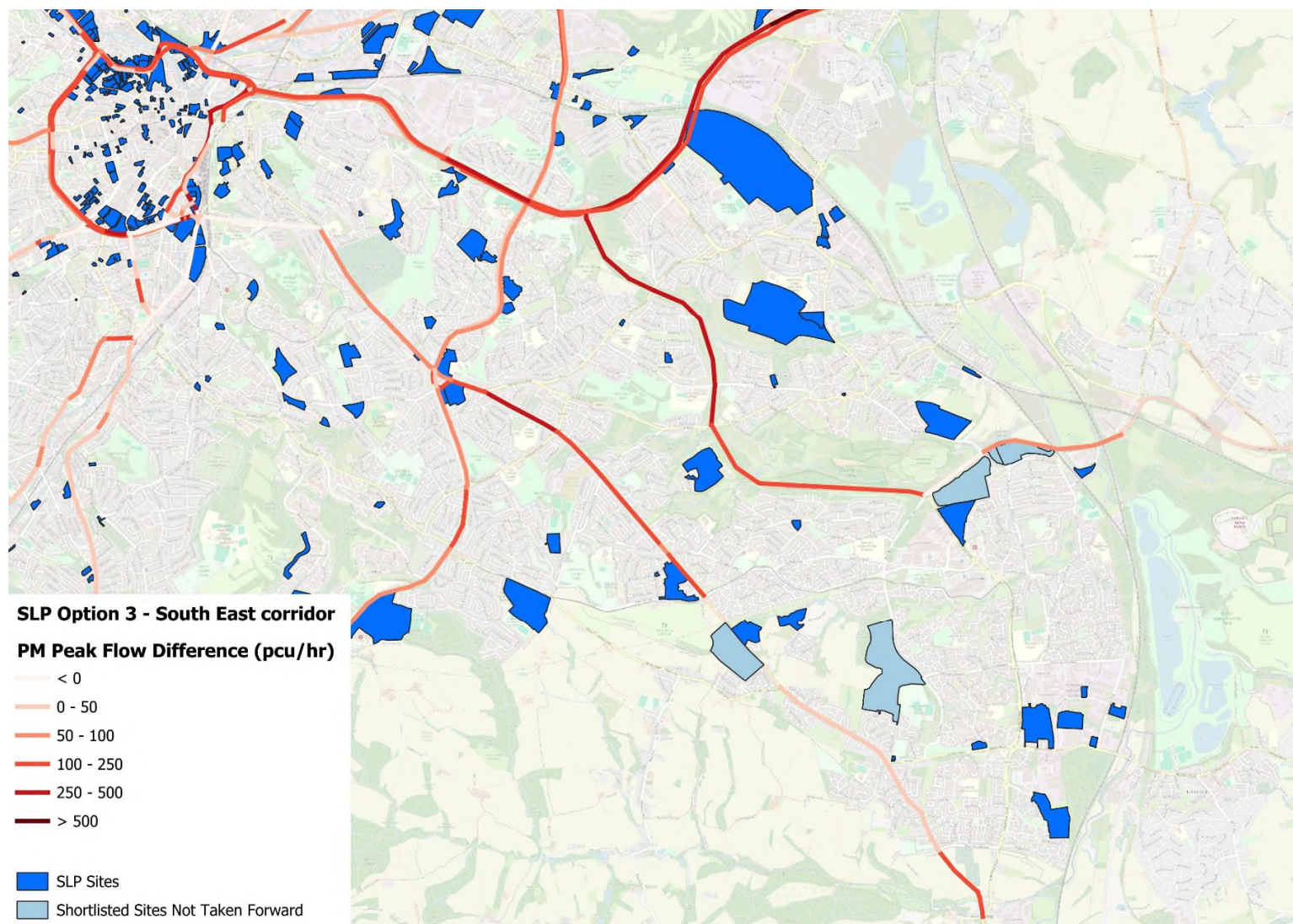
**Figure 8. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – Penistone Road Corridor**





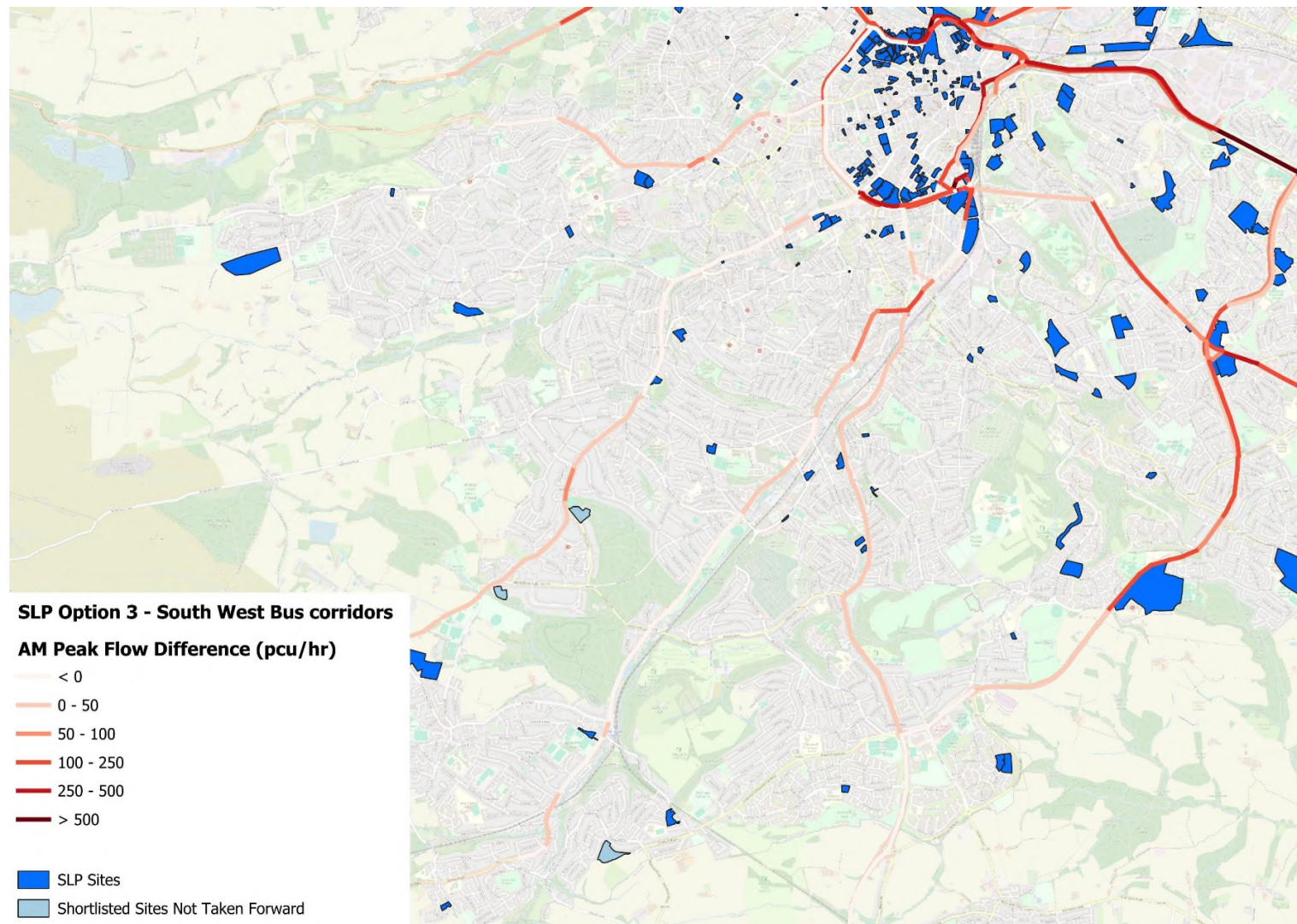
**Figure 9. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – South East Sheffield Corridor**





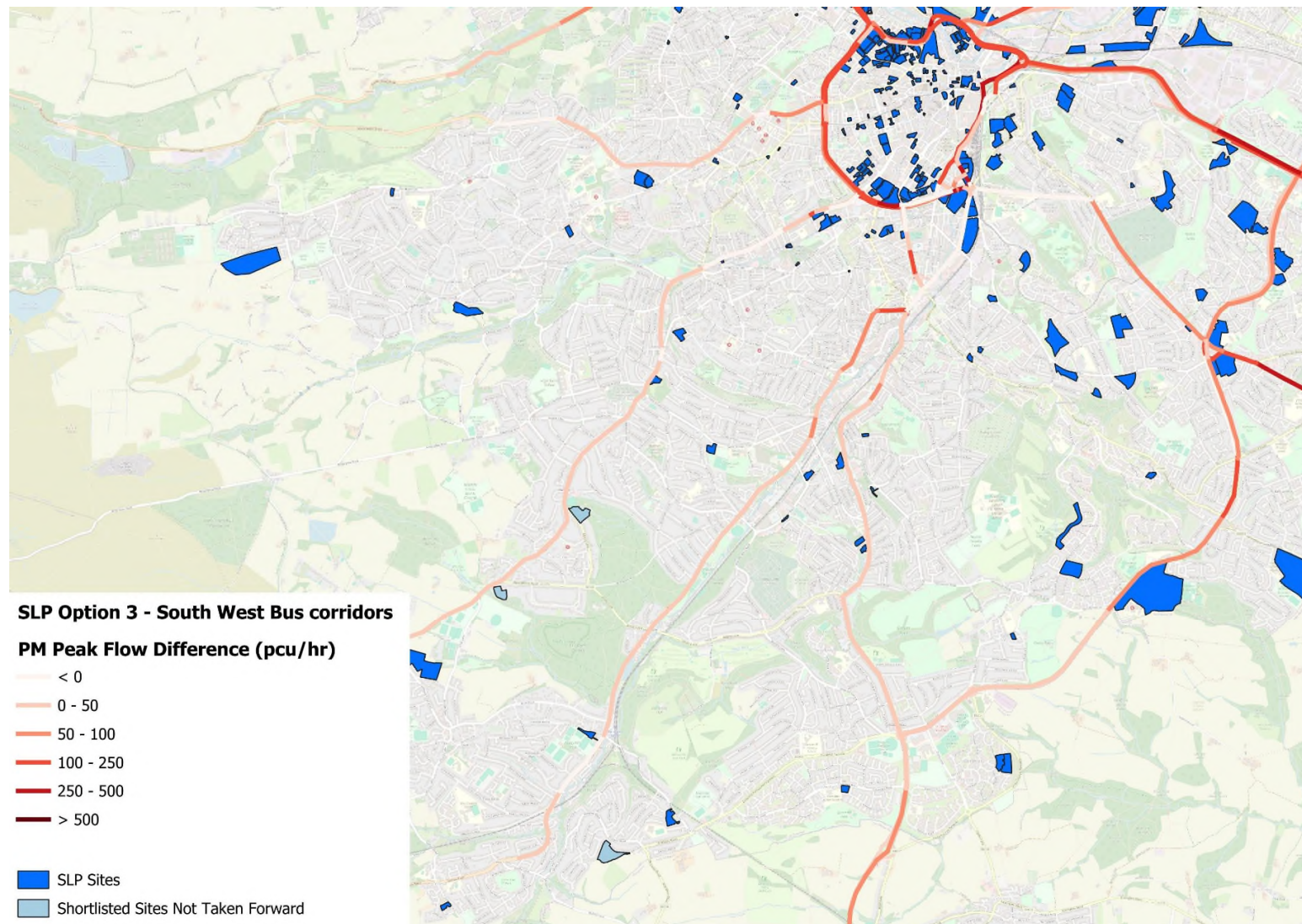
**Figure 10. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – South East Sheffield Corridor**





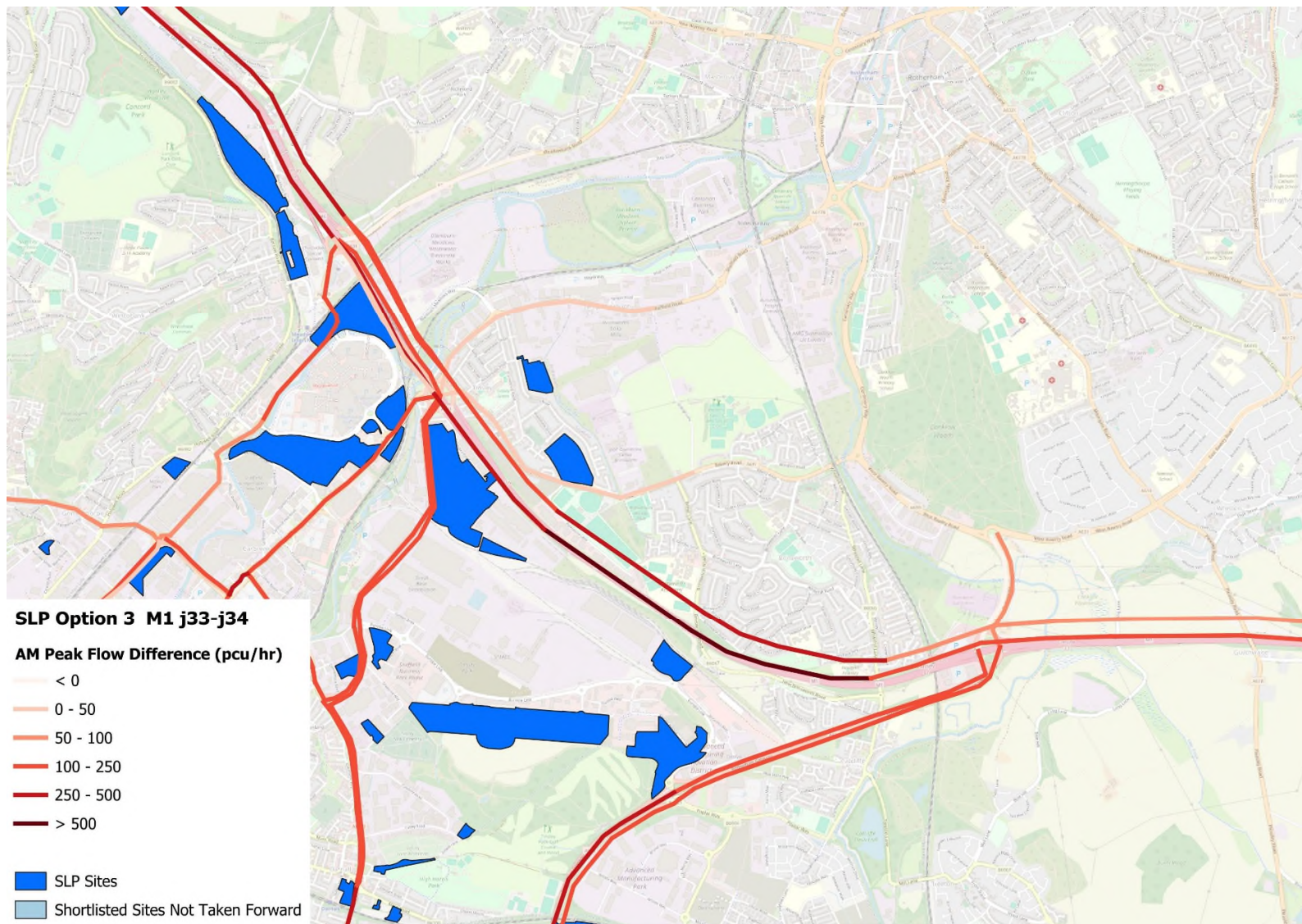
**Figure 11. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – South West Bus Corridors**





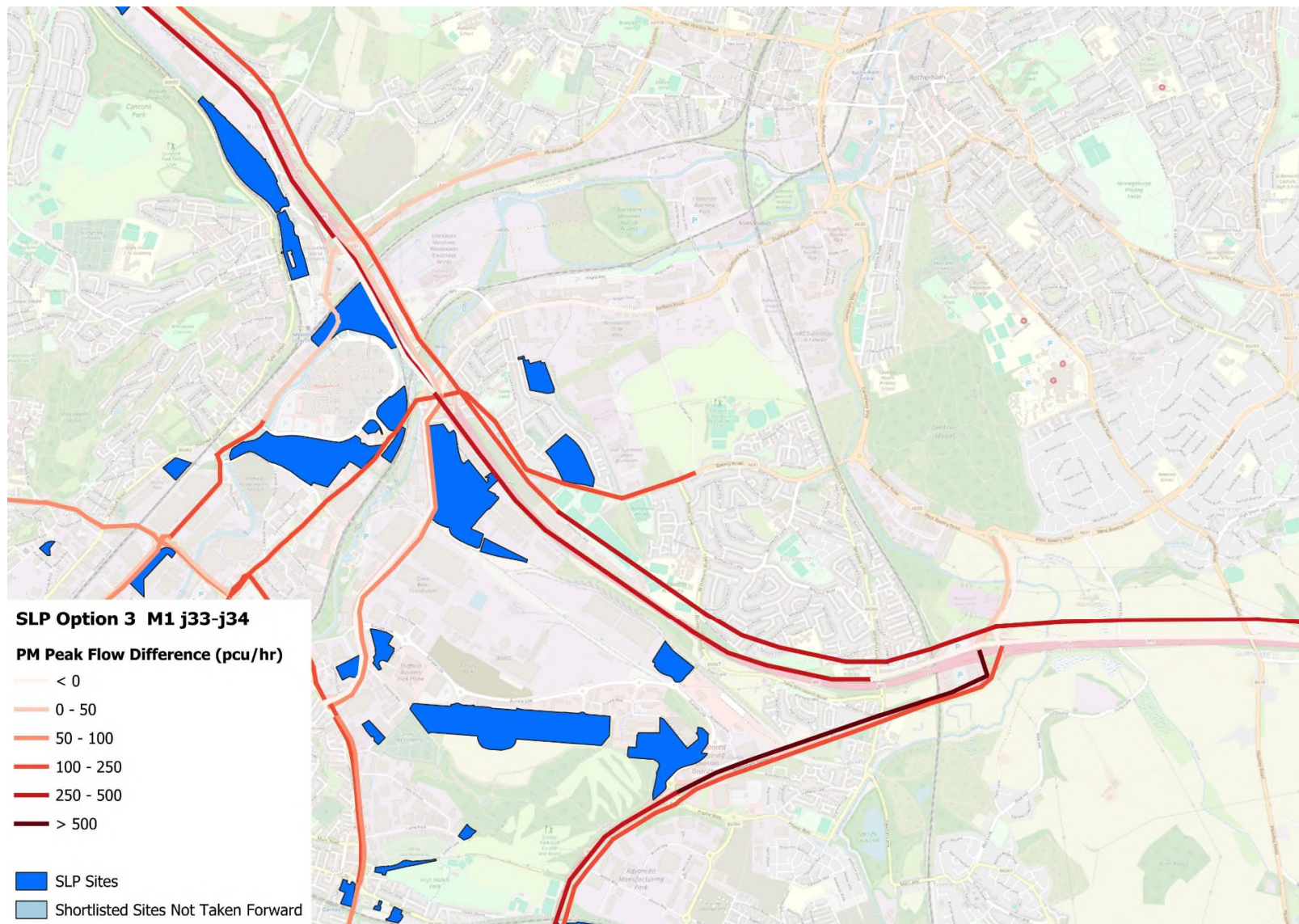
**Figure 12. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – South West Bus Corridors**





**Figure 13. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Morning Peak Hour – SRN**

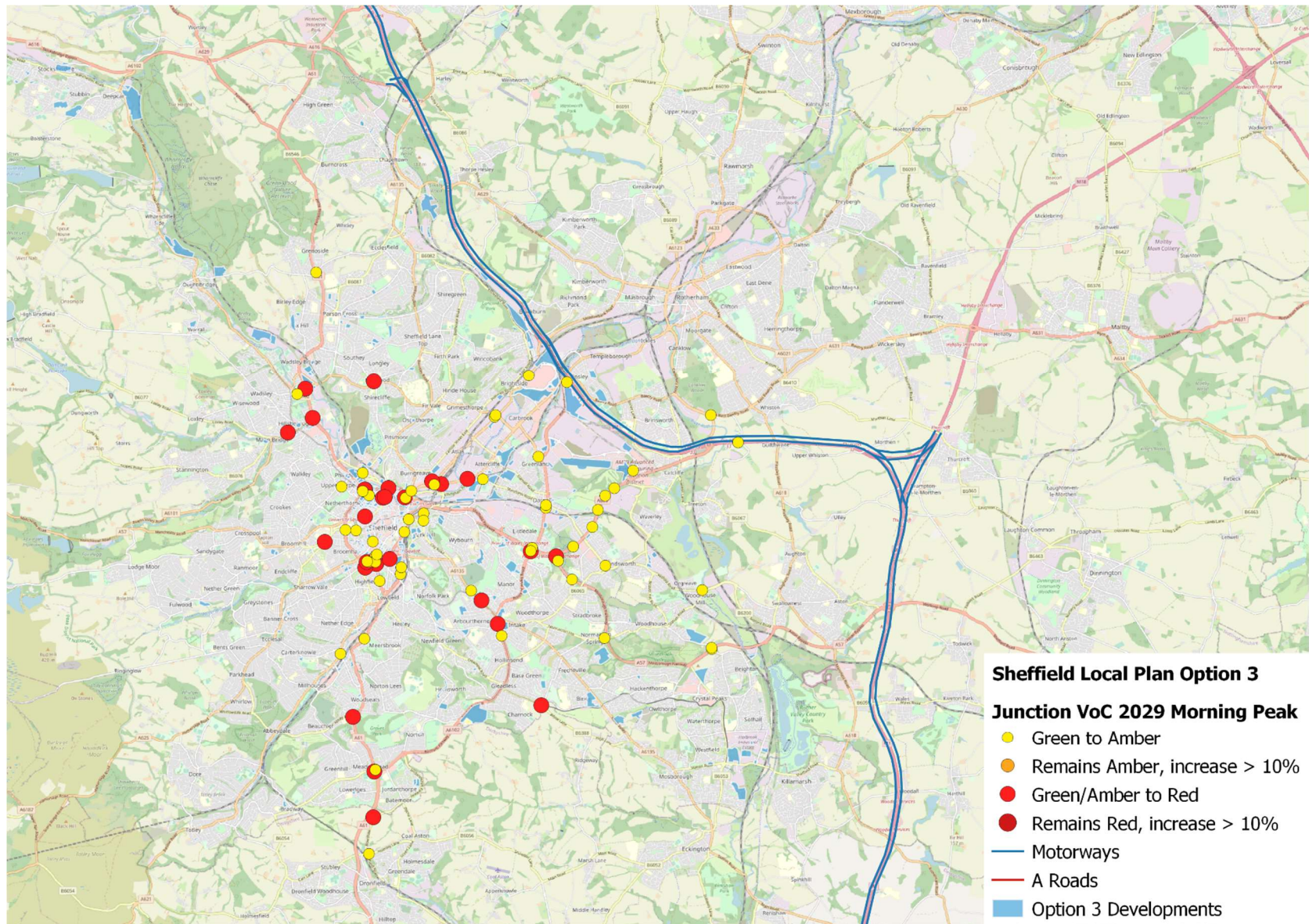




**Figure 14. Forecast NET Changes in 2039 Traffic Flows due to Sheffield Local Plan – Evening Peak Hour – SRN**

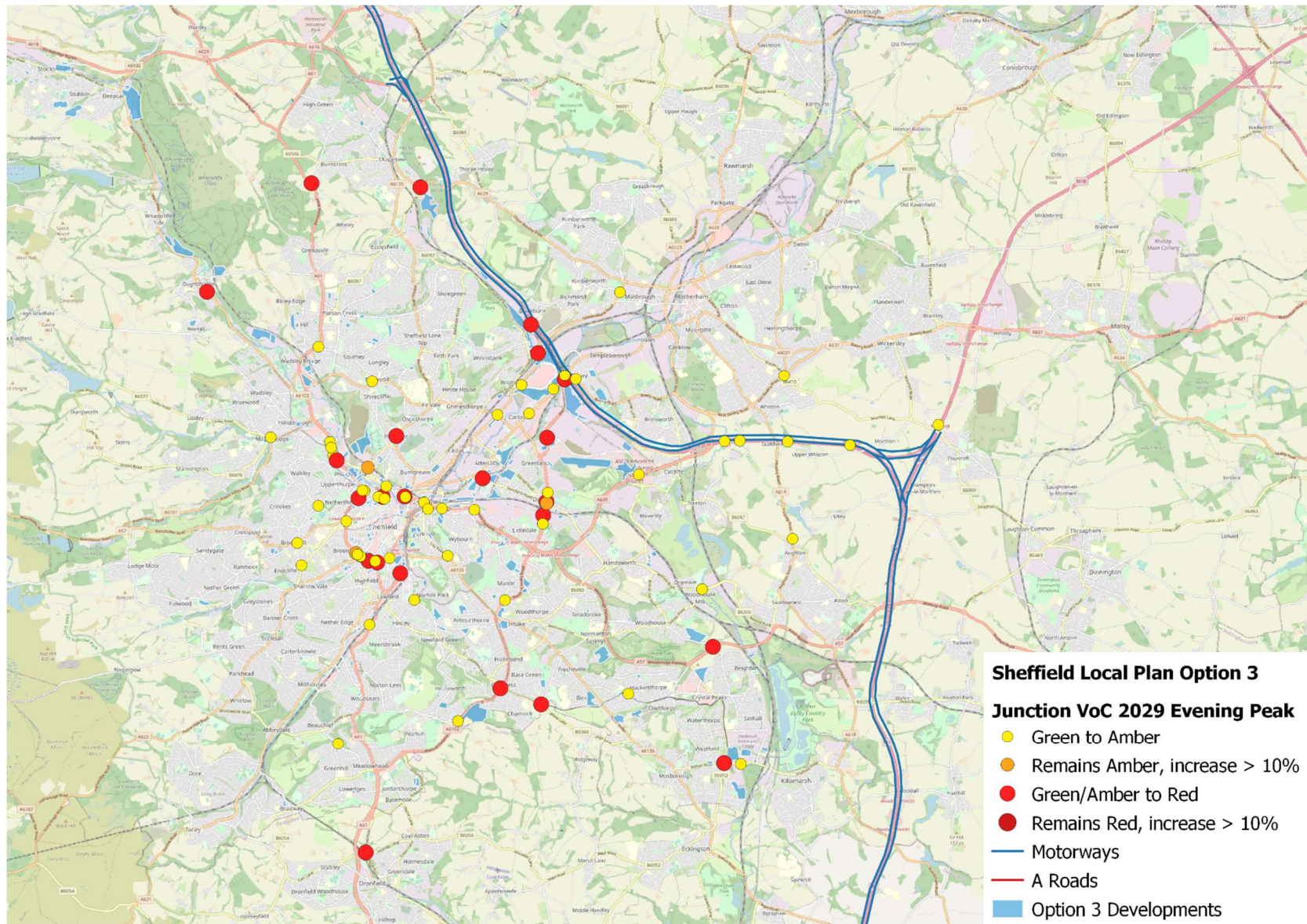
## **Appendix D 2029 Junction VoC Plots**





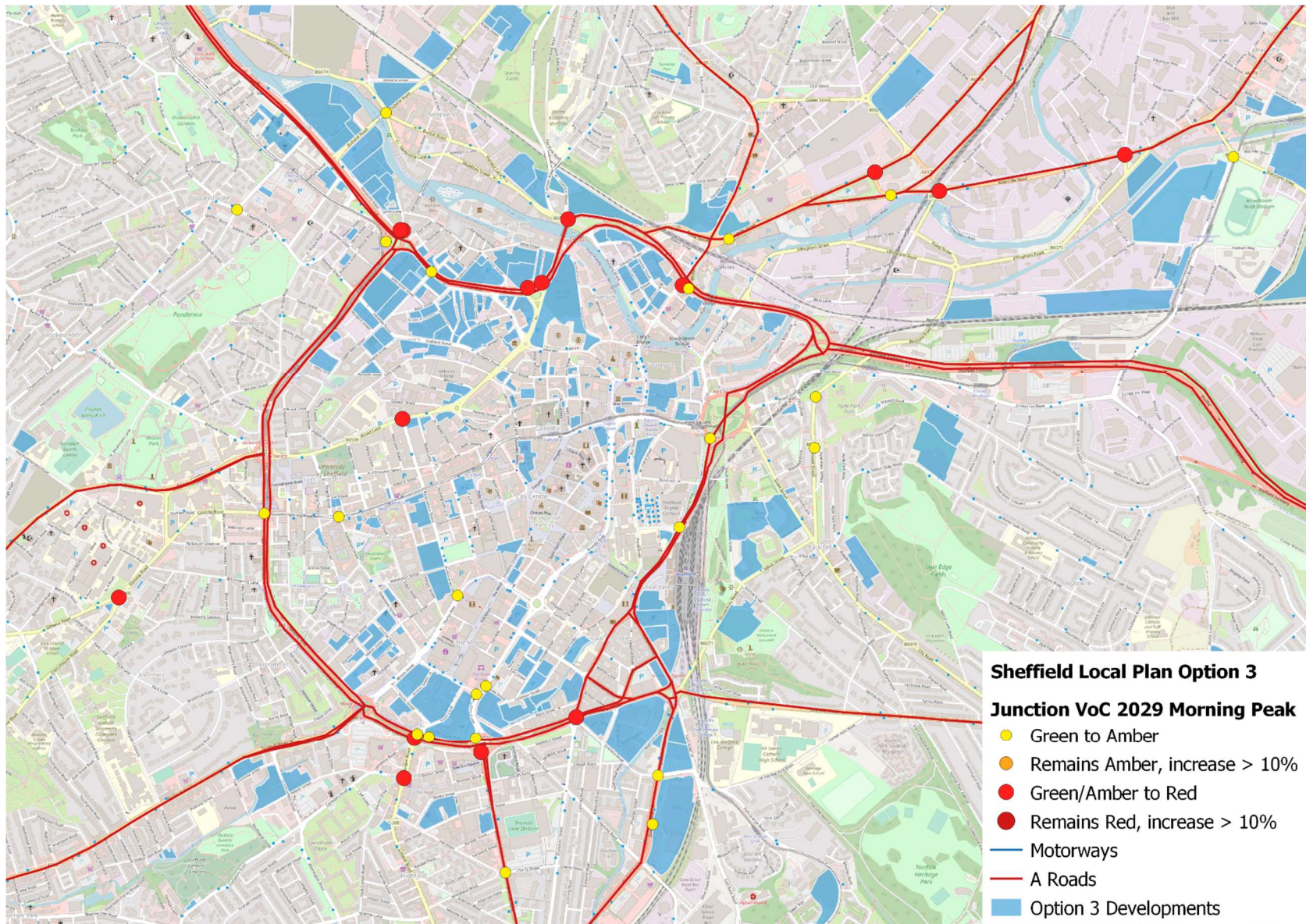
**Figure 1. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Morning Peak Hour – Full Network**





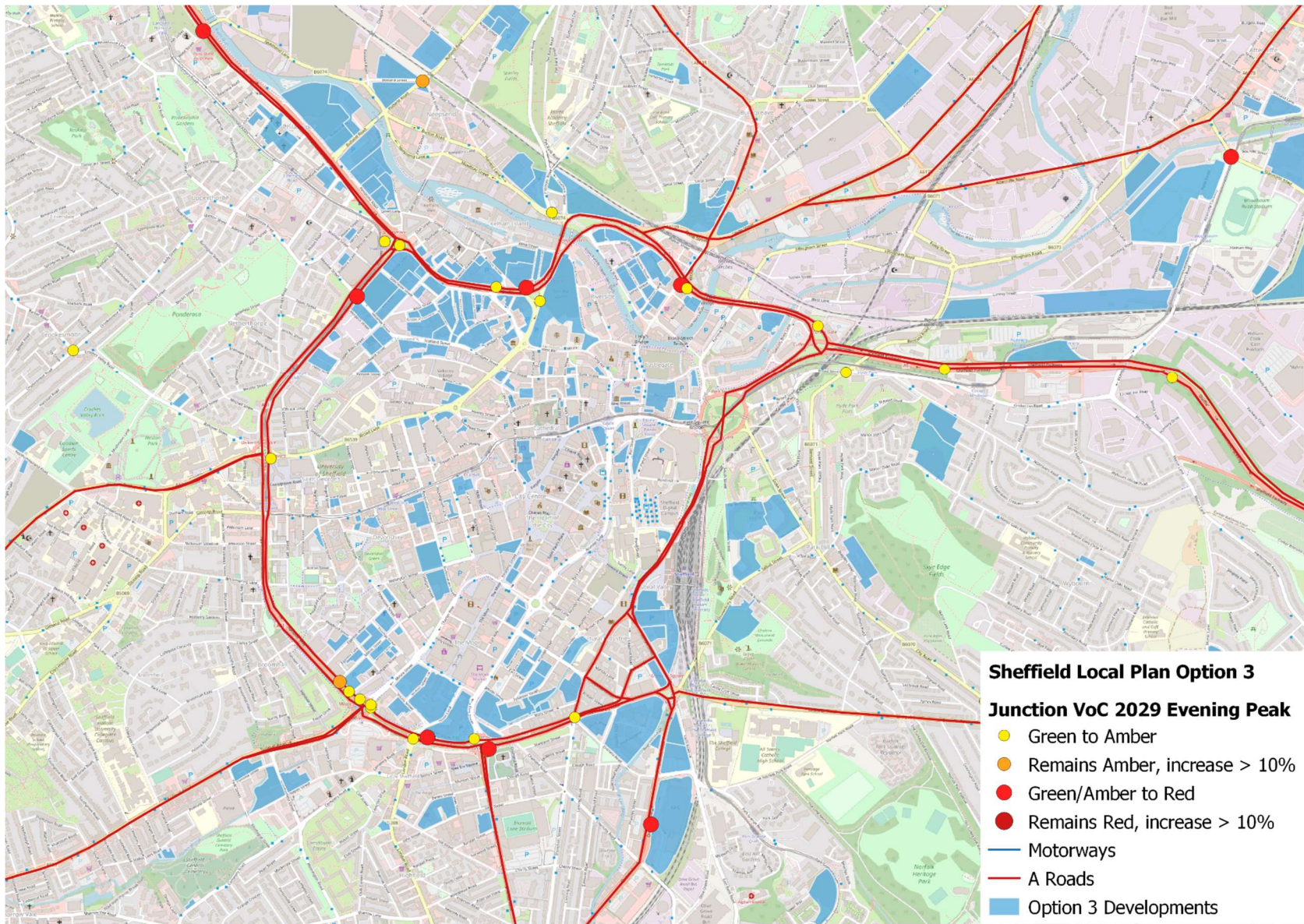
**Figure 2. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Evening Peak Hour – Full Network**





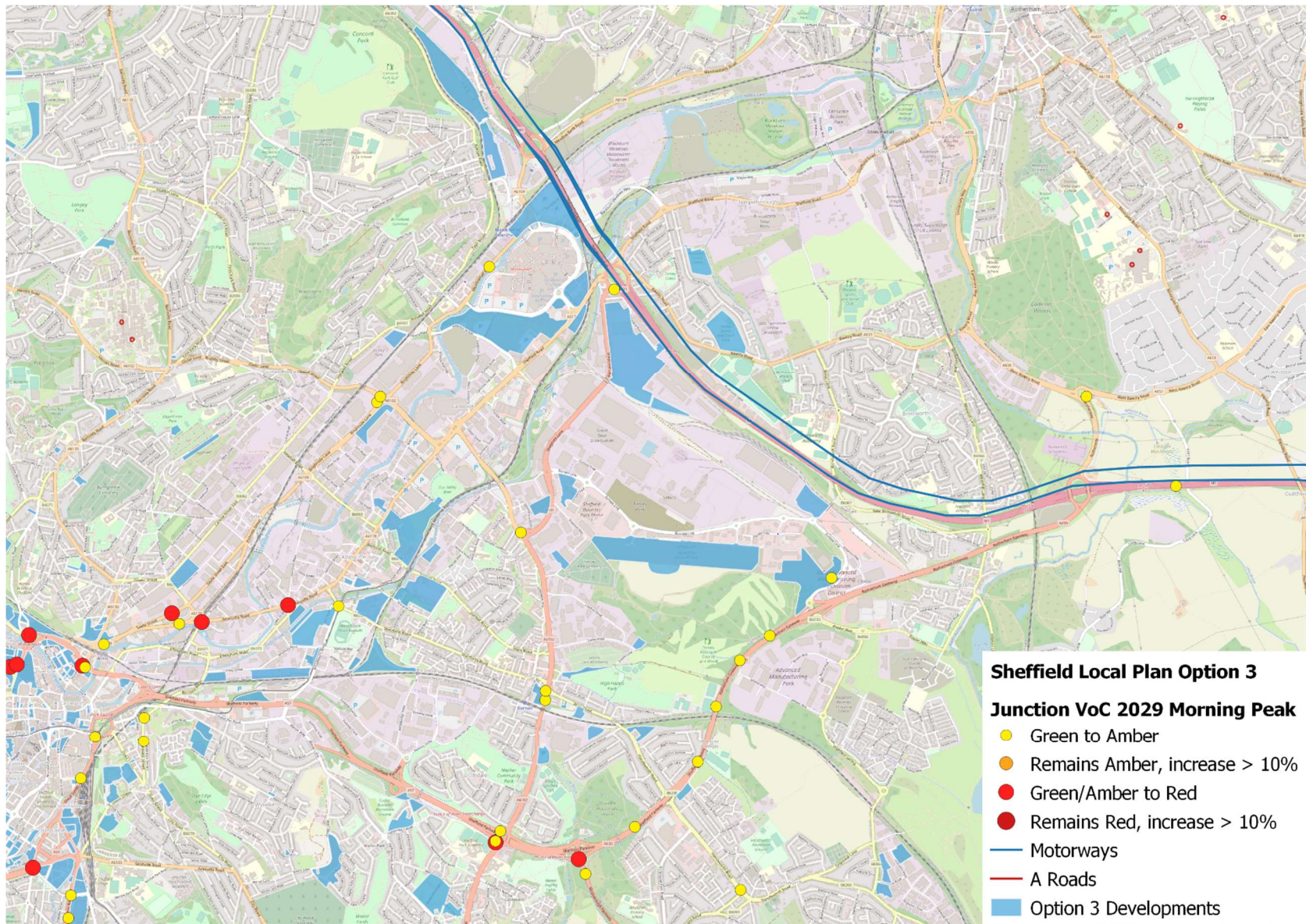
**Figure 3. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Morning Peak Hour – Sheffield City Centre**





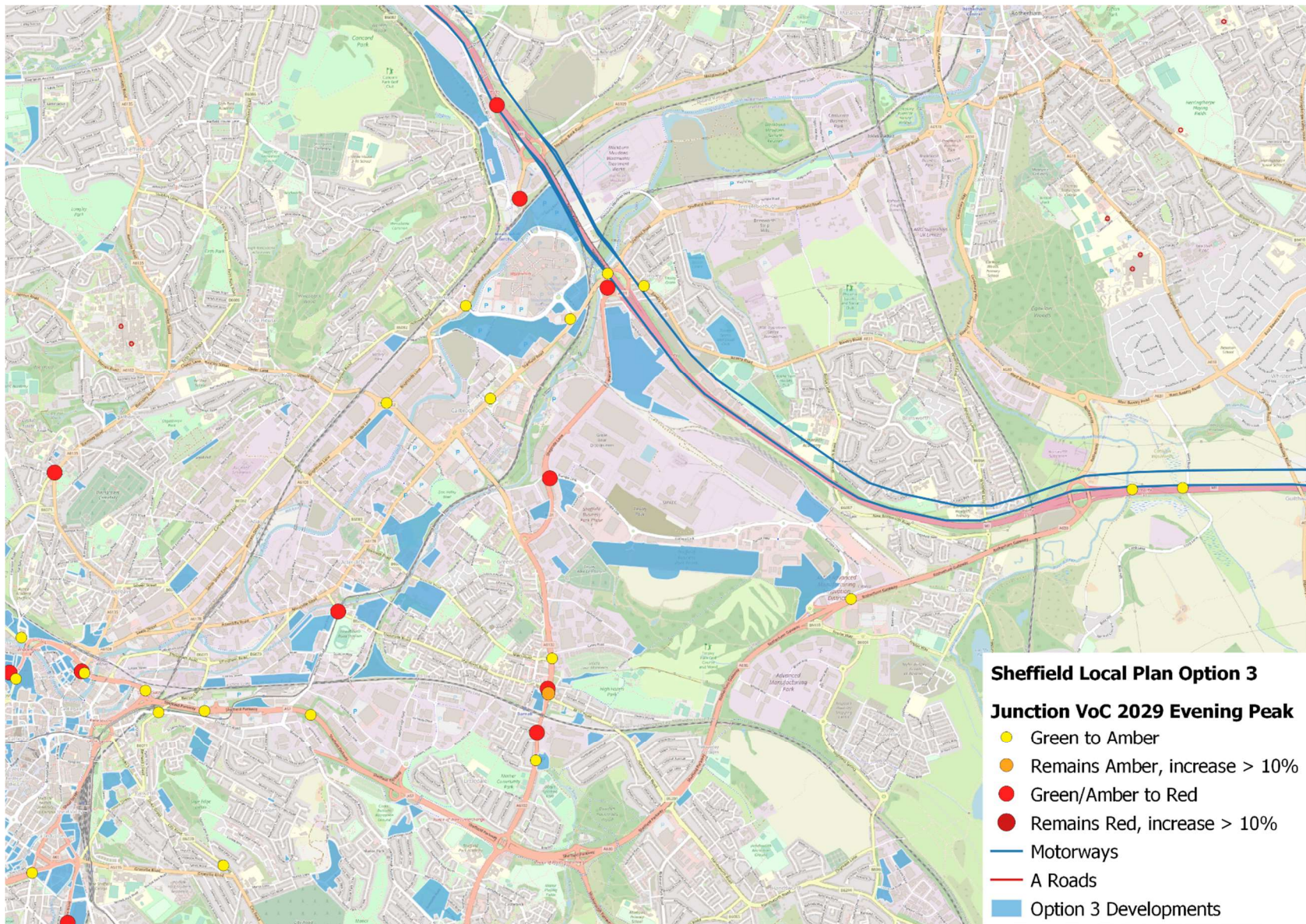
**Figure 4. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Evening Peak Hour – Sheffield City Centre**





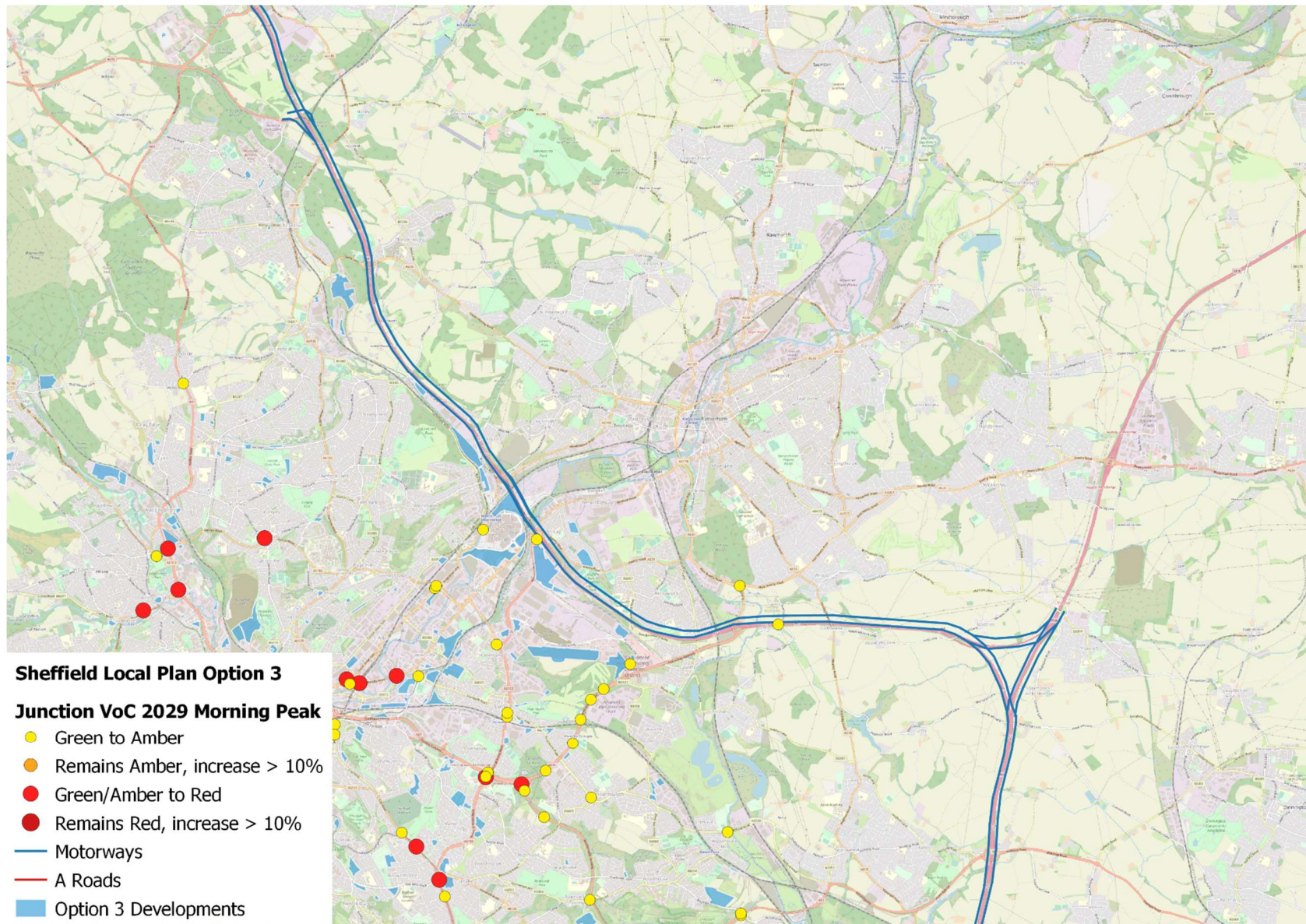
**Figure 5. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Morning Peak Hour – Lower Don Valley**





**Figure 6. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Evening Peak Hour – Lower Don Valley**





**Figure 7. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Morning Peak Hour – SRN**

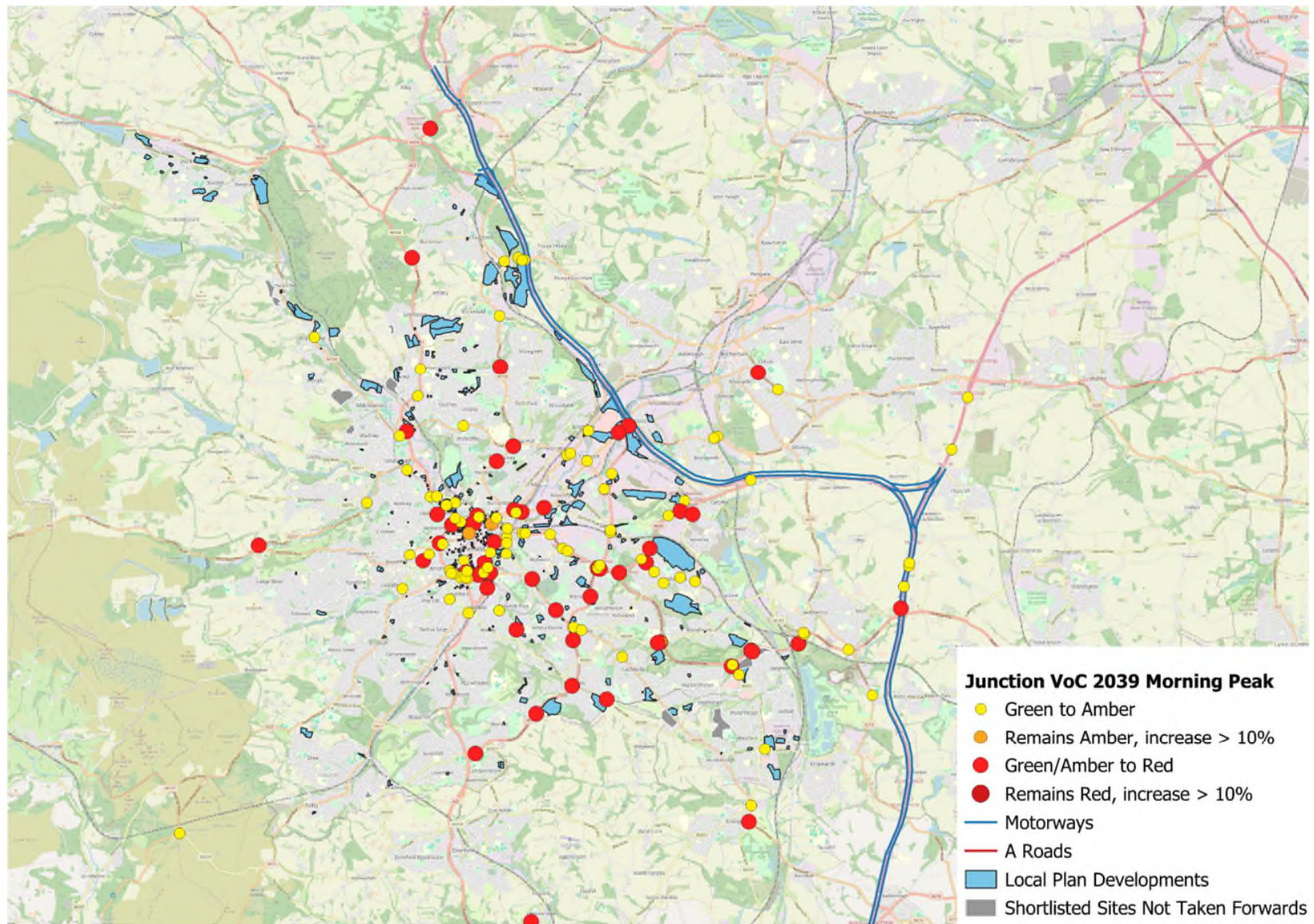




**Figure 8. Forecast NET Changes in 2029 VoC due to Sheffield Local Plan – Evening Peak Hour – SRN**

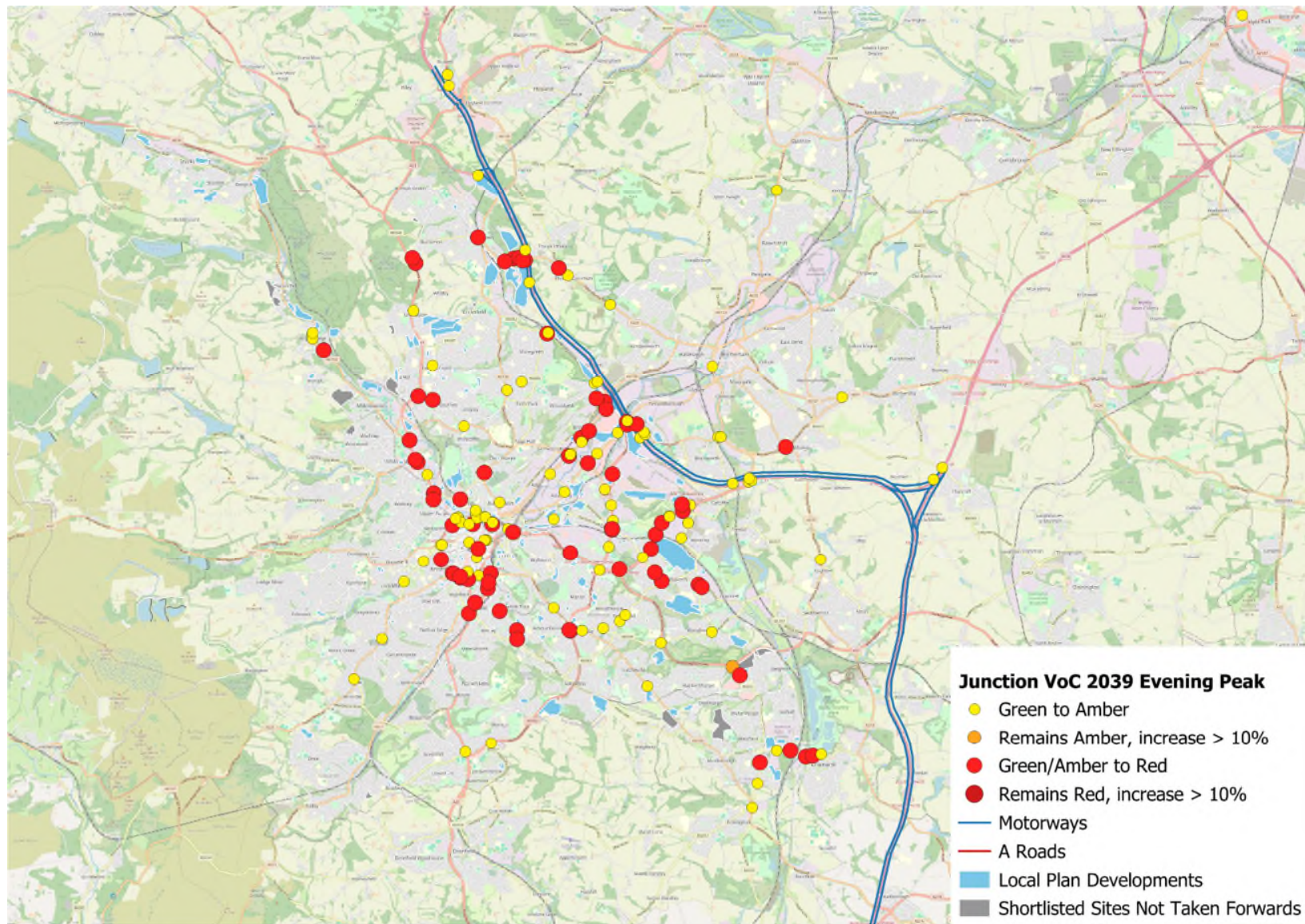
## **Appendix E 2039 Junction VoC Plots**





**Figure 1. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Morning Peak Hour – Full Network**





**Figure 2. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Evening Peak Hour – Full Network**



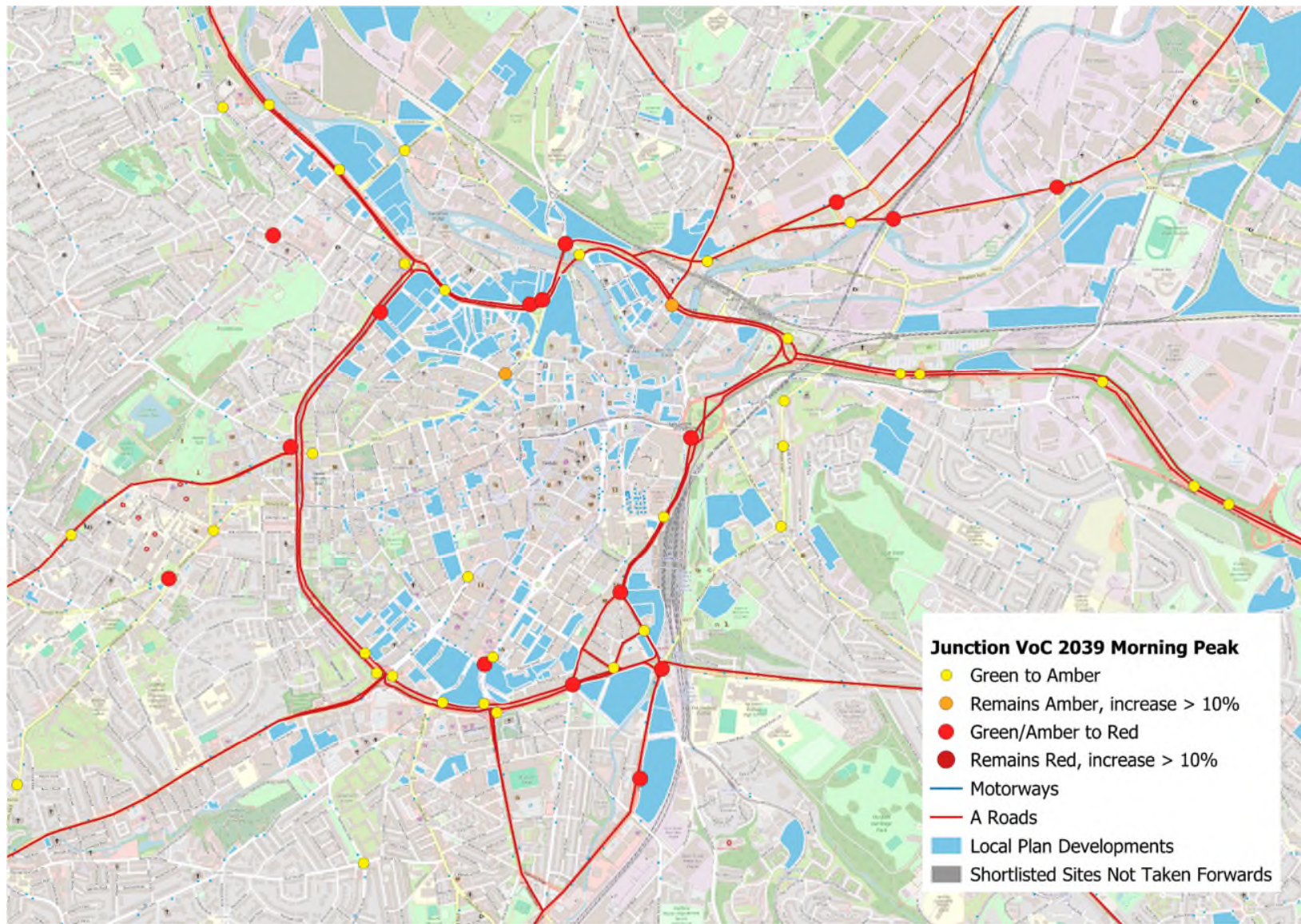


Figure 3. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Morning Peak Hour – Sheffield City Centre



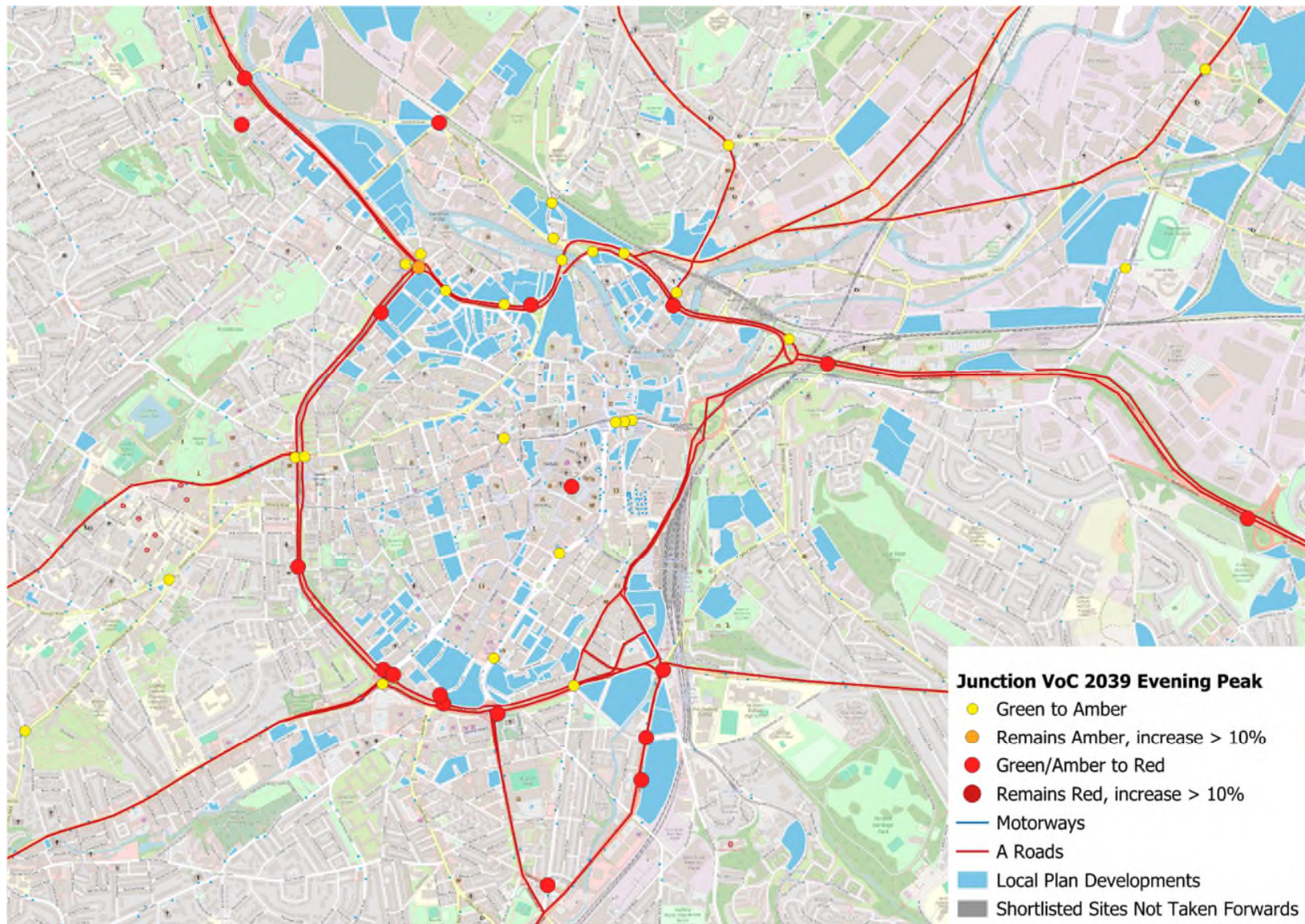


Figure 4. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Evening Peak Hour – Sheffield City Centre



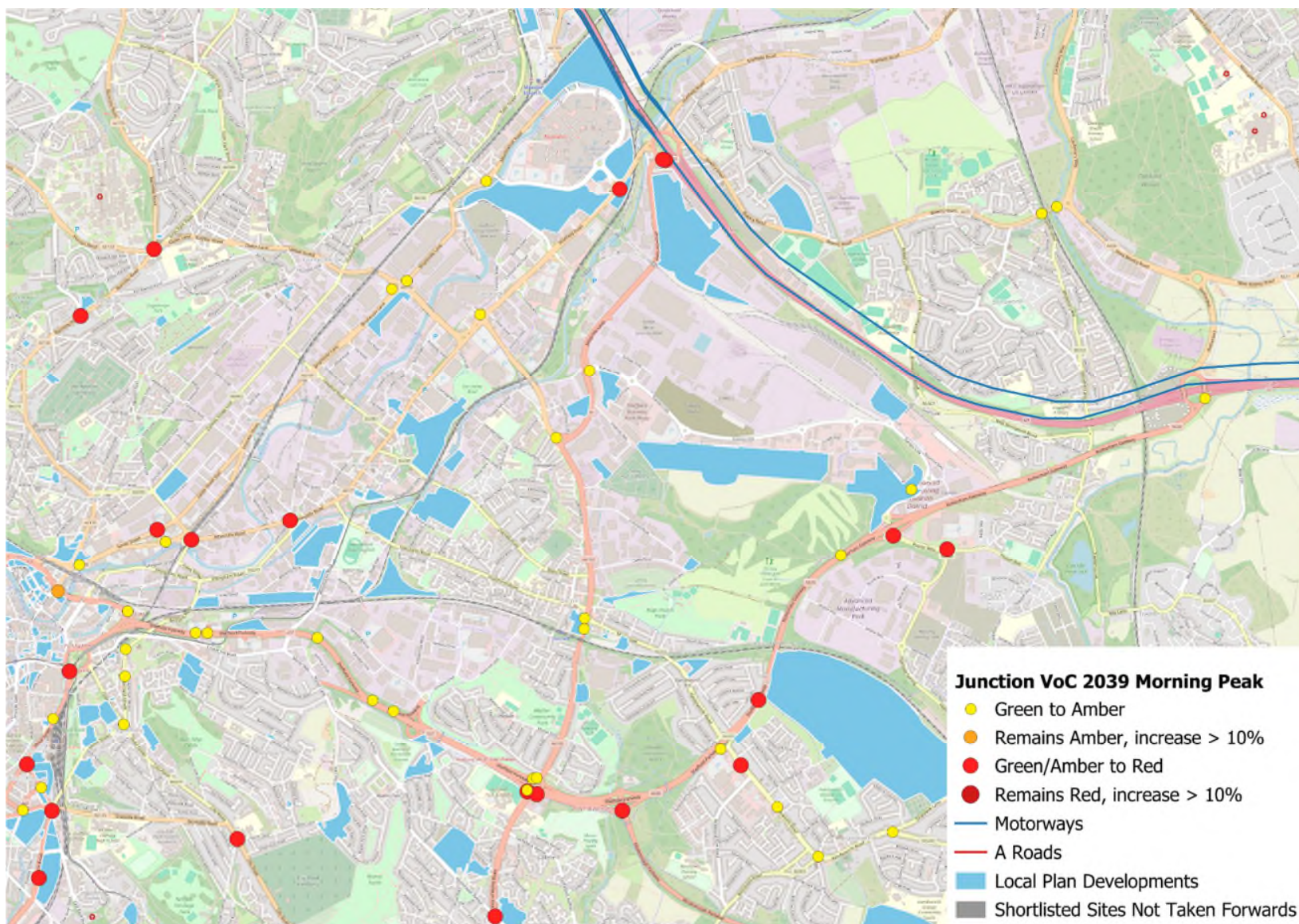


Figure 5. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Morning Peak Hour – Lower Don Valley



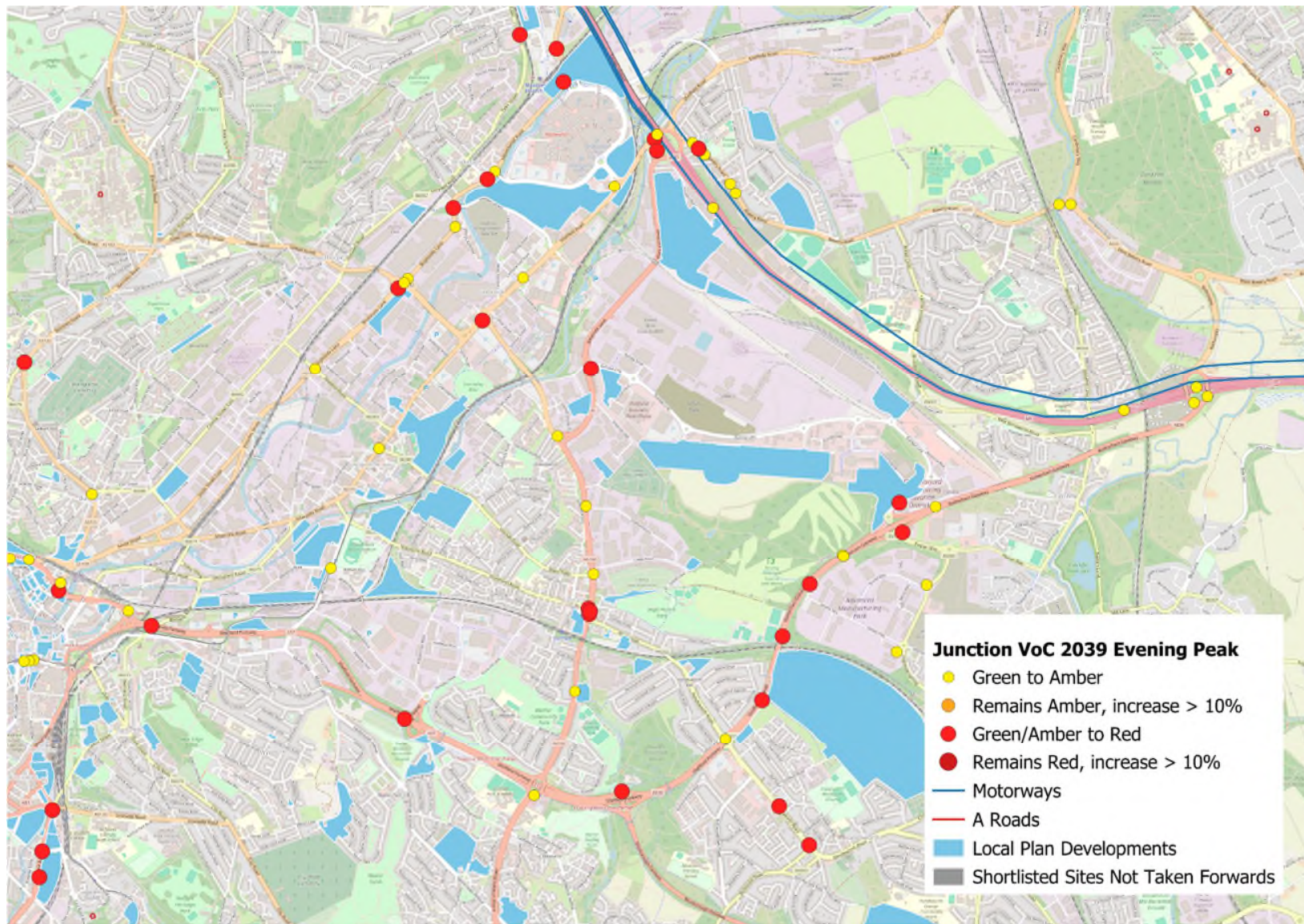
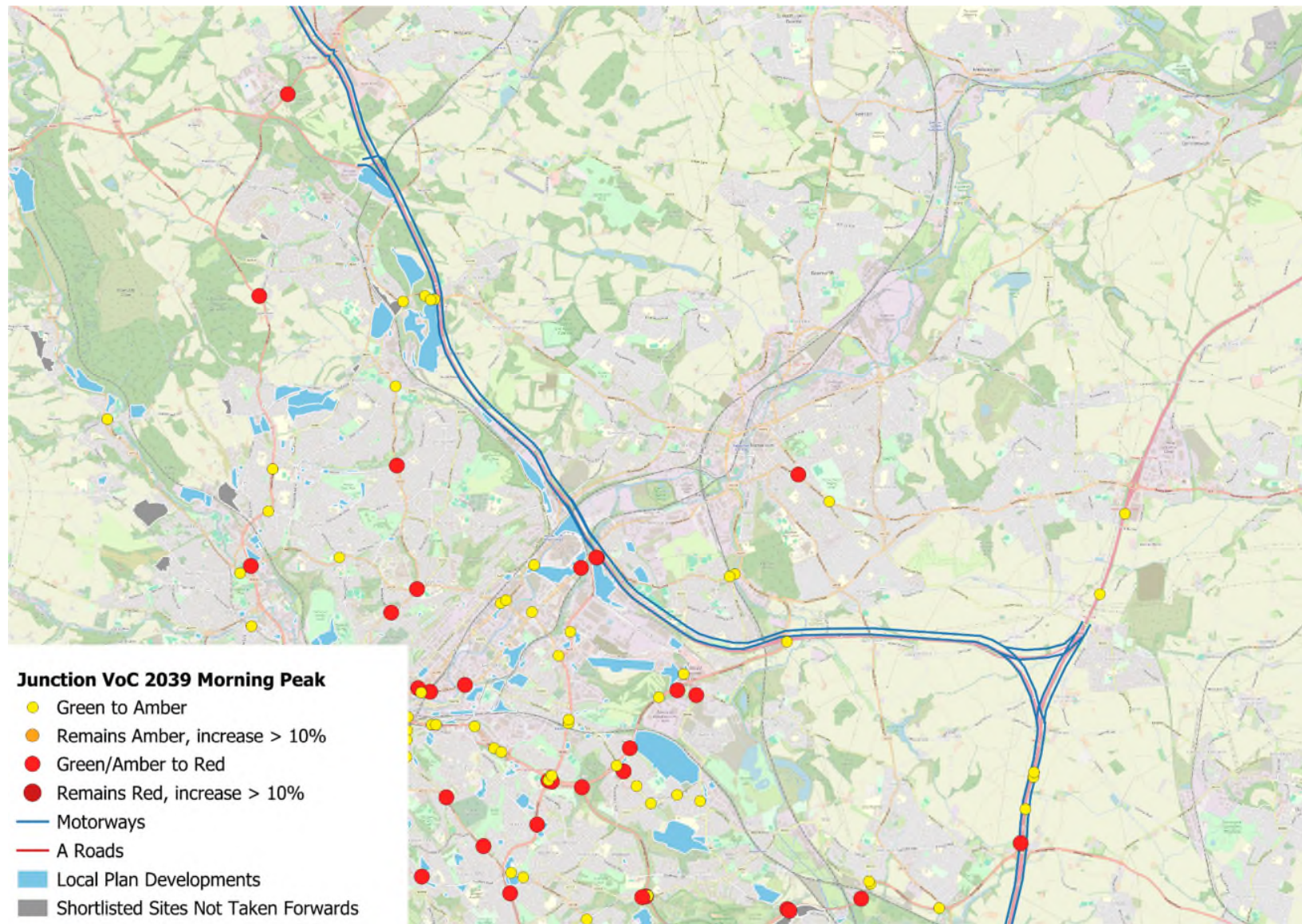


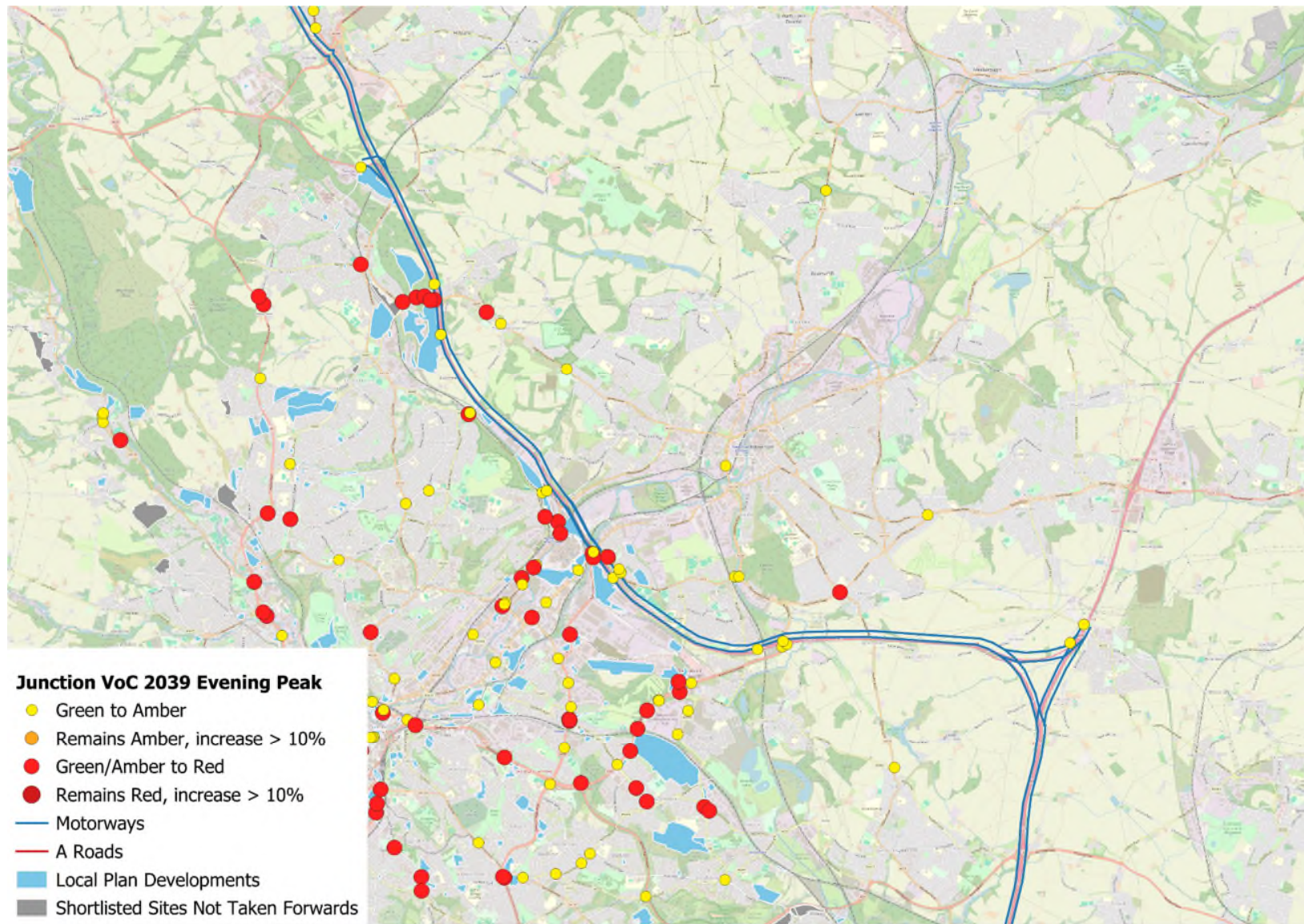
Figure 6. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Evening Peak Hour – Lower Don Valley





**Figure 7. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Morning Peak Hour – SRN**





**Figure 8. Forecast NET Changes in 2039 VoC due to Sheffield Local Plan – Evening Peak Hour – SRN**



## **Appendix F 2029 and 2039 Link Capacity Analysis - LRN**



			Number of Lanes		Assumed Lane Capacity	2029 Ref		2029 Local Plan		Flow Difference 2029 Ref-> 2029 Local Plan		2029 Ref		2029 Local Plan	
Units			Vehs			Vehs		Vehs		Vehs					
Source						Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
A630 Parkway	Eastbound	to A6102 jn	2	3,400		1,936	2,887	2,279	3,107	343	220	57%	85%	67%	91%
A630 Parkway	Westbound	from A6102 jn	2	3,400		3,204	2,725	3,143	2,908	- 62	183	94%	80%	92%	86%
A630 Parkway	Eastbound	A57 Int to Handsworth Int	2	3,400		2,602	2,827	2,868	3,023	267	195	77%	83%	84%	89%
A630 Parkway	Westbound	Handsworth Int to A57 Int	2	3,400		3,027	3,052	3,048	3,155	21	103	89%	90%	90%	93%
A630 Parkway	Eastbound	Europa Link to M1 j33	2	3,400		2,939	2,842	3,062	3,279	123	436	86%	84%	90%	96%
A630 Parkway	Westbound	M1 j33 to Europa Link	2	3,400		3,297	3,126	3,389	3,206	92	80	97%	92%	100%	94%
A61	Northbound	Penistone Rd near Albert Terrace Rd	2	3,400		1,009	1,404	1,005	1,421	- 4	17	30%	41%	30%	42%
A61	Southbound	Penistone Rd near Albert Terrace Rd	2	3,400		1,346	876	1,366	913	21	38	40%	26%	40%	27%
A61	Northbound	Penistone Rd, Hillsborough	2	3,400		1,572	2,013	1,619	2,018	46	4	46%	59%	48%	59%
A61	Southbound	Penistone Rd, Hillsborough	2	3,400		2,134	1,647	2,150	1,762	16	115	63%	48%	63%	52%
A61	Northbound	Halifax Rd nr Wilcox Rd	2	3,400		990	1,245	839	1,238	- 151	- 7	29%	37%	25%	36%
A61	Southbound	Halifax Rd nr Wilcox Rd	2	3,400		1,207	1,077	1,138	1,116	- 70	39	36%	32%	33%	33%
A631 Shepcote Lane	Northbound	Europa Link to M1 j34	2	3,400		662	862	780	814	119	- 48	19%	25%	23%	24%
A631 Shepcote Lane	Southbound	M1 j34 to Europa Link	2	3,400		844	528	992	618	148	91	25%	16%	29%	18%
A631 Shepcote Lane	Northbound	Europa Link to A6102	2	3,400		642	709	791	727	150	18	19%	21%	23%	21%
A631 Shepcote Lane	Southbound	A6102 to Europa Link	2	3,400		645	766	709	888	64	122	19%	23%	21%	26%



			Number of Lanes	Assumed Lane Capacity	2039 Ref		2039 Local Plan		Flow Difference 2039 Ref-> 2039 Local Plan		2039 Ref		2039 Local Plan	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name	2016 Base	2016 Base	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
A630 Parkway	Eastbound	to A6102 jn	2	3400	1,974	3,035	2,529	3,307	554	273	58%	89%	74%	97%
A630 Parkway	Westbound	from A6102 jn	2	3400	3,264	2,819	3,259	2,983	- 5	164	96%	83%	96%	88%
A630 Parkway	Eastbound	A57 Int to Handsworth Int	2	3400	2,681	2,938	3,169	3,304	487	366	79%	86%	93%	97%
A630 Parkway	Westbound	Handsworth Int to A57 Int	2	3400	3,069	3,120	3,145	3,234	75	114	90%	92%	92%	95%
A630 Parkway	Eastbound	Europa Link to M1 j33	2	3400	3,119	2,967	3,321	3,570	201	603	92%	87%	98%	105%
A630 Parkway	Westbound	M1 j33 to Europa Link	2	3400	3,353	3,213	3,550	3,427	196	214	99%	95%	104%	101%
A61	Northbound	Penistone Rd near Albert Terrace Rd	2	3400	1,002	1,429	1,029	1,448	27	19	29%	42%	30%	43%
A61	Southbound	Penistone Rd near Albert Terrace Rd	2	3400	1,407	940	1,476	1,044	68	104	41%	28%	43%	31%
A61	Northbound	Penistone Rd, Hillsborough	2	3400	1,586	2,046	1,722	2,070	136	24	47%	60%	51%	61%
A61	Southbound	Penistone Rd, Hillsborough	2	3400	2,171	1,723	2,203	1,883	32	160	64%	51%	65%	55%
A61	Northbound	Halifax Rd nr Wilcox Rd	2	3400	1,000	1,239	862	1,242	- 137	3	29%	36%	25%	37%
A61	Southbound	Halifax Rd nr Wilcox Rd	2	3400	1,210	1,120	1,164	1,155	- 46	35	36%	33%	34%	34%
A631 Shepcote Lane	Northbound	Europa Link to M1 j34	2	3400	700	895	825	885	125	- 10	21%	26%	24%	26%
A631 Shepcote Lane	Southbound	M1 j34 to Europa Link	2	3400	885	579	1,091	662	206	82	26%	17%	32%	19%
A631 Shepcote Lane	Northbound	Europa Link to A6102	2	3400	677	757	857	816	180	60	20%	22%	25%	24%
A631 Shepcote Lane	Southbound	A6102 to Europa Link	2	3400	669	832	833	947	164	115	20%	24%	24%	28%

## **Appendix G 2029 and 2039 Link Capacity Analysis - SRN**



			Number of Lanes	Assumed Lane Capacity	2029 Ref		2029 Local Plan		Flow Difference 2029 Ref-> 2029 Local Plan			2029 Ref		2029 Local Plan	
Units			Vehs		Vehs		Vehs		Vehs						
Source					Demand Flows		Demand Flows		Demand Flows			VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM		AM	PM	AM	PM
M1	Northbound	M1 Junction 30 (At Junction)	4	7,200	3,924	4,833	3,985	4,826	62	-	7	54%	67%	55%	67%
M1	Southbound	M1 Junction 30 (At Junction)	4	7,200	4,286	4,417	4,331	4,479	45		62	60%	61%	60%	62%
M1	Northbound	M1 Junction 30 - M1 Junction 31	4	7,200	4,562	5,442	4,646	5,446	84		4	63%	76%	65%	76%
M1	Southbound	M1 Junction 31 - M1 Junction 30	4	7,200	4,835	5,084	4,885	5,181	50		97	67%	71%	68%	72%
M1	Northbound	M1 Junction 30 (Off Slip Road Diverge)	1	1,800	676	721	673	720	-	3	-	38%	40%	37%	40%
M1	Southbound	M1 Junction 30 (Off Slip Road Diverge)	1	1,800	549	667	554	702	5		36	30%	37%	31%	39%
M1	Northbound	M1 Junction 30 (On Slip Road Merge)	1	1,800	639	609	661	620	22		11	35%	34%	37%	34%
M1	Southbound	M1 Junction 30 (On Slip Road Merge)	1	1,800	705	747	725	757	20		10	39%	42%	40%	42%
M1	Northbound	M1 Junction 31 (At Junction)	4	7,200	4,266	4,858	4,345	4,868	79		10	59%	67%	60%	68%
M1	Southbound	M1 Junction 31 (At Junction)	4	7,200	4,322	4,832	4,382	4,932	60		101	60%	67%	61%	69%
M1	Northbound	M1 Junction 31 - M1 Junction 32	4	7,200	6,252	6,213	6,325	6,247	72		34	87%	86%	88%	87%
M1	Southbound	M1 Junction 32 - M1 Junction 31	4	7,200	5,653	6,584	5,754	6,701	101		116	79%	91%	80%	93%
M1	Northbound	M1 Junction 31 (Off Slip Road Diverge)	1	1,800	296	584	301	578	5	-	5	16%	32%	17%	32%
M1	Southbound	M1 Junction 31 (Off Slip Road Diverge)	2	3,600	1,331	1,753	1,372	1,769	41		16	37%	49%	38%	49%
M1	Northbound	M1 Junction 31 (On Slip Road Merge)	2	3,600	1,986	1,355	1,980	1,379	-	6	25	55%	38%	55%	38%
M1	Southbound	M1 Junction 31 (On Slip Road Merge)	1	1,800	513	252	503	249	-	10	-	28%	14%	28%	14%

			Number of Lanes	Assumed Lane Capacity	2029 Ref		2029 Local Plan		Flow Difference 2029 Ref-> 2029 Local Plan		2029 Ref		2029 Local Plan	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Northbound	M1 Junction 32 (At Junction)	3	5,400	3,717	3,450	3,790	3,503	73	53	69%	64%	70%	65%
M1	Southbound	M1 Junction 32 (At Junction)	3	5,400	3,099	4,181	3,160	4,317	61	136	57%	77%	59%	80%
M1	Westbound	M1 Junction 32 - M1 Junction 33	4	7,200	5,837	5,805	5,969	5,818	132	12	81%	81%	83%	81%
M1	Eastbound	M1 Junction 33 - M1 Junction 32	4	7,200	4,920	6,390	4,978	6,711	58	321	68%	89%	69%	93%
M1	Northbound	M1 Junction 32 (Off Slip Road Diverge)	2	3,600	2,536	2,762	2,535	2,744	- 0	- 19	70%	77%	70%	76%
M1	Eastbound	M1 Junction 32 (Off Slip Road Diverge)	2	3,600	1,821	2,209	1,818	2,394	- 3	185	51%	61%	51%	66%
M1	Westbound	M1 Junction 32 (On Slip Road Merge)	2	3,600	2,120	2,355	2,179	2,315	59	- 41	59%	65%	61%	64%
M1	Southbound	M1 Junction 32 (On Slip Road Merge)	2	3,600	2,554	2,403	2,594	2,383	41	- 20	71%	67%	72%	66%
M1	Eastbound	M1 Junction 33 (Off Slip Road: Diverge)	1	1,800	977	1,143	1,042	1,231	65	88	54%	63%	58%	68%
M1	Westbound	M1 Junction 33 (On Slip Road: Merge)	1	1,800	1,163	1,276	1,263	1,465	100	189	65%	71%	70%	81%
M1	Eastbound	M1 Junction 33 (On Slip Road: Merge)	2	3,600	1,667	1,983	1,666	2,102	- 1	119	46%	55%	46%	58%
M1	Westbound	M1 Junction 33 (Off Slip Road: Diverge)	2	3,600	2,119	1,948	2,097	1,895	- 22	- 53	59%	54%	58%	53%
M1	Eastbound	M1 Junction 33 (At Junction)	3	5,400	3,253	4,407	3,312	4,609	59	202	60%	82%	61%	85%
M1	Westbound	M1 Junction 33 (At Junction)	3	5,400	3,718	3,857	3,872	3,923	154	65	69%	71%	72%	73%
M1	Northbound	M1 Junction 33 - M1 Junction 34 (South)	4	7,200	4,881	5,134	5,135	5,388	254	254	68%	71%	71%	75%



			Number of Lanes	Assumed Lane Capacity	2029 Ref		2029 Local Plan		Flow Difference 2029 Ref-> 2029 Local Plan		2029 Ref		2029 Local Plan	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Southbound	M1 Junction 34 (South) - M1 Junction 33	4	7,200	4,230	5,550	4,355	5,840	125	290	59%	77%	60%	81%
M1	Northbound	M1 Junction 34 (South) (Off Slip Road: Diverge)	2	3,600	1,778	1,203	1,946	1,227	168	24	49%	33%	54%	34%
M1	Southbound	M1 Junction 34 (South) (On Slip Road: Merge)	1	1,800	737	1,647	761	1,949	23	301	41%	92%	42%	108%
M1	Northbound	M1 Junction 34 (South) (At Junction)	3	5,400	3,102	3,930	3,188	4,161	86	230	57%	73%	59%	77%
M1	Southbound	M1 Junction 34 (South) (At Junction)	3	5,400	3,493	3,903	3,594	3,891	101	11	65%	72%	67%	72%
M1	Northbound	M1 Junction 34 (North) (On Slip Road: Merge)	1	1,800	1,314	2,002	1,333	2,057	18	55	73%	111%	74%	114%
M1	Southbound	M1 Junction 34 (North) (Off Slip Road: Diverge)	1	1,800	1,822	1,274	1,942	1,243	120	31	101%	71%	108%	69%
M1	Northbound	M1 Junction 34 (North) (At Junction)	3	5,400	3,102	3,930	3,188	4,161	86	230	57%	73%	59%	77%
M1	Southbound	M1 Junction 34 (North) (At Junction)	3	5,400	3,493	3,903	3,594	3,891	101	11	65%	72%	67%	72%
M1	Northbound	M1 Junction 34 (North) - M1 Junction 35	4	7,200	4,416	5,933	4,521	6,218	104	285	61%	82%	63%	86%
M1	Southbound	M1 Junction 35 - M1 Junction 34 (North)	4	7,200	5,314	5,176	5,536	5,134	221	42	74%	72%	77%	71%
M1	Northbound	M1 Junction 35 (Off Slip Road: Diverge)	1	1,800	658	801	744	841	85	41	37%	44%	41%	47%
M1	Southbound	M1 Junction 35 (On Slip Road: Merge)	1	1,800	593	599	709	647	116	48	33%	33%	39%	36%
M1	Northbound	M1 Junction 35 (On Slip Road: Merge)	1	1,800	802	907	782	909	21	2	45%	50%	43%	51%
M1	Southbound	M1 Junction 35 (Off Slip Road: Diverge)	1	1,800	689	854	695	869	6	15	38%	47%	39%	48%

			Number of Lanes	Assumed Lane Capacity	2029 Ref		2029 Local Plan		Flow Difference 2029 Ref-> 2029 Local Plan		2029 Ref		2029 Local Plan	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Northbound	M1 Junction 35 (At Junction)	4	7,200	3,758	5,132	3,777	5,377	19	244	52%	71%	52%	75%
M1	Southbound	M1 Junction 35 (At Junction)	4	7,200	4,722	4,577	4,827	4,487	105	- 90	66%	64%	67%	62%
M1	Northbound	M1 Junction 35 - M1 Junction 35A	4	7,200	4,560	6,040	4,559	6,286	- 1	246	63%	84%	63%	87%
M1	Southbound	M1 Junction 35A - M1 Junction 35	4	7,200	5,411	5,431	5,522	5,356	111	- 75	75%	75%	77%	74%
M1	Northbound	M1 Junction 35A (Off Slip Road: Diverge)	1	1,800	749	696	755	716	6	20	42%	39%	42%	40%
M1	Southbound	M1 Junction 35A (On Slip Road: Merge)	1	1,800	1,078	1,026	1,121	1,020	44	- 6	60%	57%	62%	57%
M1	Northbound	M1 Junction 35A (At Junction)	3	5,400	3,811	5,344	3,804	5,570	- 8	226	71%	99%	70%	103%
M1	Southbound	M1 Junction 35A (At Junction)	3	5,400	4,333	4,405	4,400	4,336	67	- 69	80%	82%	81%	80%
M1	Northbound	M1 Junction 36 (At Junction)	3	5,400	3,271	4,092	3,270	4,201	- 0	109	61%	76%	61%	78%
M1	Southbound	M1 Junction 36 (At Junction)	3	5,400	3,567	3,745	3,610	3,702	43	- 43	66%	69%	67%	69%
M1	Northbound	M1 Junction 35A - M1 Junction 36	3	5,400	3,811	5,344	3,804	5,570	- 8	226	71%	99%	70%	103%
M1	Southbound	M1 Junction 36 - M1 Junction 35A	3	5,400	4,333	4,405	4,400	4,336	67	- 69	80%	82%	81%	80%
M1	Northbound	M1 Junction 36 - M1 Junction 37	3	5,400	4,609	5,110	4,653	5,224	44	114	85%	95%	86%	97%
M1	Southbound	M1 Junction 37 - M1 Junction 36	3	5,400	4,419	4,940	4,432	4,968	13	28	82%	91%	82%	92%
M1	Northbound	M1 Junction 36 (Off Slip Road Diverge)	1	1,800	541	1,251	533	1,369	- 7	117	30%	70%	30%	76%
M1	Southbound	M1 Junction 36 (Off Slip Road Diverge)	1	1,800	851	1,195	822	1,266	- 30	71	47%	66%	46%	70%



			Number of Lanes	Assumed Lane Capacity	2029 Ref		2029 Local Plan		Flow Difference 2029 Ref-> 2029 Local Plan		2029 Ref		2029 Local Plan	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Northbound	M1 Junction 36 (On Slip Road Merge)	1	1,800	1,339	1,018	1,383	1,023	44	5	74%	57%	77%	57%
M1	Southbound	M1 Junction 36 (On Slip Road Merge)	1	1,800	766	660	790	634	24	- 26	43%	37%	44%	35%
---	Westbound	A616 (M1 - A61)	1	1,500	671	398	687	408	16	10	45%	27%	46%	27%
---	Eastbound	A616 (A61 - M1)	1	1,500	866	725	888	736	22	11	58%	48%	59%	49%
---	Westbound	A616 (A61 - A629)	2	3,000	921	1,051	908	1,070	- 13	19	31%	35%	30%	36%
---	Eastbound	A616 (A629 - A61)	1	1,500	1,062	1,067	1,075	1,074	13	7	71%	71%	72%	72%
---	Westbound	A616 (A629 - A6102)	1	1,500	977	1,207	977	1,250	- 1	43	65%	80%	65%	83%
---	Eastbound	A616 (A6102 - A629)	2	3,000	1,006	954	1,156	994	150	40	34%	32%	39%	33%

			Number of Lanes	Assumed Lane Capacity	2039 Ref		2039 Option 3		Flow Difference 2039 Ref -> 2039 With Option 3		2039 Ref		2039 Option 3	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Northbound	M1 Junction 30 (At Junction)	4	7200	4,264	5,022	4,366	5,030	102	8	59%	70%	61%	70%
M1	Southbound	M1 Junction 30 (At Junction)	4	7200	4,760	4,937	4,827	4,974	67	37	66%	69%	67%	69%
M1	Northbound	M1 Junction 30 - M1 Junction 31	4	7200	4,930	5,647	5,075	5,671	145	24	68%	78%	70%	79%
M1	Southbound	M1 Junction 31 - M1 Junction 30	4	7200	5,380	5,644	5,412	5,730	31	86	75%	78%	75%	80%
M1	Northbound	M1 Junction 30 (Off Slip Road Diverge)	1	1800	740	746	729	789	11	43	41%	41%	41%	44%
M1	Southbound	M1 Junction 30 (Off Slip Road Diverge)	1	1800	620	707	585	756	35	49	34%	39%	32%	42%
M1	Northbound	M1 Junction 30 (On Slip Road Merge)	1	1800	666	626	709	641	43	15	37%	35%	39%	36%
M1	Southbound	M1 Junction 30 (On Slip Road Merge)	1	1800	731	784	775	835	44	51	41%	44%	43%	46%
M1	Northbound	M1 Junction 31 (At Junction)	4	7200	4,603	5,047	4,738	5,082	135	35	64%	70%	66%	71%
M1	Southbound	M1 Junction 31 (At Junction)	4	7200	4,825	5,362	4,886	5,446	61	85	67%	74%	68%	76%
M1	Northbound	M1 Junction 31 - M1 Junction 32	4	7200	6,538	6,426	6,685	6,500	147	74	91%	89%	93%	90%
M1	Southbound	M1 Junction 32 - M1 Junction 31	4	7200	6,120	7,035	6,259	7,178	139	143	85%	98%	87%	100%
M1	Northbound	M1 Junction 31 (Off Slip Road Diverge)	1	1800	327	601	337	590	10	11	18%	33%	19%	33%
M1	Southbound	M1 Junction 31 (Off Slip Road Diverge)	2	3600	1,295	1,673	1,373	1,732	78	59	36%	46%	38%	48%
M1	Northbound	M1 Junction 31 (On Slip Road Merge)	2	3600	1,935	1,380	1,947	1,418	12	39	54%	38%	54%	39%
M1	Southbound	M1 Junction 31 (On Slip Road Merge)	1	1800	555	282	525	283	29	1	31%	16%	29%	16%



			Number of Lanes	Assumed Lane Capacity	2039 Ref		2039 Option 3		Flow Difference 2039 Ref- > 2039 With Option 3		2039 Ref		2039 Option 3	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Northbound	M1 Junction 32 (At Junction)	3	5400	3,933	4,227	4,070	4,244	138	17	73%	78%	75%	79%
M1	Southbound	M1 Junction 32 (At Junction)	3	5400	3,642	4,518	3,724	4,698	82	179	67%	84%	69%	87%
M1	Westbound	M1 Junction 32 - M1 Junction 33	4	7200	6,164	6,658	6,352	6,655	188	- 3	86%	92%	88%	92%
M1	Eastbound	M1 Junction 33 - M1 Junction 32	4	7200	5,643	6,853	5,725	7,247	82	394	78%	95%	80%	101%
M1	Northbound	M1 Junction 32 (Off Slip Road Diverge)	2	3600	2,605	2,199	2,614	2,256	9	57	72%	61%	73%	63%
M1	Eastbound	M1 Junction 32 (Off Slip Road Diverge)	2	3600	2,001	2,335	2,001	2,550	- 0	215	56%	65%	56%	71%
M1	Westbound	M1 Junction 32 (On Slip Road Merge)	2	3600	2,232	2,431	2,282	2,411	50	- 20	62%	68%	63%	67%
M1	Southbound	M1 Junction 32 (On Slip Road Merge)	2	3600	2,478	2,516	2,535	2,481	57	- 36	69%	70%	70%	69%
M1	Eastbound	M1 Junction 33 (Off Slip Road: Diverge)	1	1800	1,018	1,207	1,212	1,377	194	171	57%	67%	67%	77%
M1	Westbound	M1 Junction 33 (On Slip Road: Merge)	1	1800	1,276	1,360	1,620	1,697	344	337	71%	76%	90%	94%
M1	Eastbound	M1 Junction 33 (On Slip Road: Merge)	2	3600	1,725	2,035	1,719	2,132	- 7	97	48%	57%	48%	59%
M1	Westbound	M1 Junction 33 (Off Slip Road: Diverge)	2	3600	2,164	2,016	2,152	2,009	- 12	- 7	60%	56%	60%	56%
M1	Eastbound	M1 Junction 33 (At Junction)	3	5400	3,917	4,818	4,006	5,116	89	298	73%	89%	74%	95%
M1	Westbound	M1 Junction 33 (At Junction)	3	5400	4,000	4,642	4,200	4,646	200	4	74%	86%	78%	86%
M1	Northbound	M1 Junction 33 - M1 Junction 34 (South)	4	7200	5,276	6,002	5,819	6,343	544	341	73%	83%	81%	88%

			Number of Lanes	Assumed Lane Capacity	2039 Ref		2039 Option 3		Flow Difference 2039 Ref- > 2039 With Option 3		2039 Ref		2039 Option 3	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Southbound	M1 Junction 34 (South) - M1 Junction 33	4	7200	4,935	6,025	5,218	6,493	283	468	69%	84%	72%	90%
M1	Northbound	M1 Junction 34 (South) (Off Slip Road: Diverge)	2	3600	1,820	1,259	1,963	1,287	143	28	51%	35%	55%	36%
M1	Southbound	M1 Junction 34 (South) (On Slip Road: Merge)	1	1800	805	1,757	864	1,987	58	230	45%	98%	48%	110%
M1	Northbound	M1 Junction 34 (South) (At Junction)	3	5400	3,456	4,743	3,856	5,056	401	313	64%	88%	71%	94%
M1	Southbound	M1 Junction 34 (South) (At Junction)	3	5400	4,130	4,268	4,354	4,507	224	239	76%	79%	81%	83%
M1	Northbound	M1 Junction 34 (North) (On Slip Road: Merge)	1	1800	1,371	2,027	1,408	2,081	38	53	76%	113%	78%	116%
M1	Southbound	M1 Junction 34 (North) (Off Slip Road: Diverge)	1	1800	1,862	1,324	1,983	1,272	121	52	103%	74%	110%	71%
M1	Northbound	M1 Junction 34 (North) (At Junction)	3	5400	3,456	4,743	3,856	5,056	401	313	64%	88%	71%	94%
M1	Southbound	M1 Junction 34 (North) (At Junction)	3	5400	4,130	4,268	4,354	4,507	224	239	76%	79%	81%	83%
M1	Northbound	M1 Junction 34 (North) - M1 Junction 35	4	7200	4,826	6,770	5,265	7,136	438	366	67%	94%	73%	99%
M1	Southbound	M1 Junction 35 - M1 Junction 34 (North)	4	7200	5,992	5,592	6,338	5,779	345	187	83%	78%	88%	80%
M1	Northbound	M1 Junction 35 (Off Slip Road: Diverge)	1	1800	697	815	954	964	257	149	39%	45%	53%	54%
M1	Southbound	M1 Junction 35 (On Slip Road: Merge)	1	1800	666	639	940	851	274	212	37%	35%	52%	47%
M1	Northbound	M1 Junction 35 (On Slip Road: Merge)	1	1800	809	893	842	934	33	41	45%	50%	47%	52%

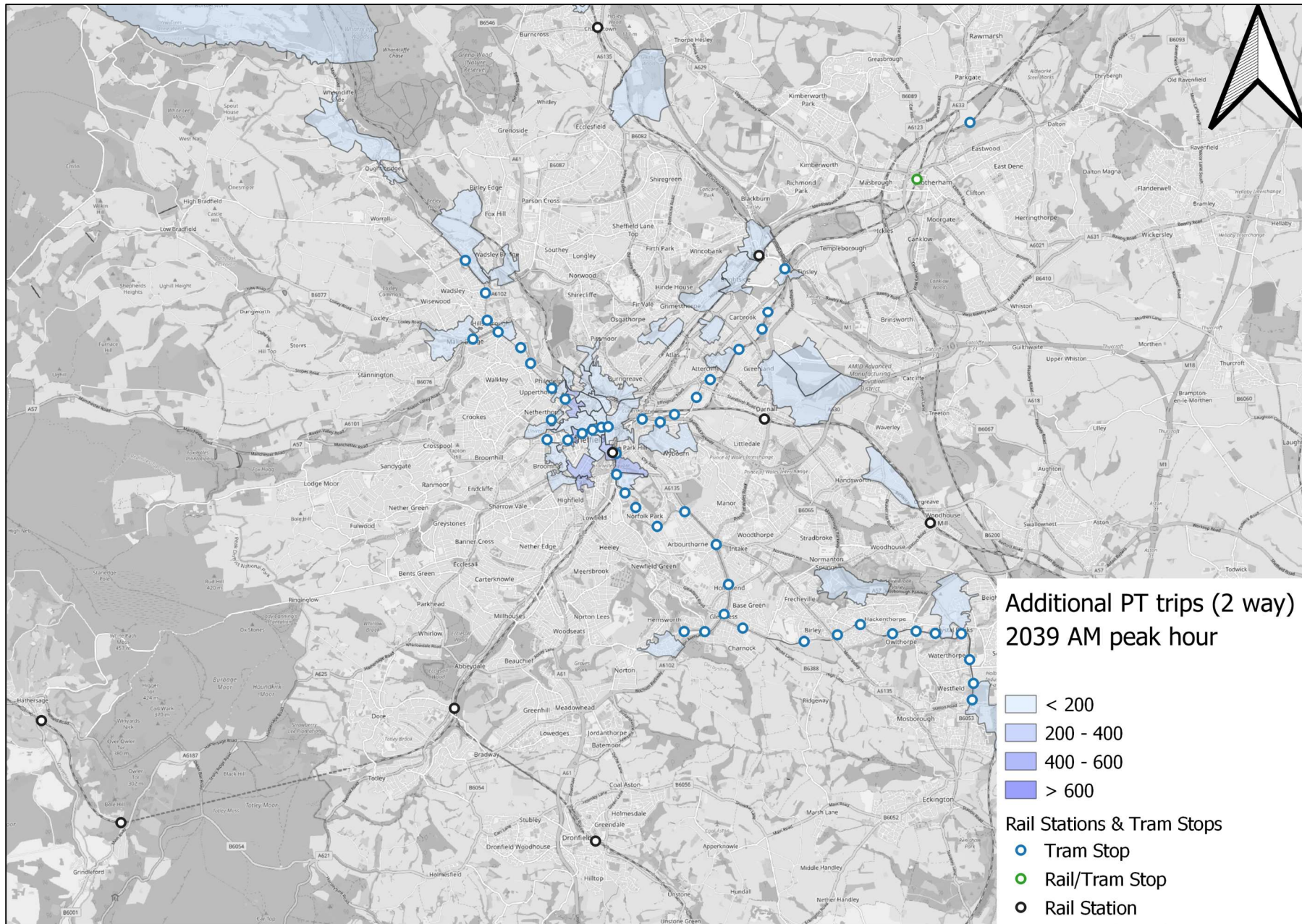


			Number of Lanes	Assumed Lane Capacity	2039 Ref		2039 Option 3		Flow Difference 2039 Ref -> 2039 With Option 3		2039 Ref		2039 Option 3	
Units			Vehs		Vehs		Vehs		Vehs					
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC	
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
M1	Southbound	M1 Junction 35 (Off Slip Road: Diverge)	1	1800	658	768	672	816	14	48	37%	43%	37%	45%
M1	Northbound	M1 Junction 35 (At Junction)	4	7200	4,129	5,955	4,311	6,172	182	217	57%	83%	60%	86%
M1	Southbound	M1 Junction 35 (At Junction)	4	7200	5,326	4,953	5,398	4,928	72	25	74%	69%	75%	68%
M1	Northbound	M1 Junction 35 - M1 Junction 35A	4	7200	4,938	6,848	5,153	7,106	214	258	69%	95%	72%	99%
M1	Southbound	M1 Junction 35A - M1 Junction 35	4	7200	5,984	5,721	6,070	5,744	86	23	83%	79%	84%	80%
M1	Northbound	M1 Junction 35A (Off Slip Road: Diverge)	1	1800	813	1,192	1,042	1,274	229	82	45%	66%	58%	71%
M1	Southbound	M1 Junction 35A (On Slip Road: Merge)	1	1800	1,307	1,090	1,388	1,205	81	114	73%	61%	77%	67%
M1	Northbound	M1 Junction 35A (At Junction)	3	5400	4,126	5,656	4,111	5,832	14	176	76%	105%	76%	108%
M1	Southbound	M1 Junction 35A (At Junction)	3	5400	4,677	4,631	4,682	4,539	5	91	87%	86%	87%	84%
M1	Northbound	M1 Junction 36 (At Junction)	3	5400	3,533	4,652	3,528	4,750	5	97	65%	86%	65%	88%
M1	Southbound	M1 Junction 36 (At Junction)	3	5400	4,116	3,876	4,103	3,790	12	86	76%	72%	76%	70%
M1	Northbound	M1 Junction 35A - M1 Junction 36	3	5400	4,126	5,656	4,111	5,832	14	176	76%	105%	76%	108%
M1	Southbound	M1 Junction 36 - M1 Junction 35A	3	5400	4,677	4,631	4,682	4,539	5	91	87%	86%	87%	84%
M1	Northbound	M1 Junction 36 - M1 Junction 37	3	5400	5,025	5,692	5,079	5,815	54	123	93%	105%	94%	108%
M1	Southbound	M1 Junction 37 - M1 Junction 36	3	5400	4,819	4,991	4,784	4,994	35	3	89%	92%	89%	92%

			Number of Lanes	Assumed Lane Capacity	2039 Ref		2039 Option 3		Flow Difference 2039 Ref- > 2039 With Option 3		2039 Ref		2039 Option 3		
Units					Vehs		Vehs		Vehs		Vehs				
Source					Demand Flows		Demand Flows		Demand Flows		VoC		VoC		
Motorway Route	Direction	Link name			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
M1	Northbound	M1 Junction 36 (Off Slip Road Diverge)	1	1800	593	1,004	584	1,082	-	9	79	33%	56%	32%	60%
M1	Southbound	M1 Junction 36 (Off Slip Road Diverge)	1	1800	703	1,114	680	1,203	-	23	89	39%	62%	38%	67%
M1	Northbound	M1 Junction 36 (On Slip Road Merge)	1	1800	1,492	1,040	1,551	1,065		59	25	83%	58%	86%	59%
M1	Southbound	M1 Junction 36 (On Slip Road Merge)	1	1800	561	754	578	749		17	-	5	31%	42%	42%
---	Westbound	A616 (M1 - A61)	1	1500	661	974	680	1,101		19	128	44%	65%	45%	73%
---	Eastbound	A616 (A61 - M1)	1	1500	972	814	1,038	810		66	-	4	65%	54%	54%
---	Westbound	A616 (A61 - A629)	2	3000	919	1,146	906	1,172	-	13	26	31%	38%	30%	39%
---	Eastbound	A616 (A629 - A61)	1	1500	1,171	1,130	1,213	1,128		42	-	2	78%	75%	75%
---	Westbound	A616 (A629 - A6102)	1	1500	1,022	1,208	1,010	1,264	-	11	56	68%	81%	67%	84%
---	Eastbound	A616 (A6102 - A629)	2	3000	1,086	1,000	1,313	1,043		227	43	36%	33%	44%	35%

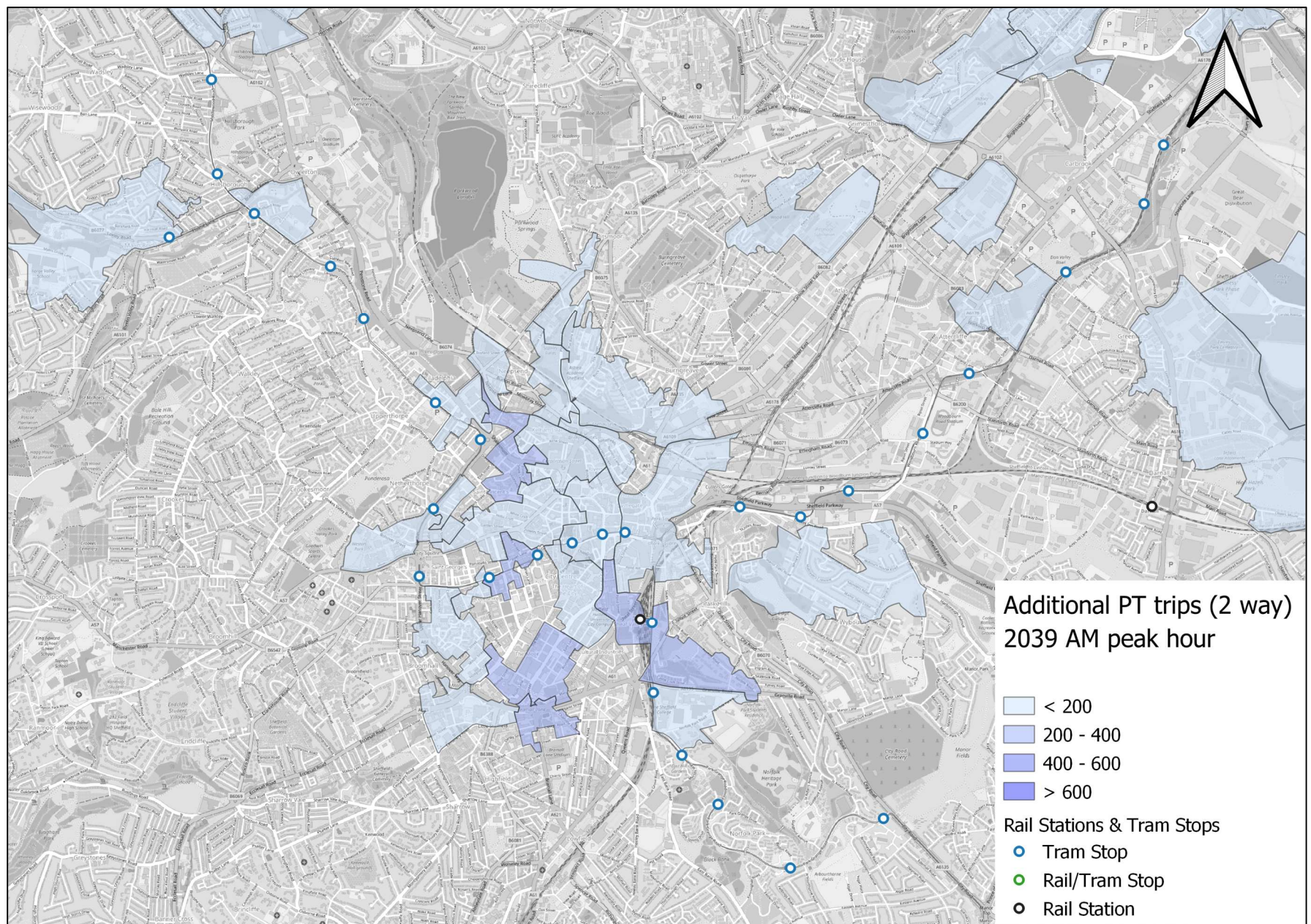


## **Appendix H 2039 Public Transport Forecasts**



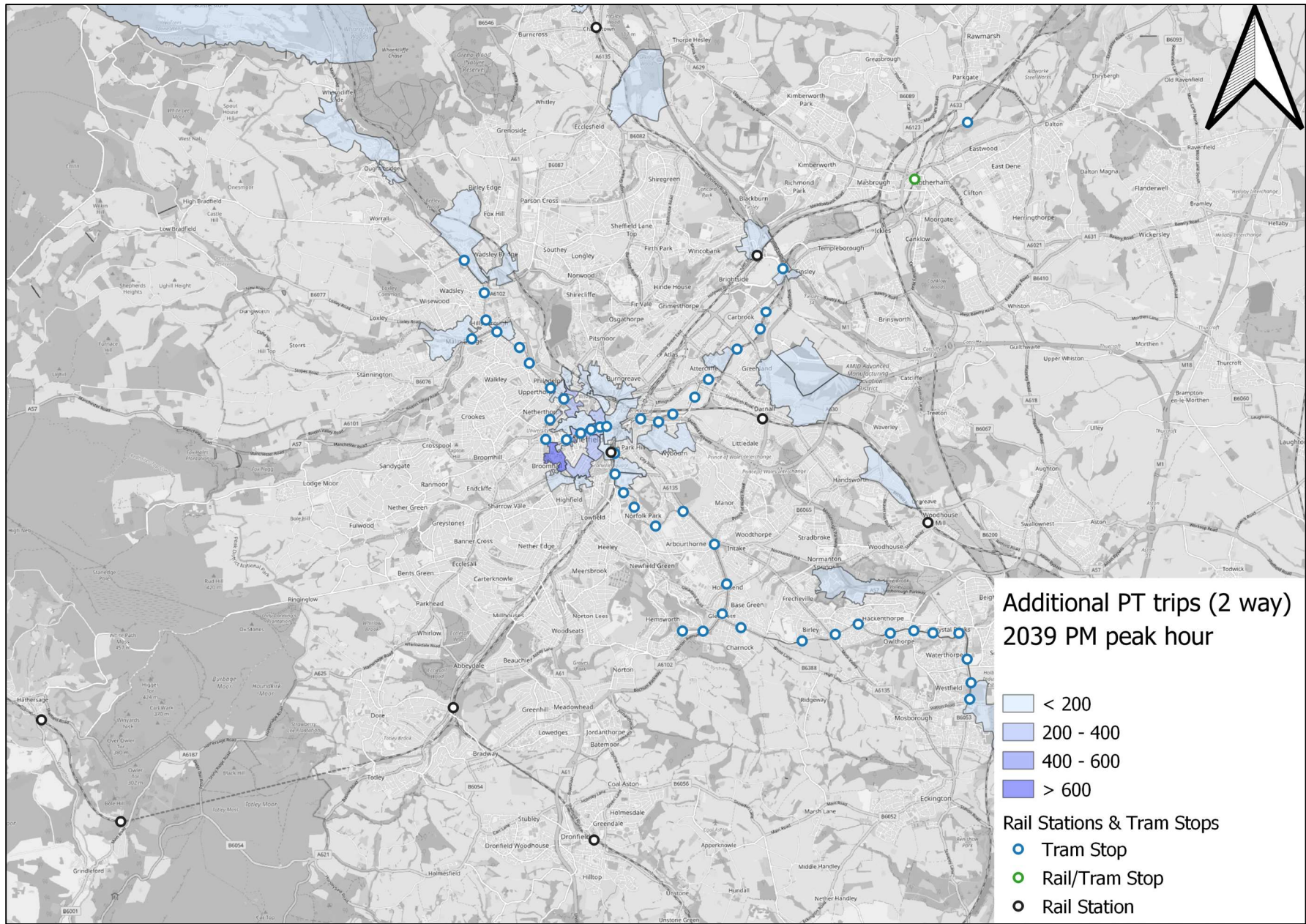
**Figure 1. Forecast Public Transport Demand – 2039 AM Peak – Wide Area**





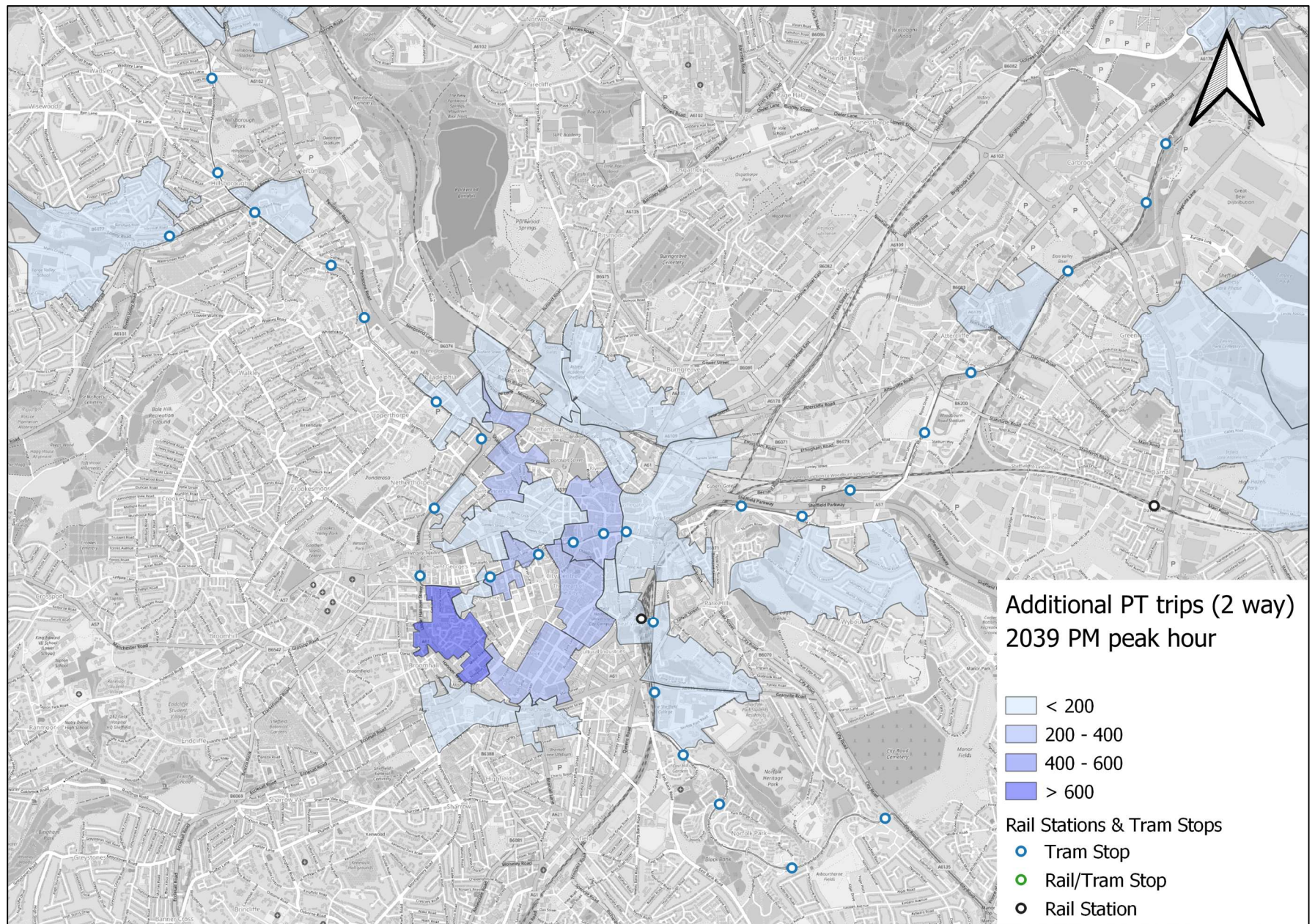
**Figure 2. Forecast Public Transport Demand – 2039 AM Peak – Central Area**





**Figure 3. Forecast Public Transport Demand – 2039 PM Peak – Wide Area**

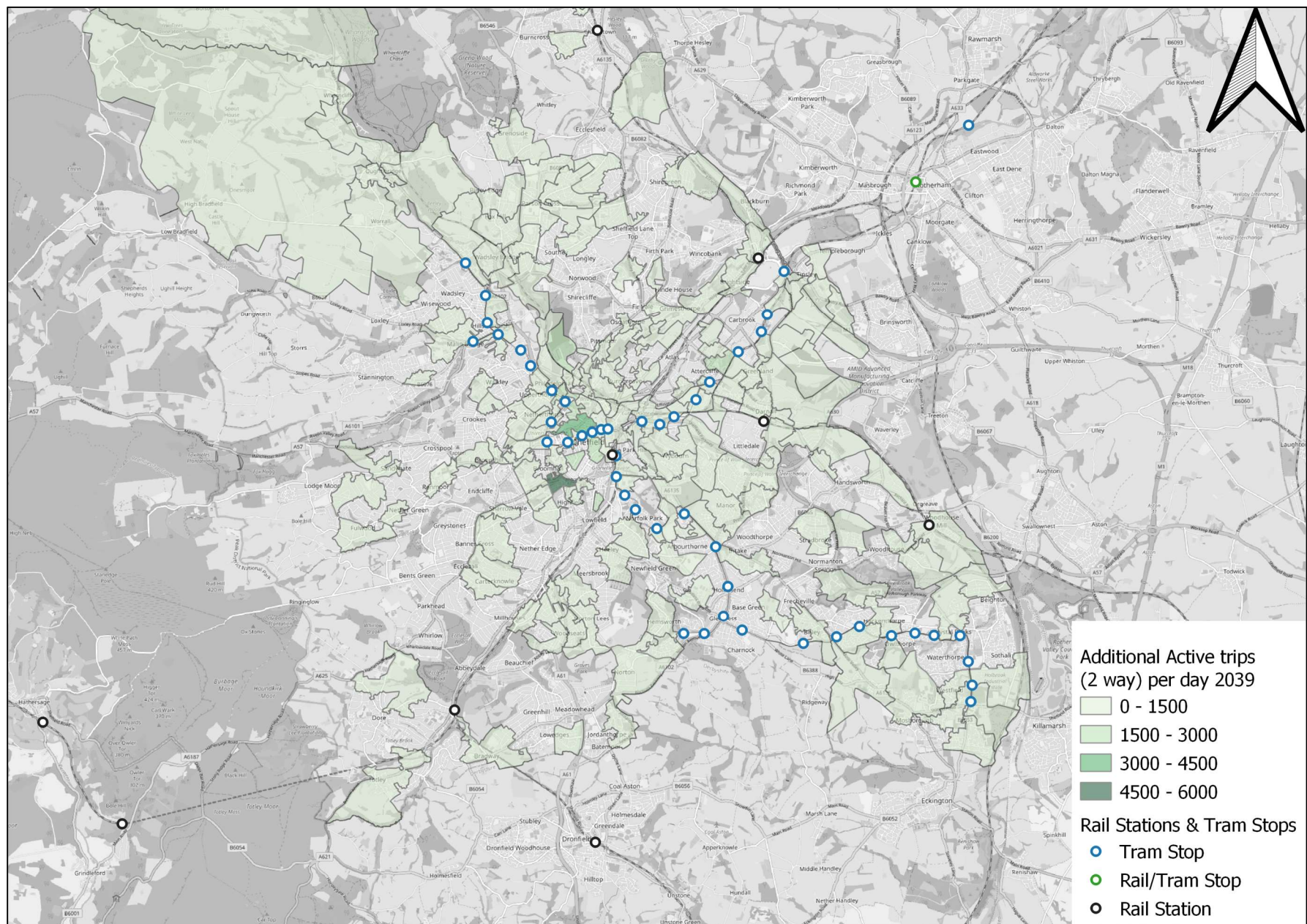




**Figure 4. Forecast Public Transport Demand – 2039 PM Peak – Central Area**

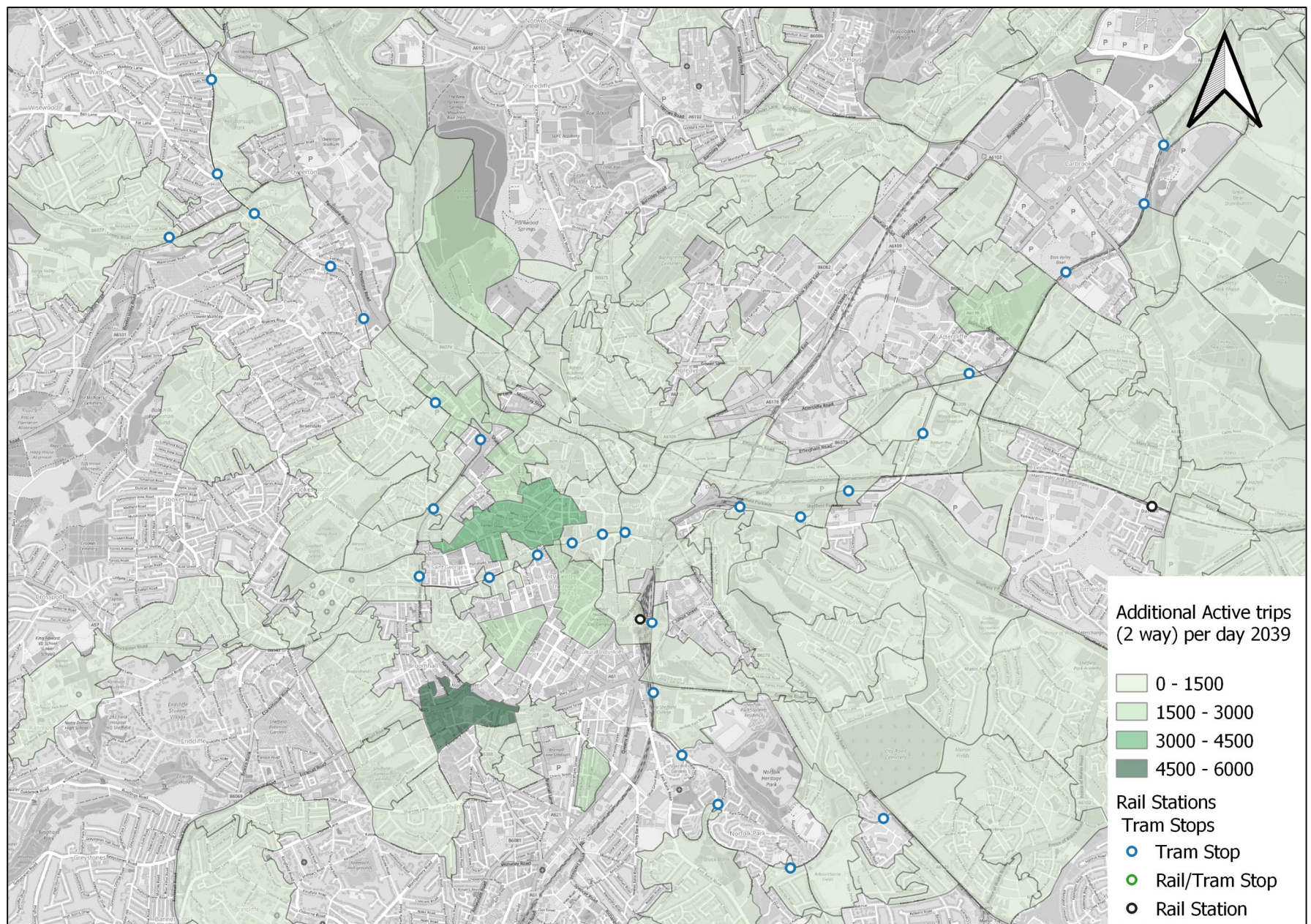
## **Appendix I 2039 Active Forecasts**





**Figure 1. Forecast Changes in 2039 Active Travel Demand (24 hour, 2-way) due to Sheffield Local Plan – Wider Area**

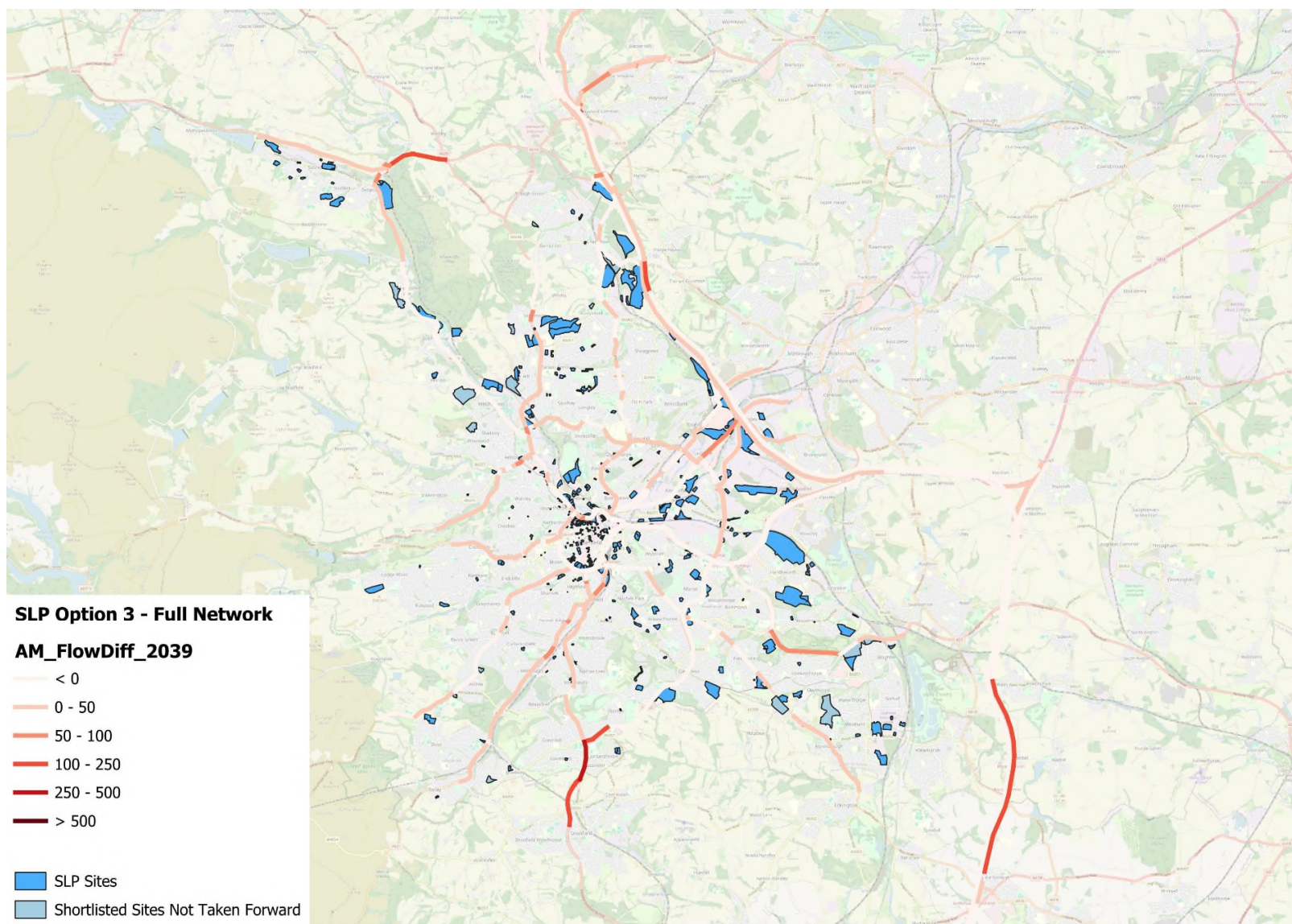




**Figure 2. Forecast Changes in 2039 Active Travel Demand (24 hour, 2-way) due to Sheffield Local Plan – Central Area**

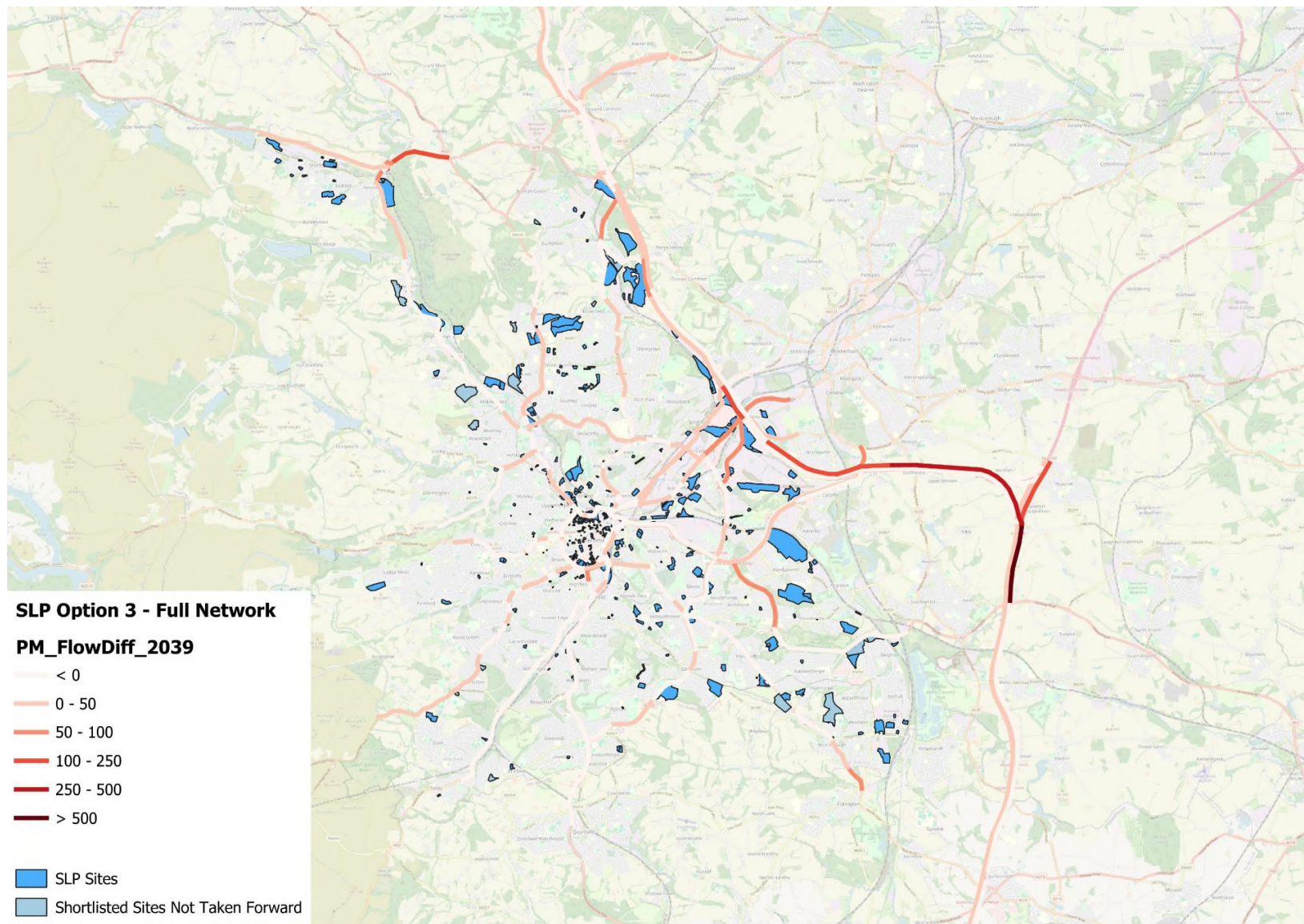


## **Appendix J 2039 Forecast Model Flows - With Mitigation**



**Figure 1. Forecast Changes in 2039 Traffic Flows due to Proposed Mitigation Measures – Morning Peak Hour – Full Model**

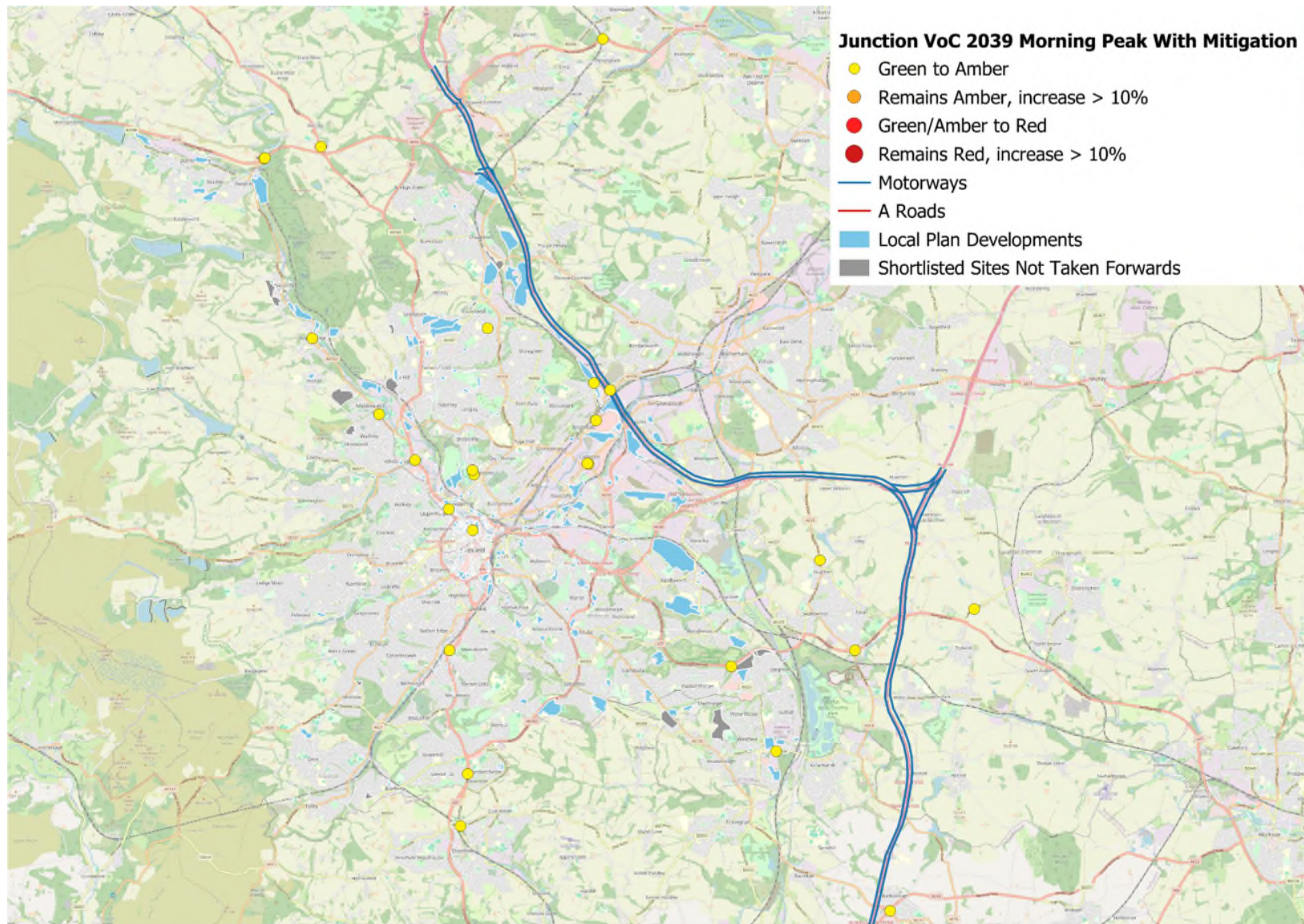




**Figure 2. Forecast Changes in 2039 Traffic Flows due to Proposed Mitigation Measures – Evening Peak Hour – Full Model**

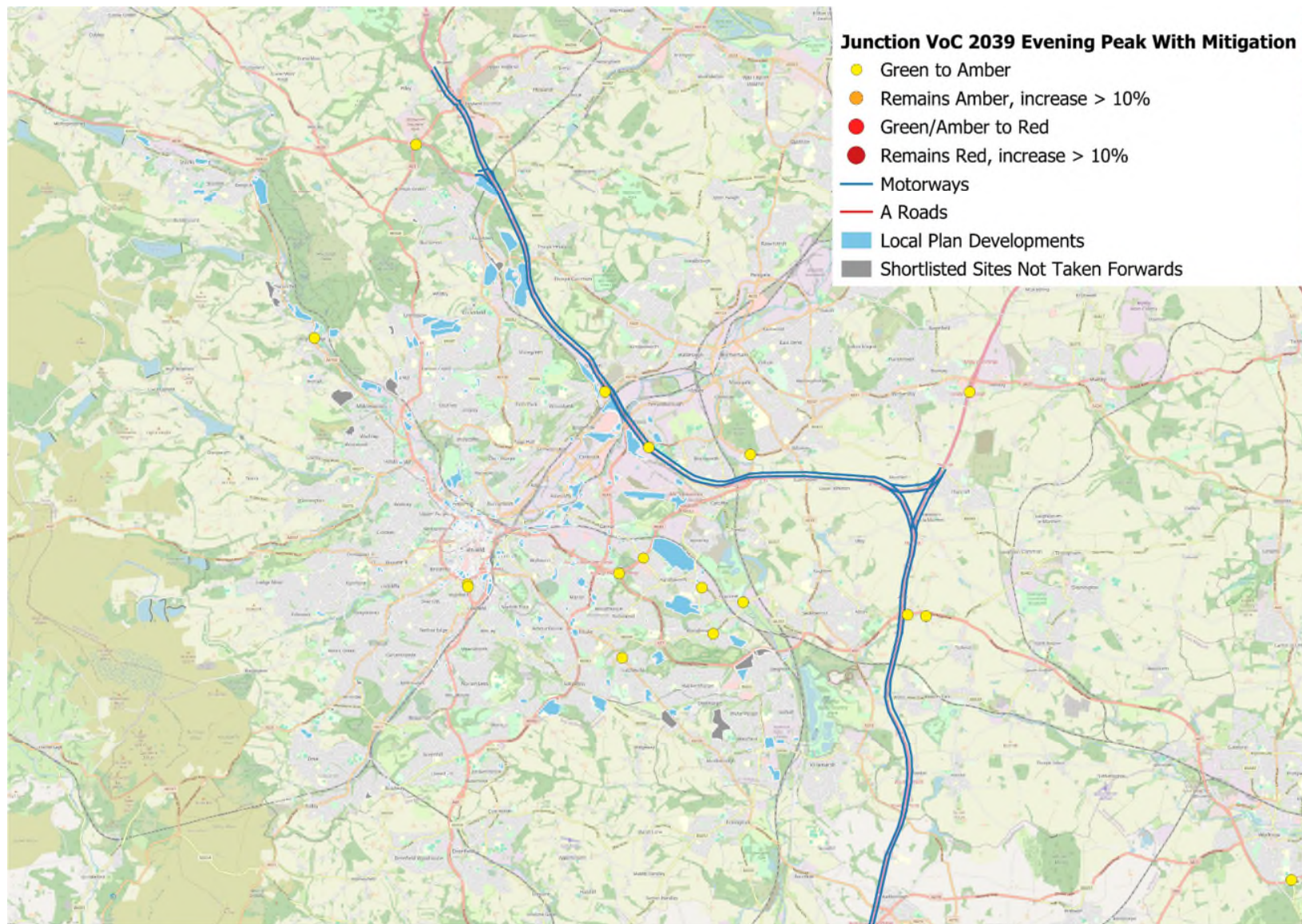
## **Appendix K 2039 Junction VoC Plots - With Mitigation**





**Figure 1. Forecast Changes in 2039 VoC due to Proposed Mitigation Measures – Morning Peak Hour – Full Model**





**Figure 2. Forecast Changes in 2039 VoC due to Proposed Mitigation Measures – Evening Peak Hour – Full Model**