

Greater Nottingham Strategic Plan Transport Assessment

Project Stages:

- Stage 2: Reference Case Modelling (complete)
- Stage 3: With Development Modelling (complete)
- Stage 4: Development of Mitigation
- Stage 5: With Mitigation Modelling

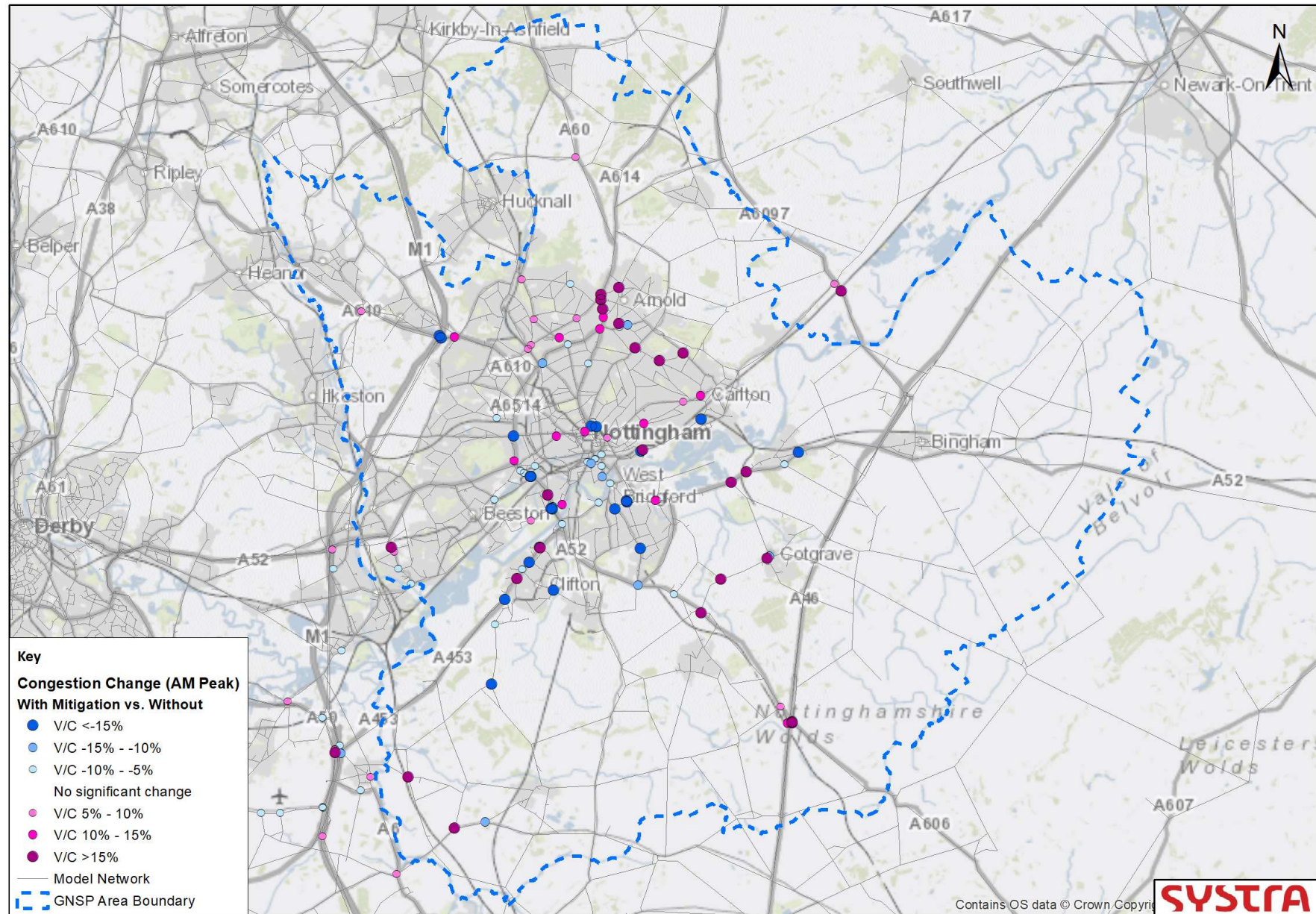
SYSTRA



With Mitigation Congestion Difference

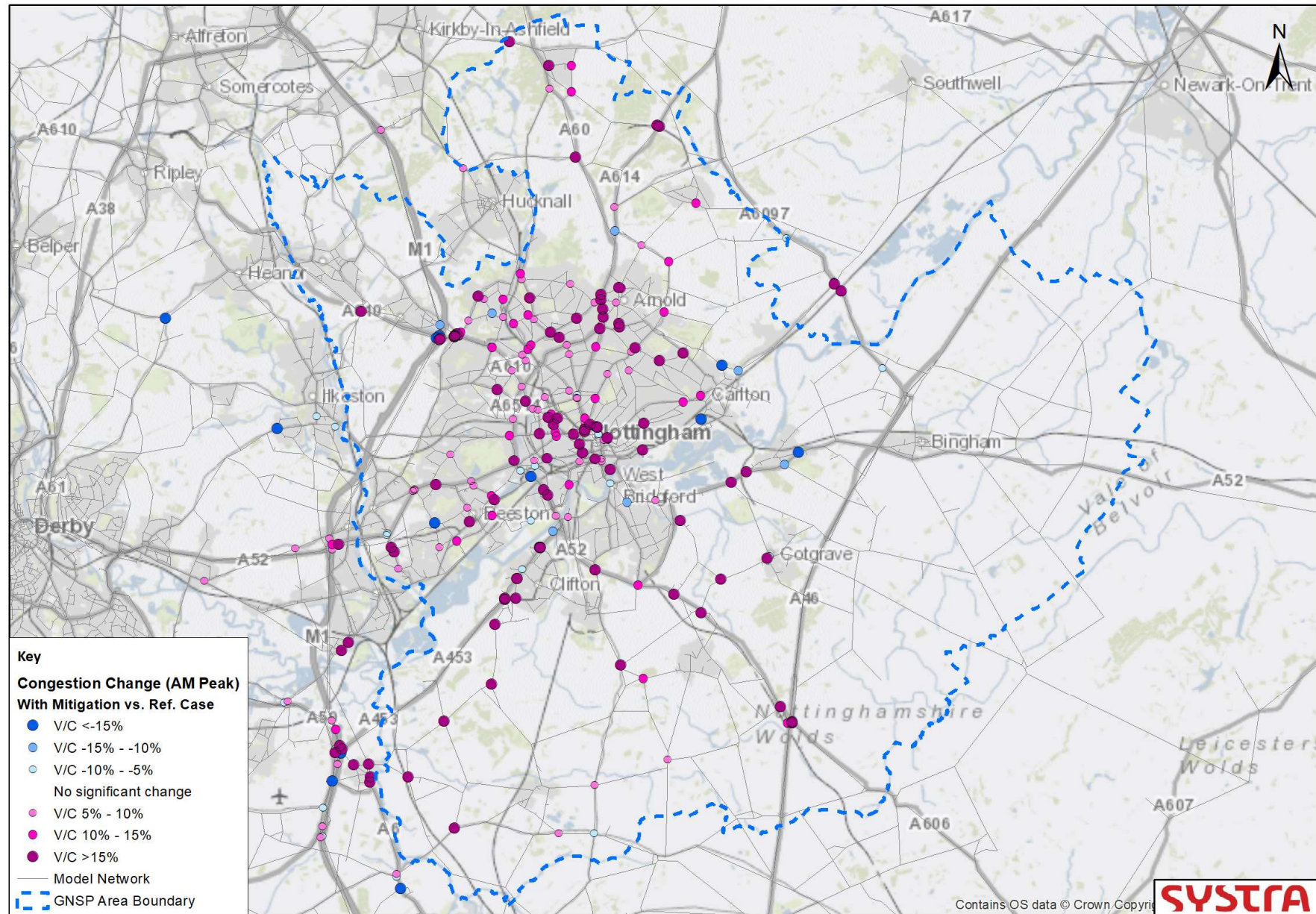
Congestion Change:

- **With Mitigation vs. Without Mitigation**
- **AM Peak**
- **Shown are junctions which are at >85% V/C in either scenario**



Congestion Change:

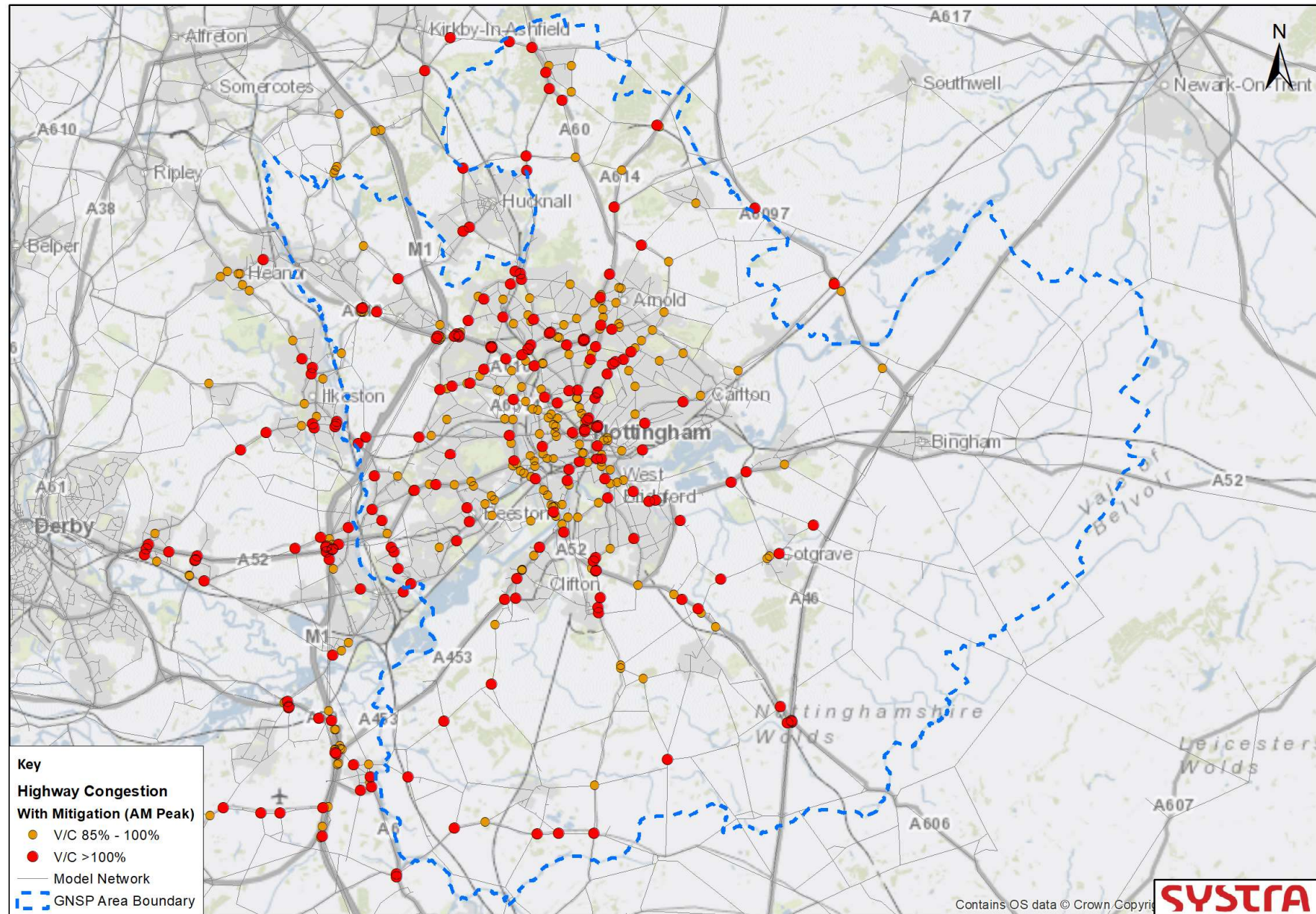
- **With Mitigation vs. Reference Case**
- **AM Peak**
- **Shown are junctions which are at >85% V/C in either scenario**



With Mitigation Congestion

Congestion:

- With Mitigation
- AM Peak



With Mitigation Change in Trip Volume and Mode Share

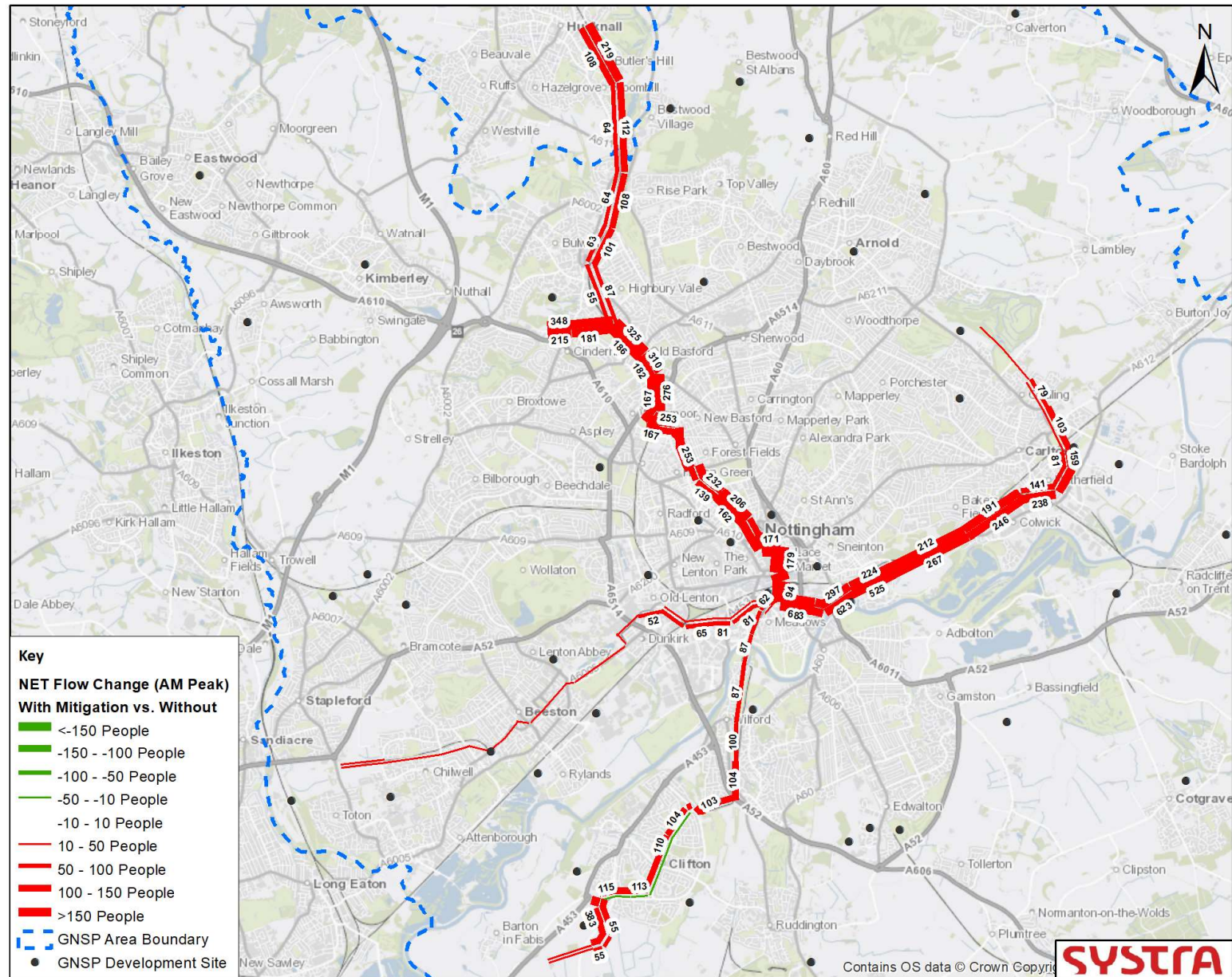
Change in Volume of Trips and Mode Share:

ID	Development	Authority	Change in Total Trips With Mitigation vs. Without			Change in Mode Share				ID	Development	Authority	Change in Total Trips With Mitigation vs. Without			Change in Mode Share			
			AM	PM	HW	PT	NET	Bus	Active				AM	PM	HW	PT	NET	Bus	Active
1	Boots Site	Broxtowe	-49	-47	-1%	1%	1%	0%	0%	21	Clifton West	Nottingham	2	1	-3%	1%	1%	0%	2%
2	Field Farm	Broxtowe	0	0	0%	0%	0%	0%	0%	22	Waterside	Nottingham	-311	-285	-6%	4%	4%	0%	2%
3	Toton Strategic Location for Growth	Broxtowe	-252	-228	-5%	4%	1%	3%	1%	23	Alfreton Road - Forest Mill	Nottingham	0	0	0%	0%	0%	0%	0%
4	Land west of Awsworth	Broxtowe	0	0	-1%	0%	0%	0%	1%	39	Farnborough Road - Former Fairham Comprehensive	Nottingham	1	0	-2%	0%	0%	0%	2%
5	Eastwood	Broxtowe	-126	-110	-2%	1%	0%	1%	1%	40	406/408 Derby Road and Northern Dairies LTD	Nottingham	0	0	0%	0%	0%	0%	0%
6	Kimberley	Broxtowe	0	0	-2%	1%	0%	1%	1%	41	Western Village, University of Nottingham Campus	Nottingham	0	0	-2%	0%	0%	0%	2%
7	Chetwynd Barracks	Broxtowe	-187	-176	0%	0%	0%	0%	0%	49	Nottingham City Centre flats	Nottingham	-5443	-4862	0%	0%	0%	0%	0%
8	Land Adjacent to Bramcote Crematorium	Broxtowe	0	0	-1%	0%	0%	0%	1%	51	Canal Quarter - Island Site	Nottingham	-162	-498	0%	0%	0%	0%	0%
9	East of Coventry Lane	Broxtowe	0	0	0%	0%	0%	0%	0%	52	Phase 1 Unity Square	Nottingham	0	1	-2%	2%	2%	0%	0%
37	Beeston Business Park, Technology Drive, Beeston	Broxtowe	0	0	-2%	0%	0%	0%	2%	55	Victoria Centre Huntingdon St	Nottingham	0	0	-10%	10%	8%	2%	0%
38	Bartons land between High Road & Queens Road West	Broxtowe	0	0	0%	0%	0%	0%	0%	58	Nottingham City Centre offices	Nottingham	-1	-1	0%	0%	0%	0%	0%
10	Teal Close	Gedling	-97	-96	-2%	2%	0%	2%	0%	24	East and West of Melton Road, Edwalton	Rushcliffe	-225	-217	-2%	1%	0%	1%	1%
11	Top Wighay Farm	Gedling	-366	-327	-3%	3%	1%	2%	0%	26	E. & W. Chapel Lane, Bingham	Rushcliffe	-130	-118	-2%	1%	0%	1%	1%
12	H16 Park Road, Calverton	Gedling	0	0	0%	0%	0%	0%	0%	27	RAF Newton	Rushcliffe	-67	-61	-1%	0%	0%	0%	1%
13	Land West of A60 Redhill	Gedling	0	0	0%	0%	0%	0%	0%	28	Clifton South	Rushcliffe	-563	-570	-6%	5%	5%	0%	1%
14	Gedling Colliery	Gedling	-118	-110	-1%	1%	1%	0%	0%	29	E. of Gamston N. of Tollerton	Rushcliffe	-374	-361	-4%	3%	0%	3%	1%
15	North of Papplewick Lane	Gedling	0	0	-3%	3%	3%	0%	0%	30	Between Platt Lane and Station Road, Keyworth	Rushcliffe	0	0	0%	0%	0%	0%	0%
16	Mapperley Plains and Killisick Lane	Gedling	0	0	0%	0%	0%	0%	0%	31	Land North of Nottingham Road/The Paddocks	Rushcliffe	0	0	-2%	1%	0%	1%	1%
17	Bestwood Business Park	Gedling	0	0	-1%	1%	1%	0%	0%	32	Land at Rempstone Road N.	Rushcliffe	1	1	0%	0%	0%	0%	0%
44	Arnold (non-allocated)	Gedling	-110	-101	0%	0%	0%	0%	0%	33	Shelford Rd/Grooms Cottage	Rushcliffe	1	0	-1%	0%	0%	0%	1%
45	Carlton (non-allocated)	Gedling	-152	-144	1%	0%	0%	0%	-1%	34	Lantern Lane, E. Leake	Rushcliffe	1	1	0%	0%	0%	0%	0%
46	Bestwood (non-allocated)	Gedling	-70	-62	-3%	1%	1%	0%	2%	35	North of Bunny Lane	Rushcliffe	0	0	0%	0%	0%	0%	0%
47	Calverton (non-allocated)	Gedling	-76	-67	-2%	0%	0%	0%	2%	36	East of L'borough Rd	Rushcliffe	0	0	0%	0%	0%	0%	0%
48	Ravenshead (non-allocated)	Gedling	-77	-67	-2%	1%	1%	0%	2%	42	North of Grantham Road	Rushcliffe	0	0	-2%	1%	0%	1%	1%
56	Teal Close, ALDI & Local Centre	Gedling	0	34	-8%	8%	1%	7%	0%	43	Land R/O Mill Lane/the Old Park/S. of Hollygate Lane	Rushcliffe	0	1	-6%	6%	0%	6%	0%
1	Boots Site	Nottingham	-60	-54	-3%	1%	1%	0%	2%	50	Ratcliffe on Soar Power Sta.	Rushcliffe	4	-13	-4%	1%	0%	1%	3%
18	Chalfont Drive	Nottingham	0	0	0%	0%	0%	0%	0%	53	Wilford Lane West Bridgford	Rushcliffe	0	-11	-3%	2%	1%	1%	2%
19	Former Padstow School Site Gainsford Crescent	Nottingham	0	0	0%	0%	0%	0%	0%	54	E. Bridgford Garden Centre	Rushcliffe	0	0	0%	0%	0%	0%	0%
20	Stanton Tip	Nottingham	-64	-57	-2%	1%	1%	0%	1%	57	Landmere Lane, Edwalton	Rushcliffe	-1	19	-4%	3%	0%	3%	2%
											Total		-9,067	-8,586					

With Mitigation Public Transport Flow Differences

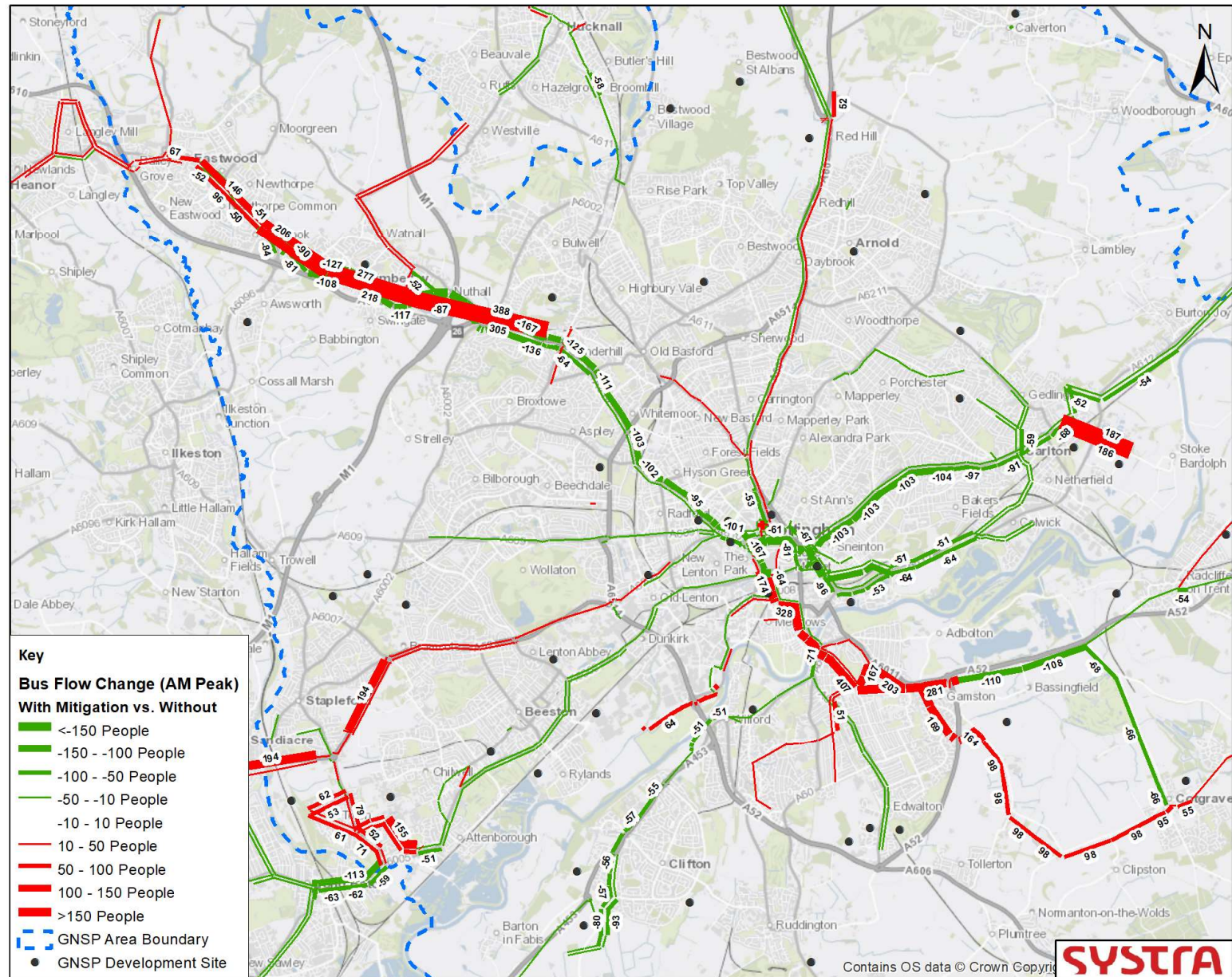
NET Volume Change:

- **With Mitigation vs. Without Mitigation**
- **AM Peak**



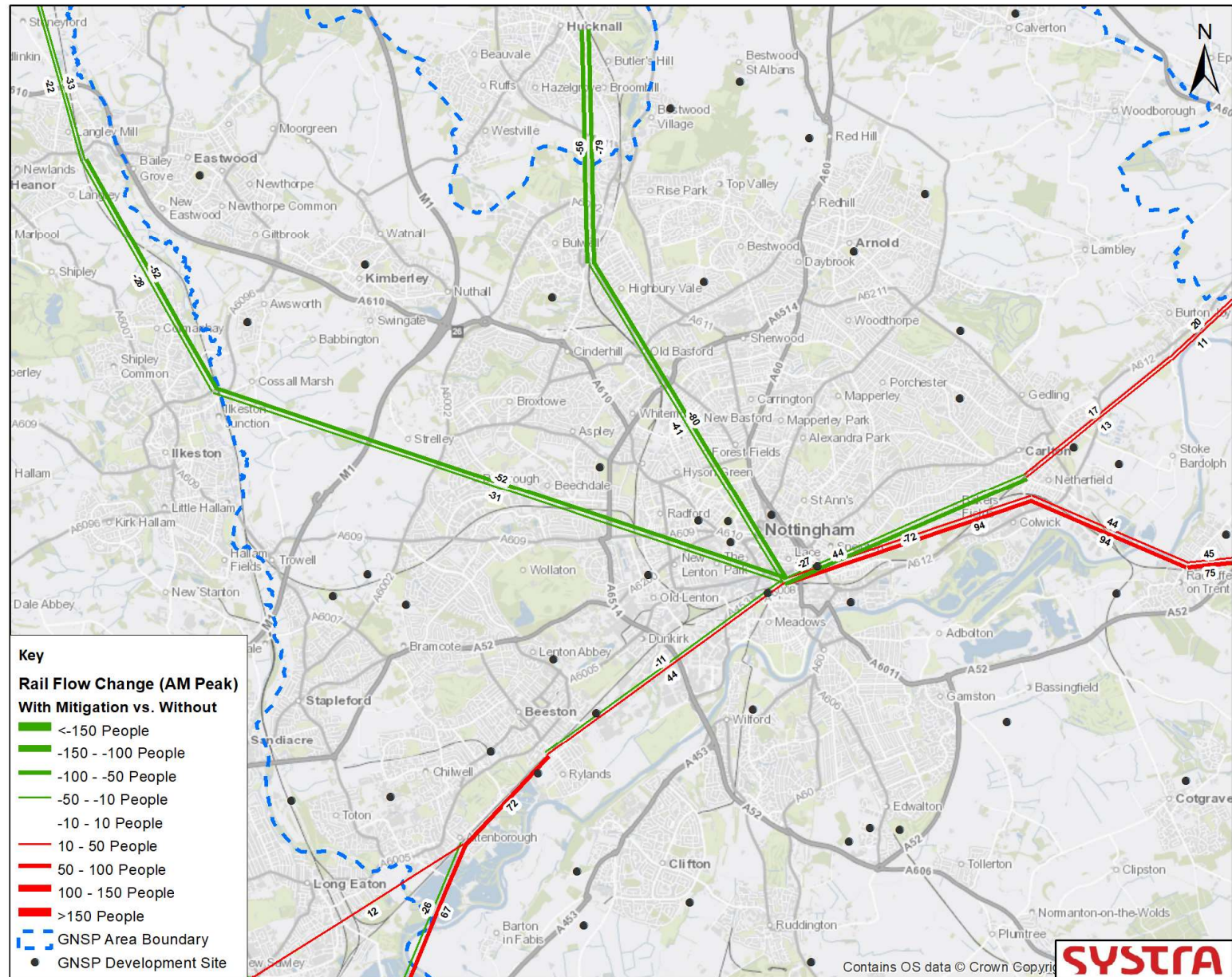
Bus Volume Change:

- **With Mitigation vs. Without Mitigation**
- **AM Peak**



Rail Volume Change:

- **With Mitigation vs. Without Mitigation**
- **AM Peak**



With Mitigation Network Summary Statistics

Mitigation Package

■ AM Peak:

INDICATOR	REFERENCE CASE	STRATEGIC PLAN SCENARIO	STRATEGIC PLAN SCENARIO PLUS FULL MITIGATION	% MITIGATED
Congestion (Over Capacity Queue, (PCU hrs)	1,938	4,258	4,171	4%
Total Travel Time (PCU hrs)	49,272	57,221	56,283	12%
Total Travel Distance (PCU kms)	1,974,417	2,113,795	2,084,723	21%
Average Speed km/hr	40	37	37	2%

■ PM Peak:

INDICATOR	REFERENCE CASE	STRATEGIC PLAN SCENARIO	STRATEGIC PLAN SCENARIO PLUS FULL MITIGATION	% MITIGATED
Congestion (Over Capacity Queue, (PCU hrs)	2,608	4,646	4,846	-10%
Total Travel Time (PCU hrs)	50,217	57,689	57,244	6%
Total Travel Distance (PCU kms)	1,979,641	2,110,306	2,091,884	14%
Average Speed km/hr	39	37	37	-3%

Mitigation Package (excluding A52 Bus Lanes)

■ AM Peak:

INDICATOR	REFERENCE CASE	STRATEGIC PLAN SCENARIO	STRATEGIC PLAN SCENARIO PLUS FULL MITIGATION	% MITIGATED
Congestion (Over Capacity Queue, (PCU hrs)	1,938	4,258	3,611	28%
Total Travel Time (PCU hrs)	49,272	57,221	55,934	16%
Total Travel Distance (PCU kms)	1,974,417	2,113,795	2,092,255	15%
Average Speed km/hr	40	37	37	15%

■ PM Peak:

INDICATOR	REFERENCE CASE	STRATEGIC PLAN SCENARIO	STRATEGIC PLAN SCENARIO PLUS FULL MITIGATION	% MITIGATED
Congestion (Over Capacity Queue, (PCU hrs)	2,608	4,646	4,066	28%
Total Travel Time (PCU hrs)	50,217	57,689	56,697	13%
Total Travel Distance (PCU kms)	1,979,641	2,110,306	2,093,136	13%
Average Speed km/hr	39	37	37	12%

Mitigation Package (excluding A52 Bus Lanes and Demand Management)

■ AM Peak:

INDICATOR	REFERENCE CASE	STRATEGIC PLAN SCENARIO	STRATEGIC PLAN SCENARIO PLUS FULL MITIGATION	% MITIGATED
Congestion (Over Capacity Queue, (PCU hrs)	1,938	4,258	3,683	25%
Total Travel Time (PCU hrs)	49,272	57,221	55,934	16%
Total Travel Distance (PCU kms)	1,974,417	2,113,795	2,092,255	15%
Average Speed km/hr	40	37	37	15%

■ PM Peak:

INDICATOR	REFERENCE CASE	STRATEGIC PLAN SCENARIO	STRATEGIC PLAN SCENARIO PLUS FULL MITIGATION	% MITIGATED
Congestion (Over Capacity Queue, (PCU hrs)	2,608	4,646	4,241	20%
Total Travel Time (PCU hrs)	50,217	57,689	56,697	13%
Total Travel Distance (PCU kms)	1,979,641	2,110,306	2,093,136	13%
Average Speed km/hr	39	37	37	12%

Discussion on Next Steps