Appendix A. Uncertainty Log

Scheme Description	HMA Spatial Categorisation [Complete/Permission/Windfall/Potential/Greater Harlow/New Settlement]	Use Class ID (use for model)	Log Ref	No of Dwellings/Beds
The Good's Yard Site (Policy BISH3)	Potential	Housing	22	400
Reserve Secondary School Site, Hadham Road (Policy BISH5) Planning permission granted for school on ASR (BISH8 site) so dwellings can be assumed	Potential	Housing	24	163
Site East of Manor Links (Policy BISH6)	Potential	Housing	25	50
Land South of Bishop's Stortford (Policy BISH7)	Potential	Housing	26	750
Land West of Hoggate's Wood (Policy BISH8). Access off new rbt on Hadham Rd	Potential	Housing	27	857
Land Between Hoggate's Wood and Farnham Road (Policy BISH8)	Potential	Housing	28	1343
Land East of Farnham Road (Policy BISH8)	Potential	Housing	29	329
Bishop's Stortford High School Site, London Road	Potential	Housing	30	150
Land North of West Road (Policy SAWB2)	Potential	Housing	33	125
Land to North of Sawbridgeworth	Potential	Housing	34a	200
Land south of West Road (SAWB3)	Potential	Housing	34	175
Land in Mead Lane Area (Policy HERT2)	Potential	Housing	35	193
Land North of Welwyn Road (Policy HERT3)	Potential	Housing	36	300
Land South of Welwyn Road / Thieves Road (Policy HERT3)	Potential	Housing	37	250
Land North of Hertford (Policy HERT4)	Potential	Housing	38	50
Land South of Hertford (Policy HERT5)	Potential	Housing	39	50
Land North and East of Ware (Policy WARE3)	Potential	Housing	40b	1000
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	42	125
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	43	85
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	43a	15
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	43b	123
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	43c	37
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	43d	25
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	43e	19
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	44	63
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	45	49
Infill Development in Group 1 Villages (Policy VILL1)	Potential	Housing	46	47
Land East of London Road (Policy BUNT2)	Potential	Housing	47	0
Land West of Ermine Street (Policy BUNT3)	Potential	Housing	48	0
Henderson Development, The Causeway	Potential	Housing	49	50
Land to South of Hare Street Road (Area 1)	Permission	Housing	50	100
Land to South of Hare Street Road (Area 2 & 3)	Permission	Housing	51	180
Western Section (Gilston Park Estate) developed by CPP	Greater Harlow	Housing	52	1386
Land North of Harlow: The Gilston Park Estate (Northern Section) developed by Places for People	Greater Harlow	Housing	53	1664

East of Stevenage	Potential	Housing	54	600
Hertford Regional College, Scott's Road, Ware	Permission	Housing	58	49
Wallace Land, Buntingford Road (3/10/1522)	Permission	Housing	59	14
Former Trinity Centre (3/11/0384)	Permission	Housing	60	14
Terlings Park, Eastwick Road, Gilston (3/11/0554)	Permission	Housing	65	192
Former Fyfe Wilson Site, Station Road	Potential	Housing	67	42
Works, Southmill Road	Potential	Housing	68	0
Delivery Office & Post Office Site	Potential	Housing	69	0
Pearce House Site, Parsonage Lane	Permission	Housing	70	17
Sports Field, Birchwood High School	Potential	Housing	71	0
Land at Brazier's Field	Potential	Housing	72	18
Sovereign House, Hertford	Permission	Housing	74	84
South of Mead Lane (next to Hertford East Station)	Permission	Housing	75	107
Land east of Welwyn Garden City	Potential	Housing	365	1350
High Cross Committed Dev	Permission	Housing	392	57
Tewin Committed Dev	Permission	Housing	393	8
Bps Stortford Committed Dev (remainder)	Permission	Housing	394	149
Buntingford Committed Dev	Permission	Housing	395	29
Hertford Police Station, SG13 7HD	Permission	Housing	397	85
Hertford Committed Dev (remainder)	Permission	Housing	398	351
Ware Committed Dev	Permission	Housing	399	167
Land north of Hare St Rd, Buntingford	Permission	Housing	400	160
Rural Committed in vicinity of Aston/Benington	Permission	Housing	401	31
Rural Committed in vicinity of Broxbourne	Permission	Housing	403	14
Rural Committed in vicinity of Eastwick/Gilston	Permission	Housing	406	37
Rural Committed in vicinity of Hertford	Permission	Housing	408	64
Rural Committed in vicinity of Puckeridge/Standon	Permission	Housing	409	30
Rural Committed in vicinity of Sawbridgeworth	Permission	Housing	410	29
Rural Committed in vicinity of Ware	Permission	Housing	411	30
Rural Committed in vicinity of Welwyn	Permission	Housing	412	21
District Wide Completions	Completion	Housing	524	503
District Wide Windfall Allowance	Windfall	Housing	525	690
Added back to all options 18th Mar; SR-0176 St Just, 1 Powell Road, Buckhurst Hill	Potential	Housing	225	60
Added back to all options (+18) 18th Mar; SR-0230 Electricity sub-station, Station Way, Roding Valley, Buckhurst Hill	Potential	Housing	226	30
SR-0014 Land adjoinging 40A Hainault Road (Small)	Potential	Housing	227	10
Added to Opt D 18th Mar; SR-0022 101-103 High Street, Chipping Ongar	Potential	Housing	229a	5
Reduced to zero in Option D 18th Mar; SR-0184 Land adjacent to High Ongar Road, High Ongar	Potential	Housing	230	26
Added to Opt D 18th Mar; SR-0053 Land East of Brentwood Road, Marden Ash.	Potential	Housing	233	7
Added to Opt D 18th Mar; SR-0268 Land to the South of Kettlebury Way, Ongar	Potential	Housing	234	43
SR-0281 St Johns Road Area, Epping Town Centre	Potential	Housing	237	50

SR-0347 Epping Sports Centre	Potential	Housing	237a	35
Loughton shortfall (593, 1011 Opt D) added to site 18th Mar; SR-0058 Land to North of Clay's Lane, Loughton, Essex, IG10 2RZ	Potential	Housing	247	671
SR-0289 Vere Road, Loughton Broadway	Potential	Housing	252	41
SR-0286 Burton Road, Loughton Broadway	Potential	Housing	253	80
SR-0059 Land at 20 Albion Hill, Loughton	Potential	Housing	254a	10
Opt D swapped for Opt E 18th Mar; SR-0036A Land at Blumans, North Weald	Potential	Housing	264	220
SR-0080 Coppice Farm, Coppice Row, Theydon Bois, Essex, CM16 7OS	Potential	Housing	269	68
Reduced to 11; Opt D increased to 196 185h Mar; SR-0104 Land adjoining Parklands, Waltham Abbey	Potential	Housing	278	11
SR-0021 Land lying to the North of Honey Lane and west of Mason Way, Ninefields, Waltham Abbey, Essex	Potential	Housing	279c	10
East Harlow	Greater Harlow	Housing	325	750
West Katherines	Greater Harlow	Housing	333	1100
SR-0046 Latton Priory Farm, London Road, Harlow; Residential led urban extension to Harlow	Greater Harlow	Housing	372	1050
SR-0068 Land to the west of Sumners (bounded in part by Water Lane and Epping Road, Tylers Cross (also partly within Epping Upland and Harlow DC)); Residential led urban extension to Harlow	Greater Harlow	Housing	375	1000
Added back in (increased by 49) to all except Opt D 18th Mar; SR-0210 The Moores Estate, Church Lane, Roydon, Essex, CM19 5HS	Potential	Housing	385	0
SR-0088 Land in School Lane, Chigwell	Potential	Housing	413	150
SR-0433 Former Beis Shammai School, High Road, Chigwell, IG7 5DN	Potential	Housing	414	75
SR-0478 Chigwell Nurseries, 245 High Road, Chigwell, Essex, 1G75BL	Potential	Housing	415	175
Reduced to zero in Option D 18th Mar; SR-0120 Bowes Field, Chipping Ongar	Potential	Housing	416	100
Reduced to zero in Option D 18th Mar; SR-0102 Land to the south and west (rear) of Nos 57a and 57b Fyfield Road, Ongar	Potential	Housing	417	8
Included in Option D 18th Mar; SR-0071 Land at Stonards Hill, Epping	Potential	Housing	424	300
Included in Option D 18th Mar (113) amended to 128 in all other options; SR-0113 Land South of Brook Road, Epping	Potential	Housing	426	128
SR-0219 Fire Station, Sewardstone Road, Waltham Abbey, Essex, EN9 1PA	Potential	Housing	427	16
SR-0482 Land adjoining Mason Way, Waltham Abbey	Potential	Housing	428	21
SR-0481 Land to the South of Hillhouse Primary School, Waltham Abbey	Potential	Housing	429	88
SR-0020 Land at Paternoster Hill, Waltham Abbey	Potential	Housing	430	260
Added back in to all except Opt D 18th Mar; SR-0035 Land at Epping Road, Roydon	Potential	Housing	431	0
Added back in to all except Opt D 18th Mar; SR-0169 The Old Coal Yard, off 32 High Street, Roydon	Potential	Housing	432	0
Added back in to all except Opt D 18th Mar; SR-0117 The paddock to the rear of Barn House, Farm Close, Roydon, Essex, CM19 5LW	Potential	Housing	433	0
SR-0228A Theydon Bois LU Car Park	Potential	Housing	434	22
Added 9 to all options 18th Mar; SR-0228B Land and commercial yard adjacent to station off Coppice Row, CM16 7	Potential	Housing	435	30
SR-0070 Land at Forest Drive, Theydon Bois	Potential	Housing	436	28

Reduced to zero in Option D 18th Mar; SR-0186 Land adjacent to Chelmsford Road (A414) near the Four Wantz roundabout, High Ongar	Potential	Housing	438	10
Reduced to zero in Option D 18th Mar; SR-0090 Land to east of Longfields, Ongar	Potential	Housing	439	114
Opt D swapped for Opt E 18th Mar; SR-0036B Land at Blumans, North Weald	Potential	Housing	440	102
Opt D swapped for Opt E 18th Mar; SR-0501 Playing field at New House Lane, North Weald	Potential	Housing	441	70
Opt D swapped for Opt E 18th Mar; SR-0003 Two fields East and West of Church Lane (North of Lancaster Road), North Weald Bassett, Essex	Potential	Housing	442	200
Opt D swapped for Opt E 18th Mar; SR-0417 Land east of Church Lane/West of Harrison Drive, North Weald Bassett	Potential	Housing	443	55
Opt D swapped for Opt E 18th Mar; SR-0119(PART OF) North Weald Airfield, Merlin Way, North Weald Essex, CM16 6AA	Potential	Housing	444	219
Opt D swapped for Opt E 18th Mar; SR-0158C Land at North Weald Bassett, East of Church Lane	Potential	Housing	445	99
Opt D swapped for Opt E 18th Mar; SR-0158B West of Church Lane	Potential	Housing	446	38
Opt D swapped for Opt E 18th Mar; SR-0076 Land south of Vicarage Lane, North Weald	Potential	Housing	447	91
Opt D swapped for Opt E 18th Mar; SR-0158A Land at North Weald Bassett, South of Vicarage Lane	Potential	Housing	448	200
Opt D swapped for Opt E 18th Mar; SR-0455 Chase Farm Business Centre, Vicarage Lane West, North Weald, Essex, CM16 6AL	Potential	Housing	449	12
Opt D swapped for Opt E 18th Mar; SR-0195A Land to the North of Vicarage Lane, East, North Weald Bassett, Epping, Essex, CM16 6AP	Potential	Housing	450	40
Removed from Opt D 18th Mar; SR-0309(PART OF) North Weald Bassett, North East Area	Potential	Housing	451	200
Opt D swapped for Opt E 18th Mar; SR-0418 (PART OF) Chase Farm & Redricks Nursery and North Weald Nursery	Potential	Housing	452	70
'Givens' (Completion/Permission/Windfall) to be distributed across district based on EFDC GIS info	Permission	Housing	509	1800
Land North of Gilden Way	Permission	Housing	298	900
Kitson Way Multi Story Car Park Site	Potential	Housing	299	170
New Pond Street	Potential	Housing	300	31
Parcel 1 of New Hall Phase 1	Permission	Housing	304	328
New Hall Phase 2 & 3	Permission	Housing	305	1780
Parcel 2 New Hall Phase 2	Permission	Housing	305a	239
Peartree Business Centre South Rd. CM20 2BD (PD PrNotice)	Permission	Housing	389	24
Redstone House, Crown gate (PD PrNotice) (superceeds 437/13)	Permission	Housing	390	24
Site at Greenway House, The Parkway, Harlow CM19 5QD	Permission	Housing	391	55
Motorsales Site, Fifth Avenue	Permission	Housing	307	102
Various Small Sites < 20 dwellings	Permission	Housing	310	113
Land to South of Berecroft	Potential	Housing	311	294
Ram Gorse Site	Permission	Housing	312	125
Rectory Field Playing Field	Potential	Housing	313	70
Playing Field to West of Deer Park	Potential	Housing	314	69
Playing Field to East of Radburn Close & South of Clifton Hatch	Potential	Housing	315	69

Playing Field to South of Gilden Way	Potential	Housing	316	67
The Angle Site	Potential	Housing	317	69
Lister House, Staple Tye Mews - West of Riddings Lane	Potential	Housing	318	42
Land North West of Kingsland	Potential	Housing	319	42
Land South of Hawthorns & West of Riddings Lane	Potential	Housing	320	35
Purford Green School	Potential	Housing	321	30
Land Adjacent to Katherines School	Potential	Housing	322	27
Land East of Downs School	Potential	Housing	323	25
Various Small Sites < 20 dwellings	Permission	Housing	324	153
Land at Wych Elm	Potential	Housing	326	500
Barley Croft, Lower Meadow, The Briars, Copshall Close, Ayletts Field Area	Permission	Housing	327	125
Terminus House and Car Park	Potential	Housing	328	0
Northbrook Playing Fields	Potential	Housing	330	0
Kingsmoor Recreation Centre	Potential	Housing	331	0
Land East of 144-154 Fennells	Potential	Housing	332	0
SR-0146 Land East of Harlow, North of Church Langley and South of Sheering Road; Large strategic site on edge of Harlow, with only part of site within Epping Forest DC.	Potential	Housing	383	2600
Land South of Stanley Road	Permission	Housing	206	50
Land at Priors Green	Permission	Housing	212	65
MANUDEN land off The Street, committed	Permission	Housing	361	5
Easton Park potential land allocation	New settlement	Housing	388	1400
Boxted Wood/Andrewsfield potential land allocation	New settlement	Housing	466	1400
Former Willis and Gambier Site, Radwinter Road	Permission	Housing	192	52
The Ashdon Road Commercial Centre	Permission	Housing	193	167
Land West of Great Dunmow, north of Stortford Road	Permission	Housing	194	790
Land West of Chelmsford Road	Permission	Housing	197	300
Land at Woodlands Park	Permission	Housing	198	966
Land South of Ongar Road	Permission	Housing	199	100
Land North of Ongar Road	Potential	Housing	200	73
Land at Brick Kiln Farm	Permission	Housing	201	65
Land West of Station Road	Permission	Housing	203	155
Land West of Hall Road	Permission	Housing	204	130
Land South of Stansted Road	Permission	Housing	205	165
Land at Bury Water Lane / Whiteditch Lane	Permission	Housing	207	84
Land at Forest Hall Park	Permission	Housing	209	35
Land at Walpole Farm (north of Stansted Mountfitchet)	Permission	Housing	210	160
Land at Elms Farm	Permission	Housing	211	51
Land South of Dunmow Road, Brewers End	Permission	Housing	213	100
Land South of Sampford Road	Permission	Housing	214	60
Land at Flitch Green	Permission	Housing	215	132
Miscellaneous committed housing not previously highlighted	Permission	Housing	339	460
Takeley/Little Canfield Policy 2: Land south of Dunmow Road and west of The Pastures/Orchard Fields	Permission	Housing	346	41
Takeley/Little Canfield Policy 3: North View and 3 The Warren	Permission	Housing	347	44

Takeley/Little Canfield Policy 4: Land at Former Takeley Service Station and between Ridge House and Remarc	Permission	Housing	348	15
Great Chesterford Policy 1: New World Timber and Great Chesterford Nursery, London Road	Permission	Housing	352	42
CLAVERING Policy 1: Land rear of the shop and Oxleys Close	Permission	Housing	353	14
HENHAM Policy 1: Land at Blossom Hill Farm, Chickney Road	Permission	Housing	354	21
HENHAM Policy 2: Land north of Chickney Road and west of Lodge Cottages	Permission	Housing	355	16
RADWINTER Policy 1: Land north of Walden Road	Permission	Housing	356	35
STEBBING Policy 1: Land east of Parkside and Garden Fields	Permission	Housing	357	30
FELSTED land at Watch House Green, committed	Permission	Housing	359	25
HIGH RODING Land at Meadow House, committed	Permission	Housing	360	31
QUENDON Land rear of Foxley House, committed	Permission	Housing	362	19
CLAVERING Jubilee Works, committed	Permission	Housing	363	24
Land West of Great Dunmow, south of Stortford Road	Potential	Housing	195	600
Land at Helena Romanes School	Potential	Housing	196	150
Land West of London Road; plus potential for site to accord with HMA larger village options	Potential	Housing	208	200
Takeley Policy 5, Olivias, Dunmow Rd	Permission	Housing	349	6
Committed sites previously omitted	Permission	Housing	341	33
Miscellaneous committed housing not previously highlighted	Permission	Housing	343	16
Committed sites previously omitted	Permission	Housing	344	12
Committed sites previously omitted	Permission	Housing	350	8
Committed sites previously omitted	Permission	Housing	351	47
Small Sites: to be spread across district	Potential	Housing	364	172
Land East of Saffron Walden	Potential	Housing	191	750
Great Chesterford: land north of Bartholomew Close	Permission	Housing	387	14
CLAVERING: Land south of Oxleys Cl	Permission	Housing	510	14
Various Permissions in Gt Dunmow	Permission	Housing	511	36
Thaxted: Wedow Rd various sites with permission	Permission	Housing	512	106
Elsenham Nurseries Stansted Road Elsenham	Permission	Housing	513	40
Land east of St Edmunds lane, Great dunmow	Permission	Housing	514	22
Former Ridleys Brewery Mill Lane Hartford End	Permission	Housing	515	22
Land At Dell Lane Little Hallingbury	Permission	Housing	516	16
Land s of Wyndhams Croft & land opp Branksome	Permission	Housing	517	30
25 Barnards Field, Thaxted	Permission	Housing	518	7
9-10 Everitt Rd, Saffron Walden	Permission	Housing	519	7
Canfield Nursery Bullocks Lane Takeley	Permission	Housing	520	7
Kings Head North St Great Dunmow	Permission	Housing	521	6
Elsenham Goods Yard (North) Old Mead Lane Elsenham	Permission	Housing	522	6
Land West of Cambridge Road, Newport	Permission	Housing	523	34
See GIS files	Potential	Housing	467	100
See GIS files	Potential	Housing	468	100
See GIS files	Potential	Housing	469	40
See GIS files	Potential	Housing	470	60
See GIS files	Potential	Housing	471	71

See GIS files	Potential	Housing	472	60
See GIS files	Potential	Housing	473	52
See GIS files	Potential	Housing	474	40
See GIS files	Potential	Housing	475	36
See GIS files	Potential	Housing	476	36
See GIS files	Potential	Housing	477	22
See GIS files	Potential	Housing	478	218
See GIS files	Potential	Housing	479	40
See GIS files	Potential	Housing	480	88
See GIS files	Potential	Housing	481	79
See GIS files	Potential	Housing	482	35
See GIS files	Potential	Housing	483	25
See GIS files	Potential	Housing	484	90
See GIS files	Potential	Housing	485	22
See GIS files	Potential	Housing	486	30
See GIS files	Potential	Housing	487	40
See GIS files	Potential	Housing	488	56
See GIS files	Potential	Housing	489	40
See GIS files	Potential	Housing	490	60
See GIS files	Potential	Housing	491	32
See GIS files	Potential	Housing	492	34
See GIS files	Potential	Housing	493	115
See GIS files	Potential	Housing	494	40
See GIS files	Potential	Housing	495	200
See GIS files	Potential	Housing	496	50
See GIS files	Potential	Housing	497	140
See GIS files	Potential	Housing	498	300
See GIS files	Potential	Housing	499	33
See GIS files	Potential	Housing	500	50
See GIS files	Potential	Housing	501	300
See GIS files	Potential	Housing	502	523
See GIS files	Potential	Housing	503	460
See GIS files	Potential	Housing	504	600
See GIS files	Potential	Housing	505	750
See GIS files	Potential	Housing	506	750
See GIS files	Potential	Housing	507	80
See GIS files	Potential	Housing	508	132
Potential for site to accord with HMA larger villages projection	Potential	Housing	526	0
Potential for site to accord with HMA larger villages options	Potential	Housing	527	0
West of Pinnacles	Potential	Housing	528	0
Land north of Stort/south of Gilston	Potential	Housing	529	0
New Health Centre		GPSurgeries_GPs	188	3
The Good's Yard Site (Policy BISH3)	Potential	Hotel_bed	22	
The Good's Yard Site (Policy BISH3)	Potential	Retail_Park	22	

Land South of Bishop's Stortford (Policy BISH7)	Potential	Business Park_B1	26
Land Between Hoggate's Wood and Farnham Road (Policy BISH8)	Potential	Office_B1	28
Henderson Development, The Causeway	Potential	Food_Superstore	49
Henderson Development, The Causeway	Potential	Shopping_Centre	49
Henderson Development, The Causeway	Potential	Hotel_bed	49
SR-0281 St Johns Road Area, Epping Town Centre	Potential	Shopping_Centre	237
SR-0281 St Johns Road Area, Epping Town Centre	Potential	Leisure_Centre	237
SR-0347 Epping Sports Centre	Potential	Shopping_Centre	237a
SR-0347 Epping Sports Centre	Potential	Leisure_Centre	237a
SR-0286 Burton Road, Loughton Broadway	Potential	Shopping_Centre	253
SR-0046 Latton Priory Farm, London Road, Harlow; Residential led urban extension to Harlow	Greater Harlow	Business Park_B1	372
SR-0066 Harlow Park Nursery, London Road, North Weald Bassett	Greater Harlow	Business Park_B1	374
SR-0092 Latton Park, London Road, Harlow	Greater Harlow	Office_B1	378
SR-0483 Southfiled Nursery, Old House Lane, Roydon, CM19 5DH	Greater Harlow	Office_B1	386
Opt D swapped for Opt E 18th Mar; SR-0119(PART OF) North Weald Airfield, Merlin Way, North Weald Essex, CM16 6AA	Potential	Office_B1	444
Opt D swapped for Opt E 18th Mar; SR-0076 Land south of Vicarage Lane, North Weald	Potential	Office_B1	447
Opt D swapped for Opt E 18th Mar; SR-0418 (PART OF) Chase Farm & Redricks Nursery and North Weald Nursery	Potential	Office_B1	452
Harlow Enterprise Zone - London Road North	Permission	Business Park_B1	336
Harlow Enterprise Zone - London Road South	Permission	Office_B1	337
Harlow Enterprise Zone - Templefields North East	Permission	Industrial Estate_B1	338
Public Health England transfer to old GSK site at The Pinnacles	Potential	Business Park_B1	456
The Ashdon Road Commercial Centre	Permission	Office_B1	193
Land West of Chelmsford Road	Permission	Office_B1	197
Stansted Airport	Permission	Industrial Estate_B1	220
Stansted Airport	Permission	Warehousing_B8	220
Alsa Street	Potential	Office_B1	216
Bury Lodge Lane	Potential	Industrial Estate_B1	217
Bury Lodge Lane	Potential	Warehousing_B8	217
Chesterford Park	Potential	Business Park_B1	218
Gaunts End	Potential	Office_B1	219
Start Hill	Potential	Industrial Estate_B1	221
Start Hill	Potential	Office_B1	221
Start Hill	Potential	Warehousing_B8	221
Land East of Saffron Walden	Potential	Office_B1	191
See GIS files	Potential	Business Park_B1	161
See GIS files	Potential	Business Park_B1	163
See GIS files	Potential	Business Park_B1	164a
See GIS files	Potential	Business Park_B1	165
See GIS files	Potential	Retail_Park	165
See GIS files	Potential	Leisure_Centre	165

Appendix B. Trip Reductions Applied to the Trip Matrices

In the transport model, the modelled area is subdivided into model zones. Each of these zones generates a defined number of vehicle trips forecast for 2033, set out in a trip matrix for a weekday AM peak hour and a trip matrix for a weekday PM peak hour. The number of trips in the 2033 forecast includes:

- Trips from emerging Local Plan developments in the model zone. These trips are referred to as development trips.

- Trips from existing land uses the model zone and an assumption about growth in trips without those developments identified in the emerging Local Plan. These trips are referred to as background trips.

The methods used to forecast the number of vehicle trips are outlined in Chapter 2 and include a standard assumption that a certain amount trips will be by a sustainable transport mode such as public transport, cycling or walking. Technical Note 7 has made additional assumptions that the number of trips generated will be reduced further by improved sustainable transport options introduced along sustainable travel corridors. These assumptions are called:

- Intermediate sustainable travel assumptions

- Ambitious sustainable travel assumptions

The figure below shows those model zones covering wider Harlow. These zones are referred to as the internal model zones. It should be noted that the model zone boundaries do can extend far beyond the sustainable transport corridor should in Figure 3.1 in Chapter 3. However, the assumption is that at larger development sites they will be sustainable transport connectivity within the development site which will always users to access the sustainable travel corridors.

Figure 1: Model Zones

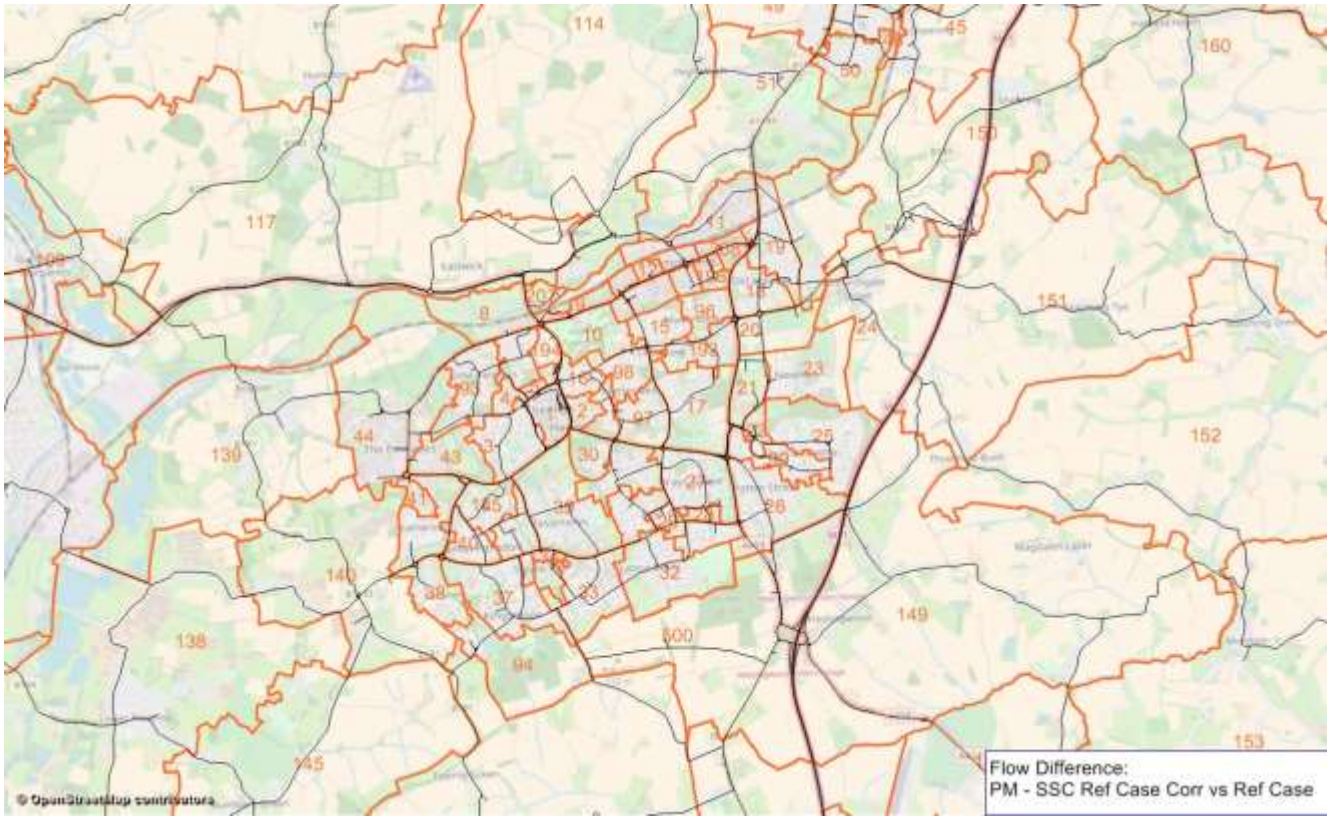

Table 1 sets out the trips generated in each model zone in the wider-Harlow area in the AM-peak hour using the standard sustainable travel assumptions and shows the percentages of these trips left in the model. Different reductions are applied for:

- Trips from development sites to other zones in wider Harlow (internal zones)
- Trips from development sites to zones outside wider Harlow (external zones)
- Background trips to zones in wider Harlow (internal zones)
- (No reduction is applied to background trips to zones outside wider Harlow (external zones))

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Table 1: Trips generated in each model zone in the wider-Harlow area

			Standard sustainable travel				Intermediate sustainable travel				Ambitious sustainable travel			
Model zone	**Development**	**Type of development**	**Total number of trips**	**Number of development trips to internal zones**	**Number of development trips to external zones**	**Number of background trips to internal zones**	**Total number of trips**	**% development trips to internal zones used**	**% development trips to external zones used**	**% background trips to internal zones used**	**Total number of trips**	**% development trips to internal zones used**	**% development trips to external zones used**	**% background trips to internal zones used**
1	1. Kitson Way Multi Story Car Park Site 2. Redstone House, Crown gate (PD PrNotice) (supersedes 437/13) 3. Terminus House and Car Park	1. Housing 2. Housing 3. Housing	576.53	48.09	4.52	449.54	503.97	0.79	0.86	0.79	388.23	0.53	0.66	0.64
2	Land East of Downs School	Housing	38.52	4.23	2.55	21.28	36.14	0.86	0.92	0.91	31.85	0.79	0.86	0.75
3	1. The Angle Site 2. Northbrook Playing Fields	1. Housing 2. Housing	357.38	17.05	1.66	257.81	335.79	0.86	0.92	0.91	287.94	0.79	0.86	0.75
4	See GIS files	Housing	99.72	25.43	1.69	56.68	99.72	1.00	1.00	1.00	99.72	1.00	1.00	1.00
5	Land at Wych Elm	Housing	114.91	109.86	0.05	4.72	91.12	0.79	0.86	0.79	61.13	0.53	0.66	0.64
6	n/a	n/a	48.46	0.00	0.00	37.60	48.46	1.00	1.00	1.00	48.46	1.00	1.00	1.00
7	Motorsales Site, Fifth Avenue	Housing	239.92	21.00	6.66	142.12	225.89	0.86	0.92	0.91	198.37	0.79	0.86	0.75

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8	n/a	n/a	95.29	0.00	0.00	56.11	95.29	1.00	1.00	1.00	95.29	1.00	1.00	1.00
9	n/a	n/a	68.45	0.00	0.00	43.29	68.45	1.00	1.00	1.00	68.45	1.00	1.00	1.00
10	n/a	n/a	292.42	0.00	0.00	169.78	292.42	1.00	1.00	1.00	292.42	1.00	1.00	1.00
11	Harlow Enterprise Zone - Templefields North East	Industrial Estate_B1	333.78	39.84	16.42	166.65	333.78	1.00	1.00	1.00	333.78	1.00	1.00	1.00
12	n/a	n/a	9.36	0.00	0.00	9.36	9.36	1.00	1.00	1.00	9.36	1.00	1.00	1.00
13	n/a	n/a	12.69	0.00	0.00	7.10	12.69	1.00	1.00	1.00	12.69	1.00	1.00	1.00
14	n/a	n/a	20.11	0.00	0.00	14.95	20.11	1.00	1.00	1.00	20.11	1.00	1.00	1.00
15	n/a	n/a	240.44	0.00	0.00	181.60	240.44	1.00	1.00	1.00	240.44	1.00	1.00	1.00
16	n/a	n/a	96.11	0.00	0.00	90.08	96.11	1.00	1.00	1.00	96.11	1.00	1.00	1.00
17	Various Small Sites < 20 dwellings	Housing	484.01	49.86	22.26	275.27	454.76	0.86	0.92	0.91	400.24	0.79	0.86	0.75
18	n/a	n/a	90.71	0.00	0.00	74.27	90.71	1.00	1.00	1.00	90.71	1.00	1.00	1.00
19	n/a	n/a	746.40	0.00	0.00	450.54	713.22	0.86	0.92	0.91	631.75	0.79	0.86	0.75
20	Playing Field to South of Gilden Way	Housing	167.98	9.29	8.88	73.98	160.48	0.86	0.92	0.91	145.91	0.79	0.86	0.75

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21	1. Harlow Enterprise Zone - London Road North 2. Harlow Enterprise Zone - London Road South	1. Business Park_B1 2. Office_B1	122.91	25.28	9.32	49.31	109.47	0.79	0.86	0.79	89.77	0.53	0.66	0.64
22	n/a	n/a	71.73	0.00	0.00	55.14	71.73	1.00	1.00	1.00	71.73	1.00	1.00	1.00
23	1. New Pond Street 2. Parcel 1 of New Hall Phase 1 3. New Hall Phase 2 & 3 4. Parcel 2 New Hall Phase 2	1. Housing 2. Housing 3. Housing 4. Housing	954.45	520.59	124.22	218.80	796.80	0.79	0.86	0.79	585.55	0.53	0.66	0.64
24	1. East Harlow 2. SR-0146 Land East of Harlow, North of Church Langley and South of Sheering Road; Large strategic site on edge of Harlow, with only part of site within Epping Forest DC.	1. Housing 2. Housing	1033.67	609.22	299.15	87.94	850.03	0.79	0.86	0.79	610.68	0.53	0.66	0.64
25	n/a	n/a	568.42	0.00	0.00	392.07	568.42	1.00	1.00	1.00	568.42	1.00	1.00	1.00
26	Added back in (increased by 49) to all except Opt D 18th Mar; SR-0210 The Moores Estate, Church Lane, Roydon, Essex, CM19 5HS	Housing	450.99	0.00	0.00	282.02	450.99	1.00	1.00	1.00	450.99	1.00	1.00	1.00
27	Purford Green School	Housing	531.92	6.72	1.41	371.07	503.51	0.86	0.92	0.91	435.87	0.79	0.86	0.75
28	n/a	n/a	26.77	0.00	0.00	25.39	26.77	1.00	1.00	1.00	26.77	1.00	1.00	1.00

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29	n/a	n/a	42.06	0.00	0.00	31.78	42.06	1.00	1.00	1.00	42.06	1.00	1.00	1.00
30	n/a	n/a	70.49	0.00	0.00	43.52	70.49	1.00	1.00	1.00	70.49	1.00	1.00	1.00
31	n/a	n/a	207.88	0.00	0.00	158.91	207.88	1.00	1.00	1.00	207.88	1.00	1.00	1.00
32	1. Playing Field to East of Radburn Close & South of Clifton Hatch 2. Land South of Hawthorns & West of Riddings Lane	Housing	378.92	24.58	3.62	238.36	357.52	0.86	0.92	0.91	312.56	0.79	0.86	0.75
33	1. Land to South of Berecroft 2. Barley Croft, Lower Meadow, The Briars, Copshall Close, Ayletts Field Area	1. Housing 2. Housing	543.84	90.93	22.68	310.43	506.03	0.86	0.92	0.91	442.42	0.79	0.86	0.75
34	n/a	n/a	80.99	0.00	0.00	61.89	80.99	1.00	1.00	1.00	80.99	1.00	1.00	1.00
35	n/a	n/a	48.12	0.00	0.00	41.77	48.12	1.00	1.00	1.00	48.12	1.00	1.00	1.00
36	n/a	n/a	11.83	0.00	0.00	8.00	11.83	1.00	1.00	1.00	11.83	1.00	1.00	1.00
37	1. Lister House, Staple Tye Mews - West of Riddings Lane 2. Kingsmoor Recreation Centre 3. Land East of 144-154 Fennells	1. Housing 2. Housing 3. Housing	602.70	8.71	2.68	326.84	577.16	0.86	0.92	0.91	517.31	0.79	0.86	0.75
38	n/a	n/a	209.85	0.00	0.00	144.45	208.43	1.00	1.00	1.04	181.05	1.00	1.00	0.80

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39	Land North West of Kingsland	Housing	799.88	8.16	3.23	586.49	755.26	0.86	0.92	0.91	648.45	0.79	0.86	0.75
40	Playing Field to West of Deer Park	Housing	141.35	17.09	1.62	94.04	131.83	0.86	0.92	0.91	113.59	0.79	0.86	0.75
41	n/a	n/a	116.04	0.00	0.00	65.02	115.40	1.00	1.00	1.04	103.08	1.00	1.00	0.80
42	Land Adjacent to Katherines School	Housing	404.93	6.18	1.14	227.18	387.22	0.86	0.92	0.91	345.66	0.79	0.86	0.75
43	n/a	n/a	273.40	0.00	0.00	150.60	271.92	1.00	1.00	1.04	243.39	1.00	1.00	0.80
44	1. Site at Greenway House, The Parkway, Harlow CM19 5QD 2. Public Health England transfer to old GSK site at The Pinnacles	1. Housing 2. Business Park_B1	261.36	14.03	27.59	137.01	235.59	0.79	0.86	0.79	195.30	0.53	0.66	0.64
45	n/a	n/a	159.30	0.00	0.00	59.24	159.30	1.00	1.00	1.00	159.30	1.00	1.00	1.00
46	n/a	n/a	1.76	0.00	0.00	1.74	1.76	1.00	1.00	1.00	1.76	1.00	1.00	1.00
47	n/a	n/a	2.11	0.00	0.00	1.86	2.11	1.00	1.00	1.00	2.11	1.00	1.00	1.00
48	Land to North of Sawbridgeworth	Housing	111.54	15.63	38.60	28.39	111.54	1.00	1.00	1.00	111.54	1.00	1.00	1.00
49	1. Land North of West Road (Policy SAWB2) 2. Land south of West Road (SAWB3)	1. Housing 2. Housing	318.88	26.89	54.46	89.36	318.88	1.00	1.00	1.00	318.88	1.00	1.00	1.00

50	n/a	n/a	153.48	0.00	0.00	63.51	153.48	1.00	1.00	1.00	153.48	1.00	1.00	1.00
51	n/a	n/a	498.95	0.00	0.00	179.97	498.95	1.00	1.00	1.00	498.95	1.00	1.00	1.00
93	Ram Gorse Site	Housing	766.69	23.63	10.27	454.06	729.02	0.86	0.92	0.91	644.68	0.79	0.86	0.75
94	n/a	n/a	215.85	0.00	0.00	96.26	215.85	1.00	1.00	1.00	215.85	1.00	1.00	1.00
96	n/a	n/a	213.38	0.00	0.00	143.57	213.38	1.00	1.00	1.00	213.38	1.00	1.00	1.00
97	n/a	n/a	193.98	0.00	0.00	154.76	193.98	1.00	1.00	1.00	193.98	1.00	1.00	1.00
98	n/a	n/a	195.89	0.00	0.00	160.53	195.89	1.00	1.00	1.00	195.89	1.00	1.00	1.00
99	n/a	n/a	186.27	0.00	0.00	141.37	186.27	1.00	1.00	1.00	186.27	1.00	1.00	1.00
114	1. Terlings Park, Eastwick Road, Gilston (3/11/0554) 2. Rural Committed in vicinity of Eastwick/Gilston 3. Rural Committed in vicinity of Sawbridgeworth	1. Housing 2. Housing 3. Housing	426.06	25.47	44.49	170.33	406.31	0.86	0.92	0.91	370.91	0.79	0.86	0.75
117	1. Western Section (Gilston Park Estate) developed by CPP 2. Land North of Harlow: The Gilston Park Estate (Northern Section) developed by Places for People	1. Housing 2. Housing	851.82	548.90	278.12	16.12	693.79	0.79	0.86	0.79	490.78	0.53	0.66	0.64

140	1. West Katherines 2. SR-0068 Land to the west of Sumners (bounded in part by Water Lane and Epping Road, Tylers Cross (also partly within Epping Upland and Harlow DC)); Residential led urban extension to Harlow 3. SR-0483 Southfiled Nursery, Old House Lane, Roydon, CM19 5DH	1. Housing 2. Housing 3. Office_B1	583.93	477.11	93.04	8.77	468.82	0.79	0.86	0.79	322.90	0.53	0.66	0.64
149	1. SR-0046 Latton Priory Farm, London Road, Harlow; Residential led urban extension to Harlow 2. SR-0066 Harlow Park Nursery, London Road, North Weald Bassett 3. SR-0092 Latton Park, London Road, Harlow	1. Business Park_B1 2. Business Park_B1 3. Office_B1	486.30	28.40	30.04	137.82	457.03	0.79	0.86	0.79	412.30	0.53	0.66	0.64
183	n/a	n/a	137.49	0.00	0.00	119.94	137.49	1.00	1.00	1.00	137.49	1.00	1.00	1.00
184	n/a	n/a	92.84	0.00	0.00	74.12	92.84	1.00	1.00	1.00	92.84	1.00	1.00	1.00
185	Rectory Field Playing Field	Housing	267.69	14.98	4.00	191.72	251.09	0.86	0.92	0.91	215.17	0.79	0.86	0.75
186	n/a	n/a	101.25	0.00	0.00	87.92	100.38	1.00	1.00	1.04	83.72	1.00	1.00	0.80
187	n/a	n/a	81.61	0.00	0.00	38.11	81.61	1.00	1.00	1.00	81.61	1.00	1.00	1.00

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193	n/a	n/a	154.56	0.00	0.00	131.71	154.56	1.00	1.00	1.00	154.56	1.00	1.00	1.00
194	n/a	n/a	28.46	0.00	0.00	26.71	28.46	1.00	1.00	1.00	28.46	1.00	1.00	1.00
195	n/a	n/a	46.04	0.00	0.00	31.29	46.04	1.00	1.00	1.00	46.04	1.00	1.00	1.00
196	n/a	n/a	32.91	0.00	0.00	25.68	32.91	1.00	1.00	1.00	32.91	1.00	1.00	1.00
197	n/a	n/a	100.69	0.00	0.00	69.73	100.69	1.00	1.00	1.00	100.69	1.00	1.00	1.00
198	n/a	n/a	1.35	0.00	0.00	1.35	1.35	1.00	1.00	1.00	1.35	1.00	1.00	1.00
207	n/a	n/a	59.92	0.00	0.00	39.72	59.92	1.00	1.00	1.00	59.92	1.00	1.00	1.00
208	n/a	n/a	50.21	0.00	0.00	29.76	50.21	1.00	1.00	1.00	50.21	1.00	1.00	1.00
213	n/a	n/a	49.02	0.00	0.00	33.50	49.02	1.00	1.00	1.00	49.02	1.00	1.00	1.00
217	Peartree Business Centre South Rd. CM20 2BD (PD PrNotice)	Housing	40.58	6.05	0.46	24.89	37.84	0.86	0.92	0.91	32.91	0.79	0.86	0.75
218	n/a	n/a	6.01	0.00	0.00	4.33	6.01	1.00	1.00	1.00	6.01	1.00	1.00	1.00
219	n/a	n/a	4.84	0.00	0.00	4.44	4.84	1.00	1.00	1.00	4.84	1.00	1.00	1.00
220	n/a	n/a	79.89	0.00	0.00	63.71	79.89	1.00	1.00	1.00	79.89	1.00	1.00	1.00

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500	SR-0046 Latton Priory Farm, London Road, Harlow; Residential led urban extension to Harlow	Housing	284.71	154.73	129.98	0.00	233.32	0.79	0.86	0.79	166.95	0.53	0.66	0.64
501	Land North of Gilden Way	Housing	244.04	133.65	110.40	0.00	244.04	1.00	1.00	1.00	244.04	1.00	1.00	1.00

Appendix C. Flow Differences

1.1. Intermediate Sustainability Scenario with the Second Stort Crossing (SSC)

Table 2 shows the network statistics, total number of trips, total vehicle time, total vehicle miles and average network speed, in the morning peak for the intermediate sustainability and the reference case scenarios for the Harlow road network. The sustainability improvements are likely to result in a reduction in total number of trips, total vehicle time and total vehicle miles, by 3%, 5% and 2% respectively. The sustainability improvements are also likely to have a positive impact on the average network speed, which would increase by 3% over the reference case scenario.

Table 2: Intermediate Sustainability Scenario - Network Statistics for wider Harlow area (AM peak)

Scenario	Total Number of Trips	Total Vehicle Time (veh*hr)	Total Vehicle Miles (veh*miles)	Average Network Speed (miles/hr)
Base (2014)	21,182.23	1,737.65	54,605.16	31.31
SSC Ref Case (2033)	31,897.17	2,847.17	80,259.70	28.19
SSC ImSust (2033)	30,852.11	2,706.95	78,682.69	29.07

Table 3 shows the network statistics, total number of trips, total vehicle time, total vehicle miles and average network speed, in the evening peak for the intermediate sustainability and the reference case scenarios for the Harlow road network. Similar to the morning peak, the sustainability improvements are likely to result in a reduction in total number of trips, total vehicle time and total vehicle miles, by 4%, 2% and 1% respectively. The sustainability improvements are also likely to have a positive impact on the average network speed, which would increase by 1% over the reference case scenario.

Table 3: Intermediate Sustainability Scenario - Network Statistics for wider Harlow area (PM peak)

Scenario	Total Number of Trips	Total Vehicle Time (veh*hr)	Total Vehicle Miles (veh*miles)	Average Network Speed (miles/hr)
Base (2014)	21,374	1,796	56,236	31.3
SSC Ref Case (2033)	30,550	2,514	76,519	30.4
SSC ImSust (2033)	29,455	2,467	75,534	30.6

Figure 2 shows the modelled changes in flows in the morning peak when comparing the reference case scenario and the scenario in which intermediate sustainable travel assumptions have been applied to represent more sustainable travel. As it has been explained above and as the figure indicates, the localised sustainable travel change assumptions have a positive impact on wider Harlow; an over reduction in traffic has been observed especially in the city centre.

However, the figure indicates an increase in traffic in B1393 London Road and Rye Hill Road, which may attract more traffic, resulting from the freeing up of capacity due to the localised trip reductions from travel change

related to the strategic sites (Latton Priory development), while parallel routes (e.g. B181 Epping Road) are likely to have a reduction in traffic.

In order to gain a better understanding of the flow changes on the B1393 London Road, a select link analysis was undertaken for these two scenarios, the outputs from which are shown in **Error! Reference source not found.**.

In addition, the figure shows an increase in traffic in A414 westbound, north of Harlow, which may attract more traffic, resulting from the capacity improvement related to the strategic sites (Gilston development). Before the sustainability improvements, traffic coming from the north uses routes through Harlow and other parallel routes, B194, B194 Nazeing Road, A10 and M25, to go west, while after the sustainability improvements traffic reassigns to use A414.

Figure 2: Flow Differences – Intermediate Sustainability Scenario v. Reference Case (with Second Stort Crossing, AM peak)

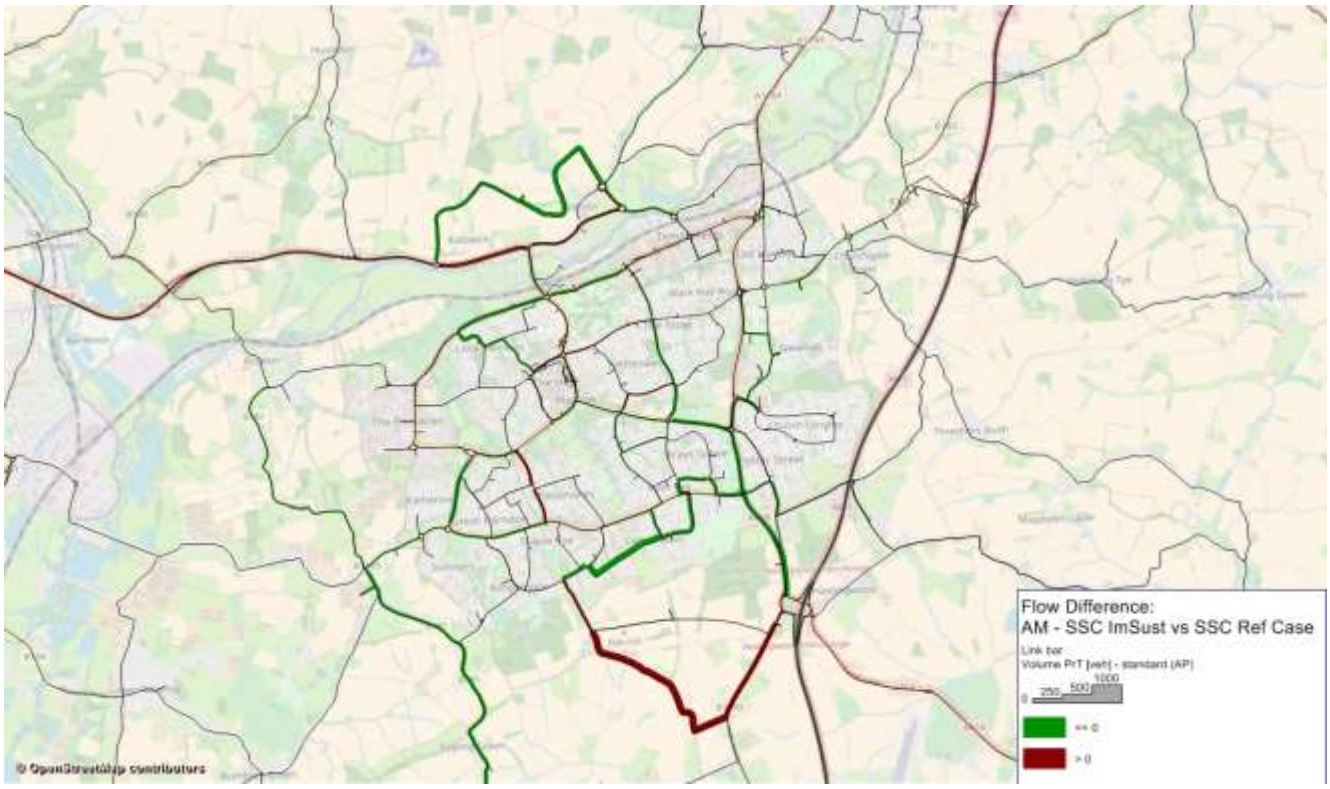
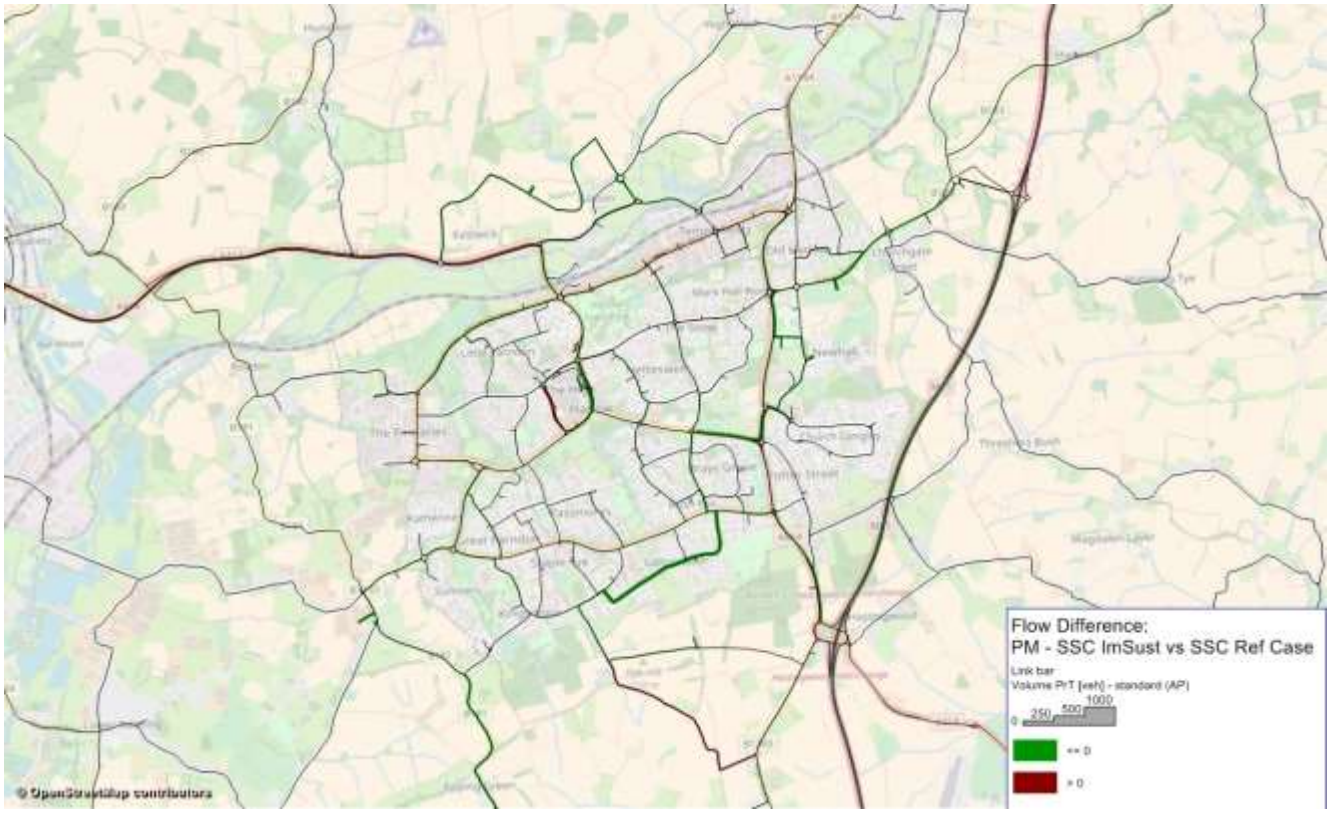


Figure 3 shows the modelled changes in flows in the evening peak when comparing the reference case scenario and the scenario in which intermediate sustainable travel assumptions have been applied to represent more sustainable travel. As it has been explained above and as the figure indicates, the localised sustainable travel change assumptions have a positive impact on wider Harlow; an over reduction in traffic has been observed especially in the city centre.

Like in the morning peak, the figure indicates an increase in traffic in A414 westbound, north of Harlow, which may attract more traffic, resulting from the capacity improvement related to the strategic sites (Gilston development), as it has been explained above. Before the sustainability improvements, traffic coming from the north uses routes through Harlow and other parallel routes, B194, B194 Nazeing Road, A10 and M25, to go west, while after the sustainability improvements traffic reassigns to use A414.

Figure 3: Flow Differences – Intermediate Sustainability Scenario v. Reference Case (with Second Stort Crossing, PM peak)



1.2. Ambitious Sustainability Scenarios

Table 4 presents the network statistics, total number of trips, total vehicle time, total vehicle miles and average network speed, in the morning peak for the reference case scenario and the scenarios in which reduced trip rates have been applied to represent more sustainable travel for the Harlow road network.

The sustainability improvements are likely to result in a reduction in total number of trips, total vehicle time and total vehicle miles, by 9%, 20% and 5% respectively. With a higher level of internal trips assumed within the town the total number of trips and total vehicle miles are likely to increase by 1% and 0.2% respectively, however would remain lower than the reference case scenario, while total vehicle time would have a 4% further reduction. Average network speed is likely to increase by 19% after the sustainability improvements, while with a higher level of internalisation is likely to increase a further 4%, or 23% over the reference case scenario.

Table 4: Ambitious Sustainability Scenarios - Network Statistics for wider Harlow area (AM peak)

Scenario	Total Number of Trips	Total Vehicle Time (veh*hr)	Total Vehicle Miles (veh*miles)	Average Network Speed (miles/hr)
Base (2014)	21,182.23	1,737.65	54,605.16	31.31
SSC Ref Case Corr (2033)	31,807.53	3,143.83	78,685.36	25.03
SSC AmSust Corr (2033)	28,919.09	2,508.17	74,490.00	29.70
SSC AmSust Corr HighInt (2033)	29,082.89	2,412.89	74,632.09	30.93

Table 5 presents the network statistics, total number of trips, total vehicle time, total vehicle miles and average network speed, in the evening peak for the reference case scenario and the scenarios in which reduced trip rates have been applied to represent more sustainable travel for the Harlow road network.

Like in the morning peak, the sustainability improvements are likely to result in a reduction in total number of trips, total vehicle time and total vehicle miles, by 8%, 13% and 6% respectively. With a higher level of internal trips assumed within the town the total number of trips and total vehicle time are likely to slightly increase, however would remain lower than the reference case scenario, while total vehicle miles would have a 0.1% further reduction. Average network speed is likely to increase by 8% after the sustainability improvements, while with a higher level of internalisation is likely to slightly decrease by 0.5%.

Table 5: Ambitious Sustainability Scenarios - Network Statistics for wider Harlow area (PM peak)

Scenario	Total Number of Trips	Total Vehicle Time (veh*hr)	Total Vehicle Miles (veh*miles)	Average Network Speed (miles/hr)
Base (2014)	21,374.34	1,796.37	56,236.31	31.31
SSC Ref Case Corr (2033)	30,775.48	2,693.69	76,628.74	28.45
SSC AmSust Corr (2033)	28,212.33	2,333.45	71,698.05	30.73
SSC AmSust Corr HighInt (2033)	28,232.11	2,341.82	71,611.69	30.58

Figure 4 shows the modelled changes in flows in the evening peak when comparing the reference case scenario and the scenario in which ambitious sustainable travel assumptions have been applied to represent more sustainable travel. As it has been explained above and as the figure indicates, the localised sustainable travel change assumptions have a positive impact on wider Harlow; an over reduction in traffic has been observed especially in the city centre and along M11.

However, the figure indicates an increase in traffic in Paringdon Road, A1169 Southern Way and A1169 Katherine's Way, which may attract more traffic especially from Kingsmoor and M11, resulting from the freeing up of capacity due to the localised trip reductions from travel change related to the strategic sites. Before the sustainability improvements, traffic coming from Kingsmoor uses minor roads, Ployters Road and Abercrombie Way, to go to Harlow, while after the sustainability improvements traffic reassigns to use A1169 Southern Way and A1169 Katherine's Way. In addition, without any sustainability improvement, traffic coming from Snaresbrook uses M11 and A414 London Road to go north, however after the reduced trip rates have been applied to represent more sustainable travel, traffic reassigns to use M11, Rye Hill Road, Paringdon Road, A1169 Southern Way and A1169 Katherine's Way.

Figure 4: Flow Differences – Ambitious Sustainability Scenario v. Reference Case (with Second Stort Crossing and Bus Lane, AM peak)

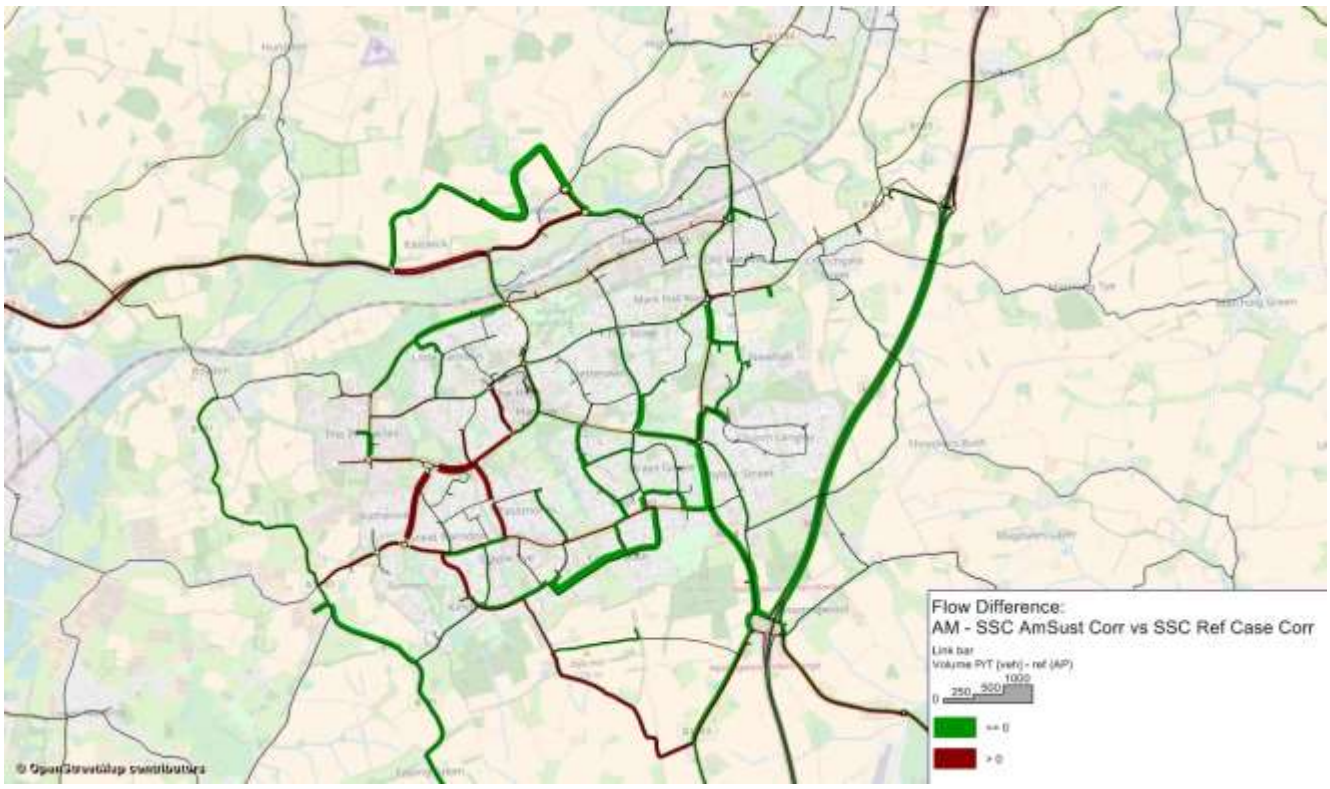


Figure 5 shows the modelled changes in flows in the evening peak when comparing the reference case scenario and the scenario in which ambitious sustainable travel assumptions have been applied to represent more sustainable travel. As in the morning peak, the localised sustainable travel change assumptions have a positive impact on wider Harlow.

However, the figure indicates an increase in traffic in A414 westbound, north of Harlow, which may attract more traffic, resulting from the freeing up of its capacity due to the localised trip reductions from travel change related to the strategic sites. Before the sustainability improvements, traffic coming from the north uses routes through Harlow and other parallel routes, B194, B194 Nazeing Road, A10 and M25, to go west, while after the sustainability improvements traffic reassigns to use A414.

Figure 5: Flow Differences – Ambitious Sustainability Scenario v. Reference Case (with Second Stort Crossing and Bus Lane, PM peak)

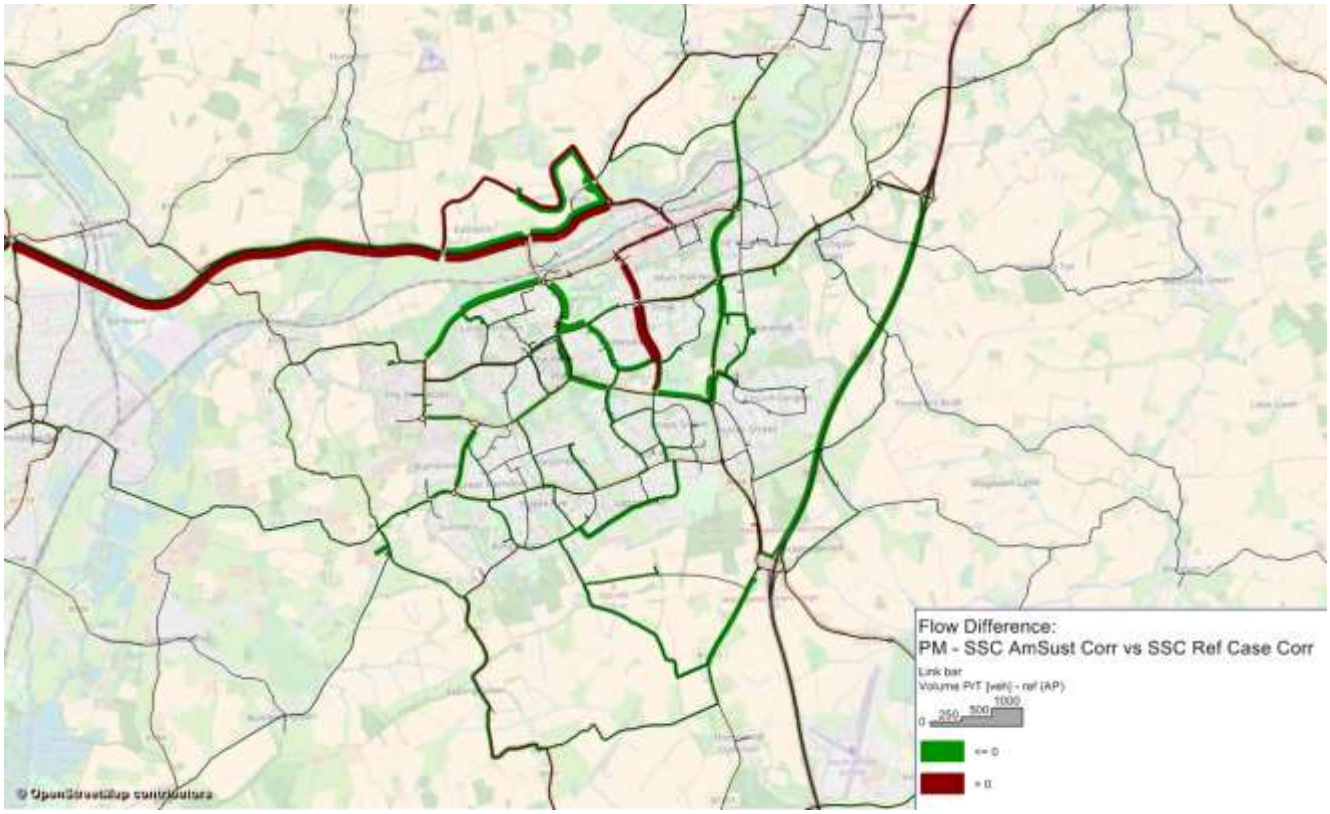


Figure 6 shows the modelled changes in flows in the morning peak when comparing the reference case scenario with the scenario with higher internalisation. As above, the sustainable travel change assumptions have a positive impact on wider Harlow.

The travel pattern is similar to the travel pattern in the ambitious sustainability scenario without the additional internal trips, which can be seen by comparing Figure 6 and Figure 4.

As in the ambitious sustainability scenario, the figure indicates an increase in traffic in Paringdon Road, A1169 Southern Way and A1169 Katherine's Way, which may attract more traffic especially coming from Kingsmoor and M11, resulting from the freeing up of capacity due to the localised trip reductions from travel change related to the strategic sites, as it has been explained above.

Figure 6: Flow Differences – Ambitious Sustainability Scenario with Higher Internalisation v. Reference Case (with Second Stort Crossing and Bus Lane, AM peak)

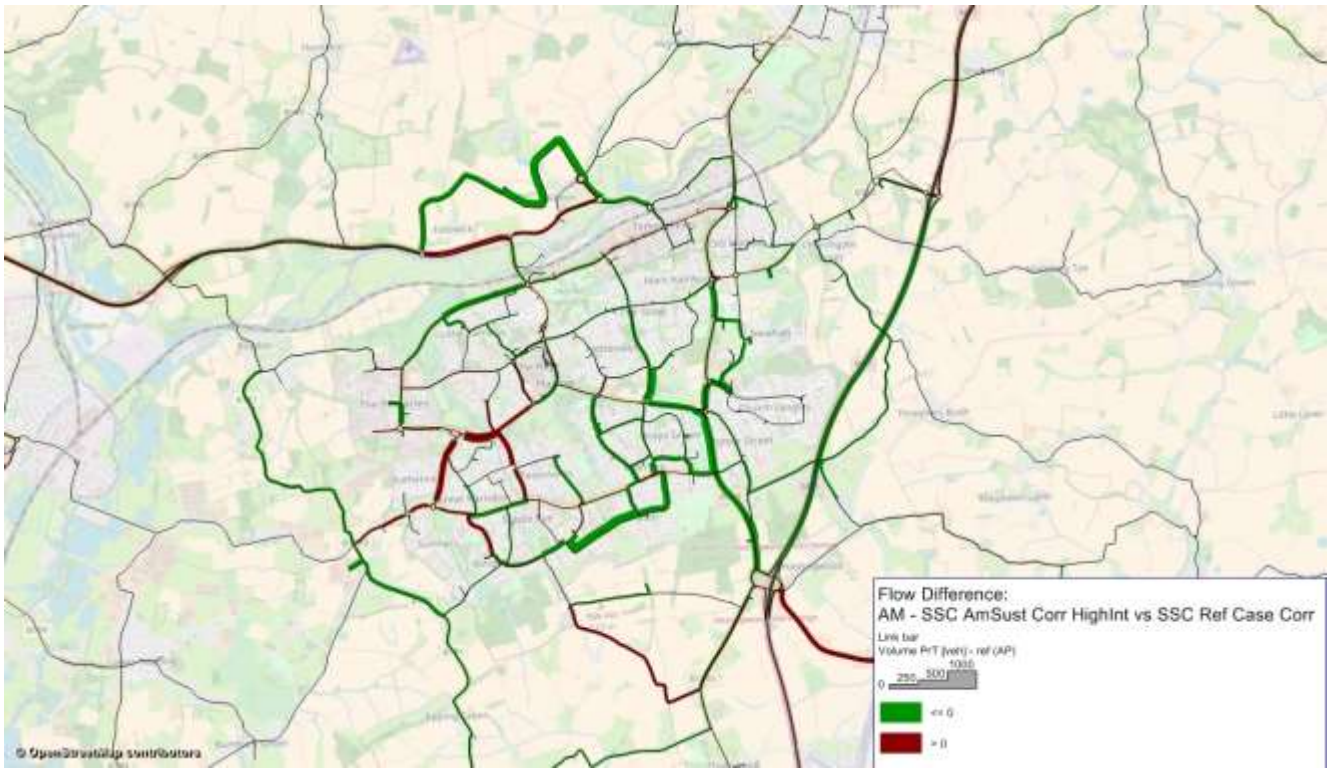
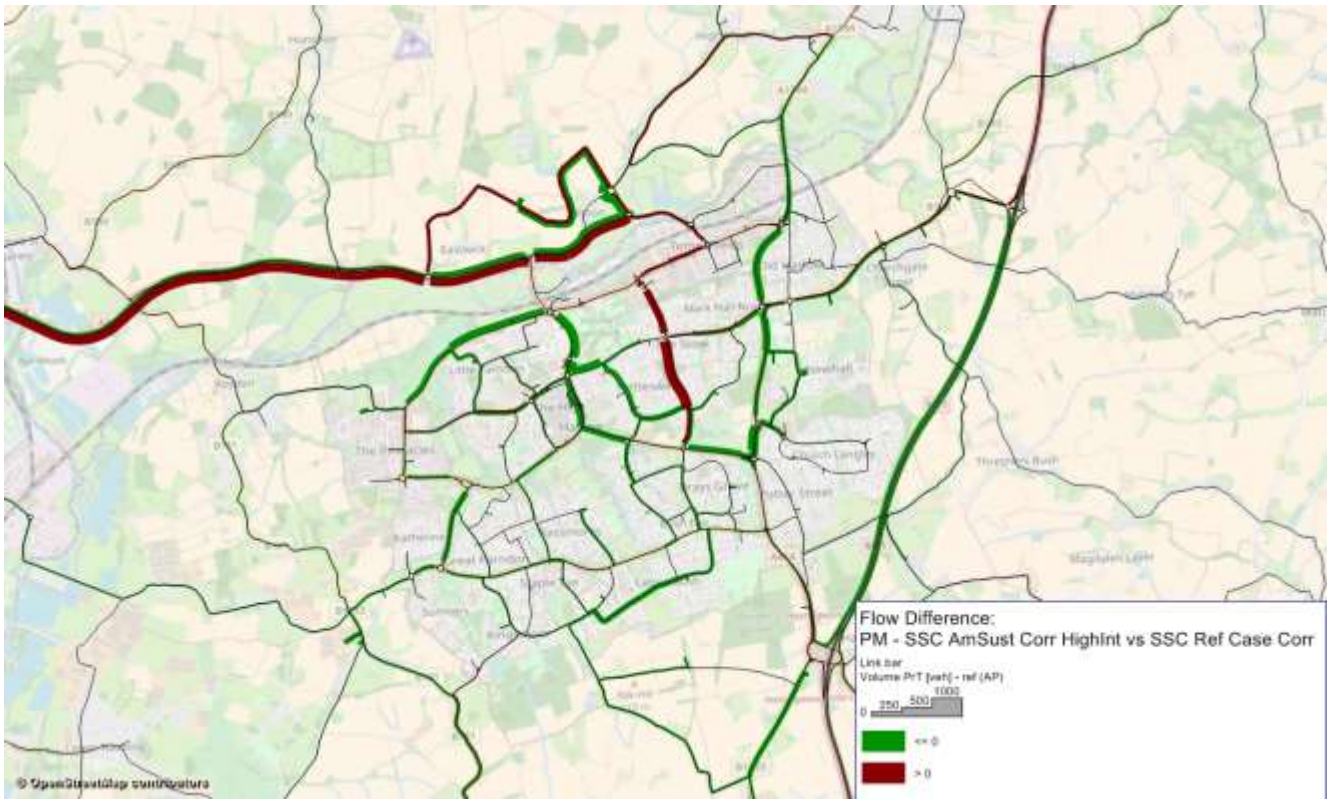


Figure 7 shows the modelled changes in flows in the evening peak when comparing the reference case scenario with a higher level of internalisation. As in the morning peak, the sustainable travel change assumptions have a positive impact on wider Harlow. The travel pattern is similar to the travel pattern in the intermediate sustainability scenario without the additional internal trips.

Figure 7: Flow Differences – Ambitious Sustainability Scenario with Higher Internalisation v. Reference Case (with Second Stort Crossing and Bus Lane, PM peak)



Appendix D. Journey Time Analysis

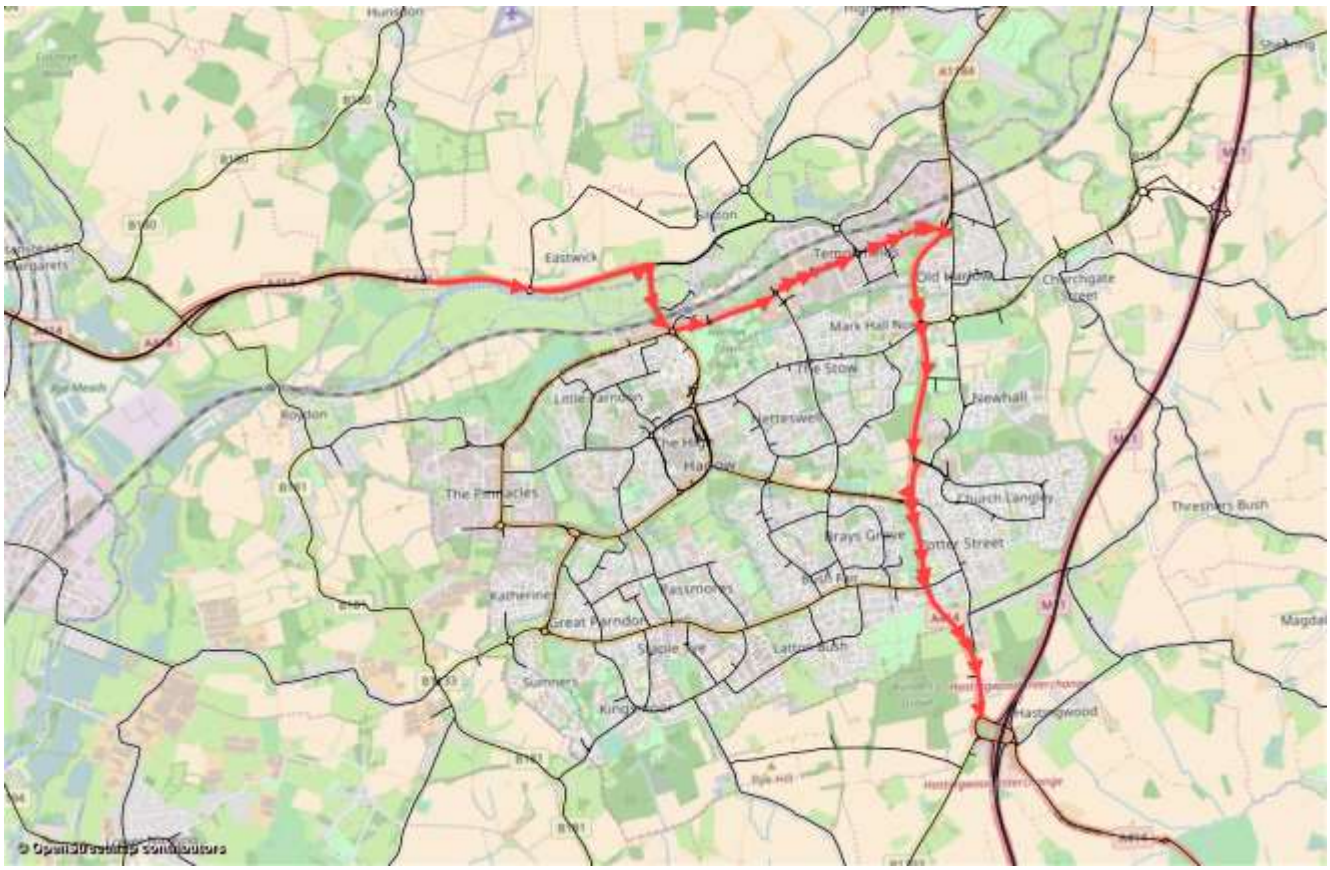
This section presents the assessment of journey times along five routes through the local road network. The selected routes are the following:

- A414 to J7 via A414 Fifth Avenue, A414 Edinburgh Way and A414;
- A414 to J7a via A414 Fifth Avenue, A1019 Fifth Avenue, A1025 Second Avenue and A414;
- A414 to J7 via Eastwick Road, Second Stort Crossing (SSC), A414 Edinburgh Way and A414;
- Fourth Avenue to J7a via First Avenue and B183; and
- A1025 Third Avenue to B1133 Water Lane via A1169 Katherine's Way.

1. A414 to J7 via A414 Fifth Avenue, A414 Edinburgh Way, and A414

The A414 to J7 via A414 Fifth Avenue, A414 Edinburgh Way, and A414 route is shown in Figure 8.

Figure 8: A414 to J7 via A414 Fifth Avenue, A414 Edinburgh Way, and A414 route (9.80 km)



1.1. Southbound

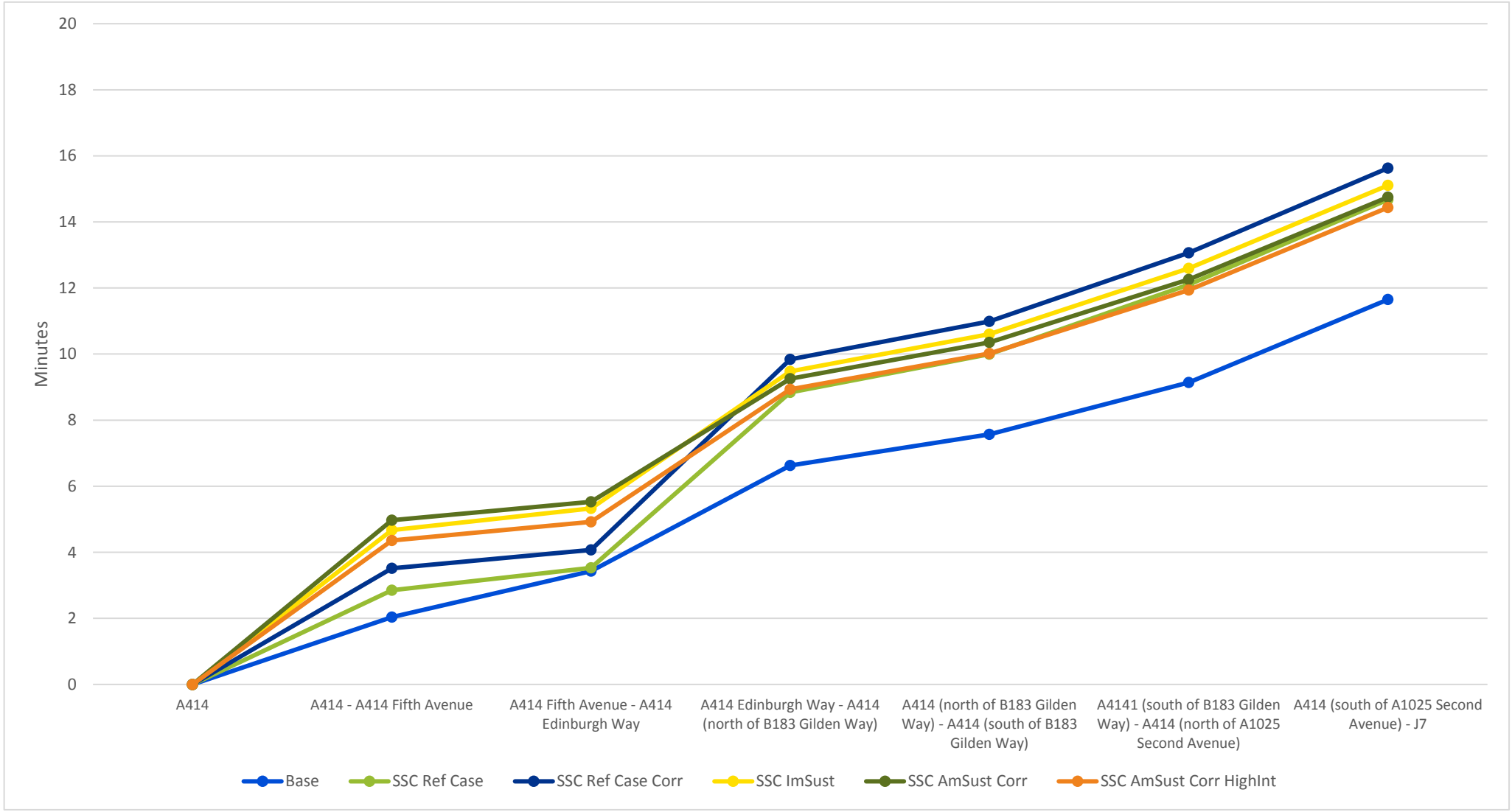
The journey time data southbound is shown in Table 6 and graphically in Figure 9.

Southbound journey time is likely to increase by 7% as a result of the addition of the bus lane on the north:south corridor in Fifth Avenue. After applying the intermediate sustainability improvements, travel time is likely to slightly increase over the reference case scenario, due to A414 – Eastwick Road – Fifth Avenue roundabout, since traffic in Eastwick Road and Fifth Avenue increases, resulting in higher turning delays for the road users in A414. As it would be expected the ambitious sustainability improvements are likely to result in a reduction in journey time by 6%, while with a higher level of internal trips assumed within the town the travel time would reduce by a further 2%, or 8% over the reference case scenario.

Table 6: Total journey (minutes) for A414 to J7 via A414 Fifth Avenue, A414 Edinburgh Way, and A414 route (9.80 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
A414	0.00	0.00	0.00	0.00	0.00	0.00
A414 - A414 Fifth Avenue	2.04	2.85	3.52	4.67	4.97	4.36
A414 Fifth Avenue - A414 Edinburgh Way	3.43	3.53	4.07	5.33	5.53	4.92
A414 Edinburgh Way - A414 (north of B183 Gilden Way)	6.63	8.84	9.84	9.47	9.25	8.93
A414 (north of B183 Gilden Way) - A414 (south of B183 Gilden Way)	7.57	10.00	10.99	10.60	10.35	10.02
A4141 (south of B183 Gilden Way) - A414 (north of A1025 Second Avenue)	9.14	12.11	13.06	12.59	12.26	11.94
A414 (south of A1025 Second Avenue) - J7	**11.65**	**14.67**	**15.63**	**15.10**	**14.75**	**14.43**

Figure 9: A414 to J7 via A414 Fifth Avenue, A414 Edinburgh Way, and A414 route



1.2. Northbound

The journey time data northbound is shown in Table 7 and graphically in Figure 10. This is the peak direction of travel in the morning peak, and it can be seen that journey times are higher for all scenarios than in the southbound direction.

Like the southbound direction the additional bus lanes on the north:south corridor are likely to result in an increase in travel time on this route, of approximately 2%, which is lower than the southbound increase. However, journey time is likely to decrease after reduced trip rates have been applied to represent more sustainable travel. As it would be expected the ambitious sustainability assumptions would result in a further reduction in travel time, of approximately 9% over the reference case scenario.

Table 7: Total journey (minutes) for J7 to A414 via A414, A414 Edinburgh Way, and A414 Fifth Avenue route (9.80 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
J7	0.00	0.00	0.00	0.00	0.00	0.00
J7 - A414 (south ofA1025 Second Avenue)	2.95	2.71	2.77	2.67	2.65	2.67
A414 (north ofA1025 Second Avenue) - A414(south of B183 Gilden Way)	4.76	7.14	7.38	6.83	6.36	6.34
A414(north of B183 Gilden Way) - A414 (south of A414 Edinburgh Way)	5.68	8.03	8.27	7.72	7.25	7.23
A414 - A414 Edinburgh Way	9.67	14.73	15.09	13.91	13.47	13.00
A414 Edinburgh Way - A414 Fifth Avenue	10.71	15.42	15.78	14.60	14.16	13.68
A414 Fifth Avenue - A414	**12.83**	**16.82**	**17.18**	**16.00**	**15.58**	**15.09**

Appendix

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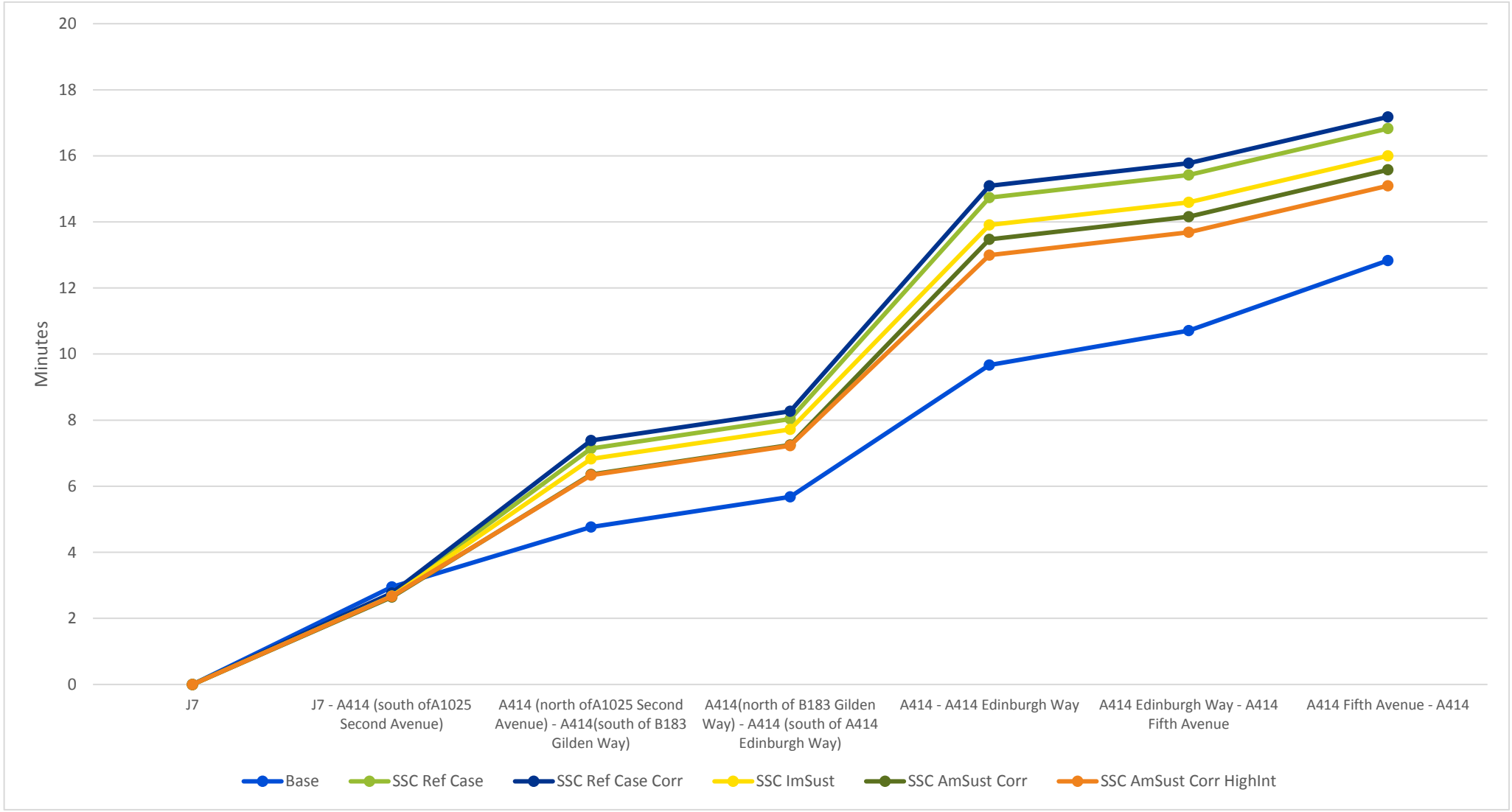
Figure 10: Comparison of journey times for J7 to A414 via A414, A414 Edinburgh Way, and A414 Fifth Avenue route



2. A414 to J7 via A414 Fifth Avenue, A1019 Fifth Avenue, A1025 Second Avenue, and A414

The A414 to J7 via A414 Fifth Avenue, A1019 Fifth Avenue, A1025 Second Avenue and A414 route is illustrated in Figure 11.

Figure 11: A414 to J7 via A414 Fifth Avenue, A1019 Fifth Avenue, A1025 Second Avenue and A414 route (8.11 km)

2.1. Southbound

The journey time data southbound is shown in Table 8 and graphically in Figure 12.

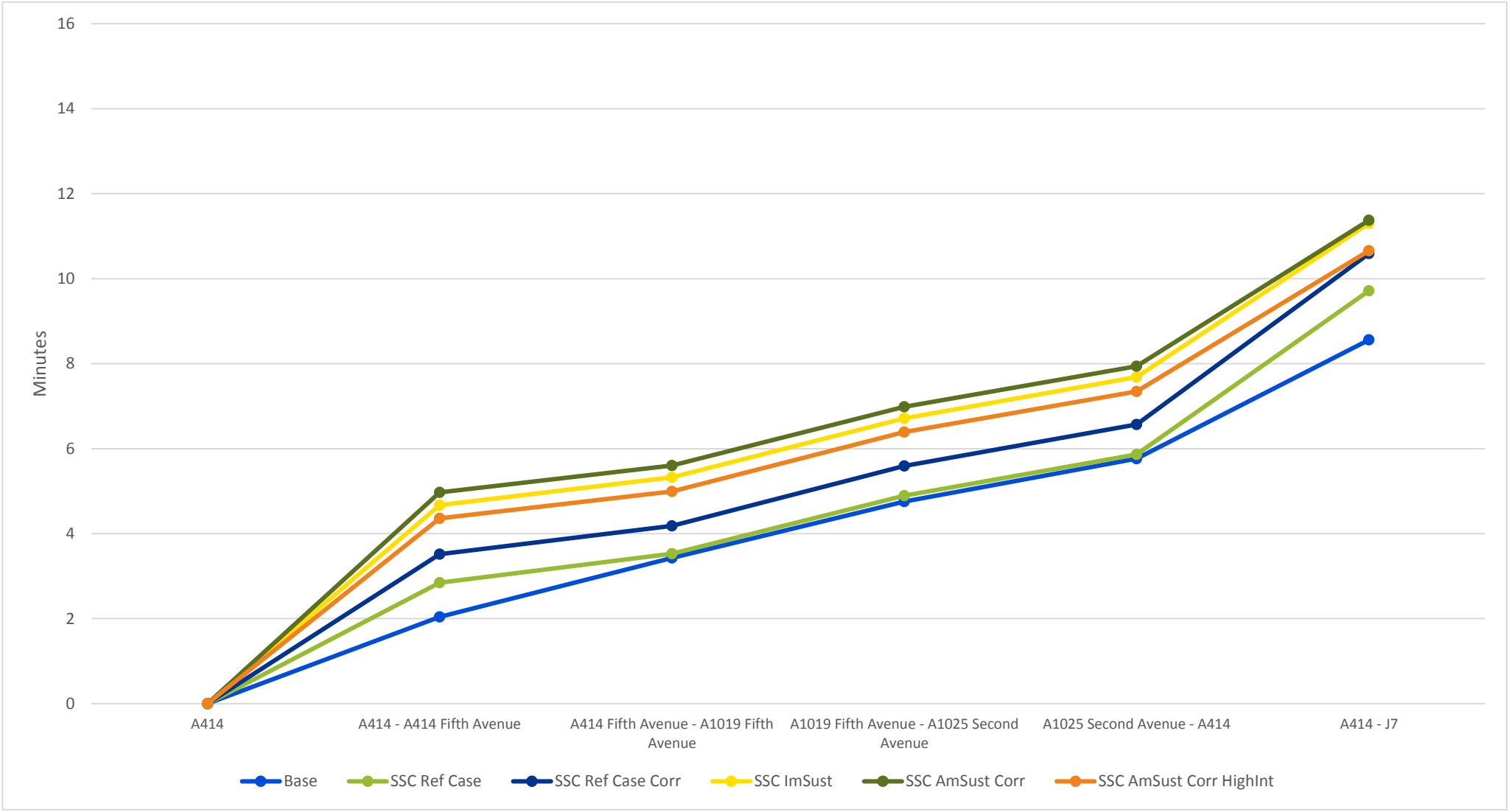
The addition of the bus lanes on the north:south corridor in Fifth Avenue is likely to result in an increase in travel time on this route of approximately 9%. After applying the sustainability improvements, travel time is likely to slightly increase due to higher turning delays in the A414 – Eastwick Road – Fifth Avenue roundabout as it has been explained above. With a higher level of internal trips assumed within the town, journey time would decrease, however it would remain in the same level as in the reference case scenario.

Table 8: Total journey (minutes) for A414 to J7 via A414 Fifth Avenue, A1019 Fifth Avenue, A1025 Second Avenue and A414 route (8.11 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
A414	0.00	0.00	0.00	0.00	0.00	0.00
A414 - A414 Fifth Avenue	2.04	2.85	3.52	4.67	4.97	4.36
A414 Fifth Avenue - A1019 Fifth Avenue	3.43	3.53	4.18	5.33	5.61	4.99

A1019 Fifth Avenue - A1025 Second Avenue	4.75	4.90	5.59	6.72	6.98	6.39
A1025 Second Avenue - A414	5.77	5.86	6.57	7.68	7.94	7.35
A414 - J7	**8.56**	**9.72**	**10.59**	**11.30**	**11.38**	**10.66**

Figure 12: Comparison of journey times for A414 to J7 via A414 Fifth Avenue, A1019 Fifth Avenue, A1025 Second Avenue and A414 route



2.2. Northbound

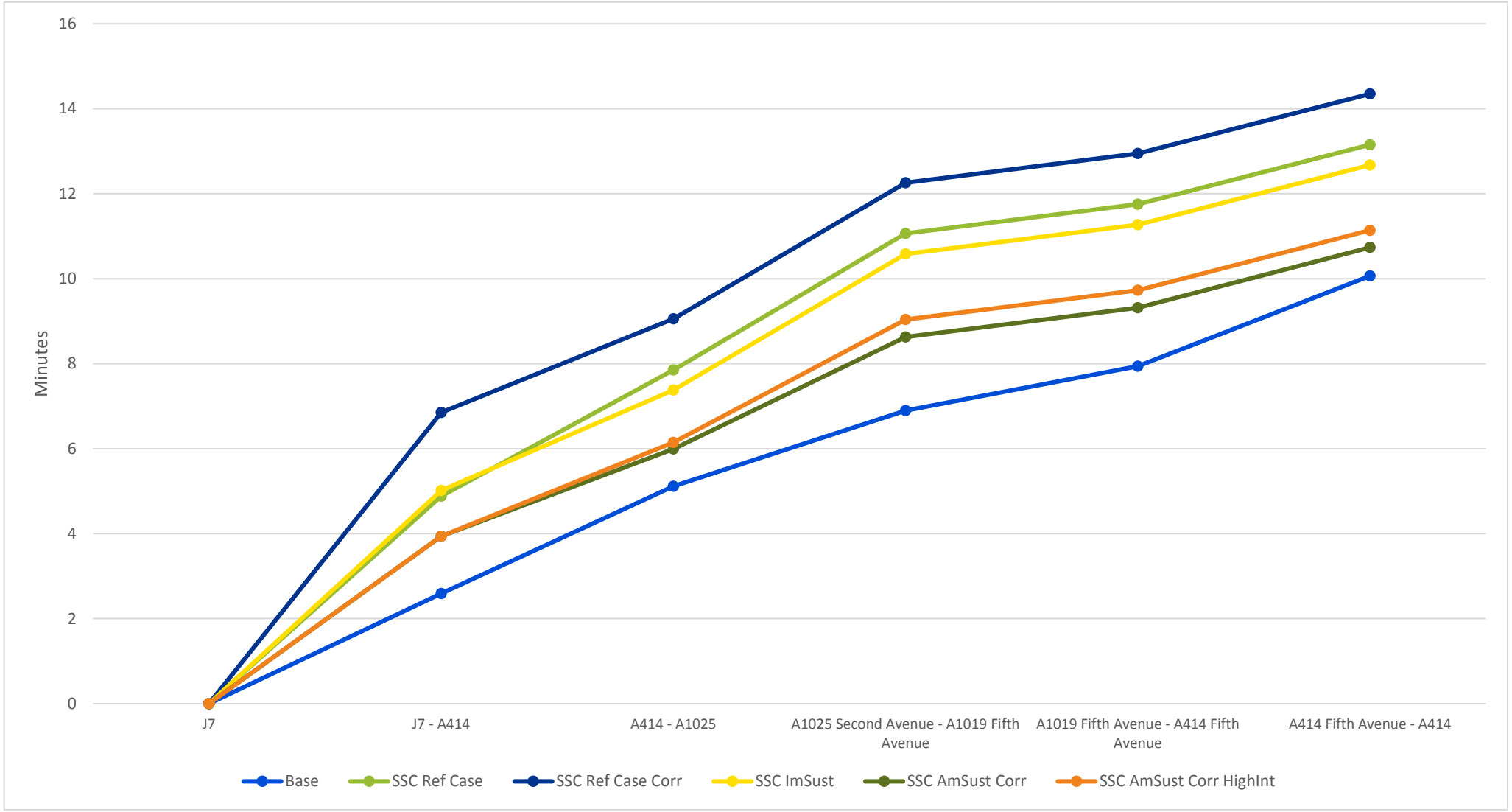
The northbound journey time for each scenario is shown in Table 9 and graphically in Figure 13. This is the peak direction of travel in the morning peak, and it can be seen that journey times are higher for all scenarios than in the southbound direction.

The addition of the bus lanes on the north:south corridor in Fifth Avenue is likely to result in an increase in travel time on this route of approximately 9%, which is the same with the southbound increase. After applying the intermediate sustainability improvements, travel time is likely to decrease by approximately 4%. As it would be expected, the ambitious sustainability improvements are likely to result in a bigger reduction in journey time of approximately 25% over the reference case scenario. However, with a higher level of internal trips assumed within the town, journey time would increase, but it would still remain approximately 22% lower than the reference case scenario.

Table 9: Total journey (minutes) for J7 to A414 via A414, A1025 Second Avenue, A1019 Fifth Avenue and A414 Fifth Avenue route (8.11 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
J7	0.00	0.00	0.00	0.00	0.00	0.00
J7 - A414	2.59	4.88	6.85	5.02	3.94	3.94
A414 - A1025	5.12	7.85	9.06	7.38	5.99	6.15
A1025 Second Avenue - A1019 Fifth Avenue	6.90	11.06	12.26	10.58	8.63	9.04
A1019 Fifth Avenue - A414 Fifth Avenue	7.94	11.75	12.95	11.27	9.32	9.73
A414 Fifth Avenue - A414	**10.06**	**13.15**	**14.35**	**12.67**	**10.73**	**11.14**

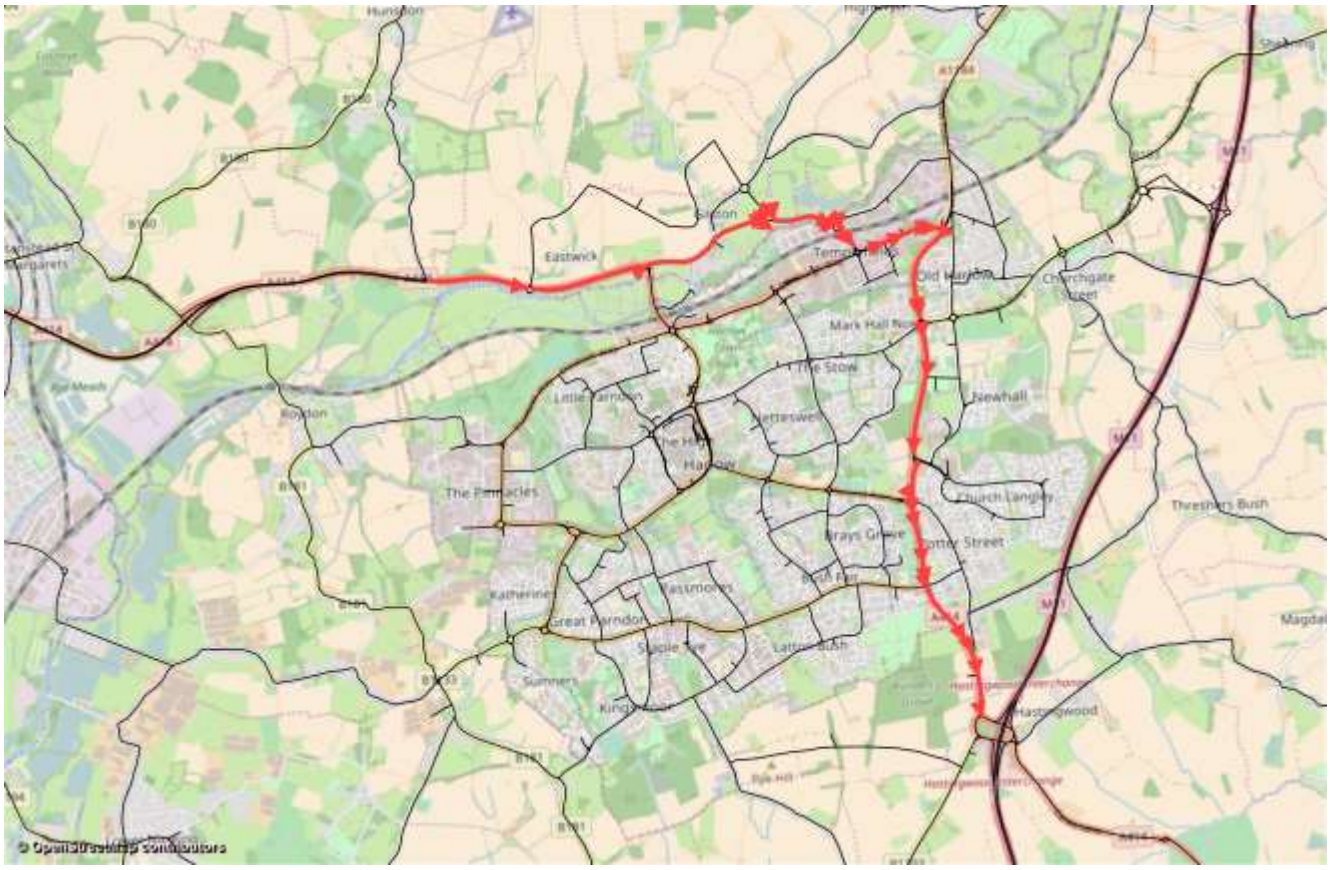
Figure 13: Comparison of journey times for J7 to A414 via A414, A1025 Second Avenue, A1019 Fifth Avenue and A414 Fifth Avenue route



3. A414 to J7 via Eastwick Road, Second Stort Crossing, A414 Edinburgh Way, and A414

The A414 to J7 via Eastwick Road, Second Stort Crossing, A414 Edinburgh Way, and A414route is shown in Figure 14.

Figure 14: A414 to J7 via Eastwick Road, Second Stort Crossing, A414 Edinburgh Way, and A414 (9.87 km)



3.1. Southbound

The southbound journey times are shown in Table 10 and graphically in Figure 15.

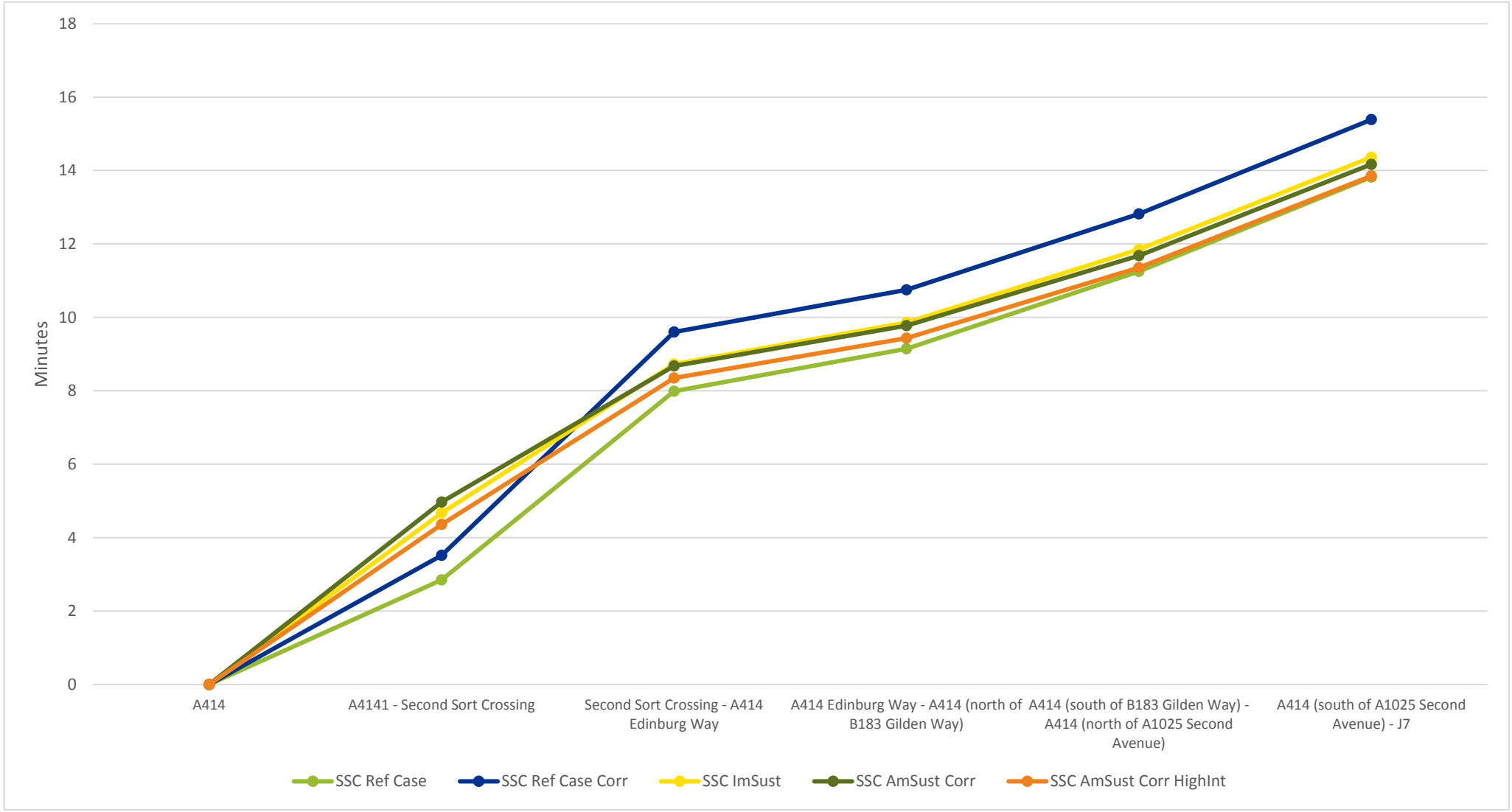
As shown in Table 10, the addition of bus lanes on the north:south corridor is likely to result in an increase in travel time on the southbound route of approximately 11%. Journey time is likely to increase by approximately 4%, after intermediate reduced trips rates have been applied to represent more sustainable travel, due to increased turning delays in the A414 – Eastwick Road – Fifth Avenue roundabout as it has been explained above. As it would be expected, the ambitious sustainability improvements are likely to result in an 8% reduction in travel time over the reference case scenario. With a higher level of internal trips assumed within the town the travel time is likely to reduce by a further 2%, or 10% over the reference case scenario.

Table 10: Total journey (minutes) for A414 to J7 via Eastwick Road, Second Stort Crossing, A414 Edinburgh Way, and A414 route (9.87 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
A414	n/a	0.00	0.00	0.00	0.00	0.00

A4141 - Second Sort Crossing	n/a	2.85	3.52	4.67	4.97	4.36
Second Sort Crossing - A414 Edinburg Way	n/a	7.99	9.60	8.73	8.67	8.35
A414 Edinburg Way - A414 (north of B183 Gilden Way)	n/a	9.14	10.75	9.86	9.77	9.43
A414 (south of B183 Gilden Way) - A414 (north of A1025 Second Avenue)	n/a	11.25	12.82	11.85	11.68	11.36
A414 (south of A1025 Second Avenue) - J7	n/a	**13.82**	**15.39**	**14.36**	**14.17**	**13.85**

Figure 15: Comparison of journey times for A414 to J7 via Eastwick Road, Second Stort Crossing, A414 Edinburgh Way, and A414 route



3.2. Northbound

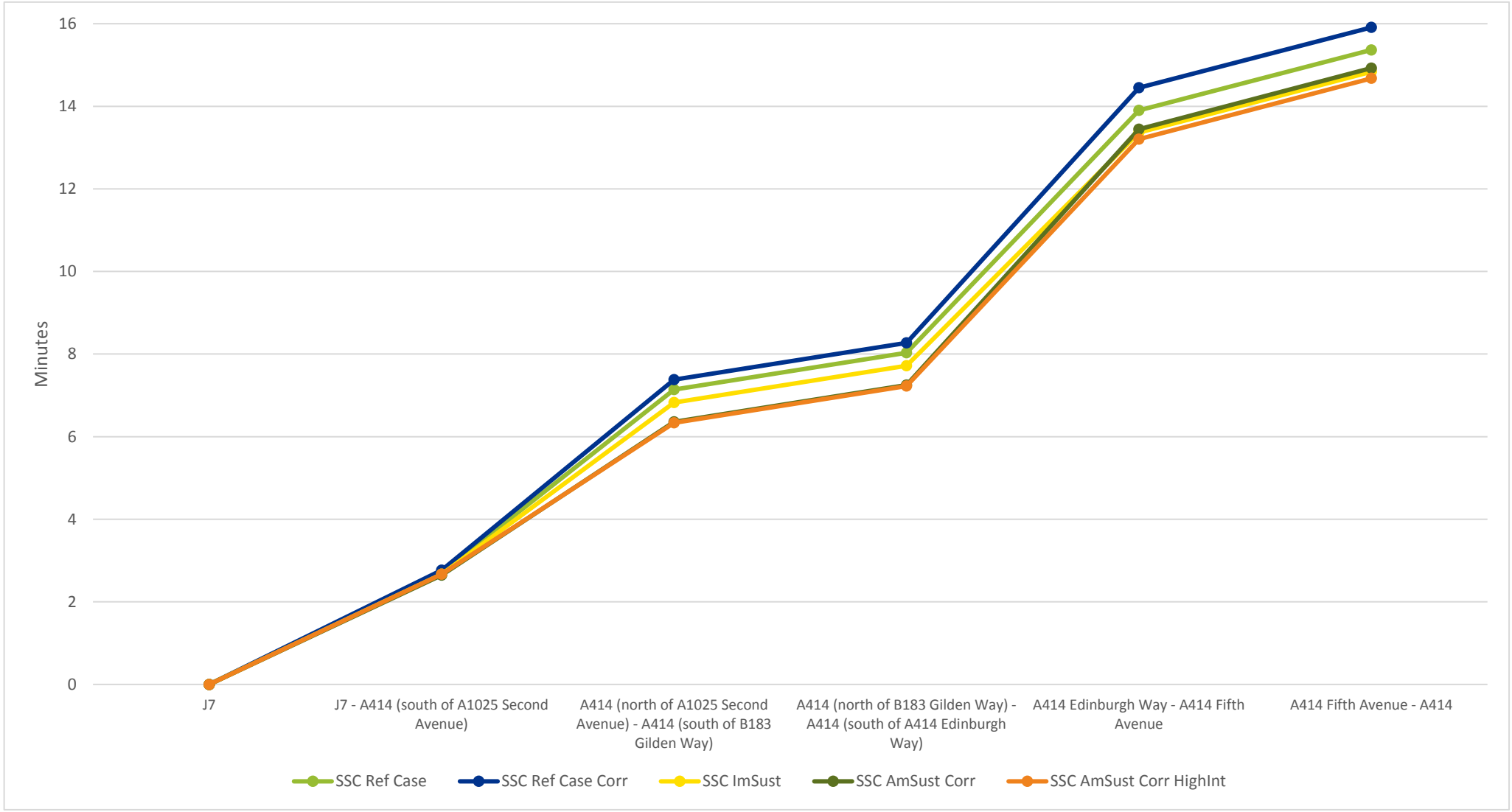
The journey time data northbound is shown in Table 11 and graphically in Figure 16. This is the peak direction of travel in the morning peak, and it can be seen that journey times are higher for all scenarios than in the southbound direction.

Like the southbound direction, the addition of bus lanes on the north:south corridor is likely to result in an increase in travel time on the northbound route of approximately 4%. However, the intermediate sustainability improvements are likely to result in a 3% reduction in journey time. As it would be expected, travel time is likely to decrease by approximately 6% over the reference case scenario, after applying the ambitious sustainability improvements, while with a higher level of internal trips also assumed within the town, it would reduce by a further 2%, or 8% over the reference case scenario.

Table 11: Total journey (minutes) for J7 to A414 via A414, A414 Edinburgh Way, Second Stort Crossing, and Eastwick Road route (9.87 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
J7	n/a	0.00	0.00	0.00	0.00	0.00
J7 - A414 (south of A1025 Second Avenue)	n/a	2.71	2.77	2.67	2.65	2.67
A414 (north of A1025 Second Avenue) - A414 (south of B183 Gilden Way)	n/a	7.14	7.38	6.83	6.36	6.34
A414 (north of B183 Gilden Way) - A414 (south of A414 Edinburgh Way)	n/a	8.03	8.27	7.72	7.25	7.23
A414 Edinburgh Way - A414 Fifth Avenue	n/a	13.90	14.45	13.37	13.45	13.20
A414 Fifth Avenue - A414	n/a	**15.36**	**15.91**	**14.84**	**14.92**	**14.68**

Figure 16: Comparison of journey times for J7 to A414 via A414, A414 Edinburgh Way, Second Stort Crossing, and Eastwick Road route



4. Fourth Avenue to J7a via First Avenue, and B183

The Fourth Avenue to J7 via First Avenue and B183 route is shown in Figure 17. This route comprises part of the proposed east:west sustainable corridor, and already includes bus priority measures in the form of sections of bus lanes along First Avenue, mainly westbound, but also some eastbound. The already committed developments in the east, including the Enterprise Zone and New Hall, as well as the new strategic site at East Harlow, will deliver additional sustainable travel infrastructure to connect to this route.

The peak direction of travel on this route in the AM peak hour is westbound, from the M11 towards the town centre and The Pinnacles, so it would be expected that journey times would be shorter in the eastbound direction in the AM peak.

Figure 17: Fourth Avenue to J7a via First Avenue, and B183 route (7.23 km)

4.1. Eastbound

The journey time data eastbound is shown in Table 12 and graphically in Figure 18.

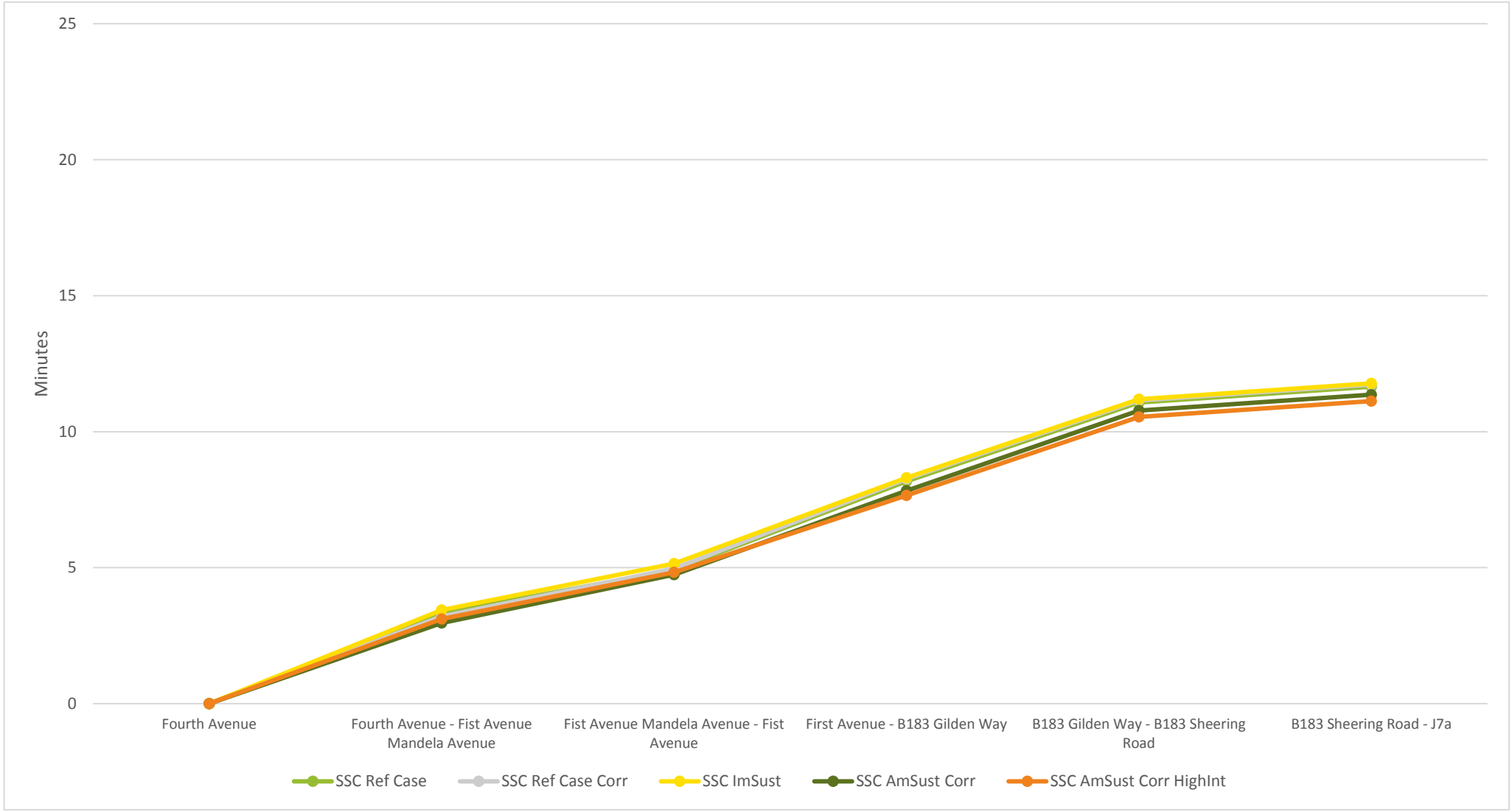
Table 12: Total journey (minutes) Fourth Avenue to J7a via First Avenue, and B183 route (7.23 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
Fourth Avenue	n/a	0.00	0.00	0.00	0.00	0.00
Fourth Avenue - Fist Avenue Mandela Avenue	n/a	3.32	3.21	3.44	2.96	3.11
Fist Avenue Mandela Avenue - Fist Avenue	n/a	4.92	4.97	5.15	4.74	4.83

First Avenue - B183 Gilden Way	n/a	8.18	8.27	8.30	7.83	7.66
B183 Gilden Way - B183 Sheering Road	n/a	11.07	11.15	11.19	10.78	10.54
B183 Sheering Road - J7a	n/a	**11.65**	**11.73**	**11.78**	**11.36**	**11.12**

The addition of the bus lanes in Fifth Avenue on the north:south corridor is likely to result in an approximately 1% increase in travel time. As it would be expected, the ambitious sustainability improvements are likely to have a positive impact on the eastbound journey time of the route, resulting in a 3% reduction over the reference case scenario. With a higher level of internal trips assumed within the town the travel time is likely to decrease by a further 2%, or 5% over the reference case scenario.

Figure 18: Comparison of journey times for Fourth Avenue to J7a via First Avenue, and B183 route



4.2. Westbound

The Journey time data westbound is shown in Table 13 and graphically in Figure 19. As previously stated, this is the peak direction of travel in the morning peak, and it can be seen that journey times are higher for all scenarios than in the eastbound direction.

Table 13: Total journey times (minutes) for J7a to Fourth Avenue via B183, and First Avenue route (7.23 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
J7a	n/a	0.00	0.00	0.00	0.00	0.00
J7a - B183 Sheering Road	n/a	0.58	0.58	0.58	0.58	0.58
B183 Sheering Road - B183 Gilden Way	n/a	7.57	7.66	7.25	7.81	6.97
B183 Gilden Way - First Avenue	n/a	10.30	10.43	9.87	10.21	9.35
First Avenue - First Avenue Mandela Avenue	n/a	13.00	13.37	12.37	12.57	11.73
First Avenue Mandela Avenue - Fourth Avenue	n/a	**19.08**	**21.05**	**17.63**	**19.26**	**18.12**

Like the eastbound direction the addition of bus lanes in Fifth Avenue on the north:south corridor, is likely to result in an increase in travel time on the west:east route of approximately 10%. After intermediate reduced trips rates have been applied to represent more sustainable travel, travel time would reduce by approximately 8%. The ambitious sustainability improvements are likely to result in a 9% reduction in travel time, while with a higher level of internal trips assumed within the town travel time would reduce by a further 6%, giving a total journey time saving of approximately 3 minutes, over the reference case scenario.

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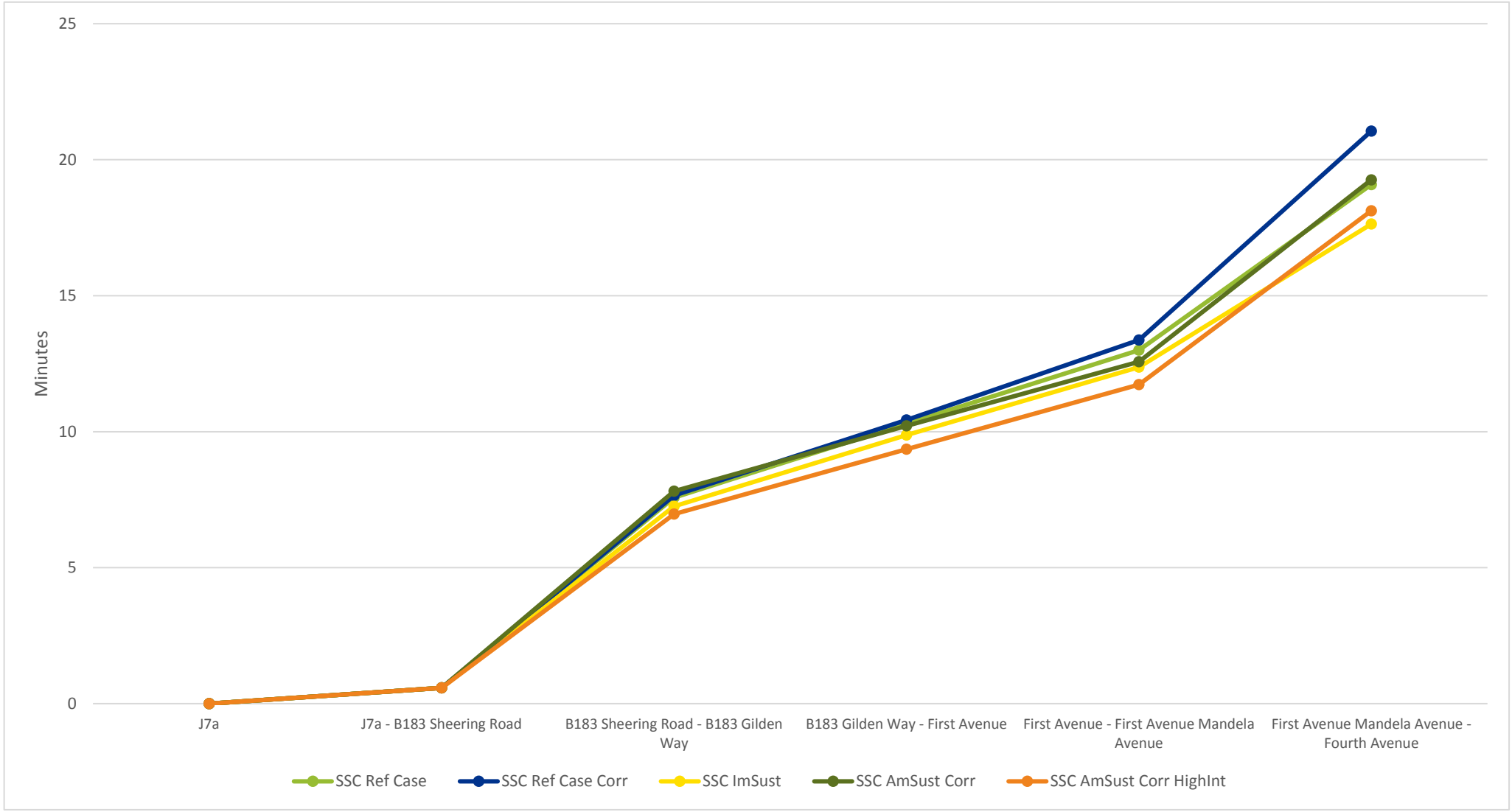
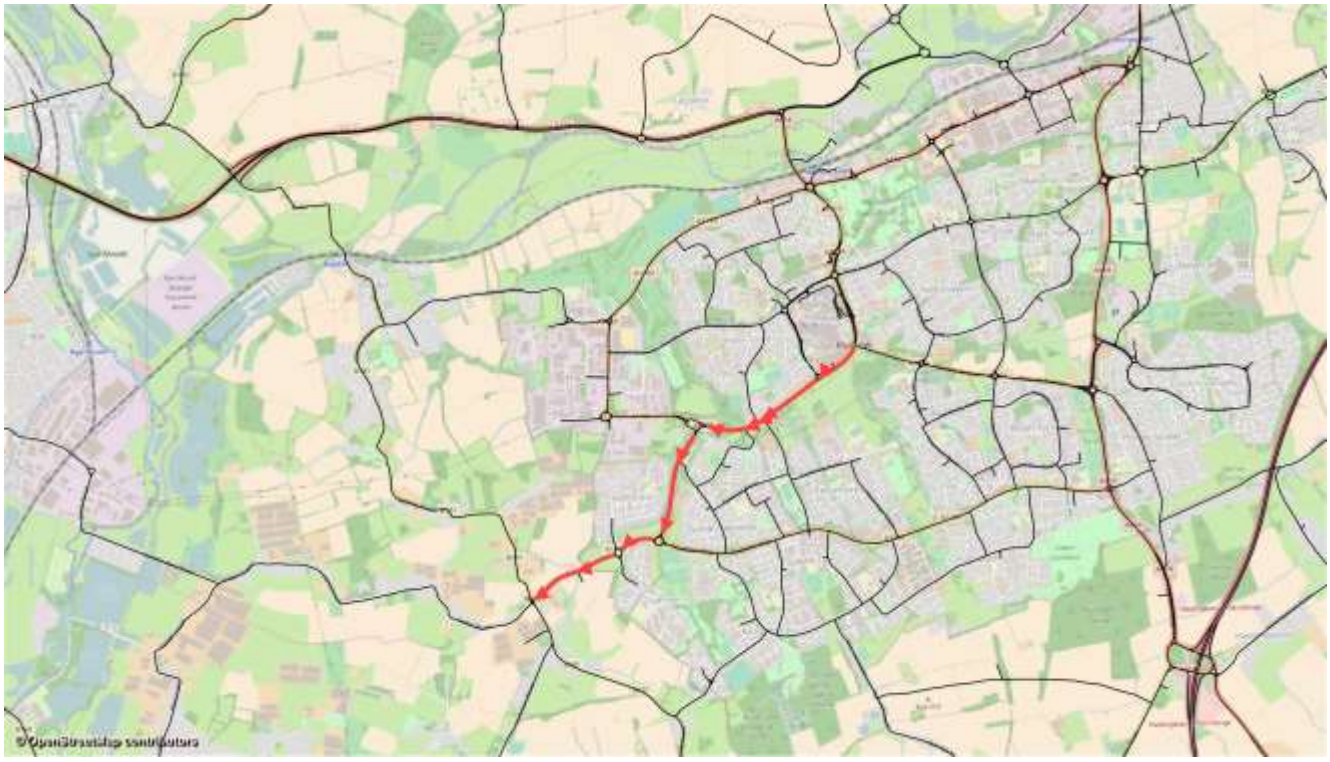
Figure 19: Comparison of journey times for J7a to Fourth Avenue via B183, and First Avenue route



5. A1025 Third Avenue to B1133 Water Lane via A1169 Katherine's Way

The A1025 Third Avenue to B1133 Water Lane via A1169 Katherine's Way route is shown in Figure 20.

Figure 20: A1025 Third Avenue to B1133 Water Lane via A1169 Katherine's Way route (3.26 km)



5.1. Southbound

The journey time data southbound is shown in Table 14 and graphically in Figure 21.

The addition of bus lanes on the north:south corridor is likely to result in an increase in travel times on the southbound route of approximately 31%. Journey time is likely to decrease by approximately 10% after applying the intermediate sustainability improvements. As it would be expected, the ambitious sustainability improvements are likely to result in a reduction in travel time by approximately 38%, while with a higher level of internal trips assumed within the town travel time would reduce by a further 2%, giving a total journey time saving of approximately 3.5 minutes, over the reference case scenario.

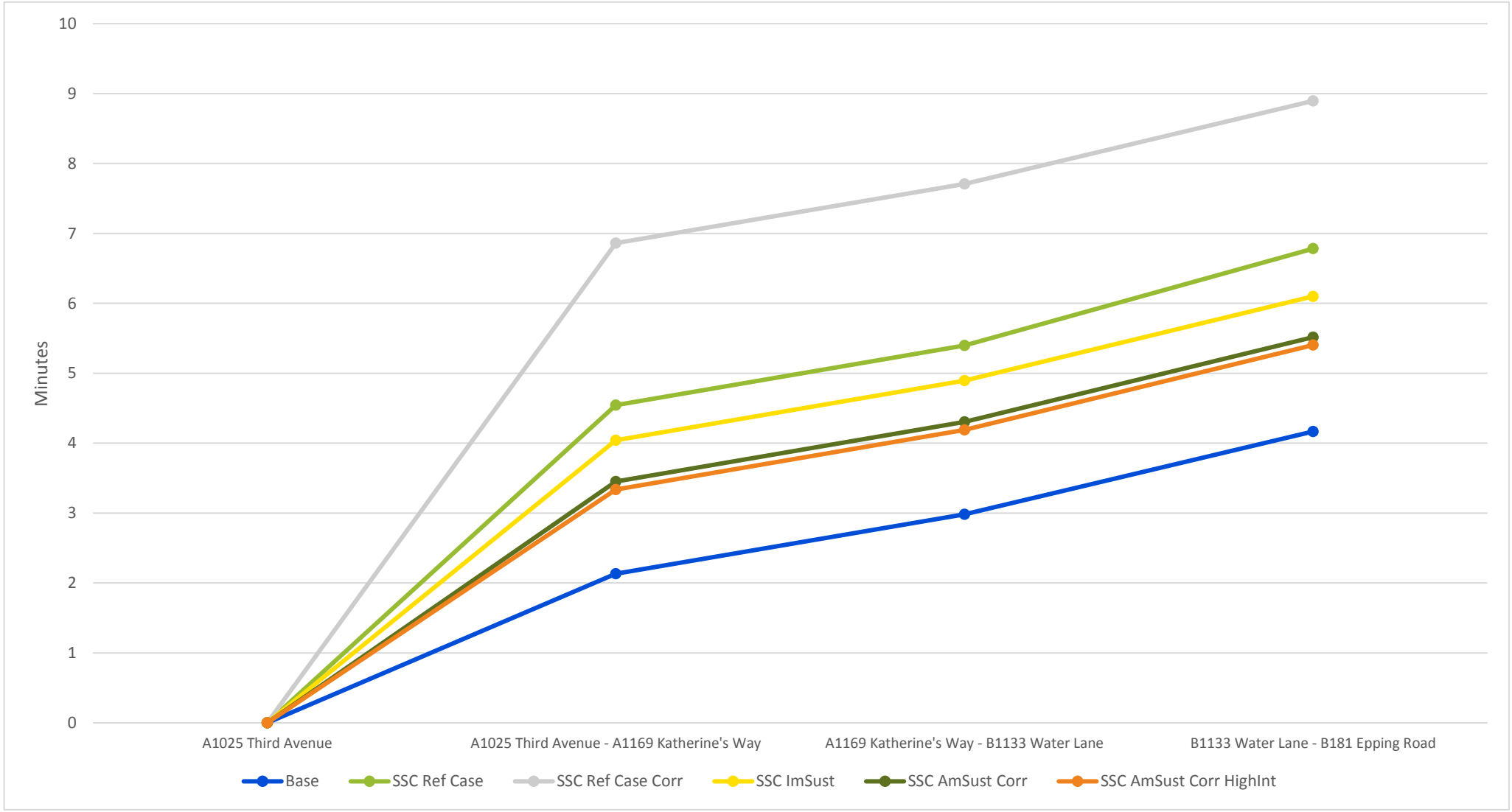
Table 14: Total journey (minutes) for A1025 Third Avenue to B1133 Water Lane via A1169 Katherine's Way route (3.26 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
A1025 Third Avenue	0.00	0.00	0.00	0.00	0.00	0.00
A1025 Third Avenue - A1169 Katherine's Way	2.13	4.54	6.86	4.04	3.45	3.34
A1169 Katherine's Way - B1133 Water Lane	2.98	5.40	7.71	4.89	4.30	4.19

B1133 Water Lane - B181 Epping Road	**4.17**	**6.78**	**8.90**	**6.10**	**5.52**	**5.40**

.

Figure 21: Comparison of journey times for A1025 Third Avenue to B1133 Water Lane via A1169 Katherine's Way route



5.2. Northbound

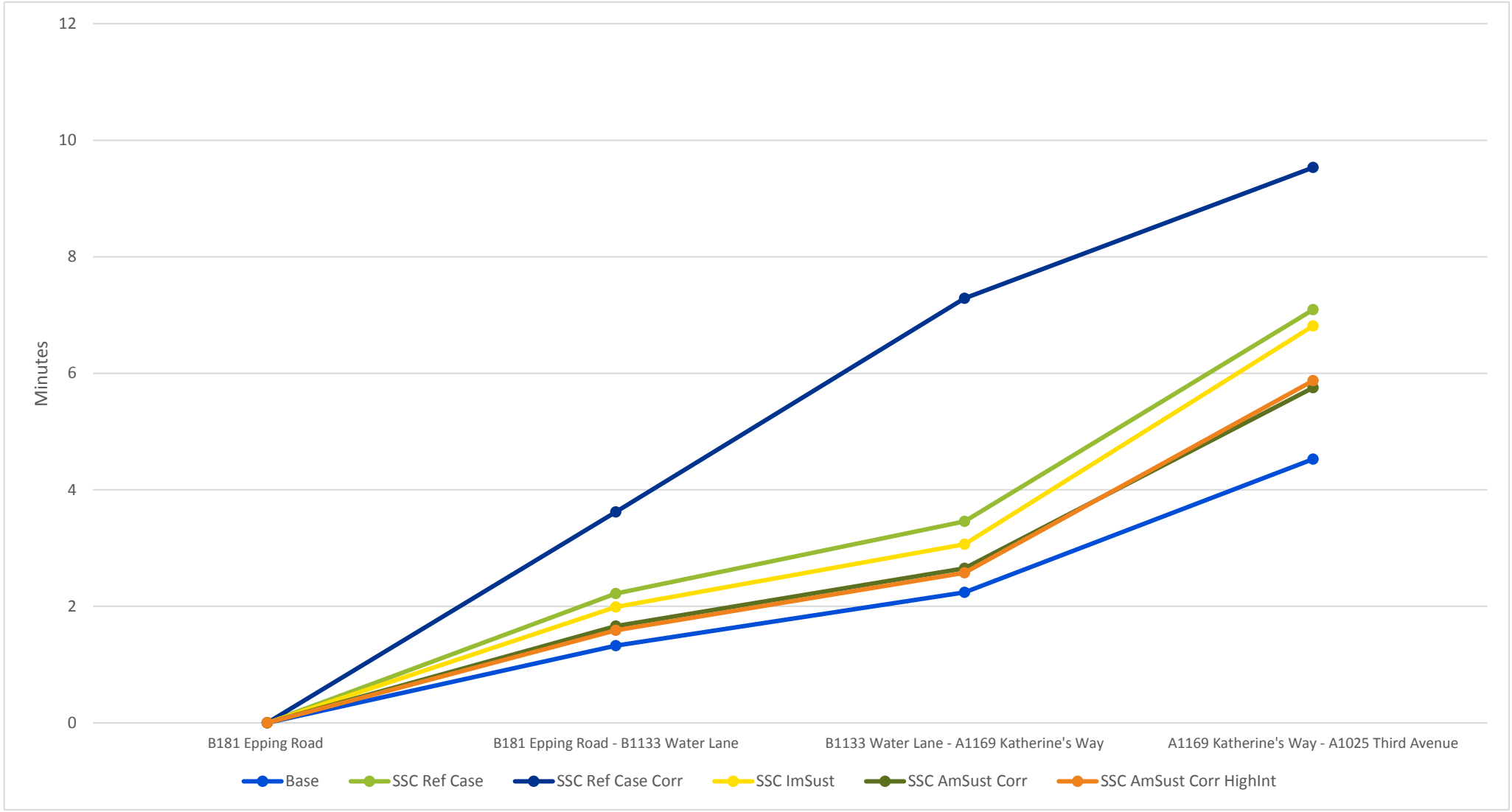
The journey time of B1133 Water Lane to A1025 Third Avenue via A1169 Katherine's Way route for each scenario is shown in Table 15and graphically in Figure 22.

Like the southbound direction the addition of bus lanes on the north:south corridor is likely to result in an increase in travel time on the southbound route of approximately 34%. Journey time is likely to decrease by approximately 4% after applying the intermediate sustainability improvements. As it would be expected, the ambitious sustainability improvements are likely to result in a reduction in travel time by approximately 40%, while with a higher level of internal trips assumed within the town travel time would reduce by a further 2%, giving a total journey time saving of more than 3.5 minutes, over the reference case scenario.

Table 15: Total journey (minutes) for B1133 Water Lane to A1025 Third Avenue via A1169 Katherine's Way route (3.26 km)

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
B181 Epping Road	0.00	0.00	0.00	0.00	0.00	0.00
B181 Epping Road - B1133 Water Lane	1.32	2.22	3.62	1.99	1.66	1.59
B1133 Water Lane - A1169 Katherine's Way	2.24	3.46	7.29	3.06	2.65	2.57
A1169 Katherine's Way - A1025 Third Avenue	**4.53**	**7.09**	**9.53**	**6.81**	**5.75**	**5.87**

Figure 22: Comparison of journey times for B1133 Water Lane to A1025 Third Avenue via A1169 Katherine's Way route



6. Comparison of Routes

Figure 23 illustrates the three routes from A414 to J7 that are compared in this section. The first route is via A414 Fifth Avenue and A414 Edinburgh Way, the second route via A414 Fifth Avenue, A1019 Fifth Avenue and A1025 Second Avenue, and the third route via Eastwick Road, SSC and A414 Edinburgh Way. The length of each route is presented in Table 16.

Figure 23: The three routes from A414 to J7

Table 16: Length of the three routes from A414 to J7

Route	Length (km)
Route 1 (via A414 Fifth Avenue and A414 Edinburgh Way)	9.80
Route 2 (via A414 Fifth Avenue, A1019 Fifth Avenue and A1025 Second Avenue)	8.11
Route 3 (Eastwick Road, SSC and A414 Edinburgh Way)	9.87

1.1. Southbound

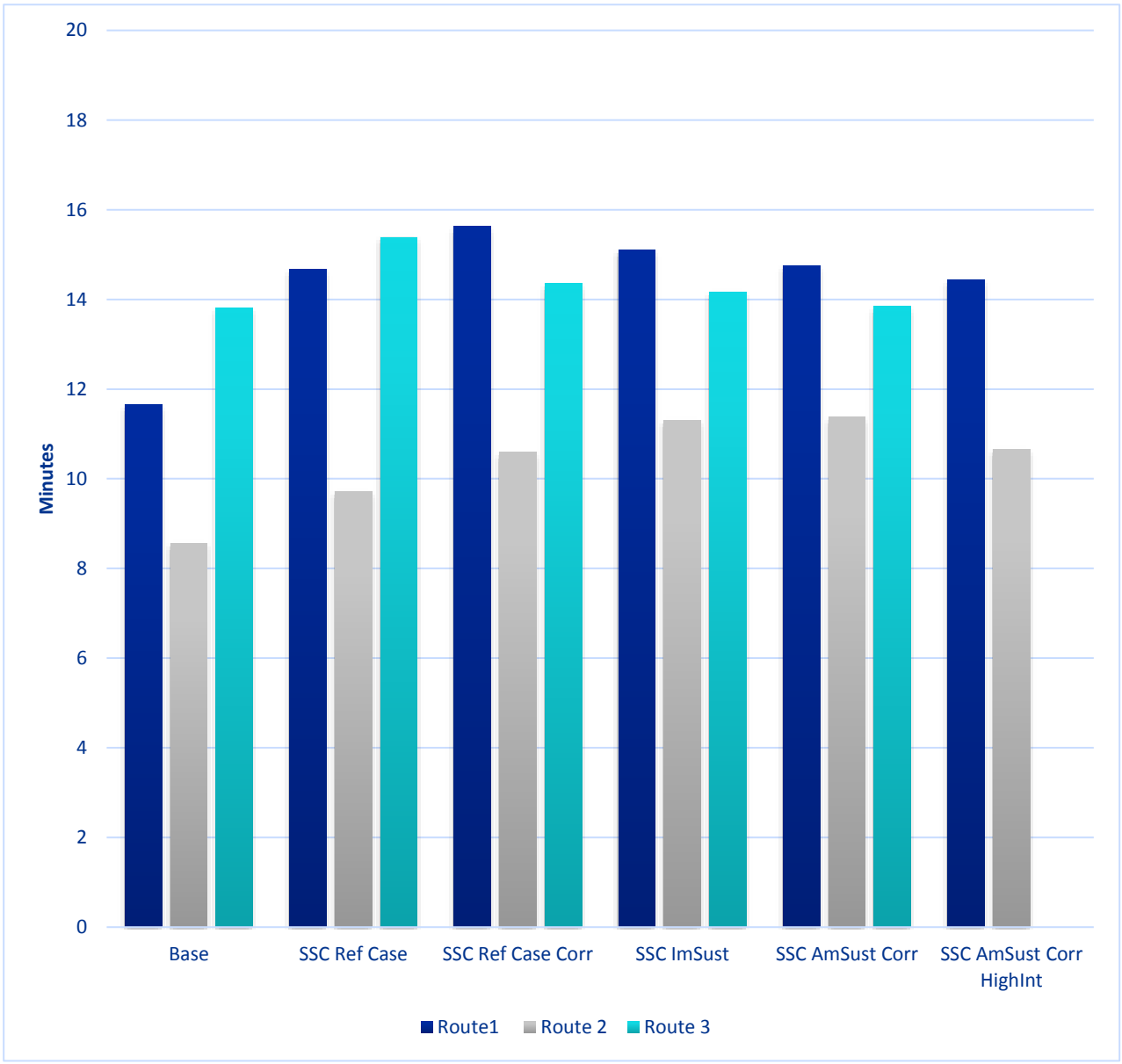
Table 17 and Figure 24 present the total journey time comparison of the three routes from A414 to J7 for the different scenarios. Route 2, via A414 Fifth Avenue, A1019 Fifth Avenue and A1025 Second Avenue, is the fastest route in all scenarios, while Route 1, via A414 Fifth Avenue and A414 Edinburgh Way, is the slowest. Routes 3, via Eastwick Road, SSC and A41 Edinburgh Way, and Route 1 have similar total southbound journey times, with Route 3 being slightly faster.

Table 17: Southbound – Total Journey Time Comparison of the Three Routes from A414 to J7

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)
Route 1	11.65	14.67	15.63	15.10	14.75	14.43
Route 2	8.56	9.72	10.59	11.30	11.38	10.66

Route 3	n/a	13.82	15.39	14.36	14.17	13.85

Figure 24: Southbound – Travel Time Comparison of the Three Routes from A414 to J7



1.2. Northbound

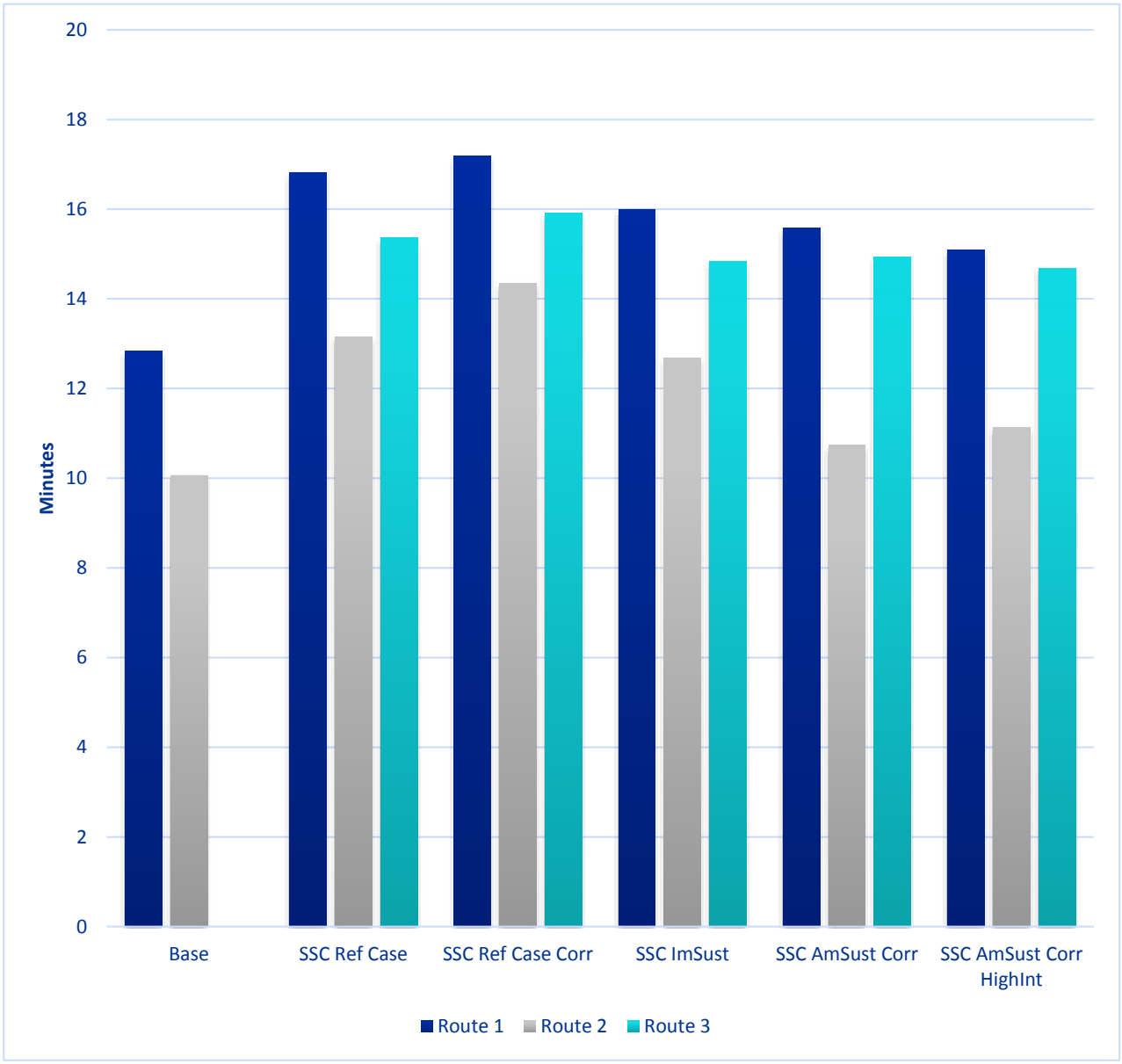
Table 18 and Figure 25 present the total journey time comparison of the three routes from A414 to J7 for the different scenarios. Similarly, to southbound, Route1, via A414 Fifth Avenue and A414 Edinburgh Way, has the slowest total journey time. Route 2, via A414 Fifth Avenue, A1019 Fifth Avenue and A1025 Second Avenue, is the fastest route, followed by Route 3, via Eastwick Road, SSC and A414 Edinburgh Way.

Table 18: Northbound – Total Journey Time Comparison of the Three Routes from A414 to J7

	Base (2014)	SSC Ref Case (2033)	SSC Ref Case Corr (2033)	SSC ImSust (2033)	SSC AmSust Corr (2033)	SSC AmSust Corr HighInt (2033)

Route 1	12.83	16.82	17.18	16.00	15.58	15.09
Route 2	10.06	13.15	14.35	12.67	10.73	11.14
Route 3	n/a	15.36	15.91	14.84	14.92	14.68

Figure 25: Northbound – Travel Time Comparison of the Three Routes from A414 to J7



Appendix E. Total trips in various scenarios

Figure **Error! No text of specified style in document.**-26 presents the total number of trips for the different scenarios in the morning peak. The construction of the SSC and the addition of the bus lanes in Fifth Avenue (improved sustainable travel corridor) are likely to result in an increase in total number of trips. However, when reduced trip rates have been applied to represent more sustainable travel and with a higher level of internal trips assumed within the town the total number of trips is likely to decrease by 3% over the reference case scenario.

Figure Error! No text of specified style in document.**-26: AM – Total Number of Trips (veh)**

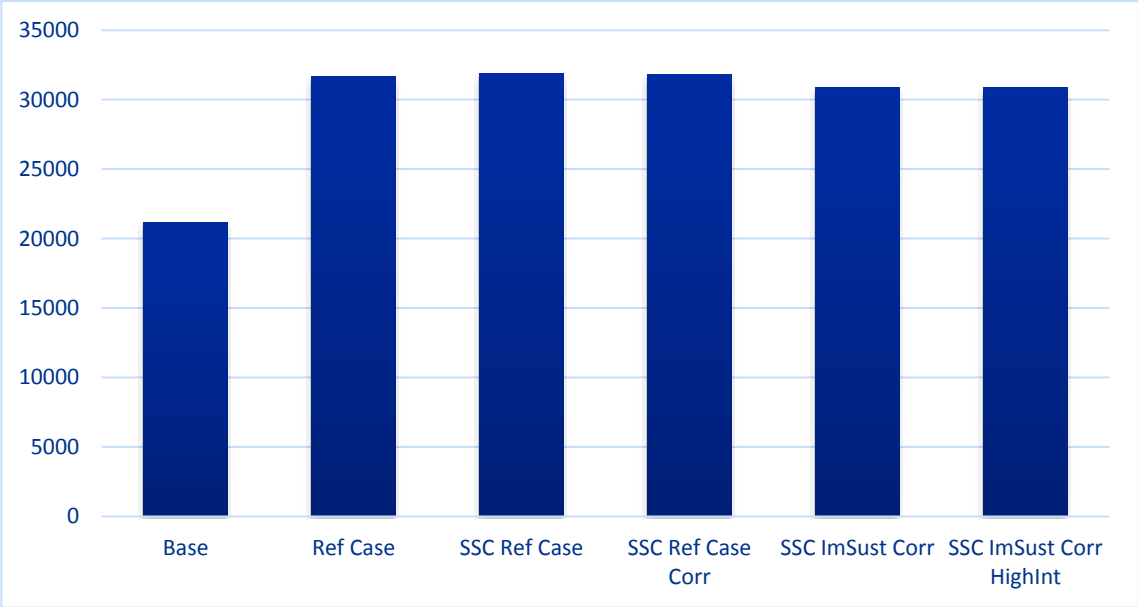


Figure **Error! No text of specified style in document.**-27 presents the total number of trips for the different scenarios in the evening peak. In the evening peak the total number of trips is lower than in the morning peak. The construction of the SSC is likely to result in a small reduction in the total number of trips, however, the total number of trips would increase with the addition of the bus lane on the north-south corridor. As would be expected, the intermediate sustainable travel assumptions and a higher level of internal trips assumed within the town are likely to have a positive impact on the total number of trips, resulting in a 4% reduction over the reference case scenario.

Figure Error! No text of specified style in document.**-27: PM – Total Number of Trips (veh)**

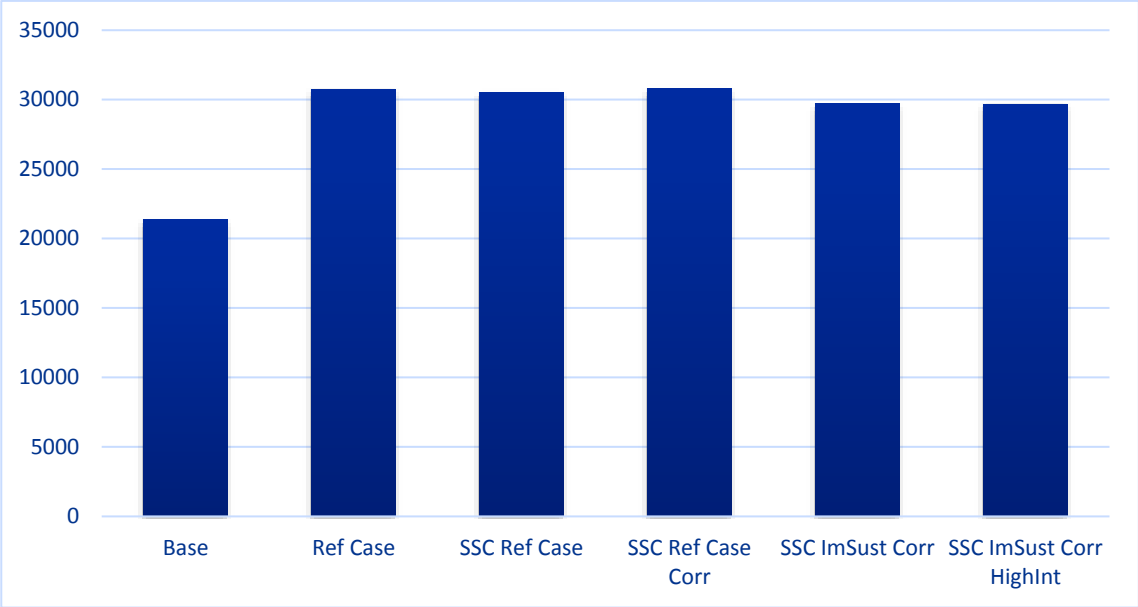


Figure **Error! No text of specified style in document.**-28 presents the total vehicle time for the different scenarios in the morning peak. With the SSC in place, the total vehicle time would decrease by 7%, however, the additional bus lanes in Fifth Avenue on the north-south corridor are likely to result in an increase in total vehicle time. The sustainability improvements result in a reduction of the total vehicle time by 13%, while with a higher level of internal trips assumed within the town the total vehicle time would decrease by a further 1%, or 14% over the reference case scenario.

Figure Error! No text of specified style in document.**-28: AM – Total Vehicle Time (veh*hr)**

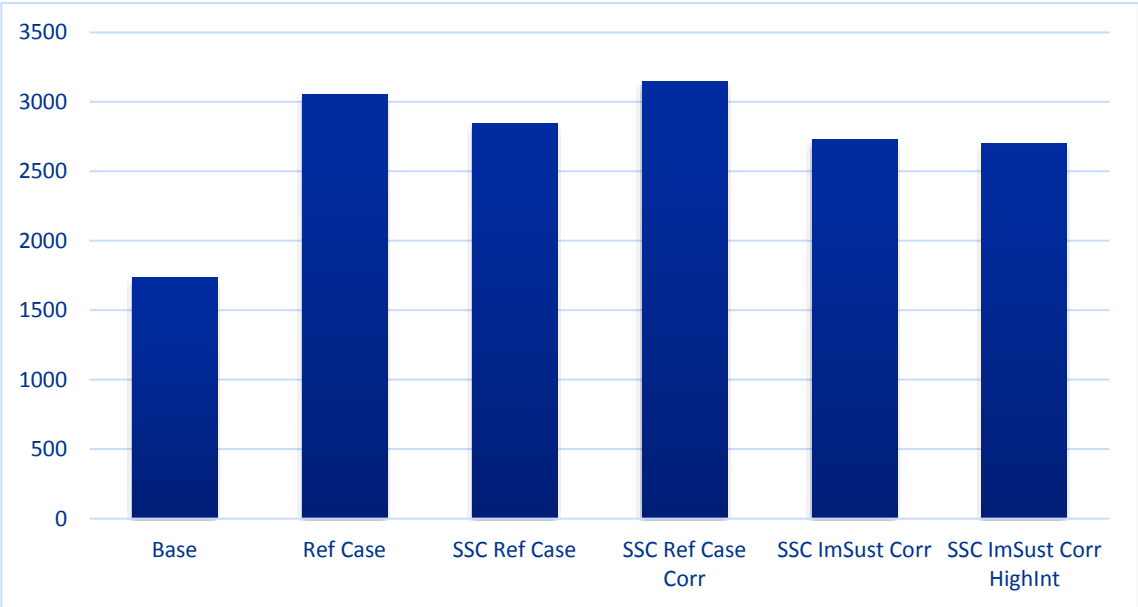


Figure **Error! No text of specified style in document.**-29 presents the total vehicle time for the different scenarios in the evening peak. In the evening peak, the total vehicle time is lower than in the morning peak. The construction of the SSC is likely to result in a 3% reduction of total vehicle time, while the addition of the bus lanes on the north-south corridor would result in an increase of 4% over the reference case scenario. Total vehicle time is likely to decrease after reduced trip rates have been applied to represent more sustainable travel

for the Harlow road network, while with a higher level of internal trips assumed within the town total vehicle time would reduce further, resulting in a 7% reduction over the reference case scenario.

Figure Error! No text of specified style in document.**-29: PM – Total Vehicle Time (veh*hr)**

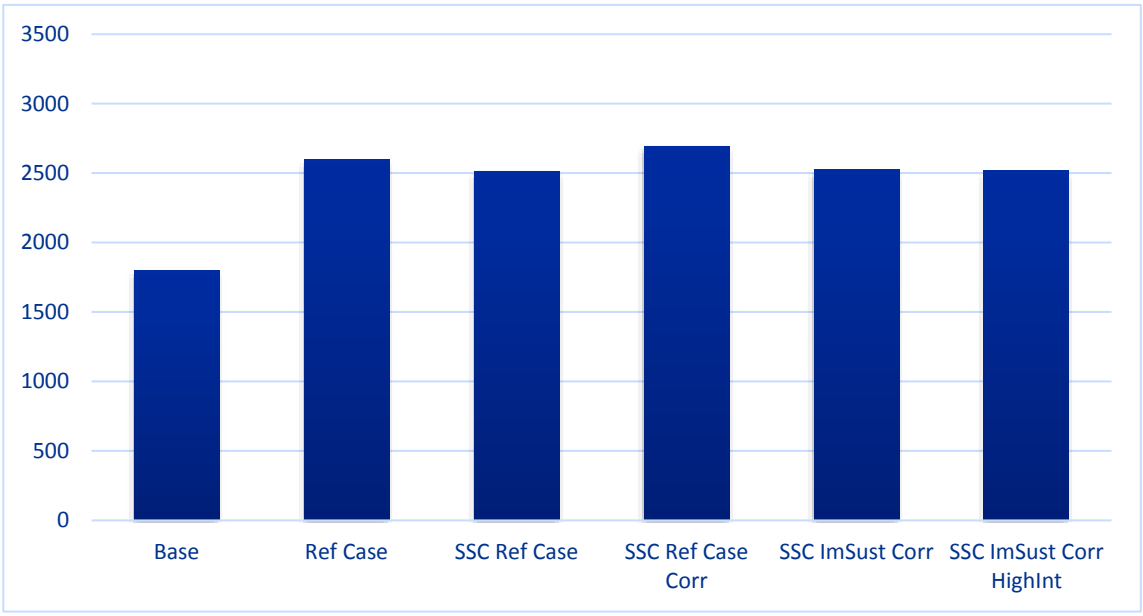


Figure **Error! No text of specified style in document.**-30 presents the total vehicle miles for the different scenarios in the morning peak. The construction of the SSC and the addition of the bus lanes on Fifth Avenue on the north-south corridor result in a reduction in total vehicle miles of 1%. However, when reduced trip rates have been applied to represent more sustainable travel for the Harlow road network, total vehicle miles decrease by 1%. With a higher level of internal trips assumed within the town total vehicle miles increase slightly.

Figure Error! No text of specified style in document.**-30: AM – Total Vehicle Miles (veh*miles)**

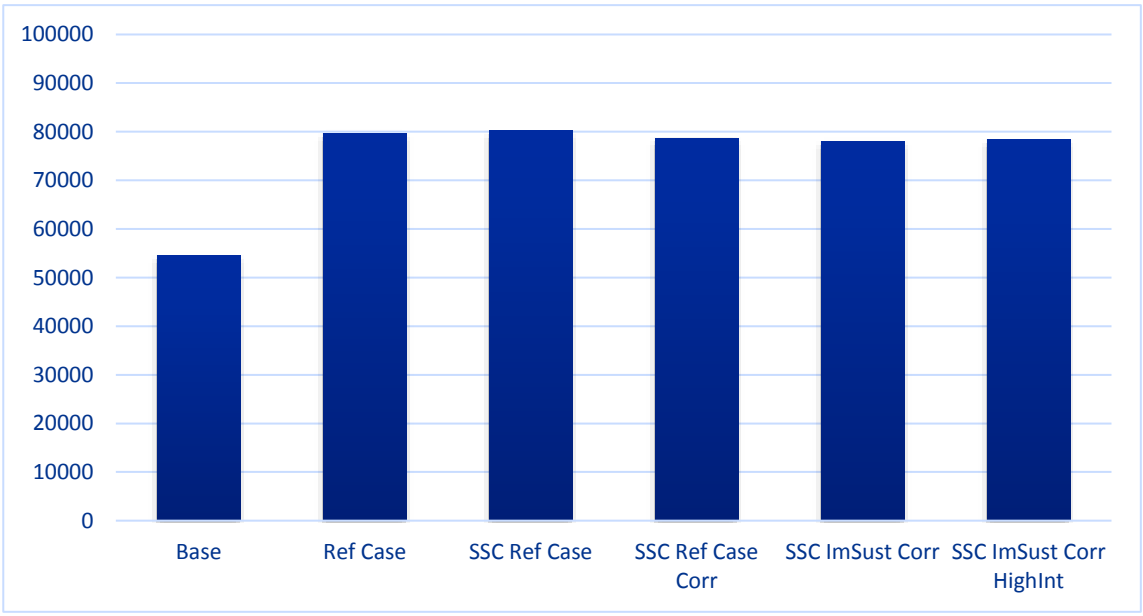


Figure **Error! No text of specified style in document.**-31 presents the total vehicle miles for the different scenarios in the evening peak. In the evening peak the total vehicle miles are lower than in the morning peak. The construction of the SSC is likely to result in a reduction in total vehicle miles, however, total vehicle miles

would slightly increase with the addition of the bus lanes in Fifth Avenue. The sustainability improvements and a higher level of internal trips assumed within the town are likely to have a positive impact on the total vehicle miles, resulting in a 2% reduction over the reference case.

Figure Error! No text of specified style in document.**-31: PM – Total Vehicle Miles (veh*miles)**

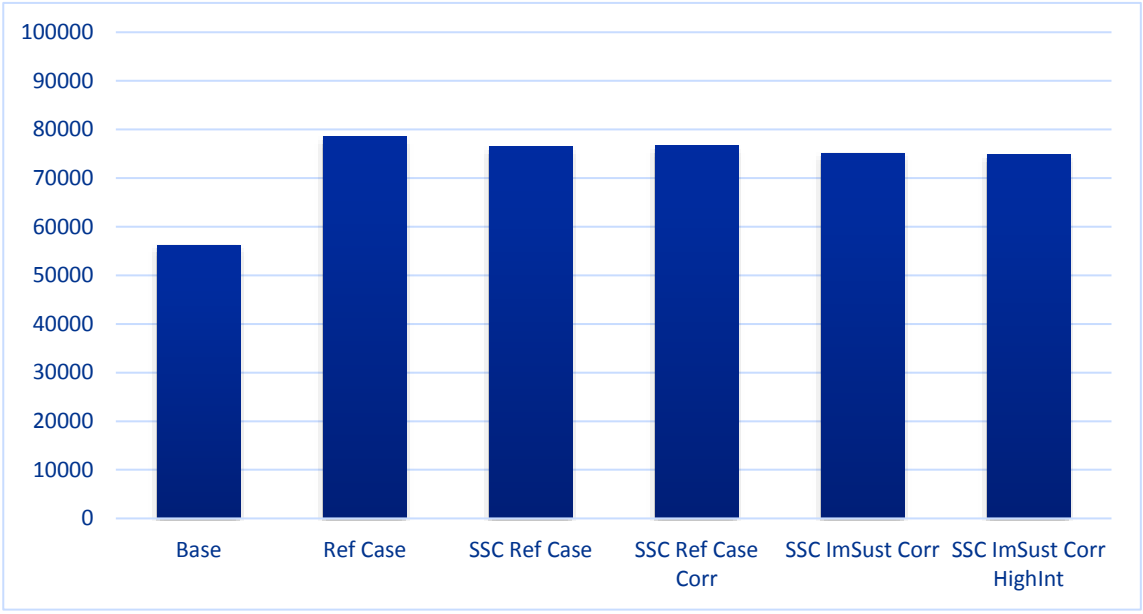


Figure **Error! No text of specified style in document.**-32 presents the average network speed for the different scenarios in the morning peak. With the SSC in place, the average network speed would increase by 8%, however the additional bus lanes on the north-south corridor are likely to result in a reduction in average network speed. The sustainability improvements are likely to result in an increase in average network speed by 14% while, with a higher level of internal trips assumed within the town, the total vehicle time would increase by a further 2%, or 16% over the reference case scenario.

Figure Error! No text of specified style in document.**-32: AM – Average Network Speed (mph)**

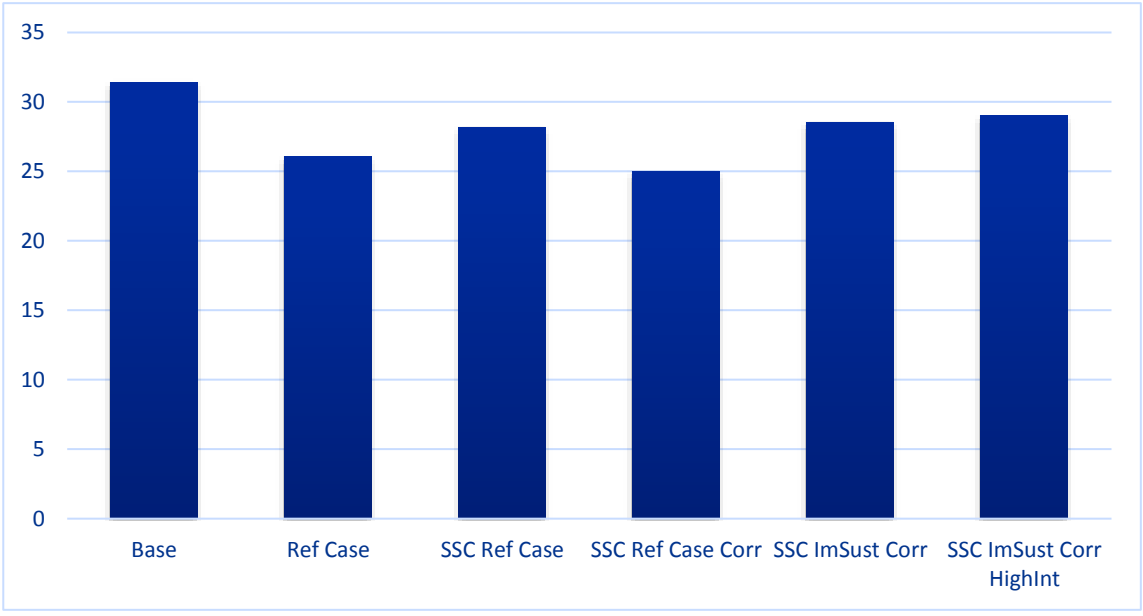


Figure **Error! No text of specified style in document.**-33 presents the average network speed for the different scenarios in the evening peak. In the evening peak, the average network speed is higher than in the morning

peak. The construction of the SSC is likely to result in a small increase in average network speed, however the addition of the bus lanes on the north-south corridor would result in a reduction of 6% over the reference case scenario. Average network speed is likely to increase after reduced trip rates have been applied to represent more sustainable travel, while with a higher level of internal trips assumed within the town, average network speed would increase further, resulting in a 5% increase over the reference case scenario.

Figure Error! No text of specified style in document.**-33: PM – Average Network Speed (mph)**