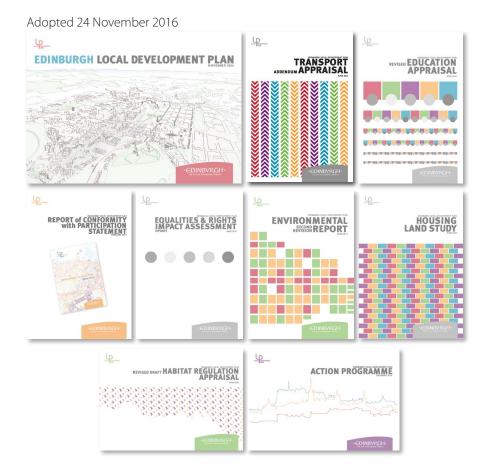


EDINBURGH LOCAL DEVELOPMENT PLAN **TRANSPORT** ADDENDUM ADDENDATION





The Local Development Plan sets out policies and proposals to guide development.

The Action Programme sets out actions to deliver the Plan.

The Report of Conformity explains how engagement informed the Plan.

The Habitats Regulations Appraisal assesses the Plan's impact on internationally important bird habitats.

The Transport Appraisal identifies transport actions to support the Plan.

The Education Appraisal identifies new and expanded schools to support the Plan.

The Equalities & Rights Impact Assessment checks what impact the Plan will have on people.

The Environmental Report assesses the impact of the Plan and explains the selection of new housing sites.

The Housing Land Study sets out the assumption on housing land availability which inform the Local Development Plan.

See the documents, supplementary guidance, and other information at: www.edinburgh.gov.uk/localdevelopmentplan www.edinburgh.gov.uk/supplementaryguidance





Published in 2013



Published in 2014



Overview of Transport Appraisal

This section sets out the context for the preparation of the Transport Appraisal and its addendum. It explains how it has been used to inform the Local Development Plan and Action Programme.

As part of the preparation of the Local Development Plan, the Council, in line with national guidance, commissioned the preparation of a Transport Appraisal. The purpose of the appraisal was to assess at an appropriate level the impact of the Edinburgh Local Development Plan strategy on the transport network, and to identify and outline the transport interventions that will be required to ensure that the strategy does not have an unacceptable negative impact on the transport network.

The Council commissioned CH2M (then Halcrow Group Limited) to carry out the Transport Appraisal on its behalf. The project involved close working between Halcrow and Council Planning and Transport officers to ensure a rigorous approach. Transport Scotland were also involved in the process and attended the initial inception meeting and a workshop where the initial results were presented for discussion. The Transport Appraisal was undertaken in two stages: first, for the Proposed Local Development Plan which was approved in March 2013; and second (the addendum), for the Second Proposed Plan. A Second Proposed Plan was required because the approved Strategic Development Plan and its supplementary guidance significantly increased the housing land requirement in the Edinburgh city region.

This addendum updates the original Transport Appraisal to take account of the changes and additions to new housing sites included in the Second Proposed Local Development Plan post examination as modified. The addendum updates the original demand analysis, using the original methodology, assessing the cumulative impact of new, amended and original housing sites that are identified in the post examination Second Proposed Plan as modified. The addendum also includes site summary sheets for each of the additional housing proposals. These include a list of recommended transport interventions which have been subject to assessment using the same methodology used for the original transport appraisal. Where appropriate, these interventions have been included in the Proposed Plan, either as a Transport Proposal or referred to in the relevant site brief or development principles. Other transport interventions will be included in the LDP Action Programme which will be updated when more detailed transport assessment work is undertaken, or as further information becomes available. The assessment of the interventions for the sites set out in the original report has not been replaced. As a result, both the original report and its addendum should be read together to understand the methodology and the results of the appraisal.

To accord with the approved Strategic Development Plan and its Supplementary Guidance on Housing Land, the second Proposed Plan allocates land for approximately 9,500 new houses. Furthermore, three supplementary sites which have been removed from the green belt, although not allocated for housing, have been included in the evaluation. It is important to recognise that the scale of new housing development required will inevitably have an impact on the transport network regardless of where it is located. The LDP strategy seeks to minimise this impact. The Transport Appraisal does not comprise detailed transport modelling. Detailed transport modelling will be undertaken as part of the planning application process as details of the individual sites, including access arrangement and layouts, emerge. The Transport Appraisal is one of a number of background documents informing the Local Development Plan and Action Programme.

The Transport Appraisal recommends a residential travel plan be prepared for each of the new housing sites. It considers that travel plans are relevant but not necessary to support development. The Proposed Plan requires travel plans to be prepared for major travel generating proposals in locations not well served by public transport. Accessibility by public transport was one of the main criteria used in identifying the new housing sites and a number of interventions have been identified to provide access to public transport and promote active travel. Travel plans are a useful tool in promoting sustainable travel and helping to meet mode share targets. However, these are not considered to be essential to support development of the new housing sites and therefore are not a requirement of the Proposed Plan.

If you have any queries on the LDP Transport Appraisal, please contact Keith Miller, Senior Planning Officer on 0131 469 3665 or <u>keith.miller@edinburgh.gov.uk</u>.

Introduction

A strategic transport appraisal (TA) to support Edinburgh's emerging Local Development Plan (LDP) was undertaken during 2012-2013, with production of the final report (TA) in March 2013. The TA focused on a number of new housing sites to be included in the Proposed LDP in addition to sites identified in previous local plans (Edinburgh City Local Plan and Rural West Edinburgh Local Plan).

In June 2013, Scottish Ministers approved the Strategic Development Plan and increased the housing land requirement for the Edinburgh city region. SESplan were required to prepare supplementary guidance on housing land to indicate how much of the overall housing land requirement should be met in each of the six member authority areas in the period to 2024. To meet the requirements of the SDP and its supplementary guidance, the Council prepared a second proposed LDP which amended the capacity of a number of the sites considered within the original TA and included a number of additional housing sites. In addition, the report of examination added a number of additional sites. This Addendum to the TA has been prepared to update the relevant sections of the main TA to reflect the changes in the LDP strategy. The Addendum considers the cumulative impact of all the proposed sites.

Addendum

Table 1 sets out the 15 sites that were considered within the TA report and notes a number of changes in proposed capacity.

Site	TA Report mid-range capacity estimate	Addendum mid-range capacity estimate
Maybury 1 (HSG 19)	600	1,000
Maybury 2 (HSG19)	525	850
International Business Gateway (EMP6)	350	350
Edinburgh Park/The Gyle (Del 4)	575	575
Cammo (HSG20)	500	600
Burdiehouse 1 (HSG 21)	570	510
Burdiehouse 2 (HSG 22)	300	300
Gilmerton 1(HSG 23)	60	60
Gilmerton 2 (HSG 24)	500	625
Drum 1 (HSG25)	150	150
Moredunvale Road (HSG30)	50	188
Newcraighall 1 (HSG26)	270	220
Newcraighall 2 (HSG27)	330	330
Riccarton Mains Road (HSG 35)	50	30
Curriemuirend (HSG 31)	100	170
Total	4,930	5,958

Table 1: TA Report Sites

The revised mid-range capacities give a total of 5,958 units for the original sites, which is a 21% increase on the 4,930 units considered within the TA report.

Table 2 sets out the eleven additional housing sites that are to be considered, together with their indicative capacities. Furthermore, Table 3 contains three further sites that have been included in the evaluation. Although these sites have not been allocated for housing, the possibility exists that they could be subsequently developed, and therefore it has been deemed practical to consider this potential additional transport impact.

Site	Addendum mid-range capacity estimate
Ellen's Glen (HSG 28)	240
Dalmeny (HSG 34)	15
Newmills, Balerno (HSG 37)	210
Brunstane (HSG 29)	1,140
Builyeon Road, Queensferry (HSG 32)	840
South Scotstoun, Queensferry (HSG 33)	374
Curriehill Road, Currie (HSG 36)	60
North of Lang Loan (HSG 39)	220
South East Wedge South: Edmonstone (HSG 40)	270
South East Wedge North: The Wisp (HSG 41)	71
Ravelrig Road, Balerno (HSG 38)	120
Total	3,560

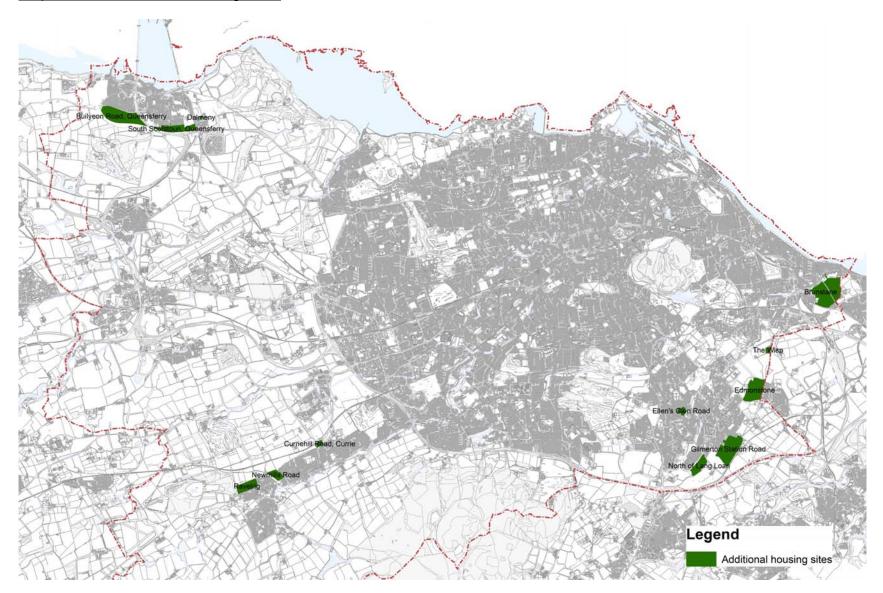
Table 2: Additional Sites

Table 3: New Greenbelt Release

Site	Addendum mid-range capacity estimate
East of Burdiehouse	110
Lasswade Road	510
Factory Field, Kirkliston	100
Total	720

The additional allocated sites have a total mid-range capacity of 3,560 units, while the potential capacity of the unallocated new greenbelt releases has been estimated at 720 units. This gives a total of 9,518 'allocated' units assessed within this Addendum, which is a 93% increase from the main TA report, with an additional potential increase of 720 units increasing the total considered within the addendum to 10,238 units.

Map of Additional LDP Housing Sites



Demand Analysis

Demand analysis for the sites to be considered within the Addendum follows that undertaken for the main sites set out in the TA report. The following paragraphs give a summary of the process and more detail is set out in the TA report. Analysis was undertaken using a Microsoft Excel spreadsheet tool, developed specifically for the transport appraisal.

A daily person trip rate per unit of housing was generated from TRICS (Trip Rate Information Computer System), with values of 8.8 for privately owned houses and 7.2 for rented houses, respectively, calculated. It was not possible to differentiate between flats and house size at this point, as this aspect is still to be determined definitively through the planning application process. These trip rates were then applied to each of the LDP housing sites, with 25% of units allocated to affordable housing, in line with current CEC policy, for two time periods – units implemented by 2020 and the remaining units implemented by 2025.

After an estimated number of trips was generated for each development, it was necessary to assign these trips by mode. This was done by applying modal splits. Modal split was assigned based on an estimated modal share for 2010. This estimated modal split was based on a baseline of modal share from 2001 Census data from 'travel to work' statistics for five edge-of-city wards, which was then adjusted with more recent Scottish Household Survey data (in the absence of 2011 Census data, not published at the time of writing the original TA report).

For the Baseline (Do Nothing) scenario, a uniform set of modal splits was applied across all developments. For the Do Minimum scenario and the Do Something scenario, different modal splits were applied to each site to reflect a more realistic scenario of how the transport system might look in future years with 'committed' and LDP transport interventions in place, respectively, affecting individual sites.

In order to both distribute trip demand spatially across the transport network and to provide a spatial structure for the development of multi-modal solutions, a broad spatial framework was developed for this study. This focused on a set of strategic corridors, produced in line with the SDP strategy and key road and public transport routes were identified within these corridors.

Trip demand forecasts were also generated for 'committed' housing sites to provide estimated additional trips on strategic corridors from committed development alone and then additionally from the new housing sites. The figures have changed slightly from the original report as a result of error corrections. In addition, the forecast demand from the potential housing sites is set against the background of moderate growth in overall traffic levels which may happen in the absence of the LDP proposals.

The calculated demand was then distributed across the spatial framework. To assist with this, gravity models were developed and applied. The gravity models produced a distribution of trips by broad spatial corridor for the potential housing sites and committed residential sites. This distribution was applied to the trip demand within the demand analysis. A further distribution of these trips was carried out within corridors by mode, by peak hour (10% of all trips) and, finally, for car trips, by road. Professional judgement was used to assign proportions of peak car trips across individual key roads

within the strategic corridors. Finally, the peak hour trip demand was assessed in terms of its impact on the transport network, in both quantitative and qualitative ways.

Due to the limitations of the spreadsheet tool, vehicular trips were allocated to relevant adjacent strategic corridors. It should be noted that some traffic will be likely to use nearby alternative secondary routes, so some impact on a strategic corridor may be higher than would actually occur. In addition, traffic on an initial strategic corridor may connect to a subsequent strategic corridor, for example the Orbital Corridor (which includes the A720 City Bypass and the local Inner Orbital route), meaning that the overall impact across the whole network is not provided and may be slightly underestimated for sections of some routes. However, such under-estimates are probably offset by use of full build-out estimates for 2024/25. Computer modelling would provide further clarity on this subject. However, the lack of an existing up-to-date Edinburgh area model meant budget and timescale constraints prevented such an assessment being undertaken.

With regard to main corridor allocations, these are summarised in Table 4, while the distribution by road are summarised in Table 5 (all sites are likely to have some impact on Corridor 7 (Orbital)). It should be noted that the analysis does not identify direction of flow.

Table 4: Distribution to Corridor (note, rounding to the nearest whole percentage may result in values of 0% or row totals marginally above or below 100%)

	CORRIDOR 1 - West Edinburgh	CORRIDOR 2 - South East Edinburgh	CORRIDOR 3 - East Edinburgh	CORRIDOR 4 - North West Edinburgh	CORRIDOR 5 - South West Edinburgh	CORRIDOR 6 - South Edinburgh	CORRIDOR 7 - Orbital Edinburgh
Maybury 1 (HSG 19)	77%			13%			9%
Maybury 2 (HSG19)	69%			21%			9%
International Business Gateway (EMP6)	75%			12%			13%
Edinburgh Park/The Gyle (Del 4)	93%			4%			2%
Cammo (HSG20)	64%			28%			9%
Burdiehouse 1 (HSG 21)		84%	1%				15%
Burdiehouse 2 (HSG 22)		82%	1%				17%
Gilmerton 1(HSG 23)		86%	5%				9%
Gilmerton 2 (HSG 24)		87%	4%				9%
Drum 1 (HSG25)		88%	0%				11%
Moredunvale Road (HSG30)		91%	2%				7%
Newcraighall 1 (HSG26)		3%	87%				10%
Newcraighall 2 (HSG27)		2%	86%				12%
Riccarton Mains Road (HSG 35)	2%				91%		7%
Curriemuirend (HSG 31)	4%				92%		4%
Ellen's Glen (HSG 28)		100%					
Dalmeny (HSG 34)	25%			75%			
Newmills, Balerno (HSG 37)	3%				75%		22%
Brunstane (HSG 29)			100%				
Builyeon Road, Queensferry (HSG 32)	25%			75%			
South Scotstoun, Queensferry (HSG 33)	25%			75%			

	CORRIDOR 1 - West Edinburgh	CORRIDOR 2 - South East Edinburgh	CORRIDOR 3 - East Edinburgh	CORRIDOR 4 - North West Edinburgh	CORRIDOR 5 - South West Edinburgh	CORRIDOR 6 - South Edinburgh	CORRIDOR 7 - Orbital Edinburgh
Curriehill Road, Currie (HSG 36)					100%		
North of Lang Loan (HSG 39)		87%	1%				13%
South East Wedge South: Edmonstone (HSG 40)		75%	25%				
South East Wedge North: The Wisp (HSG 41)		50%	50%				
Ravelrig Road, Balerno (HSG 38)	3%				80%		17%
East of Burdiehouse		80%	1%				19%
Lasswade Road		80%	5%				15%
Factory Field, Kirkliston	29%			69%			1%

Table 5: Distribution to Road (note, rounding to the nearest whole percentage may result in values of 0% or row totals marginally above or below 100%)

Corridor	1		2				3		4	5		6	7	
Road	A8 Glasgow Road	Stenhouse/ Broomhouse Road	A701 Liberton Road	A772 Gilmerton Road	A7 Old Dalkeith Road	Lasswade Road	A1	A6095	A90 Queensferry Road	A71 Calder Road	A70 Lanark Road	A702 Biggar Road	A720	Inner Orbital
Maybury 1 (HSG 19)	77%								13%				8%	1%
Maybury 2 (HSG19)	69%								21%				8%	1%
International Business Gateway (EMP6)	75%								12%				11%	2%
Edinburgh Park/The Gyle (Del 4)	56%	37%							4%				2%	0%
Cammo (HSG20)	64%								28%				7%	1%
Burdiehouse 1 (HSG 21)			59%	17%	8%		0%	0%					13%	2%

Corridor	1		2				3		4	5		6	7	
Road	A8 Glasgow Road	Stenhouse/ Broomhouse Road	A701 Liberton Road	A772 Gilmerton Road	A7 Old Dalkeith Road	Lasswade Road	A1	A6095	A90 Queensferry Road	A71 Calder Road	A70 Lanark Road	A702 Biggar Road	A720	Inner Orbital
Burdiehouse 2 (HSG 22)			58%	16%	8%		0%	0%					14%	2%
Gilmerton 1(HSG 23)			9%	60%	9%	9%	2%	3%					8%	1%
Gilmerton 2 (HSG 24)			4%	52%	4%	26%	2%	3%					7%	1%
Drum 1 (HSG25)			4%	53%	4%	27%	0%	0%					9%	2%
Moredunvale Road (HSG30)				46%	46%		1%	1%					6%	1%
Newcraighall 1 (HSG26)			1%	1%	1%	1%	35%	52%					8%	1%
Newcraighall 2 (HSG27)			0%	0%	0%	0%	34%	52%					10%	2%
Riccarton Mains Road (HSG 35)	2%									36%	55%		6%	1%
Curriemuirend (HSG 31)	4%									37%	55%		4%	1%
Ellen's Glen (HSG 28)			25%	25%	25%	25%								
Dalmeny (HSG 34)	25%								75%					
Newmills, Balerno (HSG 37)	3%									30%	45%		19%	3%
Brunstane (HSG 29)							75%	25%						
Builyeon Road, Queensferry (HSG 32)	25%								75%					
South Scotstoun, Queensferry (HSG 33)	25%								75%					
Curriehill Road, Currie (HSG 36)										40%	60%			
North of Lang Loan (HSG 39)			22%			65%	0%	0%					11%	2%
South East Wedge South: Edmonstone (HSG 40)					75%		10%	15%						
South East Wedge North: The Wisp (HSG 41)			13%	13%	13%	13%	20%	30%						
Ravelrig Road, Balerno (HSG 38)	3%									40%	40%		15%	2%

Corridor	1		2			3			4	5		6	7	
Road	A8 Glasgow Road	Stenhouse/ Broomhouse Road	A701 Liberton Road	A772 Gilmerton Road	A7 Old Dalkeith Road	Lasswade Road	A1	A6095	A90 Queensferry Road	A71 Calder Road	A70 Lanark Road	A702 Biggar Road	A720	Inner Orbital
East of Burdiehouse			40%			40%	0%	0%					17%	3%
Lasswade Road			8%		8%	64%	2%	3%					13%	2%
Factory Field, Kirkliston	29%								69%				1%	0%

Baseline Scenario

The Baseline Scenario (also considered as Do Nothing) assesses demand from all the LDP housing sites assuming background traffic growth in the network and the delivery of committed residential development. In terms of modal share, it assumes a baseline (2010) modal split of trips, based on existing values. The scenario assumes no improvements will be made in terms of modal shift to more sustainable transport modes and the baseline modal split observed currently continues.

Throughout this addendum, sustainable modes are defined as those trips undertaken by walking, cycling, public transport (bus, train and tram), motorcycle and as a car passenger. Taxi trips are excluded, as they are considered to constitute a private vehicle trip.

For the baseline scenario, modal split is deemed to be consistent across all sites, with applied values as set out in Table 6. Realistically, there may be some variation for individual sites but the applied values are considered reasonable for this scenario.

Site	Corridor	Car Driver +taxi	Car pax	Train	Bus	Cycle	Walk	Other	Total Sustainable
All LDP sites	-	58.9	6.0	1.7	21.6	2.0	7.8	2.0	41.1

Table 6: Baseline (Do Nothing) scenario – % modal splits by site (uniform)

The impact analysis results for Scenario 1 – Baseline are shown in Table 7 and Table 8, by corridor and by site respectively.

Table 7: Scenario 1 – Baseline Case – Corridor Impact

		CORRIDOR 1 – WEST EDINBURGH		CORRIDO	OR 2 – SOUT GH	TH EAST		CORRIDO EAST ED	DR 3 – INBURGH	CORRIDOR 4 - NORTH WEST EDINBURGH	CORRIDOR 5 – SOUTH WEST EDINBURGH		CORRIDOR 6 - SOUTH EDINBURGH	CORRIDOR 7 – ORBITAL EDINBURGH	
Corridor		A8 Glasgow Road	Stenhouse / Broomhouse	A701 Liberton Road	A772 Gilmerton Road	A7 Old Dalkeith Road	Lasswade Road	A1	A6095	A90 Queensferry Road	A71 Calder Road	A70 Lanark Road	A702 Biggar Road	A720 - Outer orbital	Inner Orbital
Baseline peak hour flow		4,447	1,333	1,500	1,102	1,874	740	5,329	875	3,832	2,000	2,465	1,000	6,265	886
2019/20	Corridor impact - by car (peak car trips)	258		379				183		108	186	<u>.</u>	0	103	
2019/20	LDP only	243	16	107	151	75	46	91	92	108	75	112	0	88	14
	LDP only as % over baseline peak hour flow	5.5%	1.2%	7.1%	13.7%	4.0%	6.3%	1.7%	10.5%	2.8%	3.7%	4.5%	0.0%	1.4%	1.6%
	Background growth 2019/20	44	13	15	11	19	7	320	9	230	20	25	10	376	9
	Committed residential 2019/20	195	20	44	38	11	42	17	26	305	17	24	0	38	6
LDP (44) over (baseline traffic plus background growth plus committed residential)	LDP only as % over baseline peak hour flow plus background plus committed	5.2%	1.2%	6.8%	13.1%	3.9%	5.9%	2%	10.1%	2.5%	3.7%	4.4%	0.0%	1.3%	1.6%
	LDP and committed residential and growth 2019/20	482	49	166	200	104	96	428	127	643	112	160	10	502	29
	% over 2011 baseline peak hour flow	10.8%	3.7%	11.0%	18.2%	5.6%	12.9%	8.0%	14.5%	16.8%	5.6%	6.5%	1.0%	8.0%	3.3%
2024/25	Corridor impact - by car (peak car trips)	1,630		1,541				1,000		889	278		0	427	
2024/25	LDP only	1510	120	401	411	284	444	623	377	889	117	161	0	367	60
	LDP only as % over baseline peak hour flow	34.0%	9.0%	26.7%	37.3%	15.2%	60.0%	11.7%	43.1%	23.2%	5.8%	6.5%	0.0%	5.9%	6.8%
	Background growth 2024/25	89	27	30	22	37	15	533	18	383	40	49	20	627	18
	Committed residential 2024/25	335	40	50	44	9	52	17	26	333	34	49	107	64	10
	LDP only as % over baseline peak hour flow plus background plus committed	31.0%	2.7%	19.6%	35.2%	14.8%	55.1%	10.6%	41.0%	19.6%	5.6%	6.3%	0.0%	5.3%	6.5%
	LDP and committed residential and growth 2024/25		186	481	478	331	511	1173	420	1606	190	259	127	1057	88
	% over 2011 baseline peak hour flow	43.5%	14.0%	32.1%	43.3%	17.7%	69.0%	22.0%	48.0%	41.9%	9.5%	10.5%	12.7%	16.9%	9.9%

Table 8: Scenario 1 – Baseline Case – Site Impact (number of peak hour trips generated)

	INTERIM									FULL								
	2019/20									2024/25								
		ed sites in t ites (peak h		LDP sites daily trips	s only (peal s)	c hour		s committee our daily trip			ed sites in t ites (peak h		LDP sites daily trip	s only (peał s)	(hour		committec ur daily trip	
	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail
Maybury 1	30	11	1	98	36	3	128	47	4	30	11	1	560	205	16	590	216	17
Maybury 2	30	11	1	98	36	3	128	47	4	30	11	1	476	174	14	506	185	15
IBG	0	0	0	0	0	0	0	0	0	0	0	0	196	72	6	196	72	6
Edinburgh Park	53	19	2	42	15	1	95	35	3	106	39	3	322	118	9	428	157	12
Cammo	0	0	0	84	31	2	84	31	2	45	17	1	336	123	10	381	140	11
Burdiehouse 1	23	8	1	84	31	2	107	39	3	23	8	1	285	105	8	308	113	9
Burdiehouse 2	23	8	1	56	21	2	79	29	2	23	8	1	168	62	5	191	70	6
Gilmerton 1	17	6	0	34	12	1	51	19	1	17	6	0	34	12	1	51	19	1
Gilmerton 2	17	6	0	42	15	1	59	22	2	17	6	0	350	128	10	367	135	11
Drum 1	17	6	0	56	21	2	73	27	2	17	6	0	84	31	2	101	37	3
Moredunvale Road	4	2	0	84	31	2	89	33	3	5	2	0	105	39	3	93	19	1
Newcraighall 1	23	8	1	90	33	3	112	41	3	23	8	1	123	45	4	146	54	4
Newcraighall 2	23	8	1	56	21	2	79	29	2	23	8	1	185	68	5	208	76	6
Riccarton Mains Road	9	3	0	17	6	0	26	10	1	9	3	0	17	6	0	26	10	1
Curriemuirend	9	3	0	95	35	3	105	38	3	9	3	0	95	35	3	105	38	3
Ellen's Glen	0	0	0	67	25	2	67	25	2	0	0	0	134	49	4	134	49	4
Dalmeny	0	0	0	8	3	0	8	3	0	0	0	0	8	3	0	8	3	0
Newmills, Balerno	8	3	1	67	25	2	77	28	2	9	3	0	118	43	3	127	47	4

	INTERIM									FULL								
	2019/20									2024/25								
		ed sites in tl tes (peak ho		LDP sites daily trips	s only (peak इ)	hour		committed ur daily trip		Committed sites in the vicinity of LDP sites (peak hour daily trips)			LDP sites daily trips	only (peak इ)	hour	LDP plus committed sites (peak hour daily trips)		
	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail	By Car	By Bus	By Rail
Brunstane	0	0	0	50	18	1	50	18	1	0	0	0	638	234	18	638	234	18
Builyeon Road, Queensferry	29	11	1	0	0	0	29	11	1	38	14	1	470	172	14	508	186	15
South Scotstoun, Queensferry	29	11	1	56	21	2	85	31	2	38	14	1	246	90	7	284	104	8
Curriehill Road, Currie	9	3	0	34	12	1	43	16	1	9	3	0	34	12	1	43	16	1
North of Lang Loan	17	6	1	0	0	0	17	6	0	17	6	0	123	45	4	0	51	4
SEW South: Edmonstone	0	0	0	0	0	0	0	0	0	0	0	0	151	55	4	0	55	4
SEW North: The Wisp	0	0	0	0	0	0	0	0	0	0	0	0	40	15	1	0	15	1
Ravelrig Road, Balerno	8	3	1	0	0	0	9	3	0	9	3	0	67	25	2	0	28	2
East of Burdiehouse	19	8	2	0	0	0	23	8	1	23	8	1	62	23	2	0	31	2
Lasswade Road	15	6	1	0	0	0	17	6	0	17	6	0	285	105	8	0	111	9
Factory Field, Kirkliston	305	122	31	0	0	0	359	132	10	359	132	10	56	21	2	0	152	12
Total	719	275	47	1217	446	35	2000	733	58	899	330	26	5766	2114	166	5438	2422	190

<u>Results</u>

Table 7 observations of comparison with Main Report Table 4-2:-

- Significant increase in LDP peak period trips on Corridor 1 (West) A8 route is due to increased capacity of Maybury 1 and 2 sites and new sites at Queensferry.
- Increases on Corridor 2 (South East) routes is due to the increased capacity of the Moredunvale Road site and the new Ellen's Road, North of Lang Loan, South East Wedge South: Edmonstone, South East Wedge North: The Wisp sites, as well as the potential future greenbelt release sites i.e. East of Burdiehouse and Lasswade Road.
- Increase on Corridor 3 (East) is due to new Brunstane site, with main percentage impact being on the A6095, due to its low baseline flow.
- Significant increase in LDP peak period trips on Corridor 4 (North West) A90 route is due to increased capacity of Maybury 1 and 2 sites and new sites at Queensferry.
- Increases on Corridor 5 (South West) is due to increased capacity at Curriemuirend and new sites at Newmills and Ravelrig in Balerno.
- Increase on Corridor 7 (Orbital) is due to increased capacity of original sites and new sites.
- The increases in trips from committed residential allocations is the result of an error correction from the Main Report analysis.

In terms of key corridors and their sub-routes, all are forecast to experience an increase in vehicular traffic volumes of more than 5% over baseline plus background growth and committed development by 2024/25, with full build-out, as a result of all the proposed LDP housing sites. Of the 14 sub-routes, 12 are forecast to see increases exceeding 10.0%.

Caution needs to be exercised when considering some of the results. For example, a road with a low existing baseline flow may experience a significant % increase but this may be accommodated without requiring major enhancements.

It should be noted that these increases:-

(i) assume full build-out by 2024/25;

(ii) do not allow for vehicles using secondary roads;

(iii) do not identify use of just a short section of the corridor, which would have limited impact.

In terms of individual sites, the LDP sites plus the 'greenbelt releases' are forecast to generate an additional 5,766 vehicular trips during the one hour peak period by 2024/25 (compared with a background growth by 2024/25 of 1,907), with the largest impacts due to Maybury 1 and 2; Builyeon Road; Queensferry; and Brunstane, as would be expected as they are the four largest sites. These sites also generate significant numbers of potential trips by bus that would need to be accommodated.

Do Minimum Scenario

The Baseline Scenario took no account of transport interventions that can be classified as "committed" for the purposes of this study. These are interventions which are broadly assumed to have a moderate or high degree of certainty of delivery over the assessment period of the LDP housing scenario.

The Do Minimum scenario therefore takes into account potential modal share impacts of these "committed" schemes on the LDP housing sites (this is effectively the 'Reference' case, in transport appraisal terms).

A largely qualitative analysis has been carried out on the potential modal share impacts of a set of committed transport interventions and are shown in Table 9.

Site	Corridor	Car Driver + taxi	Car passenger	Train	Bus	Cycle	Walk	Other	Total Sustainable
Maybury 1	W	44.9	6	17.7	18.6	2.5	8.3	2	55.1
Maybury 2	W	48.9	6	13.2	19.6	2.3	8	2	51.1
IBG	W	39.9	6	21.7	17.6	3.5	9.3	2	60.1
Edinburgh Park	W	40.9	6	21.7	18.6	2.5	8.3	2	59.1
Cammo	W	58.9	6	1.7	21.1	2.3	8	2	41.1
Burdiehouse 1	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Burdiehouse 2	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Gilmerton 1	SE	57.9	6	1.7	21.6	2.5	8.3	2	42.1
Gilmerton 2	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Drum 1	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Moredunvale Road	SE	57.9	6	1.7	21.6	2.5	8.3	2	42.1
Newcraighall 1	E	58.9	6	1.7	21.6	2	7.8	2	41.1
Newcraighall 2	E	58.9	6	1.7	21.6	2	7.8	2	41.1
Riccarton Mains Road	SW	54.9	6	1.7	24.6	2.5	8.3	2	45.1
Curriemuirend	SW	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Ellen's Glen	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Dalmeny	NW	59.9	6	1.7	20.1	2.2	8.1	2	40.1
Newmills, Balerno	SW	55.9	6	1.7	23.6	2.5	8.3	2	44.1
Brunstane	E	56.4	6	3.7	21.6	2.2	8.1	2	43.6
Builyeon Road, Queensferry	NW	61.9	6	1.7	19.1	2.2	8.1	2	39.1
South Scotstoun, Queensferry	NW	60.9	6	1.7	18.1	2.2	8.1	2	38.1
Curriehill Road, Currie	SW	55.9	6	1.7	23.6	2.5	8.3	2	44.1
North of Lang Loan	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
SEW South: Edmonstone	SE	57.9	6	1.7	21.6	2.5	8.3	2	42.1

Table 9: Do Minimum scenario - estimated adjusted % modal share by site

Site	Corridor	Car Driver + taxi	Car passenger	Train	Bus	Cycle	Walk	Other	Total Sustainable
SEW North: The Wisp	SE	57.9	6	1.7	21.6	2.5	8.3	2	42.1
Ravelrig Road, Balerno	SW	55.9	6	1.7	23.6	2.5	8.3	2	44.1
East of Burdiehouse	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Lasswade Road	SE	56.9	6	1.7	22.6	2.5	8.3	2	43.1
Factory Field, Kirkliston	W	57.9	6	1.7	21.9	2.3	8.1	2	42.1

The impact analysis results for Scenario 2 – Do Minimum are shown in Table 10 and Table 11, by corridor and by site respectively.

Table 10: Scenario 2 – Do Minimum Case – Corridor Impact

								CORRIDOR 3 – EAST EDINBURGH		CORRIDOR 4 – NORTH WEST EDINBURGH	CORRIDOR 5 – SOUTH WEST EDINBURGH		CORRIDOR 6 - SOUTH EDINBURGH	CORRIDO ORBITAL EDINBUF	L
Corridor		A8 Glasgow Road	Stenhouse / Broomhouse	A701 Liberton Road	A772 Gilmerton Road	A7 Old Dalkeith Road	Lasswade Road	A1	A6095	A90 Queensferry Road	A71 Calder Road	A70 Lanark Road	A702 Biggar Road	A720 - Outer orbital	Inner Orbital
Baseline peak hour flow		4,447	1,333	1,500	1,102	1,874	740	5,329	875	3,832	2,000	2,465	1,000	6,265	886
2024/25	Corridor impact - by car (peak car trips)	1339		1493				971		866	265		0	388	
2024/25	LDP only	1256	83	388	399	277	429	602	369	866	111	154	0	334	54
	LDP only as % over baseline peak hour flow	28.2%	6.3%	25.8%	36.2%	14.8%	58.0%	11.3%	42.1%	22.6%	5.6%	6.2%	0.0%	5.3%	6.1%
	Background growth 2024/25	89	27	30	22	37	15	533	18	383	40	49	20	627	18
	Committed residential 2024/25	307	27	49	44	10	50	17	26	328	33	47	107	61	10
	LDP only as % over baseline peak hour flow plus background plus committed	25.9%	1.9%	18.9%	34.1%	14.4%	53.3%	10.2%	40.2%	19.1%	5.4%	6.0%	0.0%	4.8%	6.0%
	LDP and committed residential and growth 2024/25	1652	138	467	465	325	494	1152	412	1577	184	251	127	1022	82
	% over 2011 baseline peak hour flow	37.1%	10.3%	31.1%	42.2%	17.3%	66.8%	21.6%	47.1%	41.2%	9.2%	10.2%	12.7%	16.3%	9.3%

Table 11: Scenario 2 – Do Minimum Case – Site Impact

	FULL													
	2024/25													
	Committed sites in trips)	the vicinity of LDP site	s (peak hour daily	LDP sites only (peak	c hour daily trips)		LDP plus committed	sites (peak hour daily	r trips)					
	By car	By bus	By rail	By car	By bus	By rail	By car	By bus	By rail					
Maybury 1	23	9	9	427	177	168	449	186	177					
Maybury 2	25	10	7	395	158	107	420	168	113					
IBG	0	0	0	133	59	72	133	59	72					
Edinburgh Park	74	33	39	223	102	119	297	135	158					

	FULL									
	2024/25									
	Committed sites in t trips)	he vicinity of LDP site	es (peak hour daily	LDP sites only (peal	< hour daily trips)		LDP plus committee	l sites (peak hour dail <u>)</u>	/ trips)	
	By car	By bus	By rail	By car	By bus	By rail	By car	By bus	By rail	
Cammo	45	16	1	336	120	10	381	137	11	
Burdiehouse 1	22	9	1	276	109	8	298	118	9	
Burdiehouse 2	22	9	1	162	64	5	184	73	6	
Gilmerton 1	17	6	0	33	12	1	50	19	1	
Gilmerton 2	17	7	0	338	134	10	354	141	11	
Drum 1	17	7	0	81	32	2	98	39	3	
Moredunvale Road	5	2	0	103	39	3	93	19	1	
Newcraighall 1	23	8	1	123	45	4	146	54	4	
Newcraighall 2	23	8	1	185	68	5	208	76	6	
Riccarton Mains Road	9	4	0	16	7	0	24	11	1	
Curriemuirend	9	4	0	92	36	3	101	40	3	
Ellen's Glen	0	0	0	130	52	4	130	52	4	
Dalmeny	0	0	0	9	3	0	9	3	0	
Newmills, Balerno	9	4	0	112	47	3	120	51	4	
Brunstane	0	0	0	611	234	40	611	234	40	
Builyeon Road, Queensferry	40	12	1	494	144	14	534	156	15	
South Scotstoun, Queensferry	40	12	1	255	80	7	294	92	8	
Curriehill Road, Currie	9	4	0	32	13	1	41	17	1	
North of Lang Loan	17	7	0	119	47	4	0	54	4	
SEW South: Edmonstone	0	0	0	149	55	4	0	55	4	
SEW North: The Wisp	0	0	0	39	15	1	0	15	1	
Ravelrig Road, Balerno	9	4	0	64	27	2	0	31	2	
East of Burdiehouse	22	9	1	59	24	2	0	32	2	

	FULL	L											
	2024/25												
	Committed sites in t trips)	he vicinity of LDP site	ity of LDP sites (peak hour daily LDP sites only (peak hour daily trips) LDP plus committed sites (peak hour daily trips)						r trips)				
	By car	By bus	By rail	By car	By bus	By rail	By car	By bus	By rail				
Lasswade Road	17	7	0	276	109	8	0	116	9				
Factory Field, Kirkliston	353	134	10	55	21	2	0	155	12				
Total	844	323	76	5323	2034	609	4975	2336	682				

<u>Results</u>

Table 10 observations of comparison with Main Report Table 5-3:-

- Significant increase in LDP peak period trips on Corridor 1 (West) A8 route is due to increased capacity of Maybury 1 and 2 sites and new sites at Queensferry.
- Increases on Corridor 2 (South East) routes is due to increased capacity of the Moredunvale Road site and the new Ellen's Road, North of Lang Loan, South East Wedge South: Edmonstone, South East Wedge North: The Wisp sites, as well as the potential future greenbelt release sites i.e. East of Burdiehouse and Lasswade Road.
- Significant increase on Corridor 3 (East) is due to new Brunstane site, with main impact being on the A6095, due to its low baseline flow.
- Significant increase in LDP peak period trips on Corridor 4 (North West) A90 route is due to increased capacity of Maybury 1 and 2 sites and new sites at Queensferry.
- Increases on Corridor 5 (South West) is due to increased capacity at Curriemuirend and new sites at Newmills and Ravelrig in Balerno.
- Increase on Corridor 7 (Orbital) is due to increased capacity of original sites and new sites.
- The increases in trips from committed residential allocations is the result of an error correction from the Main Report analysis.

In terms of key corridors, all are forecast to experience increase in vehicular traffic volumes of more than 5% over baseline plus background growth and committed development by 2024/25, with full build-out, as a result of all the proposed LDP housing sites. Of the 14 sub-routes, 12 are forecast to see increases exceeding 10.0%. However, all impacts are reduced from the do-minimum scenario as a result of "committed" transport schemes.

In terms of individual sites, the LDP sites plus the 'greenbelt releases' are forecast to generate an additional 5,323 vehicular trips during the one hour peak period by 2024/25 (compared with a background growth by 2024/25 of 1,907), with the largest impacts still due to Maybury 1 and 2; Builyeon Road; Queensferry; and Brunstane.

Do Something Scenario

For each site, potential transport interventions were identified that would accommodate significant proportions of person trips generated by the new housing and mitigate their impact on the existing transport network. The proposed scale of an individual development site has influenced the extent of suggested interventions while focusing on envisaged impact on the adjacent local transport network and also the Key Corridor deemed to be most affected by a particular site.

Table 12 sets out the estimated modal share assigned to each site which reflect the impacts of the site-specific transport interventions. The impact analysis results for the Do Something scenario are shown in Table 13 and Table 14, by corridor and by site respectively.

Site	Corridor	Car Driver + taxi	Car passenger	Train	Bus	Cycle	Walk	Other	Total Sustainable
Maybury 1	W	39.9	6	17.7	21.6	3.5	9.3	2	60.1
Maybury 2	W	42.9	6	13.2	23.6	3.3	9	2	57.1
IBG	W	34.9	6	21.7	20.6	4.5	10.3	2	65.1
Edinburgh Park	W	36.9	6	23.7	18.6	3.5	9.3	2	63.1
Cammo	W	51.9	6	1.7	26.1	3.7	8.6	2	48.1
Burdiehouse 1	SE	51.9	6	1.7	25.6	3.9	8.9	2	48.1
Burdiehouse 2	SE	50.9	6	1.7	28.6	2.5	8.3	2	49.1
Gilmerton 1	SE	56.9	6	1.7	21.6	3.2	8.6	2	43.1
Gilmerton 2	SE	51.9	6	1.7	25.6	4	8.8	2	48.1
Drum 1	SE	53.9	6	1.7	25.6	2.5	8.3	2	46.1
Moredunvale Road	SE	54.9	6	1.7	23.6	2.8	9	2	45.1
Newcraighall 1	E	58.9	6	1.7	21.6	2	7.8	2	41.1
Newcraighall 2	E	58.9	6	1.7	21.6	2	7.8	2	41.1
Riccarton Mains Road	SW	52.9	6	1.7	25.6	3	8.8	2	47.1
Curriemuirend	SW	55.9	6	1.7	22.6	3.1	8.7	2	44.1
Ellen's Glen	SE	56.9	6	1.7	23.1	2.2	8.1	2	43.1
Dalmeny	NW	58.9	6	1.9	20.4	2.4	8.4	2	41.1
Newmills, Balerno	SW	51.9	6	2.7	25.1	3.5	8.8	2	48.1
Brunstane	E	50.9	6	4.2	25.6	2.9	8.4	2	49.1
Builyeon Road, Queensferry	NW	51.9	6	1.7	27.1	2.7	8.6	2	48.1
South Scotstoun, Queensferry	NW	50.9	6	3.2	25.6	3.4	8.9	2	49.1
Curriehill Road, Currie	SW	53.9	6	3.2	23.1	3	8.8	2	46.1
North of Lang Loan	SE	51.9	6	1.7	25.6	4	8.8	2	48.1

Table 12: Do Something scenario –	estimated adjusted % modal share by site

Site	Corridor	Car Driver + taxi	Car passenger	Train	Bus	Cycle	Walk	Other	Total Sustainable
SEW South: Edmonstone	SE	54.9	6	1.7	23.6	2.8	9	2	45.1
SEW North: The Wisp	SE	56.9	6	1.7	21.6	3.2	8.6	2	43.1
Ravelrig Road, Balerno	SW	51.9	6	2.7	25.1	3.5	8.8	2	48.1
East of Burdiehouse	SE	51.9	6	1.7	25.6	4	8.8	2	48.1
Lasswade Road	SE	51.9	6	1.7	25.6	4	8.8	2	48.1
Factory Field, Kirkliston	W	56.9	6	1.7	22.3	2.7	8.5	2	43.1

Table 13: Scenario 3 – Do Something Case – Corridor Impact

								CORRIDOR 3 – EAST EDINBURGH		CORRIDOR 4 – NORTH WEST EDINBURGH	CORRIDOR 5 – SOUTH WEST EDINBURGH		CORRIDOR 6 - SOUTH EDINBURGH	CORRIDO ORBITAL EDINBUR	L
Corridor	Corridor		Stenhouse / Broomhouse	A701 Liberton Road	A772 Gilmerton Road	A7 Old Dalkeith Road	Lasswade Road	A1	A6095	A90 Queensferry Road	A71 Calder Road	A70 Lanark Road	A702 Biggar Road	A720 - Outer orbital	Inner Orbital
Baseline peak hour flow		4,447	1,333	1,500	1,102	1,874	740	5,329	875	3,832	2,000	2,465	1,000	6,265	886
2024/25	Corridor impact - by car (peak car trips)	1180		1383				906		743	252		0	355	
2024/25	LDP only	1105	75	355	371	262	395	555	351	743	106	147	0	305	50
	LDP only as % over baseline peak hour flow	24.8%	5.6%	23.7%	33.6%	14.0%	53.4%	10.4%	40.1%	19.4%	5.3%	5.9%	0.0%	4.9%	5.6%
	Background growth 2024/25	89	27	30	22	37	15	533	18	383	40	49	20	627	18
	Committed residential 2024/25	290	25	45	44	12	47	17	26	311	32	46	107	59	10
	LDP only as % over baseline peak hour flow plus background plus committed	22.9%	1.7%	17.3%	31.7%	1 3. 6%	49.3%	9.4%	38.2%	16.4%	5.1%	5.7%	0.0%	4.4%	5.4%
	LDP and committed residential and growth 2024/25	1484	127	430	437	311	457	1105	394	1438	178	242	127	990	77
	% over 2011 baseline peak hour flow	33.4%	9.5%	28.7%	39.7%	16.6%	61.8%	20.7%	45.0%	37.5%	8.9%	9.8%	12.7%	15.8%	8.7%

Table 14: Scenario 3 – Do Something Case – Site Impact

	FULL													
	2024/25													
	Committed sites in t trips)	he vicinity of LDP site	s (peak hour daily	LDP sites only (peak	hour daily trips)		LDP plus committed	sites (peak hour daily	r trips)					
	by car	by bus	by rail	by car	by bus	by rail	by car	by bus	by rail					
Maybury 1	20	11	9	379	205	168	399	216	177					
Maybury 2	22	12	7	346	191	107	368	203	113					
IBG	0	0	0	116	68	72	116	68	72					
Edinburgh Park	66	33	43	202	102	129	268	135	172					

	FULL									
	2024/25									
	Committed sites in t trips)	he vicinity of LDP site	es (peak hour daily	LDP sites only (peal	c hour daily trips)		LDP plus committee	l sites (peak hour dail)	/ trips)	
	by car	by bus	by rail	by car	by bus	by rail	by car	by bus	by rail	
Cammo	40	20	1	296	149	10	336	169	11	
Burdiehouse 1	20	10	1	251	124	8	272	134	9	
Burdiehouse 2	20	11	1	145	82	5	165	93	6	
Gilmerton 1	17	6	0	32	12	1	49	19	1	
Gilmerton 2	15	7	0	308	152	10	323	159	11	
Drum 1	16	7	0	77	36	2	92	44	3	
Moredunvale Road	4	2	0	98	42	3	93	19	1	
Newcraighall 1	23	8	1	123	45	4	146	54	4	
Newcraighall 2	23	8	1	185	68	5	208	76	6	
Riccarton Mains Road	8	4	0	15	7	0	24	11	1	
Curriemuirend	9	4	0	90	36	3	99	40	3	
Ellen's Glen	0	0	0	127	53	4	127	53	4	
Dalmeny	0	0	0	8	3	0	8	3	0	
Newmills, Balerno	8	4	0	104	50	5	112	54	6	
Brunstane	0	0	0	551	277	45	551	277	45	
Builyeon Road, Queensferry	34	18	1	414	216	14	448	234	15	
South Scotstoun, Queensferry	33	17	2	213	107	13	246	124	15	
Curriehill Road, Currie	9	4	1	31	13	2	39	17	2	
North of Lang Loan	15	7	0	108	54	4	0	61	4	
SEW South: Edmonstone	0	0	0	141	61	4	0	61	4	
SEW North: The Wisp	0	0	0	38	15	1	0	15	1	
Ravelrig Road, Balerno	8	4	0	59	29	3	0	33	4	
East of Burdiehouse	20	10	1	54	27	2	0	37	2	

	FULL											
	2024/25											
	Committed sites in t trips)	he vicinity of LDP site	s (peak hour daily	LDP sites only (peak	hour daily trips)		LDP plus committed sites (peak hour daily trips)					
	by car	by bus	by rail	by car	by bus	by rail	by car	by bus	by rail			
Lasswade Road	15	7	0	251	124	8	0	131	9			
Factory Field, Kirkliston	347	136	10	54	21	2	0	157	12			
Total	793	352	81	4819	2368	635	4490	2695	714			

<u>Results</u>

Table 13 observations of comparison with Main Report Table 8-2:-

- Significant increase in LDP peak period trips on Corridor 1 (West) A8 route is due to increased capacity of Maybury 1 and 2 sites and new sites at Queensferry.
- Increases on Corridor 2 (South East) routes is due to increased capacity of the Moredunvale Road site and the new Ellen's Road, North of Lang Loan, South East Wedge South: Edmonstone, South East Wedge North: The Wisp sites, as well as the potential future greenbelt release sites i.e. East of Burdiehouse and Lasswade Road.
- Significant increase on Corridor 3 (East) is due to new Brunstane site, with main impact being on the A6095, due to its low baseline flow.
- Significant increase in LDP peak period trips on Corridor 4 (North West) A90 route is due to increased capacity of Maybury 1 and 2 sites and new sites at Queensferry.
- Modest increases on Corridor 5 (South West) is due to increased capacity at Curiemuirend and new sites at Newmills and Ravelrig in Balerno.
- Increase on Corridor 7 (Orbital) is due to increased capacity of original sites and new sites.
- The increases in trips from committed residential allocations is the result of an error correction from the Main Report analysis.

In terms of key corridors, all are forecast to experience increase in vehicular traffic volumes of more than 5% over baseline plus background growth and committed development by 2024/25, with full build-out, as a result of all the proposed LDP housing sites. However, impacts are reduced from the previous scenarios, but still with 10 corridors forecast to see increases exceeding 10.0%.

In terms of individual sites, the LDP sites plus the 'greenbelt releases' are forecast to generate a reduced level of an additional 4,787 vehicular trips during the one hour peak period (compared with a background growth by 2024/25 of 1,907). The largest impacts are still due to Maybury 1 and 2; Builyeon Road; Queensferry; and Brunstane. These sites also generate significant increases in the numbers of potential trips by bus that would need to be accommodated, potentially through investment in additional services by bus operators.

Summary of Demand Analysis

This Addendum has presented a summary of the appraisal of the envisaged impact of all housing sites being considered for the Edinburgh LDP. These include the 15 sites assessed as part of the main TA together with eleven additional housing sites and the potential impact of assuming that the 'greenbelt release' sites could be subsequently developed for housing. As was the case for the main TA report, the analysis has not extended to the use of transport computer modelling packages. Instead it is based on a proportionate and more appropriate 'first principles' analysis to establish the impact on the existing transport network.

The main objective of the appraisal has been to identify transport interventions deemed necessary to support the new housing sites, with a focus on encouraging sustainable travel and reducing use of the private car.

Three scenarios have been assessed:-

- 1. Baseline (Do Nothing) Scenario;
- 2. Do Minimum Scenario; and
- 3. Do Something Scenario.

The results suggest the proposed transport interventions will help to reduce the detrimental impact of development on the majority of key corridors and routes, on the basis that they will achieve the suggested mode share targets.

The further analysis undertaken within the Addendum suggests a number of corridors would still experience noticeable increases in traffic flows that site-specific interventions are unlikely to address sufficiently to avoid increased congestion. This is to be expected, given the 93% uplift in the number of proposed LDP homes from that considered within the main TA report.

Considering the Do Something scenario, the A8 Corridor would see significant increases, as a result of increased capacity to original sites and the two large new sites at Queensferry. As noted earlier in the analysis, impact would not be along the whole route and does not identify the direction of flow. A lot of traffic would use just short sections of the A8 to access other roads.

The A701 Liberton Road would see an increase of approximately 17%, due to the new Ellen's Glen Road, North of Lang Loan, and South East Wedge North: The Wisp sites and the potential East of Burdiehouse and Lasswade Road greenbelt release sites, but traffic would use both directions and some would route onto other roads, so the actual impact would be less and likely to be accommodated. The impact of these sites would also be apparent on Lasswade Road (an increase of approximately 49%).

The A772 Gilmerton Road would see an increase of approximately 32%, due to the increased capacity at Moredunvale Road and the new Ellen's Glen Road, and South East Wedge Wisp sites. Traffic would use both directions and some would route onto other roads, so the actual impact is likely to be less and can be accommodated, although some increased delay may be experienced at junctions.

One of the largest percentage impacts is forecast to be experienced by the A6095 Newcraighall Road, due to impact from three sites, Newcraighall 1 and 2 but especially Brunstane. It should be noted the percentage increase is based on a low baseline flow and links should be able to accommodate flows, although delay would be experienced at junctions, particularly the A1/Newcraighall Road junction.

The A90 Queensferry Road corridor is forecast to see an increase of approximately 16%, as a result of increased capacity to original sites and the two large new sites at Queensferry. However, some of this traffic, particularly from the Queensferry sites, would be routing northbound and, therefore, would not travel via Maybury Junction. Hence, impact on this junction and the southbound direction would be lower than suggested.

The analysis estimates the LDP sites, and the potential additional impact from the 'greenbelt release' sites, will see an approximate 5% impact on the A720 City Bypass, although this will not occur along the full length of the road. It is possible that the analysis may have underestimated the numbers of Edinburgh-based vehicular trips that might use various short sections of the Orbital Corridor, which comprises the A720 City Bypass and Inner Orbital Route, to travel between different parts of the city.

The main TA report (Section 8.4) considered the impact the new LDP housing sites would have in terms of cross-boundary trips as people travel from the sites to locations outwith Edinburgh. In general, these are minimal impacts, with most new cross-boundary trips coming from, as expected, those larger developments. For the updated Addendum, peak period cumulative impact from cross-boundary traffic from all of the proposed LDP sites on the A720 City Bypass is estimated to be in the order of less than 1% in the Do Something scenario. This means the majority of the 5% increase discussed above is generated by traffic travelling between different Edinburgh wards and using the A720.

Table 15 shows how estimated total modal share by sustainable modes (that is walking, cycling, public transport which includes bus, train and tram, motorcycle and car passenger trips) across the three scenarios that have been applied. It is suggested the figures set out in the Do Something scenario could be used as the starting point for agreeing Travel Plan targets. It should be noted the values are purely estimates/targets at this time and actual achieved figures would need to be monitored.

Site	Corridor	Baseline	Do Minimum	Do Something	Do Something over Baseline - change
Maybury 1	W	41.1	55.1	60.1	19.0
Maybury 2	W	41.1	51.1	57.1	16.0
IBG	W	41.1	60.1	65.1	24.0
Edinburgh Park	W	41.1	59.1	63.1	22.0
Cammo	W	41.1	41.1	48.1	7.0
Burdiehouse 1	SE	41.1	43.1	48.1	7.0

Table 15: Comparison of sustainable % modal splits by scenario

			Do	Do	Do Something over Baseline -
Site	Corridor	Baseline	Minimum	Something	change
Burdiehouse 2	SE	41.1	43.1	49.1	8.0
Gilmerton 1	SE	41.1	42.1	43.1	2.0
Gilmerton 2	SE	41.1	43.1	48.1	7.0
Drum 1	SE	41.1	43.1	46.1	5.0
Moredunvale Road	SE	41.1	42.1	45.1	4.0
Newcraighall 1	E	41.1	41.1	41.1	0.0
Newcraighall 2	E	41.1	41.1	41.1	0.0
Riccarton Mains Road	SW	41.1	45.1	47.1	6.0
Curriemuirend	SW	41.1	43.1	44.1	3.0
Ellen's Glen	SE	41.1	43.1	43.1	2.0
Dalmeny	NW	41.1	40.1	41.1	0.0
Newmills, Balerno	NW	41.1	44.1	48.1	7.0
Brunstane	NW	41.1	43.6	49.1	8.0
Builyeon Road, Queensferry	SW	41.1	39.1	48.1	7.0
South Scotstoun, Queensferry	SW	41.1	38.1	49.1	8.0
Curriehill Road, Currie	E	41.1	44.1	46.1	5.0
North of Lang Loan	SE	41.1	43.1	48.1	7.0
SEW South: Edmonstone	SE	41.1	42.1	45.1	4.0
SEW North: The Wisp	SE	41.1	42.1	43.1	2.0
Ravelrig Road, Balerno	SW	41.1	44.1	48.1	7.0
East of Burdiehouse	SE	41.1	43.1	48.1	7.0
Lasswade Road	SE	41.1	43.1	48.1	7.0
Factory Field, Kirkliston	W	41.1	42.1	43.1	2.0

Note the two Newcraighall sites were not previously assessed, in terms of potential mode shift, as they were granted consent when the main TA report was being developed. It is likely some mode shift would occur, thereby slightly reducing the numbers of trips by private vehicles from that suggested within this Addendum.

Assessment of Interventions

As was used in the TA report, the following criteria have been used to assess interventions for the additional 11 sites plus 3 green belt releases:-

1. To facilitate reliable and convenient access to the city and movement within it, in particular by reducing congestion.

2. To reduce the need to travel, especially by car.

3. To reduce the adverse impacts of travel, including road accidents and environmental damage.

4. Promote walking and cycling to reduce use of the private car.

5. Integrated public transport to provide for all medium and longer distance movement demands to, from and around Edinburgh.

In addition to the above five criteria, the interventions have also been considered in terms of technical delivery, which considers how difficult implementation might be and if there are any particular relevant issues that might influence implementation of the proposed intervention. This additional criterion also takes account of the standard tests for a planning condition – (i) necessary, (ii) relevant, (iii) enforceable, (iv) precise and (v) reasonable, as it is envisaged that developers will be expected to fund some of the proposed interventions and contribute to others.

For all six criteria, the appraisal scoring has been based on following seven point scale:-

- +3 major compliance with the criteria
- +2 moderate compliance with the criteria
- +1 minor compliance with the criteria
- 0 neutral performance against the criteria
- -1 minor conflict with the criteria
- -2 moderate conflict with the criteria
- -3 major conflict with the criteria

For the Technical Delivery criterion, scoring is undertaken but supported with text as this criterion is considered to be more subjective and, therefore, more difficult to score. Table 16 to Table 26 summarise the appraisal scoring for the additional sites, while Table 27 to Table 29 summarise the appraisal scoring for the 'greenbelt release' sites.

Table 16: Ellen's Glen (HSG 28 – 240 units) – Corridor 2, South East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – upgrade existing bus stops in Lasswade Road and Gilmerton Road, with new n/b bus stop in Gilmerton Road.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public transport – bus service should directly serve site (to achieve PT mode share).	+2	+2	+1	+1	+1	-3	Operator agreement unlikely; cost implication; scale of site	No
Active travel – high quality pedestrian/cycle routes within site linked to suitable exit points for public transport routes.	+1	+1	+1	+3	0	+2	Not complicated; relevant; necessary	Yes
Active travel – new footway along east boundary frontage of site.	0	+1	+2	+2	0	+2	Not complicated; relevant	Yes
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road improvements – help provide widening and upgrade existing footway along Ellen's Glen Road.	0	+1	+1	+2	0	-2	Technically deliverable but requires road order to deliver	Yes

Table 17: Builyeon Road, Queensferry (HSG 32 – 840 units) – Corridor 4, North West

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – upgrade existing bus stop facilities and provide new high quality ones on Builyeon Road.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public transport – help provide potential bus priority measures on Builyeon Road through road widening – essential to achieve PT mode share.	+3	+3	+1	+1	+3	-2	Cost implication – requires land and may need utility diversions	Yes
Public transport – bus capacity likely to need to be enhanced.	+2	+2	+1	+1	+1	-2	Need operator agreement; cost implication	Yes
Public transport – increased frequency of direct city centre service and also to key local services – essential to achieve PT mode share.	+2	+2	+2	+1	+1	-2	Need operator agreement; cost implication – likely to need pump- priming	Yes
Public transport – provide, or help provide, increased car park capacity at Dalmeny Station.	0	0	+1	-1	0	-2	Need 3rd party agreement; land ownership; cost implication	Yes
Public transport – provide or help provide shuttle bus service to serve Dalmeny Station.	+2	+2	+1	+1	+3	-3	Need operator agreement or tender; cost implication; unlikely to be commercially viable	No
Active travel – high quality pedestrian/cycle routes within site linking with suitable exit points, particularly existing routes into South Queensferry.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active travel – new footway/cycle path along Builyeon Road site frontage.	+1	+1	0	+3	+1	+3	Not complicated; relevant	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active travel – provide pedestrian/cycle crossing facilities on Builyeon Road – type and location to be agreed.	-1	+1	+1	+2	0	+2	Not complicated; relevant; road safety	Yes
Active travel – help provide improvements of adjacent external routes, in particular to Dalmeny Station and town centre, including potential A90 bridge and signage.	0	+1	+1	+2	0	+1	Not complicated; relevant	Yes
Active travel – help provide additional cycle parking at Dalmeny railway station.	+1	+1	0	+2	+1	+2	Would need 3rd party agreement; relevant	Yes
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications.	Yes
Road improvements – implement TRO and physical measures for reduced speed limit on frontage section of Builyeon Road.	0	0	+2	0	0	+3	Not complicated; road safety	Yes
Road improvements – no other specific scheme identified at this time but Transport Scotland may require impact assessment on new FRC junction.	+1	-1	+1	0	0	-2	Cost implication currently unknown	Yes

Table 18: South Scotstoun, Queensferry (HSG 33 – 374 units) – Corridor 4, North West

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – upgrade existing bus stop facilities on Scotstoun Avenue in Dalmeny.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public transport – bus capacity likely to need to be enhanced.	+2	+2	+1	+1	+1	-2	Need operator agreement; cost implication	Yes
Public transport – increased frequency of direct city centre service and also to key local services – essential to achieve PT mode share.	+2	+2	+2	+1	+1	-3	Need operator agreement; cost implication – likely to need pump- priming	Yes
Public transport – provide, or help provide, increased car park capacity at Dalmeny Station.	0	0	+1	-1	0	-2	Need 3rd party agreement; land ownership; cost implication	Yes
Active travel – high quality pedestrian/cycle routes within site linking with suitable exit points, particularly existing route to station and towards Edinburgh.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active travel – provide high quality east/west cycle route through site to allow realignment of existing nearby National Cycle Route and connection to Builyeon Site.	+1	+1	+1	+2	0	+2	Land ownership for west connection?	Yes
Active travel – help provide additional cycle parking at Dalmeny railway station.	+1	+1	0	+2	+1	+2	Would need 3rd party agreement; relevant	Yes
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Road improvements – no specific scheme identified at this time but Transport Scotland may require impact assessment on new FRC junction.	+1	-1	+1	0	0	-2	Cost implication currently unknown	Yes

Table 19: Dalmeny (HSG 34 – 15 units) – Corridor 4, North West

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – upgrade existing bus stop facilities in Dalmeny.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public transport – provide, or help provide, increased car park capacity at Dalmeny Station.	0	-1	0	-1	-1	-3	Need 3rd party agreement; land ownership; cost implication	No
Active travel – high quality pedestrian/cycle route within site linking with suitable exit point.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active travel – provide new footway along site boundary frontage.	0	0	+1	+1	0	-1	Presence of existing mature trees; safety	No
Active travel – improve external footway link between site and Dalmeny bus stops.	0	+1	+1	+1	+1	-2	Land-ownership issue? Lack of suitable width?	No

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes

Table 20: Newmills, Balerno (HSG 37 – 210 units) – Corridor 5, South West

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – provide new bus stops on A70, near new junction and Newmills Road.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public transport – bus service should directly serve site (to achieve PT mode share).	+1	+2	+1	+2	+1	-3	Operator agreement unlikely; need turning facility; cost implication; scale of site	No
Public transport – help provide extension to Hermiston Park and Ride site.	+1	+1	+1	0	+1	-1	Scheme designed but unfunded	Yes
Active travel – high quality pedestrian/cycle routes within site linking with suitable exit points.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active travel – help provide improved cycle links between site and Curriehill Station – infrastructure and signage.	+1	+1	+1	+2	+1	+2	Relevant	Yes
Active travel – new footway along east boundary frontage of site (Newmills Road and Old Newmills Road).	0	+1	+2	+2	0	+3	Not complicated; relevant	Yes
Active travel – improved crossing facilities on A70, in vicinity of Newmills Wood Road – may require signal controls.	-1	+1	+1	+2	0	+2	Not complicated; relevant; road safety	Yes
Public transport – help provide additional cycle parking at railway stations.	+1	+1	0	+2	+1	+2	Would need 3rd party agreement; relevant	Yes
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road improvements – provide or help provide bus priority measures on the A70.	+2	+2	+2	+1	0	-3	No CEC proposals as road widening for bus lanes would require demolition	No
Road improvements – help provide Gillespie Crossroads Junction enhancement scheme.	+1	-1	+1	0	0	+1	A70 route pinch point	Yes

Table 21: Curriehill Road, Currie (HSG 36 – 60 units) – Corridor 5, South West

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – upgrade existing bus stops on Riccarton Avenue.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Active travel – high quality pedestrian/cycle routes within site linking with suitable exit points.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active travel – provide high quality pedestrian/cycle link to Curriehill Station.	+1	+1	+1	+2	0	+3	Not complicated; relevant	Yes
Active travel – new footway along east boundary frontage of site (Curriehill Road).	0	+1	+2	+2	0	+3	Not complicated; relevant	Yes
Active travel – help provide additional cycle parking at railway station.	+1	+1	0	+2	+1	+2	Would need 3rd party agreement; relevant	Yes
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road improvements – help provide Gillespie Crossroads Junction enhancement scheme.	+1	-1	+1	0	0	+1	A70 route pinch point; scale of impact	Yes

Table 22: Brunstane (HSG 29 – 1,140 units) – Corridor 3, East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public transport – upgrade existing bus stop facilities Milton Road East and Newcraighall Road.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public transport – bus services to run through site – essential to achieve PT mode share.	+3	+3	+1	+1	+3	-3	Need operator agreement; cost implication – need pump-priming	Yes
Public transport – bus capacity will need to be enhanced.	+2	+2	+1	+1	+1	-3	Need operator agreement; cost implication	Yes
Public transport – increased frequency of direct city centre service and also to key local services – essential to achieve PT mode share.	+2	+2	+2	+1	+1	-3	Need operator agreement; cost implication – likely to need pump- priming	Yes
Active travel – high quality pedestrian/cycle routes within site linking with suitable exit points, particularly existing routes to Brunstane Station and Newcraighall.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active travel – review need for pedestrian/cycle crossing facilities on Milton Road East and Newcraighall Road – type and location to be agreed.	-1	+1	+1	+2	0	+2	Not complicated; relevant; road safety	Yes
Active travel – help provide improvements of adjacent external pedestrian/cycle routes, including a pedestrian/cycle link at Brunstane.	+1	+1	+1	+2	+1	+1	Not complicated; relevant	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active travel – provide additional cycle parking at Brunstane and Newcraighall railway stations.	+1	+1	0	+2	+1	+2	Would need 3rd party agreement; relevant	Yes
Travel Plan – implement travel plan (agreed MST, monitoring, soft & hard measures).	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road improvements – will need new junction with Milton Road East. Likely to require traffic signals.	0	0	+2	0	0	-2	Land-ownership issues; road safety	Yes
Road improvements – review need for any alterations to the A1/Newcraighall Road and help provide, as appropriate.	+1	0	+2	0	0	-2	Land ownership; road safety	Yes
Road improvements – review existing road safety measures if necessary on Milton Road East and, if appropriate, Newcraighall Road and enhance.	0	+1	+2	+2	0	0	Would improve road safety; financial implication	Yes

Table 23: North of Lang Loan (HSG 39 – 220 units) – Corridor 2, South East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public Transport – Upgrade existing bus stop facilities on Lasswade Road, with appropriate active travel connections to/from them.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Active Travel – Provide high quality pedestrian/cycle routes through the site, connecting with adjacent walking and cycle routes e.g. the Gilmerton to Roslin QuietRoute which runs adjacent to Lasswade Road, and neighbouring residential areas.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active Travel – New footway/cycleway along east frontage boundary with Lasswade Road, and south frontage boundary with Lang Loan to provide potential in the future to connect with links to the west.	+1	+1	+2	+2	0	+3	Not complicated; relevant	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road improvements – Provide new junction with Lang Loan.	0	0	0	0	0	-2	Potential road safety issues; required	Yes
Road improvements – Review road safety and provide improvements e.g. speed limit reduction, if appropriate, to Lasswade Road and Lang Loan.	0	0	+2	0	0	+3	Improved road safety; not complicated; relevant	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Road improvements – Replace roundabout at Lasswade Road/Lang Loan junction with a signalised junction to allow pedestrian/cycle crossing to wider network.	+1	-1	+1	+2	0	-1	Relevant; potential land- ownership issues; developer responsibility	Yes
Road improvements – Contribute to Lasswade Road/Gilmerton Dykes Street/Captain's Road Junction Improvement, as referred to in "Broomhills, Burdiehouse and Lang Loan Site Brief" from LDP (September 2016).	+1	0	+1	0	0	-1	Relevant; developer contribution	Yes
Road improvements – Help support proposal to increase Burdiehouse Junction capacity, based on improved efficiency of traffic signals, to ease congestion and maintain or improve bus priority for north to south traffic.	+1	0	+1	0	0	-2	Unlikely route for associated development traffic	No

Table 24: South East Wedge South: Edmonstone (HSG 40 – 270 units) – Corridor 2, South East

	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery		Apply
Interventions proposed	Rec	Rec car	Rec	Pro anc	Inte	Teo deli	Technical Delivery Comment	Apply - Yes/No
Public Transport – Upgrade existing bus stop facilities on A7, Old Dalkeith Road (east of The Wisp/Old Dalkeith Road junction) or, preferably, provide additional facilities south of the site on the A7, Old Dalkeith Road, with due consideration given to active travel connections to/from them.	+1	+2	+1	+1	+1	+3	Not complicated; relevant	Yes
Public Transport – Upgrade existing bus stop facilities on The Wisp in the vicinity of the site, with appropriate active travel connections to/from them.	+1	+1	+1	0	+1	+3	Not complicated; relevant	Yes
Active Travel – Integrate a network of footpaths, cycleways and open space to be part of the wider Green network. In particular, new pedestrian/cycle routes along the A7 and Wisp within the site and pedestrian/cycle route from A7/B701 junction to open space on the north east boundary.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active Travel – Provide appropriate crossings of The Wisp providing linkages to neighbouring residential areas and bus stop on opposite side of the road. Also need to ensure cycle crossing at A7/B701 junction.	-1	0	0	+2	+1	+2	Not complicated; relevant; road safety	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Road Improvements – Review operation of Traffic signals at The Wisp/Old Dalkeith Road and provide improvements if deemed necessary.	+1	-1	+1	0	0	-1	Relevant; developer contribution	Yes
Road Improvements – Need to redesign the Wisp to restrict traffic speed.	0	0	+2	0	0	0	Improved road safety; difficulty dependent on redesign; relevant	Yes

Table 25: South East Wedge South: The Wisp (HSG 41 – 71 units) – Corridor 2, South East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active Travel – Pathways and cycle routes both internally and connected to other proposed developments and bus facilities on The Wisp. In particular link, to Hunters Hall/Jack Kane Centre.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes

Table 26: Ravelrig Road, Balerno (HSG 38 – 120 units) – Corridor 5, South West

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public Transport – Bus infrastructure – provide new bus stop facilities on A70, and improve pedestrian access between these and the proposed site.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public Transport – Help provide extension to Hermiston Park and Ride.	+1	+1	+1	0	+1	-1	Scheme designed but unfunded	Yes
Active Travel – Help provide extended car park at Curriehill Station (Constraint – land ownership).	0	0	+1	-1	0	-2	Need 3rd party agreement; land ownership; cost implication	Yes
Active Travel – Provide high quality pedestrian/cycle routes through site, connecting with and making improvements to adjacent walking and cycle routes e.g. NCN75 which is on- road along Ravelrig Road.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active Travel – New footway along west frontage boundary, linking into Ravelrig Road and A70 footways.	+1	+1	+2	+2	0	+3	Not complicated; relevant	Yes
Active Travel – Improved pedestrian/cycle crossing facilities on A70 and Ravelrig Road (layout to be determined, but to incorporate appropriate dropped kerb and tactile paving arrangements to current standards).	-1	0	0	+2	+1	+2	Not complicated; relevant; road safety	Yes
Active Travel – Help provide upgrade to cycle routes between site and Curriehill Station.	+1	+1	+1	+2	+1	+2	Relevant	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active Travel – Help provide additional cycle parking at Curriehill Station.	+1	+1	0	+2	+1	+2	Would need 3rd party agreement; relevant	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road Improvements – Contribute to Gillespie Crossroads Junction enhancement scheme i.e. increasing capacity through installation of (MOVA) signal control.	+1	-1	+1	0	0	+1	A70 route pinch point	Yes

Table 27: East of Burdiehouse (110 units) – Corridor 2, South East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public Transport – Bus infrastructure – contribute to the upgrading of existing facilities in the vicinity e.g. on Burdiehouse Road.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public Transport – Support the enhancement of bus capacity during peak periods.	+3	+2	+1	+1	+1	-2	Need operator agreement; cost implication	Yes
Public Transport – Support the introduction of a bus service to route through Burdiehouse 2, linking with The Murrays.	+3	+3	+2	+2	+3	-3	Need operator agreement; cost implication;	Yes
Active Travel – Provide high quality pedestrian/cycle routes through the site, connecting with adjacent walking and cycle routes to the north, east and south and neighbouring residential areas.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
As per North of Lang Loan this site should have an active travel route on its boundary, which connects with North of Lang Loan.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road Improvements – Restricted vehicular access to The Murrays.	0	0	+1	+3	+1	+2	Linked with bus gate	Yes
Road Improvements – Help provide Burdiehouse Road/Frogston Road East Junction improvement scheme.	+2	-1	0	0	+1	-2	Cost implication; scale of impact; other developments	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Help provide new signalised junction at Lasswade Road/Lang Loan.	+1	-1	+1	+2	0	-1	Relevant; potential land- ownership issues; developer responsibility	Yes

Table 28: Lasswade Road (510 units) – Corridor 2, South East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Public Transport – Upgrade existing bus stop facilities on Lasswade Road, with appropriate active travel connections to/from them.	+1	+1	+1	+1	+1	+3	Not complicated; relevant	Yes
Public Transport – Support the enhancement of bus capacity during peak periods.	+3	+2	+1	+1	+1	-2	Need operator agreement; cost implication	Yes
Active Travel – Provide high quality pedestrian/cycle routes through the site, connecting with adjacent walking and cycle routes, in particular new and existing housing sites to the west and links to the south.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active Travel – New footway/cycleway route along Gilmerton Station Road frontage.	+1	+1	+1	+2	0	+3	Not complicated; relevant	Yes
Active Travel – Review suitability of pedestrian/cycle crossing facilities on Lasswade Road e.g. at bus stop locations.	0	+1	+1	+1	+2	+3	Not complicated; relevant; road safety	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road Improvements – Provide new access from Lasswade Road/Lang Loan junction, and provide any other appropriate access junction(s).	0	0	0	0	0	-2	Potential road safety and operational issues; required	Yes
Road Improvements – Replace Lasswade Road/Lang Loan roundabout with new signalised junction to allow pedestrian/cycle crossing to wider network.	+1	-1	+1	+2	0	-1	Relevant; potential land- ownership issues; developer responsibility	Yes
Road Improvements – Contribute to Lasswade Road/Gilmerton Dykes Street/Captain's Road Junction Improvement, as referred to in "Broomhills, Burdiehouse and Lang Loan Site Brief" from LDP (September 2016).	+1	0	+1	0	0	-1	Relevant; developer contribution	Yes

Table 29: Factory Field, Kirkliston (100 units) – Corridor 2, South East

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Active Travel – Provide high quality pedestrian/cycle routes through site, connecting with and making improvements to adjacent walking and cycle routes.	+1	+1	+1	+3	0	+3	Not complicated; relevant; necessary	Yes
Active Travel – New footway along north frontage boundary, linking pedestrian network on Main Street.	+1	+1	+1	+2	0	+3	Not complicated; relevant	Yes
Active Travel – Improved pedestrian/cycle facilities between site and nearest bus stops on Queensferry Road/Station Road/High Street and Main Street.	+1	+1	+1	+2	0	+3	Not complicated; relevant	Yes
Active Travel – Help provide upgrade to adjacent cycle route to west of site.	+1	+1	+1	+2	0	+3	Not complicated; relevant	Yes
Travel Plan – Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.	+2	+2	+1	+2	+1	+1	Relevant; potential future measures have cost implications	Yes
Road Improvements – Provide appropriate access junction – type and size to be determined.	0	0	0	0	0	-2	Potential road safety and operational issues; required	Yes
Road Improvements – Review road safety and provide improvements e.g. extend 30mph speed limit, if appropriate, east of proposed access junction.	0	0	+2	0	0	+3	Improved road safety; not complicated; relevant	Yes

Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Technical Delivery Comment	Apply - Yes/No
Road Improvements – Review operation of Main Street/Queensferry Road/Station road signalised junction, and provide improvements if necessary.	+1	0	+1	0	0	-2	Relevant; developer contribution	Yes

Additional Sites Summary Sheets

As was undertaken for the TA report, following the interventions appraisal, summary sheets have been prepared for the additional 11 housing sites and three green belt releases, on an individual basis. Each sheet contains the following information:-

- Site number, site name and suggested unit capacity;
- Key Route Corridor(s);
- Any relevant committed transport intervention;
- Commentary on vehicular site access; and
- The recommended site-specific interventions, under separate headings (public transport, active travel, travel plan and road improvements).

The site sheets are set out below. It is considered that the recommended interventions are appropriate for the individual sites and will mitigate significant proportions of the new generated development trips. Reference has been made to the Site Brief's included within the Edinburgh Local Development Plan as Modified, September 2016.

Site Name: Ellen's Glen (HSG 28)

Route Corridor: 2 – South East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Minor Bus Priority Measures on key bus corridors – minor impact

1 Vehicular Access

(a) Access from Lasswade Road across the Liberton Hospital site with additional vehicular access taken from Ellen's Glen Road and Malbet Wynd.

2 Public Transport

Bus

(a) Upgrade existing bus stops in Lasswade Road.

(b) Upgrade existing S/B bus stop and provide new N/B bus stop in Gilmerton Road.

Train Not applicable.

Tram Not applicable.

3 Active Travel

(a) High quality pedestrian and cycle routes within site, to link with public transport routes, and to link from Malbet Wynd through the site to connect via Ellen's Glen Road to the Burdiehouse Burn Valley Park Core Path.

(b) Consider new footway along east boundary frontage of site.

(c) New pedestrian/cycle link on land near to Stenhouse Burn to compensate for the narrow footway on Ellen's Glen Road.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Help provide widening and upgrade of existing footway along Ellen's Glen Road.

Route Corridor: 4 - North West Edinburgh

Relevant Committed Interventions:

- (i) City-wide ATAP measures minor impact
- (ii) Forth Replacement Crossing major impact

1 Vehicular Access

(a) Access from Builyeon Road to north of site – a number of access points required, given potential scale of development.

2 Public Transport

Bus

(a) Bus infrastructure – upgrade existing facilities and provide new high quality bus stops on Builyeon Road as part of opportunity to change the character of Builyeon Road (A904).

(b) Help provide potential widening of Builyeon Road to accommodate bus priority measures.

(c) Additional capacity needed. (Opportunity – support commercial operation.)

(d) Increased frequency of direct city centre service and also to key local facilities, to achieve PT mode share. (Opportunity – support commercial operation.)

Train

(a) Help provide increased and improved cycle parking at Dalmeny Station.

(b) Help provide enhanced car parking capacity at Dalmeny Station by adding new level.

Tram

Not applicable.

3 Active Travel

(a) Network of high quality pedestrian/cycle routes through site to link with suitable exit points around site boundary, particularly with existing routes into South Queensferry.

(b) New footway and cycle path along frontage of site on south side of Builyeon Road, giving due consideration to the opportunity to change the character of Builyeon Road (A904), through street design.

(c) Provide pedestrian/cycle crossing facilities on Builyeon Road – type to be agreed, forming northsouth path connections by linking new pedestrian/cycle routes to the existing network north of the A904, thus allowing the new housing to integrate fully with the existing urban area including the town centre to the north of the site.

(d) Help provide upgrades of existing external pedestrian/cycle routes, in particular a high quality pedestrian/cycle route to Dalmeny Station, with a bridge over the A90, and improved links to the town centre.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Implement TRO and physical measures for reduced speed limit on Builyeon Road as part of opportunity to change the character of Builyeon Road (A904).

(b)Give due consideration to the opportunity to change the character of Builyeon Road (A904), through street design, including new development frontage with the road where possible.

(c) No other improvements identified at this time but prospective developers should be aware Transport Scotland may require assessment of impact on new FRC junction. Route Corridor: 4 - North West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Forth Replacement Crossing – medium impact

1 Vehicular Access

(a) Primary access from B800, Kirkliston Road to west of site and Provost Milne Grove, although there should be no provision for traffic through the site between B800, Kirkliston Road and Scotstoun Avenue, apart from buses in the event that this is considered appropriate. No vehicular access to be taken from the eastern end of the site into Dalmeny.

2 Public Transport

Bus

(a) Bus infrastructure – upgrade existing bus stop facilities on Kirkliston Road, Scotstoun Avenue and in Dalmeny.

(b) Additional capacity likely.

(c) Increased frequency of direct city centre service and also to key local facilities, to achieve Public Transport mode share.

Train

(a) Help provide increased and improved cycle parking at Dalmeny Station.

(b) Potential for major high quality pedestrian/cycle links to station from and through site.

(c) Help provide improved car parking at Dalmeny Station.

Tram

Not applicable.

3 Active Travel

(a) High quality pedestrian/cycle routes through site, linking to suitable exit points around site boundary, particularly to north-east corner to connect with existing route to station and Edinburgh and with South Scotstoun.

(b) High quality east/west cycle route through site to allow connection across the

A90 and B800 to Builyeon Road site, linking to the existing footpath/cycleway (National Cycle Route 1) extending to Dalmeny to the east, and North Queensferry to the north.

(c) Additional cycle parking at Dalmeny Station.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) No specific scheme identified but prospective developers should be aware Transport Scotland may require assessment of impact on new Forth Replacement Crossing junction.

(b) Appropriate traffic calming measures may be considered for Scotstoun Avenue.

(c) Give due consideration to the opportunity to change the character of the B800 through street design.

Site Name: Dalmeny (HSG 34)

Route Corridor: 4 – North West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Forth Replacement Crossing – medium impact

1 Vehicular Access

(a) Access from Bankhead Road to east of site.

2 Public Transport

Bus

(a) Upgrade existing bus stops in Bankhead Road/Main Street.

Train

(a) Not relevant, given scale of development.

Tram Not applicable.

3 Active Travel

(a) Appropriate pedestrian and cycle access within site.

(b) Pedestrian access to be provided from Main Street.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Not relevant, given scale of development.

Site Name: Newmills, Balerno (HSG 37)

Route Corridor: 5 - South West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures - minor impact

(ii) Hermiston P&R extension – minor impact

(iii) Minor Bus Priority Measures on key bus corridors – minor impact

1 Vehicular Access

(a) From Lanark Road West to south of site, with secondary access from Old Newmills Road and Newmills Road to east of site.

2 Public Transport

Bus

(a) Bus infrastructure – provide new bus stop facilities on A70, in vicinity of new vehicular access onto Lanark Road West and, if appropriate, Newmills Road.

(b) Help provide extension to Hermiston Park and Ride.

Train

(a) Help provide extended car park at Curriehill Station. (Constraint – land ownership.)

Tram Not applicable.

3 Active Travel

(a) High quality pedestrian/cycle routes through site.

(b) New footway along east frontage boundary, linking into Newmills Road footways.

(c) Improved pedestrian/cycle crossing facilities on A70, - may be requirement for signal control.

(d) Help provide upgrade cycle routes between Newmills Road and Curriehill Station.

(e) Help provide additional cycle parking at Curriehill Station.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Help provide Gillespie Crossroads Junction enhancement scheme by increasing capacity through installation of (MOVA) signal control.

(b) Address any identified impacts on the safe operation of the local road network.

Site Name: Curriehill Road, Currie (HSG 36)

Route Corridor: 5 - South West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures - minor impact

(ii) Hermiston P&R extension – minor impact

(iii) Minor Bus Priority Measures on key bus corridors – minor impact

1 Vehicular Access

(a) From Curriehill Road only.

2 Public Transport

Bus

(a) Bus infrastructure external to site – upgrade existing bus stop facilities in Riccarton Avenue, approximately 275m from the site.

Train

None, other than cycle parking (Given proximity of site to station, should be encouraging walk/cycle access rather than car, so no assistance to help provide car park extension at Curriehill Station).

Tram

Not applicable.

3 Active Travel

(a) High quality pedestrian/cycle route within and through site site, linking with appropriate exit points around site boundary and station.

(b) Provide new footway along east boundary frontage (Curriehill Road) to link with existing footway network.

(c) Improve high quality pedestrian/cycle link to Curriehill Station (may involve upgrading existing link).

(d) Connections to be made to the Kirknewton Core Path to the west boundary of the site.

(e) Help provide additional cycle parking at Curriehill Station.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Help provide Gillespie Crossroads Junction enhancement scheme by increasing capacity through installation of (MOVA) signal control.

(b) Address any identified impacts on the safe operation of the local road network.

Site Name: Brunstane (HSG 29)

Route Corridor: 3 - East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures - minor impact

- (ii) Minor Bus Priority Measures on key bus corridors minor impact
- (iii) Borders Rail Line medium impact

(iv) Sheriffhall Junction Grade Separation – minor impact

1 Vehicular Access

(a) Access from Milton Road East to north of site and Newcraighall Road to the south, with a route connecting them that can accommodate buses. Note, internally, it is desirable in the interests of safety that the site should have more than one vehicular crossing of the railway (on bridges).

2 Public Transport

Bus

(a) Bus infrastructure – upgrade existing bus stops on Milton Road East and Newcraighall Road.(b) Essential to route bus services through site (consider section(s) of 'bus only' roads).

(c) Additional capacity needed. (Opportunity – support commercial operation.)

(d) Increased frequency of direct city centre service and also to key local facilities, to achieve PT mode share. (Opportunity – support commercial operation.)

Train

(a) Help provide improved pedestrian/cycle links and increased cycle parking at Brunstane and Newcraighall Stations.

Tram

Not applicable.

3 Active Travel

(a) Network of high quality pedestrian/cycle routes through site to link with suitable exit points around site boundary, particularly with existing routes to Brunstane and Newcraighall railway stations. At least two pedestrian/cycle railway crossing points shall be provided within the site.

(b) Review existing pedestrian/cycle crossing facilities on Milton Road East and Newcraighall Road and help enhance as required.

(c) Provide upgrades of existing external pedestrian/cycle routes in vicinity of site, including signage. In particular, help provide missing link across the Newcraighall railway line.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Provide new junction with Milton Road East.

(b) Provide new junction with Newcraighall Road.

(c) Review road safety and provide improvements, if necessary, to Milton Road East and, if appropriate, Newcraighall Road.

(d) Review operation of A1/Newcraighall Road junction and help provide improvements, if deemed necessary.

Site Name: North of Lang Loan (HSG 39)

Route Corridor: 2 – South East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact(ii) Minor Bus Priority Measures on key bus corridors – minor impact

1 Vehicular Access

(a) From Lang Loan only with multiple points of entry to slow traffic, avoiding conflict with bus stops and bus services on Lasswade Road.

2 Public Transport

Bus

(a) Upgrade existing bus stop facilities on Lasswade Road, with appropriate active travel connections to/from them.

Train Not applicable.

Tram Not applicable.

3 Active Travel

(a) Provide high quality pedestrian/cycle routes through the site, connecting with adjacent walking and cycle routes e.g. the Gilmerton to Roslin QuietRoute which runs adjacent to Lasswade Road, and neighbouring residential areas. Give cognisance to potential bus services to be routed via Burdiehouse 2 linking with The Murrays to the north, and the benefits of providing appropriate walking and cycling links.

(b) New footway/cycleway along east frontage boundary with Lasswade Road, and south frontage boundary with Lang Loan to provide potential in the future to connect with links to the west.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Provide new junction with Lang Loan.

(b) Review road safety and provide improvements e.g. speed limit reduction, if appropriate, to Lang Loan. Note speed limit on Lasswade Road reduced to 40mph as part of Gilmerton to Roslin QuietRoute scheme.

(c) Replace roundabout at Lasswade Road/Lang Loan junction with a signalised junction to allow pedestrian/cycle crossing to wider network.

(d) Contribute to Lasswade Road/Gilmerton Dykes Street/Captain's Road Junction Improvement, as referred to in "Broomhills, Burdiehouse and Lang Loan Site Brief" from LDP (September 2016).
(e) Help support proposal to increase Burdiehouse Junction capacity, based on improved efficiency of traffic signals, to ease congestion and maintain or improve bus priority for north to south traffic.

Route Corridor: 2 – South East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures - minor impact

(ii) Minor Bus Priority Measures on key bus corridors - minor impact

(iii) Borders Rail Line – medium impact

(iv) Sheriffhall Junction Grade Separation - minor impact

1 Vehicular Access

(a) From The Wisp only.

2 Public Transport

Bus

(a) Upgrade existing bus stop facilities on A7, Old Dalkeith Road (east of The Wisp/Old Dalkeith Road junction) or, preferably, provide additional facilities south of the site on the A7, Old Dalkeith Road, with due consideration given to active travel connections to/from them.

(b) Upgrade existing bus stop facilities on The Wisp in the vicinity of the site, with appropriate active travel connections to/from them.

Train Not applicable.

Tram Not applicable.

3 Active Travel

(a) Integrate a network of footpaths, cycleways and open space to be part of the wider
Green network. In particular, new pedestrian/cycle routes along the A7 and Wisp within the site and pedestrian/cycle route from A7/B701 junction to open space on the north east boundary.
(b) Provide appropriate crossings of The Wisp providing linkages to neighbouring residential areas and bus stop on opposite side of the road. Also need to ensure cycle crossing at A7/B701 junction.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Traffic signals at The Wisp/Old Dalkeith Road.

(b) Need to redesign the Wisp to restrict traffic speed.

Route Corridor: 2 – South East Edinburgh; 3 – East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Minor Bus Priority Measures on key bus corridors - minor impact

(iii) Borders Rail Line - medium impact

(iv) Sheriffhall Junction Grade Separation - minor impact

1 Vehicular Access

(a) From Milligan Drive only, avoiding conflict with bus stops and bus facilities and services on The Wisp.

2 Public Transport

Bus Not applicable.

Train Not applicable.

Tram Not applicable.

3 Active Travel

(a) Pathways and cycle routes both internally and connected to other proposed developments and bus facilities on The Wisp. In particular link, to Hunters Hall/Jack Kane Centre.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

Not applicable.

Route Corridor: 5 - South West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures - minor impact

(ii) Hermiston P&R extension – minor impact

(iii) Minor Bus Priority Measures on key bus corridors – minor impact

1 Vehicular Access

(a) Access from Ravelrig Road to the east of site.

2 Public Transport

Bus

(a) Bus infrastructure – provide new bus stop facilities on A70, and improve pedestrian access between these and the proposed site.

(b) Help provide extension to Hermiston Park and Ride.

Train

(a) Help provide extended car park at Curriehill Station (Constraint - land ownership).

Tram

Not applicable

3 Active Travel

(a) Provide high quality pedestrian/cycle routes through site, connecting with and making improvements to adjacent walking and cycle routes e.g. NCN75 which is on-road along Ravelrig Road.

(b) New footway along west frontage boundary, linking into Ravelrig Road and A70 footways.

(c) Improved pedestrian/cycle crossing facilities on A70 and Ravelrig Road (layout to be determined,

but to incorporate appropriate dropped kerb and tactile paving arrangements to current standards).

(d) Help provide upgrade to cycle routes between site and Curriehill Station.

(e) Help provide additional cycle parking at Curriehill Station.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Contribute to Gillespie Crossroads Junction enhancement scheme i.e. increasing capacity through installation of (MOVA) signal control.

Greenbelt Release Sites Summary Sheets

Again, acknowledging that the greenbelt release sites have not been allocated for housing, it has however been deemed practical to prepare summary sheets for these sites, on the basis that the possibility exists that they could be. As identified above the summary sheets contain the following information:-

- Site number, site name and suggested unit capacity;
- Key Route Corridor(s);
- Any relevant committed transport intervention;
- Commentary on vehicular site access; and
- The recommended site-specific interventions, under separate headings (public transport, active travel, travel plan and road improvements).

The site sheets are set out below, and it is considered that the recommended interventions are appropriate to assist mitigate significant proportions of the potential trips that these sites may generate, regardless if developed for housing or any other development type.

Site Name: East of Burdiehouse

Route Corridor: 2 - South East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Minor Bus Priority Measures on key bus corridors - minor impact

1 Vehicular Access

(a) Access potentially from Burdiehouse Road, to the west of the site, via Burdiehouse 2, giving due consideration to operation of junction with Burdiehouse Road.

2 Public Transport

Bus

(a) Bus infrastructure – contribute to the upgrading of existing facilities in the vicinity e.g. on Burdiehouse Road.

(b) Support the enhancement of bus capacity during peak periods.

(c) Support the introduction of a bus service to route through Burdiehouse 2, linking with The Murrays (constraint – existing service providers may be reluctant to alter current routes).

Train Not applicable.

Tram Not applicable.

3 Active Travel

(a) Provide high quality pedestrian/cycle routes through the site, connecting with adjacent walking and cycle routes to the north, east and south e.g. the Gilmerton to Roslin QuietRoute which runs adjacent to Lasswade Road, and neighbouring residential areas. Give cognisance to potential bus services to be routed via Burdiehouse 2 linking with The Murrays to the north, and the benefits of providing appropriate walking and cycling links.

(b) As per North of Lang Loan this site should have an active travel route on its boundary, which connects with North of Lang Loan.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Restricted vehicular access to The Murrays. (Constraint - land ownership.)

(b) Help provide Burdiehouse Road/Frogston Road East Junction improvement scheme.

(c) Help provide new signalised junction at Lasswade Road/Lang Loan.

Site Name: Lasswade Road

Route Corridor: 2 - South East Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Minor Bus Priority Measures on key bus corridors - minor impact

1 Vehicular Access

(a) Potential for access from Lasswade Road/Lang Loan junction, with additional access from Lasswade Road further south or from Gilmerton Station Road.

2 Public Transport

Bus

(a) Upgrade existing bus stop facilities on Lasswade Road, with appropriate active travel connections to/from them.

(b) Support the enhancement of bus capacity during peak periods.

Train Not applicable

Tram Not applicable

3 Active Travel

(a) Provide high quality pedestrian/cycle routes through the site, connecting with adjacent walking and cycle routes, in particular new and existing housing sites to the west and links to the south e.g. the Gilmerton to Roslin QuietRoute which runs adjacent to Lasswade Road.

(b) New footway/cycleway route along Gilmerton Station Road frontage.

(c) Review suitability of pedestrian/cycle crossing facilities on Lasswade Road e.g. at bus stop locations.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Provide new access from Lasswade Road/Lang Loan junction, and provide any other appropriate access junction(s).

(b) Review road safety and provide improvements if appropriate.

(c) Replace Lasswade Road/Lang Loan roundabout with new signalised junction to allow pedestrian/cycle crossing to wider network.

(d) Contribute to Lasswade Road/Gilmerton Dykes Street/Captain's Road Junction Improvement, as referred to in "Broomhills, Burdiehouse and Lang Loan Site Brief" from LDP (September 2016).

Site Name: Factory Field, Kirkliston

Route Corridor: 1 - West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact
 (ii) Minor Bus Priority Measures on key bus corridors – minor impact

1 Vehicular Access

(a) Access from road east of Main Street and Burnshot Road that links to Carlowrie Castle.

2 Public Transport

Bus Not applicable.

Train Not applicable.

Tram Not applicable.

3 Active Travel

(a) Provide high quality pedestrian/cycle routes through site, connecting with and making improvements to adjacent walking and cycle routes e.g. route to west of site (links to Dalmeny and beyond to the north and Ratho and beyond to the south).

(b) New footway along north frontage boundary, linking pedestrian network on Main Street.(c) Improved pedestrian/cycle facilities between site and nearest bus stops on Queensferry Road/Station Road/High Street and Main Street.

(d) Help provide upgrade to adjacent cycle route to west of site.

4 Travel Plan

(a) Implement residential travel plan, with agreed mode share targets, monitoring regime and potential additional mitigation measures.

5 Road Improvements

(a) Provide appropriate access junction – type and size to be determined.

(b) Review road safety and provide improvements e.g. extend 30mph speed limit, if appropriate, east of proposed access junction.

(c) Review operation of Main Street/Queensferry Road/Station road signalised junction, and provide improvements if necessary.

Assessment of Changes to Main LDP Sites

In preparing the second Proposed Plan, and following examination the capacities of the housing sites in the first Proposed Plan have been amended. CEC has advised a number of the original housing sites have been altered, in terms of their potential capacity, as summarised below:-

Maybury 1	1,000 units	(previously 600)	67% increase
Maybury 2	850 units	(previously 525)	62% increase
Cammo	600 units	(previously 500)	20% increase
Burdiehouse 1	510 units	(previously 570)	11% reduction
Gilmerton 2	625 units	(previously 500)	25% increase
Moredunvale Road	188 units	(previously 50)	276% increase
Newcraighall 1	220 units	(previously 270)	19% reduction
Riccarton Mains Road, Currie	30 units	(previously 50)	40% reduction
Curriemuirend	170 units	(previously 100)	70% increase

This is a 21% increase overall. A brief review of these changes has been undertaken.

Maybury (1 and 2)

The proposed 64% increased capacity of the combined sites would result in corresponding uplifts in peak period daily trips by car (441 to 725), bus (241 to 396) and rail (167 to 275), respectively that would be noticeable on the adjacent transport network.

Proposed interventions, identified previously, would still be appropriate but the increased scale of development would justify:-

- even more essential that bus services directly serve the sites (increased housing units will help provide this requirement;
- even more essential to provide pedestrian/cycle to Gogar train/tram interchange, so new footbridge across railway line needed;
- even more essential to help provide the Maybury Junction Improvement scheme; and
- even more essential to help provide the Barnton Junction Improvement scheme.

Consideration needs to be given to providing some local services within the development sites to reduce the need for some travel trips.

Cammo

The proposed 20% increased capacity of the sites would result in corresponding uplifts in peak period daily trips by car (247 to 296), bus (124 to 149) and rail (8 to 10), respectively that would be noticeable on the adjacent transport network. The increase in private vehicles would exacerbate the peak periods, which are already congested.

Proposed interventions, identified previously, would still be appropriate but the increased scale of development would mean it is even more essential the site is directly

served by bus services, with suitable routing, capacity and frequency that will achieve mode share.

Burdiehouse 1

The proposed 11% reduction will have little overall impact and it is considered the proposed interventions, previously identified, would still be appropriate for the site.

Gilmerton 2

The proposed 25% increase will have little overall impact and it is considered the proposed interventions, previously identified, would still be appropriate for the site.

Moredunvale Road

Given the low initial capacity, the proposed 276% increase would result in corresponding uplifts in peak period daily trips by car (26 to 98) and bus (11 to 42) that would have some additional impact on the transport network. Additional bus trips should be accommodated by existing services but the increase in car trips would extend queues and queuing time for traffic exiting Moredunvale Road onto the surrounding road network but this might encourage mode shift to public transport.

Proposed interventions, identified previously, would still be appropriate.

Newcraighall 1

The 19% reduction is considered significant and would result in the detrimental impact of the development being noticeably reduced, particularly in regard to the number of generated person trips and associated vehicular trips. Proposed interventions, previously identified, are considered to be still relevant but the reduced scale of development may affect the extent of any proposed enhancements to existing road safety measures on Newcraighall Road. However, any reduction will be offset by the impact of the new Brunstane site, which will have a major impact on the A6095.

Riccarton Mains Road, Currie

The site had an original capacity of 50 units, which generated minimal impact on the existing transport network. Hence, the proposed 40% decrease in the number of units will reduce the minimal impact further.

Even with reduced scale of development, the proposed interventions, identified previously, would still be considered appropriate.

Curriemuirend

Whilst there is a proposed 70% increase in the number of units, this is only 170 units and, therefore, any impact on the adjacent transport network is likely to be minimal (peak period daily trips by car (48 to 90) and bus (19 to 36).

Proposed interventions, identified previously, would still be appropriate.





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