Local Development Plan Transport Appraisal

Addendum

June 2014

Planning Committee – 12 June 2014 – Background Paper

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 Halcrow Group Limited (CH2MHILL) 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, the first for the Proposed Local Development Plan which was approved in March 2013 and the 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.

The addendum (May 2014) 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. 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 Second Proposed Plan. The addendum also includes site summary sheets for each of the additional new 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 around 8,500 new houses. 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 15 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 keith.miller@edinburgh.gov.uk.

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 has prepared a second proposed LDP which has amended the capacity of a number of the sites considered within the original TA and has included a number of additional housing 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.

Table 1: TA Report Sites

Site	Mid-range capacity estimate
Maybury 1	1,000 (previously 600)
Maybury 2	850 (previously 525)
International Business Gateway	350
Edinburgh Park/The Gyle	575
Cammo	600 (previously 500)
Burdiehouse 1	510 (previously 570)
Burdiehouse 2	300
Gilmerton 1	60
Gilmerton 2	420 (previously 500)
Drum 1	150
Moredunvale Road	188 (previously 50)
Newcraighall 1	180 (previously 270)
Newcraighall 2	330
Riccarton Mains Road	30 (previously 50)
Curriemuirend	165 (previously 100)

The revised mid-range capacities give a total of 5,708 units for the original sites, which is a 16% increase on the 4,930 units considered within the TA report.

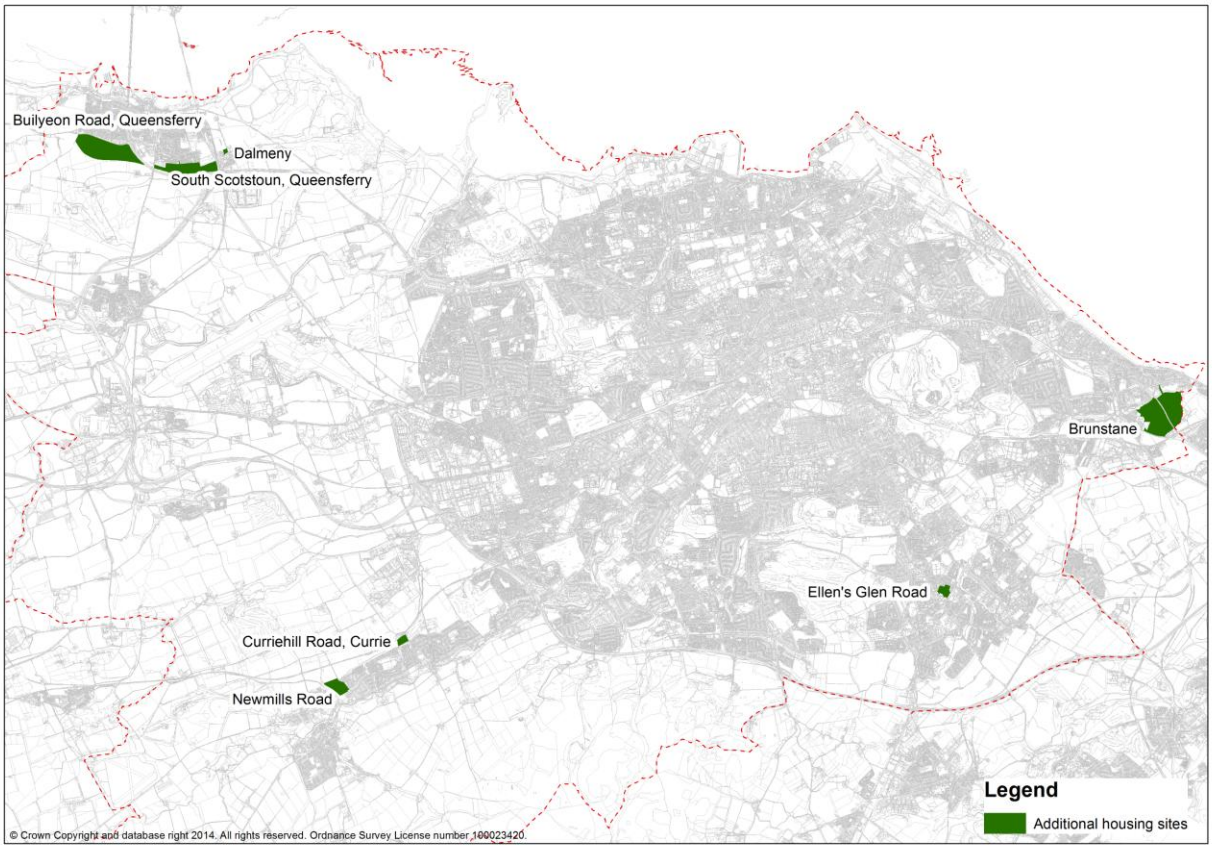
Table 2 sets out the seven additional housing sites that are to be considered, together with their indicative capacities.

Table 2: Additional Sites

Site	Mid-range capacity estimate
Ellen's Glen	240
Dalmeny	15
Newmills, Balerno	210
Brunstane	1,140
Builyeon Road, Queensferry	840
South Scotstoun, Queensferry	440
Curriehill Road, Currie	60

The additional sites have a total mid-range capacity of 2,945 units. This gives a total of 8,653 units assessed within this Addendum, which is a 75% increase from the main TA report.

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 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 of 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 quantitatively and qualitatively 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 overall impact across the whole network is not provided and may be slightly under-estimated 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, the following assumptions have been made (all sites are likely to have some impact on the Corridor 7 (Orbital) :-

Maybury 1	Corridor 1 (77%) & Corridor 4 (14%)
Maybury 2	Corridor 1 (69% & Corridor 4 (21%)
International Business Gateway	Corridor 1 (75%) & Corridor 4 (12%)
Edinburgh Park / The Gyle	Corridor 1 (93%) & Corridor 4 (4%)
Cammo	Corridor 1 (64%) & Corridor 4 (28%)
Burdiehouse 1	Corridor 2 (86%) (mainly A701 – 70%)
Burdiehouse 2	Corridor 2 (82%) (mainly A701 – 70%)
Gilmerton 1	Corridor 2 (86%) (mainly A772 – 70%)
Gilmerton 2	Corridor 2 (87%) (mainly A772 – 60%)
Drum 1	Corridor 2 (88%) (mainly A772 – 60%)
Newcraighall 1	Corridor 3 (87%) (A1 – 40%, A6096 – 60%)
Newcraighall 2	Corridor 3 (87%) (A1 – 40%, A6096 – 60%)
Riccarton Mains Road	Corridor 5 (91%)
Curriehill Road, Currie	Corridor 5 (88%)
South Scotstoun, Queensferry	Corridor 1 (45%) & Corridor 4 (35%)
Builyeon Road, Queensferry	Corridor 1 (45%) & Corridor 4 (35%)
Moredunvale Road	Corridor 2 (91%) (A772 & Lasswade Road)
Curriemuirend	Corridor 5 (92%)
Ellen's Glen Road	Corridor 2 (88%)
Dalmeny	Corridor 1 (45%) & Corridor 4 (35%)
Newmills, Balerno	Corridor 5 (88%)
Brunstane	Corridor 2 (100%) (A1 – 40%, A6095 – 60%)

It should be noted that the analysis does not identify direction of flow.

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 frequently 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 3. Realistically, there may be some variation for individual sites but the applied values are considered reasonable for this scenario.

Table 3 - Baseline (Do Nothing) scenario – % modal splits by site (uniform)

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**

The impact analysis results for Scenario 1 – Baseline are shown below, by corridor (Table 4) and by site (Table 5).

Table 4: Scenario 1 – Baseline Case – Corridor Impact		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	
		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
2011 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)**	**272**		**370**				**113**		**82**	**188**		**0**	**113**	
2019/20	*LDP only*	256	16	104	149	73	44	45	68	82	75	113	0	98	14
	LDP only as % over baseline peak hour flow	**5.8%**	**1.2%**	**7.0%**	**13.5%**	**3.9%**	**6.0%**	**0.8%**	**7.8%**	**2.1%**	**3.8%**	**4.6%**	**0.0%**	**1.6%**	**1.6%**
	Background growth 2019/20	44	13	15	11	19	7	320	9	230	20	25	10	376	9
	Committed residential 2019/20	156	20	48	71	16	25	36	54	33	30	45	53	54	7
LDP (44) over (baseline traffic plus background growth plus committed residential)	*LDP only as % over baseline peak hour flow plus background plus committed*	**5.5%**	**1.2%**	**6.7%**	**12.6%**	**3.8%**	**5.7%**	**0.8%**	**7.3%**	**2.0%**	**3.7%**	**4.5%**	**0.0%**	**1.5%**	**1.6%**
	LDP and committed residential and growth 2019/20	**457**	**49**	**168**	**231**	**108**	**76**	**401**	**130**	**345**	**125**	**182**	**63**	**528**	**30**
	% over 2011 baseline peak hour flow	**10.3%**	**3.7%**	**11.2%**	**20.9%**	**5.8%**	**10.3%**	**7.5%**	**14.9%**	**9.0%**	**6.3%**	**7.4%**	**6.3%**	**8.4%**	**3.4%**
2024/25	**Corridor impact - by car (peak car trips)**	**1758**		**906**				**910**		**561**	**232**		**0**	**475**	
2024/25	*LDP only*	1637	120	313	342	134	118	364	546	561	93	139	0	429	46
	LDP only as % over baseline peak hour flow	**36.8%**	**9.0%**	**20.8%**	**31.0%**	**7.1%**	**15.9%**	**6.8%**	**62.4%**	**14.6%**	**4.6%**	**5.7%**	**0.0%**	**6.8%**	**5.2%**
	Background growth 2024/25	89	27	30	22	37	15	533	18	383	40	49	20	627	18
	Committed residential 2024/25	245	40	51	66	12	28	17	26	54	38	57	107	72	9
	LDP only as % over baseline peak hour flow plus background plus committed	**34.2%**	**2.7%**	**15.3%**	**28.7%**	**7.0%**	**15.0%**	**6.2%**	**59.5%**	**13.1%**	**4.5%**	**5.4%**	**0.0%**	**6.2%**	**5.1%**
	LDP and committed residential and growth 2024/25	**1972**	**186**	**394**	**430**	**183**	**160**	**914**	**589**	**999**	**171**	**246**	**127**	**1127**	**73**
	% over 2011 baseline peak hour flow	**44.3%**	**14.0%**	**26.3%**	**39.0%**	**9.8%**	**21.6%**	**17.2%**	**67.3%**	**26.1%**	**8.5%**	**10.0%**	**12.7%**	**18.0%**	**8.3%**

Table 5: Scenario 1 – Baseline Case – Site Impact

NUMBER OF PEAK HOUR TRIPS GENERATED	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	INTERIM 2019/20	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25
LDP sites	**Committed sites in the vicinity of LDP sites**			**LDP sites only**			**LDP plus committed sites**			**Committed sites in the vicinity of LDP sites**			**LDP sites only**			**LDP plus committed sites**		
	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips 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
International Business Gateway	0	0	0	0	0	0	0	0	0	0	0	0	196	72	6	196	72	6
Edinburgh Park/The Gyle	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 2	34	13	1	56	21	2	90	33	3	34	13	1	168	62	5	202	74	6
Gilmerton 1	26	9	1	34	12	1	59	22	2	26	9	1	34	12	1	59	22	2
Gilmerton 2	26	9	1	42	15	1	68	25	2	26	9	1	235	86	7	261	96	8
Drum 1	26	9	1	56	21	2	82	30	2	26	9	1	84	31	2	110	40	3
Newcraighall 1	23	8	1	67	25	2	90	33	3	23	8	1	101	37	3	124	45	4
Newcraighall 2	23	8	1	56	21	2	79	29	2	23	8	1	185	68	5	208	76	6
Burdiehouse 1	34	13	1	84	31	2	118	43	3	34	13	1	285	105	8	320	117	9
Riccarton Mains Road	14	5	0	17	6	0	31	11	1	14	5	0	17	6	0	31	11	1
Curriehill Road, Currie	14	5	0	34	12	1	48	17	1	14	5	0	34	12	1	48	17	1
South Scotstoun, Queensferry	29	11	1	56	21	2	85	31	2	38	14	1	246	90	7	284	104	8
Builyeon Road, Queensferry	29	11	1	0	0	0	29	11	1	38	14	1	470	172	14	508	186	15
Moredunvale Road	4	2	0	84	31	2	89	33	3	5	2	0	105	39	3	93	19	1
Curriemuirend	14	5	0	92	34	3	106	39	3	14	5	0	92	34	3	106	39	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	12	5	1	67	25	2	69	28	7	14	5	0	118	43	3	132	48	4
Brunstane	0	0	0	50	18	1	43	17	4	0	0	0	638	234	18	638	234	18
TOTAL number of trips generated	422	155	13	1192	437	34	1596	589	54	540	198	16	4842	1776	140	5366	1952	153

Results

Table 4 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 increased capacity of Modedunvale Road site and new Ellen's Road site.
- 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.
- Modestincreases on Corridor 5 (South West) is due to increased capacity at Curriemuirend and new site at Newmills, 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, the majority 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, six 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 identity use of just a short section of the corridor, which would have limited impact.

In terms of individual sites, the LDP sites are forecast to generate an additional 4,842 vehicular trips during the one hour peak period by 2024/25, 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 6.

Table 6 - Do Minimum scenario – estimated adjusted % modal share by site

Site	Corridor	Car Driver +taxi	Car pax	Train	Bus	Cycle	Walk	Other	**Total Sustainable**
Maybury 1	**W**	**44.9**	6.0	17.7	18.6	2.5	8.3	2.0	**55.1**
Maybury 2	**W**	**48.9**	6.0	13.2	19.6	2.3	8.0	2.0	**51.1**
IBG	**W**	**39.9**	6.0	21.7	17.6	3.5	9.3	2.0	**60.1**
Edinburgh Park	**W**	**40.9**	6.0	21.7	18.6	2.5	8.3	2.0	**59.1**
Cammo	**W**	**58.9**	6.0	1.7	21.1	2.3	8.0	2.0	**41.1**
Burdiehouse 1	**SE**	**56.9**	6.0	1.7	22.6	2.5	8.3	2.0	**43.1**
Burdiehouse 2	**SE**	**56.9**	6.0	1.7	22.6	2.5	8.3	2.0	**43.1**
Gilmerton 1	**SE**	**57.9**	6.0	1.7	21.6	2.5	8.3	2.0	**42.1**
Gilmerton 2	**SE**	**56.9**	6.0	1.7	22.6	2.5	8.3	2.0	**43.1**
Drum 1	**SE**	**56.9**	6.0	1.7	22.6	2.5	8.3	2.0	**43.1**
Moredunvale Road	**SE**	**57.9**	6.0	1.7	21.6	2.5	8.3	2.0	**42.1**
Newcraighall 1	**E**	**58.9**	6.0	1.7	21.6	2.0	7.8	2.0	**41.1**
Newcraighall 2	**E**	**58.9**	6.0	1.7	21.6	2.0	7.8	2.0	**41.1**
Riccarton Mains Road	**SW**	**54.9**	6.0	1.7	24.6	2.5	8.3	2.0	**45.1**
Curriemuirend	**SW**	**56.9**	6.0	1.7	22.6	2.5	8.3	2.0	**43.1**
Ellen’s Glen	**SE**	56.9	6.0	1.7	22.6	2.5	8.3	2.0	**43.1**
Builyeon Road, Queensferry	**NW**	61.9	6.0	1.7	19.1	2.2	8.1	2.0	**38.1**
South Scotstoun, Queensferry	**NW**	60.9	6.0	1.7	18.1	2.2	8.1	2.0	**39.1**
Dalmeny	**NW**	59.9	6.0	1.7	20.1	2.2	8.1	2.0	**40.1**

Newmills, Balerno	**SW**	55.9	6.0	1.7	23.6	2.5	8.3	2.0	**44.1**
Curriehill Road, Currie	**SW**	55.9	6.0	1.7	23.6	2.5	8.3	2.0	**44.1**
Brunstane	**E**	56.4	6.0	3.7	21.6	2.2	8.1	2.0	**43.6**

The impact analysis results for Scenario 2 – Do Minimum are shown below, by corridor (Table 7) and by site (Table 8).

Table 7: Scenario 2 – Do Minimum Case – Corridor Impact		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	
		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
2011 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)**	**1474**		**878**				**882**		**525**	**222**		**0**	**446**	
2024/25	*LDP only*	1390	83	302	332	130	114	353	529	525	89	133	0	405	42
	LDP only as % over baseline peak hour flow	**31.3%**	**6.3%**	**20.1%**	**30.1%**	**6.9%**	**15.4%**	**6.6%**	**60.5%**	**13.7%**	**4.4%**	**5.4%**	**0.0%**	**6.5%**	**4.7%**
	Background growth 2024/25	89	27	30	22	37	15	533	18	383	40	49	20	627	18
	Committed residential 2024/25	219	27	50	65	12	27	17	26	52	37	56	107	70	9
	LDP only as % over baseline peak hour flow plus background plus committed	**29.2%**	**1.9%**	**14.7%**	**27.9%**	**6.8%**	**14.5%**	**6.0%**	**57.6%**	**12.3%**	**4.3%**	**5.2%**	**0.0%**	**5.8%**	**4.6%**
	LDP and committed residential and growth 2024/25	**1699**	**138**	**382**	**419**	**180**	**156**	**903**	**572**	**961**	**166**	**238**	**127**	**1102**	**68**
	% over 2011 baseline peak hour flow	**38.2%**	**10.3%**	**25.5%**	**38.0%**	**9.6%**	**21.1%**	**16.9%**	**65.4%**	**25.1%**	**8.3%**	**9.6%**	**12.7%**	**17.6%**	**7.7%**

Table 8: Scenario 2 – Do Minimum Case – Site Impact

NUMBER OF PEAK HOUR TRIPS GENERATED	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25
LDP sites	**Committed sites in the vicinity of LDP sites**			**LDP sites only**			**LDP plus committed sites**		
	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail
Maybury 1	23	9	9	427	177	168	449	186	177
Maybury 2	25	10	7	395	158	107	420	168	113
International Business Gateway	0	0	0	133	59	72	133	59	72
Edinburgh Park/The Gyle	74	33	39	223	102	119	297	135	158
Cammo	45	16	1	336	120	10	381	137	11
Burdiehouse 2	33	13	1	162	64	5	195	78	6
Gilmerton 1	25	9	1	33	12	1	58	22	2
Gilmerton 2	25	10	1	227	90	7	252	100	8
Drum 1	25	10	1	81	32	2	106	42	3
Newcraighall 1	23	8	1	101	37	3	124	45	4
Newcraighall 2	23	8	1	185	68	5	208	76	6
Burdiehouse 1	33	13	1	276	109	8	309	123	9
Riccarton Mains Road	13	6	0	16	7	0	29	13	1
Curriehill Road, Currie	13	6	0	32	13	1	45	19	1
South Scotstoun, Queensferry	40	12	1	255	80	7	294	92	8
Builyeon Road, Queensferry	40	12	1	494	144	14	534	156	15
Moredunvale Road	5	2	0	103	39	3	93	19	1
Curriemuirend	14	5	0	89	35	3	103	41	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	13	6	0	112	47	3	125	53	4
Brunstane	0	0	0	611	234	40	611	234	40
TOTAL number of trips generated	492	190	66	4427	1683	582	4904	1851	645

Results

Table 7 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 Modedunvale Road site and new Ellen's Road site.
- 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 Newmills site.
- 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, the majority are again 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. Six corridors are forecast to see increases exceeding 10.0%. However, all impacts are reduced from the Do Minimum Scenario as a result of 'committed' transport interventions.

In terms of individual sites, the LDP sites are forecast to generate an additional 4,427 vehicular trips during the one hour peak period by 2024/25, 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 9 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 below, by corridor (Table 10) and by site (Table 11).

Table 9 - Do Something scenario – estimated adjusted % modal share by site

Site	Corridor	Car Driver +taxi	Car pax	Train	Bus	Cycle	Walk	Other	**Total Sustainable**
Maybury 1	**W**	**39.9**	6.0	17.7	21.6	3.5	9.3	2.0	**60.1**
Maybury 2	**W**	**42.9**	6.0	13.2	23.6	3.3	9.0	2.0	**57.1**
IBG	**W**	**34.9**	6.0	21.7	20.6	4.5	10.3	2.0	**65.1**
Edinburgh Park	**W**	**36.9**	6.0	23.7	18.6	3.5	9.3	2.0	**63.1**
Cammo	**W**	**51.9**	6.0	1.7	26.1	3.7	8.6	2.0	**48.1**
Burdiehouse 1	**SE**	**51.9**	6.0	1.7	25.6	3.9	8.9	2.0	**48.1**
Burdiehouse 2	**SE**	**50.9**	6.0	1.7	28.6	2.5	8.3	2.0	**49.1**
Gilmerton 1	**SE**	**56.9**	6.0	1.7	21.6	3.2	8.6	2.0	**43.1**
Gilmerton 2	**SE**	**51.9**	6.0	1.7	25.6	4.0	8.8	2.0	**48.1**
Drum 1	**SE**	**53.9**	6.0	1.7	25.6	2.5	8.3	2.0	**46.1**
Moredunvale Road	**SE**	**54.9**	6.0	1.7	23.6	2.8	9.0	2.0	**45.1**
Newcraighall 1	**E**	**58.9**	6.0	1.7	21.6	2.0	7.8	2.0	**41.1**
Newcraighall 2	**E**	**58.9**	6.0	1.7	21.6	2.0	7.8	2.0	**41.1**
Riccarton Mains Road	**SW**	**52.9**	6.0	1.7	25.6	3.0	8.8	2.0	**47.1**
Curriemuirend	**SW**	**55.9**	6.0	1.7	22.6	3.1	8.7	2.0	**44.1**
Ellen's Glen	**SE**	56.9	6.0	1.7	23.1	2.2	8.1	2.0	**43.1**
Builyeon Road, Queensferry	**NW**	51.9	6.0	1.7	27.1	2.7	8.6	2.0	**48.1**
South Scotstoun, Queensferry	**NW**	50.9	6.0	3.2	25.6	3.4	8.9	2.0	**49.1**
Dalmeny	**NW**	58.9	6.0	1.9	20.4	2.4	8.4	2.0	**41.1**
Newmills,	**SW**	51.9	6.0	2.7	25.1	3.5	8.8	2.0	**48.1**

Balerno									
Curriehill Road, Currie	**SW**	53.9	6.0	3.2	23.1	3.0	8.8	2.0	**46.1**
Brunstane	**E**	50.9	6.0	4.2	25.6	2.9	8.4	2.0	**49.1**

Table 10: Scenario 3 – Do Something Case – Corridor Impact		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	
		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**
2011 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)**	**1290**		**815**				**821**		**452**	**212**		**0**	**397**	
2024/25	*LDP only*	1215	75	276	309	123	107	328	493	452	85	127	0	359	38
	LDP only as % over baseline peak hour flow	**27.3%**	**5.6%**	**18.4%**	**28.0%**	**6.5%**	**14.4%**	**6.2%**	**56.3%**	**11.8%**	**4.2%**	**5.1%**	**0.0%**	**5.7%**	**4.3%**
	Background growth 2024/25	89	27	30	22	37	15	533	18	383	40	49	20	627	18
	Committed residential 2024/25	202	25	46	65	14	26	17	26	45	36	54	107	66	9
	LDP only as % over baseline peak hour flow plus background plus committed	**25.6%**	**1.7%**	**13.5%**	**26.0%**	**6.4%**	**13.7%**	**5.6%**	**53.7%**	**10.6%**	**4.1%**	**4.9%**	**0.0%**	**5.2%**	**4.2%**
	LDP and committed residential and growth 2024/25	**1506**	**127**	**352**	**396**	**174**	**148**	**878**	**536**	**880**	**161**	**231**	**127**	**1051**	**64**
	% over 2011 baseline peak hour flow	**33.9%**	**9.5%**	**23.5%**	**35.9%**	**9.3%**	**20.0%**	**16.5%**	**61.2%**	**23.0%**	**8.0%**	**9.4%**	**12.7%**	**16.8%**	**7.2%**

Table 11: Scenario 3 – Do Something Case – Site Impact

NUMBER OF PEAK HOUR TRIPS GENERATED	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25	FULL 2024/25
LDP sites	**Committed sites in the vicinity of LDP sites**			**LDP sites only**			**LDP plus committed sites**		
	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail	peak hour daily trips by car	peak hour daily trips by bus	peak hour daily trips by rail
Maybury 1	20	11	9	379	205	168	399	216	177
Maybury 2	22	12	7	346	191	107	368	203	113
International Business Gateway	0	0	0	116	68	72	116	68	72
Edinburgh Park/The Gyle	66	33	43	202	102	129	268	135	172
Cammo	40	20	1	296	149	10	336	169	11
Burdiehouse 2	30	17	1	145	82	5	175	98	6
Gilmerton 1	25	9	1	32	12	1	57	22	2
Gilmerton 2	23	11	1	207	102	7	230	113	8
Drum 1	23	11	1	77	36	2	100	48	3
Newcraighall 1	23	8	1	101	37	3	124	45	4
Newcraighall 2	23	8	1	185	68	5	208	76	6
Burdiehouse 1	30	15	1	251	124	8	282	139	9
Riccarton Mains Road	13	6	0	15	7	0	28	13	1
Curriehill Road, Currie	13	6	1	31	13	2	44	19	3
South Scotstoun, Queensferry	33	17	2	213	107	13	246	124	15
Builyeon Road, Queensferry	34	18	1	414	216	14	448	234	15
Moredunvale Road	4	2	0	98	42	3	93	19	1
Currienuirend	13	5	0	88	35	3	101	41	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	12	6	1	104	50	5	116	56	6
Brunstane	0	0	0	551	277	45	551	277	45
TOTAL number of trips generated	448	216	71	3986	1980	608	4425	2170	676

Results

Table 10 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 Modedunvale Road site and new Ellen's Road site.
- 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.
- Modestincreases on Corridor 5 (South West) is due to increased capacity at Curiemuirend and new Newmills site.
- 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, the majority are again 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, with five sub-routes seeing impacts less than 5% and two more seeing impacts of just over 5%.

In terms of individual sites, the LDP sites are forecast to generate a reduced level of an additional 3,986 vehicular trips during the one hour peak period. The largest impacts are still due to Maybury 1 and 2; Builyeon Road, Queensferry; and Brunstane but impact from Cammo now also becomes significant as its mode shift forecast is relatively low. These five sites also generate significant increases in the numbers of potential trips by bus that would need to be accommodated.

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 seven additional housing sites. 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 suggest 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 75% uplift in the number of proposed LDP homes from that considered within the main TA report.

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, 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 13.5%, due to increased capacity at Moredunvale Road and the new Ellen's Glen site, 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. This would also apply to Lasswade Road (13.7%).

The A772 Gilmerton Road would see an increase of approximately 26%, again due to Moredunvale Road and Ellen's Glen. 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.

The largest % impact 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 % 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 10.6%, 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 DP sites will see a 5.2% 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 the most number of 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 5.2% increase discussed above is generated by traffic travelling between different Edinburgh wards and using the A720.

Table 12 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.

Table 12 - Comparison of sustainable modal splits by scenario

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
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
Newcraighall 2	**E**	**41.1**	**41.1**	**41.1**	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
Builyeon Road, Queensferry	**NW**	**41.1**	**38.1**	**48.1**	7.0
South Scotstoun, Queensferry	**NW**	**41.1**	**39.1**	**49.1**	8.0
Dalmeny	**NW**	**41.1**	**40.1**	**41.1**	0.0
Newmills, Balerno	**SW**	**41.1**	**44.1**	**48.1**	7.0
Curriehill Road, Currie	**SW**	**41.1**	**44.1**	**46.1**	5.0
Brunstane	**E**	**41.1**	**43.6**	**49.1**	8.0

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 seven sites:-

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 envisaged that developers may 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:-

- +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.

The following tables set out the appraisal scoring for the seven additional sites.

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
2 South East	**Ellen's Glen** **240 units**	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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
4 North West	**Builyeon Road, Queensferry** **840 units**								
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
4 North West	**South Scotstoun Queensferry** **440 units**								
		Public transport – upgrade existing bus stop facilities on Scotstoun Avenue and 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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
4 North West	**Dalmeny** **15 units**								
		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 car park extension 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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
5 South West	**Newmills, Balerno** **210 units**	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
		Active travel – help provide improved cycle links between site and Curriehill Station – infrastructure and signage	+1	+1	+1	+2	+1	+2 Relevant	Yes

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
5 South West	**Curriehill Road, Currie** **60 units**								
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		Road improvements – help provide Gillespie Crossroads Junction enhancement scheme	+1	-1	+1	0	0	+1 A70 route pinch point Scale of impact	Yes

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
3 East	**Brunstane** **1140 units**								
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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
		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

Corridor	Site	Interventions proposed	Reduce congestion	Reduce travel by car	Reduce adverse impacts of travel	Promote walking and cycling	Integrated public transport	Technical delivery	Apply - Yes/No
		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

Site Summary Sheets

As was undertaken for the TA report, following the interventions appraisal, summary sheets have been prepared for the additional seven housing sites, 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.

Site Name: Ellen's Glen Mid-range Capacity: 240 units

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

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1 Vehicular Access

(a) Access from Ellen's Glen Road to east of site.

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.

(b) New footway along east boundary frontage 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) Help provide widening and upgrade of existing footway along Ellen's Glen Road.

Site Name: Builyeon Road, Queensferry Mid-range Capacity: 1,840 units

Route Corridor: 4 - North West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Forth Replacement Crossing – major impact

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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.

(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.

(c) Provide pedestrian/cycle crossing facilities on Builyeon Road – type to be agreed.

(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.
(b) No other improvements identified at this time but prospective developers should be aware Transport Scotland may require assessment of impact on new FRC junction.

Site Name: South Scotstoun, Queensferry Mid-range Capacity: 440 units

Route Corridor: 4 - North West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Forth Replacement Crossing – medium impact

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1 Vehicular Access

(a) Primary access from Kirkliston Road to west of site, with potential secondary access from South Scotstoun and 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 to Builyeon Road site.

(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.

Site Name: Dalmeny Mid-range Capacity: 15 units

Route Corridor: 4 – North West Edinburgh

Relevant Committed Interventions:

(i) City-wide ATAP measures – minor impact

(ii) Forth Replacement Crossing – medium impact

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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.

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** Mid-range Capacity: 210 units

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

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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

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

Site Name: **Curriehill Road, Currie** Mid-range Capacity: 60 units

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

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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) 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.

Site Name: Brunstane Mid-range Capacity: 1, 140 units

Route Corridor: 2 - 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

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1 Vehicular Access

(a) Access from Milton Road 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.)

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 Brunstance 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.

Assessment of Changes to Main LDP Sites

In preparing the second Proposed Plan, City of Edinburgh Council has reviewed the capacities of the housing sites in the first Proposed Plan. The capacity of a review of the main LDP sites, 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
Burdiehouse 1	510 units	(previously 570)	11% reduction
Gilmerton 2	420 units	(previously 500)	16% reduction
Newcraighall 1	180 units	(previously 270)	33% reduction
Curriemuirend	165 units	(previously 100)	65% increase
Moredunvale Road	188 units	(previously 50)	276% increase
Cammo	600 units	(previously 500)	20% increase
Riccarton Mains Road, Currie	30 units	(previously 50)	40% reduction

This is a 16% 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 723), bus (241 to 395) and rail (167 to 274), 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.

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 16% reduction will have little overall impact and it is considered the proposed interventions, previously identified, would still be appropriate for the site.

Newcraighall 1

The 33% reduction is considered significant and would result in the detrimental impact of the development being noticeable 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.

Curriemuirend

Whilst there is a proposed 65% increase in the number of units, this is only 65 units and, therefore, any impact on the adjacent transport network is likely to be minimal (peak period daily trips by car (48 to 79) and bus (19 to 31)

Proposed interventions, identified previously, would still be appropriate.

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 41) 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.

Cammo

The proposed 20% increased capacity of the sites would result in corresponding uplifts in peak period daily trips by car (202 to 242), bus (102 to 122) and rail (129 to 155), 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.

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.

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