

**APPENDIX 2 -**



The Strategic Development Planning Authority  
for Edinburgh and South East Scotland

# Action Programme

September 2016

Committee Draft

## STRATEGIC DEVELOPMENT PLAN ACTION PROGRAMME – 2016 UPDATE

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## INTRODUCTION

### Purpose

The purpose of this Action Programme is to set out the key strategic actions needed to deliver the vision of the Strategic Development Plan for South-east Scotland. The SESplan Strategic Development Plan covers the City of Edinburgh, East Lothian, West Lothian, Midlothian, the Scottish Borders, and South Fife. Section 21 of the Planning etc. (Scotland) Act 2006 requires the Strategic Development Planning Authority (SDPA) to prepare an Action Programme that sets out how the authority expects to implement the Plan.

## **Outcomes**

The SESplan vision will be achieved by:

- Providing direction to local development plans – Local Development Plans in the city region have to be consistent with the Strategic Development Plan.
- Providing a context for decisions on planning applications – all planning applications have to be made in accordance with the development plan unless material considerations indicate otherwise
- Influencing investment plans and other strategic plans and strategies affecting the region.
- Identifying some specific actions that require the input and coordination of more than one local planning authority to deliver.

The delivery of this plan and the Local Development Plans that it seeks to direct, raises a number of issues that could be considered strategic. For example, many of the larger housing sites allocated in LDPs will not be able to be delivered without a substantial investment in new education provision. However, most of the actions to deliver the housing and infrastructure needed are already set out in the action programmes related to each of the local development plans in the city region.

This updated Action Programme will therefore focus on:

- Actions to deliver cross-boundary infrastructure and infrastructure of regional importance
- Action to help deliver national developments
- Actions that require the input and coordination of more than one local planning authority to deliver

## **Development of the Action Programme**

This Action Programme has been developed in consultation with the member authorities, The Scottish Government, Key Agencies and other public and private stakeholders. Many of the funding commitments in the plan will be dependent on future Government spending reviews and public and private sector finance. The City Region Deal proposal, currently the subject of negotiation with Scottish and UK Government, is also likely to have a key role to play in delivering SESplan's vision.

### **How will it be used?**

Organisations identified as having a Lead Role in carrying out an action will:

- Co-ordinate the planning, delivery and monitoring of the action
- Provide updates to SESplan on progress and funding where requested
- Advise SESplan on changes needed to the Action Programme related to that action
- Seek to ensure, in collaboration with others, that all relevant plans or strategies, (including investment strategies) support the delivery of the action

Organisations identified as having a Partnership Role in carrying out an action will:

- Provide the Lead Partner(s) with information on request
- Work closely with the lead partner to help plan, deliver and monitor the action
- Seek to ensure, in collaboration with others, that all relevant plans or strategies, (including investment strategies) support the delivery of the action

### **Monitoring and review**

This Action Programme will be republished at least every two years. The existing Action Programme, approved in September 2015, was prepared in the context of SDP1 and therefore this new Action Programme has been prepared to set out the actions specifically required for SDP2. In practice, the Action Programme will be used by SESplan and its partners as a 'live' high level project management tool, updating and publishing more frequently if significant changes are required.

## TABLES

Table 1. Actions Completed Since September 2015 [to be completed before publication]

Action	Progress

Table 2. Column headings/ Legend for Action Table

<b>Delivery Action</b>	Number [to be completed before publication] , title and description of individual actions <b><i>Italic:</i></b> Action associated with National Development <b><u>Underlined:</u></b> Actions that SESplan will play a leading role in coordination and delivery
<b>Timing</b>	Date range within which action likely to be implemented
<b>Lead/ Partners</b>	Lead partner highlighted in bold text
<b>Cost/Funding</b>	Indication of the cost of carrying out the action, the status and breakdown of funding and list of funding sources, where known. <b>Not applicable (n/a)</b> is used where actions can be implemented within current work programmes without significant additional funding required. <b>To be confirmed (t.b.c.)</b> is used where funding information will be sought prior to the next Action Programme update. <b>Unknown</b> is used where further studies will be required to produce cost estimates and these are not likely to be completed before the next Action Programme update.
<b>Progress</b>	Provides one of the following status updates <b>Underway/ Under construction</b> – the action is in the process of being implemented <b>Policy Support</b> – the action has support in plans and programmes other than the SDP <b>Proposed</b> – the action is proposed but has no formal commitment

**Table 3. Action Table**

The action table is structured around the three Delivery Themes in SESplan 2. A Place to Do Business (Grey), A Place for Communities (Red) and a Better Connected Place (Yellow).

	<b>Delivery Action</b>	<b>Timing</b>	<b>Lead (Bold) /Partners</b>	<b>Cost/Funding</b>	<b>Progress</b>
	<b>A Place to Do Business</b>				
<b>1.</b>	<p><b>City Region Deal</b></p> <p>Example proposals include a regional network of incubator facilities; regional collaboration to expand overseas trade; invest to protect and enhance the world famous culture and leisure assets in the region including the Edinburgh Festivals; developing advanced digital technology to support business and culture; developing a clear and integrated regional infrastructure strategy with all public sector partners; developing an integrated regional skills programme to increase opportunities for learning and development for everyone.</p>	2016-2032	<p><b>City Deal Partnership</b>, East Lothian Council, West Lothian Council, Scottish Borders Council, Midlothian Council, Fife Council, Universities, Colleges, private sector, third sector, UK Government, Scottish Government and agencies. A wide range of other public and private stakeholders and partners will be involved in delivery.</p>	<p>Ambition is to secure £2bn of funding. Estimated that an additional £3bn worth of private sector investment could be leveraged if the bid is successful.</p>	<p><b>Proposed</b></p> <p>Announcement that negotiations on a City Region deal will be commenced for South East Scotland City Region made in 2016 UK Budget.</p> <p>N.B. the City Region deal area also likely to include St Andrews and North-East Fife</p>
<b>2.</b>	<p><b>Edinburgh Airport Improvements:</b> Deliver enhanced facilities at Edinburgh Airport and supporting improvements in surface transport and other infrastructure as identified in NPF3, SESplan SDP and City of Edinburgh LDP.</p>	2016-2024	<p><b>Transport Scotland, Network Rail, Global Infrastructure Partners,</b></p>	<p>Costs of some interventions still t.b.c.</p>	<p><b>Underway</b></p> <p>2016 – Winter – Edinburgh Gateway Rail Station to open. Works progressing on schedule</p>

			<p><b>Edinburgh International Development Partnership , Edinburgh International Business Gateway Landowners, City of Edinburgh Council</b></p>		<p>2016 – Airport Masterplan to be updated by Global Infrastructure Partners</p> <p>2017 – Edinburgh International Gateway – First phase plans for the £700m mixed use urban extension at Edinburgh International Business Gateway have been submitted by a consortium comprised of Murray Estates, New Ingliston, Frogmore and Salmon Harvester.</p> <p>International Business Gateway is supported by of the Edinburgh tram to the airport through the heart of the site.</p>
3.	<p><b>Enhanced High Voltage Energy Transmission Network:</b> Needed to facilitate renewable electricity development and its export.</p>	2016-2020	<p><b>Scottish Power Energy Networks; Scottish and Southern Energy Power Distribution Scottish Hydro-electric Transmission</b></p>	t.b.c.	<b>Underway</b>
4.	<p><b><u>Cross-boundary Windfarm Working Group</u></b> A working group will be established to explore the potential for a plan-led approach to identifying strategic capacity for wind farms and re-powering opportunities (i.e. replacing old turbines with new ones) in areas where there are likely to be cross-boundary effects. The geographic scope of this</p>	2016-2020	<p><b>SESplan, East Lothian Council, Scottish Borders Council, Midlothian Council, West Lothian Council, Scottish Natural</b></p>	n/a	<p><b>Proposed</b> Scottish Natural Heritage has published guidance on Decommissioning and Restoration Plans for wind farms which is relevant to issues related to repowering</p>

	group to be decided by the working group		Heritage, Scottish Environmental Protection Agency		
5.	<b><i>Additional Freight Handling Capacity on the Forth (Rosyth)</i></b>  Create multimodal container terminal facilities with deep water access and improved supporting port, road and rail infrastructure.	2016-2025	<b>Fife Council, Scottish Environmental Protection Agency, Babcock, Forth Ports, Scottish Government</b>	t.b.c.	<b>Underway</b> Work in connection with the Marine Licence application, including the preparation of an updated Environmental Impact Assessment (EIA), is progressing
6.	<b><u>Minerals– Aggregate Resources Review.</u></b> Establish a Minerals Working Group to review the aggregate resources of the city region (based on either Scottish Government minerals survey data or locally sourced information) to ensure there is a sufficient aggregates land bank of permitted reserves for construction aggregates of at least 10 years.	2016-2018	<b>SESplan member authorities</b>	n/a	<b>Proposed</b>
<b>Better Connected Place</b>					
7.	<b><u>Complete Cross Boundary Transport Appraisal</u></b> Appraisal identifying cumulative and cross boundary impacts of development on strategic transport network. Models impact of development associated with SDP1 and emerging LDPs. Will identify measures and interventions that could be developed to mitigate impacts of development.	2016	<b>Transport Scotland, SESplan member authorities, City of Edinburgh Council, Fife Council, Midlothian Council, East Lothian Council, West Lothian Council, Scottish Borders Council</b>	c. £140K Funded by Scottish Government	<b>Underway</b> Appraisal work underway. Reports due Autumn 2016
8.	<b><u>Complete Strategic Development Plan Transport Appraisal (SDP2 Transport Appraisal)</u></b> Appraisal identifying additional impacts of	2016	<b>SESplan, Transport Scotland, City of Edinburgh Council,</b>	c. £14K Funded by SESplan member authorities	<b>Underway</b> Appraisal of impacts as a result of additional development required in

	development as a result of additional development required by SDP2 Housing Supply Targets		Fife Council, Midlothian Council, East Lothian Council, West Lothian Council, Scottish Borders Council		City of Edinburgh is complete. Further appraisal work required when Cross Boundary Appraisal is complete.
9.	<p><b><u>Cross-boundary Transport Contributions Framework</u></b></p> <p>Produce supplementary guidance "Cross Boundary Transport Contributions Framework" that will set out a framework for requesting contributions towards infrastructure to mitigate the cumulative and cross boundary impacts of additional traffic generated from new developments. Guidance will set out:</p> <ul style="list-style-type: none"> <li>• The detailed location and boundaries of the contribution zones within which the contributions will be required. These zones will be identified at locations within the Growth Corridors and the City Region Core where developments are most likely to contribute to traffic hot-spots</li> <li>• The specific infrastructure to be funded</li> <li>• The method for calculating the contributions required</li> <li>• How, when and to whom payments should be made</li> </ul>	2016-2019	SESplan, Transport Scotland, City of Edinburgh Council, Fife Council, Midlothian Council, East Lothian Council, West Lothian Council	t.b.c	<b>Proposed</b> Framework to be developed following completion of Cross Boundary Transport Appraisal.
10.	<p><b>Edinburgh/Glasgow rail improvements:</b></p> <ul style="list-style-type: none"> <li>• Electrification of Edinburgh/Glasgow Queens</li> </ul>	2016-2019	<b>Network Rail, Transport Scotland</b>	t.b.c Funded	<b>Under construction</b> Completion expected in 2019.

	<p>Street line</p> <ul style="list-style-type: none"> <li>Increase in capacity and frequency of trains between Edinburgh and Glasgow Queen Street: and</li> <li>Further improvements will be set out in stage 2</li> </ul>				Stage 2 to be developed in 2020's
11.	<p><b>East Coast Mainline Improvements</b></p> <p>Ongoing improvements to the East Coast Mainline and potential future improvements. Includes platform work at Edinburgh Waverley.</p>	2016-2032	Network Rail, Transport Scotland	t.b.c.	<p><b>Underway</b></p> <p>Potential initial list of suggest improvements set out in Network Rail Scotland Market Study.</p>
12.	<p><b>Edinburgh-Glasgow via Shotts Line Electrification</b></p> <p>Electrification of 75 km of the Shotts Line between Holytown and Midcalder junctions. Will allow for faster services, including potential Edinburgh-Livingston-Glasgow Central express service</p>	2016-2019	Network Rail, Transport Scotland	Funded	<p><b>Underway</b></p> <p>Preparation work underway</p>
13.	<p><b>Winchburgh Rail Station</b></p> <p>New station to support ongoing development in the Winchburgh Core Development Area.</p>	2016-2019	Network Rail, Transport Scotland, SEStran, West Lothian Council.	Developer funded	<p><b>Underway</b></p> <p>Design work on new stations is underway. New service and stops are included as part of recent Franchise award. Timetable details to be confirmed.</p>
14.	<p><b>Winchburgh M9 Junction</b></p> <p>New Junction on M9 supporting ongoing development in the Winchburgh Core Development Area.</p>	2024-2032	Transport Scotland, West Lothian Council [lead t.b.c]	Developer funded	<p><b>Policy support</b></p>
15.	<p><b>M9 Junction 3 Upgrade</b></p> <p>Development of Westbound slips on Junction East of Linlithgow.</p>	2016-2032	Transport Scotland, West Lothian Council [lead t.b.c]	Developer funded	<p><b>Policy support</b></p>
16.	<p><b>East Linton and Reston Rail Stations</b></p> <p>New stations on East Coast Mainline supported by a new two-hourly service between Edinburgh and Berwick.</p>	2016-2032	Network Rail, Transport Scotland, Abellio Scotrail, SEStran, East Lothian Council,	Funding for design work by East Lothian Council and Scottish Borders Council	<p><b>Underway</b></p> <p>Initial design work on new stations has been completed. New services and stations are included as priced options in the recent franchise.</p>

			Scottish Borders Council		
17.	<b>Levenmouth Rail Link</b> Re-open rail line and new stations at Leven and Cameron Bridge for a passenger service.	2018-2032	<b>Fife Council, SEStran</b>	t.b.c	<b>Policy support</b> Further appraisals required. Aspirational Project. No firm commitment from Scottish Government.
18.	<b>Edinburgh Cross-rail Services</b> New cross-Edinburgh services and suburban rail capacity enhancements	2016-2032	<b>Scotrail, Network Rail, Abellio Scotrail, SEStran</b>	Unknown	<b>Policy support</b> Supported by SEStran. Fife - Edinburgh - Borders Rail services to be introduced.
19.	<b>Dunfermline Northern Relief Road and Western Distributor Road</b> Road improvements required to deliver planned housing and employment growth in Dunfermline	2016-2032	<b>Fife Council</b>	Funding to be secured through planning permission and legal agreements.	<b>Policy support</b> Policy support in FIFEplan
20.	<b>Newbridge Junction Upgrade:</b> Public transport improvements, incl. Edinburgh bound bus lane to roundabout. Safeguards included in emerging Edinburgh LDP	2016-2032	<b>Transport Scotland, South East Scotland Transport, City of Edinburgh Council, West Lothian Council</b>	t.b.c	<b>Underway</b> A joint study looking at options for improving public transport services through junction has been completed, and new computerised junction control in place. New bus lanes on the A89 and A8 is also supported but no funding identified.
21.	<b>Improvements on trunk road approaches to Edinburgh including Junction Upgrades and Non-Car Alternatives</b>  This may include upgrades to junctions on the M9, M8, M90, A1, A71, A68, A89 and A8 and could include upgrades to strategic cycle routes as non-car alternatives.	2018-2032	<b>SEStran</b>	Unknown	<b>Proposed</b> List of improvements will be generated based on evidence from the Cross Boundary Transport Appraisal and the Transport Appraisal of the Strategic Development Plan

22.	<b>Park and Ride Sites:</b> <ul style="list-style-type: none"> <li>• Extensions - Ingliston, Hermiston and Sheriffhall sites</li> <li>• Potential new sites - Gilmerton Road (City of Edinburgh Council area); Lasswade Road (City of Edinburgh Council area); North A68/A720 junction (Midlothian area); Lothianburn A702/A720; Rosyth; Broxburn; Heartlands (Whitburn); Winchburgh (new M9 Junction) Linlithgow (coach park and ride); Winchburgh rail station.</li> </ul>	2016-2032	SEStran, City of Edinburgh Council, Fife, West Lothian Council, Midlothian Council	t.b.c Various levels of commitment. Some funding will be raised through developer contributions.	<b>[ progress on individual sites to be confirmed prior to publication]</b> Land secured for Hermiston Extension. Rosyth Park and Ride has planning consent. Heartlands Park and Ride has planning consent.
23.	<b>A701 and A702 improvements</b> Relief road for A701 with link to A702	2018-2032	Midlothian, Scottish Borders, <b>Lead TBC</b>	t.b.c	<b>Policy support</b>
24.	<b>A801 Improvements</b> Carriageway improvements and new viaduct to improve links between Grangemouth and the M8	2018-2032	<b>West Lothian Council, Falkirk Council</b>	t.b.c To be funded by development	<b>Policy support</b>
25.	<b>A92 Junction Improvements</b> Improvements to roundabouts on A92 around Kirkcaldy and Glenrothes. Includes works to Redhouse Roundabout	2018-2032	<b>Fife Council</b>	t.b.c To be funded by development	<b>Policy support</b> Further appraisals required.
26.	<b>West Edinburgh infrastructure improvements:</b> Upgrade of A8 dumbbells (two roundabouts linked by a bridge or underpass) and Eastfield Rd, Gogar link road (through International Business Gateway site connecting airport to Gogar roundabout), upgraded junctions, International Business Gateway tram halt and bus priority measures.	2016-2032	<b>Edinburgh International Development Partnership</b> comprising Scottish Government, Scottish Enterprise, Transport Scotland, City of Edinburgh Council, Edinburgh Airport, RHASS, private landowners	In excess of £56m	<b>Policy support</b> Policy support in Rural West Edinburgh Local Plan and Proposed LDP. Application for International Business Gateway phase 1 submitted with transport study.
27.	<b>A1 Junction Improvements:</b>	2016-	Transport	Unknown	<b>Proposed</b>

	Improvements to junctions on A1(T) in East Lothian to accommodate development in East Lothian LDP. Does not cover Old Craighall which will be assessed under Cross-Boundary Transport Appraisal.	2030	Scotland, East Lothian Council, Developers. [Lead t.b.c prior to publication]		More detail will be set out in East Lothian LDP Transport Appraisal.
28.	<b>A720 Improvements</b> Potential junction improvements and non-car alternatives that will be required to mitigate impact of development on movement along radial routes to, and orbital routes around Edinburgh.	2018-2030	<b>Transport Scotland,</b> City of Edinburgh Council, , East Lothian, Midlothian Council	Unknown	<b>Proposed</b> No committed interventions yet. Cross Boundary Transport Appraisal to inform prioritisation process.
29.	<b>Edinburgh Orbital Bus and Associated Park and Ride</b> Part dedicated bus route supporting orbital movement around Edinburgh with supporting park & ride infrastructure.	2016-2030	<b>SEStran,</b> City of Edinburgh Council, Midlothian Council, East Lothian Council, Transport Scotland	Unknown	<b>Proposed</b> Supported by SEStran led appraisal complete but no commitment or funding. Policy support in SDP and RTS.
30.	<b>Strategic Walking and Cycling Routes: Functional Routes</b>				
30a.	<b>Glenrothes - Kirkcaldy</b> Connects major towns with strategic centres.	2018-2032	<b>Fife Council,</b> SEStran, Sustrans, SNH	Unknown	<b>Proposed</b>
30b.	<b>Dunfermline - Edinburgh</b> Would connect settlement, expansion areas and employment centres along the A90 corridor which suffers from significant congestion. Good quality off-road route exists between Edinburgh and southern Bridgehead but there is no quality provision between Dunfermline and Rosyth.	2018-2032	<b>Fife Council, City of Edinburgh Council</b> SEStran, Sustrans, SNH	Unknown	<b>Proposed</b> No current commitment to undertake work between Dunfermline and Rosyth
30c.	<b>A89/A8</b>	2016-	<b>City of Edinburgh</b>	t.b.c.	<b>Underway</b>

	Would connect settlement, expansion areas and employment centres along A8/A89 corridor which suffers from significant congestion. Off-road route exists between Bathgate and Broxburn along A89. Some sections in City of Edinburgh area are narrow, poorly surfaced and need upgrading.	2032	<b>Council, West Lothian Council,</b> SEStran, Sustrans, SNH		Route safeguarded from Harthill to Bathgate. Works underway at Gogar interchange as part of Edinburgh Gateway Station works, forming a hub and providing additional safe crossing point of A8. Upgrade of surface and width along A8 commenced 2015/16, further work planned for 2017/18.
30d.	<b>A71 Separated Route</b> Current proposal for high quality separated new route along the route of the A71 from West Calder to Edinburgh. Would provide a safe route along this busy road corridor.	2016-2032	<b>City of Edinburgh Council, West Lothian Council,</b> SEStran, Sustrans, Transport Scotland, SNH	t.b.c.	<b>Underway</b> West Lothian Council have appointed AECOM to undertake route study. City of Edinburgh examining potential of enhancements along Calder Road.
30e.	<b>Edinburgh - Penicuik</b> Connects existing settlements, growth areas, Straiton Commercial Centre and Science and Knowledge Cluster along commuter heavy A701 corridor	2018-2032	<b>Midlothian Council,</b> City of Edinburgh Council, SEStran, Sustrans, Transport Scotland. SNH	t.b.c.	<b>Proposed</b> Support for different parts of route connecting settlements along A701 in Midlothian LDP.
30f.	<b>Edinburgh - Gorebridge</b> New route from Gorebridge to Dalkeith via Newtongrange, Mayfield and Easthouses, with a safe crossing at Sheriffhall and on to Edinburgh. Potentially including A7 urbanisation work. Connects settlements, major growth areas and major employment locations.	2018-2032	<b>Midlothian Council, City of Edinburgh Council,</b> SEStran, Sustrans, Transport Scotland, SNH	t.b.c.	<b>Policy support</b> Support for different parts of routes connecting settlements along A701 in Midlothian LDP.
30g.	<b>A1/A199</b> Spinal through the centre of East Lothian broadly following the A1 corridor and the route of the A199. Links existing settlements employment sites and housing growth areas (including Queen Margaret University, Wallyford and Blindwells).	2016-2032	<b>East Lothian Council, City of Edinburgh Council,</b> SEStran, Sustrans, Transport Scotland, SNH	t.b.c.	<b>Underway</b> East Lothian Council have appointed Ironside Farrar to undertake route study

30h.	<b>Edinburgh Orbital Route</b> Proposed route following the Edinburgh bypass (A720). Sections would include route along former railway path between Straiton and Shawfair. Proposed linking with Gyle and A90 at Barnton. Could be developed as part of Orbital Bus proposal.	2016-2032	<b>City of Edinburgh Council, East Lothian Council, Midlothian Council,</b> SEStran, Sustrans, Transport Scotland, SNH	t.b.c.	<b>Proposed</b> No detail appraisal work undertaken at this stage. Sustrans plan to construct Straiton to Shawfair path within the next 2 years.
<b>31.</b>	<b>Strategic Walking and Cycling Route Recreational Routes</b>				
31a.	Pilgrims Way – Culross & North Queensferry to St Andrews	2016-2032	<b>SESplan Member Authorities,</b> Sustrans, SEStran, SNH	Unknown	[ progress on individual sites to be confirmed prior to publication]
31b.	John Buchan Way Extension to Clyde Walkway	2016-2032	<b>SESplan Member Authorities,</b> Sustrans, SEStran, SNH	Unknown	[ progress on individual sites to be confirmed prior to publication]
31c.	Tweed Cycleway Peebles to Kelso	2016-2032	<b>SESplan Member Authorities,</b> Sustrans, SEStran, SNH	Unknown	Innerleithen to Walkerburn completion due in 2019
31d.	River Tyne Walkway Extension from Haddington to Vogrie Country Park	2016-2032	<b>SESplan Member Authorities,</b> Sustrans, SEStran, SNH	Unknown	[ progress on individual sites to be confirmed prior to publication]
<b>32.</b>	<b>High Speed Rail</b> Linking Edinburgh and Glasgow city centres with London and offering good connections to the rest of the rail network.	2016-2032	<b>Scottish Government</b>	Unknown	<b>Policy support</b> National policy support. An extended a joint study between Transport Scotland, the Department for Transport and HS2 Ltd, into bringing HS2 further and faster into Scotland is expected to report in 2016.

33.	<b>A1 Dualling between Dunbar and Berwick Upon Tweed</b> Proposal to complete dualling of the A1 within Scotland creating a better connection along East Coast.	2016-2032	<b>Scottish Government</b>	t.b.c.	<b>Policy support</b> Local policy support but no current support or commitment from Scottish Government. Further appraisal work required. Department of Transport is committed to the important work on the A1 between Newcastle and the Border dualling 13 miles of the of the single carriageway in Northumberland.
34.	<b>Borders Railway Extensions to Hawick and Carlisle</b>	2016-2032	<b>Transport Scotland, Scottish Borders Council, Abellio Scotrail, Network Rail, SEStran, Carlisle City Council and Dumfries &amp; Galloway Council</b>	Unknown	<b>Policy support</b> All partners are committed to scoping potential further feasibility work in relation to extending the Borders Railway line towards Hawick and Carlisle, including turning options at and beyond Tweedbank. It is envisaged that pre-feasibility work in relation to extending the Borders Railway will be initiated in 2016.
35.	<b>Dunfermline-Alloa Passenger Rail Link</b> Create sustainable connection between Alloa and Dunfermline using existing track.	2016-2032	Transport Scotland, Fife Council, Clackmannanshire Council	Unknown	<b>Policy support</b> Local policy support but no current support or commitment from Scottish Government.
36.	<b>Edinburgh Tram Extensions</b>				
36a.	St Andrew Square to Newhaven - Needed to support significant scale of development at Leith and Waterfront	2016-2032	<b>City of Edinburgh Council</b>	No funding in place. Developers along tram routes would be expected to	<b>Policy support</b> Council has approved in principle and period of site investigation and procurement underway over next

				contribute.	year. Firm commitment still to be confirmed.
36b.	Newhaven to Granton - Needed to support significant scale of development at Waterfront	2018-2032	<b>City of Edinburgh Council</b>	No funding in place. Developers along tram routes would be expected to contribute.	<b>Policy support</b> Rights to start construction extend to March 2021. City of Edinburgh Council approved a report in March agreeing to compulsory purchase the land before the rights expire. Other routes have policy support only.
36c.	Ingliston Park & Ride to Newbridge	2018-2032	<b>City of Edinburgh Council</b>	No funding in place. Developers along tram routes would be expected to contribute.	
36d.	City Centre to Edinburgh BioQuarter, Newcraighall and Queen Margaret University	2018-2032	<b>City of Edinburgh Council</b>	No funding in place. Developers along tram routes would be expected to contribute.	<b>Policy support</b>
36e.	Roseburn to Granton	2018-2032	<b>City of Edinburgh Council</b>	No funding in place. Developers along tram routes would be expected to contribute.	<b>Policy support</b>
	<b>Place for communities</b>				
37.	<b><u>Supplementary Guidance for Cross-boundary Green Networks 1.</u></b> <i>Edinburgh &amp; East</i>	2016-2019	<b>SESPlan, Scottish Natural Heritage, City of Edinburgh Council, Midlothian Council, East Lothian Council, Forestry Commission Scotland, Scottish Environmental</b>	t.b.c.	<b>Proposed</b> Technical Paper on SESplan Green Networks Published 2015

			Protection Agency, Lothian and Fife Green Network Partnership, Sustrans		
38.	<b><u>Supplementary Guidance for Cross-boundary Green Networks 2.</u></b> <i>Edinburgh &amp; West</i>	2016-2019	<b>SEsPlan, Scottish Natural Heritage, City of Edinburgh Council, West Lothian Council, Forestry Commission Scotland, Scottish Environmental Protection Agency, Lothian and Fife Green Network Partnership, Sustrans</b>	t.b.c.	<b>Proposed</b> Technical Paper on SEsPlan Green Networks Published 2015

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39.	<p><b><i>Cross Boundary Green Network Framework for the Green Network Priority Areas that do not cross boundaries.</i></b></p> <p>Note: Scottish Borders is not italicised since it was not selected as part of the Central Scotland Green Network National Development.</p> <p><i>Dunfermline North &amp; East Ore Valley Kirkcaldy Gateways Levenmouth &amp; Coast</i></p>	2016-2024	<p><b>Fife</b>, Scottish Natural Heritage, Forestry Commission Scotland, Lothian and Fife Green Network Partnership, Scottish Environmental Protection Agency</p>	t.b.c.	<p><b>Underway</b> Green Networks in Fife – FIFEplan Background Paper setting out recommendations as to how green networks should be spatially defined and assessed for inclusion in the Fife LDP.</p>
	<p><i>Linlithgow</i></p>	2016-2024	<p><b>West Lothian Council</b>, Scottish Natural Heritage, Forestry Commission Scotland, LFGNP, Scottish Environmental Protection Agency</p>	t.b.c.	<p><b>Proposed</b></p>
	<p><i>Polkemmet &amp; Breich Water</i></p>	2016-2024	<p><b>West Lothian Council</b>, Scottish Natural Heritage, Forestry Commission Scotland, Lothians</p>	t.b.c.	<p><b>Proposed</b></p>

			and Fife Green Network Partnership, Scottish Environmental Protection Agency		
	<i>Forth Shores</i>	2016-2024	<b>City of Edinburgh Council</b> , Scottish Natural Heritage, Forestry Commission Scotland, Lothians and Fife Green Network Partnership, Scottish Environmental Protection Agency	t.b.c.	<b>Proposed</b>
	Scottish Borders	2016-2024	<b>Scottish Borders Council</b> , Scottish Natural Heritage, Forestry Commission Scotland, Scottish Environmental Protection Agency	t.b.c.	<b>Policy support</b> Scottish Borders Council intends to produce Supplementary Guidance
<b>40.</b>	<b>Monitor SESplan Housing Land Supply</b> SESplan and SESplan member authorities will work with Homes for Scotland to develop standards for the preparation of Housing Land Audits. Prepare an annual housing audit including information on the housing land supply and other factors such as completions and significant appeal decisions in	2016-2032	<b>SESplan, SESplan member authorities</b> , Homes for Scotland	n/a	<b>Underway</b>

	consultation with Homes for Scotland.				
41.	<b>Monitor need for specialist housing provision.</b> SESplan member authorities will work together through the South-east Scotland Housing Forum to update housing need information for communities with specialist housing needs.	2016-2032	<b>SESplan member authorities</b>	n/a	<b>Proposed</b>
42.	<b>Review Remit and Purpose of SESplan Housing Market Partnership</b> Review the remit and purpose of SESplan Housing Market Partnership. Consider whether the remit could be expanded to include additional joint action to support the rate of market and affordable housing delivery.	2016-2018	<b>SESplan member authorities, Homes for Scotland, SESplan Housing Market Partnership</b>	n/a	<b>Proposed</b>

**APPENDIX 3 –**

# Housing Background Paper



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## Executive Summary

## Executive Summary

1 The Strategic Development Plan (SDP) sets out the number of additional homes to be delivered over the period 2018 to 2030 for the SESplan Single Housing Market Area and for each of the SESplan Member Authorities. These Housing Supply Targets must be reasonable and deliverable. The Housing Supply Targets agreed by SESplan Member Authorities (Table 1) are robust, supported by evidence and have been set using a methodology designed to be compliant with Scottish Planning Policy and related guidance.

**Table 1 SESplan Housing Supply Targets 2018-2030**

	Affordable		Market		Combined	
	Annual Average	Period Total	Annual Average	Period Total	Annual Average	Period Total
City of Edinburgh	1,200	14,400	1,220	14,640	2,420	29,040
East Lothian	189	2,268	330	3,960	519	6,228
Fife	262	3,144	605	7,260	867	10,404
Midlothian	165	1,980	369	4,428	534	6,408
Scottish Borders	128	1,536	220	2,640	348	4,176
West Lothian	300	3,600	333	3,996	633	7,596
<b>SESPLAN</b>	<b>2,244</b>	<b>26,928</b>	<b>3,077</b>	<b>36,924</b>	<b>5,321</b>	<b>63,852</b>

2 The SESplan Housing Supply Targets have been informed by a Housing Need and Demand Assessment (HNDA), certified as credible and robust by the Centre of Housing Market Analysis in 2014. The HNDA identified three alternative futures based on different economic and demographic assumptions. The output of each alternative future was numerical estimates of housing need and demand. Following analysis SESplan has concluded that the most likely outcome will fall somewhere between the Steady Recovery and Wealth Distribution alternative futures. Steady Recovery is based on a lower economic growth future with lower migration. Wealth Distribution is based on a higher level of economic growth than Steady Recovery, with a medium level of migration. It also is based on reducing income inequalities and wider distribution of wealth in the City Region. Of these two alternative futures, reflecting a more ambitious approach to growth, the Wealth Distribution alternative future estimates have been used to inform the Housing Supply Targets.

3 The HNDA numerical estimates have been used alongside other relevant factors to identify the Housing Supply Targets. These include the need to align with the agreed SESplan Spatial Strategy (i.e. More provision within Edinburgh), availability of resources to deliver required supporting infrastructure and the rate of past and recent completions.

4 The distribution of Housing Supply Targets reflects the SDP Spatial Strategy. City of Edinburgh will be providing a higher proportion of the housing supply target than the proportion of the housing requirement set out in SDP1 and the Housing Land Supplementary Guidance. This will result in proportional levels housing being located closer to where future jobs are. Additional commuting will

## Executive Summary

be minimised and there expected benefits in terms of minimising carbon and nitrogen oxide emissions. Air quality impacts on already congested traffic corridors will be minimised. Limited dispersal of housing from Edinburgh will be met in existing housing allocations on growth corridors.

**5** The majority of need and demand for housing is for households who cannot afford buy or rent at market prices - owner occupation or private rent tenures. They require affordable tenures of housing where rent or purchase prices are lower than market levels. Affordable Housing Supply Targets have not been set at a level that would meet the full estimate of need for affordable homes estimated by the HNDA. Delivery of affordable housing is severely limited by funding, despite planned increases from Scottish Government. Affordable Housing Supply Targets reflect this significant need for affordable housing, but are set at a level that is realistic and deliverable. Market Housing Supply Targets exceed the demand identified by the Wealth Distribution HNDA estimate. This is because market housing can help meet some but not all of the shortfall in the need for affordable housing through more affordable types of market housing, help to buy and an expanded role for new build private rented sector housing. The Housing Supply Targets overall are therefore ambitious but are considered deliverable over the 12 year period from 2018 to 2030. Even so, achieving them will require a step change in the rate of housebuilding for both market and affordable housing.

**6** The SDP also sets out the level of housing land required to enable the Housing Supply Targets to be met. This is known as the Housing Land Requirement (Table 2). It is calculated by adding a 10-20% generosity allowance to the Housing Supply Targets. A 10% margin has been used to calculate the Housing Land Requirements for SESplan. This is justified because the Housing Supply Targets are set at ambitious but justified levels in excess of demand indicated by the HNDA. Greater levels of housing land supply than the Housing Land Requirements will not increase the likelihood of level of housing delivery required by the Housing Supply Targets. The viability of housing sites could be undermined by an over-supply of land by reducing the level of returns to developers and landowners. This also creates uncertainty for communities and infrastructure providers where large supplies of land are identified for housing but do not come forward due to an excess of housing sites compared to the level of demand.

**Table 2 Housing Land Requirements 2018-30 (Housing Supply Targets +10%)**

Area	Combined Housing Supply Targets		Housing Land Requirements	
	Annual Average	Period Total	Annual Average	Period Total
City of Edinburgh	2,420	29,040	2,662	31,944
East Lothian	519	6,228	571	6,851
Fife	867	10,404	954	11,444
Midlothian	534	6,408	587	7,049
Scottish Borders	348	4,176	383	4,594
West Lothian	633	7,596	696	8,356
<b>SESplan</b>	<b>5,321</b>	<b>63,852</b>	<b>5,853</b>	<b>70,237</b>

## Executive Summary

**7** For the 2018-2030 period it is estimated that additional housing land supply will be required in City of Edinburgh to meet the Housing Land Requirement. This is estimated to be up to land for 8,000 additional dwellings over current supplies. Of this, land for approximately 5,000 dwellings is expected to come forward through windfall housing sites. Additional housing land above supplies in emerging LDPs is not expected to be needed in East Lothian, Fife, Midlothian, Scottish Borders and West Lothian. Estimated supplies of housing land in those SESplan member authorities for the 2018-2030 period indicate that there will be varying levels of housing land surpluses to meet the Housing Land Requirements.

**8** Indications of the scale of housing required have identified for 2030-2038 (Table 3) based on the HNSA Wealth Distribution estimates. These figures do not take into account wider factors that may influence delivery, given the difficulty of making robust assumptions for the 2030's at this time. Instead the distribution of Housing Supply Targets between the SESplan member authorities for the 2018-2030 period has been used as a proxy. These indicative scale of housing required is higher than the Housing Supply Targets for the 2018-30 period because the affordable housing levels have not been reduced because of levels of funding available to deliver them. They will require a further step-change in the rate of delivery of affordable housing if there is not to be a shortfall in affordable housing delivery.

**Table 3 Indicative Scale of Housing Required 2030-2038**

Plan Area	2030-38 Distribution	Annual Average	Period Total
City of Edinburgh	45.5%	2,491	19,928
East Lothian	9.8%	534	4,274
Fife	16.3%	892	7,139
Midlothian	10%	550	4,397
Scottish Borders	6.5%	358	2,866
West Lothian	11.9%	652	5,212
<b>SESplan</b>	<b>100%</b>	<b>5,477</b>	<b>43,816</b>

## 1 Introduction

# 1 Introduction

## Purpose

**1.1** This paper sets out the background, process and justification for the Housing Supply Targets and Housing Land Requirement set out in the SESplan Strategic Development Plan (SDP). These Housing Supply Targets and Housing Land Requirements will be used in subsequent Local Development Plans (LDPs) and Local Housing Strategies.

**1.2** The SDP is intended to be a concise, map based document. It does not therefore set out the justification and background behind the Housing Supply Targets and Housing Land Requirements in detail. This paper therefore sets out the detailed process for identifying the Housing Supply Targets and provides the justification and evidence that underpins them and the Housing Land Requirements in the plan.

**1.3** For the purposes of this note the the following definitions of Housing Supply Targets and Housing Land Requirements are used. They are taken from Scottish Planning Policy (see 2 'Policy Context' for more detail).

### Definitions

Housing Supply Target<sup>(1)</sup>: a policy view of the number of homes the authority has agreed will be delivered in each housing market area over the periods of the development plan and local housing strategy, taking into account wider economic, social and environmental factors, issues of capacity, resource and deliverability, and other important requirements such as the aims of National Parks. The target should be reasonable, should properly reflect the HNDA estimate of housing demand in the market sector, and should be supported by compelling evidence.

Housing Land Requirement<sup>(2)</sup>: Within the overall housing supply target, plans should indicate the number of new homes to be built over the plan period. This figure should be increased by a margin of 10 to 20% to establish the housing land requirement, in order to ensure that a generous supply of land for housing is provided.

**1.4** The rest of this report is structured as follows:

- Chapter 2 sets out the key policies and guidance that Housing Supply Targets and Housing Land Requirement, and the process for identifying them that they must comply with. Extracts of all related policies and guidance are set out in Appendix A.
- Chapter 3 sets out the background context for setting the Housing Supply Targets. This includes the 2015 HNDA and the work undertaken up to the 2015 SESplan Main Issues Report.
- Chapter 4 sets out the agreed methodology for identifying Housing Supply Targets. Each individual step taken is then set out in chapters 5, 6, 7 and 8. Chapter 9 then sets out the combined Housing Supply Targets.

1 SPP Paragraph 115

2 SPP Paragraph 116

## Introduction 1

- Chapter 10 sets out the Housing Land Requirements and the justification for choosing a 10% generosity margin.
- Chapter 11 sets out a comparison of the estimated housing land supplies and the Housing Land Requirements. This indicates what the level of housing allocations will need to be in LDPs after the adoption of this SDP.

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## 2 Policy Context

## 2 Policy Context

### Policy Context

Scottish Planning Policy (SPP) and the Housing Need and Demand Assessment (HNDA) Manager's Guide are the most relevant documents setting out guidance and requirements for identifying Housing Supply Targets and Housing Land Requirements. The critical sections of these documents are set out here with key messages for SESplan identified. All relevant sections of all relevant guidance in set out in Appendix A.

### SPP

**2.1** SPP sets out the requirements for SDPs on housing matters.

113. Plans should be informed by a robust housing need and demand assessment, prepared in line with the Scottish Government's HNDA Guidance.

115 Plans should address the supply of land for all housing. They should set out the housing supply target (separated into affordable and market sector) for each functional housing market area, based on evidence from the HNDA.

115 The housing supply target is a policy view of the number of homes the authority has agreed will be delivered in each housing market area over the periods of the development plan and local housing strategy, taking into account wider economic, social and environmental factors, issues of capacity, resource and deliverability, and other important requirements such as the aims of National Parks.

115 The target should be reasonable, should properly reflect the HNDA estimate of housing demand in the market sector, and should be supported by compelling evidence.

116 Within the overall housing supply target, plans should indicate the number of new homes to be built over the plan period. This figure should be increased by a margin of 10 to 20% to establish the housing land requirement.

118 Strategic development plans should set out the housing supply target and the housing land requirement for the plan area, each local authority area, and each functional housing market area. They should also state the amount and broad locations of land which should be allocated in local development plans to meet the housing land requirement up to year 12 from the expected year of plan approval, making sure that the requirement for each housing market area is met in full. Beyond year 12 and up to year 20, the strategic development plan should provide an indication of the possible scale and location of housing land, including by local development plan area.

### Housing Need and Demand Assessment Manager's Guide

**2.2** This provides advice on preparation and use of HNDAs, including their role in informing Housing Supply Targets. The key related sections are set out below (emphasis added).

9.1 While it is expected that there is a clear alignment between the HNDA and the Housing Supply Target the two are not the same and are therefore are not expected to match.

## Policy Context 2

9.2 The Housing Supply Target will take the HNDA as its starting point, but will consider policy and practical considerations to reach a view on the level of housing that can actually be delivered over a defined period.

9.3 The HNDA gives a statistical estimate of how much additional housing is required, whereas the Housing Supply Target gives an estimate of how much additional housing can be actually be delivered by authorities.

13.1 The Housing Supply Target feeds into both LHSs and Development Plans. It sets out the estimated level of additional housing that can actually be deliverable, on the ground, over the period of the plan. The Housing Supply Target represents a policy interpretation of the HNDA and therefore should be considered separately to the HNDA.

13.4 In setting and agreeing the Housing Supply Target, authorities should give full consideration to those factors which may have a material impact on the pace and scale of housing delivery such as:

- economic factors which may impact on demand and supply
- capacity within the construction sector
- the potential inter-dependency between delivery of market and affordable housing at the local level
- availability of resources
- likely pace and scale of delivery based on completion rates
- recent development levels
- planned demolitions
- planned new and replacement housing or housing brought back into effective use.

13.5 Consideration of these factors could result in a Housing Supply Target figure which may be lower or higher than the housing estimate in the HNDA.

### What this Means for the SESplan Housing Supply Targets:

- They should be based on the SESplan HNDA but informed by other relevant factors. Therefore the Housing Supply Targets are not expected to match the estimates from the HNDA.
- Separate Market and Affordable Housing Supply Targets are required. The market HNDA estimates should be fully reflected in the Market Housing Supply Targets.
- They are required to be realistically deliverable over a plan period and should not be unachievable targets solely based on HNDA estimates.
- SDP2 should set Housing Supply Targets for the single SESplan Housing Market Area (Chapter 3) and the six SESplan Member Authorities.

## 3 Background Context

### 3 Background Context

**3.1** This chapter sets out the context to preparing the Housing Supply Targets and Housing Land Requirements up to the approval of the SESplan Main Issues Report for publication in May 2015.

#### **SDP1 & Housing Land Supplementary Guidance**

**3.2** SDP1 was approved in June 2013 subject to Ministerial modifications which required the production of Housing Land Supplementary Guidance (SG). Adopted in October 2014, this set out how the housing requirements<sup>0</sup> for 2009-2019 and 2019-2024 periods should be met across the six SESplan LDP areas. The terminology around housing requirements, housing land requirements and housing supply targets changed in the revised 2014 SPP.

**3.3** The Housing Land SG housing requirements for the six SESplan member authorities were required to add up to the 2011 HNDA estimate of 107,545 homes over the 2009-2024 period<sup>0</sup>. Using an analysis of environmental and infrastructure opportunities, capacities and constraints, the housing requirements were agreed for each member authority. Since then SESplan Member authorities have been preparing LDPs, providing generous levels of housing land to meet the housing requirements of the SDP and Housing Land SG.

#### **Housing Need and Demand Assessment**

**3.4** A HNDA sets out information to support land use planning. Using a modelling tool with demographic and economic inputs, it provides estimates of the total additional future housing need and demand over a 20 year period. This is split by households who can afford owner occupation; private rent; below market rent and social rent. These estimates are then used to inform the Housing Supply Targets.

**3.5** The following section briefly summarises the 2015 HNDA process. It focuses on the estimates generated by the HNDA and how they were used in the Main Issues Report. The full HNDA documentation is available on a 2015 [HNDA page](#) on the [SESplan Website](#), including a [Quick Guide](#), [Executive Summary](#) and [Final Report](#).

#### **HNDA2 Process**

**3.6** Preparation of HNDA began in 2013. It was directed by Core Housing Market Partnership, a group made up of planning and housing officers in each of the six authorities. This is in accordance with the HNDA guidance.

**3.7** The draft HNDA2 Report was produced in summer 2014 and made available for public consultation for eight weeks. Full details of the consultation are available in the [13 October 2014 SESplan Joint Committee Report](#). Based on consultation feedback, the HNDA report and estimates were updated to take account of the 2012 based population projections. The HNDA was submitted to the Centre for Housing Market Analysis in early 2015. On March 27 2015, they found the HNDA robust and credible. Therefore the findings of the HNDA should not be considered further at the SDP, or any subsequent LDP examinations.

## Background Context 3

### SESplan Functional Housing Market Area

**3.8** HNDAs are required to assess housing need and demand within Housing Market Areas. Housing Supply Targets are required to be set at SDP level, functional Housing Market Area and member authority level. Therefore the HNDA report identifies the functional Housing Market Areas within the SESplan Area.

**3.9** Edinburgh lies at the centre of the SESplan region. Housing sales data shows that Edinburgh has a housing market that extends beyond its local authority boundaries. The [SESplan Housing Market Area Assessment](#) concluded that all SESplan member authority areas should be taken as being within City of Edinburgh's wider functional Housing Market Area, albeit that the strength of this relationship varies between the surrounding sub-market areas, tending to weaken as distance from the city increases. This builds on conclusions from HNDA1 (2011) which identified that SESplan was one functional Housing Market Area, with sub Housing Market Areas operating within it. Whilst there are 15 sub-Housing Market Areas, there is only one functional SESplan Housing Market Area. Housing Supply Targets are not required to be set at sub-housing market area level. Therefore the SDP has only set Housing Supply Targets for the SESplan Housing Market Area and each of the SESplan member authorities.

**3.10** For more detail see the [SESplan HMAA](#) and Section 3 of the [HNDA Report](#).

### Using 2012 Base Projections

**3.11** The Final 2015 HNDA report contains estimates based on both the 2010 and 2012 based National Records of Scotland household projections. Household projections are produced by National Records of Scotland every two years. As these are the first set of household projections following the 2011 Census, significant changes have been made to the method used to produce these projections. The 2012 based household projections incorporate data from the 2011 Census as well as 1991 and 2001 Censuses combined with the most recent population projections and household survey data. Given this, 2012 based household projections are considered to be more robust than 2010 based projections and reflect changes in household formation rates more accurately. Therefore, only the 2012-based HNDA scenarios have been considered for use in the Housing Supply Target process.

**3.12** The 2012 based household projection figures project a slower rate of growth than estimated in previous projections and they suggest that the economic downturn and affordability issues have impacted upon the ability of people to form new households.

### Summary of HNDA2 Alternative Futures

**3.13** The HNDA2 Report has four different output estimates of additional housing required based on the 2012 household projections. These are referred to as the four alternative futures and are named as 'Default', 'Steady Recovery', 'Wealth Distribution' and 'Strong Economic Growth'.

**3.14** The alternative futures are based on different economic and demographic assumptions. Each of these different alternative futures was used in the HNDA tool to produce the different estimates. The default scenario is not a true alternative future, rather it tests the HNDA tool with all assumptions in their default setting as selected by CHMA and does not take account of variables specific to the SESplan area. Therefore it has not been used to inform the Housing Supply Targets. The remaining three alternative futures are described as follows on page 143 of the HNDA Report:

### 3 Background Context

**Steady Recovery** - describes a steady upturn in the economy, characterised by positive economic activity in some areas and some reduction in housing development constraints, limited increases in GVA, productivity and employment growth, with public spending cuts and welfare reform continuing to impact. Migration to the SESplan City Region area is lower than compared with other scenarios due to the lower level of economic growth than experienced previously.

**Wealth Distribution**<sup>(3)</sup> - portrays a wide distribution of wealth within the region, creating more high and low skilled jobs and increasing economic activity throughout the working age population. Whilst helping to reduce economic inequalities, bringing more people back into work in lower skilled employment lowers GVA and workforce productivity.

**Strong Economic Growth** - characterised by major increases in economic wealth, productivity and high levels of employment. The SESplan area becomes one of the fastest growing regions of the UK in population terms, drawing in workers from other parts of the country.

**3.15** Assumptions are made about the impact of these different scenarios on a range of economic/ demographic variables, so that each scenario is associated with a different set of values or HNDA 'inputs' The different variables were:

- Household projections migration level - set at low default or high levels of migration
- Existing need clearance period - number of years for the existing unmet housing need and demand at 2012 to be added to newly arising need and demand
- Average median household income growth - percentage growth in incomes by SESplan member authority to 2040
- Change in income distribution - proportional distribution of incomes and whether incomes become closer or income inequality increases
- Projected house price increases
- Below market rent growth - change in rental levels

**3.16** The different level the variables were set at were informed by an Oxford Economics Study<sup>(4)</sup> and decisions by the Core Housing Market Partnership. More details are on the alternative futures and their assumptions are available in Chapter 5 'Evaluating Alternative Futures' and section 9 of the HNDA Report.

**3.17** The outputs of each of the alternative futures are estimates for housing need and demand each of the four tenure categories (social rent, below market rent, private rented sector and owner occupied). Estimates are provided for each year from 2012 to 2038. These estimates are summarised in Table 3.1 'SESplan Housing Need & Demand Estimates 2012-2038' at the SESplan HMA level as totals and annual averages.

3 This scenario was re-named as Increasing Economic Activity with more High and Low Skilled Jobs in the Main Issues Report under Issue F: Housing Land across the SESplan Area

4 HNDA Report Supporting Documents 5, 6 and 7

## Background Context 3

**Table 3.1 SESplan Housing Need & Demand Estimates 2012-2038**

	Social Rent	Below Market Rent	Private Rented Sector	Owner Occupier	Total
Steady Recovery (total)	70,487	18,717	15,452	33,889	138,545
Steady Recovery (annual average)	2,611	693	572	1,255	5,131
Wealth Distribution (total)	75,747	26,217	23,809	43,723	169,496
Wealth Distribution (annual average)	2,805	971	882	1,619	6,278
Strong Economic Growth (total)	88,865	23,099	33,090	56,292	201,346
Strong Economic Growth (annual average)	3,291	856	1,226	2,085	7,457

**Key Findings & Conclusions from HNDA**

**3.18** The HNDA concludes that a 25% increase in households is projected from 2012 to 2037 with the number of households projected to increase from 559,838 in 2012 to 700,389 in 2037. This is significant compared a 17% increase across Scotland.

**3.19** It is clear from the HNDA estimates that the need for affordable housing (social rent and below market rent) significantly outstrips that of market housing (private rented sector and owner occupier). In all scenarios affordable need is over 50% of the total estimate. For Steady Recovery and Wealth Distribution it is respectively 64% and 60% of the total need. This reflects the findings of sections 5.9 to 5.12 of the HNDA Report. This highlights the high house prices and rents in the region, particularly in and around Edinburgh. This results in a high proportion of the additional housing need and demand falling into the affordable categories. These households are considered not able to afford owner occupier or private rent tenures.

**3.20** Page 143 of the HNDA Report concludes that 'steady recovery' and 'wealth distribution' are most likely to represent the future for the SESplan area on the basis of rigorous analysis by the Housing Market Partnership, informed by Oxford Economics research. Strong Economic Growth was considered the least likely alternative future to take place based on the available evidence. More detail on findings from the HNDA are set out in Section 10 of the [HNDA Report](#).

**Main Issues Report**

**3.21** The SESplan Main Issues Report did not set out Housing Supply Targets or Housing Land Requirements for the six SESplan Authorities. Instead each of the future scenarios were presented as options on which to base Housing Supply Targets. There were four issues in the Main Issues Report on housing related matters. A summary of these is set out below. The Main Issues Report gave a clear indication of what factors were going to influence Housing Supply Targets, what approximate level the SESplan HMA Housing Supply Target would be set at and how it would be

## 3 Background Context

met between the six SESplan member authorities. For more detail for the justification behind these issues see the Place for Communities Section of the [Main Issues Report](#) and section 4.62 to 4.74 of the Monitoring Statement.

**3.22** In summary:

- The Main Issues Report preferred option relating to Housing Supply Targets was for the 'Steady Recovery' alternative future to be used to inform them;
- For Edinburgh, a higher proportion of the SESplan Housing Market Area Housing Supply Target is to be met there compared to the previous SDP. This is to accord with the preferred spatial strategy of the SDP; and
- The generosity margin to calculate Housing Land Requirements should be set at 10% with local flexibility to increase this.

### Main Issues Report Feedback

**3.23** The Main Issues Report consultation period ran for 10 weeks from mid July to mid September 2015. The SESplan Core Team analysed all the responses from September to November. A [report](#) of the analysis was presented to the SESplan Joint Committee in December 2015. Appendix 1 of the report provides detailed summaries of all the responses received. The key points relating to the housing issues above are set out below.

### Issue F Housing Land Across the SESplan Area

**3.24** Most respondents supported the preferred option of using Steady Recovery was the most popular of the options but responses were highly polarised depending on the respondee type. Individuals and community related groups predominantly favoured Steady Recovery. They argued that the higher 2015 HNDA scenarios do not match economic trends and are 'speculative and unrealistic'; and the higher 2015 HNDA scenarios would result in unacceptable, environmental, greenspace and cultural impacts.

**3.25** The majority of development interest groups supported the alternative options with most preferring 'Strong Economic Growth'. The most common reasons for this position included: 'Steady Recovery' does not reflect the intentions of City Deal; SDP2 should have ambitious growth scenarios where a lack of housing does not restrict growth; and 'Steady Recovery' is not ambitious.

**3.26** Section 5 of this report sets out how the use of the HNDA scenarios was re-evaluated following the consultation on the Main Issues Report.

### Issue G Housing Land in Edinburgh

**3.27** 49% of responses supported the preferred option of Edinburgh meeting a significant proportion of its need and demand. This was felt to be an appropriate balance reflecting regional relationships and that Edinburgh meeting all need and demand would not be desirable or deliverable due environmental and infrastructure capacity issues.

**3.28** A significant proportion of those who supported concentration in the City of Edinburgh were individuals and community groups / councils located outside Edinburgh. These groups were concerned about the impacts on infrastructure, the Green Belt and increased commuting on congested transport networks back into Edinburgh.

## Background Context 3

**3.29** Those supporting the dispersal option stated that infrastructure and environmental capacity issues in the City place a limit on housing delivery. A greater level of development in Edinburgh would affect its cultural and built heritage.

**3.30** Section 6 and 7 of this report describe the process for setting the City of Edinburgh affordable and market Housing Supply Targets.

### Issue H A Generous Supply

**3.31** In terms of the level of generosity, 46% of respondents supported none of the options with 44% supporting the preferred option of setting a 10% generosity allowance and providing LDPs with flexibility. A number of respondents considered that a generosity allowance is not needed at all as too much land has already been allocated for housing exceeding local infrastructure capacity.

**3.32** Others considered that the concept of a generous supply is to ensure more land is allocated than is required. They stated that there has been a significant shortfall to date in delivering SDP1, due to member authorities including ineffective sites, and failure to grant permission for windfall sites. Therefore to avoid a repeat of this, SDP2 should set a generosity allowance of 20%.

**3.33** A number of respondents stated that the preferred option of allowing LDPs flexibility to increase the generosity margin was contrary to SPP. It is for SDPs to set the generosity margin and Housing Land Requirements and therefore there is no ability for LDPs to vary from these.

**3.34** The approach to generosity and its justification is set out in Section 10 of this report.

### Issue I Affordable Housing

**3.35** 46% of respondents supported the preferred option of directing LDPs to seek a minimum of 25% affordable housing provision on market led sites. This affords flexibility to target affordable housing where it is in greatest need. However, it was noted that the significant level of need for affordable housing should not be seen in its entirety to be met through the developer obligations framework as this may render sites unviable.

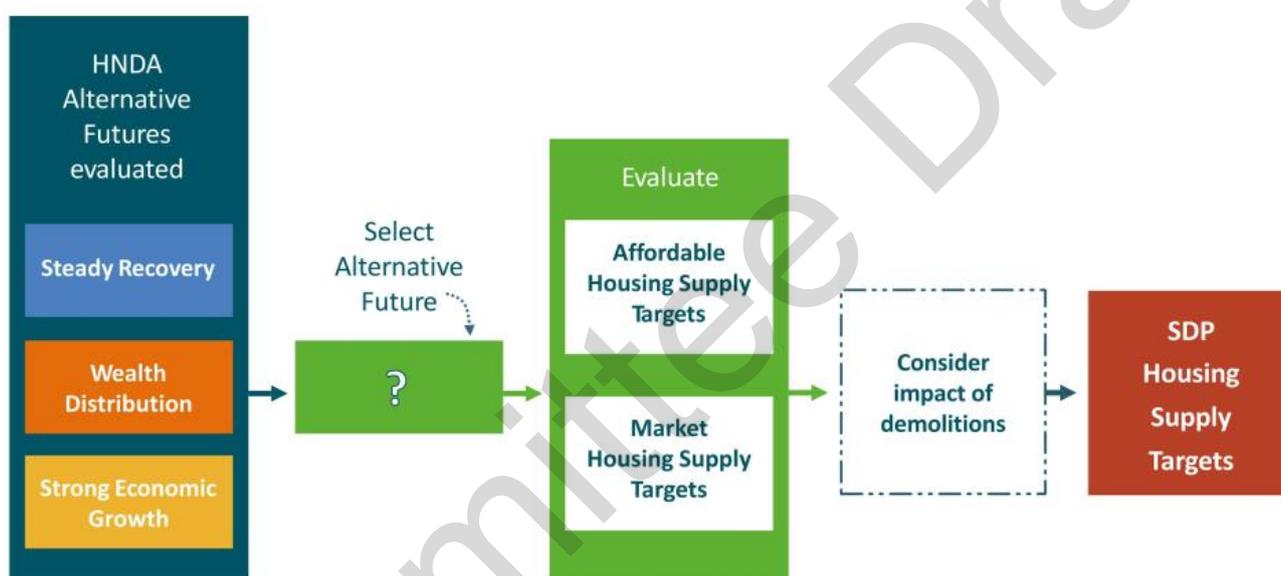
**3.36** The approach to affordable housing and affordable Housing Supply Targets is set out in Section 6 of this report.

## 4 Methodology for Setting Housing Supply Targets

### 4 Methodology for Setting Housing Supply Targets

**4.1** A methodology compatible with the Housing Supply Target requirements set out in SPP, the HNDA Managers Guide and Local Housing Strategy Guidance was identified and reviewed following the Main Issues Report consultation. This methodology was agreed between the SESplan member authorities and is set out below in Figure 4.1 and summarised in steps below. Steps 2 and 3 are undertaken at the same time and do not follow each other. Neither the market or affordable Housing Supply Target can be set independently without reference to each other and the combined Housing Supply Target.

**Figure 4.1 Housing Supply Target Process**



- 1. Review HNDA alternative futures to inform Housing Supply Targets.** Considerations are the economic and demographic assumptions behind the 2015 HNDA scenarios, current economic trends and the Main Issues Report consultation responses. - Chapter 5 5 'Evaluating Alternative Futures'
- 2. Set affordable Housing Supply Targets.** Affordable Housing Supply Targets will be set at a rate that is considered realistic and deliverable. Affordable housing delivery is strongly linked to the availability of funding, which comes from a range of sources. Affordable Housing Supply Targets need to be based on analysis of available resources to deliver affordable housing. Planning and spatial strategy considerations are also relevant. This is demonstrated by affordable housing delivery increasing in the post financial crash period. - Chapter 6 6 'Affordable Housing Supply Targets'
- 3. Set market Housing Supply Targets.** Whilst reflecting the HNDA estimate of housing need and demand in the market sector, market Housing Supply Targets will be set at levels that can be delivered by considering a range of factors. These are planning factors and spatial strategy; past and recent development levels; availability of resources to deliver development, including infrastructure funding; and capacity within the construction sector. Chapter 7 7 'Market Housing Supply Targets'
- 4. Impact of Demolitions.** As Housing Supply Targets are net figures, both affordable and market Housing Supply Targets will be lowered by the respective level of planned demolitions. Windfall demolitions will also be considered if properly evidenced. - Chapter 8 8 'Demolitions'

## Methodology for Setting Housing Supply Targets 4

**4.2** The agreed Housing Supply Targets (Chapter 9) were identified following the completion of this process.

### SDP2 Housing Supply Target Plan Periods

**4.3** SPP requires the Housing Supply Targets in the SDP to be set 12 years from the year of plan adoption. Previously in the Main Issues Report this was assumed to be the 2017/18 financial year. In the Main Issues Report, information was given to 2029. However, the SDP is expected to be adopted in 2018. Therefore the Housing Supply Targets in the Proposed Plan cover the 2018 to 2030 period.

**4.4** Whilst the HNDA provides data from 2012 onwards, the Housing Supply Targets will apply from 1st April 2018. Housing Supply Targets do not cover the same period as the HNDA, as they are not required to. As set out in footnote 6 of page 25 of the Main Issues Report, SDP1 and the Housing Land SG set the strategy and housing requirements up until the approval of SDP2 in 2018. Shortfalls in the delivery housing against the SDP1 & Housing Land SG Housing Requirements in years pre April 2018 will not be brought forward and used to inform effective housing land levels post end March 2018.

### Use of HNDA Data

**4.5** [HNDA Supporting Document 4](#) sets out the estimates for each of the scenarios by sub-housing market area. These have been combined to identify estimates at member authority and SESplan Housing Market Area level. Each table has a column for the different tenure and a row for each year from 2012 to 2038. As SDP2 is setting Housing Supply Targets for the 2018-2030 period and providing an indication of the scale of housing required for the 2030-2038 period, there were three different options for how these HNDA estimates could be used. These were:

1. Annual average of estimates from 2012 to 2038 to cover both SDP periods;
2. Separate annual averages using 2018 to 2030 and 2030 to 2038 estimates; or
3. Annual average of 2012 to 2030 estimates for the 2018-30 period and annual average of estimates for 2030 to 2038.

**4.6** The decision was taken to use the third option. This was because:

- The first option smooths out the higher estimates of housing need that occur in the earlier years of the HNDA estimates. 2018-2030 Housing Supply Targets would then not reflect this higher need earlier in the plan period.
- Whilst the second option exactly matching the estimates to the SDP periods, it would not fully take account of the backlog of housing need which has been added to the first 10 years of the HNDA estimates (2012-2022).
- The third option allows for the full backlog of need to influence the Housing Supply Targets without smoothing need and demand across the two Housing Supply Target periods. The backlog of housing need is cleared in the HNDA estimates over 10 years from 2012. Using this option results in higher estimates than the second option as the affordable housing need in the earliest HNDA years.

**4.7** Using the third option, the following member authority totals for the HNDA estimates are used for the three scenarios, separated into the 2018-2030 and 2030-38 periods. Detailed calculations for the 12 years of the 2018-2030 period are set out in Appendix B 'Housing Need and Demand Assessment Data'. Affordable estimates represent the combined the social rent and below market rent estimates. Market estimates represent the combined the private rented sector and owner occupier estimates.

## 4 Methodology for Setting Housing Supply Targets

### 2018-2030 Period Estimates

**Table 4.1 Steady Recovery HNDA Estimates**

Authority	Affordable (Annual Average)	Affordable (Period)	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
City of Edinburgh	2,136	25,633	1,147	13,764	3,283	39,397	58%
East Lothian	336	4,032	179	2,148	515	6,180	9%
Fife	378	4,563	269	3,228	647	7,764	12%
Midlothian	296	3,552	112	1,344	408	4,896	7%
Scottish Borders	128	1,536	75	900	203	2,436	4%
West Lothian	341	4,092	220	2,640	561	6,732	10%
<b>SESPLAN</b>	<b>3,615</b>	<b>43,381</b>	<b>2,002</b>	<b>24,024</b>	<b>5,617</b>	<b>67,405</b>	
Proportion	64%		36%				

## Methodology for Setting Housing Supply Targets 4

Table 4.2 Wealth Distribution HNDA Estimates

Authority	Affordable (Annual Average)	Affordable Period	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
City of Edinburgh	2,412	28,944	1,496	17,952	3,908	46,896	59%
East Lothian	370	4,440	183	2,196	553	6,636	8%
Fife	457	5,484	347	4,164	804	9,648	12%
Midlothian	325	3,900	117	1,404	442	5,304	7%
Scottish Borders	165	1,980	113	1,356	278	3,336	4%
West Lothian	380	4,560	250	3,000	630	7,560	10%
<b>SESPLAN</b>	<b>4,109</b>	<b>49,308</b>	<b>2,506</b>	<b>30,072</b>	<b>6,615</b>	<b>79,380</b>	
Proportion	62%		38%				

## 4 Methodology for Setting Housing Supply Targets

**Table 4.3 Strong Economic Growth HNDA Estimates**

Authority	Affordable (Annual Average)	Affordable Period	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
City of Edinburgh	2,661	31,932	1,911	22,932	4,572	54,864	60%
East Lothian	380	4,560	220	2,640	600	7,200	8%
Fife	522	6,264	427	5,124	949	11,388	12%
Midlothian	323	3,876	135	1,620	458	5,496	6%
Scottish Borders	199	2,388	155	1,860	354	4,248	5%
West Lothian	380	4,560	317	3,804	697	8,364	9%
<b>SESPLAN</b>	<b>4,465</b>	<b>53,580</b>	<b>3,165</b>	<b>37,980</b>	<b>7,630</b>	<b>91,560</b>	
Proportion	59%		41%				

## Methodology for Setting Housing Supply Targets 4

## 2030-38 Period HNDA Estimates

Table 4.4 Steady Recovery HNDA Estimates

Authority	Affordable (Annual Average)	Affordable Period	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
City of Edinburgh	1,883	15,064	846	6,764	2,729	21,828	69%
East Lothian	233	1,863	179	1,430	412	3,293	10%
Fife	144	1,148	161	1,287	304	2,435	8%
Midlothian	140	1,122	102	818	243	1,940	6%
Scottish Borders	-15	-118	-17	-138	-32	-256	-1%
West Lothian	178	1,427	142	1,139	321	2,566	8%
<b>SESPLAN</b>	<b>2,563</b>	<b>20,506</b>	<b>1,413</b>	<b>11,300</b>	<b>3,976</b>	<b>31,806</b>	
Proportion	64%		36%				

## 4 Methodology for Setting Housing Supply Targets

**Table 4.5 Wealth Distribution HNDA Estimates**

Authority	Affordable (Annual Average)	Affordable Period	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
City of Edinburgh	2,021	16,166	1,652	13,218	3,673	29,384	67%
East Lothian	273	2,187	189	1,510	462	3,697	8%
Fife	250	2,001	296	2,368	546	4,369	10%
Midlothian	179	1,432	116	928	295	2,360	5%
Scottish Borders	30	240	39	309	69	549	1%
West Lothian	236	1,887	196	1,564	432	3,451	8%
<b>SESPLAN</b>	<b>2,989</b>	<b>23,913</b>	<b>2,488</b>	<b>19,897</b>	<b>5,477</b>	<b>43,816</b>	
Proportion	55%		45%				

## Methodology for Setting Housing Supply Targets 4

Table 4.6 Strong Economic Growth Estimates

Authority	Affordable (Annual Average)	Affordable Period	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
City of Edinburgh	2,318	18,543	2,413	19,304	4,731	37,847	67%
East Lothian	275	2,200	264	2,111	539	4,311	8%
Fife	334	2,671	431	3,447	765	6,118	11%
Midlothian	166	1,326	155	1,236	320	2,562	5%
Scottish Borders	77	617	102	815	179	1,432	3%
West Lothian	223	1,780	290	2,322	513	4,102	7%
<b>SESPLAN</b>	<b>3,392</b>	<b>27,137</b>	<b>3,654</b>	<b>29,235</b>	<b>7,047</b>	<b>56,372</b>	
Proportion	48%		52%				

## 5 Evaluating Alternative Futures

### 5 Evaluating Alternative Futures

**5.1** Whilst the Main Issues Report's preferred approach was to use the 'Steady Recovery' alternative future as the basis for Housing Supply Targets, the HNDA report stated that either the 'Steady Recovery' or 'Wealth Distribution' alternative futures could represent the most likely future of the SESplan area. Whilst Main Issues Report responses indicated strong support for 'Steady Recovery' to be used to inform Housing Supply Targets, a significant number of respondents states that other HNDA alternative futures should be used. Therefore the decision of which alternative futures to use was reviewed in the context of emerging economic analysis.

**5.2** This process had three main strands. The first was to review recent economic commentaries to identify which HNDA alternative future best aligns with current and projected economic trends. The second was to review some of the specific variables used in the HNDA tool for each of the alternative futures. The third was to consider the potential impacts of City Deal and how this might affect the choice of HNDA scenario.

**5.3** Chapter 3 'Background Context' set out summary descriptions for each alternative future. In order to compare each in further detail in this chapter, the following longer descriptions have been taken from Table 9.3 of the [HNDA Report](#).

#### Steady Recovery

The "Steady Recovery" alternative future anticipates the impact of a steady rate of economic growth, positive economic activity in some areas, some reductions in housing development constraints and some return to modest growth for financial and business services. It is characterised by some employment growth across the City Region.

The more deprived communities on the edge of Edinburgh and in more isolated settlements across the region may continue to have difficulty in accessing employment opportunities. While there is some population and household growth across the SESplan area, this is lower in comparison with other local alternative futures.

Most of the employment growth is generated by a recovery in financial and business services, although this is nowhere near the same growth experienced during the 2000s. Business confidence takes longer than expected to return which impacts on timescales for anticipated large scale developments although some development continues in west of City of Edinburgh / West Lothian.

#### Wealth Distribution

Compared with "strong economic growth", which is focused on increasing economic wealth and productivity, this alternative future anticipates a wider distribution of wealth within the city region, creating more high and low skilled jobs and increasing economic activity throughout the working age population.

## Evaluating Alternative Futures 5

### Strong Economic Growth

This alternative future is characterised by increasing economic wealth and productivity. It features significant population growth, effective leadership, increased innovation and results in major increases in economic output, productivity and employment.

Under this alternative future the Edinburgh City Region becomes one of the fastest growing regions of the UK in population terms, drawing in workers from other parts of the country. There is an increase in numbers of overseas higher/further education students attracted to Edinburgh due to its academic profile and quality of life. There are major increases in economic output and productivity, with high levels of employment activity throughout the working age population and a strong performance in renewables, life sciences and financial services. Economic growth promotes high growth in average household incomes.

The City region leads the way in developing new public/private funding models to support economic development and physical development including housing, with a significant recovery in relation to the construction sector.

There is strong public and private sector leadership and a clear vision for the City Region.

**5.4** The HNDA alternative futures were informed by an Oxford Economics SESplan Study<sup>(5)</sup>, as well as decisions by the Core Housing Market Partnership on demographic trends. These informed the levels for the variables for each alternative future were set at. These are set out in Table 5.1 'Variables used for HNDA Based Alternative Futures' as taken from Section 9, page 44 of the [HNDA Report](#). Table 9.1, on page 130 in the [HNDA Report](#) describes each variable.

**5.5** Those highlighted in red in Table 5.1 'Variables used for HNDA Based Alternative Futures' represent the most likely future for that variable identified by Oxford Economics or the Core Housing Market Partnership<sup>(6)</sup>. Whilst Wealth Distribution and Steady Recovery have variables set at recommended levels by Oxford Economics or the Core Housing Market Partnership, Strong Economic Growth has variables set at levels above which are considered likely to occur by either. This helped the Core Housing Market Partnership understand more clearly the scale of need and demand for new homes associated with a more unlikely level of growth. It also helped identify the conditions and factors needed to drive such change.

5 HNDA Supporting Documents 5 to 8

6 Household Projections and Existing Need Clearance Period were recommended by the Core Housing Market Partnership. The rest were based on the mostly likely outcomes identified by Oxford Economics.

## 5 Evaluating Alternative Futures

**Table 5.1 Variables used for HNDA Based Alternative Futures**

Variables in HNDA Tool	Steady Recovery	Wealth Distribution	Strong Economic Growth
Household Projections	'Low migration' using 2012 based household projections	'Principal' using 2012 based	'High migration' using 2012 based household projections
Existing Need Clearance Period	Inputted value of 10 years	Inputted value of 10 years	Inputted value of 5 years
Average (median) Household Income Growth	No real growth (Inflation Target)	Modest Increases	Reasonable growth
Change in Income Distribution	Flat (no change)	Creeping equality	Creeping inequality
Projected House Prices	'No real growth (inflation target)', 'OBR estimates' for CEC and 'modest increases' for WL	'Modest increases' with 'strong recovery' for CEC and WL	'Strong recovery'
Below Market Rent Assumption	No real growth (Inflation Target) with 'OBR estimates' for CEC and 'modest increases' for WL	'Modest increases' with 'strong recovery' for WL	'Strong recovery'

**5.6** [HNDA Supplementary Document 7](#) sets out the different levels that the variables are set at for the HNDA alternative futures. the income house prices and rent assumption variables.

### Post HNDA Economic Commentary Review

**5.7** Both [Fraser of Allander](#) <sup>(7)</sup> and [Ernst & Young Scottish Item Club](#) <sup>(8)</sup> provide respected forecasts and commentaries of the economic outlook for Scotland. The following is a summary of key messages from both organisations most recent forecasts.

#### Overall Scottish Economic Performance

**5.8** Both Ernst & Young and Fraser of Allander are predicting short term lower economic growth than 2014. Economic growth in Scotland is due to be lower than the overall UK growth rate.

“Growth in both the Scottish and UK economies is slowing and in the second quarter a gap opened up between Scotland and the UK.” – Fraser of Allander Overview (page 3)

“data do tend to show an absolute and relative – to the UK – slowdown in the growth of the Scottish economy” – Fraser of Allander Overview (page 3)

7 Fraser of Allander November 2015 Commentary

8 Scotland Forecast 2016

## Evaluating Alternative Futures 5

“While still expanding, Scotland’s economy has grown at a slower rate than expected given the pace of the UK recovery and the rise in real wages.” – Ernst & Young Economic Snapshot

“The key surveys of activity and prospects for the Scottish economy paint a relatively, but not universally, downbeat picture.” – Ernst & Young Surveys for the Future (page 14)

**5.9** Recent UK level analysis also points to downgraded future growth prospects. The [March 2016](#) announcement by the Office for Budget Responsibility downgraded future UK GDP growth to around 2% per annum for each year up to 2020.

### Edinburgh Specific Analysis

**5.10** Business and financial services is a key component of region’s, particularly Edinburgh’s economic growth. However, Fraser of Allander states that the outlook for this sector is not strong. The outlook and appraisal shows its Gross Value Added contribution had fallen 15.5% by 2012 from its 2007 peak. “There must now be a strong presupposition that the scale of the financial services sector might never return to the levels seen before the Great Recession” – Fraser of Allander Page 16

**5.11** Ernst & Young anticipate that Edinburgh and Glasgow will outpace Scottish growth over the next three years. Specifically for Edinburgh it states “*As Scotland’s capital, Edinburgh has a high concentration of public sector employment. The Scottish Government is officially opposed to austerity measures, but the reality is that the capital cannot escape job cuts entirely. Financial services is even more critical: Edinburgh banks and life funds have been severely restrained in recent years by market shifts and will remain so, while active fund management (Edinburgh’s strength) may face long-term threats from fee pressures and passive investment products.*” - Ernst & Young Key Findings Section

### Construction Sector Performance

**5.12** Both Ernst & Young and Fraser of Allander identify that the construction sector is a significant part of the recovery. However, a significant part of this is government infrastructure expenditure (e.g Borders Rail, Queensferry Crossing) and cannot be expected to continue at the same rate in the same places.

“Survey evidence suggests a positive outlook for commercial construction and for housebuilding that will continue to buoy the sector, but more construction businesses now report decreases in public procurement than increases.” – Ernst & Young page 13

“In Scotland it is the construction sector that is providing the main impetus with public spending on infrastructure underpinning growth.” –Fraser of Allander Page 7

“that the surge in Scottish construction output is almost wholly explained by a surge in spending on infrastructure, which almost quadrupled between 2012q1 and 2015q2. Other construction activity, however, rose by less than half over the same period. The data are in current prices and not seasonally adjusted but the surge in infrastructure spend cannot be explained away by inflation and/or seasonal factors. The surge is real and appears to be driven by increased public spending on infrastructure by the Scottish government, with spending on the new Forth road bridge crossing (and Borders Rail link etc.) likely to be a major element in this” – Fraser of Allander Page 15

## 5 Evaluating Alternative Futures

### Population

“Scotland’s population will continue to enjoy migration-fuelled growth. The widening gap in average prices between Scotland and the south of England could both attract population to Scotland and deter outmigration to the more expensive parts of the UK.” Ernst & Young Page 3

### Summary of Economic Commentaries

**5.13** These commentaries and forecasts indicate whilst there is a recovery in Scotland, it is slowing. Growth is not at the levels seen prior to the recession. The recovery is stronger in Edinburgh but it is not growing at the pace used in the descriptions used for 'Strong Economic Growth' or 'Wealth Distribution'. The commentaries at present most closely align with the 'Steady Recovery' description and variables. This supports the original findings of the Oxford Economic Studies which recommended three of the four economic variable settings used for 'Steady Recovery' as most likely to occur. However, commentary on migration may point to the migration variables used for 'Wealth Distribution' or 'Strong Economic Growth'. The low migration variable used for Steady Recovery does not match the "migration-fuelled growth" forecast from Ernst & Young.

### Analysis of Specific Variables

#### House Price Change

**5.14** The Oxford Economics Study made use of a detailed economic model with forecasting up to 2040. As the HNDA has been found robust and credible, this model will not be re-run. However, Emerging House Price trends can be compared against the assumptions used for the House Price Growth variable for each of the scenarios. Whilst only covering a three year period rather than the 30 year Oxford Economics forecast period, it can prove a useful check.

**5.15** Steady Recovery used an assumption that house prices would have an annual growth rate of 2.2% (no real growth) for all authorities, except Edinburgh and West Lothian, which would grow faster at 3.8% (OBR estimate) and 3.5% respectively (modest recovery). Wealth Distribution assumed 3.5% (modest recovery) for all authorities and 4.6% (strong recovery) for Edinburgh and West Lothian. Strong Economic Growth assumed 4.6% for all authorities.

**5.16** Table 5.2 shows the annual average increase from 2012 to 2015. This uses Registers of Scotland quarterly data from calendar years 2012 and 2015. The average price has been weighted by the volume of sales by quarter<sup>(9)</sup>.

9 Same methodology as Oxford Economics Study

## Evaluating Alternative Futures 5

**Table 5.2 House Price Change 2012-2015**

Authority	Average Sale Price (£)		Annual Average Increase
	2012	2015	
CEC	216,932	238,068	3.1%
ELC	197,285	215,822	3%
FC <sup>(10)</sup>	132,277	147,980	3.8%
MC	168,300	183,720	3%
SBC	163,668	173,541	2%
WLC	139,228	161,041	5%

**5.17** Whilst this analysis is over the short term compared to Oxford Economics (a 2011 to 2040 projection), it does show the following:

- West Lothian prices have grown at rate in excess of the Strong Economic Growth (4.6%) assumption;
- Edinburgh prices have grown at less than the Steady Recovery (3.8%) assumption;
- East Lothian, Midlothian and Fife prices have exceeded the Steady Recovery (2.2%) assumption, with Fife exceeding the Wealth Distribution (3.5%) assumption; and
- Scottish Borders prices have grown less than, but close to the Steady Recovery (2.2%) assumption.

**5.18** It is not possible to draw an overall conclusion from this data other than that there has been a range of house price change across the region that is not uniform with any one alternative future. It should be noted that majority of the price increases were between 2012 and 2014. 2015 quarter on quarter data shows fluctuating prices and a consistent pattern could not be identified from them.

### Migration

**5.19** There was a level of affordable need existing and not met before 2012 in addition to the new affordable need arising over the HNDA period. The HNDA adds this existing need to the estimates over the first 10 years (2012-2022). Each of the alternative future uses a different migration level assumption. Accurate and enough years of data is not available to match the level of migration since 2012 to an assumption used for each of the alternative futures.

**5.20** It was decided to use the 'Steady Economic Growth' alternative future in the Main Issues Report which uses the low migration setting for the migration variable. This was seen as most likely for this alternative future as lower economic growth prospects will lead to the area becoming less attractive and therefore lead to lower levels migration. However, the 'principal' migration level was considered the most likely outcome by the Core Housing Market Partnership. Taking into account the statement by Ernst & Young that Scotland's population 'will continue to enjoy migration-fuelled growth', there could be merit in using the Wealth Distribution alternative future from demographic perspective.

## 5 Evaluating Alternative Futures

### Impact of City Deal

**5.21** The Edinburgh City Region City Deal was referred in many responses to the Main Issues Report on Housing Land and Housing Supply Targets. They stated that it should be a consideration in informing which HNDA alternative future is used and be used as a factor in setting Housing Supply Targets.

**5.22** Whilst not yet finalised, the emergence of a City Deal for the Edinburgh City Region is relevant to the descriptions and assumptions used in the HNDA Alternative Futures. The following statements were contained in Table 9.3 of the HNDA report relating to governance.

**Steady Recovery** - Councils become more focused on being able to deliver local services (as opposed to working together at the City Region level) as public sector cuts prolong local unemployment rates and reduce consumer spending”.

**Wealth Distribution** - There is strong public and private sector leadership and a clear vision for the City Region and partners decide to promote more actively the City Region’s quality of life, to encourage greater numbers of business and leisure visitors.

**Strong Economic Growth** - The City region leads the way in developing new public/private funding models to support economic development and physical development including housing, with significant recovery in the construction sector.

**5.23** The presence of a city deal has a better alignment with these governance elements of the 'Wealth Distribution' and 'Strong Economic Growth' descriptions than 'Steady Recovery'. These descriptions have a better alignment with the SDP Vision.

**5.24** Whilst the key purpose of the Edinburgh City Region City Deal is to boost the economic fortunes of the city region, it is too early in the process to make predictions about the level of additional growth that might result or the impact it may have on housing need and demand. It is therefore not credible to base the HNDA on the 'Strong Economic Growth. City Deal is unlikely to be so transformative as to lead to the outcomes needed for the 'Strong Economic Growth' alternative future rather than 'Steady Recovery'.

**5.25** Beyond informing which HNDA scenario to use, the city deal impact on housing will be primarily related to enabling infrastructure to deliver what is previously planned for. This will enable existing planned housing sites to deliver homes as originally planned before economic conditions and infrastructure funding slowed or stopped delivery of these sites. Such sites include Blindwells and the Edinburgh Waterfront. None of the Edinburgh City Region City Deal objectives relate to enabling land to come forward for housing that has not already been, or is in the process of being allocated.

### Which Alternative Future

**5.26** Plans should be aspirational, but SPP and the HNDA Managers Guide that Housing Supply Targets also need to be reasonable and deliverable. Whilst Housing Supply Targets are separate from the HNDA, they should not be based on HNDA alternative futures that have no credible chance of occurring. Housing Supply Targets cannot be set at levels of need and demand that never going to be delivered. This will lead to plan failure.

## Evaluating Alternative Futures 5

**5.27** Based on rigorous analysis, the 2015 HNDA Report, set out that the 2012 based Wealth Distribution and Steady Recovery alternative futures most closely reflect the future of the SESplan area. 'Strong Economic Growth' was seen as being aspirational and not representing a likely alternative future. This conclusion still holds true following this updated analysis. Economic analysis does not show that the conditions driving 'Strong Economic Growth' are likely to occur. 'Strong Economic Growth' requires conditions where public sector cuts stopped and an increased export performance at UK level. Instead cuts have continued and exports have not grown. Therefore using the 'Strong Economic Growth' alternative future would not lead to reasonable or deliverable Housing Supply Targets.

**5.28** The Oxford Economics study recommends the economic related variables used for Steady recovery set out in Table 5.1. These projections are backed by the economic commentaries and forecasts from Ernst & Young and Fraser of Allander. Both predicted weak economic growth in the short and medium term. However if migration is closer to the Core Housing Market Partnership recommended principal level, then a greater level of market and affordable estimates would be required than projected by the 'Steady Recovery' estimates. In addition, the 'Steady Recovery' governance description relating to authorities working together does not reflect the emergence of an Edinburgh City Region City Deal.

**5.29** Based on this analysis the likely future is expected to be somewhere in between the 'Steady Recovery' and 'Wealth Distribution' alternative futures. One set of HNDA estimates must be used to inform Housing Supply Targets. Therefore, for the purposes of setting ambitious Housing Supply Targets and in order that the Market Housing Supply Target fully reflect the HNDA market estimate of demand, the 'Wealth Distribution' HNDA alternative future estimates in Table 5.3 have been used to inform Housing Supply Targets.

**Table 5.3 Wealth Distribution HNDA Estimates to Inform Housing Supply Targets**

Authority	Affordable (Annual Average)	Affordable Period	Market (Annual Average)	Market (Period)	Combined (Annual Average)	Combined (Period)	Proportion of Combined Need and Demand
CEC	2,412	28,944	1,496	17,952	3,908	46,896	59%
ELC	370	4,440	183	2,196	553	6,636	8%
FC	457	5,484	347	4,164	804	9,648	12%
MC	325	3,900	117	1,404	442	5,304	7%
SBC	165	1,980	113	1,356	278	3,336	4%
WLC	380	4,560	250	3,000	630	7,560	10%
<b>SESPLAN</b>	<b>4,109</b>	<b>49,308</b>	<b>2,506</b>	<b>30,072</b>	<b>6,615</b>	<b>79,380</b>	
Proportion	62%		38%				

## 6 Affordable Housing Supply Targets

### 6 Affordable Housing Supply Targets

#### Completion Rates and Capacity in the Construction Sector

**6.1** Table 6.1 sets out the annual average affordable Wealth Distribution HNDA estimates, recent and past affordable housing completion rates. 62% of the combined Wealth Distribution HNDA estimate is for affordable housing. The data shows that the annual rate of need for affordable housing is more than double the average recent affordable housing completions rate.

**Table 6.1 Wealth Distribution Affordable Housing HNDA Estimates & Affordable Completions**

	Annual Average Affordable HNDA Estimate 2018-2030	Average Affordable Completions (2010-2015)	Annual Average Affordable Completions (2005-2015)
CEC	2,412	695	575
ELC	370	142	101
FC	457	189	225
MC	325	124	115
SBC	165	87	74
WLC	380	198	157
<b>SESPLAN</b>	<b>4,109</b>	<b>1,434</b>	<b>1,247</b>

**6.2** The methodology set out that the spatial strategy, constraints, opportunities and affordable housing funding were valid considerations in setting out affordable Housing Supply Targets. Capacity of the construction sector and past delivery is less relevant as delivery of affordable housing is less closely linked to the availability of private finance, evidenced by the fact that affordable housing delivery increased in the post financial crash period, with the exception of SESplan Fife. This because public funding for affordable housing and council house building programmes increased in this period.

#### Availability of Resources - Affordable Housing Finance

**6.3** The availability of funding is a significant constraint on delivering the level of affordable housing required by the HNDA. In the current parliament, the Scottish Government had set a target to build 30,000 affordable homes. It has increased this target to 50,000 affordable in the next parliament, which covers four of the first five years of the 12 year Strategic Development Plan period.

**6.4** Each authority reviewed the following funding factors in setting affordable Housing Supply Targets:

- Current affordable housing programmes and funding
- Scottish Government affordable housing investment plans
- Council housebuilding programmes
- Potential for council borrowing
- Affordable housing being provided on market sites

## Affordable Housing Supply Targets 6

**6.5** Affordable Housing Supply Targets are not wholly dependant on the delivery of affordable homes on market sites as they are primarily informed by levels of funding available from Scottish Government and member authorities. A significant proportion of affordable homes have been delivered on sites that are part of specific council-led affordable housing programmes, largely on the public estate. The HNDA clearly shows that there is a greater level of affordable need (62%) compared to market demand (38%) under the wealth distribution scenario. However, the level of resources to deliver more affordable homes in practice and the need for market sites to help deliver affordable homes results in an overall SESplan affordable Housing Supply Target that has been set at a lower level than the SESplan market Housing Supply Target. Based on that analysis, the member authorities have agreed the number of affordable homes that will be delivered in the SESplan Housing Market Area and each member authority over the 2018-2030 plan period (Table 6.2).

**Table 6.2 Agreed Affordable Housing Supply Targets 2018-2030**

	Annual Average Affordable Housing Supply Targets	Affordable Housing Supply Targets (2018-2030 Total)	Annual Average Wealth Distribution HNDA Estimate 2018-2030	Annual Average Steady Recovery HNDA Estimate 2018-2030
CEC	1,200	14,400	2,412	2,136
ELC	189	2,268	370	336
FC	262	3,144	457	378
MC	165	1,980	325	296
SBC	128	1,536	165	128
WLC	300	3,600	380	341
<b>SESPLAN</b>	<b>2,244</b>	<b>26,928</b>	<b>4,109</b>	<b>3,615</b>

**6.6** Neither the annual affordable need estimates for the 'Wealth Distribution' (4,109) nor the 'Steady Recovery' (3,615) alternative futures can be realistically delivered over a 12 year period. However, the agreed Affordable Housing Supply Targets (2,244 homes per annum) are ambitious but deliverable when the increased investment in affordable housing and current affordable housing plans from each authority are considered. However, This is due to a lack of funding for affordable housing and the infrastructure needed to support both market and affordable homes. Delivery of these Affordable Housing Supply Targets will result in an increased rate of affordable housing. This will help to reduce waiting lists and address the significant SESplan region housing affordability issue identified in the HNDA.

## 7 Market Housing Supply Targets

### 7 Market Housing Supply Targets

**7.1** SPP requires that the market Housing Supply Target should fully reflect the overall market need and demand for selected HNDA scenario (2,506 per annum for the 2018-2030 period). The following section set out how these estimates have been analysed against the factors set out in the methodology to identify deliverable Housing Supply Targets.

#### Past & Recent Delivery Levels

**7.2** Table 7.1 sets out the 'Wealth Distribution' market HNDA estimates and compares them to past and recent market housing completion rates.

**Table 7.1 Market HNDA Estimates & Market Completions 2018-2030**

	Wealth Distribution Market HNDA Estimate (Annual Average)	Annual Average Market Completions (2010-2015)	Annual Average Market Completions (2005-2015)	Annual Average Market Completions (2004-2009)
CEC	1,496	797	1,320	2,056
ELC	183	227	351	501
FC	347	509	738	1,090
MC	117	402	343	249
SBC	113	238	389	518
WLC	250	337	489	818
<b>SESPLAN</b>	<b>2,506</b>	<b>2,509</b>	<b>3,630</b>	<b>5,231</b>

**7.3** It should be noted that past completions do not indicate future demand - that is the purpose of the HNDA estimates. However, past completions do indicate that for all of the member authorities, except Edinburgh, the market estimates are capable of being delivered over a year 12 period. These estimates are all within the average completions over the past five years.

**7.4** Whilst not shown in recent completion rates, City of Edinburgh market completions in the mid 2000's demonstrate past delivery levels that exceed the number of homes required to built on an annual basis to meet market demand identified in the HNDA. However, these completion rates were predominantly achieved because of the building of high density flatted sites on brownfield land. The current land supply in City of Edinburgh has a higher proportion of greenfield land (when compared to supply in the early 2000s) which will probably not be developed at the same rates as higher density flatted sites.

**7.5** When the annual market estimate for Edinburgh (1,496) is combined with HNDA annual affordable estimate (2,412) or annual affordable Housing Supply Target (1,200), this would require combined annual completions of 3,908 or 2,696 dwellings respectively. Neither have been delivered in a single year and the transition from current levels of completions would unlikely to take place. Therefore these rates of completions would not be reasonable or deliverable over a 12 year period.

## Market Housing Supply Targets 7

### Capacity of the Construction Sector

**7.6** Table 7.1 indicates that there has been past capacity in the construction sector to greater levels of housing than currently completed. There has been a recent upturn in market completions after lowest post 2008 recession level of completions in 2012/13. Volume house builders are now building at comparative rates to pre-recession years.

**7.7** Prior to the recession, smaller independent house builders were making a significant contribution to overall completions rates. However, those small and medium sized builders were significantly affected by the recession and many no longer. This is compounded by difficulty in getting development finance hindering the recovery of small and medium size builders. As a result the proportion of completed dwellings by small and medium sized builders is much smaller than their pre-recession contribution.

### Development Opportunities, Capacity, Constraints and Resources to Deliver Plan

**7.8** The full analysis of the opportunities, capacity and constraints is set out in Section 5 of the [MIR Spatial Strategy Technical Note](#)<sup>(11)</sup> and the [Interim Environmental Report](#). These set out that there is a physical and environmental capacity limits in the region. Unlimited numbers of homes cannot be allocated and delivered without subsequent detrimental impacts on the regions environmental assets and ability to adapt to climate change.

**7.9** A significant issue highlighted in the Spatial Strategy Technical Note and LDP appraisals is the lack of education capacity and resource levels to fund new schools. In many development areas, existing capacity has been used up. The lack of capacity and significant costs of new and expanded schools is affecting current housing delivery rates. There are significant shortfalls in available funding to deliver schools required to meet the housing requirements in emerging LDPs.

**7.10** The current capacity and ability to deliver future transport infrastructure is also limiting the future level of development in the region. This is recognised in [NPF3](#) under Edinburgh and South East Scotland Place Statement. It states "Whilst programmed transport improvements will collectively go some way towards enhancing capacity for growth, the longer-term spatial strategy for delivering housing land will need to acknowledge and address the region's infrastructure constraints". This statement particularly relates to the strategic transport network into and around Edinburgh.

**7.11** Whilst there are constraints and capacity issues, the analysis indicates that the 'Wealth Distribution' market estimates (Table 7.1) could be delivered in all authorities, without with exception of City of Edinburgh, without impacts on the environment or on infrastructure capacity. They are also within the level of funding resources to deliver the additional infrastructure capacity to support that level of housing delivery.

**7.12** Combined with the affordable Housing Supply Target, 2,696 dwellings per annum (market estimate + affordable Housing Supply Target) could not consistently be delivered over a 12 year period within infrastructure capacity, resource and environmental constraints. The constraints on Edinburgh were recognised at the SDP1 examination. It concluded that City of Edinburgh could not meet the full level of HNDA need and demand that originated there. This finding has not changed.

11 Includes a public transport accessibility analysis and a strategic flood risk assessment

## 7 Market Housing Supply Targets

### City of Edinburgh Market Housing Supply Target

**7.13** Reviewing the capacity and constrain information with Edinburgh, a market Housing Supply Target for City of Edinburgh of 1,220 homes per annum. This would be at top of potential delivery capacities when combined with the affordable Housing Supply Target 1,200 homes per annum.

**7.14** The City of Edinburgh Housing Supply Target is higher than the last five years market completions average. Delivering the Edinburgh market Housing Supply Target consistently across the 2018-2030 period would require a 53% increase over recent market completions levels. To achieve this would require a range of measures including a less restrictive lending market and the continued roll out of schemes such as help to buy. Institutional and large scale investors would also have to deliver on their potential role in providing private sector rental housing.

**7.15** SESplan is single housing market area. Therefore as long as SESplan market Housing Supply Target equals the SESplan HNDA wealth distribution estimate (2,506 homes per annum) then the SPP paragraph 115 requirement is met. As there is a 276 homes per annum shortfall in the City of Edinburgh market Housing Supply Target (1,220) against its market estimate (1,496), then HNDA 'Wealth Distribution' market estimates must be exceed in other SESplan member authorities to meet this SPP requirement.

**7.16** This City of Edinburgh Housing Supply Target would be 82% of the HNDA market demand. This reflects the findings of the [Housing Market Area Assessment](#) which identified that 81% of purchasers originating from City of Edinburgh then bought with the city. The remaining 19% moved and bought housed in other SESplan member authorities.

### East Lothian, Fife, Midlothian, Scottish Borders and West Lothian Market Housing Supply Targets

**7.17** Levels of housing can be delivered in East Lothian, Fife, Midlothian, Scottish Borders and West Lothian to meet the 'wealth distribution' market housing estimates over the 2018-2030 period. Higher levels of delivery than the HNDA estimates could be achieved within the constraints identified. However, to do so must be supported by robust justification to set market Housing Supply Targets at higher levels than the level of market demand indicated by the Wealth Distribution HNDA estimates.

**7.18** The first reason is to meet the shortfall in the market need from the Edinburgh Market Housing Supply Target. SESplan is a single housing market area and it is considered that the 276 per annum shortfall could be met across the five authorities without affecting delivery rates. This would be deliverable as the [Housing Market Area Assessment](#) demonstrates that a portion of market activity originating in the City of Edinburgh is met outside it.

**7.19** There are two further reasons to increase the market Housing Supply Targets for East Lothian, Fife, Midlothian, Scottish Borders and West Lothian above their respective HNDA 'Wealth Distribution' market estimates. These are:

- Where justified, additional market housing delivery contribute to meeting some of the shortfalls in the affordable Housing Supply Targets against affordable HNDA estimates (see table 5.2) for each of the five authorities.
- Additional market housing located near to City of Edinburgh could contribute to meeting some of the shortfall of the City of Edinburgh affordable Housing Supply Target against the Edinburgh affordable HNDA estimate.

## Market Housing Supply Targets 7

**7.20** The justifications for why market housing can meeting a proportion of affordable need is set out under the headings below. These are judgement and qualitative based reasons. Their contribution cannot be calculated by using a formula.

### Private Rented Sector Help Meeting Affordable Need Shortfall

- Private Rented Sector can help meet a proportion of affordable need that is not being met by recognised affordable tenures. Whilst there is no quantifiable level for how much affordable need this meets, Local Authorities do make use of private rented sector stock to house families in affordable need. Therefore it is justifiable to allow a small increase in the market Housing Supply Target to reflect this practice, helping to meet some of the unmet affordable need.
- The delivery of most additional private rented sector stock involves the conversion of existing stock to private rented sector. However, this loss of owner occupier stock to private rented sector means that an increase in new build owner occupier stock will be needed to meet this displacement.
- The role the Private Rented Sector will play may be limited recent challenges to the buy to let market. Tax exemption treatment and stamp duty rises introduced in 2016 will result in buy to let investment being less attractive. Buy to let purchases may fall away, limiting the role of this sector in helping to meet HNDA estimates.
- Scottish Government is supporting an increased role of institutional investors, such as pension funds, in delivering new build PRS schemes to help increase housing supply. They are usually delivered in apartment format with communal facilities such as gyms. Scottish Government are supporting a PRS champion from Homes for Scotland and the Chief Planner has issued a [letter](#) to all planning authorities asking them to support PRS. Whilst there is no record of historic delivery of new build PRS, there is expected to be a role for it in helping meet market housing need. There has been interest in Edinburgh for new build PRS but the contribution outside the city may be limited.

### Other Tenures Recognised as Affordable

- New Build Shared Equity enables Registered Social Landlords's and private developers to build or buy new homes for sale on a shared equity basis, with purchasers buying a majority stake of the equity depending on income. The delivery of new build shared equity as part of a market Housing Supply Target can assist to meet a limited level of need recognised as affordable in the HNDA estimates. This is limited because it has not been consistently delivered across the SESplan area and not in significant numbers to make more than a small contribution
- Open Market Shared Equity is a scheme that enables people on low to moderate incomes buy homes for sale of the open market where it is affordable for them to do so. The scheme is open to first time buyers. It is not formally recognised affordable in the HNDA. Using existing owner occupier homes this way to help meet affordable need can be replaced with new build owner occupier homes. Like new build shared equity, delivery has not been high or consistent across the region.

### Help to Buy

- Help to Buy was not fully forecast when the HNDA was being produced. Currently it is helping meeting the needs of some households who want to but could not raise the finance to own a home. It provides government backed deposit support. Whilst households estimated by the HNDA who could afford a market home may be making use of the scheme, it could also be those at the identified as needing affordable need. It is not possible to quantify what this level might be. Whilst it will have a contribution to make, SESplan cannot also cannot rely on this continuing

## 7 Market Housing Supply Targets

over the SDP 12 period to 2030. There have been no announcements on long term government support for the scheme.

### Delivering Long Term Strategies

- Authorities plans and strategies are reliant on a level of market housing delivery that is higher than the HNDA estimates for market housing. Delivering long term strategies will require a higher level of market completions than the HNDA estimates for Fife, West Lothian, Midlothian, East Lothian and Scottish Borders.
- Housing Supply Targets are authorities' views on the level of housing delivery the they should plan for. Development plans are create to support multi-benefit objectives other than just housing delivery. Therefore it is appropriate to set Market Housing Supply Targets at these higher but deliverable levels for these authorities.

**7.21** These reasons cannot be expected to account for the market sector to fully meet the shortfall in meeting the affordable HNDA estimate. If this was the case there would be no current housing waiting lists if the market housing could fully meet what could not be delivered by the affordable sector.

**7.22** Based on the factors highlighted in this chapter, the SESplan member authorities agreed the number of market homes that will be delivered in the SESplan housing market area and each member authority over the period 2018-2030 (Table 7.2). The SESplan housing market area Housing Supply Target exceeds the SPP requirement to fully reflect the overall market need and demand for selected HNDA scenario (Wealth Distribution - 2,506 per annum).

**Table 7.2 Agreed Market Housing Supply Targets 2018-2030**

	Market Housing Supply Targets (Annual Average)	Market Housing Supply Targets (2018-2030 Total)	Annual Average Wealth Distribution HNDA Estimate 2018-2030	Annual Average Market Completions (2010-2015)
CEC	1,220	14,640	1,496	797
ELC	330	3,960	183	227
FC	605	7,260	347	509
MC	369	4,428	117	402
SBC	220	2,640	113	238
WLC	333	3,996	250	338
<b>SESPLAN</b>	<b>3,077</b>	<b>36,924</b>	<b>2,506</b>	<b>2,509</b>

**7.23** Higher market Housing Supply Targets cannot be delivered in combination with the agreed affordable Housing Supply Targets due to infrastructure funding and environmental constraints. Delivery of housing is being restricted by education capacity and the ability to fund the require new schools and school expansion.

## Market Housing Supply Targets 7

**7.24** Setting higher market Housing Supply Targets than proposed would not be credible against the HNDA as they would not reflect future demand. Therefore they would remain undelivered and is therefore neither reasonable nor realistic.

**7.25** Delivering the market Housing Supply Targets will be challenging over 12 period. To be achieved they will require a 22.5% increase over recent market completion rates in the SESplan area. Significant investment is required to overcome infrastructure constraints.

Committee Draft

## 8 Demolitions

### 8 Demolitions

#### Demolitions

**8.1** Housing Supply Targets are net figures, not gross. They are annual or period totals of the number of additional homes that are to be added to the existing supply. If there are planned or expected housing demolitions, then the number of homes demolished are subtracted from the number of new homes added to the supply to calculate the net additional completions. A housing proposal which demolishes 100 homes and then rebuilds 100 homes would contribute a net zero to the Housing Supply Target.

**8.2** SPP and the agreed methodology allows for the market and affordable Housing Supply Targets to be lowered by the levels of planned demolitions or by historic trends of demolitions.

**8.3** Each authority considered any planned demolitions and historic demolition trends. However, no authority considered these to be significant. None of the authorities had identified any significant housing demolition proposals. Therefore there has been no adjustment to the Housing Supply Targets set out in Chapters 6 'Affordable Housing Supply Targets' and 7 'Market Housing Supply Targets'.

## Agreed Housing Supply Targets 9

### 9 Agreed Housing Supply Targets

#### Housing Supply Targets Plan Period 2018-2030

**9.1** The following combined Housing Supply Targets (Table 9.1) are based on the preceding justification are included in the SESplan Proposed Plan. Housing Supply Targets are shown as annual average figures and as 2018-2030 period totals. The Housing Supply Targets represent the SESplan Joint Committee view of the levels of additional housing to be developed in the SESplan housing market area and each member authority. The Housing Supply Targets are challenging yet reasonable and deliverable. Over the 12 year period The market Housing Supply Target properly reflects the HNSA wealth distribution estimate of housing demand in the market sector.

**Table 9.1 SESplan Housing Supply Targets 2018-2030**

Area	Affordable Housing Supply Targets		Market Housing Supply Targets		Combined Housing Supply Targets	
	Annual Average	Period Total	Annual Average	Period Total	Annual Average	Period Total
City of Edinburgh	1,200	14,400	1,220	14,640	2,420	29,040
East Lothian	189	2,268	330	3,960	519	6,228
Fife	262	3,144	605	7,260	867	10,404
Midlothian	165	1,980	369	4,428	534	6,408
Scottish Borders	128	1,536	220	2,640	348	4,176
West Lothian	300	3,600	333	3,996	633	7,596
<b>SESplan</b>	<b>2,244</b>	<b>26,298</b>	<b>3,077</b>	<b>36,924</b>	<b>5,321</b>	<b>63,852</b>

**9.2** The proposed Housing Supply Targets have been identified to align with the MIR preferred Spatial Strategy (supported by the majority of respondees and Scottish Government) that requires that City of Edinburgh to meet a comparatively greater proportion of housing need and demand than required by SDP1. City of Edinburgh's Housing Requirement (2009-2024) from SDP1 Supplementary Guidance was 27% of the SESplan Housing Requirement. City of Edinburgh's proposed Housing Supply Target is 45% of the overall SESplan Housing Supply Target and therefore a significant increase in relative contribution compared with first Strategic Development Plan adopted in 2013.

**9.3** This re-profiling of SESplan housing delivery will deliver benefits in terms of reducing car commuting, journey times, carbon and nitrogen oxide emissions and locating new homes nearer to future employment. However, the proportion of this need and demand met in City of Edinburgh has been tempered by environmental impact and infrastructure capacity concerns in City of Edinburgh. City of Edinburgh could not have met its full affordable and market HNSA estimates of need and demand. It is considered that the distribution of the Housing Supply Targets across the SESplan Housing Market Area meets this balance.

## 9 Agreed Housing Supply Targets

**9.4** City of Edinburgh is prepared to meet a higher proportion of its own need and demand for new homes and this is reflected in the distribution of the Housing Supply Target. The strategy focuses the majority of new homes for each authority in settlements and other locations that are well served by public transport or walkable neighbourhoods.

**9.5** The Housing Supply Targets are challenging compared to past delivery rates (Table 9.2). To achieve them will require a step change in completions resulting in a 35% increase above the average last five year completion rate. This will have to be achieved over a 12 year period. It is not expected to be met every year. Some years will be lower and other years will be higher. It is considered to be reasonable and deliverable over the 12 year period from 2018 to 2030.

**Table 9.2 Housing Supply Targets Compared to Past Completions**

	Combined Housing Supply Target Annual Average	Combined Annual Average Completions 2010-2015	Combined Annual Average Completions 2005-2015
City of Edinburgh	2,420	1,492	1,896
East Lothian	519	369	452
Fife	867	698	963
Midlothian	534	525	459
Scottish Borders	348	325	463
West Lothian	633	532	644
<b>SESplan</b>	<b>5,321</b>	<b>3,940</b>	<b>4,876</b>

**9.6** The highest annual average increase in completions rate over a 12 year period achieved in Scotland was 3% compound increased achieved over a 12 year period between 1994 and 2002<sup>(12)</sup>. A similar level of compound annual average increase over 2014/15 completions (4,126) will be required over 12 years if the annual average Housing Supply Target between 2018-2030 of 5,321 additional dwellings is to be achieved.

### 2030-2038 Period

**9.7** The SDP covers a 20 year period from adoption in 2018 to 2038. SPP requires the SDP to set Housing Supply Targets for the first 12 year period. It is not required to be as specific on housing delivery for the latter eight year period from 2030 to 2038.

**9.8** The HNDA sets out estimates of housing need and demand up to 2038. To set Housing Supply Targets environmental and infrastructure considerations, resources, funding, housing completion rates and the capacity of the construction sector are also required to be considered. It has not been possible to fully consider these factors for the 2030-38 period, as there is no robust information to base decisions on housing delivery for the 2030's on. It is not reasonable to base decisions on future housing delivery into the 2030's on 2015 data, which does not fully project into the 2030's. Therefore

12 Using Scottish Government statistics for all tenure completions. No higher compound change in completions rate over 12 years has been achieved since 1979

## Agreed Housing Supply Targets 9

the SDP will not set out Housing Supply Targets for this period. The next SDP will set out Housing Supply Targets for the first five years of this period. They will be based on a new HNDA and an analysis of the relevant factors.

**9.9** The SDP is still required to provide an indication of the scale housing required in the 2030-38 period. For the SESplan Housing Market Area and each of the member authorities, the total SESplan Housing Market Area Wealth Distribution estimate from the HNDA for the 2030-38 period (Table 4.5) has been used. In order to distribute this between the six SESplan member authorities, the same proportional distribution as the combined 2018-2030 Housing Supply Targets has been used. This distribution was based on the factors agreed in the methodology. Continuing with this distribution will match the long term Spatial Strategy of the SDP. Therefore in the absence of more robust information for the 2030-38 period, it is appropriate to continue the distribution trend from the previous period in order to continue to deliver and achieve the aims of the spatial strategy.

**Table 9.3 Indicative Scale of Housing Required 2030-2038**

Plan Area	2030-38 Housing Supply Target Distribution	Annual Average	Period Total
City of Edinburgh	45.5%	2,491	19,928
East Lothian	9.8%	534	4,274
Fife	16.3%	892	7,139
Midlothian	10.0%	550	4,397
Scottish Borders	6.5%	358	2,866
West Lothian	11.9%	652	5,212
<b>SESplan</b>	<b>100%</b>	<b>5,477</b>	<b>43,816</b>

**9.10** The scale of housing required is a combined market and affordable figure. It has not been split into market and affordable, although 55% of the estimated need and demand for the 2030-2038 period is for affordable tenures. There is no reliable evidence on affordable housing funding for this period to inform setting a deliverable level of affordable housing. The total combined housing need and demand estimate is higher than the combined SESplan Housing Supply Target for 2018-30 and therefore to fully deliver that level of housing will require a further step-change in the rate of delivery of affordable housing.

## 10 Housing Land Requirements

### 10 Housing Land Requirements

**10.1** Strategic Development Plans are also required to set out the generous level of housing land supply required to allow the Housing Supply Targets to be met. This is the Housing Land Requirement. The level of the Housing Land Requirement is calculated by adding a 10% to 20% generosity margin to the new built housing element of the Housing Supply Targets. The generosity margin applies to the combined Housing Supply Targets to give a single Housing Land Requirement for SESplan area and each member authority. Housing Land Requirements are not split into market and affordable.

#### Vacant Housing Returned to Occupation

**10.2** SPP and the agreed methodology also allows for the Housing Supply Targets to be met by vacant housing returning to use as well as the construction of new homes. Due to vacancy turnover this is only achieved through by net reductions in the level of vacant housing. This is where the numbers of vacant homes returned to occupation exceeds the number of homes that become vacant.

**10.3** Returning vacant homes to use has become a priority for Scottish Government and member authorities as a resource efficient way of increasing housing supply. Each authority considered their vacant housing programmes to identify whether they could be anticipated to contribute to meeting Housing Supply Targets. Whilst each authority is seeking a net reduction in vacant homes, there is no robust data yet available to indicate that this would be significant. Therefore the the generosity margin to calculate the Housing Land Requirement will apply to the full level of Housing Supply Targets.

#### Generosity Margin

**10.4** The Combined Housing Supply Target is made up of both market and affordable delivery. Therefore the generosity margin should be informed by how both are delivered. Affordable housing delivery is related to level of resources, primarily finance to fund affordable housing delivery. Further availability of land for affordable housing above a 10% generosity level will not increase the likelihood affordable housing is delivered. Land for affordable housing is developed when affordable housing funding is available. Therefore decision on the generosity margin primarily relates to delivery of market housing.

**10.5** As set out in Chapter 5, most likely outcome in terms of alternative HNSA futures is a position inbetween Steady Recovery and Wealth Distribution. However, for the purposes of meeting SPP requirements, market Housing Supply Targets fully reflect and exceed the Wealth Distribution alternative future. Therefore the market Housing Supply Targets are informed by estimates of market demand that are higher than what may occur over the 12 year period from 2018-2030. The Housing Supply Targets are based on an optimistic alternative future and market Housing Supply Targets exceed the associated market demand to help meet come of the shortfall in meeting affordable need. As there is this inbuilt generosity and optimistic assumption within the Housing Supply Targets, it is determined that a 10% generosity margin has the most robust justification. It will be applied equally over the single SESplan HMA and its constituent member authorities.

**10.6** A 10% margin is sufficient to allow the Housing Supply Target to be achieved. A 20% margin for the Housing Land Requirement would be unlikely to result in any greater likelihood of the combined Housing Supply Targets, with there implicit generosity to be delivered. The viability of allocated land could be undermined by an over-supply of land. Therefore table 10.1 sets out the agreed Housing Land Requirements using a 10% margin.

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Table 10.1 SESplan Housing Land Requirements 2018-30

Area	Combined Housing Supply Targets		Housing Land Requirements	
	Annual Average	Period Total	Annual Average	Period Total
City of Edinburgh	2,420	29,040	2,662	31,944
East Lothian	519	6,228	571	6,851
Fife	867	10,404	954	11,444
Midlothian	534	6,408	587	7,049
Scottish Borders	348	4,176	383	4,594
West Lothian	633	7,596	696	8,356
<b>SESplan</b>	<b>5,321</b>	<b>63,852</b>	<b>5,853</b>	<b>70,237</b>

## 11 Land Supply Implications

### 11 Land Supply Implications

**11.1** SESplan and the member authorities have been allocating generous levels of housing land to meet the housing requirements of the SDP approved in 2013 and the subsequent SESplan Housing Land Supplementary Guidance. The capacity of these allocations, in addition to existing land supply from sites with planning consent and previous Local Plan allocations, results in SESplan having a significant level of identified housing land.

**11.2** The SDP is required to set out the amount and broad locations of additional housing land which should be identified in local development plans to meet the Housing Land Requirement up to year 12 from the expected year of plan approval (2018)<sup>(13)</sup>. This housing land is in addition to current housing land supplies. In order to broadly identify the amount of additional land required to be allocated in future LDPs, the SDP is required to identify what the estimated capacity of the supply of housing land will be for the 2018 to 2030 period.

**11.3** The data set out in tables 11.1 and 11.2 are the best available estimates of what land supply will be available over the 2018-2030 period based on current information. A full definition of each row is set out after the tables. The Estimated Land Supply at 2018 is calculated using the formula  $H = A+B+D+F-G$ . This is then compared against the Housing Land Requirements to indicate whether there is a surplus or deficit. The scale of any deficit indicates the potential scale of additional housing that may be required to be identified in the LDP. However, this is only an indication. For all SESplan member authorities, the level of additional housing land to be identified in LDPs will be dependant on land supplies at the time of LDP preparation. The information here is presented as a guide as to what the level of additional housing land might be.

**Table 11.1 Land Supply Estimates at 2018 - City of Edinburgh, East Lothian & Fife**

	City of Edinburgh	East Lothian	Fife
A. Effective Land Supply	21,803	4,698	19,322
B. Emerging LDP	2,943	5,675	
C. Constrained Sites	8,907	873	3,352
D. Constrained Expected to Become Effective	5,045	873	503
E. Windfall Allowance (Annual)	420		140
F. Windfall Allowance 2018-2030	5,040	209	1,680
G. Estimated Completions 2015-2018	5,664	1,077	1,917
H. ESTIMATED LAND SUPPLY	29,167	11,378	19,588
I. HOUSING LAND REQUIREMENT	31,944	6,851	11,444
J. DIFFERENCE	-2,777	+4,527	+8,144

## Land Supply Implications 11

**Table 11.2 Land Supply Estimates at 2018 - Midlothian, Scottish Borders, West Lothian & SESplan**

	Midlothian	Scottish Borders	West Lothian	SESplan
A. Effective Land Supply	9,883	4,844	13,350	73,900
B. Emerging LDP	5,142	1,598	3,996	20,354
C. Constrained Sites	145	2,357	7,607	23,241
D. Constrained Expected to Become Effective		2,357	7,607	16,385
E. Windfall Allowance (Annual)				
F. Windfall Allowance 2018-2030		1,464		8,393
G. Estimated Completions 2015-2018	1,788	843	2,085	13,374
H. ESTIMATED LAND SUPPLY	13,237	9,420	22,868	105,658
I. HOUSING LAND REQUIREMENT	7,049	4,594	8,356	70,238
J. DIFFERENCE	+6,188	+4,826	+14,512	+35,420

**A Effective Land Supply** - Capacity of housing land allocated or permitted for housing, which is free of all constraints that would prevent development. Data is taken from each member authority's most recent Housing Land Audit (HLA). For all authorities except West Lothian, this uses data from HLA 2015. At the time of preparation, West Lothian had not finalised their HLA 2015 but draft data from it was included.

**B Emerging LDP** - Capacity of housing land being allocated for housing in emerging LDPs that is not included in the most recent HLA. For Scottish Borders this also includes the 916 dwellings that the the council is expected to identify land for in Supplementary Guidance within one year of adoption of the Scottish Borders LDP (adopted May 2016).

**C Constrained Sites** - Capacity of housing sites that are not currently developable for housing due to a range of constraints. These sites are not considered effective. Current constraints include ownership, physical (e.g. slope, aspect, stability, flood risk, access), contamination, deficit funding, marketability, infrastructure and land use. These constraints may be overcome and the land may become effective over the life of the plan.

**D Constrained Expected to Become Effective** - Capacity of constrained sites whose constraints are expected to be overcome, therefore becoming effective and allowing them to contribute towards meeting the Housing Land Requirement for the 2018-2030 period.

**E & F Windfall Allowance** - Windfall is defined as sites which become available for development unexpectedly during the life of the development plan and so are not identified individually in the plan. SPP paragraph 117 allows the Housing Land Requirement to be met from a number of sources, including windfall development, where evidenced: "*Any assessment of the expected contribution to*

## 11 Land Supply Implications

*the housing land requirement from windfall sites must be realistic and based on clear evidence of past completions and sound assumptions about likely future trends".* Where capacity has been included, it is based on windfall allowances used to support adopted or emerging LDPs. It is shown as both an annual and 2018-2030 period total.

**G Estimated Completions** - As data is presented from a HLA 2015 base, it is necessary to subtract an estimate for completions for the three years between 1 April 2015 and 31 March 2018. For Edinburgh, the HLA 2015 data had been used for estimates of completions in the financial years 2015-16, 2016/17, 2017/18. This is because previous estimates have been close to the actual level of completions. For other authorities, their HLA estimates for future years represent land available that could come forward rather than an accurate prediction of completions. Therefore for all other authorities an average of the last two years completions<sup>(14)</sup> has been used to estimate completions over the three years from 2015 to 2018.

**H Estimated Land Supply** - The estimated level of land supply available in the 2018-2030 period is based on the total capacity of the current effective supply plus emerging LDP sites plus constrained sites expected to come forward plus windfall. 2015 to 2018 completions are then subtracted from this. This is expressed as  $H = A + B + D + F - G$ .

**I Housing Land Requirement** - The Housing Land Requirements for the 2018-2030 period included in the SDP, as set out in Chapter 10 'Housing Land Requirements'.

**J Difference** - Result of the subtraction of the Estimated Land Supply from the Housing Land Requirement. A negative figure shows a potential deficit in housing land indicating that further allocations may be necessary. A positive figure shows a surplus indicating further allocations may not be required.

**11.4** In summary there is a deficit against the estimate level of supply in Edinburgh. Therefore an additional 2,777 homes may be required in the Edinburgh LDP to fully meet the Housing Land Requirement up to 2030. In all other areas, it is estimated that there will be a surplus of housing land. Therefore further allocations in LDPs may not be required to fully meet Housing Land Requirements up to 2030.

**11.5** Housing land surpluses will be required as longer term growth opportunities to provide housing land into the 2030's. Housing Supply Targets and Housing Land Requirements for this period will be set out in the next SDP.

## Policy and Guidance A

## Appendix A Policy and Guidance

**A.1** The key relevant sections of each policy and guidance document are set out below. Note that only documents which were fully adopted policy or guidance when the Main Issues Report and Proposed Plan were being prepared are included here.

**A.2** The most important points have had emphasis added.

### Scottish Planning Policy

**A.3** Scottish Planning Policy (SPP) sets out the requirements for Strategic Development Plans on housing matters.

#### SPP

30 Development plans should.....be consistent with the policies set out in this SPP, including the presumption in favour of development that contributes to sustainable development.

109 □ National Planning Framework 3 (NPF3) aims to facilitate new housing development, particularly in areas within our cities network where there is continuing pressure for growth, and through innovative approaches to rural housing provision. **House building makes an important contribution to the economy. Planning can help to address the challenges facing the housing sector by providing a positive and flexible approach to development.** In particular, provision for new homes should be made in areas where economic investment is planned or there is a need for regeneration or to support population retention in rural and island areas.

110 □ The planning system should.... identify a generous supply of land for each housing market area within the plan area to support the achievement of the housing land requirement across all tenures, maintaining at least a 5□year supply of effective housing land at all times.

112 □ Planning for housing should be undertaken through joint working by housing market partnerships, involving both housing and planning officials within local authorities, and cooperation between authorities where strategic planning responsibilities and/or housing market areas are shared, including national park authorities.

113 □ Plans should be informed by a robust housing need and demand assessment (HNDA), prepared in line with the Scottish Government's HNDA Guidance. This assessment provides part of the evidence base to inform both local housing strategies and development plans (including the main issues report).

115 □ Plans should address the supply of land for all housing. **They should set out the housing supply target (separated into affordable and market sector) for each functional housing market area, based on evidence from the HNDA.**

115 □ **The housing supply target is a policy view of the number of homes the authority has agreed will be delivered in each housing market area over the periods of the development plan and local housing strategy, taking into account wider economic, social and environmental factors, issues of capacity, resource and deliverability, and other important requirements such as the aims of National Parks.**

115 - **The target should be reasonable, should properly reflect the HNDA estimate of housing demand in the market sector, and should be supported by compelling evidence.**

## A Policy and Guidance

116 □ **Within the overall housing supply target, plans should indicate the number of new homes to be built over the plan period. This figure should be increased by a margin of 10 to 20% to establish the housing land requirement**, in order to ensure that a generous supply of land for housing is provided. The exact extent of the margin will depend on local circumstances, but a robust explanation for it should be provided in the plan.

117 □ The housing land requirement can be met from a number of sources, most notably sites from the established supply which are effective or expected to become effective in the plan period, sites with planning permission, proposed new land allocations, and in some cases a proportion of windfall development. Any assessment of the expected contribution to the housing land requirement from windfall sites must be realistic and based on clear evidence of past completions and sound assumptions about likely future trends. In urban areas this should be informed by an urban capacity study.

118 □ **Strategic development plans should set out the housing supply target and the housing land requirement for the plan area, each local authority area, and each functional housing market area. They should also state the amount and broad locations of land which should be allocated in local development plans to meet the housing land requirement up to year 12 from the expected year of plan approval, making sure that the requirement for each housing market area is met in full. Beyond year 12 and up to year 20, the strategic development plan should provide an indication of the possible scale and location of housing land, including by local development plan area.**

119 □ Local development plans in city regions should allocate a range of sites which are effective or expected to become effective in the plan period to meet the housing land requirement of the strategic development plan up to year 10 from the expected year of adoption.

127 □ Where the housing supply target requires provision for affordable housing, strategic development plans should state how much of the total housing land requirement this represents.

### National Planning Framework 3

**A.4** The National Planning Framework (NPF) is the framework for the spatial development of Scotland as a whole. It sets out the Government's development priorities over the next 20-30 years. The key related sections are set out below (emphasis added).

#### NPF3

2.18 But throughout, there will be a need to ensure a generous supply of housing land in sustainable places where people want to live, providing enough homes and supporting economic growth.

Edinburgh and South East Scotland Place Statement – A planned approach is required to ensure development needs are met, whilst taking into account existing and future infrastructure capacity. Led by SESplan, we wish to see greater and more concerted effort to deliver a generous supply of housing land in this area.

Edinburgh and South East Scotland Place Statement – the longer-term spatial strategy for delivering housing land will need to acknowledge and address the region's infrastructure constraints.

## Policy and Guidance A

### Housing Need and Demand Assessment Manager's & Practitioner's Guides

**A.5** These documents inform about the preparation and use of HNDAs, including their role in informing Housing Supply Targets. The key related sections are set out below (emphasis added).

#### HNDA Managers Guide

9.1 □ The HNDA provides the evidence on which an Housing Supply Target(s) is based. **While it is expected that there is a clear alignment between the HNDA and the Housing Supply Target the two are not the same and are therefore not expected to match.**

9.2 □ The Housing Supply Target will take the HNDA as its starting point, **but will consider policy and practical considerations to reach a view on the level of housing that can actually be delivered over a defined period.**

9.3 □ **The HNDA gives a statistical estimate of how much additional housing is required, whereas the Housing Supply Target gives an estimate of how much additional housing can be actually be delivered by authorities.**

9.4 □ **The Housing Supply Target is NOT part of the HNDA process.**

11.1 □ HNDAs should be undertaken every 5 years and be capable of looking forward 20 years from the year of plan approval. Once considered robust and credible by the Scottish Government Centre for Housing Market Analysis (CHMA) there is no requirement to revisit the assessment within the 5 year period.

13.1 □ The Housing Supply Target .... is the next stage of the housing planning process AFTER the HNDA. The Housing Supply Target feeds into both LHSs and Development Plans. It sets out the estimated level of additional housing that can actually be deliverable, on the ground, over the period of the plan. The Housing Supply Target represents a policy interpretation of the HNDA and therefore should be considered separately to the HNDA.

13.2 □ Local authority housing and planning departments should work together to jointly agree the Housing Supply Target which in turn should be agreed by all strategic and local authority interests in the HMP, to ensure consistency to delivery across local authority and housing market boundaries.

13.3 □ In SDP areas it will be particularly important to ensure that Housing Supply Target figures have been developed and agreed jointly by planning and housing interests at both the local and strategic authority level.

**13.4 □ In setting and agreeing the Housing Supply Target, authorities should give full consideration to those factors which may have a material impact on the pace and scale of housing delivery such as:**

- economic factors which may impact on demand and supply
- capacity within the construction sector
- the potential inter□dependency between delivery of market and affordable housing at the local level
- availability of resources
- likely pace and scale of delivery based on completion rates
- recent development levels

## A Policy and Guidance

- **planned demolitions**
- **planned new and replacement housing or housing brought back into effective use.**

13.5 □ **Consideration of these factors could result in a Housing Supply Target figure which may be lower or higher than the housing estimate in the HNDA.**

13.7 □ The Housing Supply Target should cover all tenures and set out the expected broad split between market and affordable housing. In reaching a view about this tenure split, partnerships will want to consider the outputs from the HNDA tool alongside other practical and delivery considerations including pressure on existing stock.

13.8 The Housing Supply Target should normally be expressed over a period of 5, 10 and 20 years in line with the planning timeframes associated with LHS and Local Development Plans.

13.9 However in SDP areas the Housing Supply Target should be capable of being expressed at a 12 and 20 year timeframe within the MIR and SDP and at 5, 10 and 20 year timescales in the subsequent LDP and LHS.

### **HNDA Practitioner's Guide**

What HNDAs are Designed to do □ The housing need/demand estimates derived from HNDAs are subsequently refined in the Housing Supply Target. **Several factors such as housing policies, available finance and capacity of the construction sector are used to translate the HNDA estimates into the Housing Supply Target.**

1.15 □ Future need is mainly driven by future household formation (projections). By its very nature this has to be met through the provision of additional housing units. This is what the HNDA Tool outputs. Most additional housing units will be delivered through new build, but delivery should also be considered through changes in housing stock such as conversions and bringing empty properties back into use. The amount and type of additional units that need to be delivered is decided in the Housing Supply Target.

### **Local Housing Strategy Guidance**

**A.6** Produced to inform the preparation of LHSs. The key related sections are set out below (emphasis added).

#### **Local Housing Strategy Guidance**

7.1 A local authority's ability to provide housing of the right types in the right places, to meet the needs of the population is fundamental to the LHS. Local authorities should undertake an assessment of housing need and demand and **informed by this evidence, set a Housing Supply Target. In doing so, local authorities should consider the role, capacity and mechanisms available to its housing association partners, the private sector as well as its own ability to meet the need and demand of its population within its LHS.**

7.6 Local authorities, as both the statutory housing and planning authority, are responsible for assessing housing requirements, ensuring a generous supply of housing land and enabling the delivery of the both market and affordable housing. This section of the LHS should be consistent with and complement the local authority's Local Development Plan.

## Policy and Guidance A

7.7 Housing and planning authorities should continue to work closely together to take forward the processes that underpin effective housing planning and the delivery of strong local housing outcomes.

7.8 Central to the processes is the agreement of a Housing Supply Target, which should be set out clearly in the LHS.

7.9 The Local Housing Strategy should draw on the findings of the HNDA to inform its approach to housing investment and delivery. The LHS should set out clearly the local authority's view of the type and level of housing to be delivered over the period of the plan in its Housing Supply Target. **The Housing Supply Target set out in the LHS should be broadly consistent with the Housing Supply Target set out in the development plan.**

7.10 In setting and agreeing the Housing Supply Target, authorities should give full consideration to those factors which may have a material impact on the pace and scale of housing delivery such as:

- economic factors which may impact on demand and supply in particular parts of the area
- capacity within the construction sector
- the potential inter-dependency between delivery of market and affordable housing at the local level
- availability of resources
- likely pace and scale of delivery based on completion rates
- recent development levels
- planned demolitions
- planned new and replacement housing or housing brought back into effective use.

7.11 The Housing Supply Target should be split by market and affordable housing and expressed at both local authority and functional housing market area.

7.12 **Those local authorities covering a large geographic area or those with distinct submarket areas may wish to set out a Housing Supply Target at sub-housing market area.**

## B Housing Need and Demand Assessment Data

### Appendix B Housing Need and Demand Assessment Data

**B.1** Chapter 4 'Methodology for Setting Housing Supply Targets' paragraphs 4.5 to 4.7 sets out the agreed approach to using the HNDA alternative future estimates for the SDP 12 year and 8 year periods. Annual averages of the 2012 to 2030 estimates were used to calculate estimates for the 12 year period 2018 to 2030. The exact HNDA estimates will be used for the eight year 2030 to 2038 period.

**B.2** Tables of sub-housing market area HNDA estimates are set out in [HNDA Supporting Document 4 Final Analysis of Need and Demand at Sub Housing Market Area Level](#). Data for the both the 2010 based and 2012 based alternative futures is presented. For the purposes of setting Housing Supply Targets, only the 2012 based estimates will be used for reasons set out in paragraphs 3.11 and 3.12. Each row of each table represents the additional housing need and demand in an individual year from 2012 up to 2038. The columns break down the estimates of need and demand into the four broad tenure categories - Social Rent, Below Market Rent, Private Rental Sector and Owner Occupied.

**B.3** The following four step process was used to sort the data from the [HNDA Supporting Document 4](#):

1. Combined data at member authority and SESplan Housing Market Area level
2. Combined tenures into market and affordable
3. Sort relevant years for 12 and 8 year plan periods
4. Calculate annual average for 2012-2030 estimates for use in 12 year period.

#### Step 1

**B.4** Table B.1 below sets out a key of the tables of sub-housing market area level that were combined from [HNDA Supporting Document 4](#) to set out estimates at SESplan member authority level for each of the 2012 based alternative futures. The totals from each authority are combined for SESplan Housing Market Area estimates.

**Table B.1 HNDA Estimate Tables Used**

Authority	'Steady Recovery'	'Wealth Distribution'	'Strong Economic Growth'
City of Edinburgh	CEC06	CEC07	CEC08
East Lothian	EL16, EL17, EL18	EL19, EL20, EL21	EL22, ELL23, EL24
Fife	FS11, FS12	FS13, FS14	FS15, FS16
Midlothian	M11, M12	M13, M14	M15, M16
Scottish Borders	SB21, SB22, SB23, SB24	SB25, SB26, SB27, SB28	SB29, SB30, SB31, SB32
West Lothian	WL16, WL17, WL18	WL19, WL20, WL21	WL22, WL23, WL24

#### Step 2

## Housing Need and Demand Assessment Data B

**B.5** The social rent estimates and below market rent estimates for each individual year were then combined to set out the affordable estimate for each year. The private rented sector and owner occupied estimates were combined to set out the market estimate for each year.

### Step 3

**B.6** Estimates for each individual year from 2012 up to and including 2030 were combined. These are set out in Tables B.2, B.3 and B.4 under Step 4. Estimates for each individual year from 2031 up to an including 2038 were combined. These combined estimates were used for the 2030-38 period set out in Tables 4.4, 4.5 and 4.6.

### Step 4

**B.7** The data for step 4 is shown in Table B.2, B.3 and B.4 for each of the alternative futures. An annual average figure of the total 2012 to 2030 estimate for market and affordable need and demand was calculated. This is the total in Column A divided by the 19 individual years. The annual average is then shown in Column B. This annual average is then used as the annual average need and demand for the 2018-2030 period.

**B.8** To calculate the 2018-2030 period need and demand for each scenario, the average figures in Column B are multiplied by the 12 years in the 2018-2030 period. The total is then set out in Column C.

**Table B.2 Steady Recovery Estimates**

	Affordable			Market		
	A. 2012-2030 Total	B. 2012-2030 Annual Average	C. Estimate 2018-2030 Period Total	A. 2012-2030 Total	B. 2012-2030 Annual Average	C. Estimate 2018-2030 Period Total
City of Edinburgh	40,586	2,136	25,633	21,796	1,147	13,764
East Lothian	6,391	336	4,032	3,406	179	2,148
Fife	7,187	378	4,536	5,110	269	3,228
Midlothian	5,627	296	3,552	2,123	112	1,344
Scottish Borders	2,432	128	1,536	1,422	75	900
West Lothian	6,475	341	4,092	4,184	220	2,640
<b>SESplan</b>	<b>68,698</b>	<b>3,615</b>	<b>43,381</b>	<b>38,041</b>	<b>2,002</b>	<b>24,024</b>

## B Housing Need and Demand Assessment Data

**Table B.3 Wealth Distribution Estimates**

	Affordable			Market		
	2012-2030 Total	2012-2030 Annual Average	Estimate 2018-2030 Period Total	2012-2030 Total	2012-2030 Annual Average	Estimate 2018-2030 Period Total
City of Edinburgh	45,819	2,412	28,944	28,423	1,496	17,952
East Lothian	7,027	370	4,440	3,484	183	2,196
Fife	8,676	457	5,484	6,602	347	4,164
Midlothian	6,180	325	3,900	2,223	117	1,404
Scottish Borders	3,126	165	1,980	2,151	113	1,356
West Lothian	7,223	380	4,560	4,752	250	3,000
<b>SESplan</b>	<b>78,051</b>	<b>4,109</b>	<b>49,308</b>	<b>47,635</b>	<b>2,506</b>	<b>30,072</b>

**Table B.4 Strong Economic Growth Estimates**

	Affordable			Market		
	2012-2030 Total	2012-2030 Annual Average	Estimate 2018-2030 Period Total	2012-2030 Total	2012-2030 Annual Average	Estimate 2018-2030 Period Total
City of Edinburgh	50,556	2,661	31,932	36,303	1,911	22,932
East Lothian	7,229	380	4,560	4,184	220	2,640
Fife	9,915	522	6,264	8,121	427	5,124
Midlothian	6,128	323	3,876	2,572	135	1,620
Scottish Borders	3,783	199	2,388	2,947	155	1,860
West Lothian	7,216	380	4,560	6,020	317	3,804
<b>SESplan</b>	<b>84,827</b>	<b>4,465</b>	<b>53,580</b>	<b>60,147</b>	<b>3,165</b>	<b>37,980</b>

## Glossary C

## Appendix C Glossary

### Glossary

Term	Description
Affordable Housing	Housing of reasonable quality that is affordable to people on modest incomes.
Allocation	Land identified in a local development plan for a particular use.
Below Market Rent housing products	Housing options available at a cost below full market value to meet an identified need.
City Deal	Funding mechanism in which contributions and risks are shared between councils and central government and across sectors, based on the improved performance of the regional economy.
Development Plan	A document setting out how places should change and what they could be like in the future. It stipulates what type of development should take place and where should not be developed.
Effective Land Supply	The part of the established housing land supply which is free or expected to be free of development constraints in the period under consideration.
Established Land Supply	The total housing land supply including the effective housing land supply plus remaining capacity for sites under construction, sites with planning consent, sites in adopted local development plans and where appropriate other buildings and land with agreed potential for housing development.
Green Belt	Area of countryside around cities or towns which aims to prevent urban sprawl and inappropriate development.
Greenfield Land	Land in a settlement or rural area which has never been developed, or where traces of any previous development are now such that the land appears undeveloped.
Housing Demand	Quantity and type/quality of housing which households wish to buy or rent and are able to afford
Housing Land Requirement	Generous capacity of land for housing required to be made available in Local Development Plans. For SESplan it is set at 110% of the Combined Housing Supply Target.
Housing Market Area	Geographical space in which people will search for housing and within which they are willing to move while maintaining existing economic and social relationships.

## C Glossary

Term	Description
Housing Need and Demand Assessment (HNDA)	The evidence used as a basis for identifying future housing requirements to ensure suitable land is allocated through development plans.
Housing Market Areas	Geographical spaces in which people will search for housing and within which they are willing to move while maintaining existing economic and social relationships.
Housing Market Partnership	A group of local authorities and relevant organisations working jointly to plan for housing within a housing market area
Housing Need	Households lacking their own housing or living in housing which is inadequate or unsuitable, who are unlikely to be able to meet their needs in the housing market without some assistance
Housing Need and Demand Assessment (HNDA)	The evidence used as a basis for identifying future housing requirements to ensure suitable land is allocated through development plans.
Housing Supply Target	a policy view of the number of homes the authority has agreed will be delivered in each housing market area over the periods of the development plan and local housing strategy, taking into account wider economic, social and environmental factors, issues of capacity, resource and deliverability, and other important requirements such as the aims of National Parks. The target should be reasonable, should properly reflect the HNDA estimate of housing demand in the market sector, and should be supported by compelling evidence.
Infrastructure	Public transport, roads, sewerage, water supply, schools, gas, electricity, telecommunications etc. which are needed to allow developments to take place.
Market Housing	Private housing for rent or sale, where the price is set in the open market.
New Build Shared Equity	Enables RSL's and private developers to build or buy new homes for sale on a shared equity basis, with purchasers buying a majority stake of the equity depending on income
Open Market Shared Equity	Operates on similar principles to New Build Shared Equity, enabling eligible purchasers to acquire a property in the second hand market
Prudential Borrowing	The set of rules governing local authority borrowing.
Strategic Development Areas	Areas identified under SDP1 of being capable of accommodating strategic growth.
Scottish Planning Policy (SPP)	A statement of the Scottish Government's approach to land use planning

## Glossary C

Term	Description
Windfall	A site which becomes available for development during the plan period which was not anticipated to be available when the plan was being prepared

Committee Draft



Committee Draft

**APPENDIX 4 –**

## APPENDIX 4 – TRANSPORT APPRAISAL

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1. This covering paper sets out the Transport Appraisal process for the SESplan Proposed Plan. Attached is the SDP2 Transport Appraisal setting out the impacts and outline mitigation options of the additional housing development that the Strategic Development Plan (SDP2) has identified is needed to contribute towards meeting the Housing Supply Targets in the Proposed Plan. Based on current estimates, only the City of Edinburgh may be required to identify additional housing land above what is emerging from the LDP. All other SESplan member authorities are not expected to identify additional housing land above what is emerging from their Local Development Plans (LDPs) to meet the Proposed Plan Housing Supply Targets.
2. A Transport Appraisal is a process which allows the relationship between land use and movement to be taken into account when preparing development plans. It helps shape the spatial strategy, identifies regional level impacts of the strategy on the strategic transport network and presents outline mitigation options that could be delivered to support development. These will be examined in future appraisal work, including that undertaken to support the next Edinburgh LDP.
3. The first Strategic Development Plan (SDP1) and Housing Land Supplementary Guidance were accompanied by Transport Appraisals<sup>1</sup>. These identified that, as the result of development proposed over the plan period to 2024, there would be significant impacts on journey times and congestion on the strategic road network. The majority of impacts were identified on road approaches to Edinburgh (e.g. M9, M8, A1, etc) and on the A720 Edinburgh Bypass. Subsequent to this, each SESplan Member Authority Local Development Plan has undergone a transport appraisal identifying detailed impacts in each area and a range of transport interventions to mitigate the impacts.
4. The SDP2 spatial strategy was informed by the findings from the Transport Appraisal of SDP1 and transport appraisals of the emerging LDPs. In addition a sustainable [Accessibility Analysis](#) (2014) was undertaken to identify the accessibility of settlements to employment and other generators of travel by public transport. These studies underpinned the ‘Growth Corridors’ strategy set out as the preferred option in the MIR. This strategy involves locating a greater proportion of development in Edinburgh, where over 50% of future additional jobs were forecast, where journeys are shorter and where there is greater public transport infrastructure and services. Long term

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<sup>1</sup> [SDP1 Appraisal](#), [SDP1 Appraisal Appendices](#), [Housing Land Supplementary Guidance Appraisal](#)

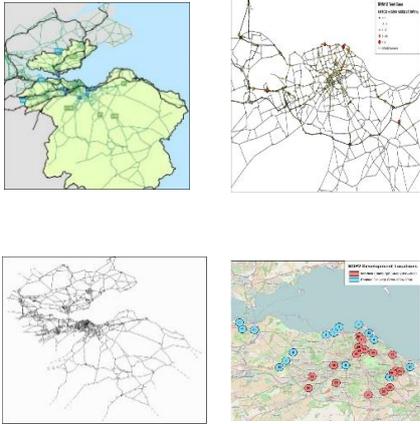
growth will also be focussed along sustainable transport corridors. The overall approach will reduce the need to travel, reduce the length and number of additional journeys and support a shift away from private car towards walking, cycling and public transport.

5. The SDP1 Transport Appraisal made use of a regional transport model. This model has been updated as part of a Cross Boundary Study (CBS), funded and led by Transport Scotland, to identify the transport impacts of SDP1 and emerging LDPs in greater detail. The study takes into account all sites permitted or allocated for housing, employment, retail and other types of development. When complete, it will identify the cumulative and cross authority boundary impacts of this development and present packages of road and public transport mitigation measures that could be developed to address them. It will also provide evidence to underpin a Developer Contributions Framework to be prepared as Supplementary Guidance to SDP2. This will set out an approach to securing developer contributions to help meet the cost of some of the key transport interventions identified by the appraisals.
6. The Cross Boundary Study was due to report in 2015. The initial plan-making programme for the Proposed Plan envisaged that a Transport Appraisal of the additional development required (the SD2 Transport Appraisal attached) would follow the completion of the Cross Boundary Study and be based on its findings. However, due to delays in data gathering, the final CBS report will not now be available until September 2016. Whilst the CBS outputs are still to be finalised, the SDP2 Transport Appraisal was able to take some of the emerging findings into account, identify the additional impacts of SDP2 and set out some outline mitigation options. The key finding of the SDP2 Transport Appraisal (set out in the Executive Summary) is that the additional impacts of SDP2 are localised and small in proportion to scale of impacts associated with SDP1 development already permitted or allocated in existing and emerging LDPs.
7. The transport interventions included in the Proposed Plan (Table 6.1) are based on the SDP1 and SDP2 appraisals as well as individual LDP appraisals. As the Cross Boundary Study is not yet complete, we are unable to set out a definitive list of cross boundary measures supported by sufficient evidence. We are however able to set out in broad terms the types of interventions that may be required (Table 6.1 Column B).

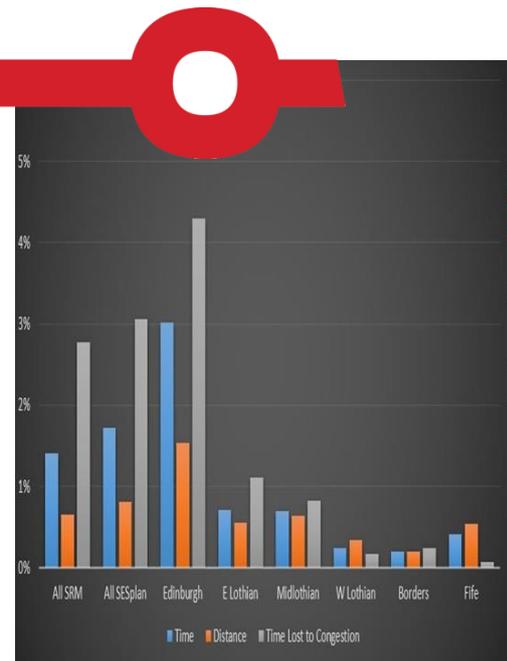
### **Next Steps**

8. As set out in the Action Programme and paragraph 6.10 of the Proposed Plan, SESplan is working with Transport Scotland to finalise the Cross Boundary Study. Together, these appraisals will form the evidence base to support the preparation of a Developer Contributions Framework to be adopted as Supplementary Guidance within one year of the approval on the SDP.

Reference number 103914 12



## SDP2 TRANSPORT APPRAISAL



# SESPLAN STRATEGIC DEVELOPMENT PLAN

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## EXECUTIVE SUMMARY

### Summary

In February 2016 SESplan commissioned a study to undertake a Transport Appraisal to inform the SESplan Strategic Development Plan (SDP2) Proposed Plan stage.

The objective of the study was to identify the potential transport impacts associated with the delivery of the additional housing required in Edinburgh to meet Housing Supply Targets in the Proposed SDP. It is estimated that the other five SESplan member authorities will have sufficient housing land already identified in existing and emerging plans. This appraisal only examined the additional impact as a result of the Edinburgh requirements.

### Approach

The appraisal of the transport impacts of the additional housing build out was undertaken using the SESplan Regional Model (SRM12). The SRM12 model 2024 forecast year network and demand data was recently updated during the preliminary stages of a parallel study known as the Cross Boundary Study (CBS). This study is examining the cumulative and cross boundary impacts of housing and employment development being built out between 2012 and 2024 as a result of the development requirements of the 2013 SESplan Strategic Development Plan and subsequent emerging Local Development Plans. The model updates included planning and development input data to the Transport Economic and Land use Model of Scotland (TELMoS), and the public transport and road assignment models. Preliminary findings are now emerging from the on-going CBS study and the final report is due in autumn 2016.

The additional build out between the CBS housing inputs to contribute to the shortfall against the Edinburgh Housing Supply Targets (HST) in SDP2 in 2030 was identified as 13,621 units. Travel demand in the model was updated to reflect known housing sites continuing to be built out beyond the CBS cut-off date of 2024, potential additional housing development at the International Business Gateway (IBG) and the expected contribution of windfall housing sites within the Edinburgh urban area. Further development of employment land and associated jobs was not undertaken as the CBS study includes a level of employment land build out that is optimistic when considered against recent trends. The Proposed Plan also does not identify a requirement for further strategic employment land.

### Key Impacts

The impacts of the delivery of the additional housing build out in Edinburgh were evaluated using a range of measures, with particular focus on the change in flows and change in capacity (the change in delays and journey times largely reflected these changes). Overall, the strategic impacts are widely distributed and relatively minor. The total network journey distance by vehicle kilometres and travel time are forecast to increase by an average of 1% in the peak periods and the increase in time lost due to congestion was 3%, indicating that areas of the network are close to or at capacity.

The appraisal has shown that transport impacts occur both locally at the development locations and on the suburban network as well as at a strategic level at recognised constraints within the key strategic road network. Localised impacts can be more significant and impacts in the vicinity of the proposed developments in north Edinburgh, at the International Business Gateway (IBG) and Maybury, along A8 and in west Edinburgh are considerable. The Gogar link road and Eastfield airport road improvements associated with A8 were not included within the model and would probably mitigate some of the impacts of the proposed IBG development.

The additional housing build out in Edinburgh gives rise to small increases in flows at many locations compared with findings to date from the CBS outputs. The highest level of increase in flows are associated with areas to the north of Edinburgh, Ferry Road, west of Edinburgh and along the city bypass (specifically A8, M8, A71, A90, M9, A720 and north Edinburgh in vicinity of Leith and Ferry Road).

The most significant increase in flow relative to capacity along one or more junction approach occurs along the A8 and at junctions in North Edinburgh. For those junctions where one or more approach is forecast to be at capacity in CBS, additional traffic demand in SDP2 HST is forecast at A8 (Newbridge to Gogar), A71 Calder Road, A720 and Queensferry Crossing and at Newbridge, Gogar, Maybury, Barnton and Hermiston Gait. Traffic demand at a number of junction approaches along the A8 and A720 in the vicinity of Gogar are forecast to increase and exceed capacity.

## Potential Mitigation

Potential measures that could be considered to mitigate the impact of the additional HST development were identified, by reviewing existing transport proposals and opportunities. The approach adopted recognised and accommodated the need to limit the detailed identification of new transport options until the CBS options emerge.

This identified the following measures:

- Extensions to Edinburgh tram
- Public Transport Action Plan and Active Travel Strategy
- South Suburban Line passenger services
- North Edinburgh Transport Action Plan
- Travel demand management plan
- Development of public transport hubs
- Capacity enhancements to IBG access junctions along A8
- Widening of A8 and bus priority measures
- Walking and cycling connections to the new Edinburgh Gateway station
- Upgrade of Barnton junctions
- Capacity enhancements to Maybury junctions
- Optimised signals strategy
- South Queensferry capacity enhancements including Builyleon Road
- Eastfield airport road improvements and Gogar link road

The appraisal has been based on a strategic assessment of the additional housing build anticipated in Edinburgh based on the Housing Supply Targets in the SESplan Proposed Plan. The appraisal builds on emerging findings from the 2024 CBS study and the updated

SESplan model. The list of emerging schemes under consideration within the CBS were not available.

The appraisal of the SDP2 HST has been based on the available information including the current estimates of housing land and building phasing. The operational performance of the differences in the network between the CBS and additional development required by the emerging Proposed Plan has been appraised at a high level. As the Local Development Plans (LDPs) are developed, more detailed information will enable the impacts of interventions to be appraised in greater detail along corridors.

# 1. INTRODUCTION

## 1.1 Background

- 1.1.1 An appraisal known as the Cross Boundary Study (CBS) is currently being undertaken to identify the impact of the 2013 SESplan Strategic Development Plan (SDP1), assess points of stress within the highway network and identify potential mitigation measures.
- 1.1.2 In February 2016 SYSTRA were appointed by SESplan to undertake a Transport Appraisal to inform the SESplan Strategic Development Plan (SDP2) Proposed Plan stage.
- 1.1.3 The objective of the study is to identify the potential transport impacts associated with the delivery of the additional housing required in Edinburgh to meet Housing Supply Targets in the Proposed SDP (referred to as SDP2). It is estimated that the other five SESplan members' authorities will have sufficient housing land already identified in existing and emerging plans. Therefore this appraisal only examined the additional impact as a result of the Edinburgh requirement.
- 1.1.4 For this purpose the CBS model has been used to model travel movements and forecast impacts across the SESplan transport network.

## 1.2 SEStran Regional Model & SESplan Cross Boundary Study

- 1.2.1 The SEStran Regional Model 2012 (SRM12) is a strategic transport model that is capable of modelling travel demand and choice of mode of transport for public and private transport (including car, goods vehicles bus, rail and tram) throughout the area of South East of Scotland, including the SESplan authorities. The model forecasts changes in travel movements and can provide information to enable an appraisal to be undertaken of the impact of these on the transport network.
- 1.2.2 The SESplan Cross Boundary Study is investigating the transport impacts associated with SESplan CBS development and emerging LDP proposals. This on-going study is considering the forecast period up to 2024 and one of the primary objectives of the study is to identify areas of impact and outline potential transport intervention options.
- 1.2.3 The CBS study forecasts are founded on spatially detailed planning data provided by the SESplan member authorities in 2015. This included housing sites from existing plans and emerging Local Development Plans. The CBS land use forecast development data collected from Local Authorities are input to the SRM12 to create the transport forecasts.

## 1.3 SDP2 Approach

- 1.3.1 The objective of the current SDP2 HST study is to deliver a Transport Appraisal of the impact additional housing required in Edinburgh to meet the Housing Supply Targets 2018-2030 relative to the level of development in the CBS to inform the SESplan Strategic Development Plan (SDP2) Proposed Plan stage. The appraisal considers impacts through the analyses of key indicators e.g. identifying pressure points, change in travel demand, growth etc. - highlighting where impacts create new areas of concern compared to the CBS scenario.

- 1.3.2 A longer term land use scenario has been developed (based on the CBS Future Case scenario), which reflects the proposed additional housing build out to meet the SDP2 HST for Edinburgh. Analysis of land supplies shows that City of Edinburgh will need to permit windfall development and potentially identify further housing land in its next LDP. This study seeks to identify the impact of this. This scenario does not consider further employment allocations as the level of employment land built out modelled in the CBS to 2024 was considered optimistic against recent trends. SESplan does not anticipate any further employment land allocations at this time. The Proposed Plan also does not identify a requirement for further strategic employment land.
- 1.3.3 Further housing development in the authorities, with the exception of Edinburgh, was not modelled. This is because the Housing Supply Targets in SDP2 are not anticipated to require further housing land allocations in the LDPs to follow. The Cross Boundary Study modelled housing build out to 2024 at rates that are higher than the HSTs so that in West Lothian, Scottish Borders and East Lothian build out to 2024 is higher than what is expected by SDP2 HSTs to 2030. Therefore additional housing build out that is modelled is restricted to Edinburgh.
- 1.3.4 The household and population allocations, and demographic profile for the proposed SDP2 HST residential areas are informed using feedback from CBS and the TELMoS population profile information. The assumptions, transport appraisal information and processes developed are generally consistent across the two appraisal studies, enabling stakeholders to more clearly understand potential impacts between the two sets of development content.
- 1.3.5 As the Proposed Plan does not identify a requirement for further strategic employment lands, there is no significant requirement to undertake further TELMoS model runs
- 1.3.6 The predicted impacts of SDP2 HST, including the geography and scale of impacts arising from the additional housing development required in Edinburgh to meet the Housing Supply Targets, are used to inform where transport mitigation maybe required.
- 1.3.7 The transport constraints and opportunities within the LDP data have been cross-referenced to ensure consistency in terms of previously predicted impacts and proposed transport infrastructure.
- 1.3.8 The staged approach to the appraisal undertaken is outlined below:
- Data gathered and information collated regarding the SDP2 HST scenario, including: scale of development, spatial strategy, access strategy and consideration of links to the Cross Boundary Study;
  - SDP2 HST scenario modelled using SRM12;
  - The impact in relation to the Cross Boundary Study considered as far as possible by analysing key indicators e.g. identification of pressure points, transport growth etc. – to highlight where impacts create new areas of concern;
  - Areas of concern identified and assessed whether these are located within areas which are likely to already be identified for mitigation from the Cross Boundary Study (on-going);

- Outlined at a high level what type of potential transport options could be considered, taking into consideration emerging CBS transport opportunities and proposals;
- Reported outcomes of the study, including the scenario development, test case analyses, key impacts and potential mitigation areas, and transport options.

1.3.9 As the appraisal of transport mitigation from the CBS has been delayed and is not due until autumn 2016, the transport mitigation proposals from the CBS are not expected to be available within the proposed timeline of this study. The current study has focused on comparing the areas requiring mitigation between the two studies (i.e. if an area has already been identified within the CBS, it's likely to be mitigated by an (as yet unidentified) transport scheme.

1.3.10 The impact of the SDP2 HST development proposals have been identified relative to the CBS, but as the CBS is an on-going study it is not appropriate to fully consider and test additional mitigation to that coming forward from the CBS. A qualitative statement of potential new infrastructure impacts has been provided to enable the rationale, scale, and type of benefits to be understood and further considered.

### Outputs & Indicators

1.3.11 The reported modelling scenario outputs provide indicators at the following three levels of evidence:

1.3.12 i. Regional & Local Authority Traffic & Travel Statistics:

- Changes in region-wide road movements – including the scale of overall growth associated with the additional allocations, across the full SESplan area and for each Local Authority;
- Forecasts the net change in travel distributions, demonstrating where SDP2 housing significantly increases road demand;
- Forecasts the changes in vehicle kilometres, travel time and time lost due to congestion, and thereby assesses the change in trip lengths (as an indication for Carbon emissions), and the subsequent impact to travel times and overall levels of congestion. The key measure of time lost per vehicle kilometre provides an overall indication of regional road network performance.

1.3.13 ii. Corridor Level Outputs

- Road traffic volumes – forecasts the change in traffic volumes along key corridors to illustrate changes in demand;
- Road journey times – forecasts the change in operational performance along key routes (including orbital and radial corridors), indicating impacts between key settlements.

1.3.14 iii. Detailed Network Outputs

- Volume / Capacity (capacity hot spot) maps illustrating specific points on the network which are forecast to become pressurised from the delivery of SDP2 HST;
- Network delay (delay hot spot) maps identifying locations where excessive congestion is forecast with the new housing in place;
- Evidence has been analysed to identify areas of the network that may require mitigation compared to the underlying CBS scenario;

## 2. SDP2 DEVELOPMENT CONTENT

### 2.1 Housing Development

2.1.1 The additional housing build out between Cross Boundary Study Test Case 2024 to contribute to meeting the shortfall against the City of Edinburgh Housing Supply Target in SDP2 to 2030, are shown in Figure 1. This information originates from three sources and as discussed below as, at this point in time, this is the best available information available to inform this study in advance of City of Edinburgh's next LDP to be prepared after the adoption of the SDP in 2018:

- Known sites continuing delivery from 2024 and onwards. Pre-2024 delivery of these sites is already included in the TELMoS outputs for the Cross Boundary Study;
- Increasing housing mix at the International Business Gateway (IBG). City of Edinburgh are now advocating an employment led but mixed use site with up to 2,400 dwellings; and
- Windfall housing sites within the urban area. Analysis shows that 420 dwellings per annum would be a conservative windfall allowance.

#### i. Sites with phased delivery 2024 and onwards

2.1.2 Data prepared for Edinburgh by consultants (CH2M) in the form of an excel spreadsheet has been applied. The spreadsheet was based on Edinburgh 2014 Housing Land Audit data and takes into consideration sites under on-going development between 2024 and up to and including 2029. This ensures compatibility with the Cross Boundary dataset and prevents overlap.

2.1.3 These sites were already coded in the model as they all provided phased delivery pre 2024 in the Cross Boundary Study.

#### ii. International Business Gateway

2.1.4 The potential Edinburgh IBG phasing expects all dwellings to be delivered by 2030 and results in an increase capacity of IBG to 2,400 dwellings. No dwellings are included at the IBG within the CBS scenario at present.

2.1.5 The level of housing development associated with both windfall developments and phasing of committed developments sites between 2024 and 2030 will be fully developed by 2030. At present the IBG is the only additional optional element considered within this appraisal that is not committed. Additional housing developments will be considered during the preparation of the City of Edinburgh LDP that follows on from this SDP.

2.1.6 The earlier low density office park layout (136,000m<sup>2</sup>) has been re-profiled to provide higher density office capacity despite the proposed additional housing at the IBG. The CBS reference case forecast high build out level of Non-Edinburgh City Centre floor space (and therefore the assumption that 136,000m<sup>2</sup> level of floor space will be built out to 2030 remains reasonable given the high level of office buildout predicted by the CBS to 2024 in

surrounding parts of West Edinburgh. Previous employment levels at the site are maintained until 2030. Therefore the SDP2 scenario contains a consistent number of jobs at the IBG as applied within the CBS study.

### iii. Windfall

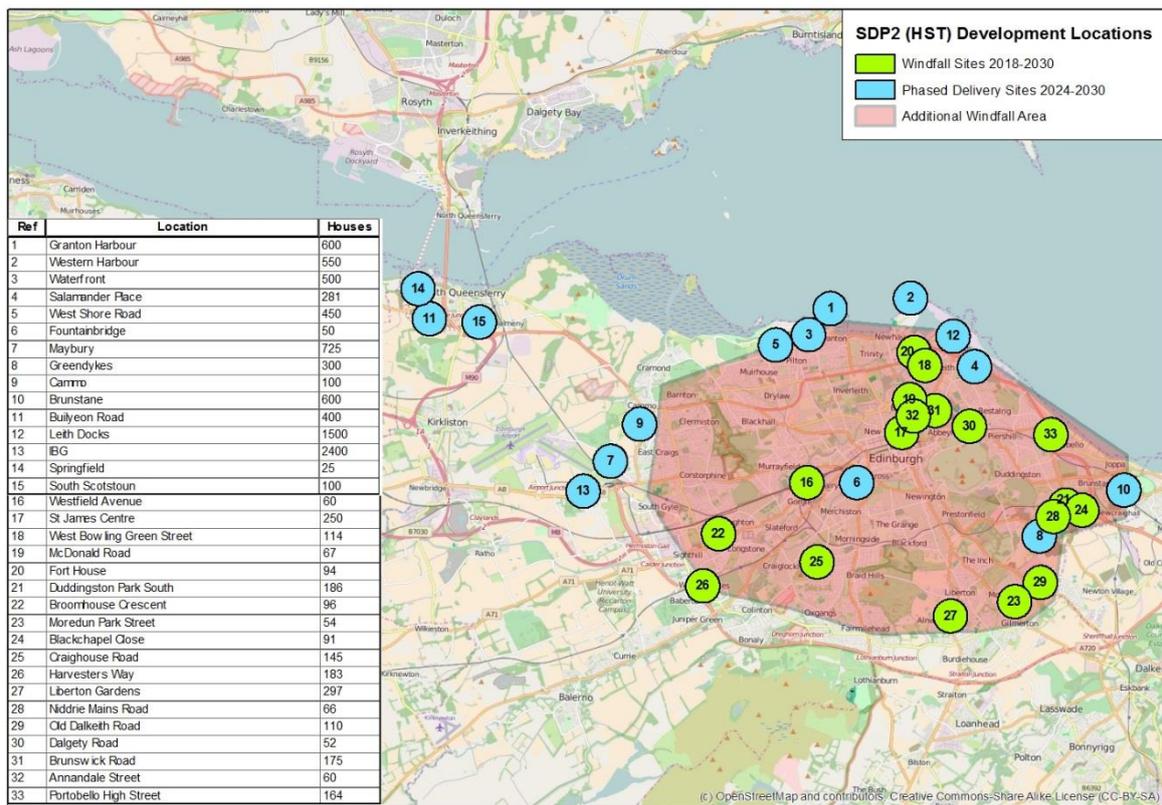
- 2.1.7 A total of 420 completions per annum is considered by City of Edinburgh Council to be a conservative forecast for windfall permissions (sites not allocated for development) on the basis of current analysis.
- 2.1.8 The location of the Additional Sites Permitted give an indication of where windfall sites have occurred (see Figure 1 and Appendix A: Table 9). These are sites that have been permitted post end 2014 that were not included in the Cross Boundary Data. The appraisal has modelled windfall completions over the 12 year SDP2 HST plan period from 2018 up to 2030 (5,040 additional dwellings).
- 2.1.9 Windfall has been modelled as urban brownfield completions and not peripheral greenfield sites, in accordance with the emerging SDP Strategy and principle for preference to be given to brownfield sites. Development has been distributed on the basis of current residential densities, excluding those locations where recent development has taken place as listed within the Additional Sites Permitted.

## 2.2 Forecast Level of Housing Development

- 2.2.1 To summarise, Table 1 shows that a total of 13,621 houses have been added to represent the potential level and location of additional housing build out in Edinburgh compared to the CBS 2024 scenario. The forecast population increase is 29,213 people and the average number of additional residents is 2.07 per household.
- 2.2.2 For further information about the calculation of the level of housing to meet the Housing Supply Target by 2030, see Appendix A.

**Table 1. Modelled Housing Inputs Additional to CBS**

HOUSING DEVELOPMENT	HOUSING UNITS
Continued delivery of sites in CBS from 2024 to 2030	6,181
International Business Gateway	2,400
Edinburgh Windfall Housing	5,040
<b>Total</b>	<b>13,621</b>



Note: Location of sites with continuing delivery 2024-30 and location of Edinburgh windfall sites post Housing Land Audit 2014

**Figure 1. Location of Planned Housing Developments building out beyond 2024**

### 3. TRANSPORT MODELLING RESULTS

#### 3.1 Introduction

3.1.1 The following sections consider aggregate and network based statistics. The focus here is to report on the change in the operational performance of the transport network between the currently available scenario for 2024 within the CBS and the SDP2 2030 housing development scenario.

3.1.2 The infrastructure package within the reference case for the CBS included committed infrastructure (i.e. which will be ‘on the ground’ by 2024) and recently delivered transport investments which have been built since the 2007 base version of the SRM. This was checked and agreed by SES plan and the local planning authorities. The package was as follows:

- Edinburgh Trams;
- Borders Railway;
- Queensferry Crossing;
- Edinburgh to Glasgow Improvement Programme;
- Winchburgh Station; and
- Access arrangements to new development areas.

3.1.3 The multimodal SEStran Regional Model models transport mode choice for both private transport and public transport (including cars, goods vehicles, rail and tram). Results from the model are presented below at both an aggregate level and local authority level. The proposed housing developments will generate movements by active modes such as walking and cycling, which are implicitly modelled as part of private and public transport journeys, both at the origin and destination, as well as, for example, access to public transport and at interchanges. To forecast modal choice of active modes and the number of walking and cycling trips, particularly for the IBG development where an Active Travel Strategy may be implemented, it would be necessary to model developments at a more detailed level.

3.1.4 The Gogar link road and Eastfield airport road improvements are not modelled within CBS as they may be covered under the CBS mitigation (for more information see paragraph 0) and therefore the IBG related development impacts may appear to be more significant than they would be otherwise.

#### 3.2 Aggregate Statistics

##### SESplan Level

3.2.1 Table 2 shows that at the SESplan level the forecasts suggest that the increase in traffic levels due to the additional Edinburgh development relative to the level of development in CBS in the AM and PM peak hours (average peak hour 8.00-9.00 and 17.00-18.00 across

model area) will result in an increase in an average total vehicle kilometres and total travel time of around 1%.

3.2.2 Congestion measured in terms of vehicle hours lost (the time ‘lost’ when travelling in congested conditions compared to travelling at free-flow speeds) is forecast to increase by approximately 3% in the peak hours with the delivery of SDP2 HST compared with CBS scenario.

3.2.3 At the strategic level it is notable that the forecast change to the level of congestion is greater than the impact on traffic volumes i.e. small increases in traffic on congested networks lead to disproportionately greater increases in congestion.

3.2.4 These forecast changes are small in magnitude but given the congested state of the network and that the developments are primarily located to the west of Edinburgh, the increase would be expected to have significant local impact in some areas.

**Table 2. Global network statistics for actual and demand flows for CBS and SDP2**

		2012 CBS Model*		2024 CBS Model**		2030 SDP2 (HST) Model***	
Time Period		Actual	Demand	Actual	Demand	Actual	Demand
Total Network Distance	AM	2,852,492	2,917,494	3,440,403	3,679,161	3,458,030	3,706,917
	IP	2,086,073	2,092,172	2,590,433	2,611,888	2,604,594	2,627,122
	PM	2,982,058	3,102,937	3,551,529	3,987,020	3,567,444	4,008,792

Note: Units are VehKm

Total Network Travel Time	AM	52,343	53,784	69,230	74,963	70,009	75,987
	IP	35,245	35,370	44,781	45,162	45,182	45,588
	PM	55,642	57,995	73,721	83,031	74,608	84,243

Note: Units are Hours

Total Time Lost due to Congestion	AM	11,650	12,108	19,501	21,774	19,942	22,306
	IP	5,083	5,106	7,450	7,530	7,601	7,689
	PM	12,587	13,252	21,798	25,351	22,397	26,135

Note: Units are Hours

		2012 vs 2024				2024 vs 2030				2012 vs 2024	2024 vs 2030
		Change		% Change		Change		% Change		AM and PM	AM and PM
Time Period		Actual	Demand	Actual	Demand	Actual	Demand	Actual	Demand	Average	Average
Total Network Distance	AM	587,912	761,666	21%	26%	17,627	27,756	1%	1%	27%	1%
	IP	504,360	519,715	24%	25%	14,160	15,235	1%	1%		
	PM	569,471	884,083	19%	28%	15,915	21,772	0%	1%		

Note: Units are VehKm

Total Network Travel Time	AM	16,888	21,179	32%	39%	778	1,024	1%	1%	41%	1%
	IP	9,536	9,791	27%	28%	401	426	1%	1%		
	PM	18,079	25,036	32%	43%	887	1,212	1%	1%		

Note: Units are Hours

Total Time Lost due to Congestion	AM	7,851	9,666	67%	80%	441	532	2%	2%	85%	3%
	IP	2,367	2,424	47%	47%	151	159	2%	2%		
	PM	9,211	12,099	73%	91%	599	785	3%	3%		

Note: Units are Hours

\*2012 CBS model ID = BC62, planning data ID = A803

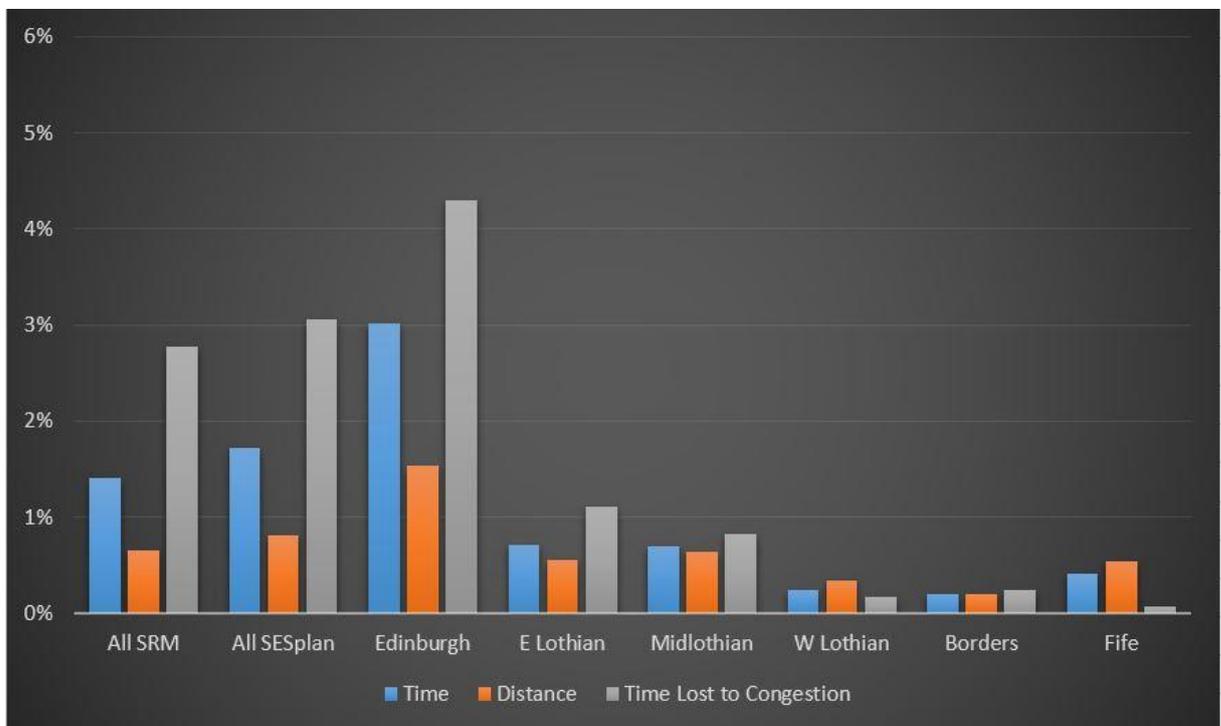
\*\*2024 CBS model ID = TC30, planning data ID = LA02

\*\*\*2030 SDP2 model ID = SD30, planning data ID = LE01

**Local Authority Level**

3.2.5 The percentage change in traffic travel times, vehicle distances and lost time for each local authority between CBS and SDP2 HST is shown in Figure 2. At the local authority level, the largest increase is forecast in Edinburgh.

3.2.6 These changes generally reflect the level of changes in traffic between CBS and SDP2 HST which in turn reflects the changes in level of housing, population and traffic between the two scenarios. Even though only the additional housing in Edinburgh was modelled, new journeys and congestion can occur as the result of new trips associated with developments elsewhere and existing traffic reassigning to alternative routes as congestions and delays increase. As expected the change in the level of lost time due to congestion indicates the majority of flow changes are found in Edinburgh.



**Figure 2. Change in travel time, vehicle kilometres and lost time by Local Authority**

**3.3 Network Level Results**

3.3.1 The network level reporting of results has focussed on the location of the developments, which are shown in Figure 1.

3.3.2 The appraisal of the relative change between the CBS and SDP2 HST scenario has been evaluated to assess the change in operational performance along road links and junctions using the following measures:

- Demand flows

- Relative difference between the traffic capacity and the demand flow for junction turning movements (V/C ratio)
- Junctions delays
- Road link delays
- Journey times

3.3.3 For each of the above measures the appraisal indicated that the operational impact of SDP2 HST was similar and the results are presented here are only for traffic flows and junction capacity. For further information relating to the appraisal of the other measures, reference should be made to Appendix B

3.3.4 Junction based data (delays and volume/capacity ratios) have been classified into ranges and displayed on link based road network diagrams by turning movement, with the greatest level of change shown more predominantly. Demand flows and delays along road links have been classified into category ranges and displayed on the same figures by direction, with the higher levels of flow shown more predominantly.

3.3.5 A series of figures showing the core SESplan road network around Edinburgh have been prepared to show the relative and absolute change in the level of service between the CBS and SDP2 HST scenarios. The overall impact of the SDP HST scenario is shown to be relatively small compared to the CBS scenario in Figure 2 is, although local impacts may be more significant. To enable the level of change associated with SDP HST to be considered within the context of CBS, for each measure a brief overview has been presented describing the location and scale of the most significant delays/impacts. The geographical location of the absolute and relative change due to the SDP2 HST scenario at junctions and along roads are then presented on figures of the road network within the SESplan area.

3.3.6 The analysis of the results have been based on model runs using a modelling option known as PASSQ, as this allows the high level of congestion and growth in traffic demand, queues and delays prior to the peak hour to be taken into account when modelling peak hour traffic movements. This is considered to better reflect travel behaviour when modelling highly congested areas but results in extended model run times.

3.3.7 The model forecasts both actual and demand flows. Actual flows are consistent with the flow that would be observed on the network whereas demand flows indicates the actual flow that would travel along the link plus the additional traffic if it were not held up upstream in the network by congestion. All flows presented within this report are based on the demand flow (actual flows are not used) and expressed in passenger car units (PCUs allow for the different vehicle types within a traffic flow group to be considered in a consistent manner and typically larger vehicles such as buses or heavy goods vehicle are considered to be equivalent to 2 or more cars (car or light goods vehicles are factored by 1 and a higher factors applied to buses and heavy goods vehicles are to calculate the equivalent total number of PCUs).

### 3.4 Demand Flows

3.4.1 In 2024 the major traffic flows (greater than 2,000 PCUs) in the CBS scenario are forecast along the A1, A720 city bypass, M8, M9, A90, A8, Queensferry Crossing and the Calder Road A71 and to the west of Edinburgh along A71 Calder Road, M8, M9, A90 in both peak

periods (forecast flows are generally 2000-4000 pcus/hr and for a limited number of locations flows exceed 4000 pcus/hr). Flows along many other key radial and orbital roads, including Ferry Road, Granton Road, A199 and A901 are between 1000-2000 pcus/hr. Flows along the majority of the remaining network is 200-500 pcus/hr.

3.4.2 The maximum link demand flow is similar between the AM and PM peak if directionality is not taken into consideration. The only small difference between peak hour flows occurs along the A90, which fall slightly in the evening peak period.

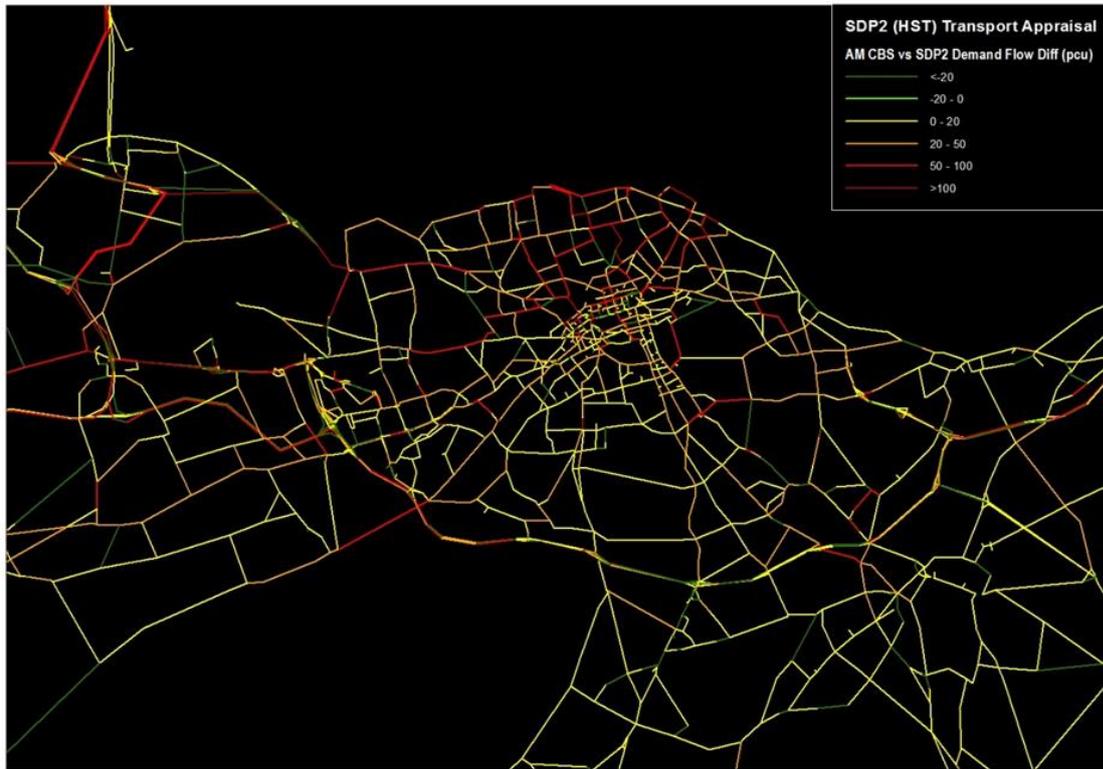
3.4.3 The following graphics have been produced which show impact of HST scenario as follows:

- Traffic Demand Flows: Change in Flows AM Peak - SDP2 relative to CBS
- Traffic Demand Flows: Change in Flows PM Peak - SDP2 relative to CBS
- Traffic Demand Flows: Change in Flows (%) AM Peak - SDP2 relative to CBS
- Traffic Demand Flows: Change in Flows (%) PM Peak - SDP2 relative to CBS

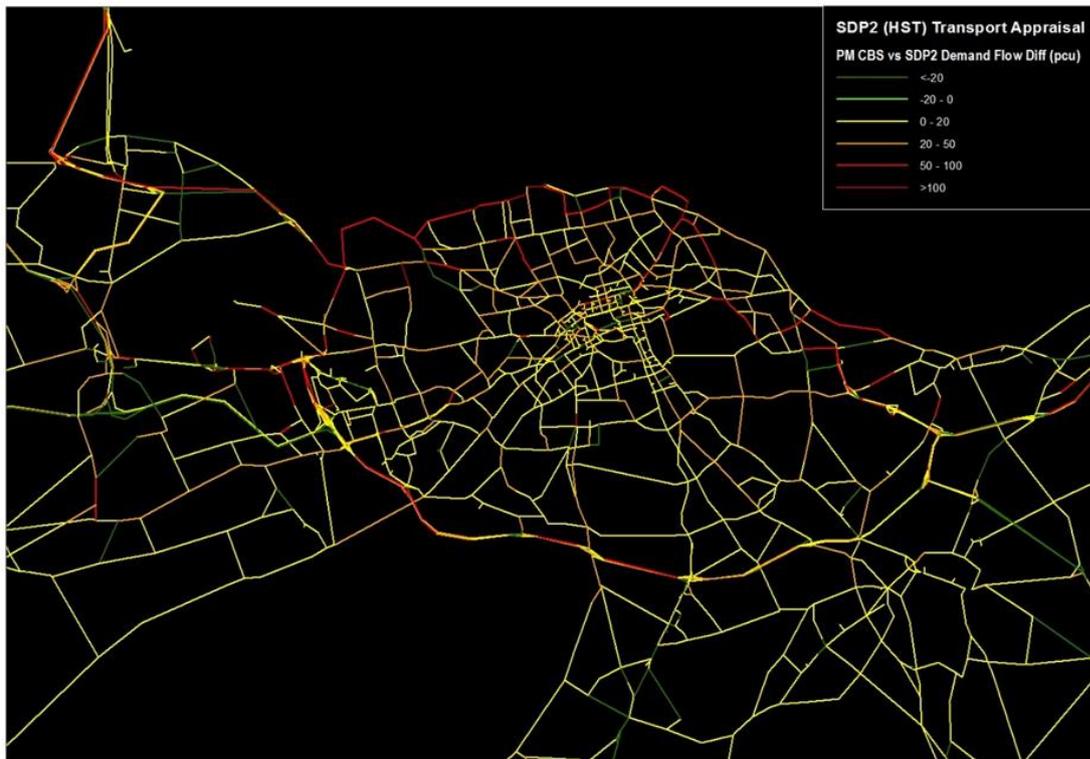
3.4.4 Figure 3 and Figure 4 show that relative to CBS, the change in flows across the network is relatively small and within the key the maximum increase banding shown for link flows is set at 100+PCUs. The highest absolute increase in traffic flows are associated with the developments in north and west Edinburgh, particularly along the A8 close to the IBG development where the impact an increase of this level is likely to be considerable as the network is at capacity. The relative change in flows are shown in Figure 5 and Figure 6.

3.4.5 There are increases in demand flows, as indicated by the 100 pcus/hr flow band, forecast across the Queensferry Crossing, along M8, A720 and A90 due to additional trips, such as commuting, associated with SDP2 housing developments. The overall level of increase due to the SDP HST developments in total flow relative to the CBS scenario, where flows of more than 2000 pcus/hr are forecast, are relatively small and around 1.5% of link flow, although where the network is operating at capacity the impact is likely to be considerable.

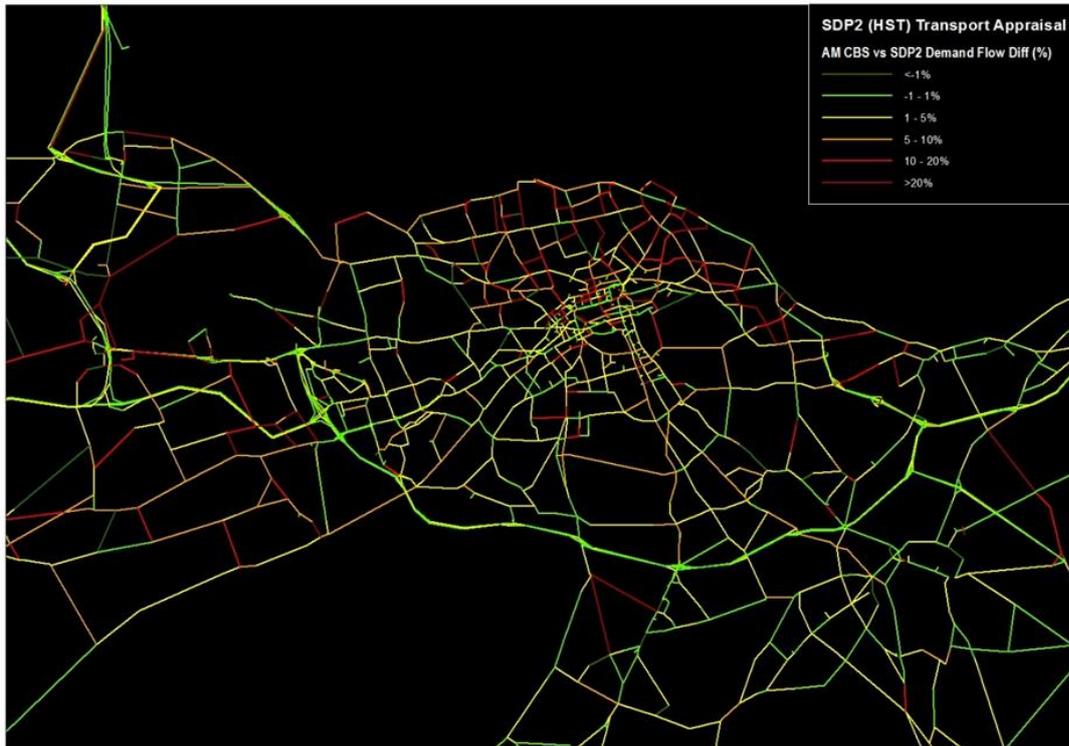
3.4.6 The greatest increase in both absolute and relative demand in flows (more than 100 pcus and/or 20+ %) are along areas of north Edinburgh and Edinburgh waterfront including Leith, Lower Granton and Ferry Road. This reflects the high level of demand in CBS and that flows are close or beyond capacity along the key routes and that there is high growth along many of the lesser trafficked roads within north Edinburgh.



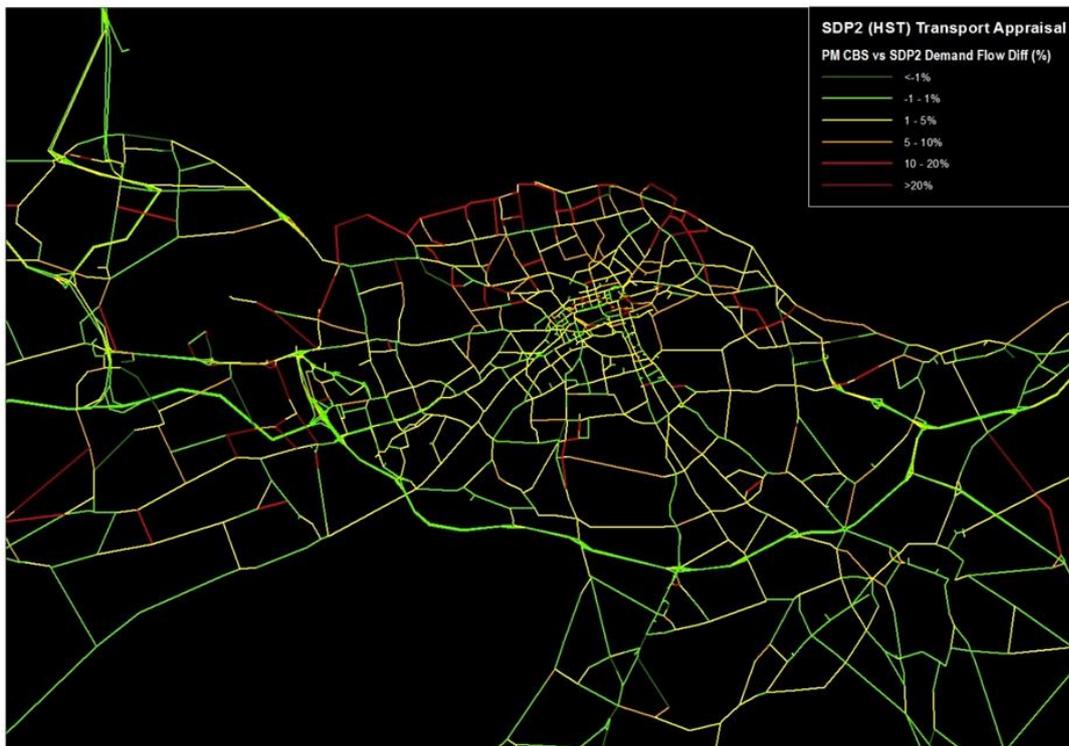
**Figure 3. Change in Flows AM Peak - SDP2 relative to CBS**



**Figure 4. Change in Flows PM Peak – SDP2 relative to CBS**



**Figure 5. % Change in Flows: AM Peak - SDP2 relative to CBS**



**Figure 6. % Change in Flows: PM Peak - SDP2 relative to CBS**

### 3.5 Traffic Volume to Capacity

3.5.1 The level of service within the network can be assessed using a number of measures, a key one of which is traffic flow expressed as a percentage the traffic capacity of the road network. As traffic flows exceed capacity (the point at which the flow volume expressed as a percentage of the capacity of the road or turning movement exceeds 100%), the level of delay, congestion and lost time increase significantly and alternative routes with lower delays, where available, become more attractive. Figures showing the percentage flow to capacity measure at junctions across the network are presented in the section below.

3.5.2 In the 2024 CBS scenario the demand flow is forecast to exceed capacity along one or more junction approaches or turning movements (locations where the demand equals or exceeds 100% capacity) at many junctions. The major intersections affected include those along the A720 city bypass, A71 Calder Road, Hermiston Gait, M8, A8, Gogar, Claylands M8/M9, A90 (Drum Brae and North Clermiston), Old Craighall and Queensferry Crossing. Overall, the trend between the morning and evening peak hours is similar, with slightly greater number of junctions along A90 and in central Edinburgh at capacity in the evening peak.

3.5.3 This assessment has been carried out at a strategic level to determine where the flow to capacity has been exceeded along one or more turning movements or junction approach arms. More detailed analysis outwith the scope of the current study would be required to determine whether the junction capacity or the capacity for the major demand flow has been exceeded.

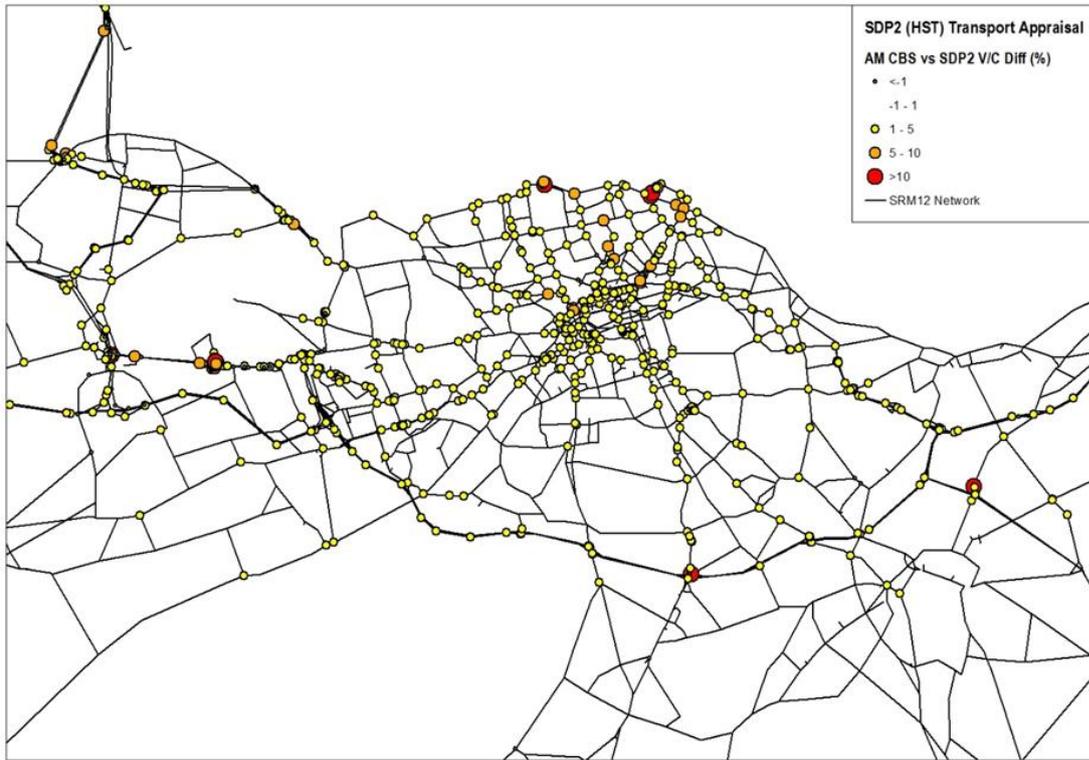
3.5.4 A significant number of junctions along radial routes to and from Edinburgh, and in north Edinburgh along Ferry Road and Granton, are close to capacity (the flow is more than 85%).

3.5.5 Figure 7 to Figure 12 show the locations where the demand flow increases relative to the junction capacity in the SDP2 HST compared to the CBS scenario. Figures Figure 9 Figure 10 highlight the locations where the flow in the CBS exceeds capacity AND the demand flows are forecast to increase further in SDP2 due to the additional developments. The final two figures show the locations where the junction is operating below capacity in CBS and the increase in demand flows due to the SDP2 HST developments result in the v/c increasing to more than 100%. The figures are as follows:

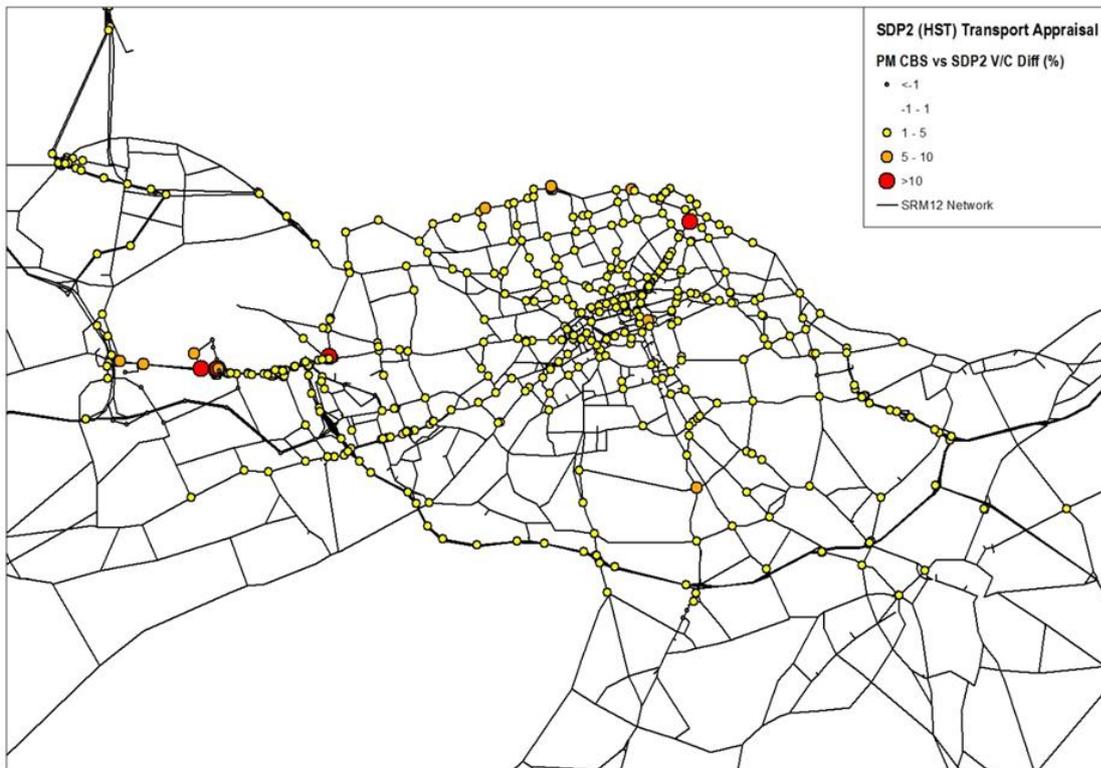
- Absolute Change in V/C (%) AM Peak - SDP2 relative to Test Case CBS
- Absolute Change in V/C (%) PM Peak - SDP2 relative to Test Case CBS
- Change in V/C (CBS> 100%) AM Peak - SDP2 relative to Test Case CBS
- Change in V/C (SDP>100%) PM Peak - SDP2 relative to Test Case CBS
- Change in V/C (CBS< 100%, SDP2>100%) AM Peak - SDP2 relative to CBS
- Change in V/C (CBS<100%,SDP2>100%) PM Peak - SDP2 relative to CBS

3.5.6 Figure 7 and Figure 8

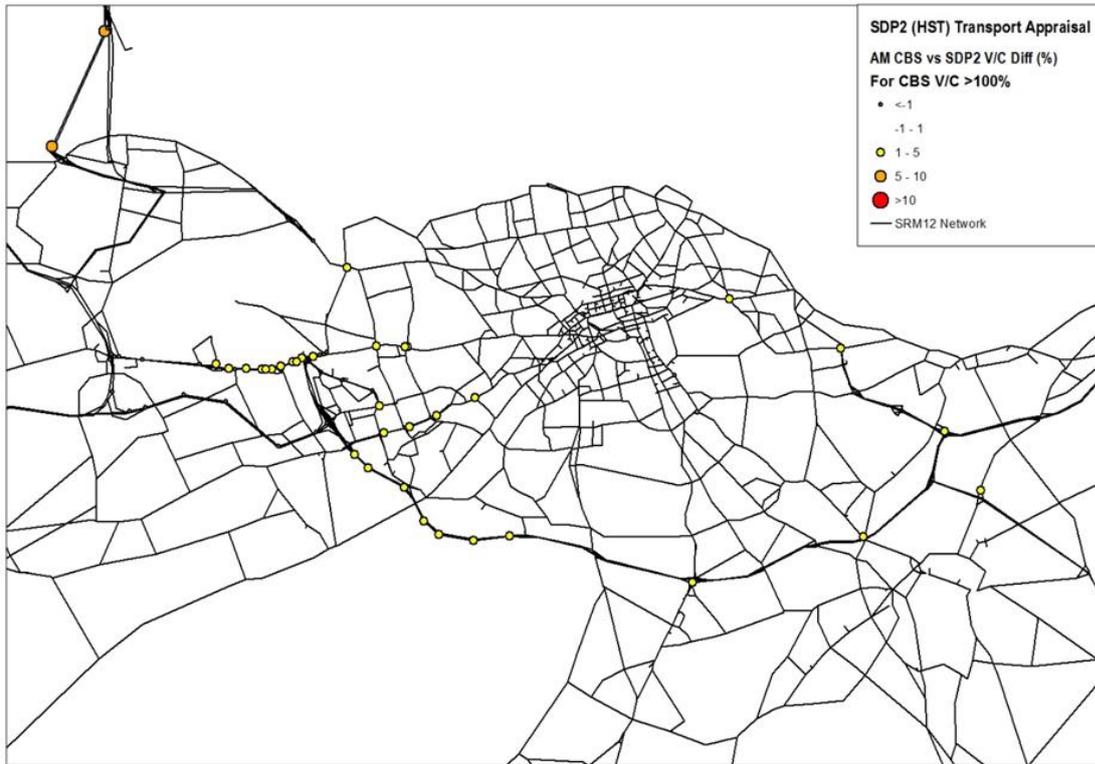
- 3.5.7 show that the volume/capacity ratio increases at many junctions throughout Edinburgh. The level of increase is more significant along the A8 in the proximity of the airport due to the trip generation associated with the IBG housing development, where the impact is likely to be considerable as the network is near to or at capacity.
- 3.5.8 Figure 9 and Figure 10 only show the junction locations which have one or more turning movement/junction approach over capacity in CBS and, as the result of increased flows in SDP2 HST, the level of service at the junction declines further. The majority of junctions within the study area experience a small increase (less than 5%) in flows relative to capacity for one or more turning movements. The main locations where the level of increase is higher (in the range 5-10%) are associated with Queensferry Crossing, A8/IGB and north Edinburgh (including Leith and Granton Road) and the impact is likely to be considerable.
- 3.5.9 Figure 11 and Figure 12 only show the location of those junctions at which the demand flows in CBS at one or more turning movement is less than capacity and in SDP2 HST the capacity is exceeded. The overall change in percentage increase in flow relative to capacity is relatively small and the maximum banding shown is for an increase of 10%. As before, the specific turning movements affected may relate to major or minor turning movements but this level of detail is not shown within the present strategic appraisal. The greatest impact is associated with junctions along A8 close to the IBG development (these movements were close to capacity and the IBG development generates a significant number of additional trips)) plus a small number of junctions along A8 and A720 in the vicinity of Gogar/Hermiston Gait.



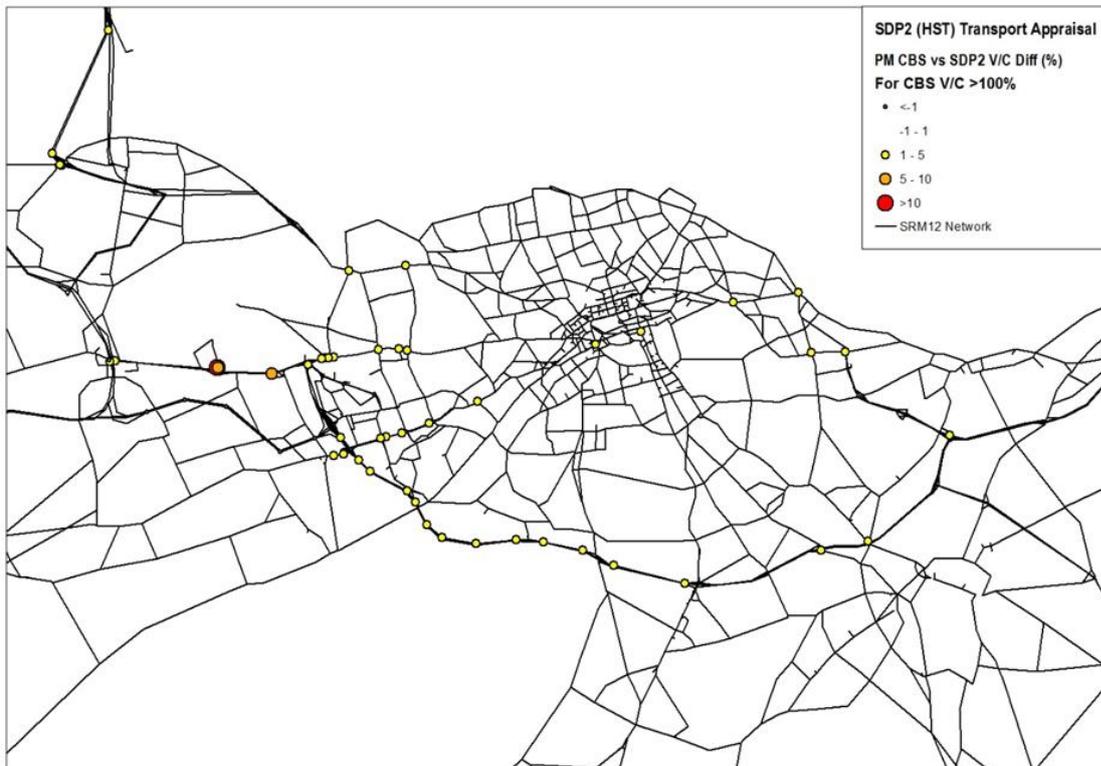
**Figure 7. Absolute Change in V/C (%) AM Peak - SDP2 relative to CBS**



**Figure 8. Absolute Change in V/C (%) PM Peak - SDP2 relative to CBS**



**Figure 9. Change in V/C (CBS > 100%) AM Peak - SDP2 relative to CBS**



**Figure 10. Change in V/C (CBS > 100%) PM Peak - SDP2 relative to CBS**



**Figure 11. Change in V/C (CBS < 100%, SDP2>100%) AM Peak - SDP2 relative to CBS**



**Figure 12. Change in V/C (CBS < 100%, SDP2>100%) PM Peak - SDP2 relative to CBS**

### 3.6 Journey Time Data

3.6.1 The change in delay associated with a representative number of routes through the study area, consistent with previous studies, was analysed and is shown in Table 3.

**Table 3. Change in Journey Time between CBS and SDP2 Test Case**

Route Number	Journey Time Route Description	Direction	CBS (mins:secs)			SDP2 (mins:secs)			CBS vs SDP2					
			AM	IP	PM	AM	IP	PM	Change			% Change		
									AM	IP	PM	AM	IP	PM
1	M9 J3 - Hermiston Gait	EB	22:27	12:30	13:56	21:58	12:31	14:07	00:29	00:01	00:11	-2%	0%	1%
		WB	12:34	12:56	24:00	12:55	13:00	23:56	00:20	00:03	00:04	3%	0%	0%
2	Ferrytoll - Hermiston Gait	EB	29:50	14:18	18:09	29:03	14:21	18:33	00:46	00:03	00:24	-3%	0%	2%
		WB	16:50	14:13	27:24	17:28	14:18	27:19	00:39	00:05	00:05	4%	1%	0%
3	M8 J3A - Hermiston Gait	EB	24:12	12:42	14:59	23:54	12:45	15:14	00:18	00:03	00:15	-1%	0%	2%
		WB	12:58	13:20	25:25	13:23	13:24	25:23	00:25	00:04	00:02	3%	0%	0%
4	Halbeath - Barnton	EB	35:00	14:54	18:53	33:50	14:57	19:35	01:10	00:03	00:43	-3%	0%	4%
		WB	17:12	13:53	18:04	17:42	13:57	18:01	00:30	00:04	00:03	3%	1%	0%
5	Barnton - Tranent (via Bypass)	EB	37:45	29:39	44:33	38:31	29:41	45:10	00:47	00:02	00:37	2%	0%	1%
		WB	49:19	29:07	45:33	49:52	29:18	45:48	00:33	00:11	00:15	1%	1%	1%
6	Barnton - Tranent (via Ferry Rd)	EB	48:11	43:48	1:00:29	49:38	44:07	1:01:28	01:27	00:19	00:59	3%	1%	2%
		WB	1:01:46	46:07	1:15:23	1:03:53	46:17	1:16:04	02:07	00:10	00:41	3%	0%	1%
7	Barnton - Tranent (via Queen St)	EB	36:27	33:08	47:22	37:13	33:18	48:12	00:46	00:09	00:50	2%	0%	2%
		WB	46:21	34:36	1:03:30	46:52	34:46	1:03:48	00:31	00:10	00:18	1%	0%	0%
8	Livingston - Haymarket (via A8)	EB	40:57	29:02	35:43	40:51	29:07	35:59	00:06	00:06	00:16	0%	0%	1%
		WB	34:11	30:30	50:21	34:56	30:42	50:15	00:45	00:12	00:06	2%	1%	0%
9	Livingston - Haymarket (via A71)	EB	38:13	28:23	36:47	38:03	28:26	37:24	00:10	00:04	00:38	0%	0%	2%
		WB	31:37	28:10	40:20	32:20	28:14	40:35	00:42	00:05	00:16	2%	0%	1%
10	Penicuik (A702) - Princes St (Lothian Rd)	NB	37:57	31:33	35:13	37:56	31:38	36:14	00:01	00:05	01:01	0%	0%	3%
		SB	32:43	31:04	37:40	33:36	31:07	37:17	00:53	00:03	00:24	3%	0%	-1%
11	Penicuik (A703) - Princes St (Lothian Rd)	NB	41:28	30:46	35:23	41:43	30:51	36:33	00:15	00:05	01:10	1%	0%	3%
		SB	32:02	30:23	38:23	32:55	30:26	37:52	00:53	00:03	00:30	3%	0%	-1%
12	Penicuik (A701) - Princes St (North Bridge)	NB	39:27	31:06	35:17	39:10	31:14	36:02	00:17	00:08	00:45	-1%	0%	2%
		SB	31:07	31:36	37:27	31:30	31:42	37:34	00:22	00:05	00:07	1%	0%	0%
13	North Middleton (B7007) - Millerhill	NB	20:04	16:05	18:14	20:05	16:07	18:27	00:01	00:03	00:13	0%	0%	1%
		SB	19:13	16:41	21:00	19:29	16:41	20:49	00:16	00:01	00:11	1%	0%	-1%
14	A68 - Princes St (North Bridge)	WB	38:45	31:02	37:05	39:32	31:09	38:23	00:47	00:07	01:18	2%	0%	3%
		EB	35:28	31:01	41:26	35:51	31:06	41:26	00:23	00:05	00:00	1%	0%	0%
<b>Average across all routes</b>			<b>33:00</b>	<b>25:48</b>	<b>35:39</b>	<b>33:22</b>	<b>25:54</b>	<b>35:59</b>	<b>00:22</b>	<b>00:06</b>	<b>00:20</b>	<b>1.1%</b>	<b>0.4%</b>	<b>1.0%</b>

**Notes**

Journey time statistics reflect average journey times within each modelled time period.

3.6.2 The journey time routes listed in Table 3 are consistent with the routes defined within the CBS, which were developed to assess strategic movements. The SDP2 HST development scenario is associated with a large number of widely dispersed developments (with the exception of the IBG) and in many instances significant localised increase in delays is only a small percentage of the overall journey time (the average overall percentage change in journey time is about 1%). The increased journey times in Route 2 and 4 are due to delays in West Edinburgh are apparent at Hermiston Gait and Barnton to the west of Edinburgh

### 3.7 Public Transport Data

3.7.1 The SDP2 housing development gives rise to additional demand for public transport by rail, bus and tram relative to the CBS scenario. Table 1 shows that the number of total daily boardings (12 hour) by train increase by 948 trips and bus/tram boardings increase by 8,605 trips ( 0.4% and 1.7% respectively) and reflects the higher accessibility of the developments to bus/tram services than to rail services.

**Table 4. Change in Public Transport Boardings between CBS and SDP2 Test Case**

<b>SCENARIO</b>	<b>BUS/TRAM BOARDINGS (12 HOURS)</b>	<b>TRAINS BOARDINGS (12 HOURS)</b>	<b>TOTAL PUBLIC TRANSPORT BOARDINGS (12 HOURS)</b>
2024 CBS Model *	489,913	215,298	705,211
2030 SDP2 (HST) Model **	498,518	216,246	714,764
Additional Journeys	8,605	948	9,553

\* 2024 CBS Model ID = TC30 Planning ID = LA02

\*\* 2020 SDP2 Model ID = SD30. Planning ID = LE01

## 4. IDENTIFICATION OF TRANSPORT IMPACTS

### 4.1 Transport Issues

- 4.1.1 Table 5 provides an overview of network conditions and how these are forecast to change between the CBS scenario and the SDP2 HST Test Case scenario.
- 4.1.2 These outcomes are based on the appraisal and analysis of a range of network data to determine the level of change in operational performance of the network between CBS and SDP2 HST. The multi-criteria analysis enables differences between absolute and relative changes to be identified and highlight change in overall operational performance at junctions and along links.
- 4.1.3 The Cross Boundary Study is progressing in parallel to the current study and focussed on the mitigation of traffic impacts of the proposed development. The current study has benefitted from feedback from CBS, undertaking the appraisal using the PASSQ option within the modelling (for further information, see paragraph **Error! Reference source not found.**). The primary appraisal objective has been to determine the impact of the additional SDP2 housing development scenario relative to the CBS.
- 4.1.4 The IBG development consists of 2,400 housing units and any local impacts would be mitigated to some extent by the Gogar link road and Eastfield road improvements. It should be noted that these improvements are included within the current model.

**Table 5. Summary of Transport Issues**

CORRIDOR	FORECAST TRANSPORT ISSUES SDP2 RELATIVE TO CBS
1. West Edinburgh	<p><u>The impact of the SDP2 proposed housing development is centred on west Edinburgh and the most significant increase in traffic demand occurs in the following areas:</u></p> <ul style="list-style-type: none"> <li>- A8 (Newbridge, Gogar and Maybury corridor)</li> <li>- M8 (Claylands to Hermiston Gait)</li> <li>- A71</li> <li>- A90 Barnton to Forth Bridge approach</li> <li>- M9</li> <li>- A720 City Bypass</li> </ul> <p><u>The CBS corridors along which the capacity for one are more turning movement on the junction approach is over capacity AND flows are forecast to increase in the SDP2 HST scenario include:</u></p> <ul style="list-style-type: none"> <li>- A8 (Newbridge to Gogar)</li> <li>- A71 Calder Road</li> <li>- Queensferry Crossing</li> <li>- A720</li> <li>- Newbridge, Gogar, Maybury, Barnton, Hermiston Gait</li> </ul>

The main junctions at which the demand on one or more approach/turning movements in the CBS scenario are less than capacity and forecast to exceed capacity in the SDP2 HST scenario are listed below (note: the junction approaches/turning movements at which the flow exceeds capacity in the CBS scenario are not listed here):

- IBG (A8 to Gogar)
- Hermiston Gait

The significant residential proposals for the IBG site creates considerable impact, although these may be mitigated to some degree by the constructions of the Gogar link road and Eastfield airport road improvement, which have not been modelled. The additional travel demand associated with these new proposals also provide an opportunity to create more viable public transport options serving the west Edinburgh area.

Within Inner Edinburgh the SDP2 proposed housing development adversely impacts on junction capacity and the most significant increase in traffic demand occurs in the following areas:

- Ferry Road
- Leith
- A1
- City Centre

2. Edinburgh City

The CBS corridors along which one or more junction approaches are over capacity and flows are forecast to increase in the SDP2 HST scenario include:

- Barnton
- A8 Maybury
- A71 Calder Road
- A1

The main junctions where the demand at one or more approach/turning movements in the CBS scenario are forecast to increase in the SDP2 HST scenario and exceed capacity are listed below (note: the junction approaches at which the flow exceeds capacity in the CBS scenario are not listed here):

- Lower Granton

CORRIDOR	FORECAST TRANSPORT ISSUES SDP2 RELATIVE TO CBS
<p>3. City Bypass</p>	<p><u>The SDP2 HST development adversely impact on the junction capacity at the majority of junctions along the city bypass A720 between Old Craighall, M8 and Gogar.</u></p> <p><u>The CBS scenario junctions along the A720 at which one are more junction approaches are over capacity and flows are forecast to increase in the SDP2 HST scenario include the majority of junctions.</u></p> <p><u>The main junctions where the demand at one or more approach/turning movements in the CBS scenario are forecast to increase in the SDP2 HST scenario AND exceed capacity are listed below (note: the junction approaches at which the flow exceeds capacity in the CBS scenario are not listed here):</u></p> <ul style="list-style-type: none"> <li>- Gogar</li> <li>- Hermiston Gait</li> </ul>
<p>4. Non CBS Impacts</p>	<p>The CBS study is on-going and the network hot spots have not yet been identified. In many instances, the SDP2 HST scenario traffic impacts on the strategic road network are may be similar. The appraisal showed that the SDP2 HST scenario developments adversely impact on traffic movements in northern and central Edinburgh, where the CBS is less likely to identify or recommended traffic mitigation measures. Traffic flows in north Edinburgh are commonly between 500-1000 pcus/hr and are forecast to increase by in excess of 50 pcus/hr (10% or more) in many instances. This reflects the proximity and cumulative impact of the proposed housing developments in North Edinburgh.</p>

## 5. POTENTIAL TRANSPORT INTERVENTIONS

### 5.1 Introduction

- 5.1.1 There are anticipated to be a wide range of transport infrastructure proposals coming forward from the CBS, the type of which are outlined in Section 6 of the SDP2 Proposed Plan. These will be identified as the Proposed Plan proceeds to examination, following the completion of the CBS. Therefore, the option generation (and potential assessment) element of this appraisal presents a risk, as the transport interventions that may accommodate SDP2 HST proposals, would not be taken into account.
- 5.1.2 The approach adopted here recognises this situation and accommodates the need to limit the detailed identification of new transport options until the CBS options emerge.
- 5.1.3 Our appraisal has focussed on ensuring consistency, identifying areas where there are significant additional impacts arising from SDP2 HST, particularly in new areas which were not identified previously. During the course of the appraisal, the previous appraisal and current policies were consulted, and these are listed in Appendix C.
- 5.1.4 The scheme intervention appraisal has been proportionate by building on an existing evidence base where available, assessing the main impacts, and recognising the majority of solutions are likely to emerge through the CBS. The next Edinburgh LDP and Accompanying Transport appraisal will identify impacts and mitigation measures for sites proposed within it.

### 5.2 Scheme Intervention

#### Central Edinburgh

- 5.2.1 The additional housing build out in Edinburgh compared to the CBS result in increased traffic within central Edinburgh to access employment within the city as well as other services and facilities. The emerging CBS measures identified in this area may be limited and further consideration of potential measures to mitigate the SDP2 HST impact and enhance the transport network within the area may be warranted. Potential options that may have been proposed previously to mitigate these types of impacts include:
- connecting developments to their local centres to allow for ready access to facilities and services where feasible;
  - Delivery of Public Transport Action Plan, and Active Travel Strategy creating a city centre and wider city environment which is conducive to and supports accessibility by walking, cycling and public transport;
  - Extensions of Edinburgh Tram; and
  - Reintroduction of passenger services on the South Suburban rail line.

### Waterfront/North Edinburgh

5.2.2 Within north Edinburgh the developments at the Waterfront, Shore and Granton areas result in an increase of over 4,000 houses and the model forecasts a resulting increase in delay towards central Edinburgh, A1 and westward towards the Forth Crossing. The emerging CBS measures may be limited along these corridors and potential measures that may warrant further consideration to mitigate the impact of the additional housing modelled compared to CBS and enhance the transport network within the area include:

- delivery of North Edinburgh Transport Action Plan to facilitate and maximise access to new developments by sustainable modes as far as possible;
- implementation of travel planning measures aimed at reducing the demand for car travel to and from new office, retail and residential developments;
- development of public transport hubs at Commercial Street and also the Waterfront; and
- Edinburgh tram extension to Granton and Newhaven.

### South Edinburgh

5.2.3 To the south of Edinburgh a key issue of the new development is the impact on the A720 City Bypass and main corridors into Edinburgh city centre. It is likely that the CBS will identify impacts along A720 and a number of radial routes that result in the development of mitigation measures that may address the impact of SDP2 HST.

### West Edinburgh

5.2.4 The International Business Gateway (IBG 2,400 houses) would be a key development within the West Edinburgh area. There are large developments with phasing beyond the CBS date of 2024 in close proximity such as at Maybury. It is likely that the CBS will identify impacts in West Edinburgh that result in the development of measures that may mitigate the additional impacts of housing development between 2024 and 2030. The appraisal has indicated a number of locations where the housing development between 2024 and 2030 introduces additional demand on the network that may not be addressed within CBS and require further intervention. These may include:

- capacity enhancements at the IBG access junctions along A8 (and possibly key interchanges of Gogar and Newbridge);
- the increased residential demand associated with the IBG may provide the opportunity for the development of sustainable public transport options along the corridor;
- Widening of A8 and bus priority between Newbridge and Gogar roundabouts;
- M8 link to upgraded A8/Eastfield airport road junction;
- Extension of tram to Newbridge;
- Walking and cycling connections from Maybury and Cammo to the new Edinburgh Gateway station;
- Upgrade of Barnton junction;
- Capacity enhancements at Maybury junctions;

- Outer orbital bus route with links to IBG; and
- Optimised signal junction capacity based on MOVA

### Queensferry/Firth of Forth

5.2.5 Continued build out of housing development post 2024 within the Queensferry area impact on the capacity of the transport network in the vicinity of the new Forth Crossing to the north and south, and these may not be addressed within emerging options arising from CBS. These include:

- South Queensferry capacity enhancements including Builyleon Road.

## 6. CONCLUSIONS

### 6.1 Summary and Conclusions

- 6.1.1 In February 2016 SESplan commissioned a study to undertake a Transport Appraisal to inform the SESplan Strategic Development Plan (SDP2) Proposed Plan stage.
- 6.1.2 The objective of the study was to identify the potential transport impacts associated with the delivery of the additional housing required in Edinburgh to meet the Housing Supply Targets set out in SDP2 relative to the level of housing in 2024 up until 2030.
- 6.1.3 The appraisal of the transport impacts of the additional housing build out in Edinburgh was undertaken using the SESplan Regional Model (SRM12). The SRM12 model 2024 forecast year network and demand data was recently updated during the preliminary stages of a parallel study known as the Cross Boundary Study. Preliminary findings are now emerging from the on-going CBS study.
- 6.1.4 The additional build out of housing in Edinburgh above the CBS Test Case to contribute to meeting the Edinburgh Housing Supply Targets in SDP2 in 2030 was identified as 13,621 units. Travel demand in the model was updated to reflect known housing sites due for delivery from 2024 onward, potential additional housing development at the International Business Gateway and windfall housing sites within the Edinburgh urban area.
- 6.1.5 The impacts of the delivery of the SDP2 HST were evaluated using a range of measures, with particular focus on the change in flows and change in capacity (the change in delays and journey times largely reflected these changes).
- 6.1.6 The total network vehicle kilometres and travel time are forecast to increase by an average of 1% in the peak periods and the increase in time lost due to congestion was 3%, indicating that areas of the network are close to or at capacity.
- 6.1.7 The highest level of increase in flows are associated with areas to the north of Edinburgh, Ferry Road, west of Edinburgh and along the city bypass (specifically A8, M8, A71, A90, M9, A720 and north Edinburgh in the vicinity of Leith and Ferry Road). The impacts on traffic flows and traffic flow relative to road capacity at one or more turning movements at junctions along A8 and in North Edinburgh is considerable. Gogar link and Eastfield Road improvements associated with A8 were not included within the model and would probably mitigate some of the impacts of the proposed IBG development
- 6.1.8 For those junctions where the flow in CBS is forecast to exceed capacity on one or more turning movements/junction approaches, additional traffic demand is forecast in SDP2 HST at A8 (Newbridge to Gogar), A71 Calder Road, A720 and Queensferry Crossing and at Newbridge, Gogar, Maybury, Barnton and Hermiston Gait. Traffic demand on one or more turning movement/junction approach at junctions along A8 and A720 in the vicinity of Gogar are forecast to increase and exceed capacity. The SDP2 HST developments give rise to small increases in flows at many locations throughout Edinburgh compared with CBS.

- 6.1.9 Potential measures that could be considered to mitigate the impact of the additional HST development were identified by reviewing existing transport proposals and opportunities. It was not possible to take into consideration the emerging findings of the CBS and where any such schemes provide residual capacity. The approach adopted recognised this situation and accommodated the need to limit the detailed identification of new transport options until the CBS options emerge.
- 6.1.10 The appraisal has been based on a strategic assessment of SDP2 HST on the basis of emerging findings from the 2024 CBS study and the updated SESplan model. The appraisal of the SDP2 HST has been based on the available information including the current forecast housing development distribution. The operational performance of the differences in the network between CBS and SDP HST has been appraised at a high level. As the LDP in Edinburgh and surrounding areas are developed and new transport options emerge from the CBS, it will become possible to identify potential measures to mitigate the impact of the HST development in greater detail.

## APPENDIX A – LEVEL OF SDP2 HOUSING DEVELOPMENT

The level of housing build out to 2030 was calculated on the basis of the information presented below. TELMoS was run on the basis of housing input data supplied to CH2M at end 2014 to predict the residential and employment build out 2013-2024 as shown in Table 6 (21,429 units).

Table 7 **Error! Reference source not found.** shows the calculation of the difference between the SDP2 Housing Supply Target build out 2013-2030 (37,392 units) compared with the level of completions predicted by the TELMoS CBS forecast for the period 2013-2024 (21,429 units). The additional proposed HST level of housing to be developed between 2024 and 2030 is 15,963 houses, which will consist of a mixture of on-going developments, new developments and windfall.

On-going committed SDP1 housing developments are shown in Table 8 and will deliver 6,181 additional houses between 2024 and 2030.

Windfall housing will provide 5,040 units (420 units per annum based on windfall assumption submitted at LDP examination), of which additional windfall housing sites permitted since end of 2014 and not included within CBS in Edinburgh 2,264 units (see Table 9). The remaining windfall development of 2,776 units is distributed throughout inner Edinburgh.

Potential proposed housing unit development at the IBG would be 2,400 units.

The location of the forecast housing development is shown in Table 1. In total the development of 13,621 unit is forecast. Recent observed levels of windfall development in Edinburgh has been higher and if these were maintained in future would address this shortfall.

**Table 6. Housing inputs to CBS**

Authority	Housing Inputs	Housing Not Built Out	Housing Built to 2024
CEC	21,430	1	21,429
ELC	11,591	30	11,561
FC	15,121	4,617	10,504
MLC	12,104	2,469	9,635
SBC	10,787	1,990	8,797
WLC	14,903	762	14,141
<b>SESPLAN</b>	<b>85,936</b>	<b>9,869</b>	<b>76,067</b>

**Table 7. Housing completions 2013/4 to 2029/30**

	Year	CEC
Actual	2013/14	2079
Actual	2014/15	1525
Estimate	2015/16	1,699
Estimate	2016/17	1,470
Estimate	2017/18	1,579
SDP2 HST	2018/19	2,420
SDP2 HST	2019/20	2,420
SDP2 HST	2020/21	2,420
SDP2 HST	2021/22	2,420
SDP2 HST	2022/23	2,420
SDP2 HST	2023/24	2,420
SDP2 HST	2024/25	2,420
SDP2 HST	2025/26	2,420
SDP2 HST	2026/27	2,420
SDP2 HST	2027/28	2,420
SDP2 HST	2028/29	2,420
SDP2 HST	2029/30	2,420
A.	Total Completions 2018-30	29,040
B.	Total Completions 2013-30	37,392
C.	TELMOS Future Case Residential Take Up 2013-2024	21,429
D.	Difference B-C = Difference Cross Boundary Study 2024 to SDP2 2030	15,963

**Table 8. Housing Development Sites with on-going phased delivery 2024 and onwards**

Site Name	Easting	Northing	Additional Capacity 2023-2030	Phasing					
				2024	2025	2026	2027	2028	2029
WAC 1b: Leith Docs	327247	677031	1,500	250	250	250	250	250	250
Granton Harbour	323493	677496	600	100	100	100	100	100	100
Western Harbour	325995	677491	550	75	75	100	100	100	100
Waterfront - WEL - Central Dev Area	323047	677077	500	50	50	100	100	100	100
WAC 1c: Salamander Place	327870	676142	281	50	50	50	50	50	31
West Shore Road - Forth Quarter	322217	676888	450	75	75	75	75	75	75
HSG 19: Maybury	317290	673378	725	150	150	150	150	125	0
HSG6: Greendykes	329752	671187	300	50	50	50	50	50	50
HSG 20: Cammo	318138	674461	100	100	0	0	0	0	0
CA3: Fountainbridge	324275	672851	50	50	0	0	0	0	0
RWELP HSG 2: Springfield	311470	678409	25	25	0	0	0	0	0
LDP HSG 29: Brunstane	332210	672530	600	100	100	100	100	100	100
LDP HSG 32: Buillyeon Road, Queensferry	312030	677540	400	100	100	100	100	0	0
LDP HSG 33: South Scotstoun, Queensferry	313560	677170	100	100	0	0	0	0	0
<b>Total</b>			<b>6,181</b>	<b>1,275</b>	<b>1,000</b>	<b>1,075</b>	<b>1,075</b>	<b>950</b>	<b>806</b>

**Table 9. Additional Housing Sites since 2014 not included within CBS**

Name of Housing Development	Easting	Northing	Capacity (no of units)	Access
Westfield Avenue	322404	672401	60	
St James Centre	325852	674178	250	
West Bowling Green Street	326425	676181	114	
Mcdonald Road	326005	675216	67	
Fort House	326206	676577	94	
Duddingston Park South	330541	672033	186	
Broomhouse Crescent	320380	671257	96	
Moredun Park Street	329036	669339	54	
Blackchapel Close	330890	671888	91	
Craighouse Road	323360	670600	145	
Harvesters Way	319931	669702	183	
Liberton Gardens	327199	668967	297	
Niddrie Mains Road	330178	671851	66	
Old Dalkeith Road	329822	669747	110	
Dalgety Road	327682	674493	52	
Brunswick Road	326605	674792	175	
Annandale Street	326069	674912	60	
Portobello High Street	330089	674209	112	
Portobello High Street	330089	674209	52	
<b>Total (all developments)</b>			<b>2264</b>	

Notes: Windfall housing development in Edinburgh 2,264 units

**Table 10. Change in Households/Population between CBS and SDP2 (2024-2030)**

Households	CBS Test Scenario to SDP2 (HST)			
	2024	2030	Change	% Change
Edinburgh	246,492	260,113	13,621	6%
East Lothian	56,384	56,384	-	0%
Fife SESplan	138,686	138,686	-	0%
Midlothian	46,498	46,498	-	0%
Scottish Borders	58,158	58,158	-	0%
West Lothian	89,670	89,670	-	0%
SESplan	635,887	649,508	13,621	2%
Scotland	2,671,097	2,684,718	13,621	1%

Population	CBS Test Scenario to SDP2			
	2024	2030	Change	% Change
Edinburgh	480,661	508,866	28,205	6%
East Lothian	106,812	106,812	-	0%
Fife SESplan	281,082	281,082	-	0%
Midlothian	93,538	93,538	-	0%
Scottish Borders	125,042	125,042	-	0%
West Lothian	203,250	203,250	-	0%
SESplan	1,290,385	1,318,590	28,205	2%
Scotland	5,538,749	5,566,954	28,205	1%

**Table 11. Forecast level of housing development 2024-2030**

Summary to Model	Units
Phasing 2024-2030	6,181
International Business Gateway	2,400
Windfall 2018-2030	5,040
<b>Total</b>	<b>13,621</b>

## APPENDIX B – ADDITIONAL APPRAISAL METRICS

### Road Junction Delays

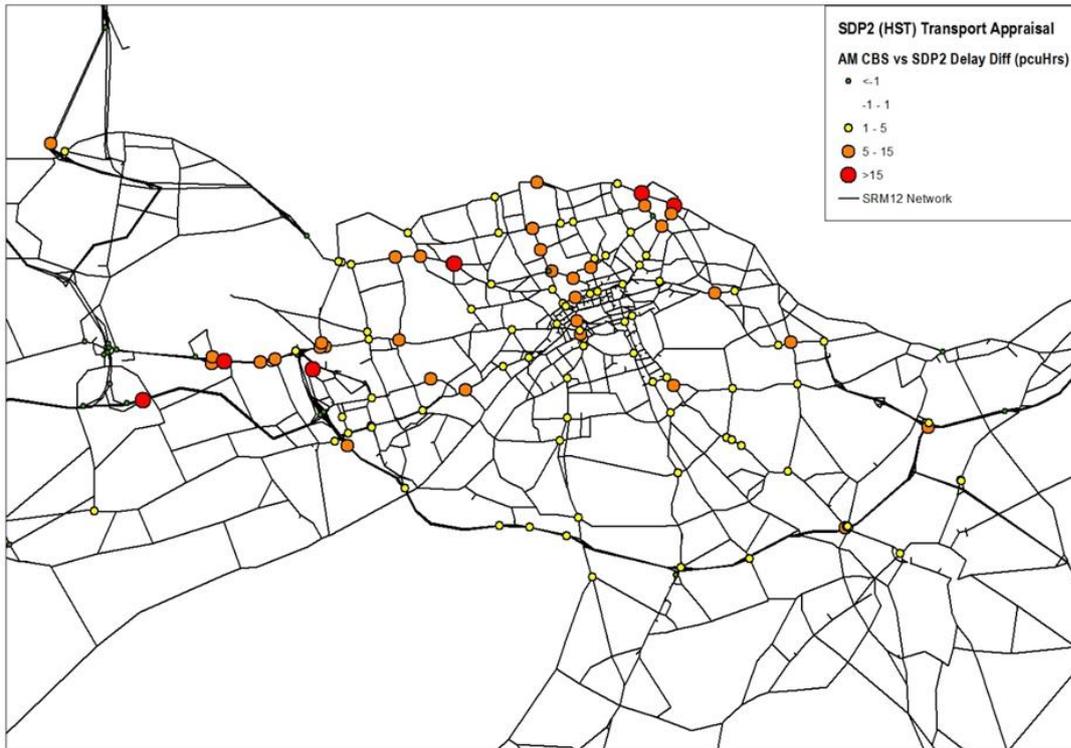
Congestion is measured in terms of vehicle hours lost. Junction and link delays are the time ‘lost’ when travelling in congested conditions compared to travelling in free flow conditions and speeds. The figures show the total change in delay associated with junctions as the result of the change in flow between the CBS and SDP2 HST scenarios.

In line with this, the following graphics have been produced which show locations which experience significant increases:

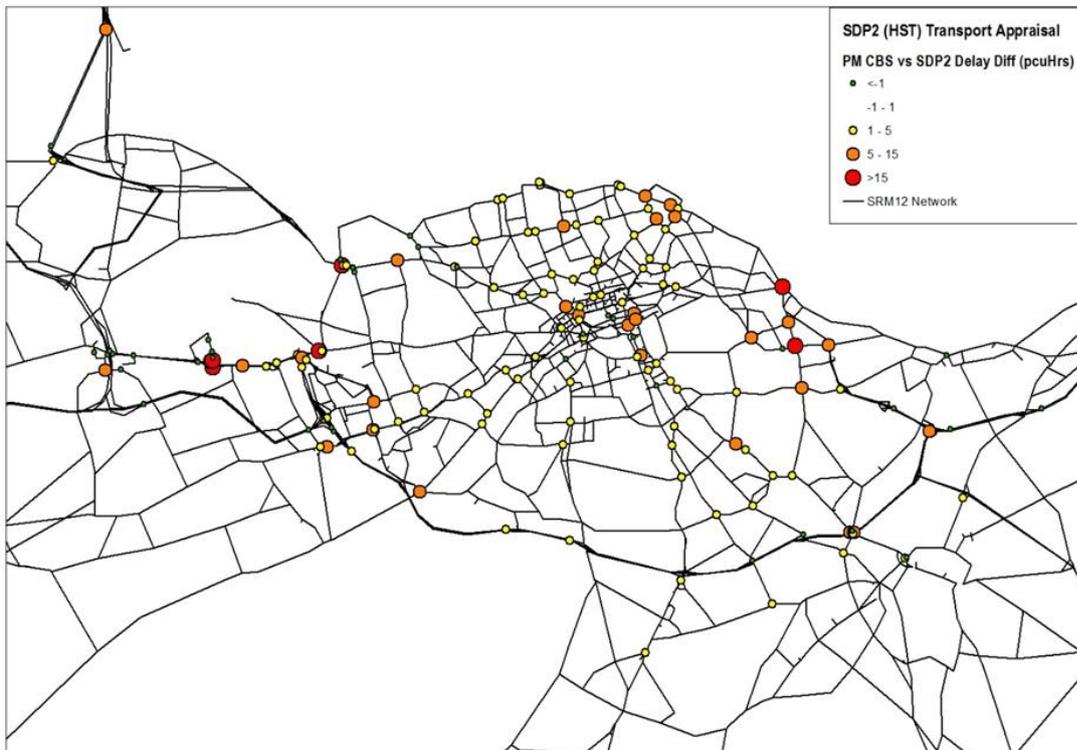
- Difference in Junction Delays AM Peak 2030 - Test Case SDP2 relative to CBS
- Difference in Junction Delays PM Peak 2030 - Test Case SDP2 relative to CBS
- Change in Junction Delay (%) AM Peak 2030 - SDP2 relative to Test Case
- Change in Junction Delay (%) PM Peak 2030 - SDP2 relative to Test Case

Figure 13 and Figure 14 show that the main change in absolute junction delays in SDP2 HST relative to CBS are located to the west and north of Edinburgh. Delays along the A8 are likely to be mainly associated with the IBG, for which the Gogar link and Eastfield airport road improvement mitigations were not modelled.

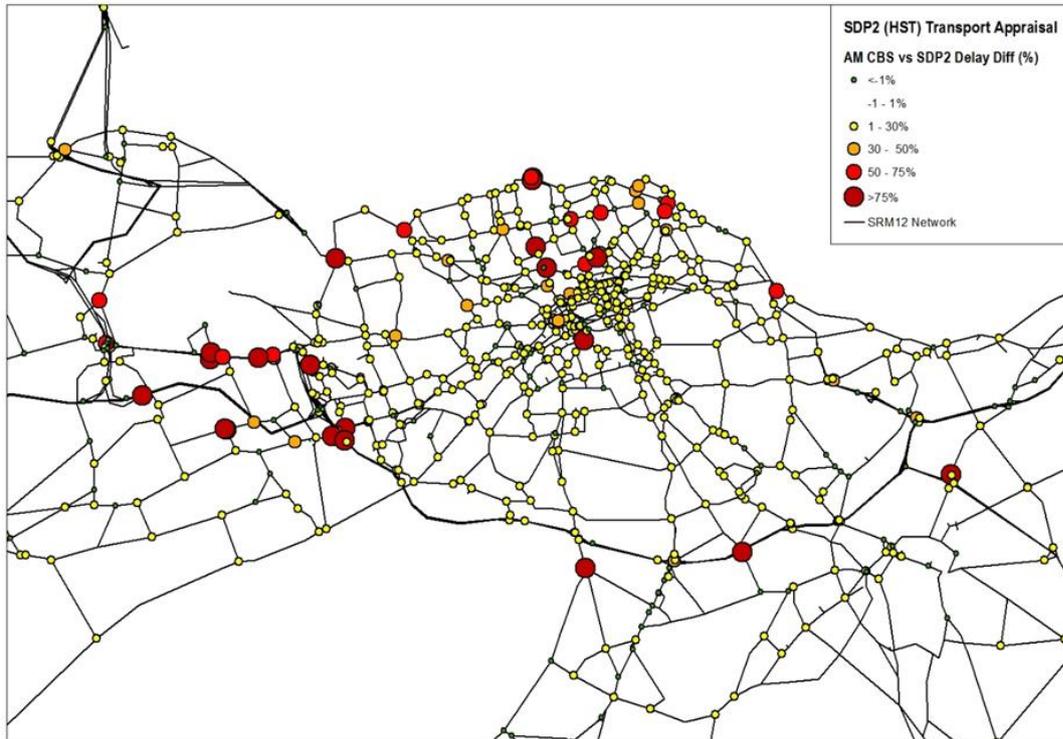
Figure 15 and Figure 16 show the relative change in total junction delay compared with CBS. The SDP2 housing development increase travel throughout the modelled area and a small change is apparent as expected. The IBG results in a higher level of delays to the west of Edinburgh along A8, which is already at or close to capacity. In north Edinburgh, the committed and windfall developments also give rise to a relatively high level of increase in junction delays, reflecting the low level of delay in the CBS scenario at these locations.



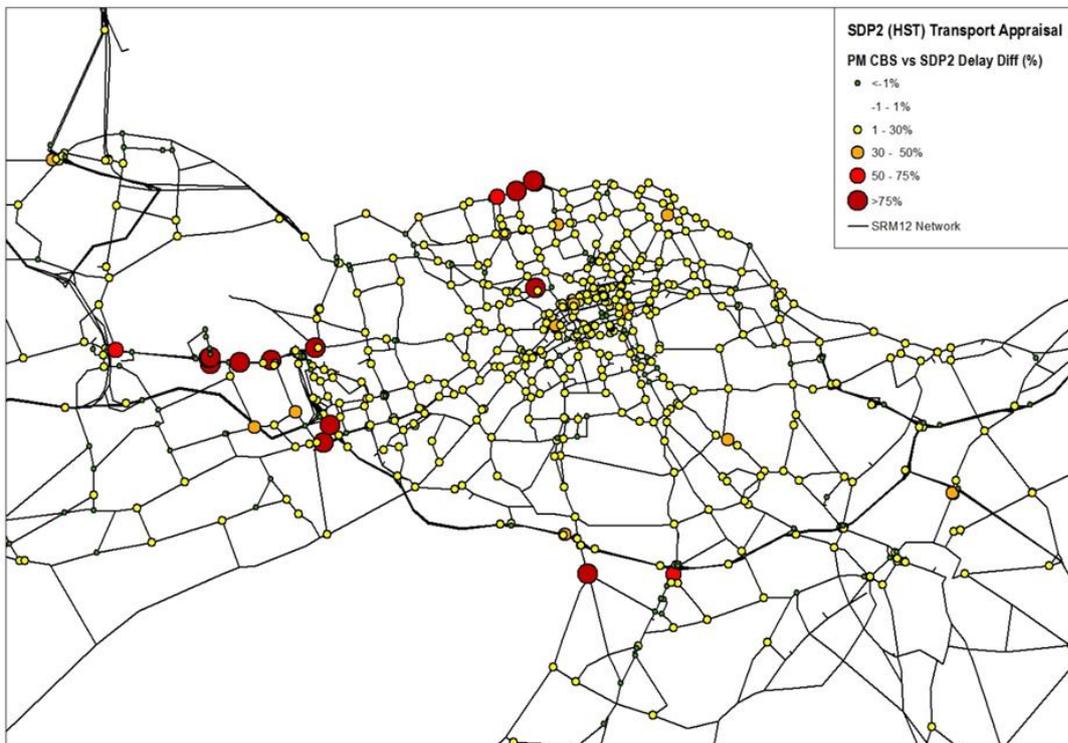
**Figure 13. Change in Delays AM Peak - SDP2 relative to CBS**



**Figure 14. Change in Delays PM Peak – SDP2 relative to CBS**



**Figure 15. Change in Delay (%) AM Peak 2030 - SDP2 relative to CBS**



**Figure 16. Change in Delay (%) PM Peak - SDP2 relative to CBS**

## Link Delays per Kilometre

The average time lost due to congestion per kilometre travelled by vehicles in the CBS and SDP2 HST scenarios is shown in the figures below. The delay per kilometre is a measure of service levels across the network and enables delays associated with short and long links to be compared on a common and consistent basis.

The link delay component is high along the City bypass and along many roads within Edinburgh. Link capacity delays are less significant to the west of the city along high capacity major road (for example M8 and M9).

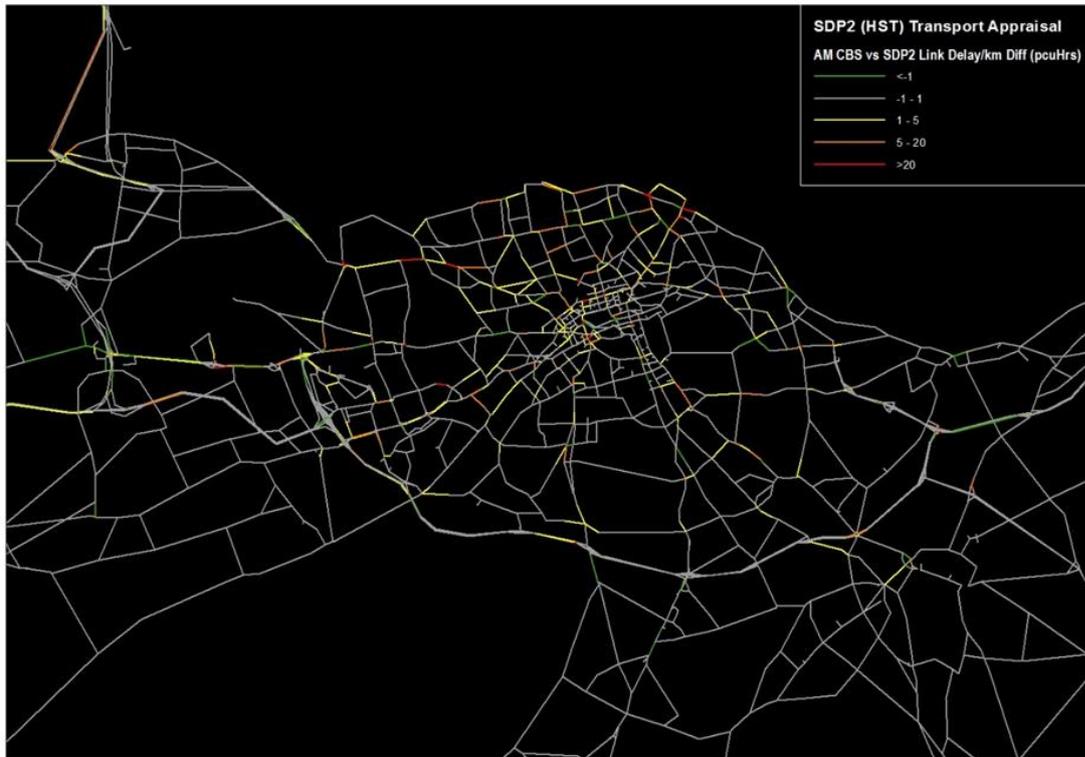
In the 2024 CBS scenario the higher level of delays per kilometre are associated a number of the major corridors of travel, including: A720 city bypass (west of Straiton), A8, Queensferry Crossing, north Edinburgh (Granton Road and Ferry Road) as well as radial corridors within Edinburgh including A8, A199, A71 Calder Road, A7 and A1.

The following graphics show the location and scale of the increase in delay within the network as the result of the SDP HST developments:

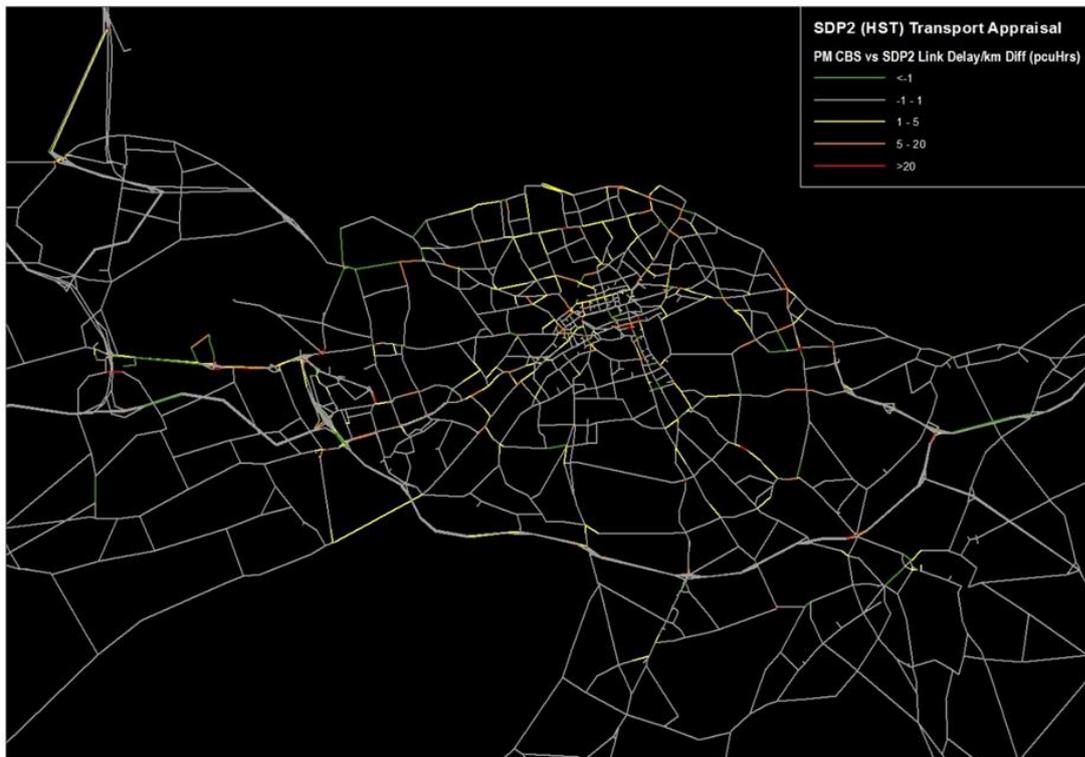
- Demand Flows: Difference in Link Delays per Kilometre - Test Case SDP2 relative to Test Case CBS AM Peak
- Demand Flows: Difference in Link Delays per Kilometre Test Case SDP2 relative to Test Case CBS - PM Peak
- Demand Flows: % Difference in Link Delays per Kilometre SDP2 relative to Test Case CBS - AM Peak
- Demand Flows: % Difference in Link Delays per Kilometre SDP2 relative to Test Case CBS - PM Peak

Figure 17 and Figure 18 show that the traffic generation associated with the SDP2 HST development has relatively small impact and the associated increase in link delays are relatively small in absolute terms (the increase is less than 5% on many links).

Figure 19 and Figure 20 show that the main impact of the SDP2 HST trip generation on average link delays as a percentage change relative to CBS (increases of between 5% and 20%) is associated with roads in northern Edinburgh and less important distributor roads to the west of Edinburgh. The links where the forecast increase in delay is high in both absolute and relative terms are associated with the proposed housing developments in north Edinburgh.



**Figure 17. Difference in Delays per Km SDP2 relative to CBS - AM Peak**



**Figure 18. Difference in Delays per km SDP2 relative to CBS - PM Peak**



**Figure 19. % Difference in Delays per km SDP2 relative to CBS - AM Peak**



**Figure 20. % Difference in Delays per km SDP2 relative to CBS - PM Peak**

## APPENDIX C – LIST OF POSSIBLE SCHEMES

### Mitigation Measures

To assess potential options to mitigate the impacts of the SDP2 HST developments that may not be adequately addressed when the CBS proposals become available in due course, a review of existing proposals and opportunities emerging from the LDP appraisal process has been undertaken, as follows:

### Sources Consulted

- CEC Local Transport Strategy: 2014 – 2019.  
[www.edinburgh.gov.uk/downloads/file/3525/local\\_transport\\_strategy](http://www.edinburgh.gov.uk/downloads/file/3525/local_transport_strategy)
- CEC Second Proposed Local Development Plan (2014).  
[www.edinburgh.gov.uk/info/20069/local\\_plans\\_and\\_guidelines](http://www.edinburgh.gov.uk/info/20069/local_plans_and_guidelines)
- CEC Waterfront and Leith Area Development Framework (2011).  
[www.edinburgh.gov.uk/info/20069/local\\_plans\\_and\\_guidelines](http://www.edinburgh.gov.uk/info/20069/local_plans_and_guidelines)
- CEC Rural West Edinburgh Local Plan Alteration (2011).  
[www.edinburgh.gov.uk/downloads/file/841/rural\\_west\\_edinburgh\\_local\\_plan\\_alteration](http://www.edinburgh.gov.uk/downloads/file/841/rural_west_edinburgh_local_plan_alteration)
- SEStran Regional Transport Strategy (2015).  
[www.sestran.gov.uk/uploads/rts\\_delivery\\_plan\\_2015\\_inc\\_appendices.pdf](http://www.sestran.gov.uk/uploads/rts_delivery_plan_2015_inc_appendices.pdf)
- SESplan Strategic Development Plan (2013).  
[www.sesplan.gov.uk/assets/assets/files/docs/290813/SESplan%20Strategic%20Development%20Plan%20Approved%2027%20June%202013.pdf](http://www.sesplan.gov.uk/assets/assets/files/docs/290813/SESplan%20Strategic%20Development%20Plan%20Approved%2027%20June%202013.pdf)
- Transport Infrastructure Study for West Edinburgh Phase 1 (TISWEP) (2013).
- West Edinburgh Transport Appraisal (2010).  
[www.scotlandsglobalhub.com/media/downloads/transport-west-edinburgh-transport-appraisal-2010.pdf](http://www.scotlandsglobalhub.com/media/downloads/transport-west-edinburgh-transport-appraisal-2010.pdf)

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## APPENDIX 5 –

### APPROVAL OF PROPOSED PLAN AND SUPPORTING DOCUMENTS FOR PUBLICATION

Output	Board decision/ noting	Committee decision/noting	For publication alongside Proposed Plan?
Proposed Plan	<b>Approved</b>	<b>Decision</b>	Yes
Action Programme	<b>Approved</b>	<b>Decision</b>	Yes
Strategic Environmental Assessment Environmental Report (ER)	Draft addendum and intention to publish revised ER alongside Proposed Plan <b>noted</b>	<b>Note</b> addendum to ER and intention to publish revised ER alongside Proposed Plan.	Yes
Housing Background Paper	<b>Approved</b>	<b>Note</b>	Yes
Transport Appraisal	<b>Draft report noted</b>	<b>Note</b> Final Report	Yes
Habitats Regulations Appraisal (HRA)	<b>Noted</b> intention to prepare a record of HRA and publish alongside Proposed Plan.	<b>Note</b> intention to prepare record of HRA and publish alongside Proposed Plan.	Yes
Strategic Flood Risk Assessment (SFRA)	<b>Noted</b> intention to prepare and publish revised SFRA alongside Proposed Plan.	<b>Note</b> intention to prepare and publish revised SFRA alongside Proposed Plan.	Yes
Equalities and Human Rights Impacts Assessment (EqHRIA)	<b>Noted</b>	<b>Note</b>	Yes
Minerals Technical Note	<b>Noted</b> proposal to carry out 'Minerals Review' in Action Programme	<b>Note</b> proposal to carry out 'Minerals Review' in Action Programme	Available on SESplan website
Revised Green Network Technical Note	<b>Noted</b> intention to prepare and publish revision with minor amendments alongside Proposed Plan	<b>Note</b> intention to prepare and publish revision with minor amendments alongside Proposed Plan	Yes
Spatial Strategy Technical Note	No revision required	No revision required	Available on SESplan website
Economy Technical Note	No revision required	No revision required	Available on SESplan website
Waste Technical Note	No revision required	No revision required	Available on SESplan website