Date	**18 October 2013**
To	Alison Irvine - Transport Scotland Paul Junik – Transport Scotland Amy Phillips – Transport Scotland
From	Euan Barr - Jacobs
Subject	A9/A96 Connections Study : MFTM Alternative Demand Scenarios Rationale and Development

Introduction

Transport Scotland (TS) has identified the requirement to derive a series of revised planning scenarios for the Moray Firth Transport Model (MFTM) to be used to assess options for the A9/A96 Connections study. The revised planning scenarios will used to develop new future year demand scenarios for input to the MFTM such that full demand model runs can be undertaken.

The revised MFTM future year demand scenarios will also be used to undertake traffic model assessment and economic appraisal of the Inverness to Nairn (including the Nairn Bypass) scheme.

Background

To date a series of monthly meetings have been held with The Highland Council (THC) to provide regular updates on progress on the appraisal of the A9/A96 Connections Study and the Inverness to Nairn scheme. Discussions have included the reasoning behind undertaking the A9/A96 Connections study to re-establish the current and future problems, the development of refined transport objectives and the generation of options meet the objectives. The assessment of the Nairn Bypass to dual-carriageway standard in accordance with the Scottish Ministers commitment to upgrade the A96 between Inverness and Aberdeen has also been discussed.

Over the course of these meetings TS and THC have recognised that the level of growth in the current Highland Wide Local Development Plan, and the subsequent Inner Moray Firth LDP is overly optimistic, and would generate significant growth in the demand for travel in future years. As a result it has been agreed that THC and TS will work jointly to develop three revised planning scenarios that better reflect the effects of the economic downturn on for example house building rates, are more consistent with the emerging housing needs assessment being undertaken by THC, and are therefore more realistic planning scenarios.

It is anticipated that three scenarios will be developed to reflect a ‘Low’, ‘High’ and ‘Medium’ level of planned development growth over the future years. In summary the scenarios will be developed:

- ‘Low’ scenario – with basis on reduced housing build rates (actual historic 5 year rates), plus element of re-phasing, re-balance of employment (jobs)

- ‘High’ scenario – with basis on current Local Development Plans but aligned with the THC housing needs assessment, re-balance of employment (jobs)

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- 'Medium' scenario – developed to sit between the upper and lower bounds of the 'Low' and 'High' scenarios

THC agreed to re-assess the planning information to develop the three alternative demand scenarios, and provide the alternative planning scenario data in spreadsheet form. The planning scenario data was provided in a similar format to previous planning data inputs for use with the MFTM model. To assist with the conversion of the planning data to the required MFTM demand model input, AECOM as the MFTM developers were commissioned to convert the data and develop the alternative MFTM demand scenarios.

Development of the Alternative Planning Scenarios

THC have provided further details setting out the rationale behind the development of the alternative demand scenarios, and this information is provided as Appendix A to this note.

A summary of the basis for each of the three alternative scenarios is as follows:

- Low Demand Scenario

  The low demand scenario assumes the same level of house building in the period between 2011 and 2016 as has been observed post-recession (2009-2013). Following that period of very low growth there are increases in the build rate expected between 2016 and 2021 to take account of growth associated with the University of Highlands and Islands (UHI) Campus and the renewables industry in Nigg. Post 2021 there is a gradual decline in house building rates reflecting the general trend highland council have seen in their Housing Needs and Demand Assessment (HNDA) work.

  In each scenario the growth in employment associated with the renewables industry at Nigg, the Port at Invergordon and the UHI campus have been accounted for. In the low growth scenario 1500 jobs have been assumed at Nigg, 820 at Invergordon and a further 1500 at the UHI campus. Over and above these sites there is effectively no growth in employment at most of the existing Industrial, commercial and business sites in the area.

- Mid Demand Scenario

  The mid demand scenario assumes a modest increase in house building in the first period, and then significantly higher levels in the following periods. The extra houses are allocated first to active sites and then to those with planning permission and developer interest.

  Extra employment is assumed to be centred on existing Industrial, commercial and business sites in the area. Invergordon and UHI campus have the same levels of employment assumed as the low demand scenario but at Nigg there is expected to be 500 more jobs, giving a total of 2000 jobs assumed in that zone.

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- High Demand Scenario

  The high demand scenario is based on the high migration scenario in the HNDA, modified to include an increase in employment and housing associated with the renewables Industry in Nigg and a corresponding decrease at the development sites along the A96.

  Invergordon and UHI employment remains as the low demand scenario but the employment at Nigg is assumed to be 2000 as in the mid demand scenario. Above that additional employment opportunities are allocated to existing Industrial, commercial and business sites in the area as well as expansion areas such as the Airport Business Park.

Details of the previous planning data preparation process, used to generate the MFTM demand scenario for the 2010/11 A96 Inshes to Nairn DMRB Stage 2 project, is also provided as Appendix B of this note.

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Appendix A – THC Alternative Planning Scenario Rationale

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INNER MORAY FIRTH TRANSPORT MODEL

EASTLINK RE-EVALUATION

MAY 2013 PLANNING DATA FOR LOW, MID AND HIGH SCENARIOS

INTRODUCTION

The original *VISUM* transport model of the Inner Moray Firth area was assembled in 2010 and is described in a note dated 1/12/2010. It has been used to investigate a number of scenarios involving development and the need for transport interventions. The original 2010 do-minimum scenario was unchanged until May 2013, with reference scenarios amended to reflect the particular development being examined. In May 2013 the original planning data was amended in the light of the current economic climate and the changing status of a number of large development sites allocated in our Highland wide Local Development Plan. This current note describes the changes made to the data.

The planning data comprises two sets of data (jobs & households, and people) for 390 transport zones, five planning periods and three scenarios and it is not possible to document the reasons for every single figure in the workbooks. The workbooks themselves effectively form their own audit trail. Preparation of the planning data for the eastlink work has been part of an evolutionary process building on the original data discussed in the note described earlier, and this current note is written from that perspective.

ECONOMIC DEVELOPMENT – OVERVIEW

One reason for the review of eastlink is the impact of the credit crunch and subsequent economic downturn. Highland has not been immune from the downturn but our population is still growing; house building has slowed but has remained at a level that will permit continued population growth; and jobs are being created in a number of sectors albeit balanced by a contraction of the public sector. The graph below gives the unemployment rate in Highland compared with the rest of Scotland and the UK. JSA is not a perfect indicator of economic health but the graph gives a good simple representation of our understanding of the performance of the Highland economy compared with the rest of Scotland and Great Britain.

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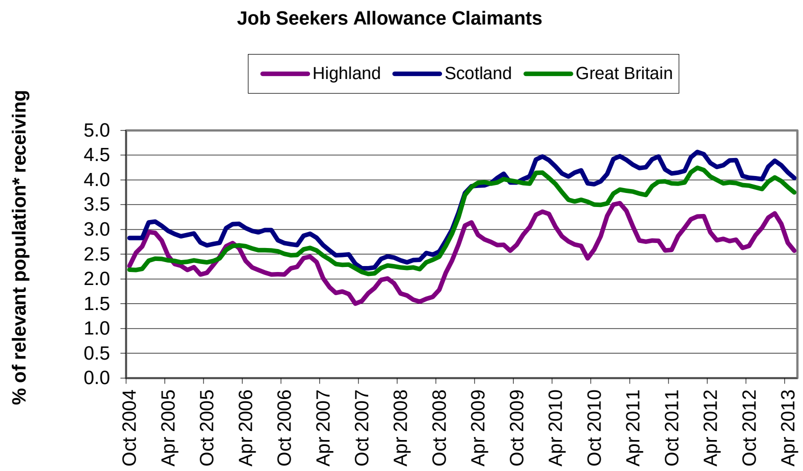

Leaving aside the public sector, the economy of Highland is dominated by medium, small and micro businesses which can be widely distributed across rural areas as well as urban areas. In the original planning data some continued expansion of this sector was assumed although around 300 zones had no new jobs allocated during the planning period. This approach has continued in the eastlink data sets with only small changes made in rural zones delivering low numbers of new jobs. The main changes that have been made are in the zones delivering large numbers of new jobs, particularly those identified in our Highland wide Local Development Plan (HwLDP).

In general, the growth of the renewables sector has resulted in more jobs being allocated at Nigg and along the Cromarty Firth Coast (and to a lesser extent Ardersier / Whiteness); with significantly lower numbers in the main expansion sites along the A96 corridor.

HOUSING DEVELOPMENT - OVERVIEW

There has been a downturn in the housing market in Highland since the credit crunch, with new house completions falling to the lowest levels since the late 1990s, around two thirds of the levels seen in the mid 2000s. However, the figures are still relatively high compared to other parts of Scotland and have been sustained in part by an ambitious programme of affordable housing.

Planning data for the low scenario was provided to a tight timetable to allow modelling work to commence. Potential delivery rates at the larger sites in Inverness and the A96 corridor were evaluated by the Council's Principal Planner Tim Stott, with the results given in the two tables in Appendix C. These figures formed the basis for the low scenario at these sites, modified upwards for the mid and high scenarios. The economic downturn was assumed to last until 2016 except for those sites where the developers are already active and there has been a high demand for housing in recent years.

We were not able to re-evaluate all of the housing sites for the low and high scenarios in the time available but a complete review was undertaken for the mid scenario (the last scenario to be prepared). The larger strategic sites were unchanged from the earlier scenarios and the changes are

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unlikely to result in any major inconsistency between the resultws. The most significant changes for the mid scenario resulted from information gathered as we prepared our IMF Local Development Plan and resulted in a change in phasing, plus in particular:

- The number of houses in zone 319, Alness Centre & Retail Park, was reduced from 444 to 250, with the start of construction delayed by five years; and
- The assumption for Evanton zone 313 Foulis was increased from 58 to 250.

Our Housing Land Auditlooks ahead to 2030 and for this reason housing is only given for the period 2031 to 2036 for large long term sites (such as Tornagrain), and for this reason the planning data for the final period is not a complete picture. There has always been a generous supply of housing land in East Ross but the supply is not able to meet the anticipated high level of demand from the renewables industry over the full period of the model: in modelling terms, some of the longer term jobs are likely to be filled by workers commuting into the area.

SCENARIOS

Full details of the numbers of new houses and jobs assumed for zones expected to see the biggest increase - all zones with an increase of more than 50 houses or jobs - are given for the low and high scenarios in Appendices A and B. The mid scenario is not given but details are available on request. The two tables below summarise the overall figures for the IMF model area.

Summary of the Number of New Houses in each Scenario

Scenario	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	total 2011 to 2036
Low	3,366	4,212	3,503	3,137	2,413	14,218	16,631
Mid	3,416	5,055	5,110	4,447	2,457	18,028	20,485
High	4,003	6,439	5,739	4,809	2,272	20,990	23,262

Summary of the Number of New Jobs in each Scenario

Scenario	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	total 2011 to 2036
Low	2,219	2,290	1,535	1,605	1,380	7,649	9,029
Mid	2,745	3,066	2,441	2,428	1,426	10,678	12,104
High	3,005	4,090	2,920	2,648	1,935	12,661	14,596

In general the scenarios have been led by anticipated levels of population growth. The starting point for assembling the revised data was a combination of high / medium / low growth scenarios taken from our Housing Need and Demand Assessment (HNDA), which gave the right balance between HMAs and through time. The combinations used took account of the increased birth rate and slightly improved age profile of our population since the 2006 projections used in our HNDA. The exception is in East Ross, where the current and anticipated rate of growth in jobs in the renewables industry, focussed on Nigg, is likely to result in a requirement for housing in the East Ross HMA which is greater than anticipated in our HNDA. In this case the housing requirement has been led by the growth in job numbers with housing given the earliest feasible start dates and high completion rates.

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The population profiles, economic activity rates and employment rates used to convert new households to people are unchanged from previous work[1].

Appendices A and B give an indication of whether housing sites in each model zone have planning permission. Where there is more than one site in a zone, *yes* means that at least one site has permission. There are also occasions where a single allocated site is in multiple ownership, or is divided into a number of individual plotted developments, and only one part has planning permission in which case the entry will also be *yes*.

LOW SCENARIO

The low scenario starts with our estimates of house completions from 2011 to date and new jobs created since 2011: in practice the latter is confined to larger developments such as supermarkets. This starting point is common to all scenarios. For the larger Inverness and A96 corridor housing sites future build rates are taken from the tables in Appendix C: for the period 2011 to 2016 the total number of houses is equivalent to the average build rate over the post credit-crunch period of 2009/10 to 2012/13[2]. There is an increase in building for 2016 to 2021 reflecting population projections and the impact of Nigg and the UHI Campus, before a gradual decline which reflects the general trend from our HNDA work.

Low Scenario - Number of New Houses in each Planning Period, by Housing Market Area							
HMA	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	total 2011 to 2036
Badenoch and Strathspey	324	434	471	455	256	1,683	1,939
East Ross	871	873	528	350	0	2,622	2,622
Inverness	1,386	1,638	1,453	1,338	1,449	5,815	7,264
Mid Ross	435	672	485	507	392	2,099	2,491
Nairn	280	526	429	339	165	1,575	1,740
Sutherland	13	13	23	23	32	72	104
West Ross	57	56	114	125	119	352	471
IMF Area Total	3,366	4,212	3,503	3,137	2,413	14,218	16,631

Nigg and associated jobs along the Cromarty Firth plus the UHI Campus development (including Capgemini and Daktarin) are common to all scenarios and the number of jobs elsewhere has been adjusted to match the growth in housing (and the implied increase in the economically active working age population) within each HMA. For this scenario the result is effectively no growth over the next 20 years in many of our existing industrial, business and commercial centres.

Low Scenario - Number of New Jobs in each Planning Period, by Housing Market Area							
HMA	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	total 2011 to 2036
Badenoch and Strathspey	53	0	75	25	75	153	228
East Ross	1,090	635	225	475	525	2,425	2,950

[1] Detailed local results from the 2011 Census are not expected until late 2013, too late for this work.
[2] The 2009/10 to 2012/13 average for the IMF transport model area was 680 houses per year

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Inverness	951	1,500	1,205	1,075	750	4,731	5,481
Mid Ross	0	20	20	20	20	60	80
Nairn	125	135	10	10	10	280	290
Ross and Cromarty West	0	0	0	0	0	0	0
Sutherland	0	0	0	0	0	0	0
IMF Area Total	2,219	2,290	1,535	1,605	1,380	7,649	9,029

MID SCENARIO

For the mid scenario there is only a very modest increase in house building during the first period over and above the low scenario, with significantly higher build rates in each of the subsequent periods. The extra growth has been allocated first to active sites and then to sites with developer interest and planning permission, with a small number of sites without permission which are highly likely to come forward.

Mid Scenario - Number of New Houses in each Planning Period, by Housing Market Area							
HMA	**11 to 16**	**16 to 21**	**21 to 26**	**26 to 31**	**31 to 36**	**total 2011 to 2031**	**total 2011 to 2036**
Badenoch and Strathspey	388	581	497	466	181	1932	2113
East Ross	620	980	839	495	100	2,934	3,034
Inverness	1,537	2,255	2,508	2,405	1,731	8,705	10,436
Mid Ross	529	628	602	520	186	2,279	2,465
Nairn	272	517	517	413	150	1,719	1,869
Sutherland	13	18	33	33	20	97	117
West Ross	57	76	114	115	89	362	451
IMF Area Total	3,416	5,055	5,110	4,447	2,457	18,028	20,485

The extra growth above the low scenario is mainly allocated across existing industrial, business and commercial centres such as the Longman, Carsegate, Muir of Ord, Dingwall Business Park etc; again balancing growth within each HMA.

Mid Scenario - Number of New Jobs in each Planning Period, by Housing Market Area							
HMA	**11 to 16**	**16 to 21**	**21 to 26**	**26 to 31**	**31 to 36**	**total 2011 to 2031**	**total 2011 to 2036**
Badenoch and Strathspey	134	190	134	134	0	590	590
East Ross	1,350	1,006	596	596	490	3,548	4,038
Inverness	1,036	1,645	1,611	1,518	886	5,810	6,696
Mid Ross	75	75	75	75	25	300	325
Nairn	150	150	25	105	25	430	455
Ross and Cromarty West	0	0	0	0	0	0	0
Sutherland	0	0	0	0	0	0	0
IMF Area Total	2,745	3,066	2,441	2,428	1,426	10,678	12,104

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HIGH SCENARIO

The number of new houses in the high scenario is based on the high migration scenario presented in our HNDA and used as the basis for the housing requirement given in our HwLDP, modified to reflect growth in the renewables industry and balanced by an equivalent reduction in the A96 corridor. Overall the total for new housing is similar to the figure in our HNDA and HwLDP.

High Scenario - Number of New Houses in each Planning Period, by Housing Market Area							
HMA	**11 to 16**	**16 to 21**	**21 to 26**	**26 to 31**	**31 to 36**	**total 2011 to 2031**	**total 2011 to 2036**
Badenoch and Strathspey	533	619	430	430	100	2,011	2,111
East Ross	511	932	781	458	105	2,683	2,788
Inverness	1,795	3,404	3,426	3,008	1,852	11,634	13,485
Mid Ross	725	755	503	409	80	2,392	2,472
Nairn	329	618	434	356	100	1,737	1,837
Sutherland	18	18	33	33	15	102	117
West Ross	92	94	132	115	20	431	451
IMF Area Total	4,003	6,439	5,739	4,809	2,272	20,990	23,262

The extra growth in jobs over and above the mid and low scenarios is again allocated to existing industrial, business and commercial centres and also to expansion areas such as the Airport Business Park.

High Scenario - Number of New Jobs in each Planning Period, by Housing Market Area							
HMA	**11 to 16**	**16 to 21**	**21 to 26**	**26 to 31**	**31 to 36**	**total 2011 to 2031**	**total 2011 to 2036**
Badenoch and Strathspey	148	204	148	148	0	646	646
East Ross	1,405	1,061	651	651	440	3,768	4,208
Inverness	1,151	2,530	1,951	1,599	1,485	7,231	8,716
Mid Ross	121	105	105	105	0	436	436
Nairn	175	185	60	140	10	560	570
Ross and Cromarty West	5	5	5	5	0	20	20
Sutherland	0	0	0	0	0	0	0
IMF Area Total	3,005	4,090	2,920	2,648	1,935	12,661	14,596

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COMMENTARY ON SELECTED MAJOR NEW HOUSING SITES

East Ross The Council's preferred strategy for meeting the housing demand from up to 3,000 jobs likely to be created in the renewables industry is that it should be met in-situ – ie within the East Ross HMA – as far as possible. We have a significant number of sites across the HMA – mainly in Tain, Alness and Evanton – and although the majority are technically unconstrained they have been slow in coming forward and some have not started. Changes in zones 380 and 313 referred to earlier reflect our on-going re-evaluation of the sites. On 2nd July we held a developer workshop in the area to identify possible barriers to delivery but the feedback was too late to inform this eastlink work.

Tain is regarded as best placed to meet the demand from Nigg and Knockbreck West – zone 380 – has potential for 250 houses. Planning permission has been granted in principle but the S 75 agreement is proving difficult and the development has been limited to 100 houses in the low scenario, 250 in the mid and high.

Inshes & Milton of Leys There are over 200 sites remaining in Inshes with a further 500 in Milton of Leys. Developers are active on the two largest sites and the two smaller sites have detailed permissions and are close to delivery. All four sites are assumed to build out, at higher rates for the higher growth scenarios.

Slackbuie Zones 102 and 387 are also active sites and have a remaining capacity of around 600 units. They are also assumed to build out.

Ness Castle This development in zone 72 has a potential capacity of 850 houses and permission in principle for a first phase of 386 houses subject to a S 75 agreement which is close to conclusion. The Council is interested in an early phase of affordables (but without funding at the moment) and the site has the potential for an early start. A relatively low rate of building is assumed, reaching only half of capacity in the low scenario but building out in the high scenario.

Westlink Dependent Housing Sites Funding for westlink is included in the Council's approved capital programme for 2016/17 and 2017/18. No westlink dependent housing is included in the low scenario but it is included in both the mid and high scenarios. 560 houses east of the river are dependent on westlink, divided between zones 4 and 51, starting in 2016 to 2021. The capacity of the Ness Side site in zone 386 is being reviewed as part of the Inner Moray Firth Local Development Plan and 550 units are assumed here.

East Inverness (Stratton) Permission has been granted in principle for the first phase of 750 houses, subject to a S 75 agreement which is close to conclusion. The development is not included in the low scenario as the developer's primary intention at this stage is believed to be to secure permission for a large supermarket. It is included in the other scenarios starting in 2016 to 2021, and is close to completion in 2036 in the high scenario.

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Tornagrain The long term proposal for Tornagrain is "to provide a new sustainable community which will provide the highest quality of life for residents", and provide up to 4,960 new houses. Permission has been granted in principle for the first phase, subject to a S 75 agreement, and the earliest feasible start date is 2015. It is included in all three scenarios, with the total number of units to 2036 being 682 for the low and mid scenarios and 1,531 for the high scenario.

Whiteness has permission in principle for a 1,950 unit development including mixed leisure / residential housing together with a marina and associated leisure activities but the site is currently being marketed only for industrial / renewables use. In all scenarios it is assumed that plans for housing have been abandoned, and that the site will be fully devoted to industrial use.

Nairn South, Delnies & Sandown The only significant site in Nairn that is currently active is Lochloy, zone 183, which is assumed to build out. In view of the general shortage of housing land in Nairn the other three sites at Nairn South, Delnies and Sandown in zones 166, 168 and 169 & 172 respectively, are assumed to start during 2016 to 2021 with construction on all three in parallel albeit at relatively low rates on each site.

An Camas Mor is a new township to the east of Aviemore with a planned capacity of 1,000 houses. In all three scenarios it is assumed that development will start during 2016 to 2021 with a slow build rate of 100 houses in each five year period.

COMMENTARY ON SELECTED MAJOR EMPLOYMENT SITES

Nigg Around 750 people are currently employed at Nigg and the potential is believed to be as high as 2,000 jobs over the next 20 years. The assumption for the low scenario is that it will achieve 1,500 jobs by 2036 with 2,000 for the mid and high scenarios.

Invergordon Invergordon is the main port in the Cromarty Firth and has the potential to expand in its own right, particularly as a stop off point for cruise ships and a base for oil rig refurbishment & dismantling, as well as attracting spin off work from Nigg. The total potential is believed to be 1,000 jobs to 2036, and 820 jobs have been assumed for all scenarios across zones as follows:

- Zone 263, Invergordon Station; 100 jobs where work is currently underway expanding the existing berthing facilities.
- Zone 361, Invergordon Harbour; 360 jobs.
- Zone 382, Invergordon Industrial Estate; 360 in transport and industry meeting the need from Nigg spin-off (as the main industrial area outside Nigg in the Cromarty Firth).

UHI Campus Work by HIE on behalf of UHI indicates that the campus has the potential to support 1,500 jobs over the next 20 years and work is already underway on the entire site with the main building scheduled to open for the 2015/16 academic year, and two companies in the advanced stages of planning for a move to the associated business park. 1,500 new jobs have been assumed in zone 123 for all scenarios.

Stoneyfield & Retail Park Extension Previous versions of the planning data have made ambitious assumptions about the scale and pace of development at this site in zone 125 but they have been

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moderated for this eastlink work, starting with fast food outlets during 2011 to 2016 and then modest growth of bulky / white goods retail. The assumption for the low scenario is 300 jobs to 2031, with 350 in the high scenario.

East Inverness (Stratton) The Stratton planning application envisaged an ambitious mixed residential / commercial development including a supermarket, garden centre, offices, car showroom, district centre with services and schools, and two hotels. This has been scaled down in all scenarios with only a supermarket in the low scenario (320 jobs in zone 144), and the addition of a small district centre, primary school and travel hotel in the high scenario.

Inverness Airport Business Park (IABP) The site covers 200 HA, has permission in principle, and has the potential to provide up to 5,000 jobs in the long term (although the land area available could support more). A managing agent has been appointed for the site and we understand that HIE plan to build some speculative units for rent within the next two years to start development on the site. Modest development of IABP is assumed in all scenarios, with a maximum in the high scenario of 900 jobs, starting during 2011 to 2016.

Tornagrain The housing assumption is for only a third of the site to be developed under the high scenario and the employment assumptions are also modest with only a primary school and small district centre (total 133 jobs) even under the high scenario.

Ardersier (Whiteness) See housing, above. The site is understood to be particularly attractive for renewables fabrication and assembly because of the large flat laying-out area, but it is lagging behind Nigg and is unlikely to achieve the same level of development. In all scenarios it is assumed that renewables work will start during 2016 to 2021, with 100 new jobs per five per period in the low and mid scenarios, and 200 per period in the high scenario.

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APPENDIX A – LOW SCENARIO

NUMBER OF NEW HOUSES IN EACH PLANNING PERIOD

Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Sites With PP	Comment
4	Charleston N	183	135	125	17	0	460	yes	Steady build out of current active site
13	Merkinch W	48	48	0	0	0	96	no	Council affordable development - funding available PP for part
26	Bught	0	25	50	50	0	125	yes	Planning applications pending
51	Dochgarroch	40	50	0	0	0	90	yes	Build out of current active site. Westlink dependent site not included.
52	Torvean Golf Course	56	0	0	0	0	56	yes	Affordable development - funding available
72	Ness Castle	50	100	100	99	250	349	yes	Slow but steady build rate on Ness Castle development - potential to be kick started by an early phase of affordables. PIP granted subject to S 75
90	Inshes / Milton of Leys	50	33	0	0	0	83	yes	Build out of current active site
92	Inshes	100	86	0	0	0	186	yes	Build out of current active site
95	Parks farm	100	200	6	0	0	306	yes	Steady build out of current active site
99	Milton of Leys	100	16	0	0	0	116	yes	Steady build out of current active site
103	Auldearn	10	50	20	12	0	92	yes	Steady build out of an allocated site
145	Castle Stuart	0	34	50	50	0	134	yes	Castle Stuart golf course development - not effective
146	Croy	0	50	50	50	50	150	no	Slow but steady build out of Hw LDP site
152	Ardersier & Rural	10	40	40	12	0	102	yes	Steady build out of allocated sites - likely demand from renew ables
155	"Daviot"	10	10	20	20	40	60	yes	Rural - much w indfall likely to continue
160	Tornagrain E	1	1	68	100	86	170	yes	2015 is earliest feasible start of Tornagrain. PIP granted subject to S 75. Slow delivery after early start.
161	Tornagrain W	80	200	132	100	85	512	yes	2015 is earliest feasible start of Tornagrain. PIP granted subject to S 75. Slow delivery after early start.
166	Nairn Firhall	90	150	80	0	0	320	no	Nairn South - transport issues constrain more than this first phase
168	Nairn Delnies	0	100	100	100	75	300	yes	PIP granted subject to S 75
169	Nairn Sandow n	0	75	75	75	37	225	no	Steady build out of Sandow n site
172	Nairn Sandow n S	0	25	25	25	13	75	no	Steady build out of Sandow n site

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Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Sites With PP	Comment
183	Nairn Lochloy E	30	50	50	20	0	150	yes	Slow build out of current active site
199	Kiltarlity	10	20	55	55	88	140	yes	Continued high rate of w indfall development plus allocated sites
209	Whitebridge	10	10	20	20	25	60	yes	Rural - much w indfall likely to continue
210	Aviemore Inverdruie	30	40	50	50	50	170	no	Grow th of Aviemore tow n
229	Duntelchaig & Ashie	10	10	18	18	36	56	yes	Rural - much w indfall likely to continue
244	Ferintosh	5	20	20	45	39	90	yes	
256	Dingw all Docharty Rural	10	10	20	20	39	60	yes	Dingw all North - slow start then steady build out, recent un met demand in the tow n
261	Invergordon Cromlet	20	16	8	9	0	53	yes	Tw o w indfall sites plus application pending
267	Arabella & A9 Roundabout	20	17	8	9	0	54	no	
270	Morangie & Redburn	50	50	50	6	0	156	yes	Allocated site - demand from Nigg & renew ables
273	North Kesoock	50	54	0	0	0	104	yes	Build out of current active site
278	Chanonry Point	50	100	4	0	0	154	yes	Slow start then build out of current active site
283	Avoch Rural	10	15	30	30	54	85	yes	Windfall development plus allocated sites - depressed rates to start picking up later
288	Culbokie	5	20	20	20	7	65	yes	Slow on going activity on a number of allocated sites picking up later
293	Conon Primary School	50	100	59	50	0	259	yes	Steady build out of active site
299	Nigg	22	19	9	9	0	60	no	Allocated plus w indfall sites - demand from Nigg
301	Fearn	40	50	27	0	0	117	yes	A number of sites - demand from Nigg & renew ables
302	Morangie Forest	48	2	1	1	0	52	yes	Steady build out of existing active site
303	Tain Moss Rd	2	25	25	25	0	77	no	Demand from Nigg & renew ables
310	Dingw all Tulloch	20	70	70	70	39	230	yes	Dingw all North - slow start then steady build out, recent un met demand in the tow n
313	Foulis	14	38	31	3	0	86	no	A number of sites (Evanton) - demand from Nigg & renew ables
317	Alness Firhill	32	14	6	7	0	59	yes	A number of sites - demand from Nigg & renew ables
318	Alness Kirkside	45	26	11	12	0	94	yes	A number of sites - demand from Nigg & renew ables
319	Alness Centre & Retail Park	248	125	48	23	0	444	yes	A number of sites - demand from Nigg & renew ables
320	Alness Milnafua & Obsdale	48	150	50	25	0	273	yes	A number of sites - demand from Nigg & renew ables

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321	Ardross	14	11	25	25	0	75	yes	Historic high rate of windfall development - suppressed for next decade then picking up
322	Edderton	10	10	20	20	32	60	yes	Steady build out of allocated plus windfall sites
323	Invergordon Kincraig Rural	36	20	25	68	0	149	yes	11 to 16 includes recent completions, otherwise steady build out
325	Contin	10	10	15	25	29	60	yes	Steady build out on a number of slow delivery allocated sites, picking up through time
328	Fort Augustus	20	20	60	57	81	157	yes	Steady growth on allocated sites plus windfall
330	Kingussie East	0	20	50	50	50	120	yes	CNP - general policy to move development out of rural areas and into towns. Delayed start then slow delivery.
335	Glen Urquhart	10	10	40	40	65	100	yes	Windfall development suppressed then picking up.
342	Muir of Ord Centre & Beauly Rd	5	40	20	20	43	85	yes	Sites with developer interest, but slow start
345	Aviemore North Primary School	50	40	50	46	0	186	yes	Growth of Aviemore town - slow build out of current active sites
347	Aviemore East & Industry	20	20	20	20	7	80	yes	Slow long term completion of an allocated site
349	Carrbridge East	10	10	20	20	8	60	yes	Delivery on allocated sites - slow start then picking up
350	Tomatin	10	10	20	20	40	60	yes	Steady build out on a number of slow delivery allocated sites
361	Invergordon Harbour	34	21	10	11	0	75	yes	Steady build out of allocated plus windfall sites
362	Nethy Bridge	10	10	20	20	8	60	yes	Steady Delivery on allocated sites - slow start then picking up
363	Newtonmore	10	20	20	20	12	70	yes	CNP - general policy to move development out of rural areas and into towns. Slow start then picking up through time.
364	Grantown West	10	10	20	20	2	60	no	Steady Delivery on allocated site
365	Grantown East	10	10	20	20	14	60	no	CNP - general policy to move development out of rural areas and into towns
366	Beauly	15	15	30	30	40	90	yes	Steady build out of allocated sites includes current active site
367	Drumnadrochit	10	10	30	30	44	80	yes	Steady build out of allocated sites
373	Strathpeffer	10	10	30	40	44	90	yes	Steady activity on two sites
376	Evanton West Rural	10	53	37	13	0	113	yes	Allocated sites - demand from Nigg & renewables
380	Tain Knockbreck Development West	0	50	50	0	0	100	yes	PIP application granted subject to S 75 , demand from Nigg and renewables but full potential of site not achieved
381	Tain Knockbreck Development East	30	48	0	0	0	78	no	Longer term demand from Nigg & renewables

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Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Sites With PP	Comment
383	Muir of Ord West & Distillery	30	50	0	0	0	80	yes	Build out of current active site & allocated sites
384	An Camas Mor	0	100	100	100	100	300	yes	New Aviemore township - steady build rate under all scenarios
386	Ness Side & District Dentre	0	0	0	0	0	0	no	Westlink dependent site - not included
387	Slackbuie & District Centre	89	100	140	140	284	469	yes	Slow build out of current active site

NUMBER OF NEW JOBS IN EACH PLANNING PERIOD

Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Comment
17	Carse Industrial Estate	0	0	25	25	25	50	General expansion
18	Muirtown Bridge	0	50	0	0	0	50	Small scale redevelopment of former B&Q site
35	Longman Industrial Estate	0	25	25	25	25	75	Limited implementation of Longman redevelopment proposals
104	Sainsbury Nairn	125	125	0	0	0	250	Sainsbury building up over 10 years
123	Campus	600	300	300	300	0	1,500	Number of jobs and phasing taken from HIE economic study: adjusted for Daktarin, Capgemini and HIE
124	Inverness Business and Retail Park	200	100	0	0	0	300	HIE / Capgemini
125	Stoneyfield Business Centre + retail extension	50	50	100	100	100	300	Effectively an extension to Inverness retail park - fast food initially then white goods
144	Stratton Business parks	0	160	160	0	0	320	East Inverness - mainly a supermarket building up over 10 years
145	Castle Stuart	0	70	0	0	0	70	Second golf course
148	Next Phase Airport Business Park	50	50	100	200	200	400	IABP starting with speculative units pre-2016
151	Tornagrain Wood	0	50	100	100	100	250	IABP starting with speculative units pre-2016
154	Whiteness	0	100	100	100	100	300	Limited redevelopment of former oil fabrication yard for renewables (plans for housing abandoned)
197	Raigmore Hospital	100	100	100	100	100	400	Continued expansion at Raingmore by NHS Highland
198	Raigmore Hospital Residential + Ancillaries	100	100	100	100	100	400	Continued expansion at Raingmore by NHS Highland
211	Aviemore Centre Highland Resort	38	0	50	0	50	88	General expansion of town centre

258	Dephaven Ind Est	0	25	25	25	25	75	Limited general expansion including renewables spin-off
263	Invergordon Station	50	50	0	0	0	100	Current work expanding berthing facilities
299	Nigg	750	250	0	250	250	1,250	750 people believed to be employed in 2013; full potential c. 2,000 jobs
347	Aviemore East & Industry	0	0	25	25	25	50	General expansion in future
361	Invergordon Harbour	90	90	90	90	90	360	General expansion at CFPA plus renewables spin-off
380	Tain Knockbreck Development West	110	110	0	0	0	220	Asda building up over 10 years
382	Invergordon Industrial Estate.	90	90	90	90	90	360	General expansion at industrial estate including waste incinerator, plus renewables spin-off
387	Slackbuie & District Centre	200	195	0	0	0	395	ASDA building up over 10 years

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APPENDIX B – HIGH SCENARIO

NUMBER OF NEW HOUSES IN EACH PLANNING PERIOD

Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Sites With PP	Comment
4	Charleston N	252	234	80	20	0	586	yes	Steady build out of current active site
11	Clachnaharry	4	24	20	4	0	51	yes	Slow delivery on allocated plus w indfall sites
13	Merkinch W	48	48	0	0	0	96	no	Council affordable development - funding available PP for part
15	Carsegate Rd	0	25	25	25	25	75	no	Muirton basin redevelopment
26	Bught	0	25	50	50	0	125	yes	Planning applications pending
39	Academy Street N	23	27	48	23	0	121	yes	PIP effectively conversion of upper floor vacant offices. Also 200 students in purpose built accommodation 2016 to 2026
47	Caledonian Stadium	0	49	40	0	0	89	no	Housing included in long term Longman redevelopment proposals
51	Dochgarroch	0	71	148	120	32	339	yes	Westlink dependent site
52	Torvean Golf Course	56	0	0	0	0	56	yes	Affordable development - funding available
58	Prison	0	20	40	20	0	80	no	Redevelopment of prison site
59	Castle Street	6	7	33	6	0	52	yes	PIP effectively conversion of upper floor vacant offices.
63	Haugh S	6	44	6	6	0	62	yes	Redevelopment of former college buildings
72	Ness Castle	100	250	250	250	130	850	yes	Completion of Ness Castle development - potential to be kick started by an early phase of affordables PIP granted subject to S 75
74	Drumossie S	16	17	14	15	0	62	yes	Rural - much w indfall likely to continue
90	Inshes / Milton of Leys	83	0	0	0	0	83	yes	Build out of current active site
92	Inshes	110	76	0	0	0	186	yes	Build out of current active sites
95	Parks farm	100	206	0	0	0	306	yes	Steady build out of current active site
99	Milton of Leys	100	16	0	0	0	116	yes	Steady build out of current active site
101	Balvonie of Leys	0	50	50	0	0	100	no	Application for 100 houses likely to be granted

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102	Culduthel mains	52	4	3	3	0	62	yes	Build out of active site
103	Auldearn	37	28	13	15	0	92	yes	Steady build out of an allocated site
105	Cawdor	10	50	50	50	50	160	yes	Slow but steady buildout of Hw LDP site
123	Campus	0	0	0	0	0	0	no	200 students in purpose built accommodation 2026 to 2036
127	Ashton Farm	35	25	1	1	0	62	yes	Build out of existing sites
129	Smithton / Stratton	0	150	200	200	0	550	yes	First phase of East Inverness PIP granted subject to S 75
144	Stratton Business parks	0	0	575	675	360	1250	no	Later phase of East Inverness PIP granted subject to S 75
145	Castle Stuart	0	34	50	50	0	134	yes	Castle Stuart golf course development - not effective
146	Croy	0	50	50	50	50	150	no	Slow but steady buildout of Hw LDP site
152	Ardersier & Rural	0	26	35	28	13	89	yes	Steady build out of allocated sites - likely demand from renewables
155	"Daviot"	10	10	20	20	40	60	yes	Rural - much windfall likely to continue
160	Tornagrain E	1	200	250	250	250	701	yes	2015 is earliest feasible start of Tornagrain PIP granted subject to S 75
161	Tornagrain W	80	250	250	250	250	830	yes	2015 is earliest feasible start of Tornagrain PIP granted subject to S 75
166	Nairn Firhall	90	150	80	0	0	320	no	Nairn South - transport issues constrain more than this first phase
168	Nairn Delnies	0	100	100	100	0	300	yes	PIP granted subject to S 75
169	Nairn Sandown	0	75	75	75	37	225	no	Steady build out of Sandown site
172	Nairn Sandown S	0	25	25	25	13	75	no	Steady build out of Sandown site
183	Nairn Lochloy E	50	100	18	0	0	168	yes	Steady build out of current active site
199	Kiltarlity	10	50	50	50	50	160	yes	Continued high rate of windfall development plus allocated sites
209	Whitebridge	15	15	15	15	0	60	yes	Rural - much windfall likely to continue
210	Aviemore Inverdruie	69	74	53	85	0	281	no	Growth of Aviemore town
214	Gorthleck	15	15	15	15	15	60	yes	Rural - much windfall likely to continue
229	Duntelchaig & Ashie	15	15	15	15	15	60	yes	Rural - much windfall likely to continue
236	Windhill & Barnyards	6	30	30	30	30	96	yes	Steady build out of allocated sites
252	Culbokie South	12	12	22	11	0	57	yes	Ongoing activity on a number of allocated sites
256	Dingwall Docharty	48	51	0	0	0	99	yes	Dingwall North - steady build out, recent unmet demand in the town

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Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Sites With PP	Comment
	Rural								
261	Invergordon Cromlet	20	16	8	9	0	52	yes	Two windfall sites plus application pending
270	Morangie & Redburn	50	50	50	6	0	156	yes	Allocated site - demand from Nigg & renewables
273	North Kessock	96	8	0	0	0	104	yes	Build out of current active site
278	Chanonry Point	105	37	7	6	0	154	yes	Build out of current active site
281	Balblair	20	24	8	9	0	62	yes	Allocated site
283	Avoch Rural	50	63	13	13	0	139	yes	Continued high rate of windfall development plus allocated sites
288	Culbokie	28	36	4	5	0	72	yes	Ongoing activity on a number of allocated sites
293	Conon Primary School	85	110	58	6	0	259	yes	Steady build out of active site
294	Maryburgh Primary School	1	1	30	39	0	72	no	Large allocated site, access issue to be resolved
299	Nigg	22	19	9	9	0	60	no	Allocated plus windfall sites - demand from Nigg
301	Fearn	0	40	50	27	0	117	yes	A number of sites - demand from Nigg & renewables
302	Morangie Forest	10	20	20	2	0	52	yes	Steady build out of existing active site
303	Tain Moss Rd	2	50	25	0	0	77	no	Demand from Nigg & renewables
310	Dingwall Tulloch	47	81	77	64	0	269	yes	Dingwall North - steady build out, recent unmet demand in the town
313	Foulis	14	15	25	3	0	58	no	A number of sites (Evanton) - demand from Nigg & renewables
317	Alness Firhill	32	14	6	7	0	59	yes	A number of sites - demand from Nigg & renewables
318	Alness Kirkside	45	26	11	12	0	94	yes	A number of sites - demand from Nigg & renewables
319	Alness Centre & Retail Park	0	100	100	50	0	250	yes	A number of sites - demand from Nigg & renewables
320	Alness Milnafua & Obsdale	48	150	50	25	0	273	yes	A number of sites - demand from Nigg & renewables
321	Ardross	14	50	50	50	50	164	yes	Continued high rate of windfall development
322	Edderton	15	15	30	30	15	90	yes	Steady build out of allocated plus windfall sites
323	Invergordon Kincraig Rural	0	50	75	75	50	200	yes	250 including new IMF site but slow start

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325	Contin	17	26	25	23	0	89	yes	Steady build out on a number of slow delivery allocated sites
327	Cannich	10	21	17	19	0	67	yes	Steady Delivery on allocated site plus windfall
328	Fort Augustus	30	50	50	50	50	180	yes	30 completions 2011to16 - steady growth on allocated sites plus windfall
330	Kingussie East	16	86	62	56	0	221	yes	CNP - general policy to move development out of rural areas and into towns
335	Glen Urquhart	40	46	37	41	0	165	yes	Continued high rate of windfall development
337	Kilmorack	13	15	12	13	0	53	yes	Rural - much windfall likely to continue
339	Cabrich & Moniack	15	33	8	9	0	64	yes	Allocated site plus windfall
340	Kirkhill	10	30	30	30	30	100	yes	Steady build out of allocated sites
342	Muir of Ord Centre & Beauly Rd	12	85	90	42	0	229	yes	Sites with developer interest, includes IMF Plan site Muir of Ord MU1 (tentative 50) 2021 on
345	Aviemore North Primary School	72	61	28	25	0	186	yes	Growth of Aviemore town - build out of current active sites
347	Aviemore East & Industry	37	21	15	14	0	87	yes	Long term completion of an allocated site
349	Carrbridge East	22	19	14	12	0	68	yes	Steady Delivery on allocated sites
350	Tomatin	5	26	33	25	12	88	yes	Steady build out on a number of slow delivery allocated sites
356	Urray	22	21	17	11	0	71	yes	Rural - much windfall likely to continue
357	Muir of Tarradale	17	29	14	2	0	62	yes	Active developer interest on two allocated sites
359	Conon Mains	2	2	24	29	0	56	yes	Allocated site - follow on from Braes of Conon
361	Invergordon Harbour	34	21	10	11	0	75	yes	Steady build out of allocated plus windfall sites
362	Nethy Bridge	22	19	14	12	0	68	yes	Steady Delivery on allocated sites
363	Newtonmore	27	23	17	15	0	82	yes	CNP - general policy to move development out of rural areas and into towns
364	Grantown West	21	18	13	11	0	62	no	Steady Delivery on allocated site
365	Grantown East	24	21	15	14	0	74	no	CNP - general policy to move development out of rural areas and into towns
366	Beauly	20	40	30	30	10	120	yes	Steady build out of allocated sites includes current active site
367	Drumnadrochit	31	35	28	31	0	124	yes	Steady build out of allocated sites
373	Strathpeffer	21	21	46	46	0	134	yes	Steady activity on two sites

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376	Evanton West Rural	10	53	37	13	0	113	yes	Allocated sites - demand from Nigg & renew ables
380	Tain Knockbreck Development West	50	100	100	0	0	250	yes	PIP application granted subject to S 75 , demand from Nigg and renew ables
381	Tain Knockbreck Development East	0	0	30	50	0	80	no	Longer term demand from Nigg & renew ables
383	Muir of Ord West & Distillery	30	50	0	0	0	80	yes	Build out of current active site & allocated sites
384	An Camas Mor	0	100	100	100	100	300	yes	New Aviemore tow nship - steady build rate under all scenarios
386	Ness Side & District Dentre	0	100	200	250	200	550	no	Westlink dependent site
387	Slackbuie & District Centre	200	250	63	0	0	513	yes	Steady build out of current active site
389	Stratton SE	0	300	300	100	0	700	yes	First phase of East Inverness PIP granted subject to S 75
390	Aviemore Craigellachie	50	25	0	0	0	75	yes	Build out of active High Burnside site

NUMBER OF NEW JOBS IN EACH PLANNING PERIOD

Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Comment
15	Carsegate Rd	0	0	25	25	0	50	General expansion
17	Carse Industrial Estate	0	25	25	25	0	75	General expansion
18	Muirtow n Bridge	0	150	0	0	0	150	Redevelopment of former B&Q site
35	Longman Industrial Estate	25	100	50	50	50	225	General expansion at Longman in line w ith Longman redevelopment proposals
86	Inshes Retail Park	0	75	75	0	0	150	Limited continued grow th
99	Milton of Leys	40	10	0	0	0	50	Primary school, district centre
104	Sainsbury Nairn	125	125	0	0	0	250	Sainsbury building up over 10 years

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Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Comment
117	Next phase of Cradlehall Business Park	0	25	25	25	25	75	General expansion
123	Campus	600	300	300	300	0	1,500	Number of jobs and phasing taken from HIE economic study: adjusted for Daktarin, Capgemini and HIE
124	Inverness Business and Retail Park	200	100	0	0	0	300	HIE / Capgemini
125	Stoneyfield Business Centre + retail extension	50	100	100	100	100	350	Effectively an extension to Inverness retail park - fast food initially then w hite goods
129	Smithton / Stratton	0	90	30	0	0	120	East inverness includes primary school and travel hotel
144	Stratton Business parks	0	160	160	33	0	353	East Inverness - mainly a supermarket building up over 10 years
145	Castle Stuart	0	70	30	0	0	100	Second golf course and hotel
148	Next Phase Airport Business Park	50	100	100	200	200	450	IABP starting w ith speculative units pre-2016
151	Tornagrain Wood	50	100	100	200	200	450	IABP starting w ith speculative units pre-2017
154	Whiteness	0	200	200	200	200	600	Redevelopment of former oil fabrication yard for renew ables (plans for housing abandoned)
160	Tornagrain E	0	0	0	50	50	50	District centre
161	Tornagrain W	0	0	33	50	0	83	District centre, includes primary school 2021 to 26
168	Nairn Delnies	0	0	0	80	0	80	Hotel
197	Raigmore Hospital	100	100	100	100	100	400	Continued expansion at Raingmore by NHS Highland
198	Raigmore Hospital Residential + Ancillaries	100	100	100	100	100	400	Continued expansion at Raingmore by NHS Highland
203	New tonmore	15	15	15	15	0	60	General expansion
204	Glenmore & Cairngorm	15	15	15	15	0	60	General expansion
211	Aviemore Centre Highland Resort	38	94	38	38	0	206	General expansion of tow n centre including new / extended supermarket
239	Muir of Ord Industry	50	50	50	50	0	200	General expansion
258	Dephaven Ind Est	75	75	75	75	0	300	General expansion including renew ables spin-off
259	Alness West Rural	20	20	20	20	0	80	General expansion
263	Invergordon Station	50	50	0	0	0	100	Current w ork expanding berthing facilities
271	Tain Station	125	0	0	0	0	125	Tesco

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Transport Model Zone	Zone Name	11 to 16	16 to 21	21 to 26	26 to 31	31 to 36	total 2011 to 2031	Comment
296	Hilton of Cadbol North	0	21	21	21	0	63	Nigg spin-off
299	Nigg	750	500	250	250	250	1,750	750 people believed to be employed in 2013; full potential c. 2,000 jobs
304	Tain Centre	15	15	15	15	0	60	General expansion
309	Dingw all Business Park	50	50	50	50	0	200	General expansion
319	Alness Centre & Retail Park	50	50	50	50	0	200	General expansion
345	Aviemore North Primary School	13	13	13	13	0	52	General expansion
346	Aviemore Railw at Station	13	13	13	13	0	52	General expansion
347	Aviemore East & Industry	25	25	25	25	0	100	General expansion
361	Invergordon Harbour	90	90	90	90	90	360	General expansion at CFPA plus renew ables spin-off
366	Beauly	20	20	20	20	0	80	General expansion
380	Tain Knockbreck Development West	110	110	0	0	0	220	Asda building up over 10 years
382	Invergordon Industrial Estate.	90	90	90	90	90	360	General expansion at industrial estate including w aste incinerator, plus renew ables spin-off
385	Nairn Forres Rd Business Park	50	50	50	50	10	200	General expansion
387	Slackbuie & District Centre	200	195	20	20	20	435	ASDA building up over 10 years then limited further growth at district centre
388	Stratton NW	0	26	320	40	0	386	East Inverness: travel hotel and business park adjacent to A96
389	Stratton SE	0	182	78	11	0	271	East Inverness, mainly business some retail

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APPENDIX C

LOW SCENARIO

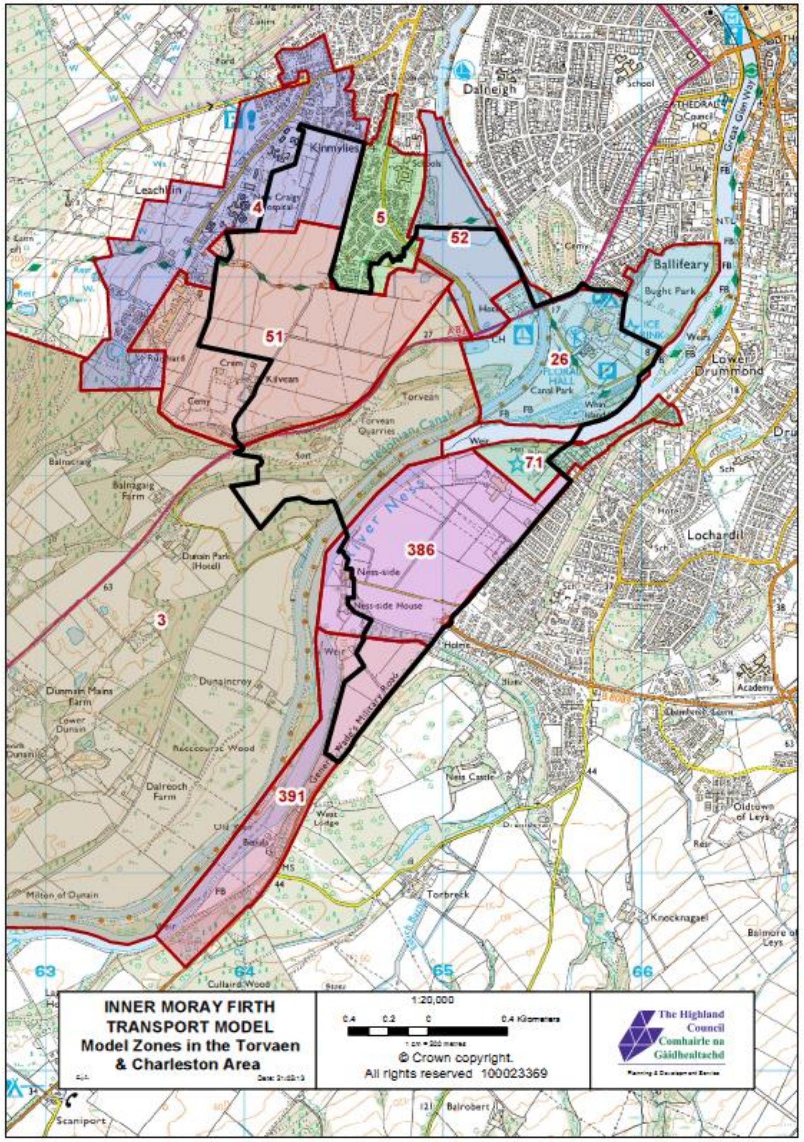
MARCH 2013 UPDATED PLANNING DATA ASSUMPTIONS FOR THE TORVEAN & CHARLESTON ZONES USED IN THE 2011 RUNS OF THE INNER MORAY FIRTH TRANSPORT MODEL EVALUATING WESTLINK OPTIONS

Updated planning data assumptions

ASSUMING NO WEST LINK OR OTHER EFFECTIVE TRANSPORT INTERVENTIONS WITHIN THE SPECIFIED TIME PERIOD THE HIGHLIGHTED FIGURES WOULD CHANGE TO THOSE STATED IN THIS FILE

Tim Stott 15.03.13

Model Zone Reference	Number of Jobs - Baseline	Number of Houses - Baseline	Additional Jobs	Additional Houses	Additional Jobs	Additional Houses	Additional Jobs	Additional Houses	Additional Jobs	Additional Houses
	2011	2011	2011 to 2016	2011 to 2016	2016 to 2021	2016 to 2021	2021 to 2026	2021 to 2026	2026 to 2031	2026 to 2031
V002	E01	E02 + E15	E01	E02 + E15	E01	E02 + E15	E01	E02 + E15	E01	E02 + E15
3	87	59	0	4	5	10	0	4	0	4
4	994	417	0	183	0	135	0	125	10	17
5	257	370	0	6	0	0	0	0	0	0
26	269	13	20	0	0	25	10	50	10	50
51	52	3	0	40	5	50	5	0	5	0
52	51	0	0	56	0	0	0	0	0	0
71	36	74	0	0	0	0	10	0	0	0
386	0	10	25	0	0	30	0	0	0	0
391	0	5	0	1	0	1	0	1	0	1


INNER MORAY FIRTH
TRANSPORT MODEL
Model Zones in the Torvaen
& Charleston Area
1:20,000
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The Highland Council
Comhairle na Gàidhealtachd
4
5
52
51
26
71
386
3
391
Dalneigh
Kinmylies
Leachkin
Ballifeary
Lower Drummond
Lochardil
Torvean
Ness-side
Ness-side House
Ness Castle
Torbreck
Knocknagael
Scaniport
Bairobert

LOW SCENARIO

Continued low growth planning assumptions for largest A96 Corridor development & other area sites

Based on discussions with development management case officers, latest consent checking, current area completion rates, and known/likely landowner/developer intentions

Rows shaded pink give the figures used in previous reference scenarios

Tornagrain										
Site	**V002 MODEL ZONE**	Current Status	Total Capacity (units/jobs)	2011-2016	2016-2021	2021-2026	2028+			HwLDP Map Ref.
Tornagrain (housing)	160+161	PIP	4,960	80	200	200	4480			Map7 p.48
Tornagrain (housing)				297	498	622	764	960	1820	
Tornagrain (other uses)		PIP	55,000m2 of retail, education , office, industrial, hotel , institutional use	0 jobs	20 jobs	20 jobs	balance of jobs from remaining floorspace			Map7 p.48
Tornagrain (other uses)				167	0	161	110	110	300	
Whiteness (industrial development)										
Site		Current Status	Total Capacity (jobs)	2011-2016	2016-2021	2021-2026	2028+			HwLDP Map Ref.
Whiteness		PIP for alternative use	1,500	0	100 jobs	100 jobs	1,300 jobs			Map 8 p.50
Whiteness				113	85	0	0			
Inverness Airport Business Park										
Site		Current Status	Total Capacity (floorspace)	2011-2016	2016-2021	2021-2026	2026+			HwLDP Map Ref.
Airport Business Park	148+151	PIP	200ha for Use Classes 4, 5,6 & Hotel	35,000m2	36,344m2	15ha	170ha			Map7 p.48 & ILP
Airport Business Park				612	132	198	223	1,000	1,200	
Nigg (& wider Invergordon spin-off)										
Site		Current Status	Total Capacity (jobs)	2011-2016	2016-2021	2021-2026	2026+			HwLDP Map Ref.
Nigg	299	Permitted development rights	2,000 jobs	750 jobs	250 jobs	0	1,000 jobs			Map 13 p.69
Nigg				200	250	50				
Invergordon	263+323+361+382	Permitted development rights	1,000 jobs	550 jobs	100 jobs	100 jobs	250 jobs			n/a but as per CFPA operational

										area
Invergordon				58						
Inverness East / Stratton										
Site		Current Status	Total Capacity (units/floorspace)	2011-2016	2016-2021	2021-2026	2026+			HwLDP Map Ref.
Campus	123	PIP & MSCs	Open ended floorspace PIP for institutional, business, leisure and community uses	1,000m2 class 4 19,000m2 education	5,000m2 institutional and business	5,000m2 institutional and business	20,000m2 all stated uses			Map 6 p.38
Campus		jobs		800	400	200	100			
Stratton Farm	129+144+389	PIP Phase 1 MSC soon	2,500 houses, 8,000m2 food retail 3,350m2 non food retail, 5,100m2 offices, 1,900m2 health centre, 9,500m2 commercial, 80 bed hotel, 5,300m2 primary school and other community uses	0 houses, 8,000m2 retail park & ride	250 houses and 20% of other uses	250 houses and 20% of other uses	2,000 houses and 60% of other uses			Map 6 p.38
Stratton Farm	129+144+389	houses		258	443	698	754	360	0	
Stratton Farm	129+144+388	jobs		433	302	190	0	300	200	
North East of Stratton	143	No applications allocated but major road ransom issues	26ha for mixed use development guesstimate 520 houses	0	50	50	420			Map 6 p.38
North East of Stratton								250	250	
Ashton Farm	127	No applications allocated but road ransom issues	80ha for mixed use development guesstimate similar use mix as Stratton farm above	0	0	250 houses and 20% of other uses	2,250 houses and 80% of other uses			Map 6 p.38
Ashton Farm		houses		35	25				500	
Ashton Farm		jobs								
Inverness Retail & Business park	125	PIP App pending	4 chain restaurants (front site) 10,451m2 bulky goods retail minded to grant decision (rear site)	2 chain restaurants	2 chain restaurants	5,000m2 bulky retail	5,451m2 bulky retail			Map 6 p.38
Inverness Retail & Business park				470	440	375	375			
Nairn										
Site		Current Status	Total Capacity (units)	2011-2016	2016-2021	2021-2026	2026+			HwLDP Map Ref.

Sandown	169+172	Allocated, no applications	350 houses	0	100	100	150		Map 9 p.52
Sandown		houses		138	111	59			
Sandown		jobs		65	65	65	50		
Delnies	168	PIP	300 houses	0	100	100	100		Map 9 p.52
Delnies		houses		107	119			75	
Delnies		jobs			80				
Lochloy	183	PIP & MSCs	150 houses remaining	30	50	50	20		
Lochloy				30	115	52			
Nairn South	166	Full PA pending	320 (without bypass)	90	150	80	0		Map 9 p.52
Nairn South				92	144	160	192		
An Camas Mor									
Site		Current Status	Total Capacity (units)	2011-2016	2016-2021	2021-2026	2026+		HwLDP Map Ref.
An Camas Mor	384	no known information							n/a (CNPA)
An Camas Mor					100	100	100		

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Appendix B – THC Original Planning Data Preparation – 2010 Appraisal

INNER MORAY FIRTH TRANSPORT MODEL

PLANNING DATA - DATA PREPARATION

Most of the work referenced here is in the folder: \\ntplhq2\localplans\IandR\TrafficModel\IMF2009

The baseline data (and also subsequent scenarios) are assembled in the format for use in templates supplied originally by AECOM for the A96 transport model. All of this original A96 work is in the folder:
..\..\A96 Transport Model\AECOM

1 INTRODUCTION

This note forms part of the documentation for the data supplied by the Highland Council for use in the Inner Moray Firth transport model developed initially by AECOM and then adopted by Transport Scotland for their DMRB stage 2 analysis. The documentation package has two parts:

- This **note**, which has two aims:
  - to show the steps in the data assembly and calculation process and identify the principal assumptions which were made; and
  - to navigate Highland Council staff through the spreadsheets and databases which were used.
- A **spreadsheet** giving the detailed assumptions made for each of the model zones. A spreadsheet has been used for this because, with 391 model zones, 7 planning periods and two sets of assumptions, a text / table based approach is not feasible. This spreadsheet is at: IMF_development_master_final.xls

The main part of this note describes the steps involved in assembling a planning scenario which represents the development profile given in the proposed HwLDP. This scenario is the *reference scenario* in terms of Transport Scotland definitions. The final part of this note deals with planning data for the *do minimum scenario* which is required by Transport Scotland for economic analysis.

2 GENERAL PRINCIPLES

Year Notation. The traffic surveys were carried out during the autumn of 2009. The baseline demographic data is mid year (end June) and all projections are also mid year to mid year hence this is the basis for the periods used throughout. In the spreadsheets and below, as an example, the period 2011-2016 refers to the 5 years starting in July 2011 and ending in June 2016.

Recovery of the housing market from the recent recession. In the early stages of the recession, advice from Government's Chief Economic Advisor was that the mortgage market would see a return to normal lending conditions during 2011. This principle was used for a number of in-house school roll forecasts studies in which modest build rates were assumed until 2011 with a return to near mid noughties build rates in 2013. These profiles have been used wherever they were available as a basis for this work and the assumptions are implicit in the data for the two planning periods to 2016.

Planning periods. There are 7 planning periods in total, grouped into three as follows:

- The base date for the model is mid 2011 and the calibration year is 2009. The calibration data is projected forwards to 2011 as follows:
  - To allow for the recent recession the general assumption is that new jobs are currently being created at half the rate of the previous 5 years and in similar locations. This is modified by local knowledge wherever possible; eg supermarkets, relocation of Nairn GP, new Milton of Leys school.
  - New housing is based on 2009/10 completion rates and locations plus local knowledge and profiles used in the school roll forecast work described earlier.
- There are four, five year planning periods starting in July 2011 and ending in June 2031. Some of the general assumptions made for this period are described below.
- For sites along the A96 corridor, there are two additional 5 year periods, nominally from July 2031 to June 2041. These are intended to allow the impact of full development of the longer term sites in the corridor to be evaluated.

Housing. The number of houses projected to be built in each 5 year period to 2031 is consistent with figures given in the proposed Highland wide Local Development Plan. This has been achieved by manually allocating a realistic build profile in the first instance, and then finally adjusting using factors for each Housing Market Area. The net result of the factoring process is that the numbers of houses built at each site may be slightly less than the full potential of the site. The two periods from 2031 onwards are not controlled to an overall total and assume that the major A96 sites either build out or continue at the rate in the previous period. The 2036 onwards figure for Tornagrain assumes that the township is completed as planned (scheduled for 2046 in the planning application).

Jobs. The number of new jobs created in each five year period is consistent with the growth in the working age population. Again, this has been achieved by a combination of manual profiles and factoring. Jobs are created in the two periods from 2031 onwards at the same rate as the jobs per household ratio for the IMF area overall in 2031.

A strategic model: reconciling figures. A common problem with strategic modelling is that models which use a number of spatial building blocks – in this case 391 zones – can easily give results which sum up to greater than the likely total for the area overall. The approach taken in this work has been to control the zone figure to the projected growth for the Inner Moray Firth area as a whole by firstly identifying feasible growth profiles and then applying factors. The result is a plausible representation of what the future might look like, but with growth evened out across the zones to some extent. There is a chance that growth in any one zone could be greater than given in the profiles, in which case growth somewhere else would be correspondingly lower. This could be analysed using this model and data as a basis for sensitivity testing, or building local models.

3 BASELINE: HOUSING AND PEOPLE

The current number of houses in each transport zone – called V002 zones after their column heading in an early AECOM spreadsheet – is taken from our 2009 council tax data. See:
baseline data to AECOM\CouncilTax_sept09.xls
This spreadsheet divides houses on the council tax register into:
- Occupied houses (ie those which are not receiving a vacant or second / holiday home discount) which gives the number of households for column E02.
- Ineffective houses for column E15 (which AECOM describe as second / holiday homes).
- The number of properties receiving a single person discount, with the intention that this will be used to calculate a fixed proportion to be used for each V002 for all planning periods (supplied as a separate free standing spreadsheet).
- The assumption is that proportions in each V002 zone will remain constant throughout, modified in *proxy communities* as described below.

The numbers of people living in these houses are based on the GROS 2008 Small Area Population Estimate with populations for the V002 zones calculated by the address point method (non organisation addresses only). The economic activity factors are calculated and inferred from 2001 Census data. The datazone calculations are given in:
census and ABI\people_by_DZ_from_SAPE_censusKS09_M_plus_F.xls
The joins are in:
baseline data to AECOM\IMF_joins.mdb

An alternative approach might have been to use current economic activity rates from the Annual Population Survey. These would be up to date – and reflect increasing activity during the last decade – but are available for Highland only and it was felt that local variability is important: eg applying activity rates for Highland overall to Merkinch would give very different modelled traffic flows.

4 BASELINE: EMPLOYMENT

The main source for baseline jobs is the 2008 Annual Business Inquiry, with figures for each V002 zone calculated from datazones figures using the address point method (organisational addresses only), see the datazone figures in:
census and ABI\employment_data ABI to AECOM headings_ABI2008.xls
This spreadsheet also includes a lookup to convert the three digit ABI code to columns E03 to E14. See above for the database containing the joins.

ABI is known to be imperfect and a manual validation exercise was carried out using local knowledge. The main error was that Raigmore Hospital was assigned to the Fairways Business Park over a mile away. There were other obvious errors such as (eg) an apparent major employer in rural Strathnairn, which is actually the small administrative HQ for a large security company with out posted workers assigned incorrectly to the HQ, and schools in the incorrect datazone. Note that some errors will have persisted where we do not have good local knowledge.

Datazone 3853 - Inverness Central, Raigmore and Longman - has 17,360 jobs and these have been allocated to V002 zones using a combination of the address point method and local knowledge.

5 FUTURE SCENARIOS: HOUSING AND PEOPLE

A summary of the development headlines for each V002 zone is given in the spreadsheet:
Q:\landR\TrafficModel\IMF2009\development_headlines by IMF zone.xls
This builds on the early data collection for the A96 transport model – see the first of the worksheets – with changes made to reflect revised applications and the HwLDP. It is the starting point for much of the work described below and in many cases the development rates given here represent potentials or aspirations which have been modified as the process has developed.

Many of the joins are carried out in access: See
GIS\joins.mdb

Local Plan and large windfall Sites. The first step is to convert known local plan and major windfall[3] & aspirational sites to a tentative build profile by year. Major windfall sites (>20 houses) are treated as one off allocated sites and their uniform ID is given rather than the local plan ID. This effectively assumes that the new 5-yearly planning cycle should result in no new large windfall sites. See:
H1LocalPlan_plus_major_sites.xls
The worksheet *first pass phasing* is the key sheet with comments from relevant Planners in the comment column. As each V002 zone may appear more than once a pivot is used to sum the tentative build profile for each zone. The values, plus other relevant lookups, are prepared in a format suitable for importing to Access for subsequent joining.

Small windfall sites. Windfall is treated as two separate components, reflecting the way the source data has been prepared and analysed. Small sites of <4 houses have been identified through completions analysis for the Housing Land Audit and the average rate of completions over the last 5 years, by V002 zone, is given in:
H2WindfallSites_completions_less_than_4.xls
The assumption is that windfall will continue throughout the planning period at this rate, and in the identified V002 zone. Note that an alternative approach might have been to allocate these completions across all zones in each HMA but the chosen approach has been adopted to preserve the rural bias.

[3] Windfall is defined as any site which is not allocated in a Plan but is granted planning permission, rather than the narrow Scottish Government brownfield definition.

Windfall sites >3 and <20 have been identified, again as part of the HLA, as current planning applications and again the assumption is that their equivalent will continue into the future but with only 50% actually being built. See:
H3WindfallSites.xls
This approach attempts to replicate the regular trickle of medium sized windfall sites in urban areas and larger villages, which is likely to continue into the future.

Combining Plan and windfall sites. The local plan (& other major sites), and the two windfall components are joined to V002 zone in Access with the calculation by zone of the total number of future houses in the spreadsheet:
H4all_sites_first_attempt_all_windfall.xls
This spreadsheet also:

- Adjusts the total number of houses built in each of the 5 year planning periods to be equal to;
  - i) for Inverness and Nairn HMAs, the housing land requirement given in Tables 2 and 3 of the Sept 2010 proposed plan (converted back to housing requirement[4]); and
  - ii) ii) for Badenoch & Strathspey, Nairn, East and Mid Ross HMAs, the housing requirement given in our HNDA.
- Note that some aggressive factors are used for the later two planning periods (when the housing requirement falls) so that the number of new houses in each V002 zone might could be as low as half the original estimates at the start of the calculation process, as identified for some sites in the development headlines workbook.
- Identifies those developments where it will not be appropriate to give new developments the same demographic profile as the existing housing in the zone. These are referred to below as *proxy communities*.

Demographic Profiles. The demographic profile for each V002 zone, based on either the baseline profile for the existing housing or the baseline housing for the proxy community, is calculated in the spreadsheet:
H5new_housing_people+households.xls
The rules the proxy communities are:

- Major new developments on the edge of Tain, Nairn and Aviemore are given the overall profile of their respective town.
- New townships and the major Inverness growth areas are given the characteristics of Culloden (incl Balloch, Cradlehall, Westhill etc). Culloden is used because it is the most recent expansion area with a representative proportion of affordable housing and also a representative Census profile to give economic activity rates.

Note that future households and non-effective stock are picked up from this spreadsheet and pasted into the final employment spreadsheet[5].

---

[4] The land requirement is 1.25*housing requirement (giving a 25% flexibility & uncertainty allowance) so the back-conversion is land requirement *0.8. Windfall is assumed constant therefore some downward adjustment to the major sites is necessary to meet the housing requirement.

[5] They are not carried through to the final housing & people factored spreadsheet described next, but are picked up from the first set of worksheets before the proxy community profiles are added – beware picking up the wrong profiles.

Adjusting for falling occupancy rates. The final step is to adjust the number of people living in each new house for falling occupancy rates: rates have been taken from the 2006 series of household projections (high migration scenario) using 2008 as the base year and adjusting using (eg) the Highland 2013 rate for the five year period from 2011 to 2015. The calculations are given in:
H6new_housing_people+households_factored_for_occupancy.xls
This spreadsheet also sums up the cumulative number of people and households to be used in the model for each of the planning periods.

It has not been possible, in the time available and with the resources available, to adjust further the profile for changes in our population so the age profile used in all planning periods is that in the 2009 baseline. However, the IMF area is dominated by Inverness, Nairn and Badenoch & Strathspey where the numbers of working age people are expected to rise through the planning period, rather than fall as is the case in the rest of Highland. In addition the economic activity rate assumed in the work is probably slightly low. Both suggest that the age profile assumption should not result in unacceptable errors.

6 FUTURE SCENARIOS: EMPLOYMENT

The procedure for jobs broadly mirrors that for housing except that, without a commercial / business equivalent of the HLA, there is less structure to the approach and it relies more on expert opinion. As with housing, the development headlines for each V002 zone are given in the spreadsheet:
Q:\landR\TrafficModel\IMF2009\development_headlines by IMF_zone.xls
And many of the joins are in:
GIS\joins.mdb
The references at the end of this note give the detail for proposed strategic developments.

The model input is in terms of jobs rather than floor space. Where a future development is described in terms of floor space, the English Partnership[6] factors have been used to convert area to jobs.

Monitoring recent historic change. The spreadsheet ABI_2003+2008.xls gives jobs in 2003 and 2008 by SIC and has been used to inform the process as it gives good general intelligence on the change in the number and location of jobs across Highland. It shows (eg) that there has been greater growth than we might have expected at Deephaven and Alness Business parks and resulted in us increasing future job numbers at these sites from a low initial estimate. It has also been used to derive the growth in jobs during 2009 and 2010 on the general assumption that, balancing the current recession with the fact that our population is still growing, the rate of growth during these two years will be half of that during the historic period.

[6] http://www.englishpartnerships.co.uk/docdownload.aspx?doc=Employment%20Densities(full%20guide).pdf&pid=64241OphaK9K2AAJhl5lwMwRzZ4YhYXY

Identifying potential development sites and phasing. The starting point is a list of 180 potential sites from a combination of local plans (identified by their Plan ref no) and current or expected applications (blank unique ref field). These have been assigned a tentative jobs profile through time in consultation with the relevant planners, see:
J1business&industry_with_IMFzone.xls
The list includes many of the strategic sties such as Stratton and the Campus but some of the profiles are in development headlines and the two are combined manually for subsequent steps.

The first version sent to Transport Scotland and MVA was checked by MVA who felt that it included 6,000 more jobs at the end of the planning period than could be supported by the working age population, which would result in a large increase in either cross border commuting or the economic activity rate. These scenarios have been kept in the folder and are annotated *Vx superseded*.

For subsequent versions, the number of jobs was reduced by manual adjustment at all sites where the growth would be >100 jobs over the period. The factors used for adjustment are given in the workbook:
J2job_change_for_adjustment.xls
The main change is that the number of new jobs created in the A96 corridor has been reduced by 50% across the board. This is a significant reduction but it has been clear throughout the work on both the original A96 model and this model that the developers' proposals – welcome as they are – are over optimistic.

The first two steps have been pulled together in the spreadsheet
J3IMF_jobs_profile_V3.xls
building on the approach used for the original A96 model, leading to a cumulative profile (ie 2009 baseline, then baseline plus 2009 & 2010, then adding subsequent planning periods sequentially).

Some points to note:

- In versions 1 and 2 some of the Charleston (Inverness) development was allocated incorrectly and in version 3 was reassigned from zone 001 to 004, and an error in the number of households in 2026-31 was corrected. Data to 2041 was added as an extra, second step and suffix_2041 indicates that the final two periods from 2031 onwards are included.
- The number of new households (which equals the number of effective new houses) and ineffective households in E02 and E15 respectively are copied and pasted from the final worksheets in the H5 housing & people spreadsheets described earlier. They are pasted as values into the J3 jobs profile worksheets for the relevant periods before the cumulative totals are summed in the final series of worksheets.
- For some future developments – eg the campus, schools, hotels etc – the type of development and the headings to which jobs should be assigned are obvious. However, for many developments the distinction is not clear and judgement has been used, particularly for E09 Services, E10 Industry Construction & Transport and E14 Business.

7 MAIN INCLUSIONS AND EXCLUSIONS IN THE REFERENCE SCENARIO

Headline developments included in the model. Working roughly north to south:

- Nigg: 500 new jobs in offshore energy sector at 50 jobs per year starting 2012.
- A river crossing in 2016 opens up constrained sites in Inverness at Charleston and Ness-Side.
- Campus as per the Sept 2009 economic study modified by 2010 application and HwLDP.
- Muirton regeneration as per the Highland Council and BWB feasibility study, Longman growth limited to significant regeneration of the harbour area with consolidation (ie zero growth) elsewhere.
- Modest growth in Merkinch & Carsegate plus redevelopment of the former B&Q site.
- East Inverness as per Inverness Estates application modified by HwLDP, includes primary + secondary schools, hotel, supermarket, business park etc.
- Tornagrain as per planning application modified by HwLDP and scheduled for completion in 2046.
- IABP is constrained to the HIE estimate of potential for 5,000 jobs in the very long term (note that it is not fully developed in the final 2036 onwards period).
- Whiteness Head as per planning application modified by HwLDP, 50% effective housing, 50% holiday lets, timeshare etc
- 350 new houses at Sandown.
- Delnies & Nairn South as per HwLDP
- Modest build rates at An Camas Mor starting 2016.

Headline developments excluded from the model. Working roughly north to south:

- Major regeneration in Cromarty Firth other than at Nigg (but some steady growth at Deephaven and Alness).
- Later stages of East Inverness on non-Inverness Estates land.
- Relocation of Raigmore Hospital (but steady growth on the current site).
- Expansion of IRA and a second new primary school in East Inverness.
- Park & Ride; student accommodation.
- Self employment.

8 THE DO MINIMUM SCENARIO

Guidelines for establishing the do-minimum and reference case scenarios are available on the transport Scotland website in the Scottish Transport Analysis Guide, in particular S2.3 at:
http://www.transportscotland.gov.uk/stag/td/Pre-Appraisal/Analysis_of_Problems_and_Opportunities/2.3

Table 2.1 describes four categories of probability to be assigned to developments as follows:

Probability	Status

Near certain: The outcome will happen or there is a high probability that it will happen.	Policy or funding approval. Tenders let. Under construction.
More than likely: The outcome is likely to happen but there is some uncertainty.	Submission of planning consent application imminent. Adopted local plans*[7]
Reasonably foreseeable: The outcome may happen, but there is significant uncertainty.	Adopted local plans* Draft Local plans Development conditional upon the intervention going ahead.
Hypothetical: There is considerable uncertainty whether the outcome will ever happen.	A policy aspiration

The Guidance is written mainly from the perspective of transport interventions but is intended to also cover land use developments, and the general principle is that the two high probability categories form the do-minimum scenario, and the two low probability categories are added to this to form the reference scenario. The guide also indicates that development which is dependent on transport interventions is assigned to the reference scenario (irrespective of its status in terms of approvals etc).

The list of developments which are included in the reference scenario but not the do minimum scenario is given in the spreadsheet:
do_minimum\summary_of_reference_domin_differences.xls
The general rules adopted in deriving this table are:

- Windfall is expected to continue into the future at these typical rates and locations and is therefore *near certain*.
- Sites with planning permission are *near certain* unless we are aware of any significant barriers to development.
- As described earlier, allocated and windfall sites have been assigned realistic development rates which are consistent with the overall growth envisaged in the proposed HwLDP and are therefore *near certain*.
- A small number of sites which have planning permission but barriers to development, or are applications and at pre-application stage but can be determined independent of the HwLDP are *more than likely*.
- Sites which are dependent on transport interventions, or have conditional support in the proposed HwLDP but will not be determined until the Plan is approved, or are aspirations which fit with firm priorities identified in previous published Plans and are underpinned by detailed studies, are all *reasonably foreseeable*.
- Long term sites beyond the end of the proposed HwLDP are *hypothetical* (unless they result from build-out of higher probability sites started much earlier).

9 INFORMATION SENT TO TRANSPORT SCOTLAND

[7] * *Whilst adopted local plans may be viewed as containing interventions that are likely to happen, it should be recognized that they will typically represent a local authority's aspiration for the local area, and therefore their forecast changes to land-use and development should be treated with caution, particularly where these forecasts imply levels of growth which are significantly above the national trend. It will typically be appropriate to subject these predicted change to sensitivity tests.*

The final sheets are stripped of annotation etc and the versions sent to Transport Scotland are in the folder:
scenarios to transport scotland
This folder contains the earlier superseded scenarios as well as the final data.

Cameron Thomas
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Planning & Development Services
1/12/2010

Selected References for Major Sites

Inverness Campus Project Planning Statement April 2009

Economic Study of Inverness Campus Options (Cogentsi) June 2009

Inverness Estates: Stratton Masterplan February 2009

Tornagrain Planning Statement January 2009

Inverness Airport Business Park application and Masterplan March 2008 giving a floor space profile from 2008 to 2061 (modified by HIE work suggesting that the Park has the long term potential to support 5,000 jobs to 2061, around half the potential capacity of the floor space).

Inverness Harbour Planning Application: First Phase, Data Centre (2009) and associated documents eg LDN Architects, Architectural Approach 2008.