

Appendix 3

Transportation

Information required for Transport Assessment (TA)/Transport Statement (TS)

The onus will be on the developer to provide a TA/TS which follows the Transport Scotland Transport Assessment Guidance 2012 and, where required use the Elgin Traffic Model.

Where developments are expected to create an increase in traffic, a completed **Transport Assessment Form** www.moray.gov.uk/downloads/file87671.pdf must be submitted by the developer to allow officers to consider the requirement or otherwise for further assessment. Developers are urged to carry out early consultation with Transportation prior to the submission of development proposals. If a Transport Statement/Transport Assessment is required the scope should be agreed with Transport Development prior to the submission. A TA must provide:

- An assessment of travel characteristics*;
- A description of the measures which are being adopted to influence travel to/from the site*;
- A description of the transport impacts of the development in a dynamic network and how these will be addressed e.g. proportionate contribution towards intervention identified by the Elgin Transport Strategy.

And, include:

- Forecast of person trips generated by the development*;
- Forecast of person trips generated by mode of transport*;
- Appraisal of the routes from development to end destinations (schools, employment, local services) by foot, cycle, public transport and vehicle.

* *Minimum requirement for Transport Statement.*

Elgin Traffic Model

The Elgin Traffic Model is a macrosimulation model, the extents of which cover the whole of the Elgin road network. The model provides the facility to review the performance of the collective traffic system to check for changes in network performance and to determine the areas of the network where there would be an increase in traffic as a result of a development.

When use of the Elgin Traffic Model is required, developers and their consultants must first agree the scope of the assessment to be undertaken with the Transport Development Team and then complete an Elgin Traffic Model Access Form

www.moray.gov.uk/downloads/file114455.doc

The model is operated by the Council's transport consultant who will undertake any necessary changes to the model and run the testing scenarios. Output from the model runs will be provided as a report with model output data in the form of shape files (if required). There is a fee associated with accessing the model which will depend on complexity of any changes required to the base model and the number of scenarios tested through model runs. The payment of invoices will be through the Moray Council (data will not be released until payment has been received).

TRICS

The Vehicle Trip Generation rates used in the Elgin Traffic Model have been derived using TRICS. TRICS is the national standard system of trip generation and analysis in the UK and Ireland, and is used as an integral and essential part of the Transport Assessment process. The system allows its users to establish potential levels of trip generation for a wide range of development and location scenarios and is widely used as part of the planning application process by both developer consultants and local authorities.

Table 1- Trip Generation Rates

Residential Trip Generation Rates	Vehicle Trips Per Dwelling		
	Arrivals	Departures	Total
AM Peak	0.140	0.390	0.530
PM Peak	0.350	0.190	0.540

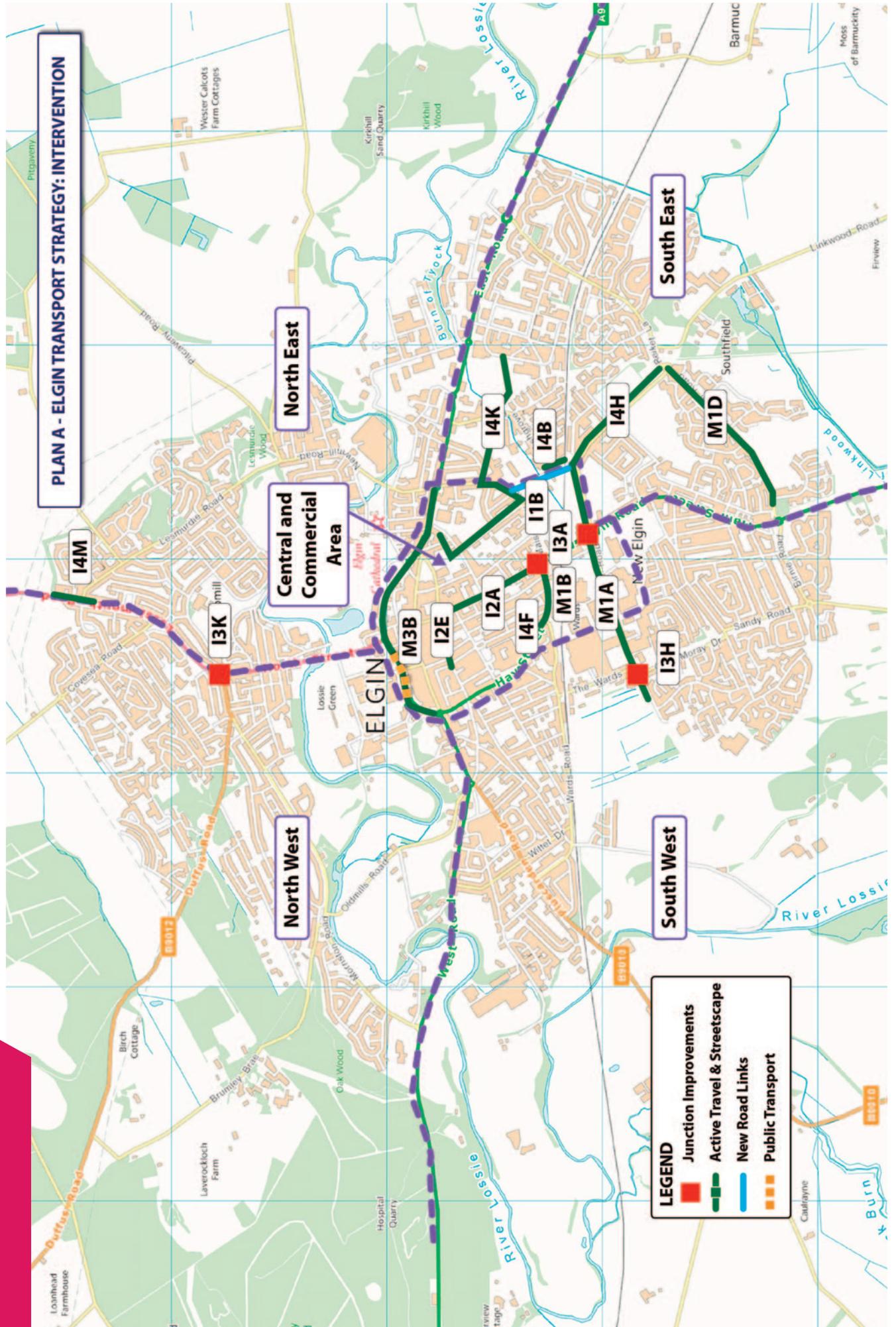


Table 2 – Elgin Transport Strategy Interventions

Indicative costs for each measure have been provided by our consultant Jacobs. They have been calculated by quantity surveyors based on available information and make an initial allowance for utility diversions and land costs.

Reference	Intervention	Cost
Central		
I1B	New north/south rail bridge: Ashgrove/Linkwood Road to Masondieu Road- two way arrangement with signals	£10,909,587
I2A	Moss Street – convert to one-way (northbound) & widen footways/cycle lanes	£708,752
I2E	South Street – pedestrianise between Commerce Street and Batchen Street	£1,090,386
I3A	New Elgin Road- improve performance/replace junctions North/South of railway	£2,845,909
I4B	New cycle/pedestrian north/south rail bridge: Ashgrove Road	£4,969,437
I4F	Station Road cycle lanes	£87,231
M1A	Edgar Road pedestrian crossing improvements	£70,875
M1B	Station Road/Maisondieu Road pedestrian crossing improvements	£245,337
M3B	Elgin Bus Station redesign/improve operation	£2,725,966
South-East		
I4H	Linkwood Road cycle lanes	£109,039
I4K	Pinefield to East End Primary School Active Travel Route	£231,282
M1D	Thornhill Road pedestrian crossing improvements	£245,337
North-West		
I3K	North Street/Morrison Road junction improvements	£27,259
I4M	A941/Lesmurdie Road: improvements to pedestrian/ cycle provision and crossing	£122,668
South-West		
I3H	Edgar Road/The Wards junction improvements	£327,116
Total		£24,716,181

Note: this list does not include interventions which would be undertaken either solely by the public sector or interventions attached to a specific development.

Full details of all of the interventions within the Elgin Transport Strategy can be found at: www.moray.gov.uk/downloads/file109528.pdf

Transportation Worked Example

Indicative Calculation for Developer Obligations to address Cumulative Impact of Development Traffic in Elgin

This is an indicative calculation prior to submission of a Transport Assessment, and will be revised once an agreed Transport Assessment has been provided by the developer.

Worked example is for R9 Hamilton Drive site which has an indicative capacity of 20 dwellings.

The methodology is based on the number of trips for a residential development as a proportion of the whole number of trips associated with unconsented residential development from the MLDP 2020, using the vehicle trip generation rates shown in Table 1 in Appendix 3. Table 3 below shows the current unconsented MLDP residential sites, their indicative capacity and the peak period vehicle trip generation.

Table 3

Site	Total dwellings	AM Peak		PM Peak	
		Arrivals	Departures	Arrivals	Departures
R2 Edgar Road	75	11	29	26	14
R3 Bilbohall South	105	15	41	37	20
R4 South West High School	107	15	42	37	20
R5 Bilbohall West	50	7	20	18	10
R6 Knockmasting wood	85	12	33	30	16
R7 The Firs	10	1	4	4	2
R8 Alba Place	6	1	2	2	1
R9 Hamilton Drive	20	3	8	7	4
R11 Findrassie/Myreside	1000	140	390	350	190
R12 Lossiemouth Rd North East	150	21	59	53	29
R13 Lesmurdie Fields	70	10	27	25	13
R14 South Lesmurdie	15	2	6	5	3
R16 Barmuckity	190	27	74	67	36
R21 Palmers Cross	20	3	8	7	4
R22 Spynie Hospital	50	7	20	18	10
Windfall Sites ¹	240	34	94	84	46
Total	2193	309	857	770	418

¹ Windfall sites - supplied by Strategic Planning & Development team

The R9 Hamilton Drive site is located in the north-west quadrant of Elgin, see Plan A. The indicative calculation would therefore be based on the Elgin Transport Strategy interventions within that Quadrant and the Central and Commercial Area. Table 4 indicates the relevant interventions with a '1'. A '0' indicates that the intervention would not be included in the indicative calculation. However should a subsequent TA identify a material impact at a given intervention where a '0' is shown then a developer obligation will be sought towards the mitigation of cumulative impact on the transportation network.

Table 4 Interventions to be included in indicative calculation

	Cost	R9 Hamilton Drive	Total vehicles from all residential developments
Cars - vehicles / Peak Periods		22	2346
Cars - vehicles / Peak Periods		0.94%	100%
Central and Commercial Area			
I1B New north/south rail bridge: Ashgrove/ Linkwood Road to Masondieu Road- two way arrangement with signals	£10,909,587	1	2346
I2A Moss Street convert to one-way (northbound) & widen footways/ cycle lanes	£708,752	1	2346
I2E South Street - pedestrianise between Commerce Street and Batchen Street	£1,090,386	1	2346
I3A New Elgin Road- improve performance/ replace junctions North/South of railway	£2,845,909	1	2346
I4B New cycle/pedestrian north/south rail bridge: Ashgrove Road	£4,969,437	1	2346
I4F Station Road cycle lanes	£87,231	1	2346
M1A Edgar Road pedestrian crossing improvements	£70,875	0	486
M1B Station Road / Maisondieu Road pedestrian crossing improvements	£245,337	1	2346
M3B Elgin Bus Station redesign/improve operation	£2,725,966	1	2346
South-East Quadrant			
I4H Linkwood Road Cycle Lanes	£109,039	0	204
I4K Pinefield to East End Primary School Active Travel Route	£231,282	0	0
M1D Thornhill Road pedestrian crossing improvements	£245,337	0	204
North-West Quadrant			
I3K North Street/Morrison Road junction improvements	£27,259	1	1400
I4M A941/Lesmurdie Road: improvements to pedestrian/cycle provision and crossing	£122,668	1	1400
South-West Quadrant			
I3H Edgar Road / The Wards junction improvements	£327,116	0	486
	£24,716,181		

Table 4 also shows the current estimated cost of each intervention, the total number of vehicle trips from all of the development sites and number of vehicle trips from Hamilton Drive, which at this time is the 0.94% of the total trips (across all development sites). Within the North-West quadrant the number of vehicle trips from Hamilton Drive is 1.57% (across the development sites which would pass through the relevant interventions, R9 Hamilton Drive, R11 Findrassie, R12 Lossiemouth Road North East, R13 Lesmurdie Fields, R14 South Lesmurdie and R22 Spynie Hospital).

Where there is a split between the public sector and developer obligations, e.g. a scheme addresses an existing constraint/background growth and future travel demand associated with development the cost is reduced to 50%. It should be noted that interventions attributable solely to the public sector or to a particular development have been omitted from the calculation.

The costs for each intervention are apportioned to each of the developments which are within the same area as the intervention, using the proportion of development peak period vehicle trips.

For interventions within the central and commercial area, the costs are apportioned across all development sites.

Table 5 shows the indicative Transportation obligations sought towards the interventions within the area (north-west) and the central and commercial area. The contribution rate per dwelling is also shown.

Table 5- R9 Hamilton Drive Draft Transportation Developer Obligations

R9 Hamilton Drive Summary Intervention	Developer Obligation
Central and Commercial Area (0.94%)	
I1B Ashgrove Road to Maisondieu Road new road link	£51,275
I2A Moss Street convert to one-way (northbound), widen footways, provide cycle lanes	£3,331
I2E South Street – pedestrianise between Commerce Street and Batchen Street	£5,125
I3A New Elgin Road/Edgar Road and Laichmoray junction improvements	£13,376
I4B Ashgrove Road cycle bridge	£23,356
I4F Station Road cycle lanes	£410
M1A Edgar Road pedestrian crossing improvements	£0
M1B Station Road / Maisondieu Road pedestrian crossing improvements	£1,153
M3B Bus station redesign / improve operation	£12,812
South-East Quadrant (0%)	
M1D Thornhill Road pedestrian crossing improvements	£0
I4H Linkwood Road Cycle Lanes	£0
I4K Pinefield to East End Primary School Active Travel Route	£0
North-West Quadrant (1.57%)	
I4M A941/Lesmurdie Road junction improve pedestrian and cycle provision	£963
I3K North Street/Morrison Road junction improvements	£214
South-West Quadrant (0%)	
I3H Edgar Road / The Wards junction improvements	£0
Total	£112,015
Rate per Dwelling	£5,600.75