

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 |

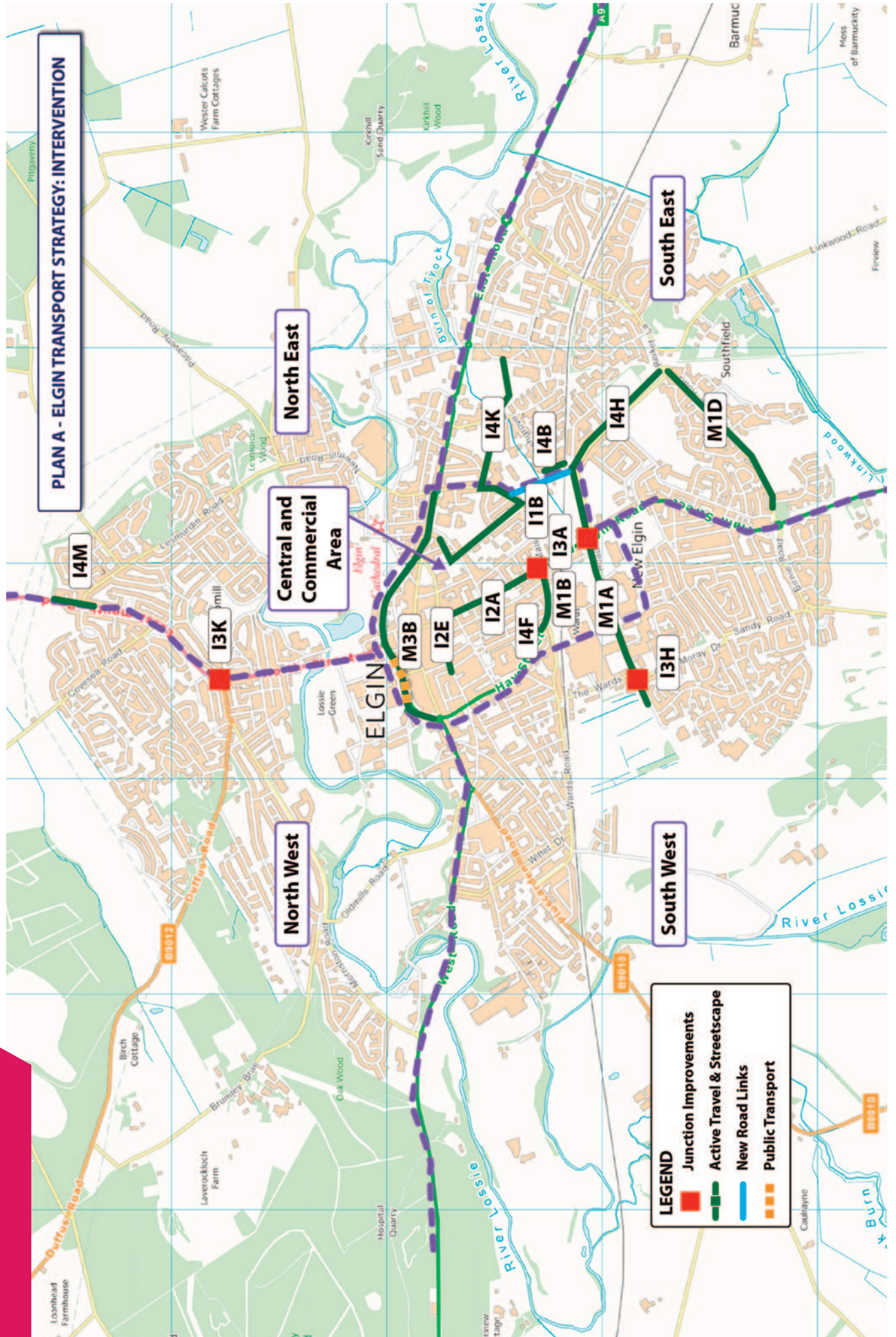


Table 2 – Elgin Transport Strategy Interventions

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 Masiondieu 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 / Masiondieu 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 |