EXECUTIVE SUMMARY

E.1 Background

E.1.1 The A96 between Inverness and Keith is part of the Inverness to Aberdeen transport corridor and is a key route linking the sub-regional economy. Concern has been growing at the performance of the route and which has led to the development of a number of policies aimed at reducing journey times and improving journey time reliability. Foremost among these is the construction between 2012 and 2022 of bypasses at Nairn, Elgin and Keith, three towns where the problems are viewed as the most acute.

E.1.2 This study is therefore an evaluation of the potential benefits resulting from journey time reductions and improvements to journey time reliability on both through and local traffic and the potential benefits to businesses and on communities that have been bypassed. The bypasses would be expected to produce business efficiencies in terms of improved access to customers, suppliers and on training opportunities. The appraisal also examines the benefits resulting from the opening up of land for development, the resultant employment impacts and the influence of new land use opportunities on traffic growth and transport patterns.

E.2 Key Issues of the A96

E.2.1 A major symptom of growing traffic flows on the A96 has been increasing congestion, on a road poorly designed with insufficient capacity. Average speeds drop precipitously on the A96 when passing through Nairn, Elgin and Keith, and longer journey times are causing poorer air quality, platooning and with few or no overtaking opportunities, frustration.

E.2.2 The A96, because it bisects Nairn, Elgin and Keith in two, is also causing severance effects, particularly on pedestrians attempting to reach their place of work, shops or other amenities. The bypasses offer, in principle, a solution to this by taking cars off the trunk route in the centre of the towns. It is also reasonable to assume that for the same reason the bypasses should assist in reducing the number of vehicle accidents in the towns as well providing a safer environment for all road users within the respective urban centres.

E.2.3 There is major proposed development for Nairn and Elgin, and more modest development for Keith. Commercial, retail and residential development would all be expected to generate additional traffic flows, which, in the absence of the bypasses, would add significantly to the existing levels of congestion, and contribute to existing traffic conflict.

E2.4 Traffic passing through all three towns has to negotiate a series of busy junctions, through traffic sharing road space with local journeys, and this is especially acute in Elgin. In addition, this traffic pattern constrains the performance of local public transport, and reduces the incentive for modal shift away from car use and to introduce faster express services to and through each of the towns.

E2.5 The problems of the A96 through the towns have a braking effect on the growth of the local economies, and they become less attractive to businesses wishing to set up in the area. Better road connections would encourage diversification of the economy by linking up with the main regional service centres, and facilitate access to the major regional air and sea ports.

E.3 Perceived Business and Social Impacts of the Bypasses

E3.1 The local businesses interviewed for the study use the A96 relatively frequently, with two-thirds or more using the A96 on a daily basis. The businesses report a number of findings, the most important of which are:

- Businesses use the A96 mostly to deliver goods and pick up supplies;
- The A96 is also heavily used by local commuters, who travel to and from work almost entirely by car;
- The main problem businesses report with using the A96 is traffic congestion and delays;

- Although the problems are not enough to force businesses to review their location, they may well impact on future plans for expansion;
- Businesses suggest that the main impact of the bypasses will be to offer substantial journey time savings, with 75% of businesses reporting a possible saving of between 6 and 30 minutes; and
- Businesses most strongly agreed that proposed bypasses would present opportunities in expanding sales in existing markets.

E3.2 With the significant reduction in congestion, the local communities living within Nairn, Elgin and Keith will be able to access facilities in the respective town centres more easily by foot and by bus. The easing of traffic should also encourage cycling for both work and leisure purposes.

E3.3 In addition reduced congestion on the A96 in the three towns might signal an opportunity to introduce an improved strategic bus service network serving the wider catchment areas along the Aberdeen to Inverness corridor, and to introduce circular routes in the vicinity of the respective town centres, thereby improving accessibility to these areas.

E.4 Transport Impacts of the Bypasses

E4.1 The results of applying diversion curve algorithms suggest the following traffic flows diverted to the bypasses for each respective town:

- Nairn 10,700 vehicles per day;
- Elgin 12,200 vehicles per day; and
- Keith 5,200 vehicles per day.

E4.2 These levels of diversion onto the bypasses give an estimated journey time savings for the three towns of:

- Nairn: 47,300 hours per year;
- Elgin: 163,200 hours per year;
- Keith: 35,100 hours per year; and
- Combined towns saving of 245,600 hours per year.

E4.3 Transforming these estimated journey time savings into annualised total (first year) monetised benefits in 2002 prices for the three towns, gives values calculated to be:

- Nairn: £5.2m per annum;
- Elgin £14.6m per annum
- Keith £1.7m per annum; and

E4.4 The bypasses therefore confer major journey time benefits, with a combined value for first year monetised benefits of £21.5 million in 2002 prices.

E4.5 It is generally accepted that severance is not a problem for pedestrians where the PV^2 value (used to measure severance) is below 1. However, average current values for the three towns range from 4.1 for Nairn, 17.7 for Elgin and 2.2 for Keith, indicating a high degree of pedestrian severance in the three towns, especially so for Elgin. With the bypasses in place, these values dropped significantly. The PV^2 value of 1 was met comfortably by nearly all the major pedestrian crossing points, with only the pedestrian crossing in Elgin accessing the bus station and adjacent shopping area just meeting this criterion.

E.5 Impacts of New Development

E5.1 As noted earlier in paragraph E2.3 there will be major new development in the three towns and this is expected to generate substantial new traffic. The anticipated total increase in traffic in the three towns including that from the predicted developments is as follows:

- Nairn: by 2012, traffic volumes on the A96 estimated to be transferred to the bypass will be 998 vehicles for each of the AM and PM peak hours both directions, and this number is expected to rise to 1,880 by 2025, well within the capacity of the bypass;
- Elgin: by 2012, traffic volumes on the A96 estimated to be transferred to the bypass will be 1,216 vehicles for each of the AM and PM peak hours both directions, and this number is expected to rise to 2,340 by 2025, at a loading of 73%, well within the capacity of the bypass; and
- Keith: by 2012, traffic volumes on the A96 estimated to be transferred to the bypass will be 403 vehicles for each of the AM and PM peak hours both directions, and this number is expected to rise to 489 by 2025, well within the capacity of the bypass.

E5.2 The construction of the bypasses will release additional land for development within the respective alignments over and above the development identified above. This releases resources in terms of developers' contributions, available to the local authority, for example, to offset any adverse environmental impact occurring during the construction of the bypasses. Discussions with developers suggest these could be of the order of £3,500 per residential unit and £30 per square metre of commercial development. This gives the following value of developer contributions as:

- Nairn: £13.1 million;
- Elgin: £21.9 million; and
- Keith: £4.0 million.

E5.3 In addition to these resources, there are significant additional benefits resulting from the additional employment and local GVA. The total direct employment impacts if all the three bypasses were built is estimated to be 8,345 FTEs (including construction employment), and total local GVA impacts in the order of £134.5 million per annum in 2007 prices. Breaking these down by town gives the following results:

- Nairn: net direct employment (FTEs): 1,725;
- Elgin: net direct employment (FTEs): 5,906; and
- Keith: net direct employment (FTEs): 715.

E5.4 In terms of GVA:

- Nairn: GVA = £9.4 million for construction and £16.4 for wider impacts (total GVA = £25.8m);
- Elgin: GVA = £15.9 million for construction and £83.0 for wider impacts (total GVA = £98.9m); and
- Keith: GVA = £2.4 million for construction and £7.4 for wider impacts (total GVA = £9.8m).

E.6 Concluding Remarks

E.6.1 The overall conclusion from this research is that there are likely to be significant economic and social benefits to the implementation of the three bypasses at Nairn, Elgin and Keith, which would be welcomed and supported by key stakeholders and businesses in the study area.