

## **EAST AYRSHIRE COUNCIL**

### **DEVELOPMENT SERVICES COMMITTEE – 24 OCTOBER 2000**

#### **ROAD TRAFFIC REDUCTION ACT & LOCAL TRANSPORT STRATEGY**

##### **Report By Director of Development Services**

### **1. PURPOSE OF REPORT**

**1.1** The purpose of the report is to seek the Committee's agreement for:-

(a) The report which has to be prepared under the terms of the Road Traffic Reduction Act, 1997; and

(b) A revised timetable for the completion of East Ayrshire's Full Local Transport Strategy.

### **2. BACKGROUND**

**2.1** The Council submitted its Interim Local Transport Strategy to the Scottish Executive in July, 1999 in accordance with the required timescale. Since then, the document has been used as a basis of extensive consultation. The final submission was originally due to be made by 31 October 2000.

**2.2** The Scottish Executive subsequently finalised its guidance on the preparation of the non-statutory Full Local Transport Strategies. Guidance on the preparation of the statutory Road Traffic Reduction Reports has also been produced which indicates that the statutory report may be subsumed in the Local Transport Strategy. The Scottish Executive has agreed to a longer timescale for the preparation of the Local Transport Strategy, but the Road Traffic Reduction Report must be submitted by 31 October 2000.

**2.3** A separate Road Traffic Reduction Act Report, Appendix A, has been prepared to enable the Council submit a report to the Scottish Executive in accordance with the statutory timescale.

### **3. ROAD TRAFFIC REDUCTION REPORT**

**3.1** The Road Traffic Reduction Act, 1997 requires local authorities to undertake a review of existing and forecast levels of traffic on local roads in their area and to prepare a report. The report should contain targets for reducing either existing levels of traffic on local roads or their rate of growth; or should state why the local authority considers it inappropriate to do so.

**3.2** East Ayrshire Council has set up a long term traffic monitoring programme using Automatic Traffic Counters (ATC) to establish the existing traffic pattern and growth trends. The current coverage comprises: -

- East Ayrshire Cordon;
- Kilmarnock Cordon;
- Cumnock/Auchinleck Cordon;
- Ayrshire Cordon; and
- a number of strategic routes; A77, A76, A71, A70, A713, and A735.

The counts undertaken on the A77 and A76 trunk roads are carried out by the Council on behalf of the Scottish Executive.

- 3.3** In preparing the Road Traffic Reduction Report, consideration has also been given to trip purpose information which is available from a number of strategic routes i.e. the A77, A76, A71 A735 and A713.
- 3.4** Because the A77 and A76 trunk roads clearly influence the traffic pattern and growth characteristics on the local roads which connect to them, information collected on the trunk roads has been included in East Ayrshire's report.
- 3.5** The existing traffic characteristics in East Ayrshire are set out in the Road Traffic Reduction Report. Comparisons with national growth trends are outlined which shows that historic traffic growth in East Ayrshire lies approximately mid-way between the government's high and low national traffic forecasts. Consideration has also been given to the various initiatives in the Local Transport Strategy for reducing car dependency and encouraging the use of sustainable transport modes.
- 3.6** As a result of the assessment, it is recommended that overall traffic reduction targets should not be set at this time because: -
- The National Traffic Forecasts, indicate that historic traffic growth in East Ayrshire is significantly lower than many other areas;
  - There are no significant congestion points in the local network outwith Kilmarnock (for which a number of strategies are being developed);
  - Road transport accounts for the movement of 92% of all goods to and from Ayrshire and it is particularly important for economic activity in the area, which has one of the highest levels of unemployment in the UK;
  - Road transport is essential for social inclusion and to meet personal mobility needs in rural areas and where public transport services are limited;
  - East Ayrshire does not have a transport modelling capability which would enable it to test the effect of policy options and forecast future traffic

#### **4. LOCAL TRANSPORT STRATEGY**

- 4.1** The findings of the public consultation have been taken into account in the drafting of implementation programmes and targets as required in the full local Transport Strategy.
- 4.2** It is proposed that the following revised timetable shall be adopted for the completion of the Local Transport Strategy: -

(a) Issues seminar for all Council members

November 2000

- |     |   |                  |
|-----|---|------------------|
| (b) | Consult Committee representatives, interest groups and those who have given a formal response to the Interim Local Transport Strategy | November 2000    |
| (c) | Draft Full Local Transport Strategy considered by Development Services Committee  | 19 December 2000 |
| (d) | Submission to Scottish Executive  | 31 December 2000 |

## **5. FINANCIAL IMPLICATIONS**

- 5.1** The cost of developing the Local Transport Strategy will be met from existing budgets.

## **6. LEGAL IMPLICATIONS**

- 6.1** The Council has a statutory obligation to prepare a report under the terms of the Road Traffic Reduction Act, 1997. This may be incorporated in the non statutory Local Transport Strategy.

## **7. RECOMMENDATIONS**

- 7.1** It is recommended that the Committee:-
- (a) Agrees the report which has to be prepared under the terms of the Road Traffic Reduction Act, 1997; and
  - (b) Agrees to the revised timetable for the completion of East Ayrshire's Full Local Transport Strategy.

**Stephen Chorley**  
**Director of Development Services**

KO  
 10 October 2000

### **LIST OF BACKGROUND PAPERS**

- (1) Interim Local Transport Strategy: Consultative Draft**
- (2) Development Services Committee, 6 June 2000 'Interim Local Transport Strategy – Public Consultation Report'**

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# Road Traffic Reduction Act Report, 2000

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October 2000

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## 1.0 INTRODUCTION

The *Road Traffic Reduction Act 1997* (RTRA) came into force in April 2000 and requires local authorities to undertake a review of existing and forecast levels of traffic on local roads in their area and to prepare a report.

The RTRA requires that authorities should consider setting targets for a reduction in traffic or a reduction in the rate of growth of traffic. Where an authority considers it inappropriate to set targets then they should explain their reasons for not doing so.

East Ayrshire does not have a transport modelling capability at present which would enable testing of transport strategy policy options and forecasting of future traffic levels. The three Ayrshire authorities are working with Strathclyde Passenger Transport to extend its Strategic Integrated Transport Model (SITM) to allow detailed analysis to be carried out in Ayrshire.

## 2.0 TRAFFIC TRENDS

East Ayrshire Council has set up a Long Term Monitoring programme. Data is collected from automatic traffic counters (ATC's) at sites on key routes. This network brings together a traffic counter network established by Strathclyde Regional Council with new counters installed in 1997 to meet the current need for information on traffic volumes and trends. Further sites will be established in East Ayrshire if and when the need arises. All diagrams showing the locations of the count sites and full details of the traffic flow data are contained within appendix 1. The current coverage comprises: -

- East Ayrshire Cordon
- Kilmarnock Cordon
- Cumnock/Auchinleck Cordon;
- Ayrshire Cordon; and
- Strategic Routes; A77, A71, A70, A76, A713 and A735.

The counts undertaken on the A77 and A76 trunk roads are carried out by the Council on behalf of the Scottish Executive.

Traffic trends have been analysed for these cordons and routes and compared with national trends from the UK National Road Traffic Growth Forecasts (NRTF). Historic national growth and future national growth is shown in appendix 2.

### 2.1 EAST AYRSHIRE CORDON

Traffic flows are counted on 12 main routes crossing the East Ayrshire boundary (figure 1, appendix 1). The average weekday traffic entering and leaving the Council's area in 2000 was 110,171 vehicles per day. The A77 at Raithburn, between the A719 and B764 junctions, and the A71 at Cauldham, west of Kilmarnock, (both 4-lane roads) carry 39,723 veh/day and 23,126 veh/day respectively which amounts to 57% of the total traffic. All other roads across the cordon carry less than 10,000 vehicles per day. The compound annual average growth recorded across the cordon between 1997 and 2000, was 2.42% per year.

A significant proportion of the growth occurred on the A77 at Raithburn where flows increased by 35% in four years. Growth on the A71 at Cauldham has also been high (4.37% per annum) since 1997 probably reflecting an increase in the number of trips to Glasgow from the Irvine area using the A77/M77. Even with the very high levels of growth on the A77 and A71, overall growth in road traffic to and from East Ayrshire was less than the higher National Road Traffic Growth Forecast (NRTF) forecast of 2.79% per annum.

Excluding the flows on the A77 & A76 trunk roads, growth on the local roads crossing the cordon has been 1.90% per annum since 1997. This is only just over the NRTF central growth forecast of 1.74% per annum for 1996-2001.

The seven-day average traffic flow entering and leaving East Ayrshire in 2000 was 103,381 vehicles per day on all roads including the trunk routes, reflecting an average compound growth of 2.09% per year between 1997 and 2000.

## 2.2 Kilmarnock Cordon

Traffic volumes are recorded on 10 roads which lead to Kilmarnock (figure 2). The average weekday traffic entering and leaving the town on these roads in 2000 was 88,419 vehicles per day. The compound annual average growth across the cordon between 1997 and 2000 was 2.03% per year.

The average growth in weekday peak hour flows is significantly lower than the all-day average (0.45% per year in the am peak and 1.91% per year in the PM peak). This is likely to be attributable to changes in travel patterns as a result of higher car ownership with more emphasis on off-peak social and recreational trips.

Traffic on Queens Drive accounted for almost a quarter of the movements to and from Kilmarnock. A significant proportion of the increased activity also occurred on Queens Drive, where flows have risen from an average of 16,242 in 1996 to 21,279 in 2000; an increase of 31% in four years. Highest growth has occurred on the B7038 Glasgow Road where traffic has increase from 8530 vehicles per weekday in 1997 to 10471 in 2000; a growth of 7.04% per annum. There has been extensive development on Queens Drive and Glasgow Road and both routes connect to the A77 trunk route. Excluding these two roads, weekday growth across the cordon was 0.10% per annum, lower than the NRTF low growth estimate of 0.65%.

## 2.3 Cumnock & Auchinleck Cordon

The Cumnock-Auchinleck cordon has been established on the main routes leading to the main towns at the heart of the Coalfield Social Inclusion Partnership area (figure 3). The area is largely rural, with dispersed settlements and communities.

The cordon comprises 4 sites, 2 on the A70 east and west, and 2 on the A76 north and south of Cumnock and Auchinleck. Traffic flows are highest on the A76 at Little Heateth, north of Auchinleck at 9901 vehicles per day. Weekday growth at this location (2.45% per annum) is greater than the other locations on the cordon. The weekday traffic growth across the cordon as a whole was 1.32% per annum, and the 7-day average was 0.80%, both lower than the NRTF central growth estimate (1.74%).

## 2.4 AYRSHIRE CORDON

The Ayrshire Cordon covers the main routes into Ayrshire as a whole (figure 4). As well as 5 routes in East Ayrshire (A77, A71, A70, A76 and A713) the Cordon includes the A78 and A737 in North Ayrshire, the A736 in Renfrewshire and the A714 and A77 in South Ayrshire. After Raithburn on the A77, the highest flow on the Cordon is on the A737 trunk road at Beith with a flow of 15,343 vehicles per day in 2000. With the exception of the A737 and A77 at Raithburn, traffic growth has been modest at most other points on the cordon. The A736 at Uplawmoor has seen a significant decline in flow. This is likely to be attributable to the improvements on the A737 with the opening of the Johnstone/Howwood bypass and the subsequent trunking of the route and the opening of the M77. Only 17% of traffic crossing the cordon is on local roads.

Across all routes on the cordon, weekday growth was 2.34% per annum between 1997 and 2000. However, excluding the A76, A77, A78 and A737 trunk routes traffic across the cordon on the local road system has fallen by 1.24% per annum since 1997.

## 2.5 A71 CORRIDOR

There are 4 ATC sites on the A71 (figure5). The highest weekday traffic volumes (23,126 vehicles per day) occur on the dual carriageway section at Cauldhame, west of Kilmarnock where growth has been 4.65% per annum. This is likely to be attributable to an increase in traffic from the Irvine area to Glasgow and the Scottish central belt via the A71/A77/M77 routes.

East of Kilmarnock, the weekday average traffic flow on the Galston bypass is 12,048 vehicles per day and 4,736 vehicles per day near the boundary with South Lanarkshire. The figures clearly demonstrate the significant level of local traffic generated by the Irvine Valley communities of Darvel, Newmilns, Galston and Hurlford, and the importance of the route for local as well as strategic movements. The growth in traffic at the boundary, east of Darvel was 0.71% per year between 1997 and 2000 compared with 0.90% per year at Galston bypass over the same period, indicating that locally generated movements are increasing more rapidly than longer distance traffic to and from the east. The growth of traffic on the A71 east of Kilmarnock at both the boundary and Galston was only slightly higher than the low national growth forecast for the period (0.65% per year).

## 2.6 A70 CORRIDOR

There are 4 ATC sites on the A70, 2 of which provide long term data (figure 6). Traffic volumes are much greater at Coalhall to the west of Cumnock (9415 vehicles per day) than at Muirkirk to the east of Cumnock (3550 vehicles per day). 5 day and 7 day growth across the 4 sites was 1.31% and 1.04% per annum respectively, less than NRTF medium growth forecast of 1.74%.

## 2.7 A713 CORRIDOR

There are 2 ATC sites on the A713: at Kirn Bridge south of Dalmellington and at Hollybush, near to the boundary with South Ayrshire. Flows at the latter (7275 vehicles per day) are much greater than the former (1096 vehicles per day). Growth rates have been 1.45% per annum at Hollybush and 0.58% at Kirn Bridge, less than NRTF medium growth (1.74% per annum) at both sites.

## 2.8 A735 CORRIDOR

There are ATC sites on the A735 at Lugton and at Kilmarnock Road in Kilmaurs with weekday traffic flows in 2000 of 1871 vehicles per day and 6892 vehicles per day respectively. Long term data is not available at Lugton. Traffic levels have increased by 0.08% per annum at Lugton and have declined by -0.62% per annum at Kilmaurs during the period between 1997 and 2000.

## 2.9 A76 CORRIDOR

A similar pattern emerges for the A76 trunk road (figure 7). Weekday traffic levels at Polshill, near to the boundary with Dumfries and Galloway, were 3,368 in 2000, and the compound annual growth between 1998 and 2000 was 0.39% per year. At the ATC sites to the north of Cumnock and Auchinleck, the flows and annual growth are, however, significantly higher. The ATC site at Little Heateth indicates a weekday average of 9,901 vehicles per day in 2000 with an annual average growth of 2.45%. The corresponding figures at Crosshands north of Mauchline are 11,014 vehicles per day and 3.26% compound annual growth per year.

The figures indicate that there are significant volumes of local traffic generated by the Cumnock and Doon Valley communities of Muirkirk, Cumnock, Auchinleck, Catrine and Mauchline which are using the A76 to gain access to Kilmarnock and the north. Growth in these locally generated movements has been significantly greater than the longer distance movement to and from the south.

## 2.10 A77 CORRIDOR

The A77 ATC sites are shown in figure 8. The average weekday traffic on the A77 trunk road at Raithburn was 39,723 vehicles per day over the most recent twelve month period (August 1999 to August 2000). The 7 day average flow was 36,608 vehicles per day over the same period. This level of activity accounts for 36% of the total traffic entering and leaving East Ayrshire and 47% of the flows to and from Ayrshire as a whole. Traffic flows on this major arterial route have increased by 4.8% per annum since 1990, demonstrating the strategic importance of this route for economic activity in Ayrshire. Flows have increased by 35% since 1996 when the M77 was extended to Malletsheugh.

Elsewhere on the A77 in East Ayrshire, the flow drops to 34520 vehicles per day on the Kilmarnock bypass north of the Bellfield Interchange.

## 2.11 TRAFFIC TRENDS SUMMARY

The above analysis shows clear trends as follows: -

### Ayrshire Cordon

- growth on local roads across the cordon was 1.24% per annum since 1997;

- only 17% of traffic crossing the cordon is on local roads.

#### **East Ayrshire Cordon**

- The most heavily trafficked route in East Ayrshire is the A77 trunk road with a traffic flow of 39,723 vehicles per day in 2000 north of Fenwick;
- Highest rates of growth on routes into and out of East Ayrshire occur on the A77 (3.6% per annum) and on the A71 west of Kilmarnock (4.37% per annum);
- Traffic growth on the local roads in the East Ayrshire cordon has been 1.90% per year since 1997 (compared with the NRTF central growth prediction of 1.74% per year).

#### **Kilmarnock Cordon**

- Highest volume in the Kilmarnock Cordon is on Queens Drive with a flow of 21,279 vehicles per day in 2000;
- Highest growths in Kilmarnock occur on Queens Drive and Glasgow Road with growth of 5.23% and 7.04% respectively;
- Weekday peak hour growth in the Kilmarnock Cordon is lower than all the day growth;
- The growth on the other routes leading to Kilmarnock has been only 0.1% per year.

#### **Cumnock & Auchinleck Cordon**

- The weekday growth of 1.32% is less than the NRTF medium forecast

#### **Strategic Routes**

- Growth in the local road corridors A70, A71, A713 and A735 are all less than the NRTF medium growth forecast, except the A71 at Cauldhame;

### **3.0 TRIP PURPOSE**

Trip purpose information has also been considered where available from recent origin-destination surveys carried out at key locations in the East Ayrshire strategic road network ie. A77 Kilmarnock Bypass; A76 Cessnock Water; A71 Newmilns; A735 Kilmaurs; A713 Patna.

This shows that overall 30% of trips are for business, 33% are for leisure/social trips and 36% are for commuting. However, during the off-peak periods between 9am and 4pm, business trips predominate accounting for 39% of the traffic stream. The relatively high proportion of leisure/social non-work trips clearly demonstrates the importance of road transport for personal mobility needs in the semi rural area.

On the A77, business trips account for 45% of all movements, amply demonstrating the importance of this route to East Ayrshire and Ayrshire as a whole. The strategic importance of the A77 is also demonstrated by the fact that 59% of all traffic on the Kilmarnock bypass is through trips, having neither an origin nor a destination within East Ayrshire.

On the A76 at Cessnock Water, 43% of all off-peak trips on the A76 are business trips. Commuting trips on the A76 represent a smaller proportion of all journeys than on the A77, but home based non-work trips represent 33% of all trips in the off-peak period, demonstrating the importance of the road for social and recreational purposes.

On the A71 at Newmilns, the A735 at Kilmaurs, and the A713 at Patna, home based non-work trips represent a higher proportion of daily trips than either commuting or business trips demonstrating the importance of the car for personal mobility in these corridors.

## **4.0 EMPLOYMENT, POPULATION & CAR OWNERSHIP**

### **4.1 EMPLOYMENT**

Until the 1960's East Ayrshire was a relatively prosperous area. Its prosperity was based on its rich agriculture surroundings, its wealth of high quality coal reserves and its industrial base ranging from food processing and whisky, through major engineering enterprises to lace, carpets and shoes. Kilmarnock was the major commercial centre and focus of communications within Ayrshire.

The area still has a substantial manufacturing sector and agricultural and coal extraction remain major industries. But international competition and technological change have reduced the size of the traditional industrial base and transformed the coal extraction industry from deep mining to opencast.

The legacy of this industrial and commercial decline is an unemployment level which is amongst the highest in the UK.

### **4.2 POPULATION**

Between 1971 and 1981 the population of East Ayrshire fell by 2.7% from 130,000 to 126,500, an annual rate of decline of 0.3%. Between 1981 and 1991, the total population in the area fell by 5%.

The population decline is expected to continue in East Ayrshire. The forecast population trends to 2026 for East Ayrshire, Scotland and Great Britain are shown in appendix 3. This indicates that the population in East Ayrshire is expected to decrease by almost 10% over the coming years compared with a fall of almost 3% across Scotland and an increase of 4% throughout the UK.

### **4.3 CAR OWNERSHIP**

Over the 25 year period, 1971-1996, car ownership levels in East Ayrshire doubled from 166 to 326 cars per 1000 population. The 1996 value compared with 340 for Scotland and 403 for the UK as a whole. By 2026, the East Ayrshire car ownership level is expected to increase by a further 43% to 466 cars per 1000 population (appendix 3). The growth in car ownership in East Ayrshire is expected to be slightly lower than for Scotland as a whole but greater than for the UK as a whole. Nonetheless, in 2026, car ownership is expected to be 7% less than the average for Scotland and 15% less than the UK as a whole.

### **4.4** The higher levels of unemployment experienced in East Ayrshire in conjunction with depopulation and lower levels of car ownership, compared to the national averages, are likely to continue to restrict the growth in locally generated traffic for the foreseeable future.

## 5.0 LOCAL TRANSPORT STRATEGY

Traffic growth in East Ayrshire is generally relatively low. In Kilmarnock and in the corridors where there are higher levels of growth ie A77, A71 and A76, proposals are put forward in the Local Transport Strategy to promote public transport and reduce car dependency: -

### Kilmarnock

- Improvement to the bus station
- Parking controls
- Bus priority measures
- Walking and Cycling proposals
- Improved access and security for bus and rail users
- Service improvements to link the main employment & retail areas.

### A76

- Improved rail frequency on the Kilmarnock-Dumfries line;
- Mauchline station reopening;
- Improved park & ride facilities at bus and rail interchanges;
- Enhanced personal security and information for public transport;

### A77

- Construction of M77
- Upgrading of the Kilmarnock-Barrhead railway line to provide 30 minute service to and from Kilmarnock throughout the day.

### A71

- Quality bus corridor from Irvine Valley to Kilmarnock.

## 6.0 ROAD TRAFFIC REDUCTION TARGETS

Individual targets have been identified for certain aspects of the council's Local Transport Strategy, however, overall traffic reduction targets are not proposed at this time because: -

- East Ayrshire does not have a transportation modelling capability at the present time to assess the effectiveness of all measures contained in the strategy for reducing car dependency and encouraging the use of sustainable modes;
- There are no significant congestion points in the local road network outwith Kilmarnock (for which a number of strategies are being developed);
- Passenger rail services frequencies in East Ayrshire are low limiting the options for alternative modes;
- Road transport accounts for the movement of 92% of all goods to and from Ayrshire and it is particularly important for economic activity in the area as a whole where unemployment levels are amongst the highest in the UK;
- Road transport is essential to meet personal mobility needs in the rural areas;
- High levels of unemployment, depopulation, and low car ownership are likely to limit future traffic growth in East Ayrshire.

The three Ayrshire authorities have agreed in principle for the need to develop an Ayrshire Transport Model which will provide the capability to forecast and assess future traffic levels and to test proposed transportation policies. The three Ayrshire councils are working with SPT to extend its SITM model into Ayrshire and other parts of Strathclyde that it currently does not cover. This is likely to be medium term project.

## **7.0 CONCLUSIONS**

East Ayrshire has established an extensive network of automatic traffic counter sites in order to monitor traffic flows and growth rates across the Council area. This information, together with origin-destination data collected across the main routes in East Ayrshire, has been used to examine the existing traffic pattern in some detail.

It is proposed to continue monitoring traffic trends as a basis for future planning, to assess the effectiveness of various measures which are identified in the Local Transport Strategy, and for use in future Road Traffic Reduction Reports.

At the present time, it is considered that traffic reduction targets cannot be justified. However, the Council will work with North and South Ayrshire under the auspices of the Ayrshire Transport Group to assist SPT to develop a strategic modelling capability which will allow traffic forecasts to be prepared for future Road Traffic Reduction Reports.

**AGENDA**