

**REPORT TO:** PLANNING AND TRANSPORTATION COMMITTEE  
22 JANUARY 2001

**REPORT ON:** BALLINARD ROAD TRAFFIC STUDY

**REPORT BY:** DIRECTOR OF PLANNING AND TRANSPORTATION

**REPORT NO:** 19-2001

## **1 PURPOSE OF REPORT**

1.1 The purpose of the report is to advise Committee of the results of the traffic study carried out to determine the volume and composition of traffic in Ballinard Road.

## **2 RECOMMENDATIONS**

2.1 It is recommended that Committee note the conclusions of the traffic study and that no action is advised.

## **3 FINANCIAL IMPLICATIONS**

3.1 There are no direct financial implications as a result of this report.

## **4 LOCAL AGENDA 21 IMPLICATIONS**

4.1 High volumes of traffic travelling on inappropriate local roads can cause detriment to the local environment in terms of pollution and safety. The study was undertaken to determine whether traffic levels were appropriate for the type of road.

## **5 EQUAL OPPORTUNITIES IMPLICATIONS**

5.1 A local road network should serve the travel needs of all local residents whether travelling by car, walking or cycling. The study addresses whether traffic levels act as a deterrent to local travel patterns.

## **6 BACKGROUND**

6.1 The Planning and Transportation Committee at its meeting on 25 September 2000 remitted the Director of Planning and Transportation to undertake a study of traffic movements in Ballinard Road and the surrounding area. This was in response to concern expressed by residents to the local elected member that A92 traffic was avoiding Claypotts junction at peak times and using Ballinard Road as part of an alternative route, thereby adding significantly to traffic volumes on Ballinard Road.

### **6.2 Study Objectives**

6.2.1 The study had three objectives:

- To determine the volume of traffic using Ballinard Road.
- To determine the proportion of traffic on Ballinard Road in the morning and evening peak periods that uses Ballinard Road as an alternative route to the A92.
- To determine the percentage of traffic entering/exiting Dundee from/to the east that uses the alternative Ballinard Route during the peak periods.

### 6.3 Data Collection

6.3.1 In order to address these objectives a large amount of traffic data was collected involving 190 hours in staff time. There were three elements to the data collection:

- Temporary automatic traffic counters on Ballinard Road and the surrounding local road network collecting data for approximately one week.
- Permanent automatic traffic counters on the A92 Arbroath Road and A930 Broughty Ferry Road.
- Registration surveys at junctions on the alternative Ballinard Road route undertaken during the morning and evening peak periods on Wednesday 29 November 2000.

### 6.4 Results

6.4.1 Appendix 1 gives details of the traffic movements recorded on and around Ballinard Road and on the surrounding strategic network, for morning and evening peak periods and for a full 24 hour weekday.

6.4.2 From information given in the diagrams in Appendix 1, the three main study objectives can be answered:

- **To determine the volume of traffic using Ballinard Road.**

The temporary automatic counters on Ballinard Road gives the following traffic information:

Time Period Direction	AM Peak (08:00 – 09:00)	PM Peak (17:00 – 18:00)	24 Hour Daily Flow
Westbound	352	70	1,513
Eastbound	76	315	1,709
Total	428	385	3,222

- **To determine the proportion of traffic on Balinard road in the morning and evening peak periods that uses Balinard Road as an alternative route to the A92.**

Registration number plates were recorded during the morning and evening peak periods in order to match the number plates of vehicles leaving/entering the A92 at East Balgillo Road with those on the alternative Ballinard Road route. In view of the tidal nature of the peak flows (and in order to keep the survey staff numbers and data analysis manageable) number plates were recorded for vehicles heading westwards towards Dundee in the morning peak and eastwards away from Dundee in the evening peak period.

In the morning period it can be seen that of the 352 vehicles travelling westwards towards Dundee on Ballinard Road, *71 have come from the A92, ie 20% of traffic on Ballinard Road in the morning peak uses it as an alternative to the A92.*

In the evening period it can be seen that of the 315 vehicles travelling eastwards away from Dundee on Ballinard Road, *16 are going to the A92, ie 5% of traffic on Ballinard Road in the evening peak uses it as an alternative to the A92.*

- **To determine the percentage of traffic entering/exiting Dundee from/to the east that uses the alternative Ballinard Route during the peak periods.**

Two screen-lines were set up to determine the volume of traffic entering/leaving Dundee from/to the east, utilising a combination of permanent and temporary automatic count sites: One screen-line to the East of Broughty Ferry and one to the West of Broughty Ferry. The site locations are as follows:

Screen-line 1 – East of Broughty Ferry  
A92 West of Grange Road  
A930 Dalhousie Road at Kerrington Crescent

Screen-line 2 – West of Broughty Ferry  
Arbroath Road at Monymusk  
Craigie Drive at Southampton Road  
Dundee Road – East of Stannergate Roundabout

In the morning peak it can be seen that 1,412 vehicles cross Screen-line 1 and 3,597 vehicles cross Screen-line 2 travelling towards Dundee. *71 of these vehicles use Ballinard Road as an alternative route. ie between 2-5% of traffic entering Dundee from the east uses the alternative Ballinard Route during the morning peak.*

In the evening peak it can be seen that 1,825 vehicles cross Screen-line 1 and 3,532 vehicles cross Screen-line 2 travelling away from Dundee. *16 of these vehicles use Ballinard Road as an alternative route. ie between 0.5-0.9% of traffic exiting Dundee to the east uses the alternative Ballinard Route during the morning peak.*

- 6.4.3 Whilst this report considers the screen-lines in specific to Ballinard Road, it should be noted that this study has identified the east/west activity over a 24 hour weekday is now 57,500 vehicle movements to the West of Broughty Ferry. To the East of Broughty Ferry this equates to 30,000 vehicle movements from outwith the Dundee boundary, with Broughty Ferry thus generating nearly 28,000 vehicle movements.**

**6.5 Conclusions**

- 6.5.1** 428 vehicles in the morning peak, 385 vehicles in the evening peak and a daily total of 3,222 vehicles travel on Ballinard Road. This level of traffic flow is appropriate for a road of this type.
- 6.5.2** In the morning peak period 20% of the 352 vehicles travelling westwards towards Dundee on Ballinard Road have come from the A92. In the evening peak 5% of the 315 vehicles travelling eastwards away from Dundee on Ballinard Road are going to the A92. Therefore during peak hours the vast majority of traffic is local to the Balgillo areas (80% am peak, 95% pm peak). It can be concluded that this level of non-local traffic does not act as a deterrent to local travel patterns and that Claypotts Junction, which will benefit from a revised layout, is not causing vehicles to divert from principal routes.
- 6.5.3** In the morning peak between 2-5% of the total traffic travelling from the east towards Dundee travels on Ballinard Road. In the evening peak between 0.5-0.9% of the total traffic leaving Dundee to the east travels on Ballinard Road. It can be concluded that the traffic travelling on Ballinard Road is a small percentage of the total traffic entering/exiting Dundee from/to the east and gives no cause for concern.
- 6.5.4** **It should also be noted that in the morning peak with 1,412 vehicles crossing screen-line 1 and 3,597 crossing screen-line 2 travelling towards Dundee, Broughty Ferry itself generates 2,185 vehicle trips. It is these trips that make up the majority of vehicles on Ballinard Road and not vehicles leaving the A92. Similarly in the evening peak period Broughty Ferry attracts 1,707 vehicle trips.**

**6.6 Recommendation**

- 6.6.1** Current travel patterns on Ballinard Road are appropriate and it is recommended that no action is necessary.

**7 CONSULTATIONS**

- 7.1 The Chief Executive, Director of Finance, Director of Support Services, Director of Corporate Planning, Director of Personnel and Management Services, Director of Education, Director of Economic Development, Director of Environmental and Consumer Protection, Director of Neighbourhood Resources and Development, Director of Public Relations, Legal Manager and the Chief Constable, have been consulted and are in agreement with the contents of this report.

**8 BACKGROUND PAPERS**

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15 December 2000

**IFS/EN**

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