# DUDDINGSTON VILLAGE TRAFFIC ANALYSIS OCTOBER & NOVEMBER 2008

#### **Purpose**

The paper reports on two sets of traffic counts in Duddingston Village: peak morning and evening flows, and mid morning and peak evening flows to inform the action needed to be taken to reduce volumes of traffic using Holyrood Park and passing through Duddingston Village

#### **Traffic counts**

Traffic counts were undertaken as follows:

- 1. Thursday 13 November between 0700 and 0900 and between 1600 and 1800: all vehicles entering and leaving the Village differentiating:- cars from commercial vehicles; entering or leaving Old Church or The Causeway; direction of travel towards Duddingston crossroads on the Milton Road and towards Craigmillar crossroads on Niddrie Mains Road. The counts were done continuously and logged in 15 minute periods.
- 2. Wednesday 8 October between 1040 and 1140 between 1700 and 1800 in Old Church Lane logging all vehicles in each direction and distinguishing between cars and commercial vehicles.

## Key statistics morning and evening rush hours 13/11/08

- 1. The evening volume at 1,543 vehicles in 2 hours is greater than morning at 1,491 vehicles in 2 hours.
- 2. Most vehicles use Old Church Lane in the morning: 1,361 or 91%, and in the evening 1,259 or 82%.
- 3. The proportion of vehicles using The Causeway is greater in the evening: 18% of total traffic (284 vehicles in 2 hours), compared with the morning 9% (130 vehicles in 2 hours).
- 4. The number of vehicles using The Causeway in the evening is more than twice the volume in the morning.
- 5. Most of the morning traffic is entering the Village from the east, i.e. from Duddingston Road West: 1,234 vehicles, 83% of the total volume.
- 6. The balance between the inward and the outward traffic in the evening is quite different: 973 vehicles are travelling eastwards from Holyrood Park to Duddingston Road West, 63% of total traffic volume, and 568 vehicles are travelling westwards, i.e. entering the Village from Duddingston Road West to Holyrood Park, 37% of the total traffic volume.
- 7. At the peak 15 minute morning period (0745 to 0800) 16 vehicles per minute or 1 every 3.65 seconds passes through the Village, of which 15.3 travel along Old Church Lane (1 every 3.92 seconds).
- 8. At the peak evening 15 minute period (1715 to 1730) 15 vehicles per minute pass through the Village, of which 11.5 per minute pass through Old Church Lane (1 vehicle every 5.2 seconds).
- 9. Cars are the predominant vehicle type: 88% in the morning and 80% in the evening.
- 10. Commercial vehicles total 177 in the morning and 313 in the evening.
- 11. Commercial vehicles are largely 5 to 10 cwt vans and taxis.
- 12. Edinburgh City Council vehicles use Old Church Lane to gain access towards the City, especially in the morning.

- 13. The majority of vehicles entering the Village from Duddingston Road West in the morning are from the direction of Milton Road 872 vehicles, 71% of the total. The remainder enter the Village from the direction of Craigmillar 362 vehicles, 29% of the total.
- 14. In the morning rush hours 965 vehicles (65% of the total traffic) turn into or out of the Village **across** the flow of traffic on Duddingston Road West: 872 turning into the Village travelling from Milton Road along Duddingston Road West, and 93 turning out of the Village turning right onto Duddingston Road West to travel towards Craigmillar.
- 15. The majority of the vehicles leaving the Village in an easterly direction in the morning go towards Milton Road: 164 vehicles, 64% of the total leaving, with the remaining 93 vehicles, 29% of the total, travelling towards Craigmillar.
- 16. In the evening rush hours 624 vehicles (40%) turn into or out of the Village **across** the flow of traffic in Duddingston Road West: 421 vehicles turning into the Village after travelling along Duddingston Road West from the Milton Road direction, and 203 vehicles turning out of the Village onto Duddingston Road West towards Craigmillar.
- 17. The majority of the vehicles leaving the Village in an easterly direction in the morning use Old Church Lane: 137, 54%, compared with The Causeway: 120, 46% (this includes The Causeway residents making journeys).
- 18. The majority of the vehicles leaving the Village in the evening to Duddingston Road West use Old Church Lane: 712 vehicles (73% of the total), compared to 262 vehicles (27%) using The Causeway.

## **Key statistics mid morning 08/10/08**

- 1. Total volume 297 vehicles an hour, i.e. 5 vehicles per minute, 1 every 20 seconds.
- 2. 163, 55% of total vehicles, travelling westwards into Holyrood Park and 134, 45%, travelling eastwards out of Holyrood Park.
- 3. Commercial vehicles 59, 20% of the total traffic, 46% towards the Park and 54% towards Duddingston Road West.
- 4. Traffic logged at a standstill 4 times in an hour.

## Key statistics afternoon 08/10/08

- 1. Total volume 690 vehicles in an hour, i.e. 11 vehicles per minute, 1 vehicle every 5 seconds.
- 2. 301, 44% of total vehicles, travelling westwards into Holyrood Park and 389, 56%, travelling eastwards out of Holyrood Park.
- 3. Commercial vehicles 53, 8% of the total traffic, of which 27 vehicles, 51%, towards the Park and 26 vehicles, 49%, towards Duddingston Road West.

#### **Key points from the statistics**

- 1. There is a very high volume of traffic passing through the Village at morning and evening rush hour.
- 2. Most of the morning traffic is travelling towards the Park.
- 3. The evening traffic pattern is much more evenly distributed between travelling towards and away from the Park.
- 4. The volume of traffic in The Causeway is very much higher is the evening rush hour than in the morning rush hour.

- 5. There is a high level of commercial vehicles using the Park, especially in the morning rush hour, despite the prohibition on commercial vehicles entering the Park.
- 6. Congestion is caused in the Village by vehicles turning right out of Old Church Lane onto Duddingston Road West.
- 7. Congestion is caused in Duddingston Road West, both morning and evening, by vehicles turning right into the Village.
- 8. Vehicles turning into Old Church Lane from the Craigmillar direction on Duddingston Road West create a potential hazard because of the narrowness of the road.

None of the above takes account of the very different usage of the roads at the weekend, and in particular takes no account of festival events, weddings, funerals etc at the Kirk.

Roger Crofts Duddingston Village resident November 2008