NEW TOWN TRAFFIC VOLUMES RESULTING FROM TRAM WORKS

During the period when York Place was closed to traffic to facilitate the tram construction works (from July 2012 to September 2013) traffic was actively diverted into the Abercromby Place/Albany Street corridor in both directions. This was brought about by advance diversion signage and changes to the traffic signal junctions at Queen Street Gardens (East and West) with Queen Street and Abercromby Place and at Albany Street/Broughton Street. The CEC Tram Team arranged for a series of traffic counters to the sited in the area to monitor both traffic volume and speed.

In the initial stages of these works all east/west traffic which would have used Queen Street/York Place was diverted into the New Town and as a result, the area experienced traffic volumes peaking at more than 1200 vehicles per hour (two-way) during August 2012.

As routes via Princes Street became available in December 2012, the signage was changed on Queen Street and Leith Street to advise drivers to follow an east/west route via Princes Street; and the temporary traffic signal junction Albany Street/York Place was changed back to a side road priority junction. This had the effect of reducing the through traffic flows through the New Town by nearly 50% (measured in January 2013 – refer to the chart below):
Speed measurements through this area confirmed that traffic was generally flowing at between 22-29 mph.

When York Place opened to traffic on 6 September 2013, and the alterations to the traffic signals leading into and out of the New Town were completed, three weeks later, observations of the traffic demand using this area would suggest that again, a step change reduction in traffic volumes has taken place. It has been unfortunate during this period that the radar detectors place in the area started to malfunction, and as a result; no robust traffic data has been available from them. On 4 November 2013, arrangements were made to have a replacement measuring device placed on Abercrombie Place. The graph below indicates the most recent set of data drawn from the traffic counter between 5/11/13 and 13/11/13, compared to the previous datasets:

A local resident has undertaken spot counts on 5th and 6th November, these indicating two-way volumes of up to 500 vehicles during the afternoon peak hour. This data is generally of the order recorded by the automatic device, though the dates collected differ.

The broad conclusions drawn from this comparison show that from a peak demand in August 2013 when York Place was closed to traffic; the reduction on flow on Abercromby Place is up to a reduction of more than 900 vehicles per hour (in the morning peak).
A more detailed comparison of east and westbound flow and speed from the November 2013 dataset is presented below:

This graph above indicates that at no stage has traffic speed in excess of 30mph been recorded, with speed generally travelling around the 25mph mark, and typical of City Centre operating.

A contextual point to note is that the absolute capacity of a single carriageway city centre road under free flow conditions would be of the order 1,500 veh per hour per direction. In terms of this then, Abercromby Place is presently operating at less than 20% of the available road capacity.

An interested group of residents have contacted the Council raising concerns that the current volumes of traffic through the area do not reflect the situation prior to the tram diversions, and that a residual demand has remained in the area despite York Place opening. This may well be the case, as drivers tend to become accustomed to certain routes over time and may choose to prefer one route over another for their particular trip. Without a data from the situation as it was before York Place was closed, it is not possible to fully evidence this position however.
Concerns have also been raised that the emerging City ‘Vision’ proposals for George Street could also result in a detrimental traffic impact on the New Town. Proposals to introduce bollards into the area to prevent though traffic in the area have also been mooted.

It is important to note that these streets are part of the City’s road network and are available for all to use. Whilst signage changes and adjustments to traffic signal timings can make it easier to reduce the number of through traffic, drivers will ultimately make their own route choices, and this is part of City life – there are consequences beyond the immediate local area to consider, if more preventative measures are considered. Examples of this would be emergency services access and road network capacity availability in the event of road closure incidents eg on York Place, London Street or Great King Street; access to local business in the area as these streets are not solely residential in nature.

It is proposed that a number of steps be taken to more actively engage with the local community as follows:

1) Review and circulate the new traffic flow and speed data when this is available. This has now been done.

2) A CEC Transport representative to meet with the NT&BCC at their next meeting in early December.

3) Include Abercromby Place and Albany Streets as part of the wider review of the City Centre; this may include the formal introduction of 20mph zones and associated traffic calming for example.

Alasdair Sim 14/11/13