

## ABERDEEN CITY COUNCIL

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COMMITTEE: Enterprise, Planning and Infrastructure Committee

DATE: 27 October 2009

CORPORATE DIRECTOR: Gordon McIntosh

TITLE OF REPORT: Wellington Road / Souterhead Road Roundabout –  
Introduction of Traffic Signals on Langdykes Road

REPORT NUMBER: EPI/09/063

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### 1. PURPOSE OF REPORT

The purpose of this report is to provide elected Members with the outcomes of testing on a proposal to introduce traffic signals to the Langdykes Road approach arm to the Wellington Road/Souterhead Road roundabout and to seek approval for implementing the proposed scheme.

### 2. RECOMMENDATION(S)

It is recommended that the Committee:

- a) note the work carried out to date and outlined in the full report to identify an improvement at the Wellington Road / Souterhead Road roundabout, and
- b) approve the scheme to introduce part time AM traffic signals at the Langdykes Road leg of the Wellington Road / Souterhead Road roundabout, and
- c) instruct appropriate officers to implement the scheme subject to successful tender procedures.

### 3. FINANCIAL IMPLICATIONS

The project mentioned here would be fully funded through the NESTRANS Capital budget for 2009/10.

#### 4. SERVICE & COMMUNITY IMPACT

The contents of this report link to the Community Plan vision of creating a 'sustainable City with an integrated transport system that is accessible to all'.

All of the projects and strategies referred to in this report will contribute to delivery of the transport aims of Vibrant, Dynamic and Forward Looking – **'Improve Aberdeen's transport infrastructure ..... addressing other pinch points .... Work to improve public transport .... encourage cycling and walking'**.

The projects identified in this report will also assist in the delivery of actions identified in the Single Outcome Agreement, in particular the delivery of both Local and Regional Transport Strategies which will contribute directly and indirectly to 14 out of the 15 National Outcomes described in Aberdeen City Council's 2009/10 SOA.

#### 5. OTHER IMPLICATIONS

No other implications.

## 6. REPORT

The expansion of Altens Industrial Estate and the increase in housing within Cove over a number of years has increased queuing at the Wellington Road/Souterhead Road roundabout. Future development will continue to impact on this junction with a predicted continuing increase in queuing and delays.

The Access from the South study completed in 2008 identified possible options in the medium term at this junction with the ultimate replacement of the roundabout with a full signal junction in the coming years

Subsequent to the Access from the South study some further work was recently carried out to identify whether signalling any of the remaining arms of the junction would lead to overall benefits at the junction in terms of reductions in queues and delays. A site visit was carried out along with an updated survey at the location to establish an accurate base model of the junction. The A956 Wellington Road is a major strategic route and the main access road for traffic from the south to Aberdeen City centre and the Harbour. Observations and examination of the base model indicated that in the AM peak significant queuing occurs on A956 Wellington Road for northbound traffic due to the cutting movement caused by traffic routing to the industrial estate and routing northbound from Langdykes Road and Souterhead Road. By 07:45 a significant queue of around 1km was observed on the A956 Wellington Road northbound with queuing also developing during this period on Langdykes Road. The queue reduces from about 08:30 and generally clears by around 09:00.

It was considered that the optimum proposal would be to introduce traffic signals on the Langdykes Road arm of the junction as a means of allowing a greater flow of traffic to access the roundabout from Wellington Road northbound. This would give a better balance to flows entering the roundabout and would allow the junction to perform at a more optimum level.

Appropriate models were developed to analyse the junction and test options to add traffic signal control at the Langdykes Road entry arm. Tests were carried out for a variety of signal timings and the conclusion is that some benefits can be achieved if this proposal was implemented. The model shows that the queue length on the A956 Wellington Road northbound would reduce in the AM peak period when the signals were introduced and that this would not have a significant impact to traffic on Langdykes Road. The junction although still operating above capacity during this period would allow for a better balance of flow movements on the roundabout.

An outline cost estimate is that the scheme would cost in the region of £50,000 to £70,000.

Another possible positive impact of this proposal concerns rat-running traffic that uses Cove to avoid the queue on Wellington Road. If this northbound queue on Wellington Road is significantly reduced then there is a potential for this traffic to remain on the A90 and Wellington Road rather than diverting through Cove. This

could reduce the amount of traffic accessing the roundabout via Langdykes Road. Another possible positive impact could be improvements to the flow of traffic on routes within the Air Quality Management Areas (AQMA).

The busy arms in the PM peak period are Wellington Road southbound and Souterhead Road. These arms are already signalised and no significant queuing is experienced on the other arms during this period. It is therefore not considered necessary to operate the proposed traffic signals on Langdykes Road during the PM peak.

In conclusion it is considered that the introduction of signals on Langdykes Road on the approach to the Wellington Road/Souterhead Road roundabout would be beneficial to the overall operation of the junction in the AM peak period as well as reducing rat-running traffic through Cove and having a positive impact on Air Quality. Approval is therefore being sought to implement this scheme.

### **Recommendations**

It is recommended that the Committee:

- a) note the work carried out to date and outlined in the full report to identify an improvement at the Wellington Road / Souterhead Road roundabout, and
- b) approve the scheme to introduce part time AM traffic signals at the Langdykes Road leg of the Wellington Road/Souterhead Road roundabout, and
- c) instruct appropriate officers to implement the scheme subject to successful tender procedures,.

## 7. REPORT AUTHORS DETAILS

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## 8. BACKGROUND PAPERS

'Access from the South' Study Report – June 2008