

***Bellshill Town Centre Traffic Management
Study***

Option Testing Results

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24 October 2013

Aim of the Presentation

To explain:

- The modelling exercise using S-Paramics microsimulation software
- The options
- The operation of each option
- Draw comparisons with the existing base situation

Study Background

SIAS was commissioned in 2012 to develop an S-Paramics microsimulation traffic model of Bellshill

Model used to test a number of traffic management schemes

Model covers three periods:

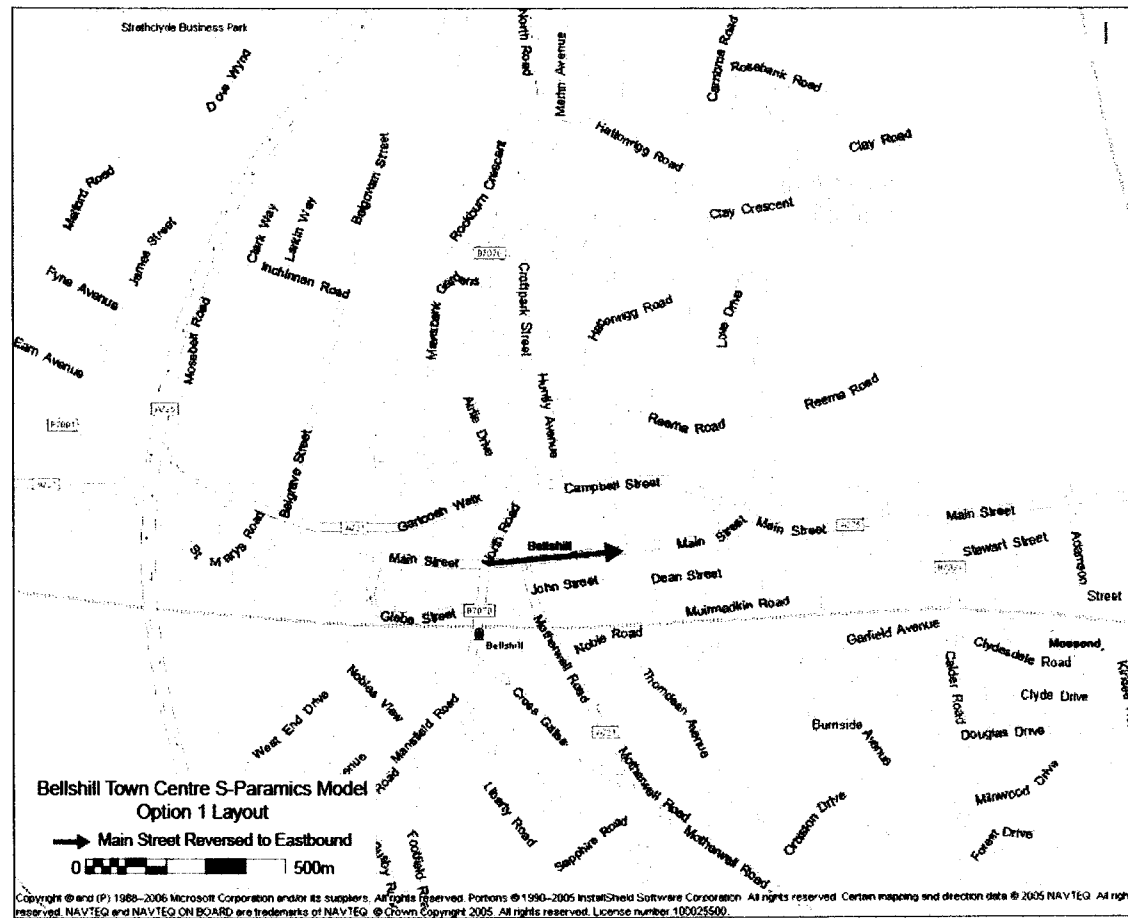
- Weekday AM 07:00-10:00
- Weekday PM 15:00-19:00
- Saturday 10:00-14:00

Presentation Format

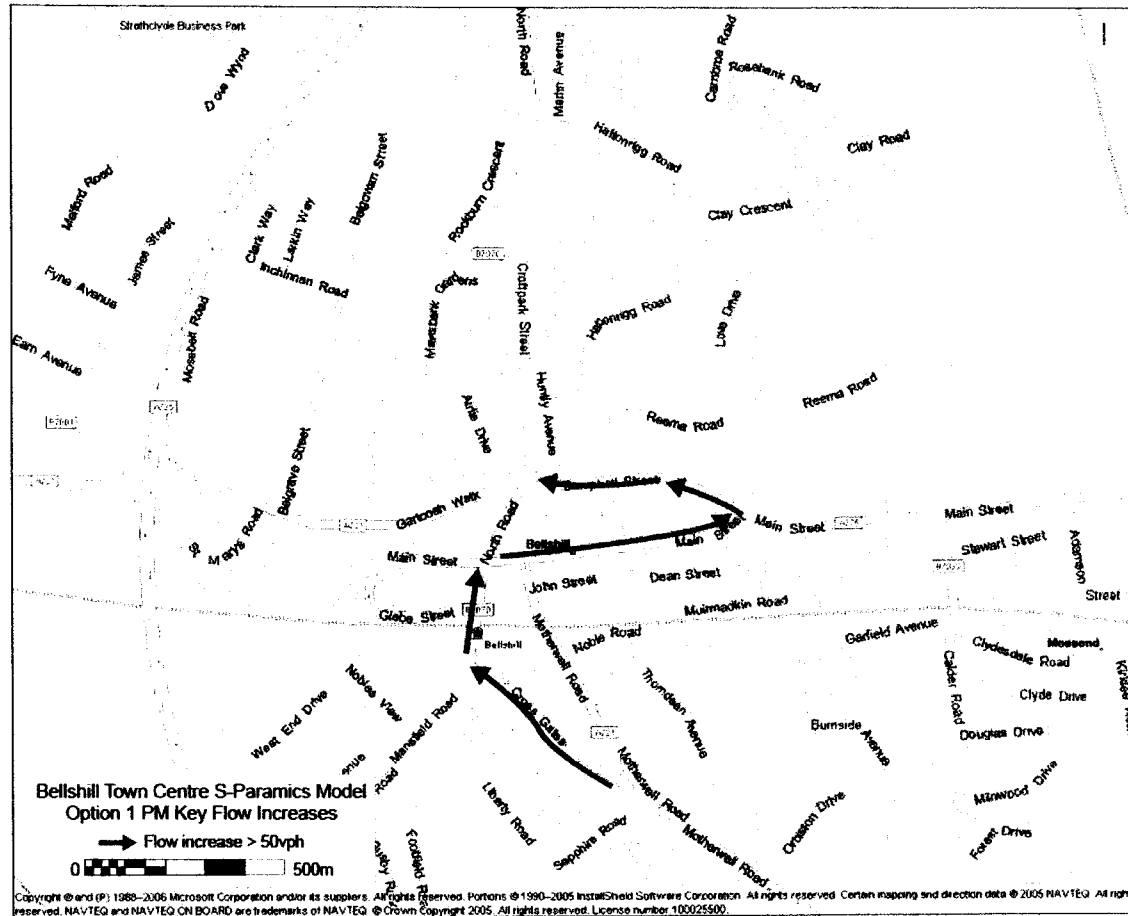
Each option considered will be presented in turn

Key results are shown for the PM period only as this is the most onerous

Option A1 – Main Street Reversal (North Road to Emma Jay Road)



Option A1 – Key Changes to Traffic Flow 15:00-19:00



Option A1 S-Paramics Simulation

Option A1 – Results PM Peak

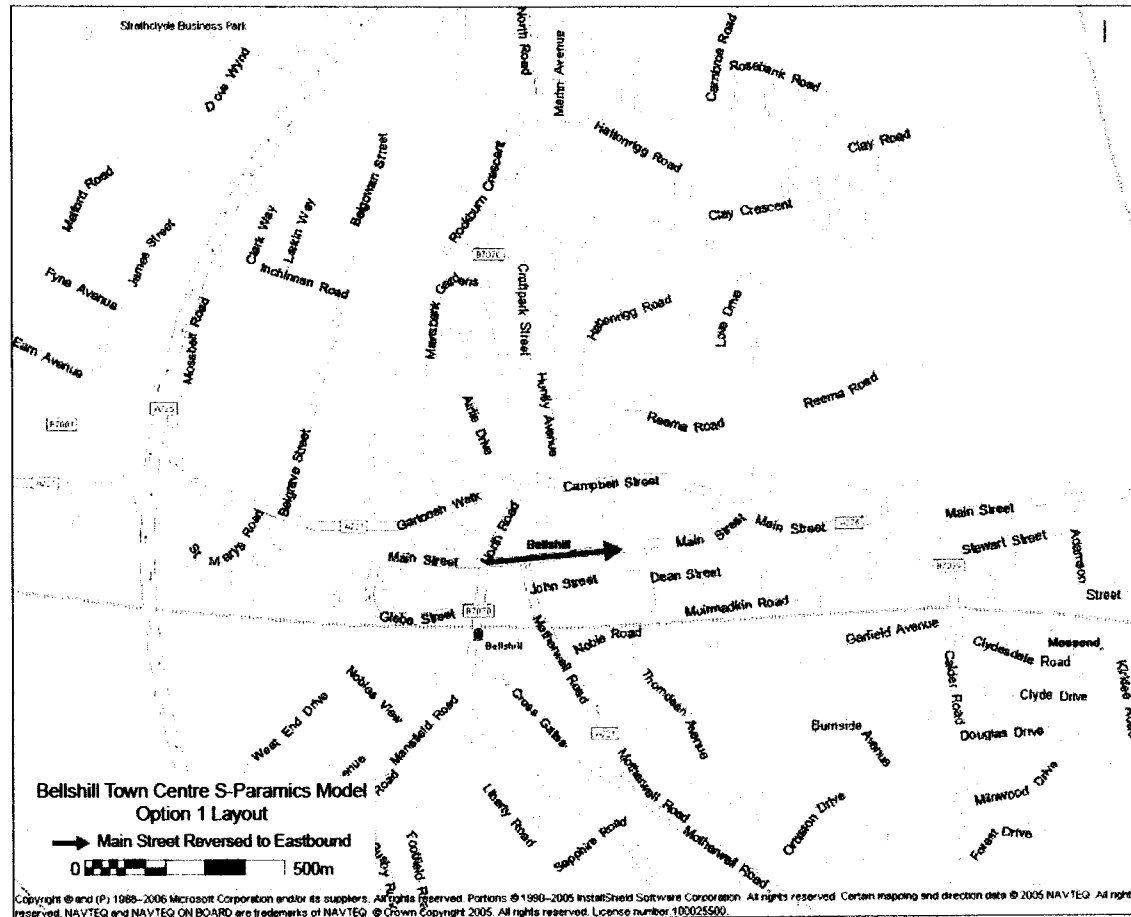
Queueing at the following locations:

- Tesco exit: significant congestion on Tesco car park exit
- Hamilton Road: significant congestion

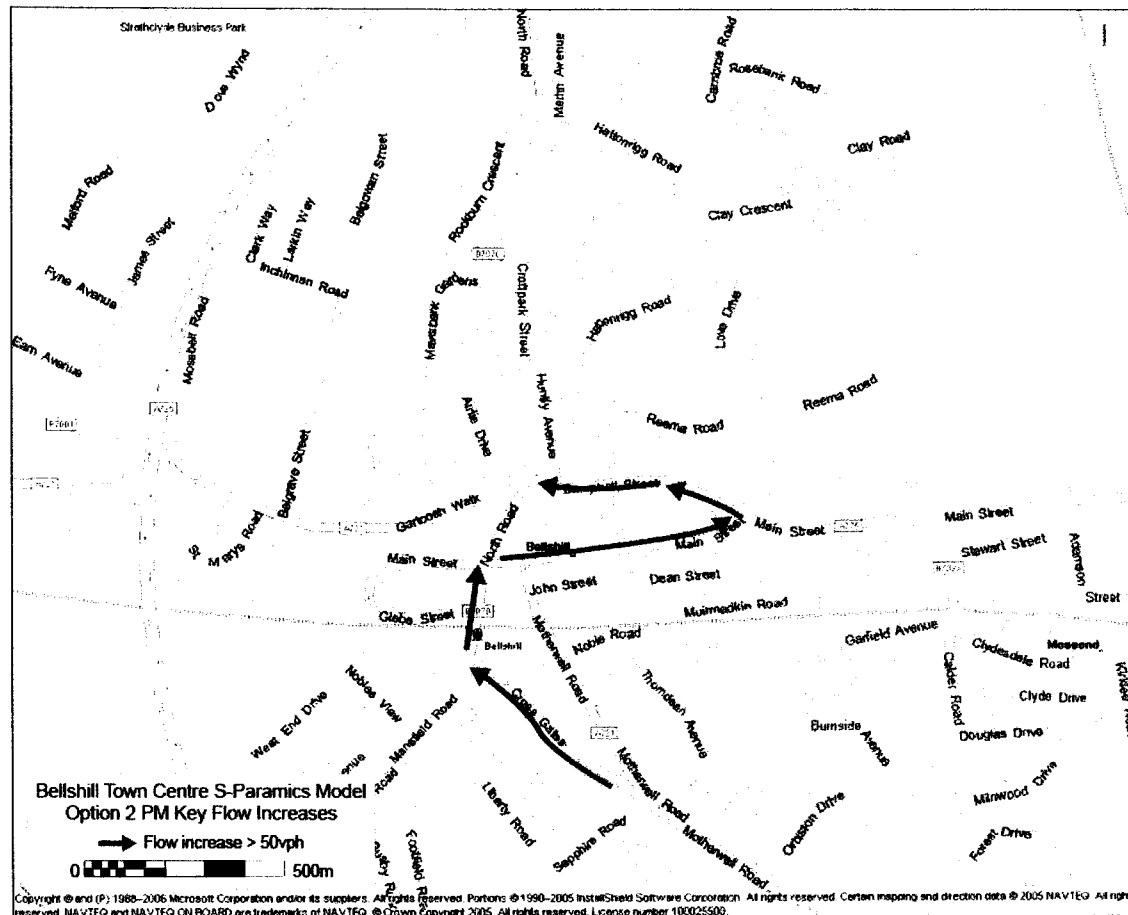
Increased journey times throughout the road network in Bellshill

Congestion resulting from Option A1 considered operationally unacceptable

Option A2 – Main Street Reversal (North Road to Emma Jay Road) & changes to signals at Cross Gates



Option A2 – Key Changes to Traffic Flow 15:00-19:00



Option A2 S-Paramics Simulation

Option A2 – Results PM Peak

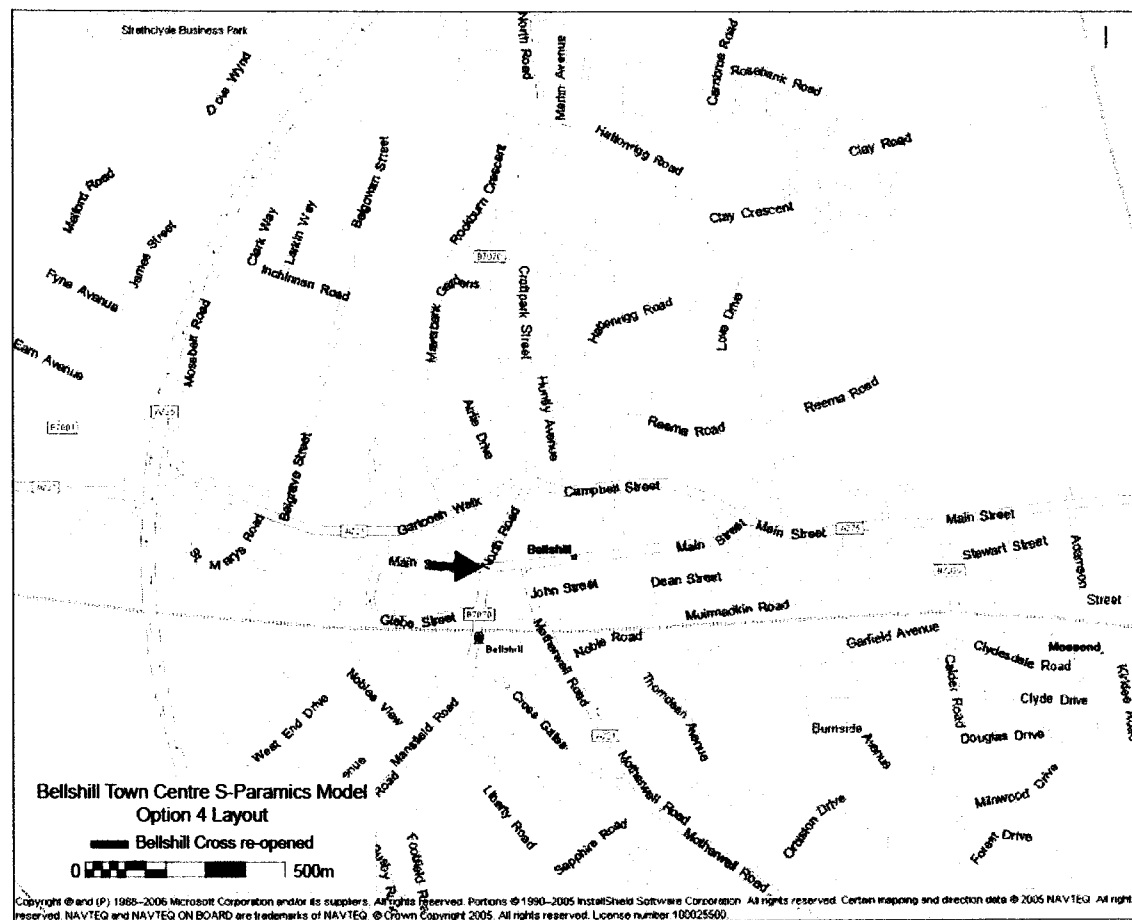
Queueing at the following locations:

- Tesco exit: significant congestion on Tesco car park exit
- Hamilton Road: significant congestion

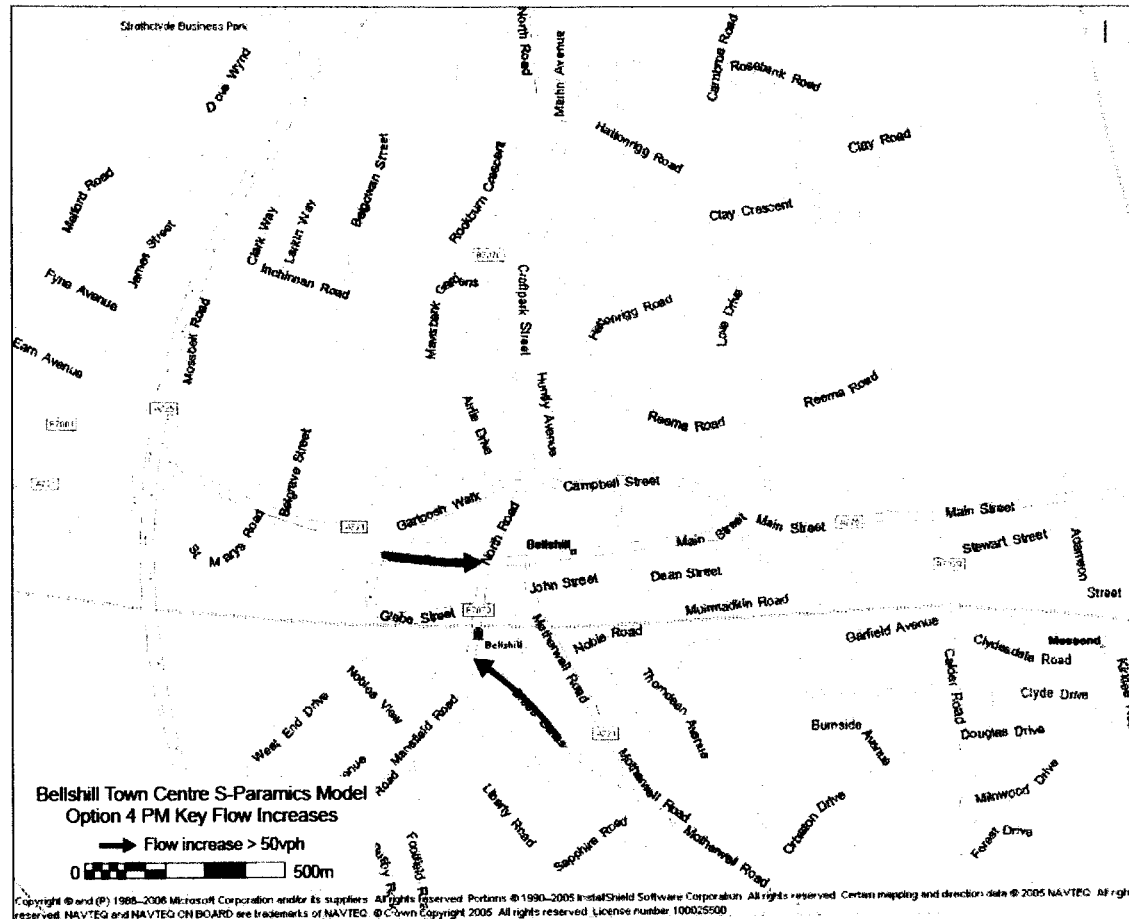
Increased journey times throughout the road network in Bellshill

Congestion resulting from Option 2 considered operationally unacceptable

Option A4 – Bellshill Cross Re-opened

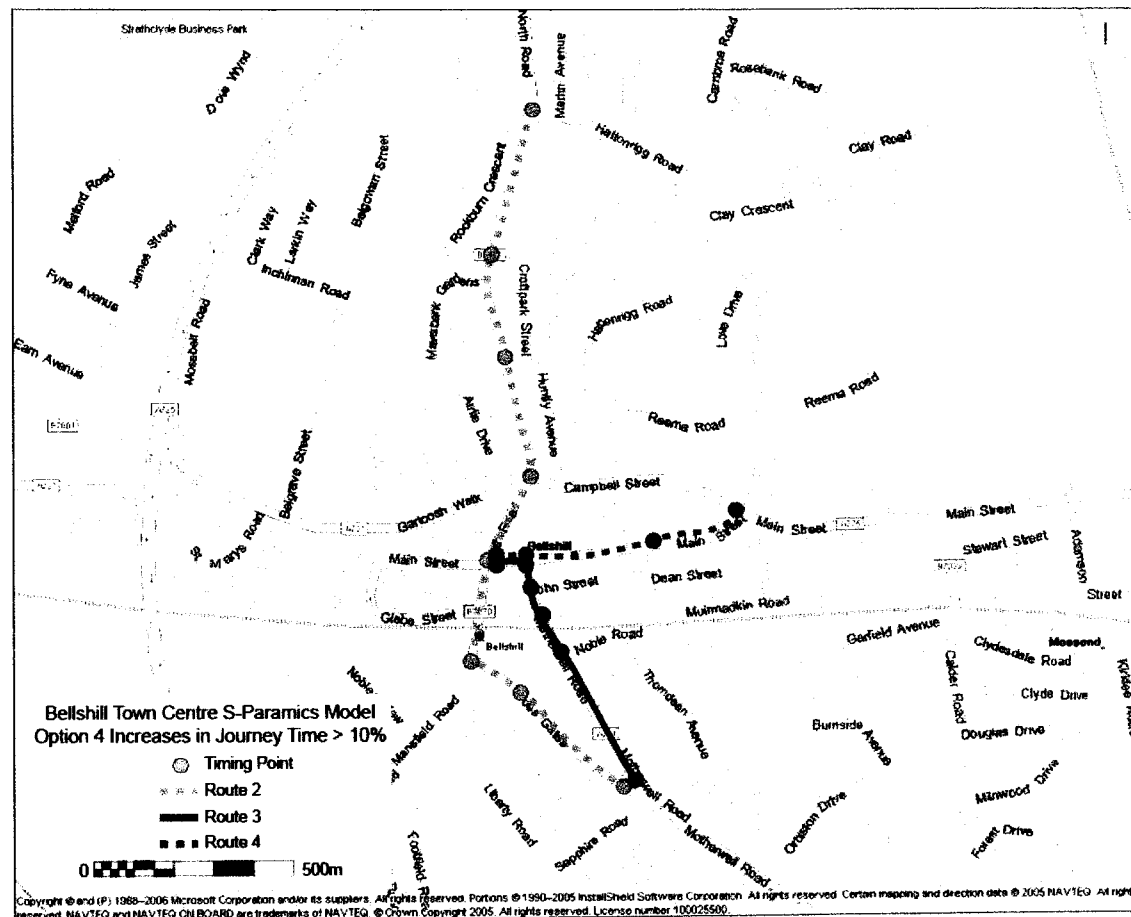


Option A4 – Key Changes to Traffic Flow 15:00-19:00



Option A4 S-Paramics Simulation

Option A4 – Key Changes to Journey Times 15:00-19:00



Option A4 – Results PM Peak

Increase in journey times along the following routes:

- Hamilton Road / North Road
- Motherwell Road
- Main Street

Increase in journey times bring no benefit when compared to the existing situation

Discussion of Results

Tesco arm of Campbell Street / North Road / Gartcosh Walk
Roundabout

- Rerouting on Campbell Street & Gartcosh Walk has adverse affect on the Tesco arm of the roundabout and causes congestion
- Capacity improvements difficult to achieve due to land constraints and topography

Discussion of Results

Cross Gates / Hamilton Road Signalised Junction

- Capacity issues in Options A1 & A2
- Rerouting from Motherwell Road to Cross Gates
- Providing additional green time to Motherwell Road would be at the expense of Cross Gates and vice versa
- Capacity improvements difficult to achieve due to land constraints (nearby buildings and railway bridge)

Discussion of Results

Option A4

Journey time increases along the following routes:

- Hamilton Road / North Road
- Motherwell Road
- Main Street

Increases due to the change in signal timings required at Bellshill Cross

Increase in journey times bring no benefit when compared to the existing situation

Summary of Results

None of the options bring about an overall benefit to the road network in Bellshill when compared to the existing situation