

# Glasgow City Council

## City Centre Traffic Management

### Review and Update

### Briefing (Feb 2009)



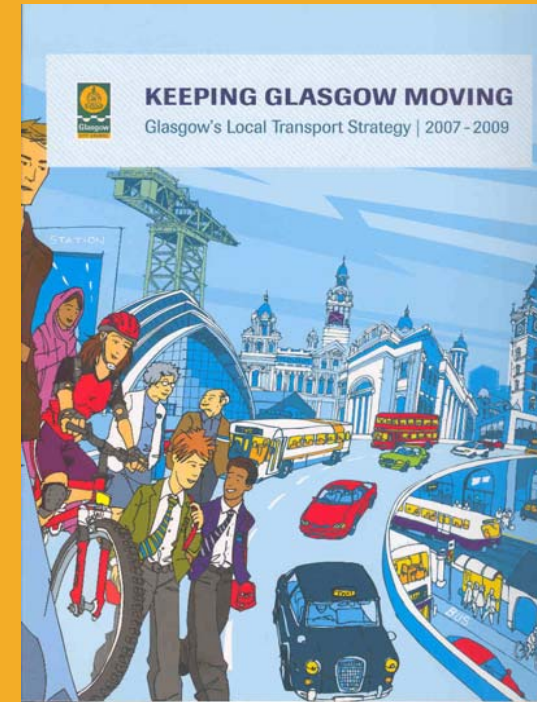
## Agenda

- Background
- Key Areas
- Core Area – Proposals
- Core Area - Results
- Accidents
- Development of further phases
- Way Ahead

## Background

### LTS Consultation Feedback

- Reduce car traffic and congestion
- Extend pedestrian priority(57%)
- Improve pedestrian environment
- Excessive bus traffic (Hope St and Union St)
- Mixed view on terminating bus services outside city centre core area
- Support for mandatory 20mph limit (64%)





## Background

### LTS Consultation Feedback

- Restrict traffic entering areas where pollution is a problem (70%)
- Introduce more bus priority schemes (even if inconvenience / restrict other traffic (65%)
- Provide cycle lanes, even if restrict opportunities for on-street parking) (65%)
- Against allowing cyclist to use ped areas (60%)



## Background

### **Draft City Centre Objectives**

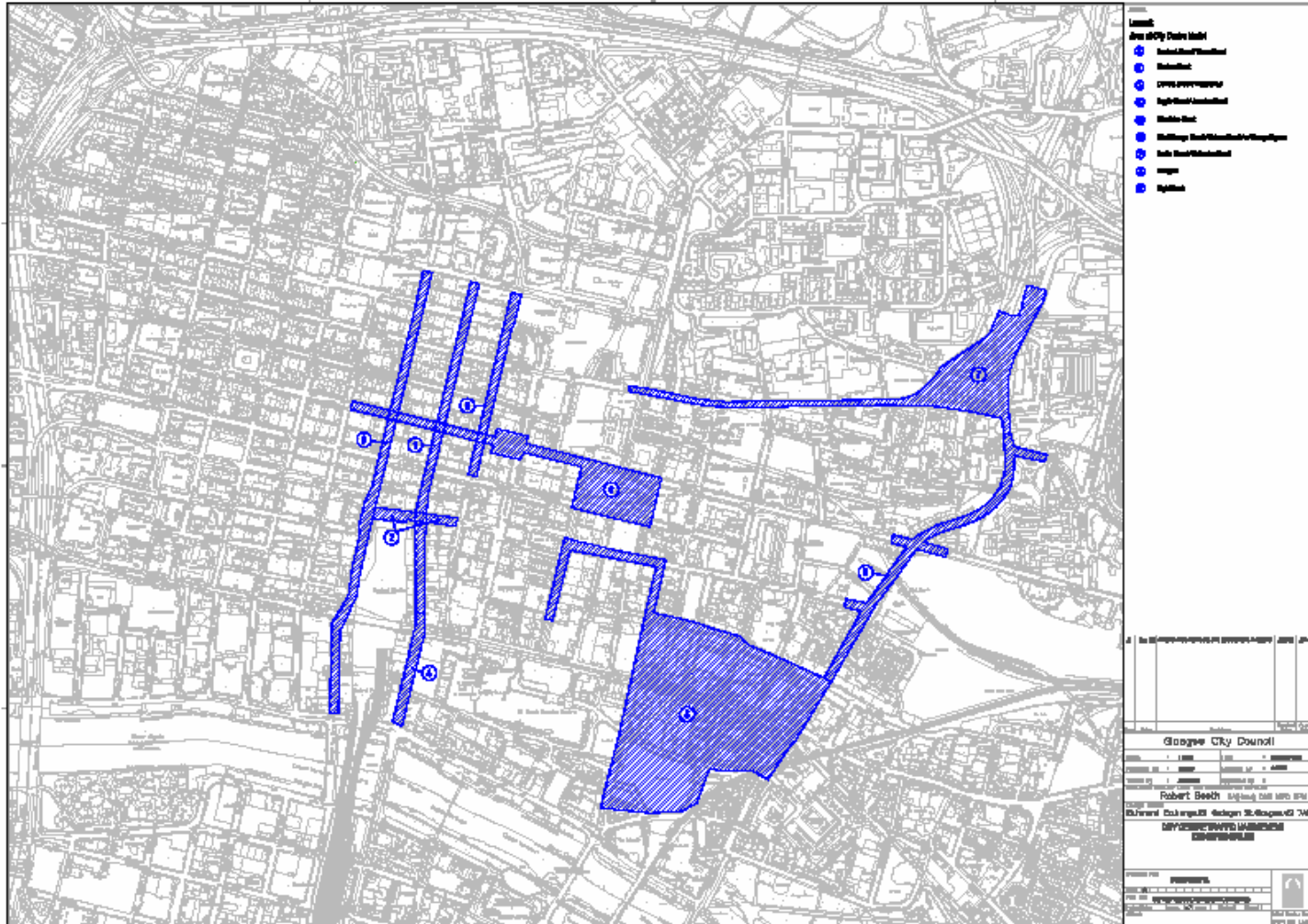
- Increase the number of trips to / from and within the city centre by walking, cycling and public transport
- Reduce the number of private car trips to / from and within the City Centre, while accommodating access for residents, blue badge holders and traffic essential to sustain economic functions
- Enhance the quality and legibility of main pedestrian spaces, key development areas and main access routes
- Improve air quality through reducing harmful traffic emissions to below government standards
- Enhance safety and security (perceived and actual) for city centre users



## Key Areas

- Renfield Street / Union Street
- Gordon Street
- Oswald Street / Hope Street
- Argyle Street / Jamaica Street
- West George Street / Nelson Mandela Place / George Square
- Castle Street / Cathedral Street
- Trongate
- West Nile Street
- High Street

## Key Areas



## Core Area

### Renfield Street / Union Street

#### Issues:-

- High number of buses cause congestion
  - High level of accidents
  - Narrow footway / high pedestrian activity
  - Loading disrupting flow of traffic
  - Poor geometry at Gordon Street junction
  - Lack of pedestrian crossing facilities on Union St at entrance to Central Station
- Union St at entrance to Central Station







## Core Area

### **Renfield Street / Union Street**

Potential Solutions :-

- Reassign some bus services onto Wellington Street
- Loading bays not operational during daytime (eg 0800 – 1800)
- Removal of on-street metered parking
- Footway widening (on east side)
- Removal of some nibs
- Improve geometry at Gordon Street junction by removing footway nibs on east side
- Provide controlled pedestrian crossing facility on Union Street at Central Station access

## Core Area

### Wellington Street

#### Issues:-

- Need to cater for potential of extra buses reassigned from Union Street
- Congestion on approach to Waterloo St due to traffic / buses accessing M8



## Core Area

### Wellington Street

#### Potential Solutions :-

- Remove metered parking on east side between Bothwell Street and Waterloo Street
- Provide bus lane between Bothwell Street and Argyle Street
- Some nibs removed
- Make left turn from Wellington St to Argyle St buses / taxis / cyclists only



## Core Area

### Gordon Street

Issues:-

- Traffic / pedestrian conflict on Gordon St between Renfield St and West Nile St
- High level of illegal manoeuvres outside Central Station
- Taxis accessing Union St cause delays on Renfield St





## Core Area

### **Gordon St**

#### Potential Solutions :-

- Pedestrianise Gordon Street (Renfield St to West Nile St)
- Make West Nile St 2 way between St Vincent St and Gordon St and remove the metered parking on Mitchell Street
- Restrict taxi egress from Gordon St to Union St
- Only allow inter-station bus and servicing (at certain times) to enter Gordon St from Renfield St
- Provide formal turning facility for taxis outside Central Station
- Widen footway and provide entry treatment on Gordon St at Renfield St

## Core Area

### Oswald Street / Hope Street

#### Issues:-

- Conflict between vehicles and pedestrians using side entrance to Central Station
- Congestion at bus stops within Hope Street bus gate
- Narrow footway / high pedestrian activity north of St Vincent Street





## Core Area

### **Oswald Street / Hope Street**

Potential Solutions :-

- Provide bus gate on Oswald Street north of Midland Street
- Consider widening carriageway to 3 lanes in bus gate between Waterloo St and Gordon St
- Loading bays not operational during daytime (eg 0800 – 1800)
- Removal of on-street metered parking
- Footway widening between West George St and Sauchiehall Street
- Removal of some nibs.

## Core Area

### Argyle Street / Jamaica Street

Issues :-

- Buses travelling northbound between Howard Street and Argyle Street cause congestion and add to traffic movements at Argyle St / Jamaica St junction
- Location of Highest Accident Rate in the City







## Core Area

### **Argyle Street / Jamaica Street**

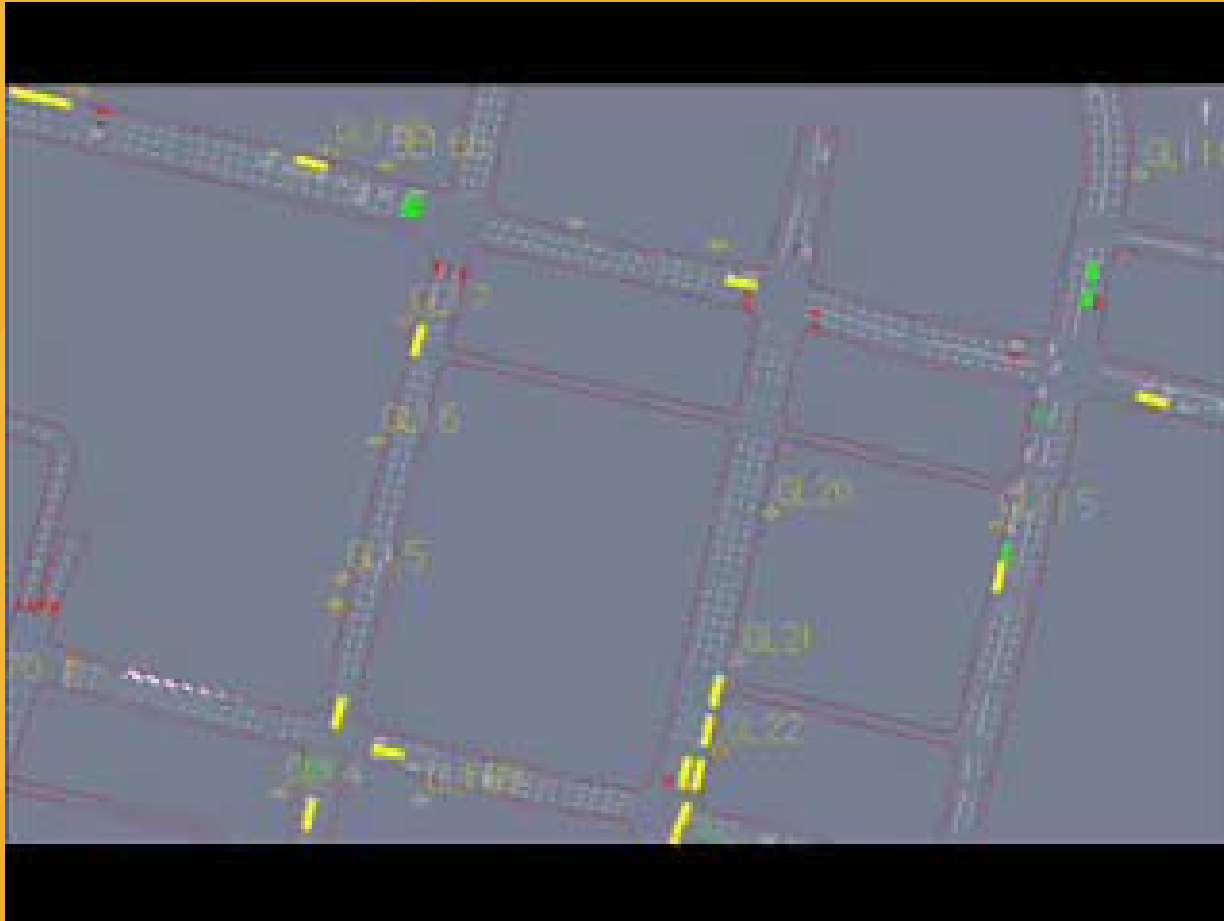
#### Potential Solutions:-

- Remove contra-flow bus lane on Jamaica Street between Howard Street and Argyle Street
- Redirect buses via Jamaica St, Broomielaw and Oswald Street
- Review pedestrian guardrail provision
- Implement Traffic Signal Improvements

# City Centre Traffic Management Review

## City Centre Traffic Model

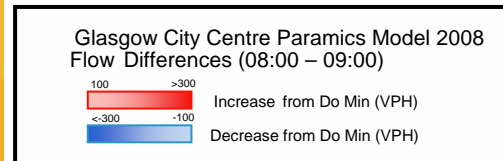
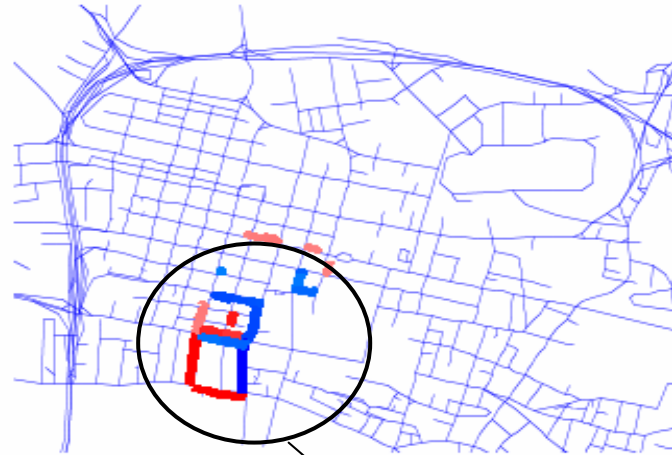
Updated Paramics Traffic Simulation Model has been developed.



## Test 1- Modelling Results

### Traffic Flow Changes

- Reduction in traffic n/b on Oswald St / Hope St and w/b on Argyle St (Oswald St to York St)
- Increase in traffic w/b on Broomielaw (Commerce St to York St) and n/b on York St / West Campbell St
- Reduction in traffic s/b on Renfield St approach to Gordon St





## Test 1- Modelling Results

### Bus journey Time Changes

- Renfield St / Union St / Jamaica St
  - Average reduction in journey time of 7% in am peak and 13% in pm peak
- Oswald St / Hope St
  - Average reduction in journey time of 8% in am peak and 23% in pm peak
- Wellington Street
  - buses reassigned from Renfield St - 1% reduction in am peak and 8% reduction in pm peak



# Test 1- Modelling Results

### **General Traffic (excl buses) Journey Time Changes**

- Reduction of 0.5 minutes in am peak and 1 minute in pm peak from Renfield St at Renfrew St to Jamaica St at Clyde St
- No significant change for vehicles travelling up York St and West Campbell St

## Accidents

### Summary

- 8 out of top 10 injury accident sites are within City Centre
- 2 out of top 5 injury accident sites are on Renfield St / Union St
- Worst site is Argyle St / Union St / Jamaica St junction (twice the number of casualties than any other site)





## Accidents

### Renfield St / Union St / Jamaica St Corridor

#### Junction Specific Measures

- Argyle St / Union St / Jamaica St
  - Physical changes to junction, including Jamaica Street one way southbound
- Gordon Street / Union Street
  - Pedestrianise Gordon St (Renfield St to West Nile St)
  - Restrict taxi egress from Gordon St to Union St



## Accidents

### Renfield St / Union St / Jamaica St Corridor

- Other Measures
  - Widen footway on east side
  - Remove parked cars from west side
  - Reduce the number of buses travelling on Renfield St and Union Street
  - Provide pedestrian crossing on Union Street at side entrance to Central Station
  - Consider introducing 20mph zone





## Early Actions

### Measures not requiring TRO

- Provide pedestrian crossing on Union Street at side entrance to Central Station
- Implement junction improvements at Argyle St / Jamaica St junction (excluding Jamaica Street one-way)

## Development of Further Phases

- West George Street / Nelson Mandela Place / George Square
- Castle Street / Cathedral Street
- Trongate
- West Nile Street
- High Street





## Wider Strategy

### **Non Traffic Management Options**

- Quality Partnership Schemes
- Bus Lane Camera Enforcement
- Legislation to Control Moving Violations e.g junction boxes
- 20mph Zone
- Low Emission Zone
- Traffic Regulation Conditions
- Freight Quality Partnership

## Way Ahead

### Future Consultation Strategy

- Key stakeholder workshop(s) – local members, police, SPT, TOA, Chamber of Commerce etc
- Evening Times





# City Centre Traffic Management Strategy

## Way Ahead

### Programme

<b>Feb – Apr 2009</b>	<b>Consult local members and key stakeholders</b> <b>+ Evening Times Consultation</b> <b>+ Implement any early action measures</b>
<b>May – Oct 2009</b>	<b>Undertake detailed design and prepare for statutory consultation</b>
<b>Nov – Dec 2009</b>	<b>Undertake statutory public TRO consultation</b>
<b>Jan – April 2010</b>	<b>Make TRO procure resources for implementation</b>
<b>May 2010 – July 2010</b>	<b>Implement measures requiring a TRO</b>