Welcome to this Public Exhibition.

The purpose of today’s exhibition is to provide an overview of the option assessment work undertaken for the A720 Sheriffhall Roundabout junction improvement scheme and present the emerging options.

We welcome your comments and feedback. Please take your time to consider the information presented at the exhibition and provide any comments you may have on the feedback forms provided.

A leaflet is available to take away and representatives from Transport Scotland and AECOM are available to answer your questions.

Further information is available on the Transport Scotland website: www.transport.gov.scot/project/a720-sheriffhall-roundabout
A720 Sheriffhall Roundabout

Introduction

Sheriffhall Roundabout is the only junction on the trunk road A720 Edinburgh City Bypass which is not grade separated.

The at grade roundabout at Sheriffhall can lead to significant localised queuing, especially during the morning and evening peak periods.

Sheriffhall junction was identified as part of the Strategic Transport Projects Review (STPR), published in December 2008. Intervention 22 recommends targeted road congestion / environmental relief schemes, including junction improvements at the Sheriffhall roundabout.

AECOM was appointed in June 2013 to undertake a Design Manual for Roads and Bridges (DMRB) Scheme Assessment to design the most appropriate form of junction at Sheriffhall roundabout.

This exhibition describes our progress to date, and presents the emerging options.
Scheme Assessment Process

A rigorous assessment process is required to determine the preferred option for a trunk road improvement scheme.

The design of a new trunk road junction follows the scheme assessment process set out in the Design Manual for Roads and Bridges (DMRB).

This is a three-stage assessment process that considers options in terms of engineering, environmental and traffic and economic factors. Throughout the assessment process, consultation is carried out with a large number of stakeholders and interested groups.

After an initial sift of eight options, the DMRB Stage 1 assessment identified a shortlist of four junction options to take forward to Stage 2.

The DMRB Stage 2 assessment to identify the preferred option is underway. A further sifting exercise has narrowed the four Stage 1 options to the three that are displayed at this exhibition.
A720 Sheriffhall Roundabout

Summary of DMRB Stage 1 Assessment

The principal aim of DMRB Stage 1 is to identify a wide range of grade separation improvement options.

The assessment examined traffic flows in the area, as well as considering how the various grade separated junctions interacted with the adjacent A720 junctions, such as the Millerhill Interchange at the northern end of the A68 Dalkeith Bypass.

An initial group of eight options was identified and subsequently assessed in accordance with DMRB Stage 1 process.

The relative merits of each option were assessed in accordance with engineering, environmental and traffic and economic criteria as well as the scheme objectives (see next board).

The following four options emerged from the assessment and it was recommended that they go forward for more detailed assessment at Stage 2:

Option 1, Option 2, Option 6 and Option 8.
A720 Sheriffhall Roundabout

Scheme Objectives

The following scheme objectives have been set, in consultation with Stakeholders, to address the main issues encountered at Sheriffhall Roundabout.

• Improve the movement of traffic on the A720 between Gilmerton and Old Craighall by providing grade-separation of the A720 at the existing Sheriffhall Roundabout
• Reduce the conflict between strategic and local traffic
• Minimise traffic impact of local proposed developments in Midlothian, East Lothian and City of Edinburgh on the A720 between Gilmerton Junction and Old Craighall Junction and approach roads
• Improve road safety for all users on the A720 and approach roads between Gilmerton Junction and Dalkeith Northern Bypass
• Minimise intrusion of the new works on the natural environment, cultural heritage and people whilst enhancing the local environment where opportunities arise
• Facilitate integration for different modes of transport along and across the A720 corridor between Gilmerton Junction and the Dalkeith Northern Bypass
• Reduce severance by improving accessibility across the A720 for all users
Engineering Assessment

• An initial investigation of the ground conditions identified:
  • several geological fault lines including the Sheriffhall fault
  • various historic mine workings, coal seams, mine entries (pits and shafts) and potential for shallow mine workings

• Physical constraints include the presence of local properties, the Dean Burn, the new Borders Railway and the adjacent Gilmerton and Millerhill interchanges. There are also various electrical, water and telecommunication services located throughout the area.

• It is important that the A720 Edinburgh City Bypass and other roads continue to operate during construction.
A720 Sheriffhall Roundabout

Environmental Assessment

- Active Travel Routes – Core Paths and National Cycle Routes
- Heritage – Scheduled Monuments, listed buildings, Gardens and Designed Landscape and Conservation Areas
- Site of Special Scientific Interest and ecological habitats
- Number of existing properties and businesses
- Greenbelt and Special Landscape Areas
- Significant future developments planned for both housing and business use
- Number of watercourses and some localised flooding
A720 Sheriffhall Roundabout

Traffic Assessment

Sheriffhall roundabout has undergone various improvements over the years including road widening, signalisation and the provision of additional lanes to alleviate delays. The road network is operating beyond its capacity and is severely congested at peak times. Despite improvements, a congestion problem persists. Planned future development will add further pressure on the already busy junction.

Traffic surveys have been undertaken to help understand current traffic conditions.

Data has been collected at various locations in the study area, recording variations in daily / hourly flows, queue lengths, vehicle speeds and journey times. Typical observed weekday 2-way 12 hour traffic flows are shown below.
A720 Sheriffhall Roundabout

Work carried out to date

**Traffic Surveys / Modelling** – traffic modelling of the emerging options is ongoing as part of the DMRB Stage 2 assessment process. Using data collected from the traffic surveys, in combination with data extracted from the region wide SEStran model (which predicts traffic growth from future planned development), a microsimulation model of the Sheriffhall study area is being developed to assess the performance of each of the emerging options.

**Environmental Surveys** - as part of the environmental assessment work, ecology surveys have been undertaken and air quality data has been collected.

**Consultations** - workshops and consultations have been held with statutory bodies and Stakeholder groups. These include the City of Edinburgh Council, Midlothian Council and East Lothian Council.
A number of junction options have been assessed and those considered to perform less well have been sifted out. As a result the following three emerging junction options are currently being developed for Stage 2 assessment:

- **Option A** – dumbbell grade separation at Sheriffhall (previously named Option 1)
- **Option B** – grade separated roundabout at Sheriffhall (previously named Option 6)
- **Option C** – dumbbell grade separation west of Sheriffhall (previously named Option 8)

These options can be viewed on the adjacent maps.
A720 Sheriffhall Roundabout

Option A

- Dumbbell Grade Separation at Sheriffhall
- A720 is carried over the new A7 link road
- Dumbbell roundabouts are at ground level
A720 Sheriffhall Roundabout

Option B

- Grade Separated Roundabout at Sheriffhall
- A720 is carried over the new roundabout
- New roundabout is at ground level
Option C

- Dumbbell Grade Separation west of Sheriffhall
- A720 remains at ground level
- Realigned A7 and dumbbell roundabouts are carried over the A720
A720 Sheriffhall Roundabout

What Happens Next

Following this exhibition, any representations received will be considered during the subsequent development and assessment of the scheme to identify a preferred option.

The options will undergo engineering, environmental, and traffic and economic assessment. They will also be assessed against the scheme objectives.

The outcome will then be detailed in the Stage 2 Options Assessment Report which will recommend a preferred option to be taken forward to the next stage of scheme development. It is expected that the DMRB Stage 2 assessment will be completed in Spring 2017.
Thank you for attending the exhibition and your interest in the A720 Sheriffhall Roundabout. We welcome your comments and feedback on the emerging options presented. Comments can be made on the feedback forms provided and posted in the feedback box at this exhibition, or can be sent by email or post.

Please email your comments to jill.irving@aecom.com or alternatively post to:

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Please return your comment sheet by 27th January 2017.

For further information on the A720 Sheriffhall Roundabout scheme, please visit the Transport Scotland website:

www.transport.gov.scot/project/a720-sheriffhall-roundabout