4a Access from the South

Purpose of Report

This report advises Board members on the latest progress in bringing forward projects identified within the Access to Aberdeen from the South Study.

Background

The Nestrans Board approved the principle of the findings within the draft Access to Aberdeen from the South Study in February 2008 and remitted the final study to Aberdeen City and Aberdeenshire Councils for consideration. Brief updates are given on individual projects being delivered through the current Capital and Revenue budgets in each progress report to the Board. The last full update was reported in December 2010 and it is therefore considered an appropriate time to report on latest progress and the results of a survey at the left turn segregated slip lane, which was completed in October 2010.

Short Term Measures

A segregated left turn lane from King George VI Bridge to West Tullos Road was funded by Nestrans as part of the 2010/11 Capital Budget. The new lane became operational on 28 October 2010 and anecdotal observations indicated that it was working well. A survey was undertaken to evidence the effect of the new lane on Tuesday 31 May 2011 during the AM peak period. The survey results showed a constant virtual free flow of vehicles on King George VI Bridge. It was noted that the vehicles on King George VI Bridge now remain in the correct lane and that the only minor queues that occur are for short intervals when the pedestrian crossing is called on West Tullos Road.

The traffic volumes on King George VI Bridge and West Tullos Road have remained at similar levels to the base survey done in March 2009. The transfer to the slip lane of around 200 vehicles that were previously recorded to turn from the offside lane on King George VI Bridge through 450° in the AM peak and thus cut across all four arms of the junction has however helped to reduce delays on the other approaches. In particular the length of queues previously observed on Great Southern Road has been significantly reduced with an increased volume of nearly 35% more vehicles being observed to enter the junction from Great Southern Road during the AM peak hour.

It was previously reported in April 2009 that a further short term measure identified within the Access to Aberdeen from the South Study would not be progressed due to value for money concerns. A segregated left turn lane had been proposed from Great Southern Road to the A90 Stonehaven Road at the roundabout on the south side of the Bridge of Dee. The preliminary design however highlighted that there were a large number of services on the line of the proposed additional lane that would need to be diverted and land acquisition would be required from properties adjacent to the roundabout, which would impact on their existing off-street parking provision. It was felt that the likely significant costs of the improvement could not be justified when compared with the predicted benefits of the scheme.

Given the success of the left turn slip lane at the King George VI Bridge, the effect of providing a segregated left turn lane from within the existing carriageway, where possible, with only minimal widening to avoid the services as a lower cost improvement is being looked at. This has started to be investigated using the £25,000 in the 2011/12 Capital Budget as a short term minor improvement in advance of the longer term solution being investigated through the Bridge of Dee Study, which is detailed below.

Officers from Aberdeen City Council have prepared 2 layout options for a left turn slip lane from Great Southern Road to Stonehaven Road within the existing carriageway with either a single or 2 lane exit from Bridge of Dee and will now test their performance using the Access from the South microsimulation model.

- Medium Term Measures

The Access to Aberdeen from the South Study identified the potential for traffic signals to more evenly distribute the capacity at the junctions of Souterhead Road and Hareness Road with Wellington Road. Funding was allocated in the 2010/11 Capital Budget to continue the preliminary design work to replace these roundabouts and officers at Aberdeen City Council developed 3 options at the Souterhead junction and a single layout for a traffic signal controlled junction with full pedestrian crossing facilities at the Hareness junction. An economic assessment of the options was undertaken using micro simulation models for the Access from the South network. The future year models included the latest predicted scale and distribution of development levels from the proposed Local Development Plans. The output showed significant variance in the results and the underlying reasons for this has now been investigated.

The dynamic responses to upstream delays given by the microsimulation model results in considerable variation in routing within the network between different runs. This situation of variability is reflective of observed travel characteristics in the area, but can mean that the benefit in journey time on the Wellington Road corridor as a result of the proposed junction improvements can be negated by the transfer of vehicles from the A90 Stonehaven Road corridor seeking to avoid the congestion at the Bridge of Dee. As detailed below, a solution is being investigated to address the capacity problems at the Bridge of Dee. Although local road improvements may continue to be required to facilitate any developments in this area, in order to ensure that any strategic improvement on the Wellington Road corridor is fit for purpose and provides value for money in the longer term, it is recommended that Nestrans waits to determine the impact of the construction of the Aberdeen Western Peripheral Route and the outcome of the Bridge of Dee Study before determining the scale of any improvement still required on Wellington Road.

The preliminary design for the A90(S) Park & Choose site and the 12 week pre-planning application consultation process have been completed. A sum of £79,000 has been approved within the 2011/12 Capital Budget to progress the specimen design, planning application and a compulsory purchase order. As the landowner has to date refused access for a geotechnical survey, an application for planning approval in principal only is to be lodged. The supporting documentation is being prepared and it is anticipated that the application will be submitted by the second week in June.

- Long Term Measures

The Access to Aberdeen from the South Study identified the need for additional capacity over the River Dee in the longer term. A study began in 2010/11 to investigate transport improvements in the area using the methodologies set out in Scottish Transport Appraisal Guidance (STAG) and Design Manual for Roads and Bridges (DMRB).

Jacobs Engineering UK Ltd was commissioned and a programme developed to complete the pre-appraisal process defined within STAG and partially complete the DMRB Stage 1. Full engagement with stakeholders has been and will continue to be undertaken throughout the process and all information relating to the study is published on Aberdeen City Council's website. To date the following packages have been completed:

- Inception - identified existing data, reviewed relevant policies and strategies and agreed do-minimum and reference case traffic modelling scenarios and gathered predicted traffic volumes and journey time information within these scenarios.

- Stakeholder workshop 1: Analysis of existing and future problems and opportunities and setting of project specific SMART (specific, measurable, attainable, relevant and timed) objectives for the study. This workshop was held on 29 Nov 2010.

- Stakeholder workshop 2: Option generation – options were suggested that may address the problems and achieve the objectives of the study. This workshop was held on 26 Jan 2011.

- Stakeholder workshop 3: Option Sifting and Development – considered previously generated options and sifted them to see if any could be discounted in response to the identified problems and opportunities and the project specific objectives. This included initial consideration of high level engineering data such as alignments, junctions, earthworks, structures and drainage design, together with high level cost estimates and transport and environmental impacts associated with each of the options. This workshop was held on 3 Mar 2011.

A sum of £75,000 has been allocated within the 2011/12 Revenue budget to continue this study. The next stage will be to complete the pre-appraisal process by finalising the option sifting process, taking account of stakeholder contributions and determining the options to be taken forward for further assessment. A project status report summarising the work undertaken to date and outlining the extent of work necessary to complete the STAG Part 1 appraisal and DMRB Stage 1 assessment will then be prepared. This will be the subject of a future report to the Board and the nest stages of undertaking the STAG Part 1/DMRB Stage 1 process will then be progressed subject to future available funding.

Recommendation

It is recommended that the Board:

1. note the progress with projects identified within the Access to Aberdeen from the South Study;
2. Agree to defer further investigation into a strategic improvement on the A956 Wellington Road corridor until the impact of construction of the AWPR and outcome of the Bridge of Dee Study are known.

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