

**PLANNING & TRANSPORTATION POLICY REPORT TO THE
S. P. C. ON TRANSPORTATION, TRANSIT AND PARKING**

2003 FEBRUARY 19

**TTP2003-12 SOUTHWEST CONNECTOR – PRELIMINARY EVALUATION STUDY
WORKPLAN**

ISSUE:

Presentation of a workplan to undertake a cost benefit and environmental impact comparison study of all options for a new north-south route west of 14 Street S.W. and south of Glenmore Trail known as the Southwest Connector.

RECOMMENDATIONS:

That the S.P.C. on Transportation, Transit and Parking recommend that Council approve the following:

- 1. That this report be tabled until the 2003 May meeting of the S.P.C. on Transportation, Transit and Parking to allow time for discussions to take place between the Tsuu T'ina Nation, The City and The Province relative to protecting a Sarcee Trail extension alignment west of the Weaselhead for the Southwest Connector;**
- 2. That the Memorandum of Understanding between The City, the Tsuu T'ina Nation and The Province signed in 2000 June be considered in determining the appropriate cost sharing formula for studies related to the planning of the Southwest Connector and that this cost sharing information be brought forward to the S.P.C. on Transportation, Transit and Parking after the Mayor's report to Council 2003 May 5;**
- 3. That Administration be directed to continue work towards developing a detailed workplan and cost estimates for the technical and communications tasks and that this information be brought forward in conjunction with Recommendations 1 and 2;**
- 4. That the Administration be directed to commence the Environmental Inventory for the area as outlined in the attached workplan with a maximum budget not to exceed \$100,000. The funding for this work would come out of the existing 2003 Functional Studies program in the Transportation Planning Operating Budget Program 611.**

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EXECUTIVE OFFICER'S COMMENTS:

Executive Officer Jim Vennard concurs with this report.

BACKGROUND:

In 2002 September, the Administration presented the results of the Glenmore Trail Corridor Study – Network Analysis where the Southwest Connector concept was defined by several network options including the 37 Street extension and the Sarcee Trail extension. In this report, there was an acknowledgement of the impact that the Southwest Connector would have on the functional design requirements for Glenmore Trail. In addition, continued growth in the city has increased pressures to provide a new north-south route in Southwest Calgary as existing routes experience ever increasing congestion.

Over the past thirty years, many studies have evaluated options for moving traffic in the Southwest including:

- The Calgary Transportation Plan (1995 GoPlan);
- Provincial Ring Road Studies (1970, 1974, 1977 and 1984);
- Sarcee Trail Extension Study (City report 1987);
- Glenmore Trail Corridor Study (2002); and
- 14 Street Functional Planning Study (1997).

These studies indicated that a Southwest Connector is an important and beneficial link in the city's transportation system. It was generally assumed that information about providing this link would be forthcoming over time and planned in conjunction with various stakeholders including The Province, the Tsuu T'ina Nation and Calgarians. On 2002 September 16, Council directed the Administration to prepare a workplan to undertake a cost benefit and environmental impact comparison study for all options to cross the western Elbow River and to provide this information to the S.P.C. on Transportation, Transit and Parking in 2003 February. This report responds to that direction.

RECENT DEVELOPMENTS:

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The Glenmore Trail Corridor Study – Network Analysis was completed in 2002 and helped clarify the various potential network options. The study advised that where the Southwest Connector ties into Glenmore Trail would dictate different interchange designs and laning configurations for Glenmore Trail. Aside from Glenmore Trail, there are also numerous questions about the environmental, financial, community and mobility impacts of options for the Southwest Connector itself depending on the alignment and the type of structure used to cross the Elbow River valley.

In order to get an early understanding of the issues and options for the Southwest Connector, the Administration held a three day Value Planning Workshop in mid-December 2002 which was attended by various technical experts from across North America as well as local, City, Provincial and Tsuu T'ina representatives (Attachment 1). Participants at this workshop provided input into clarifying issues, identifying available technologies and worked together to focus all possible options into a reasonable list for the Administration to consider in the Southwest Connector Study Workplan. Approximately 142 creative ideas were identified at the workshop (Attachment 2) and have now been narrowed down to seven Focus Options that follow three different alignments.

On 2003 January 23 Council met with the Tsuu T'ina Nation Council to discuss the Nation's proposed development plans. Subsequent to the meeting, Council passed a motion to authorize the Mayor, on behalf of Council, to meet with Premier Klein and Chief Big Plume, to continue discussions regarding areas of mutual benefit and concern to The City, The Province and the Tsuu T'ina Nation. Furthermore, the Mayor is to report back to Council no later than the 2003 May 5 Regular Meeting of Council.

INVESTIGATION:

The Value Planning Workshop participants created a list of approximately 142 creative ideas related to alignment, access, valley crossing alternatives, road cross-section, funding alternatives and impact mitigation. These creative ideas were narrowed down through a high level review of generic evaluation criteria including constructionability, implementability, stakeholder impact, environmental impact, flexibility and social impacts.

The participants did not have explicit information about capital costs, life cycle costs or project schedule implications of the creative ideas. Implicit considerations of cost and schedule issues were contained in criteria like constructionability and social impacts. Although this value planning process was a subjective one, it did provide the Administration with a better sense of feasibility of the different options and which options

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to include in this workplan. These have become the seven Focus Options that warrant further engineering, environmental and benefit/cost evaluation as outlined in this workplan.

Seven Focus Option Descriptions (Attachment 3 – Map of Focus Options)

Purple – Sarcee Trail Extension

P1 – Calgary Transportation Plan alignment with a higher level bridge crossing of the Elbow Valley

P2 – Calgary Transportation Plan alignment with a low level crossing of the Elbow Valley

Red – 37 Street S.W. Alignments

R1 – Surface-type of crossing that goes through the valley bottom on or near the 37 Street Extension alignment

R2 – High level bridge crossing on the 37 Street Extension alignment

R3 – Deep tunnel alignment on the 37 Street Extension alignment

Yellow – Crowchild Trail Extension to 37 Street on the south side of the Weaselhead

Y1 – Bridge crossing of the Reservoir

Y2 – Tunnel crossing of the Reservoir

Elements of the Study Workplan

Once the Focus Options have been ratified, the workplan needs to consider the key activities required to complete an evaluation of the environmental impacts and benefit/costs. This includes consideration of mobility, state-of-the-art structural options for crossing the Elbow River valley, cost implications and geophysical, natural, and social impacts. The following is a list of the proposed workplan elements:

1. Structural Option Review (e.g. tunnels and bridges)
2. Environmental and Archaeological Studies Assessments
3. Focus Option Mobility/Network Implications
4. Focus Option Cost Estimates
5. Focus Option Risk Assessment
6. Public/Stakeholder Consultation Program
7. Evaluation of Mechanisms to Ensure Right-of-Way
8. Property Impacts
9. Geophysical Evaluations
10. Funding Options

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Workplan Schedule (Attachment 4)

A workplan schedule has been developed to establish key milestone dates for various activities associated with completing the study. Administration's preliminary advice is that the environmental studies will be the critical path item and would take between 12 to 19 months to complete in order to evaluate factors during all four seasons. The other workplan elements should be completed within that time frame. Given the time sensitive nature of the environmental assessment, it is recommended that Council approve up to \$100,000 be budgeted to allow the data collection for such studies to commence in the spring of 2003. This data is common for all Focus Options.

An outline of communication and consultation activities has also been noted on Attachment 4 showing the commitment to provide the S.P.C. On Transportation, Transit and Parking status reports and to review information and key study decisions approximately every six months until the Southwest Connector Options Review is complete. The completion date is estimated to be in the spring of 2005. When the study is complete, Council could use the study information and recommendations as input to:

- The proposed Calgary Transportation Plan review
- The selection of an alignment and crossing structure
- The protection of right-of-way
- Further discussion of financial and cost sharing options
- Scheduling of infrastructure development in conjunction with Tssu T'ina and Alberta Transportation

ALTERNATIVES:

The Focus Options were selected based on the information available at this time. Further development of details surrounding the exact alignment and crossing structure alternatives is considered to be one of the deliverables of this project. Alternatives for cost sharing of planning studies for the Southwest Connector may depend on the routes being considered and the functional classification of the road.

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ENVIRONMENTAL IMPACT:

It is anticipated that environmental studies will need to meet the criteria of the Federal and Provincial governments as well as The City. There will need to be a Biophysical Inventory Assessment, a Biophysical Impact Assessment and an Archaeological Assessment completed for the study area. It should be noted that the environmental and historical resources studies are required for the entire area encompassed by the seven Focus Options, irrespective of the alignment selected.

COMMUNICATION PLAN:

Stakeholder consultation related to this and other City projects indicates that there is a lot of interest in this project throughout Calgary. For this reason, the workplan schedule (Attachment 4) is quite complex and includes an outline of the communication activities. Various groups (e.g. technical teams, stakeholders, communities and Council) and forums (e.g. stakeholder meetings, open houses and Internet postings) will provide information and opportunities for feedback throughout the development of the study. Also, there will be status reports and key study decision reviews with the S.P.C. on Transportation, Transit and Parking approximately every six months until the Southwest Connector Options Review is complete.

FINANCIAL IMPACT:

Evaluation of seven options to the degree of detail proposed will require substantial financial resources. Previous discussions with the Tsuu T'ina and The Province related to the 2000 Memorandum of Understanding indicated that cost sharing may be possible for this study. There will be both internal administration costs and consulting study costs for this project. The current approved Transportation Infrastructure Investment Program (TIIP) does not include any resources for this study in 2003. If the study were to begin this year, funding would have to be secured and the impact on current approved budget commitments identified. No preliminary study cost estimates are available but the total cost for the technical and communications activities will be hundreds of thousands of dollars. Administration will report with further detail on the financial impacts to the S.P.C. on Transportation, Transit and Parking in 2003 May.

Further to Recommendation 4 of this report, the proposed Environmental Inventory work could be accommodated within the unallocated portion of Transportation Planning's 2003 Operating Budget program for Functional Studies. The Administration recommends that these monies be restored to Transportation Planning's Operation

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Denise Kors

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Budget if Council approves the overall Southwest Connector project and an associated budget in conjunction with our project partners at a later date. The allocation of Operating Budget funds at this point in time represents an effort to undertake one component of the study as soon as possible. If the overall project is not undertaken and these funds are not restored it is likely that another functional study will need to be postponed from the 3rd or 4th quarter of 2003 into early 2004.

CONCLUSION:

The Southwest Connector is an important potential link in the city's network road system. Completion of the workplan outlined in this report would provide valuable information on the environmental and cost/benefit impacts of seven Focus Options for providing this link and determining the best course of action.

The Administration believes that prior to initiating such a major study, Council should be aware of the results and/or progress of discussions with The Province, Tsuu T'ina Nation and the Mayor, slated to be complete in early 2003 May.

Current approved budgets do not include 2003 funding for the complete workplan outlined in this report. Further refinement of cost estimates later in 2003, after the Mayor's 2003 May 5 report to Council will be reported to the S.P.C. on Transportation, Transit and Parking.

ATTACHMENTS:

1. Value Planning Workshop Participants
2. Value Planning Workshop Creative Ideas
3. Focus Options Map
4. Workplan Schedule
5. Frequently Asked Questions – Southwest Connector Workplan