



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: August 31, 2007
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Meeting Date: September 18, 2007

TO: Standing Committee on Transportation and Traffic

FROM: General Manager of Engineering Services

SUBJECT: Downtown Vancouver Transportation and Emergency Management System (DVTEMS)

RECOMMENDATION

- A. THAT, Council authorise staff to proceed with development of the Downtown Vancouver Transportation and Emergency Management System (DVTEMS) as outlined in this report with an estimated total project cost of \$240,000; sources of funding to be:
- 2006 Engineering Streets Capital Budget - \$30,000
 - External partner funding - \$210,000
 - Natural Resources Canada - GeoConnections Program - \$150,000
 - Vancouver Organising Committee (VANOC) - \$30,000
 - Greater Vancouver Transportation Authority (GVTA) - \$15,000
 - BC Provincial Emergency Program (PEP) - \$15,000
- B. THAT, subject to the conditions set out in Recommendations C, D and E, Council approve that an agreement be entered into with PTV America, Inc. for professional engineering services and software procurement, supporting the development of the DVTEMS, at an estimated cost of \$172,255 plus applicable taxes; to be funded from the DVTEMS budget described in Recommendation A.
- C. THAT, all legal documentation is to be in a form which is satisfactory to the Director of Legal Services and the General Manager of Engineering Services.
- D. THAT, upon approval of the legal documentation by the Director of Legal Services, the Director of Legal Services be authorized to execute and deliver the necessary agreement on behalf of City Council.

- E. THAT, no legal rights or obligations will be created by Council's approval of Recommendations B, C and D unless and until the legal documentation has been executed and delivered by the Director of Legal Services.

GENERAL MANAGER'S COMMENTS

The General Manager of Engineering Services recommends approval of Recommendations A through E. The Downtown Vancouver Transportation Emergency Management System (DVTEMS) is an important project with many external funding partners that will support the Northeast False Creek High Level Review as well as Olympic transportation and emergency planning in the Downtown Stadium Precinct.

COUNCIL POLICY

Consultant contracts over \$30,000 are to be approved by Council.

In 1995, Council adopted the "False Creek North Land Use Policy for Special Event, Festival and Entertainment Functions" which includes maintaining special event, festival and entertainment functions as the primary activities of BC Place and GM Place (with sufficient back of house, support areas, staging functions, on-site utilities and services).

In 2007, Council approved the Terms of Reference for the Northeast False Creek High Level Review to identify policies, plans and strategies regarding the future land use, built form, urban structure, infrastructure requirements and public amenities for North East False Creek.

PURPOSE

This report seeks council authority to proceed with the development of the Downtown Vancouver Transportation Emergency Management System (DVTEMS) and to enter into a contract with PTV America, Inc. to provide supporting professional engineering services for the DVTEMS.

BACKGROUND

The City of Vancouver hosts a number of large special events in the Downtown core and throughout the City on a regular basis. The unique nature of these events often present challenges for transportation and emergency services planners. In collaboration with other regional transportation and emergency services agencies, the City proposes to develop a tool to help facilitate safety and transportation decision-making in the planning and operation of large special events in Downtown Vancouver. The proposed system is titled the Downtown Vancouver Transportation and Emergency Management System (DVTEMS).

The DVTEMS will be a modelling tool that will simulate crowd and traffic behaviour during special events, based on real world observations. This tool will help predict travel patterns for special event attendees under a variety of normal and emergency conditions. The project scope will focus on the Downtown Stadium Precinct adjacent to BC Place and GM Place;

however, the system will have the capability to expand beyond this geographic scope in the future.

The DVTEMS is proposed to help plan events in such a way as to improve the quality of the event experience, reduce impacts on the transportation network and improve the planning of emergency services. The DVTEMS will also support transportation and emergency planning efforts for the 2010 Olympic and Paralympic Winter Games which will have multiple event sites (including BC and GM Places) within the Downtown peninsula, generating large volumes of event related pedestrian and vehicle traffic.

The City applied for and received approval for \$150,000 in project funding to develop the DVTEMS from the federal government under its GeoConnections program. The City will be taking the lead in developing the DVTEMS, but the project is a collaborative effort and includes the following funding or in-kind partners:

- Vancouver Organizing Committee (VANOC)
- Greater Vancouver Transportation Authority (GVTA)
- British Columbia Provincial Emergency Program (BCPEP)
- Justice Institute of British Columbia (JIBC)

In accordance with the requirements of the Government of Canada's GeoConnections Program, the DVTEMS tool would be developed to allow distribution of model output to a wide range of users based on a common web mapping platform. In this way, DVTEMS results can be shared quickly and easily with multiple partner agencies, facilitating information sharing and cooperation.

The DVTEMS will assist staff in supporting a number of current projects including, the Northeast False Creek High Level Review (May 2007) by helping inform decisions regarding the impact of special events on the Downtown Stadium Precinct and adjacent land uses. The DVTEMS will also help staff maximise compatibility and minimize conflict where residential use is proposed in close proximity to event functions, a goal of the False Creek North: Land Use Policy for Special Event, Festival and Entertainment Functions (July 2005).

DISCUSSION

A Request for Proposals (RFP) for a "Downtown Vancouver Transportation and Emergency Management System" was released by the City on June 29, 2007. The RFP was advertised on the City's and BC Purchasing Commissions' web site. An advertisement was placed in the Journal of Commerce and the City notified numerous transportation planning firms. The services required by the contractor in the RFP include:

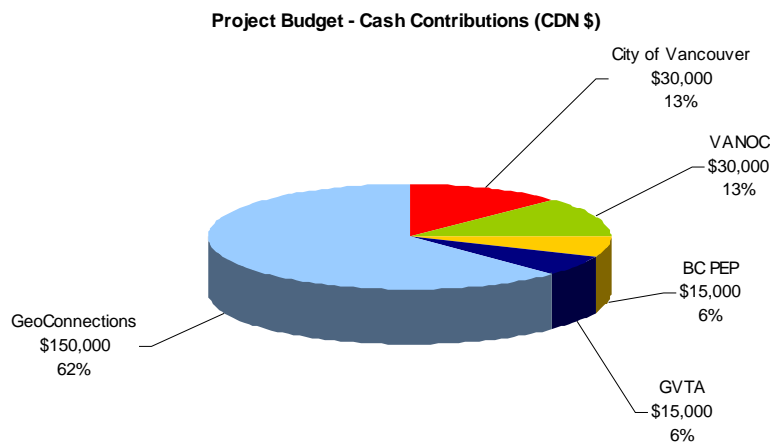
- Pedestrian and vehicle special event modelling of the Downtown Stadium Precinct, with the ability for future geographic expansion.
- Analysis of a series of special event scenarios.
- A model interface compatible with other GeoConnections Canada web services.
- A documentation and training program to facilitate the City's future use and maintenance of the DVTEMS.

A total of five proposals were received and evaluated by a staff team and three teams were short-listed for interviews. PTV America, Inc. emerged as the strongest proposal based on value for money and their ability to deliver the proposed DVTEMS successfully.

The DVTEMS project will be led by the City through Engineering Services. A Project Steering Committee will be created to ensure that the project meets the objectives of each partner agency and to provide a forum for dissemination of results; agencies that contribute funding to the project will hold positions on the Project Steering Committee (GeoConnections Canada, VANOC, GVTA, and BCPEP). In addition, a Technical Project Working Group will be formed by all project contributors to discuss technical issues.

FINANCIAL IMPLICATIONS

The total cost of developing the DVTEMS including software procurement and staff training is estimated at \$240,000. City funding of \$30,000 (13%) is available through the Engineering Services 2006 Streets Capital Budget - A4a3 Geometric and Safety Improvement on Arterials, with the remaining \$210,000 (87%) being contributed from external sources. Total project funding sources are broken down as follows:



Project expenditures are estimated as follows:

- \$50,000 for a Civil Engineering II (CEII) position for 6 months
- \$180,000 for professional engineering services and software procurement
- \$10,000 for other City costs including materials, training and office space

Based on the preferred consultant proposal (PTV America, Inc.), the combined professional engineering and software acquisition costs will be \$172,255 resulting in a project contingency of \$7,745 (or 3.2% of \$240,000).

It is anticipated that ongoing maintenance of the DVTEMS will not require any increases to the operating budget. However, staff will report back to Council at the end of the project in spring 2008 with project results and any requests for additional project funding depending on the perceived long term usefulness of the DVTEMS, its possible expansion to the entire Downtown core, and its public safety and decision making value to its partners.

PERSONNEL IMPLICATIONS

The six month temporary full-time CEII position funded through the DVTEMS project will be combined with the Council approved one year temporary full-time CEII position for the Northeast False Creek High Level Review, and thus will be available full-time over a period of 18 months.

IMPLEMENTATION PLAN

In accordance with the requirements of the GeoConnections application and consistent with PTV America's proposed schedule, the DVTEMS project would start immediately and conclude by the end of February 2008.

CONCLUSION

Staff recommends that Council authorize staff to proceed with the DVTEMS project and enter into an agreement with PTV America, Inc. to provide professional engineering services and software procurement to the project, subject to the conditions outlined in the Recommendations.

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