



THE CORPORATION OF THE CITY OF COURTENAY

STAFF REPORT

To: Council

File No.: 8620-01; 16009

From: Chief Administrative Officer

Date: October 3, 2016

Subject: Complete Streets Pilot Project - 5th Street and Fitzgerald Avenue Pop-Up Intersection

PURPOSE:

The purpose of this report is to review with Council the opportunity to install a temporary ("pop-up") intersection at 5th Street and Fitzgerald Avenue in order to better inform the design process for the 5th Street Complete Streets Pilot Project.

CAO RECOMMENDATIONS:

That, based on the October 3, 2016 staff report entitled "*Complete Streets Pilot Project - 5th Street and Fitzgerald Avenue Pop-Up Intersection*", Council approve Option 1 and direct staff to proceed with installation of the temporary ("pop-up") intersection at 5th Street and Fitzgerald Avenue in 2017.

Respectfully submitted,

David Allen, BES, CLGEM, SCLGM
Chief Administrative Officer

BACKGROUND:

In February 2016, the City of Courtenay was awarded \$3.253 million to construct a Complete Streets Pilot Project on 5th Street between Fitzgerald Avenue and Menzies Avenue, a distance of approximately 530 metres. The community was involved in the conceptual design process in May of this year, with options to be presented to Council in October 2016.

As part of the project development and conceptual design process, the intersection of 5th Street and Fitzgerald Avenue was identified as an important gateway to Downtown Courtenay, and a transition point between the Complete Streets Pilot Project and the Downtown core. Although full intersection improvements were not specifically included in the grant application there may be opportunities to make some improvements to this intersection as part of the overall project.

DISCUSSION:

The intersection of 5th Street and Fitzgerald Avenue is a multi-lane all-way stop. This configuration permits up to eight vehicles to arrive at the intersection simultaneously, which can be confusing to motorists, particularly when coupled with a high volume of pedestrian crossings. Currently pedestrians are not prioritized appropriately at the intersection. The crossing distance is great, exposing pedestrians to vehicles for longer than necessary, and with multiple lanes in each direction it is difficult for pedestrians to be seen by motorists. The retrofit of 5th Street on the west leg of the intersection will likely introduce

dedicated cycling infrastructure to encourage more multi-modal travel, which will further complicate the intersection operations.

The purpose of the proposed “pop-up” intersection is to understand the impacts to traffic when a shift is made from prioritizing vehicle movements to providing space for bike lanes and improved crossings for pedestrians. The intersection re-configuration would reduce the travel lanes approaches from two to one lane in each direction. While this geometry is more typical of an all-way stop intersection configuration, it may lead to traffic back-ups along both 5th Street and Fitzgerald Avenue. The “pop-up” intersection will give staff some indication of how traffic will react to a change at the intersection geometry and where traffic will re-route to avoid the queues. This information will assist staff in designing the transition back to the existing roadway, better understanding the future design requirements of the intersection, as well as determining what improvements may need to be made at surrounding intersections to accommodate possible traffic volume increases.

As part of this approach, staff has undertaken the following:

- Performed traffic counts at 5th and Fitzgerald
- Performed additional traffic counts on adjacent intersections – 4th and Fitzgerald, 5th and Fitzgerald, 5th and Harmston, and 6th and Fitzgerald – in order to assess the “before” traffic conditions.
- Commissioned Urban Systems to review and provide a recommended temporary intersection design and cost estimate for installation.

Urban Systems has prepared a design for a one lane, 4-leg temporary intersection (provided as Attachment A), which will accommodate all traffic movements as well as all vehicle types, including the Fire Department’s ladder truck. The estimated budget to construct the temporary installation will be approximately \$30,000 - \$50,000, which will include the set-up, take-down, material purchases, and internal staff time and labour costs. Public Works staff, under the direction of Urban Systems, will set-up and take-down the temporary intersection, each of which will take the Roads Crew approximately two days.

Staff is proposing the “pop-up” intersection be installed in spring 2017, and run for approximately three to six months. During this trial period, staff would conduct repeat traffic counts at the key intersections listed above, to determine if traffic patterns change as a result of the modifications to the intersection. A spring installation will give staff time to assess the area while school is in and out of session, during warmer months when pedestrian and cyclist volumes will likely be higher, and ensures that the temporary materials would not be in place during the winter months when they may complicate snow clearing. This time frame also fits with the detailed design phase of the project, enabling staff to use the information collected towards the final design of the intersection.

FINANCIAL IMPLICATIONS:

On February 12, 2016 the City of Courtenay was awarded \$3.253 million in funding to construct a Complete Streets Pilot Project on a section of 5th Street. This funding is from the Strategic Priorities fund under the Federal Gas Tax Fund. This grant provides 100% funding for all eligible costs related to the infrastructure project.

The budget for the temporary intersection installation is estimated at \$30,000 - \$50,000 and may need to be funded outside of the grant project. With Council’s support, staff would add this project to the 2017 capital budget for Council’s endorsement.

ADMINISTRATIVE IMPLICATIONS:

This project will inform the overall 5th Street Complete Streets Pilot Project which is part of Staff's 2016 work plan and as such, the project work is already accounted for.

ASSET MANAGEMENT IMPLICATIONS:

The use of a temporary installation of the 5th / Fitzgerald intersection will provide the supporting data, analysis and community feedback for the final design of the 5th Street Complete Streets Pilot Project. Investing a relatively small amount of budget in advance of the final design will ensure that we build the appropriate infrastructure assets that balance all modes of transportation, consistent with the City's transportation policies and strategic priorities.

STRATEGIC PRIORITIES REFERENCE:

The Complete Streets Pilot Project is a Council priority and supports the 2016- 2018 Strategic Priority

We value multi-modal transportation in our community

- We support developing multi-modal transportation network plans
- As we build new or replace existing transportation infrastructure, we are consistent with what we learn from our Complete Streets Pilot Project
- △ Support our regional transit service while balancing service improvements with costs



- **Area of Control**
The policy, works and programming matters that fall within Council's jurisdictional authority to act.
- ▲ **Area of Influence**
Matters that fall within shared or agreed jurisdiction between Council and another government or party.
- **Area of Concern**
Matters of interest outside Council's jurisdictional authority to act.

OFFICIAL COMMUNITY PLAN REFERENCE:*The Downtown*

Maintain a pedestrian orientation in downtown and integrated transportation planning (i.e., taking all modes of movement into account). (pg 11)

Transportation

5.2 Goals

2. Development of a transportation system that provides choices for different modes of travel including vehicle, transit, pedestrian, cycling and people with mobility impairments. (pg 59)

REGIONAL GROWTH STRATEGY REFERENCE:

Goal 4 – Transportation (pg 49, 50)

Objective 4-B:

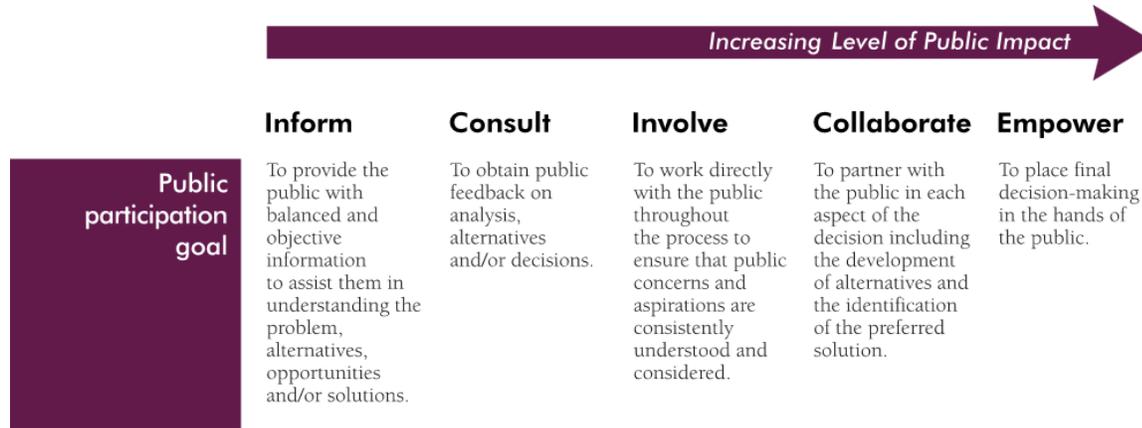
Improve bicycle and pedestrian infrastructure to increase the use of active transportation options.

Targets: 20% bicycle and pedestrian commuters by 2030

CITIZEN/PUBLIC ENGAGEMENT:

Staff will inform and consult with key stakeholders and the public based on the IAP2 Spectrum of Public Participation:

http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum_vertical.pdf



Changes to traffic patterns are not typically well received and staff anticipates some negative feedback especially at the initial stage of the installation. Staff will work to engage with the public by placing project information signage at the intersection to speak to nature of the project and the benefits of the knowledge gained by this undertaking; preparing media releases and newspaper and radio advertising will be prepared well in advance of the installation.

Staff will then monitor traffic patterns over a three to six month period following the installation, in order to compare the “before and after” traffic impacts. The City will also seek feedback from key stakeholders and the community throughout the process. At the end of the temporary installation, Urban Systems Ltd will review the traffic data and community feedback, and incorporate it into the final design of the 5th Street Complete Streets Pilot Project.

OPTIONS:

- Option 1: Council directs staff to proceed with the installation of a temporary intersection at 5th and include this in the 2017 City budget.
- Option 2: That Council does not support with the installation of a temporary “pop-up” intersection at 5th Street and Fitzgerald Avenue.

Prepared by:

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 Director of Engineering Services

ATTACHMENT A - Temporary Intersection Design Option 1 (4-Leg)

5th ST- FITZGERALD AVE INTERSECTION



ISSUED FOR DISCUSSION ONLY
 Aug 04 2016
urban-systems.ca

Client/Project	CITY OF COURTENAY		
Scale	Date	Figure	Title
1:750	2016-08-04	SK-02	INTERSECTION DESIGN
3,222,004.4.01			