



Governance and Priorities Committee Report For the July 2, 2015 Meeting

To: Governance and Priorities Committee **Date:** June 26, 2015
From: Brad Dellebuur, A/Assistant Director, Transportation and Parking Services
Subject: Pandora/Johnson Cycling Corridors – Public Consultation/Recommended Design

Executive Summary

The purpose of this report is to update Council on the results of public consultation on a proposed bike facility on Pandora Avenue, including two design options, and seek Council approval on the proposed design.

At the March 12, 2015 meeting, Council passed the following motions:

1. *That Council commits to consultation, design and installation of a safe and efficient cycling facility on Pandora Avenue;*
2. *That consultation proceed on two design options:*
 - a. *A two-way protected bike lane with traffic signal changes on Pandora Avenue*
 - b. *A pair of one-way protected bike lanes with traffic signal changes on Pandora Avenue and Johnson Street*
3. *That staff report back to Council by June 2014 with the results of consultation and a proposed design for this cycling facility.*

A “pop up bike lane” was introduced in conjunction with an on-street open house in May 2015 to solicit input from the public and showcase the different types of separation, as well as for the public to experience what a protected bike lane along Pandora Avenue could look and feel like. Approximately 400 people attended the open house, and over 750 surveys were submitted.

While there were a number of positive comments and concerns raised for each option, the most commonly shared benefit of Option A by the public was that it would be a great connection to the Galloping Goose Trail. The biggest concern was related to possible confusion with having a two-way bike lane on a one-way street.

The most commonly shared benefit of Option B by the public, was that maintaining the flow of traffic in one direction made sense, while the biggest concerns were about project costs and impacts to parking.

During the open house, the most commonly received feedback was that it does not matter what the City uses to separate the bike lanes from moving vehicles, as long as the bike lanes were separated. Survey respondents were most interested in using parked cars with bollards as a type of separation.

Overall, there was a split preference for constructing a two-way protected bike lane along Pandora Avenue, or a set of one-way protected bike lanes along Pandora Avenue and Johnson Street. Both options presented to the public had significant support and concerns, which did not provide a clear indication of one preferred option.

In addition to the two options presented to the public, the Greater Victoria Cycling Coalition put forward a hybrid option - a two-way fully protected bike lane with traffic signal changes on Pandora Avenue, and a one-way fully protected bike lane with traffic signal changes on Johnson Street. While this option does provide fully protected facilities on both corridors, this would be the most expensive design solution for these two streets.

For overall connectivity to existing bike lanes and regional trails, consistency in design, impacts other uses of the right-of-way, and lowest overall cost, staff recommend Council endorse the design and construction of a two-way fully protected bike lane with traffic signal changes on Pandora Avenue, and marked bike lanes on Johnson Street.

The public preference for using parked vehicles and bollards to provide separation is also recommended, with enhanced separation used at critical areas to ensure a high level of protection is maintained for vulnerable road users.

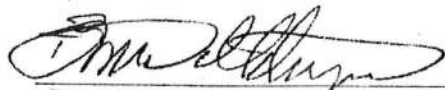
Subject to approval of a preferred option, a Request for Proposal will be issued in July to select a consultant to complete a detailed design for the improvements on Pandora Avenue. Construction is currently scheduled to start in the fall of 2015, with completion anticipated for the spring of 2016. Funding is currently allocated in the 2015 Capital budget for Pandora Avenue, and staff have also submitted an application for Gas Tax funding for this project.

Post-construction, staff will provide an update report to Council in October 2016, with public comments and feedback, changes in mode share on the corridor, and recommended changes for the project, as necessary. This information will also be used to guide development of other bike corridor projects being planned.

Recommendations

1. That Council endorse the design and construction of a two-way fully protected bike lane with traffic signal changes on Pandora Avenue, and marked bike lanes on Johnson Street.
2. That physical separation used in the design be primarily parked vehicles and bollards, with enhanced separation (concrete islands) used at bus zones, mid-block crosswalks, and at the approach to intersections where parking is not permitted.

Respectfully submitted,



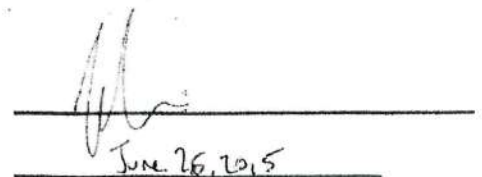
Brad Dellebuur, A/Assistant
Director, Transportation and
Parking Services



Katie Hamilton, Director
Citizen Engagement &
Strategic Planning

Report accepted and recommended by the City Manager:

Date:



June 26, 2015

Purpose

The purpose of this report is to update Council on the results of consultation on a proposed bike facility on Pandora Avenue, including two design options, and to receive Council approval on the proposed design.

Background

At the March 12, 2015 meeting, Council passed the following motions:

1. *That Council commits to consultation, design and installation of a safe and efficient cycling facility on Pandora Avenue;*
2. *That consultation proceed on two design options:*
 - a. *A two-way protected bike lane with traffic signal changes on Pandora Avenue*
 - b. *A pair of one-way protected bike lanes with traffic signal changes on Pandora Avenue and Johnson Street*
3. *That staff report back to Council by June 2014 with the results of consultation and a proposed design for this cycling facility.*

Issues & Analysis

In May 2015 an online survey, and on-street “pop-up” bike lane Open House were conducted to solicit feedback on proposed protected bike lanes, and the public’s preferred type of separation. The goal of public engagement was to:

- To determine what the potential benefits and impacts of each protected bike lane design option may be for business owners, cyclists, local residents, pedestrians and motor vehicle drivers.
- To seek community feedback on the preferred type of separation from vehicle traffic.

The two options presented to the public were:

- A. A two-way protected bike lane with traffic signal changes on Pandora Avenue with marked bike lanes on Johnson Street (see Figure 1).
- B. A pair of one-way protected bike lanes with traffic signal changes on Pandora Avenue and on Johnson Street (see Figure 2)

A pop up bike lane and open house were used to solicit feedback from the community through an interactive format, demonstrate what a protected bike lane could look and feel like, as well as showcase possible types of separation.

The pop-up bike lane was hosted during Bike to Work Week to better capture as many participants – as well as those not normally commuting to work – out on their bikes as possible. The City also had a presence at two stations during Bike to Work Week.

Supporting materials were shared to help explain the new-to-Victoria protected bike lanes and increase understanding on how a protected or two-way bike lane would work in Victoria. Feedback from the public was captured through an ideas board, drawing directly on the conceptual illustrations and through the survey.

Print ads, a media release, stakeholder emails, hand-delivered invites to residential and businesses along Pandora Avenue and Johnson Street, social media, website content, an ad on the Save-On-Foods Memorial Arena display board, “Future Bike Lanes Coming” signs lining the two corridors, and Bike to Work Week celebration stations were all used to raise awareness about engagement opportunities.

The detailed results of the online survey, and an on-street “pop-up” bike lane Open House in May 2015, are summarized and available on *HaveYourSay*, the City of Victoria’s online consultation portal.

The public identified the following positive impacts and concerns:

Option A - a two-way protected bike lane with traffic signal changes on Pandora Avenue (with marked bike lanes on Johnson Street):



Figure 1 – Two-way protected bike lane (with signal changes) – Pandora/Douglas looking towards the Johnson Street Bridge

Positive Impacts

- It creates a direct and easily accessible connection to the Galloping Goose Trail
- It creates a protected and safe environment, separated from vehicle traffic for cyclists on a downtown street
- It would help encourage new riders, including all ages and abilities riders and families to use cycle
- Option A seems to be the least expensive of the two options, as it only affects one corridor and not two
- Option A has a lower impact to parking downtown (fewer spaces eliminated)
- Greater accessibility to downtown
- Increased health benefits – promotes cycling

Concerns

- A two-way bike lane on a one-way street will create confusion for drivers, cyclists and pedestrians
- Cyclists will have head-on collisions with each other on a two-way bike lane

- Increased driver-cyclist and pedestrian-cyclist conflicts and collisions at intersections and driveway crossings
- Bike lanes possibly being too narrow for passing, increasing cyclist-cyclist conflicts and collisions
- Increased vehicle traffic congestion and the frustration of drivers not being able to turn right on red lights
- A significant reduction in parking for businesses along Pandora Avenue
- Cyclists turning at intersections
- Congestion along a two-way bike lane with faster and slower cyclists

Option B - a pair of one-way protected bike lanes with traffic signal changes on Pandora Avenue and on Johnson Street:



Figure 2 – One-way protected bike lane (with signal changes) – Pandora/Douglas looking towards the Johnson Street Bridge

Positive Impacts

- Having cyclists and vehicle traffic travelling in the same direction is simple, safe and helps reduce possible confusion – it would be more natural and intuitive for drivers, cyclists and pedestrians
- Less congestion than a two-way bike lane and fewer chances for possible cyclist-cyclist collisions
- Option B provides safe, protected cycle facilities on two streets downtown, not just along one
- Keeps the flow of vehicle and cyclist traffic in one direction
- Less road space is needed for one-way bike lanes than a two-way bike lane

Concerns

- Higher cost to build
- Less of a connection with the Johnson Street Bridge and Galloping Goose Trail

- Higher overall impact on parking
- Negative impacts for businesses along Johnson Street
- Cyclists riding along one-way bike lanes in the wrong direction
- Impedes vehicle traffic and creates more congestion along two streets downtown rather than just one with no right hand turns on red lights

The feedback did not identify a preferred option by the public.

While there were a number of positive comments and concerns raised for each option, the most commonly shared benefit of Option A by the public was that it would be a great connection to the Galloping Goose Trail, while the biggest concern was related to possible confusion with having a two-way bike lane on a one-way street.

The most commonly shared benefit of Option B by the public was that maintaining the flow of traffic in one direction made sense, while the biggest concerns were about project costs and impacts to parking.

Separation

Four types of separation were incorporated into the proposed design drawings, on display at the on-street open house pop-up bike lane, and in conceptual drawings used on the website and online survey. People at the Open House confirmed their support for a separated facility, however, there was no preferred type of separation identified. Survey respondents were most interested in using parked vehicles and bollards to separate bike riders from vehicle traffic.

Options and Impacts

Option A

Option A would connect a two-way protected bike facility on Pandora Avenue to the Galloping Goose Trail, and would eventually connect to other north/south fully-protected corridors planned for the City, including on Vancouver Street. Traffic signal upgrades and phasing changes will prohibit drivers from turning right across the bike lanes when Pandora Avenue bike riders are riding through signalized intersections. Eastbound bike riders coming from Victoria West who are uncomfortable riding with traffic will likely be on the E&N Rail Trail or the Galloping Goose Trail, and will come off the Johnson Street Bridge on the north side of the new bridge structure. From this location, people on bikes could continue east on Pandora Avenue, or south in fully-protected bike lanes planned for the Wharf Street/Government Street/Belleville Street corridor.

Marked bike lanes on Johnson Street would be an extension of the marked bike lanes proposed for the road deck of the new Johnson Street Bridge, and would connect to existing marked bike lanes east of Cook Street. Eastbound bike riders coming from Victoria West who are comfortable riding in marked bike lanes will likely be using the marked bike lanes on the road portion of the Johnson Street Bridge and on Esquimalt Road. Marked bike lanes at this time do not preclude upgrading to a one-way protected facility on Johnson Street in the future.

The right-of-way on most of Pandora Avenue is wider than Johnson Street, and the impact of re-assigning road space for a dedicated bike facility would have less impact (to parking and loading, and to accessibility for people driving vehicles).

A total of 44 on-street parking spaces on the north side of Pandora Avenue between Store Street and Cook Street would be removed to accommodate a two-way protected bike lane. Approximately nine to 11 parking spaces would be removed in each block, except in the 700 and 800 blocks, where three on-street spaces per block would be removed.

Option A is estimated to cost \$2,160,000. The two-way fully-protected bike lane on Pandora Avenue is estimated to cost \$2,060,000, while marked bike lanes on Johnson Street are estimated to cost \$100,000.

Option B

The one-way cycling facilities on one-way streets in Option B would likely be perceived to be more intuitive for drivers, cyclists, and pedestrians, as people driving cars and riding on bikes would be travelling in the same direction. However, the physical space required to install two one-way bike lanes on Pandora Avenue and on Johnson Street (1.8m on each street, plus separation) is greater than the space required for a two-way facility on Pandora Avenue (3.0m, plus separation). In addition, Option B requires narrowing the sidewalk on the south side of Johnson Street between Store Street and Broad Street (which would impact space for pedestrians), has a greater impact to vehicle right-turn movements in the downtown core, and would have a greater impact to on-street parking/loading for businesses on both corridors.

Overall, approximately 78 parking spaces would be removed along Pandora Avenue and Johnson Street. Approximately four to six parking spaces would be removed in each block, except in the 600 block, where nine on-street spaces would be removed and the 800 block, where only one on-street space would be removed.

Option B is estimated to cost \$2,865,000. A one-way fully-protected bike lane on Pandora Avenue is estimated to cost \$1,750,000, while a one-way fully-protected bike lane on Johnson Street is estimated to cost \$1,115,000. Because this option includes two bike facilities on two different streets, it requires more concrete work, more traffic signal changes, and more paint markings.

Hybrid Option

In addition to the two options presented to the public, the Greater Victoria Cycling Coalition provided their analysis of the two options, and put forward a hybrid option. The hybrid option includes a two-way fully protected bike lane with traffic signal changes on Pandora Avenue (as proposed in Option A), and a one-way fully protected bike lane with traffic signal changes on Johnson Street (as proposed in Option B). While this option does provide fully protected facilities on both corridors, it would be the most expensive design solution (estimated at \$3,175,000) for these two streets.

Similar to Option B, the hybrid option requires narrowing the sidewalk on the south side of Johnson Street between Store Street and Broad Street. This would impact space for people walking in a heavily-used area of downtown. The sidewalk width could be maintained, by removing on-street parking/loading in front of small ground-floor retail space on one side of Johnson Street between Store Street and Broad Street.

A financial comparison of the three options is below:

	Pandora Avenue	Johnson Street	Total Cost
Option A	\$2,060,000	\$100,000	\$2,160,000.00
Option B	\$1,750,000	\$1,115,000	\$2,865,000.00
Hybrid Option	\$2,060,000	\$1,115,000	\$3,175,000.00

The estimates for both options include construction of concrete medians, reconstruction of curb, gutter and sidewalk as required, new traffic signal hardware and associated underground ducting, downtown traffic signal network changes, tree removal and replacement, partial road repaving, bus shelter relocations, signs, and paint markings.

Conclusion

For overall connectivity to existing bike lanes and regional trails, consistency in design, impacts other uses of the right-of-way, and lowest overall cost, staff recommend Council endorse the design and construction of a two-way fully protected bike lane with traffic signal changes on Pandora Avenue, and marked bike lanes on Johnson Street.

The public preference for using parked vehicles and bollards to provide separation is also recommended. Enhanced separation (concrete islands) identified in the conceptual drawings should still be included at critical areas (bus zones, mid-block crosswalks, and at the approach to intersections where parking is not permitted) to ensure a high level of protection is maintained for vulnerable road users.

Next Steps and Timelines

Subject to approval of a preferred option, a Request for Proposal will be issued in July to select a consultant to complete a detailed design for the improvements on Pandora Avenue. Construction is currently scheduled to start in the fall of 2015, with completion anticipated for the spring of 2016. Funding is currently allocated in the 2015 Capital budget for Pandora Avenue, and staff have also submitted an application for Gas Tax funding for this project. While construction is currently planned to be done by City staff, Gas Tax funding conditions require that the project be constructed by non-City forces. A tender process to select a contractor would be required, should Gas Tax funding be secured.

Final designs will be consistent with information contained in this report, and with conceptual designs presented to the public (see <http://www.victoria.ca/EN/main/community/cycling/new-cycling-projects/protected-bike-lanes.html>). As the project moves towards construction, property owners, residents, and businesses on the corridor will be provided with advance notifications and design information on the project, which will also be posted on the City's website for the general public.

Post-construction, staff will be monitoring and evaluating how the new design is working. Staff will provide an update report to Council in October 2016, with public comments and feedback, changes in mode share on the corridor, and recommended changes for the project, as necessary. This information will also be used to guide development of other bike corridor projects being planned.

Recommendation

1. That Council endorse the design and construction of a two-way fully protected bike lane with traffic signal changes on Pandora Avenue, and marked bike lanes on Johnson Street.
2. That physical separation used in the design be primarily parked vehicles and bollards, with enhanced separation (concrete islands) used at bus zones, mid-block crosswalks, and at the approach to intersections where parking is not permitted.

c:\users\bradd\Desktop\pandora_johnson_consultation_july_2_gpc.doc