

### Committee of the Whole Report

For the Meeting of May 16, 2024

To: Committee of the Whole Date: May 3, 2024

From: William Doyle, Acting Director, Engineering and Public Works

**Subject:** Douglas Street Downtown Dedicated Bus Lane Update

#### RECOMMENDATIONS

That Council direct staff to:

- 1. Transition the current time-limited dedicated bus lanes between Hillside Avenue and Herald Street to be in effect 24 hours a day, 7 days a week starting in 2025 (Segment A as described in this report).
- 2. Commence detailed design for dedicated bus lanes and other complete street improvements on Douglas Street, between Hillside Avenue and Belleville Street (Segments B and C Option F as described in this report).
- 3. Report back by Q1 of 2026 following the outcomes of detailed design and provide associated recommendations on next steps for project implementation.

#### **EXECUTIVE SUMMARY**

Over the past three decades, multiple studies and cost benefit analyses have been completed emphasizing the need for and benefits of rapid transit to service growth across the region. One of BC Transit's priorities for rapid transit is the implementation of the Westshore to Downtown RapidBus which includes investments on Highway 1 and Douglas Street.

Several City polices and plans align with delivering rapid transit on Douglas Street to increase service reliability and improve the overall customer experience. Improved transit service supports increasing transit mode share (Go Victoria), reducing transportation related greenhouse gas emissions (Climate Leadership Plan), and supporting transit-oriented development (Official Community Plan).

To support the BC Transit *RapidBus Implementation Strategy*, staff from both agencies have worked collaboratively to study various bus lane design options. This report focuses on proposed changes to upgrade the Douglas Street corridor and provides Council with recommended design approaches to achieve dedicated bus lanes from Hillside Avenue to Belleville Street. In addition to bus lanes, the City would use the opportunity to undertake streetscape renewal on Douglas Street to address aging infrastructure (including paving, signals, and transit stops) and improve the overall experience on one of downtown Victoria's most prominent streets.

Pending Council's support of the recommendations in this report, staff would continue working with BC Transit to begin detailed design of offset transit lanes and develop associated funding strategies for implementation. The City would also pursue funding opportunities through the new Government of Canada transit fund, set to launch in 2026. Dependant on funding, construction could begin as early as 2027. Staff are also recommending near term improvements for 2025 to improve existing transit lanes in advance of the more significant improvements. Staff would report back by Q1 2026 with project updates and further recommendations for implementation.

#### **PURPOSE**

The purpose of this report is to share the status on advancing dedicated transit lanes on Douglas Street south of Hillside Avenue and seek Council direction on next steps.

#### **BACKGROUND**

The Douglas Street corridor has the highest transit ridership in the province outside of Metro Vancouver and is a top priority for Phase 1 of the Victoria Rapid Bus Implementation Strategy. On a typical weekday p.m. peak, Douglas Street carries approximately 140 buses including 3,500 transit passengers, 1,400 people walking, 150 people cycling and 1,300 vehicles. Transit service supports the goal of realizing complete, compact low-carbon communities as identified in the Official Community Plan, the CRD Regional Transportation Plan and Council's Strategic Plan.

The City's mobility strategy, Go Victoria, includes a target of 24% transit mode share by 2030. While decisions on transit funding and service levels are determined by the Victoria Regional Transit Commission, the City plays a role through supportive land use, transit-oriented development, programs such as the Youth Universal Bus Pass and streetscape designs. The 2022 Origin and Destination Study reported 9% of all trips to, from and within Victoria are made by public transit. In 2023, BC Transit reported over 30 million annual boardings in the region, up from 25 million in 2022.

BC Transit, the City of Victoria, and other levels of government have been working together on advancing incremental transit improvements between downtown and the Western Communities for several years. The corridor has been identified, endorsed, and already partially implemented based on comprehensive studies, technical analysis and engagement with municipal governments, the provincial government, representatives of the business community, and the public. Plans continue to receive on-going support from the Victoria Regional Transit Commission (VRTC) and investments in the southern portion, south of Hillside Avenue, remain a priority.



Figure 1: 10-year infrastructure plan (BC Transit RapidBus Implementation Strategy)

In October 2022, Council directed staff to develop options and recommendations for establishing dedicated bus lanes through the downtown core. Staff worked with a consultant team and BC Transit in 2023 to develop and assess multiple streetscape configurations and design approaches to understand how to best provide dedicated transit lanes while also addressing circulation needs, road safety objectives and other network priorities. Staff also considered opportunities to pair bus lanes with other asset renewal priorities and complete-street features such as boulevard trees, placemaking, and accessibility improvements.

Current streetscape designs and transit stops on Douglas Street do not reflect a modern, accessible, and attractive transit system. This corridor is a prime candidate for investments to improve transit service quality, customer experience and encourage increased ridership while supporting housing and employment densification goals.

#### **ISSUES & ANALYSIS**

Providing dedicated transit lanes on Douglas Street south of Hillside Avenue requires several considerations and trade-offs. Given the diverse land uses, commercial needs, right-of-way constraints and streetscape aspirations, the study area has been broken up into three segments for analysis.

- Segment A (Hillside Avenue to Herald Street) Transition to 24/7 curb-side dedicated bus lanes.
- Segment B (Herald Street to Humboldt Street) Introduce dedicated bus lanes in association with complete street improvements.
- Segment C (Humboldt Street to Belleville Street) Introduce a new rapid bus terminus and transit exchange function.

The intent is to upgrade Douglas Street as a corridor to safely move as many people as possible, set the scene for future transit and land use investments and meet a broad range of City goals.

#### **Segment A (Hillside Avenue to Herald Street)**

Between Hillside Avenue and Herald Street, dedicated bus lanes are time-limited<sup>1</sup>. Outside of designated hours, private and commercial vehicles may use the lane for travel, parking and/or loading depending on the curbside regulation. Cyclists share the road with vehicles, including buses.

With the introduction of the #95 RapidBus route in 2023, the time limited bus lanes no longer meet BC Transit's needs (bus volumes on the weekend are nearly as high as weekdays and service frequency in both directions has increased outside of peak periods) or the City's goals and targets outlined in Go Victoria.

Current restrictions are not consistent with the northern sections of Douglas Street, which are designated 24 hours, 7 days a week. When not being used for transit priority or general-purpose travel, vehicle parking is allowed and regulated with a maximum 2-hour stay. There are no parking restrictions over the weekend. The current configuration was implemented in 2016 with a goal to balance needs for business access and transit service levels at the time. There continue to be regular occurrences of vehicles remaining parked in transit lanes during prohibited hours and while the City uses enforcement (ticketing and towing), this activity can still result in impacts to transit.

<sup>&</sup>lt;sup>1</sup> In the southbound direction, the most westerly lane is dedicated for transit use between 6am and 9am, Monday to Friday. In the northbound direction, the most easterly lane between Hillside Avenue and Pembroke Street is dedicated to transit use 24 hours a day Monday through Friday, while the same lane between Pembroke and Herald is dedicated to transit between 3pm and 6pm, Monday to Friday.

Shifting to dedicated bus lanes 24 hours a day, 7 days a week in both directions between Hillside and Herald Street would provide immediate benefit to transit users and align with the City's current policy and mobility goals. This change would remove 52 time-limited parking stalls in the southbound lane and 21 in the northbound lane (total 73 stalls). An occupancy study from February 2023 identified that parking utilization in this zone did not exceed 55%.

Because only signage changes are required, this change could be implemented in 2025. Longer term, the City could make more substantial streetscape changes in this zone. Any cross-section design changes would be best coordinated with asset renewal such as road paving and underground infrastructure upgrades. This design work would be included in the scope of the detailed design efforts described in this report.

#### **Segment B (Herald Street to Humboldt Street)**

This segment has the highest concentration of bus routes and there are no dedicated transit facilities. Transit service can be hindered by traffic congestion, parking and loading activities, vehicle turning movements, and people travelling in bike lanes. There is limited room for accessible bus shelters on sidewalks and pedestrian space is constrained in several areas. Throughout 2023 staff worked in partnership with BC Transit to develop and rank different design approaches for this segment. A multiple account evaluation analysis teased out the most suitable design options and helped identify both opportunities and trade-offs.

Different designs were informed by City policies on mobility, urban forest stewardship, public realm, heritage preservation, and accessibility of the built environment. Given Douglas Street's importance for vehicle circulation and goods movement, implications to access and curbside uses were considered in all options along with cycling connectivity / infrastructure potential, and pedestrian space. Additionally, staff considered existing tree health, underground asset renewal priorities, third party utility needs and conflicts, and the ceremonial function of Douglas Street for events such as parades. Finally, cost and constructability (including capital cost, operating costs, construction length and complexity of implementation) were considered.

The team developed initial concepts and shortlisted six options for further exploration, described below. All design options result in dedicated bus lanes but have different impacts and trade-offs. An overview of tradeoffs is provided below, though exact impacts of all options would only be determined through the detailed design phase. Introducing dedicated bus lanes within this segment will improve transit service times and passenger amenities but is anticipated to impact commuter traffic and result in reduced level of service for motorists at peak travel times. Allocating roadway space to prioritize high-occupancy and sustainable modes of transportation is consistent with directions in Go Victoria.

- Option A "Mobility mall" with widened sidewalks. This design restricted private vehicle
  travel through the segment and removed all parking / loading. People on bicycles would
  share travel lanes with transit and commercial vehicles and additional pedestrian space
  would be created for new trees and amenities. General-purpose traffic would be required to
  use other parallel routes which caused significant network impacts.
- Option B Dedicated bus lanes, vehicle travel lanes, and unidirectional protected bike lanes. This option facilitated all modes of travel, however required a full reconstruction of Douglas Street, impacted boulevard trees, and reduced available pedestrian space.
- Option C Dedicated bus lanes, vehicle travel lanes and two-way protected bike lanes. This facilitated all modes of travel, however required substantial reconstruction of Douglas Street, added significant travel time impacts for all users, including transit, and removed all parking / loading.

- Option D Dedicated bus lanes and vehicle travel lanes. This design prioritized level of service for transit and general-purpose traffic but removed all on-street parking, existing bike lanes, and resulted in reduced available pedestrian space.
- Option E Centre running dedicated bus lanes. This design removes a general-purpose
  travel lane in each direction and introduces transit service into the centre of the corridor with
  boarding islands. The approach prioritizes transit service and amenities, frees up additional
  space on sidewalks, but substantially restricts vehicle circulation and eliminates existing
  bike lanes. Accessibility concerns along with potential underground utility conflicts were
  highest in this design.
- Option F Offset dedicated bus lanes. (RECOMMENDED OPTION) This design removes
  a general-purpose travel lane and introduces dedicated bus lanes while retaining some
  vehicle circulation. The approach provides for added pedestrian amenity space in select
  areas which can be used for transit amenities and public realm enhancements and
  eliminates existing bike lanes. Curb side loading, parking, and local bus stops out of the bus
  lane would be accommodated at key locations along the corridor.

The offset dedicated bus lanes, Option F, scored the highest in the multiple account evaluation and is the preferred approach for several reasons, including design consistency with segments to the north, ability to maintain a higher degree of vehicle circulation, accommodation of parking / loading uses to support commercial / retail, and ability to adapt to the changing needs of a developing downtown. The opportunity to enhance the pedestrian experience, offer an intuitive and accessible passenger boarding experience, and the ability to introduce additional streetscape and public realm enhancements, including trees, are recognized as key benefits of the design approach. This design also provides the most flexibility for special events, land development projects and has the least interference with future rapid transit investments.



Figure 2:

Rendering

of offset transit lanes (Option F - RECOMMENDED)

There are some variations that will be explored through the detailed design process. This includes the introduction of dedicated left turn bays (which can improve road safety, facilitate downtown circulation, and provide new opportunities for landscaped median islands and mid-block pedestrian

crossings). At intersections where left turn bays are not pursued, there is potential for sidewalk widening or the retention of the existing painted bike lanes. Understanding impacts to level of service and circulation through the detailed design process will confirm viability of the design. Expansion of the downtown AAA cycling network, including Blanshard Street and Store Streets, will support the provision of high quality north/south cycling options along with transit infrastructure on Douglas Street.

#### **Segment C (Humboldt Street to Belleville Street)**

The road right of way on this segment is substantially limited compared to Segment A or B (~12 metres between curbs, compared to 20+ metres) and therefore a different strategy to support transit is proposed. The zone is envisioned to provide space for both transit movements and introduce a new Rapid Bus Terminus and Exchange function.

The existing transit exchange adjacent to the Legislature Building currently functions as a bus layover area rather than a passenger exchange. It often must be closed for special events, protests and ceremonies and lacks both driver and passenger amenities. Douglas Street downtown functions more like an active exchange with a high volume of transit routes directly on the corridor and thousands of daily trip transfers to east-west routes. Relocating the existing transit exchange to 700 Douglas Street (outside of the Crystal Gardens) and incorporating it as a new terminus for rapid bus service has the benefit of being more centrally located and requires a shorter turnaround route for buses. Of note the existing curb uses on the 700 block of Douglas Street expire in February 2026. The City would continue dialogue with the service providers currently utilizing this area and ideally find a solution to maintain both transit and regional buses on or near the block.

The design for this segment proposes dedicating both existing northbound travel lanes between Belleville Street and Humboldt Street for exclusive public transit use. Northbound vehicles would be redirected to other streets, such as Blanshard, Wharf or Quadra Streets. Southbound, the offset dedicated bus lane design described in Segment B above will continue, including access for general purpose southbound traffic. Street level loading and access to the underground parkade at the Victoria Conference Centre would be maintained.

Additional circulation changes are envisioned to improve vehicle access in and out of the James Bay neighbourhood, improve pedestrian connectivity, and reduce delay for transit vehicles. Staff are exploring options to reconfigure the intersection of Blanshard at Belleville Streets to a standard "T" intersection to allow southbound Blanshard vehicles to continue south rather than be directed onto Belleville Street. A new traffic signal at this location would help to improve pedestrian access at this intersection and significantly improve access to Cridge Park and St. Anns Academy. Additionally, this change would reduce traffic diverted directly onto Belleville Street, providing future opportunities to further pedestrianize and enhance the Inner Harbour in the precinct of the Legislature.

Coupled with the changes above, staff are considering changes to the intersection of Douglas at Blanshard Streets and Superior at Southgate Streets to align Blanshard Street as the primary north/south connection between downtown and Douglas Street, alongside Beacon Hill Park. Beyond benefits to vehicle access in and out of James Bay, the recommended changes in Segment B are expected to reduce vehicle capacity on Douglas Street, leaving more space for transit. This would also reduce vehicle volumes on Douglas Street adjacent Thunderbird Park, providing new opportunities for future development plans at the Royal BC Museum.

Segment C offers several significant opportunities to improve the Legislative Precinct for all transportation modes by relocating the transit exchange to Crystal Gardens and the Victoria Conference Centre. Other opportunities to rethink vehicle circulation could provide more certainty for people driving, while achieving multiple mobility and placemaking goals near the Inner Harbour.

Staff would continue to refine concepts through the detailed design process and report back to Council on the outcomes.

#### **OPTIONS & IMPACTS**

# Option 1: Expedite dedicated bus lane improvements between Hillside Avenue and Herald Street and advance the offset dedicated bus lane design approach as described in this report (Recommended).

In this option, staff would proceed with changes to provide dedicated bus lanes north of Herald Street (Segment A) as described in this report in 2025 and proceed to detailed design to advance the offset dedicated bus lane design approach (Option F). Staff would report back to Council by Q1 2026 with updates on design refinement and trade-offs and seek direction to inform next steps.

## Option 2: Report back with more information following additional analysis prior to making further changes on Douglas Street.

In this option, staff would advance the recommended design approach (Option F) to detailed design for the Douglas Street corridor with no interim changes to Segment A (Hillside Avenue to Herald Street). Staff would report back to Council by Q1 2026 with updates on design refinement and tradeoffs and seek direction to inform next steps. This option would delay the implementation of 24/7 bus lanes between Herald Street and Hillside Avenue until after reporting to Council.

#### Accessibility Impact Statement

Transit service continues to be a key mobility service for persons with accessibility needs. The detailed design process would provide an opportunity to integrate universal design features and support improvements to the built environment to eliminate barriers. Enhancements associated with this project include wider sidewalks, improved let downs, accessible traffic signals, improved bus stop amenities and tactile indicators.

#### 2023 - 2026 Strategic Plan

This project supports the strategy to "work with partners to accelerate rapid transit, more frequent transit, and transit-oriented, mixed-use development" under the theme of Transportation. In addition, the project aligns with community well-being and safety, economic health and community vitality, and climate action and environmental stewardship.

#### Impacts to Financial Plan

Given the scale of this project and potential phasing and funding opportunities, a funding strategy would be developed for this project. The 2024 Financial Plan includes initial funding to support detailed design efforts. To deliver the project in 2027, the City anticipates sharing eligible costs with BC Transit and the Victoria Regional Transit Commission, accessing infrastructure funds and grants through other levels of government, and coordinating planned capital asset renewal, such as underground utility renewal and road paving. City funding to support the project would be included in future financial plans.

#### Official Community Plan Consistency Statement

Douglas Street is identified in the Official Community Plan as a rapid bus corridor and is also an arterial roadway, emergency response route, and truck route. This project supports several policy objectives on mobility, climate action, and land use.

#### **CONCLUSIONS**

Supporting rapid bus services through infrastructure investments on Douglas Street addresses a key direction in the Council's Strategic Plan and contributes to goals in Go Victoria, the Climate Leadership Plan, and the Official Community Plan.

While the provision of dedicated transit lanes on Douglas Street is a significant project in Victoria, it is a small step towards realizing a robust regional transit network that is affordable, convenient and attractive.

Delivering dedicated bus lanes and further expanding rapid transit service on Douglas Street requires planning, coordination and investment from the City, BC Transit, the Victoria Regional Transit Commission, and other levels of government. Investments support asset renewal, placemaking, accessibility and will set the stage for transit-oriented design and population growth. With Council's support, concepts would be shared with the Victoria Regional Transit Commission for approval.

Respectfully submitted,

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Report accepted and recommended by the City Manager.