

## **CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION**

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### **EXECUTIVE SUMMARY**

In 2014 July, Council requested an update on the cycle track pilot network project in advance of its opening in summer 2015. The update includes data collected in fall 2014 as per the evaluation plan outlined in TT2014-0569 and a Stephen Avenue evaluation plan which was created in consultation with stakeholders and finalized in summer 2014. Evaluation matrices with performance measures and targets will help assess the outcome of the Centre City Cycle Track Network and Stephen Avenue pilots.

The project team completed significant engagement to listen and learn from Stephen Avenue stakeholders and Calgarians to shape the Stephen Avenue evaluation plan and concept designs. The Transportation Data division and Ipsos Reid Data collected data about the cycle track pilot streets and Stephen Avenue in September and October 2014. In 2014 November, six information sessions were held to present the pilot cycle track designs to stakeholders and collect concerns and feedback.

### **ADMINISTRATION RECOMMENDATION(S)**

That the SPC on Transportation and Transit recommend that Council:

1. Receive for information the evaluation matrix (Attachment 3) with fall 2014 baseline data and sample evaluation sheet (Attachment 4);
2. Receive for information the 10 Avenue S traffic and parking changes and impacts;
3. Receive for information the budget update (Attachment 7);
4. Approve the updated pilot network map (Attachment 2); and
5. Direct Administration to report back to the SPC on Transportation and Transit with a project update no later than 2015 December.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

Administration has presented three reports about the cycle track pilot and Stephen Avenue pilot to the SPC on Transportation and Transit and to Council:

- April 2014: TT2014-0159 Centre City Pilot Cycle Track Network Pilot Project
- June 2014: TT2014-0482 Evaluation Plan for Centre City Pilot Cycle Track Network
- July 2014: TT2014-0569 Revised Evaluation Plan for Centre City Pilot Cycle Track Network.

At the 2014 July 28 Regular Meeting of Council, relative to report TT2014-0569, Council adopted the following recommendations:

2. Direct Administration to develop an Evaluation Plan for Stephen Avenue shared space street, in consultation with Stephen Avenue stakeholders;
3. Direct Administration to report on the traffic and parking impacts, if 10 Avenue S westbound, part time bike lane were removed, as part of the annual (2014) Cycling Strategy update in 2014 December; and
4. (a) Direct Administration to provide an updated Attachment 1 (Performance Measures) with more defined baseline information and targets after baseline collection in fall 2014 and

## **CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION**

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additionally, to determine specific matrixes which would define the success/ failure of the pilot cycle track network;

(b) Direct Administration to report back on updated cycle track pilot network baseline information, targets, success/failure matrix and detailed budget with the annual cycle strategy update at the 2014 December Standing Policy Committee on Transportation and Transit.

### **BACKGROUND**

The project timeline is outlined in the Construction Schedule - Centre City Pilot Cycle Track Network (Attachment 1). The cycle track pilot network and Stephen Avenue pilot will open in 2015 July. One year of pilot operation will be monitored and evaluated. Adjustments will be made as needed during the pilot. Administration will bring recommendations to the SPC on Transportation and Transit based on the evaluation of the pilot at the end of 2016. Based on the direction from Council, Administration will modify or remove the cycle track network by early 2017.

The Stephen Avenue pilot will introduce two-way bicycle riding. People will be allowed to ride bicycles in a mixed-use setting with pedestrians during the day and in a mixed-use setting with vehicles in the evening. A cycle track will not be installed on Stephen Avenue.

Minor revisions to the cycle track pilot network are reflected in the Updated Pilot Network Map (Attachment 2) and include:

- the removal of 10 Avenue S as a supporting bikeway.
- a one-block extension of the 5 St SW cycle track northward to 3 Avenue SW to provide better connectivity to the Bow River pathway
- the addition of 3 Avenue S as a supporting bikeway, likely a combination of painted shared lanes and painted bike lanes

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

Revised evaluation matrices for each pilot route, with fall 2014 baseline information and updated targets, can be found in the Evaluation Matrix (Attachment 3). A sample graphical evaluation sheet showing the same baseline information and updated targets for the 5 Street pilot route is provided in Attachment 4. Baseline data for each performance measure is given a red value with the exception of PM4: Travel Time by Car, which is given a green value. Target values are assigned a green value. The yellow band indicates at least 50% progress toward the target. The summary table totals the number of performance measures with a red, yellow or green value. The bar graphics and summary table will be populated with red, yellow, and green values when the 2015 and 2016 data is available.

There are few published reports on the effects of Canadian and American street retrofit projects such as the cycle track pilot and the Stephen Avenue pilot. The Transportation Department's monitoring of the 7 Street SW cycle track before and after its installation in summer 2013 increases our confidence in the pilot's target bicycle volumes, sidewalk riding, and gender proportions.

## CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION

Published reports about the outcomes of street retrofit projects in Winnipeg, Minneapolis, Toronto, Chicago, Vancouver, and New York City have influenced the targets chosen for the cycle track network pilot and Stephen Avenue pilot projects.

### Cycle track network pilot

The project team will track nine performance measures to evaluate the outcome of the cycle track network pilot:

#### Primary Performance Measures

1. Satisfaction
2. Safety: collisions
3. Safety: unlawful riding
4. Bicycle volumes
5. Peak period travel time for drivers

#### Secondary Performance Measures

6. Economic vitality: patrons
7. Economic vitality: merchants
8. Demographics: gender
9. Demographics: younger and older riders

Nine locations along the proposed pilot network roads are part of the monitoring program and are identified in the Updated Bicycle Count Locations Map (Attachment 5). The number of bicycles today and expected in the summer/fall 2016 is outlined in the Updated Current and Target Bicycle Volumes (Attachment 6).

### Stephen Avenue pilot project

The project team will track eleven performance measures to evaluate the outcome of the Stephen Avenue pilot:

#### Primary Performance Measures

1. Satisfaction
2. Safety: collisions involving bicycles
3. Safety: near-misses involving bicycles
4. Safety: careless riding
5. Safety: speed
6. Bicycle volumes
7. Pedestrian volumes

#### Secondary Performance Measures

8. Economic vitality: patrons
9. Economic vitality: merchants
10. Demographics: gender
11. Demographics: younger and older riders

## **CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION**

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Careless bicycle riding will be monitored as defined by the Alberta Traffic Safety Act: "without due care and attention" and "without reasonable consideration for persons using the highway" and with reference to the Calgary Traffic Bylaw: the traveller "will not interfere with the pedestrian."

### Data collection methods

Ipsos Reid interviewed 550 adult Calgarians by telephone from September 30 to October 14, 2014. Interviewers asked people questions about their travel patterns and experiences on the pilot streets as well as their attitudes toward the pilot. The results are statistically valid.

The Transportation Department's trained data collection personnel gathered information about the usage of the pilot streets by various methods including:

- Manual counts and observation
- Video cameras with automated counting software
- Tubes on the roadway to count bicycles
- GPS and stopwatch trials to record driving travel times
- In-person questionnaires/interviews with pedestrians and merchants.

### 10 Avenue S changes and impacts

The westbound afternoon weekday bike lane will be removed by the time the pilot opens in July 2015. The bike lane curbside space will be repurposed to parallel parking, matching the eastbound side of the road. This will result in westbound parking stalls becoming available during the afternoon weekday peak period. No changes to traffic signal timing nor intersection turn bays are anticipated. The westbound afternoon peak period traffic flow is not expected to change as a result of the reintroduction of parking.

## **Stakeholder Engagement, Research and Communication**

### Research

The Ipsos Reid telephone survey found that the majority of Calgarians support the pilot projects: 63% support the cycle track pilot and 59% support the Stephen Avenue bicycle pilot. The same survey will again be performed in fall of 2015 and 2016 for comparison.

### Cycle track pilot engagement and communication

Initial outreach in July included emailing existing stakeholders and mailing a letter with a fact sheet to stakeholders on the cycle track routes. The project team followed-up with one-on-one meetings with property managers, business owners and residents along the cycle track routes. Project team members walked door to door, meeting with residents, property managers and business owners/managers along the cycle track routes to introduce themselves and share the initial design. The team learned about the needs of the properties and businesses such as loading and taxi zones, and communicated anticipated changes, such as the configuration of curbside parking.

The project team hosted six identical daytime and evening information sessions between November 12 and November 20 at different downtown and Beltline venues to share planned cycle track designs with Calgarians. People were invited to fill in a hard copy or online feedback form after visiting the information sessions.

## CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION

The team collected contact information and created an email distribution list to send project updates. The information collected during the meetings and information sessions is being used to inform the design.

The project team will share the final plans for the cycle track network with Calgarians in early 2015. The project team continues to meet in person with property owners/managers and business owners/managers about block-by-block design details along the routes as adjustments to the design are made.

The Centre City Bicycle Projects Committee has been on hiatus since spring 2014 and will meet in Q1 2015.

### Stephen Avenue engagement and communication

At the onset of planning for shared daytime use by bicycles and pedestrians in summer 2014, the project team walked door to door to businesses along Stephen Avenue and introduced themselves while delivering introductory letters inviting businesses to participate on a new advisory committee and attend the first design workshop. The team collected contact information and created an email distribution list.

As described in TT2014-0482, the project team created “a stakeholder committee involving the Calgary Downtown Association, merchants and restaurant owners and managers, property managers, law enforcement and emergency response organizations, and others.” This committee is a consultative body that offers recommendations on design topics, priorities and options that are considered by the Centre City project team.

The Stephen Avenue Bicycle Advisory Committee (BAC) has met three times since its creation in August. The project team has taken feedback from the BAC and other people into account to create the Stephen Avenue pilot project evaluation plan by adding near-misses with bicycles, careless bike riding, pedestrian volumes and speeds of bicycles and mixed traffic.

Interested individuals filled in 430 online feedback forms between September 30 and November 3. Respondents are interested in maintaining the slow-speed nature of the street. Suggestions include education, awareness, enforcement, and design that will result in appropriate bicycle speed.

To facilitate discussions on how Stephen Avenue can accommodate people cycling, the project team hosted two public workshops. On September 18, stakeholders were asked how the street is currently being used and what opportunities there were to improve Stephen Avenue. On November 19, the project team presented design concepts to attendees. Based on the feedback received, staff will finalize the plans and will share them Q1 2015.

The project team will share the final plans for Stephen Avenue with Calgarians in Q1 2015.

### **Strategic Alignment**

This report aligns with Part 4 – Monitoring and Reporting of the Calgary Transportation Plan (CTP) which includes the following objective (Page 4-2): “Provide a basis for effective strategic

## **CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION**

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decision making by monitoring and reporting on the progress made toward achieving the goals and objectives of the Municipal Development Plan (MDP) and CTP.”

This report also aligns with the Council-endorsed Key Directions for Land Use and Mobility (2008), Council-endorsed policy in the Calgary Transportation Plan (2009) and the Cycling Strategy (2011):

- Key Direction for Land Use and Mobility #8: Optimize infrastructure.
- Calgary Transportation Plan Goal #7: Ensure transportation infrastructure is well managed.
- Cycling Strategy Actions
  - C42 Investigate best practices and technology for cycling data collection, purchase automated counting stations and install them in strategic locations.
  - C43 Investigate the inclusion of a question regarding on–street bikeways in the Citizen Satisfaction Survey to update and report on indicator 16 [satisfaction with the on-street cycling network] in Table 8-1.
  - C44 Investigate conducting periodic telephone surveys to update and report on indicators 17 [perceived safety in traffic], 18 [perceived coverage of bikeway network] and 19 [perceived satisfaction with amount of bike parking] in Table 8-1.

### **Social, Environmental, Economic (External)**

The Evaluation Plan for the Centre City Pilot Cycle Track Network will have little long term social, environmental and economic effect on Calgarians. It demonstrates the City’s commitment to engaging Calgarians in the decision its government is making.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

Five summer students will be hired in 2015 to support the pilot project awareness and education program before and after the pilot opening. Funding for the students will come from the existing Transportation operating budget.

The work required to collect and analyse information for the evaluation plan will not affect the current annual Transportation Planning operating budget. Data collection costs are part of the overall project’s capital cost.

#### **Current and Future Capital Budget:**

On 2014 April 28, as part of the response to TT2014-0159, Council endorsed a proposal to spend up to \$7.47 million of the 2012-2014 bicycle infrastructure capital budget on the cycle track pilot. The current Class 3 estimated capital cost is \$7.08 million and is detailed in the Budget Update (Attachment 7). It includes the cost of project management, communication,

## **CENTRE CITY CYCLE TRACK PILOT AND STEPHEN AVENUE PILOT EVALUATION**

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education and awareness, traffic signals, signage, line marking, cycle track barriers, and automated counting equipment.

### **Risk Assessment**

Collecting data does not present a risk. The City of Calgary already collects information about the use of the transportation network as part of its regular business.

Multiple factors influence travel patterns. Some are beyond the control of the municipal government. Examples include changes in the regional economy and severe weather. Negative pilot evaluation outcomes may be caused by influences outside the pilot project.

### **REASON(S) FOR RECOMMENDATION(S):**

The revised evaluation matrices and evaluation sheet for the cycle track network pilot and Stephen Avenue pilot respond to the interests of Calgarians and identify a comprehensive list of performance measures and their evaluation to inform the 2016 December decision to make all, part, or none of the pilot routes permanent.

### **ATTACHMENT(S)**

1. Construction Schedule- Centre City Pilot Cycle Track Network
2. Updated Pilot Network Map
3. Evaluation Matrix
4. Sample Evaluation Sheet
5. Updated Bicycle Count Locations Map
6. Updated Current and Target Bicycle Volumes
7. Budget Update