

## **CENTRE CITY CYCLE TRACK NETWORK PILOT PROJECT UPDATE**

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### **EXECUTIVE SUMMARY**

Council directed the Transportation Department to provide a December 2015 update on the status of the Centre City cycle track network pilot project. The cycle track network was constructed under budget and opened ahead of schedule on June 18, 2015. The cycle track network has introduced 6.5 km of physically separated lanes or shared space for cyclists on three corridors (12 Avenue S, 8/9 Avenue S.W. and 5 Street S.W.). Since opening to October 31, 2015, over 370,000 cycling trips have been recorded at three automated counters in the middle of each of the corridors. The pilot project also enables cyclists to share Stephen Avenue with pedestrians during the day and with cars and pedestrians during the evening.

This update highlights project impacts to different transportation modes, adjustments made to the cycle track network in response to feedback from stakeholders and presents performance measure data after three months of operation.

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

That the SPC on Transportation and Transit recommend that Council:

1. Receive this update for information.

### **RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2015 DECEMBER 11:**

That the Administration Recommendation contained in Report TT2015-0850 be approved.

### Opposition to the Recommendation:

Opposed: S. Chu

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

Administration has presented four reports regarding 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- To seek approval of the pilot network.
- June 2014: TT2014-0482 Evaluation Plan for Centre City Pilot Cycle Track Network- To approve an evaluation plan.
- July 2014: TT2014-0569 Revised Evaluation Plan for Centre City Pilot Cycle Track Network.- To approve a revised evaluation plan with specific Stephen Avenue performance measures.
- December 2014: TT2014-0889 Centre City Cycle Track Pilot and Stephen Avenue Pilot Evaluation- To approve an updated evaluation plan with baseline information and targets.

At the 2015 January 12 Regular Meeting of Council, relative to report TT2014-0889, Council adopted the following recommendation:

Approval(s): Logan, Malcolm concurs with this report. Author: Glowacz, Katherine  
City Clerk's: D. Williams

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5. Direct Administration to report back through the SPC on Transportation and Transit with a project update no later than 2015 December.

### **BACKGROUND**

In April 2014, Council approved the Centre City Cycle Track Pilot Project Network map (Attachment 1) and directed Administration to open the network in 2015. The cycle track pilot network opened on June 18, 2015. Since then, the project team has been monitoring, adjusting and evaluating the Centre City cycle track pilot network. Administration will bring recommendations forward to the SPC on Transportation and Transit based on the evaluation of the pilot in December 2016. Based on the direction from Council, Administration will retain, modify or remove the cycle track network in 2017.

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

The Centre City Cycle Track Pilot and Stephen Avenue Pilot Evaluation Plan was approved by Council in January 2015. The Evaluation Matrix is divided into five themes:

1. Satisfaction
2. Safety
3. Walking, cycling and auto activities
4. Economic vitality
5. Demographics

Under these five themes, Administration is tracking nine performance measures along each of the cycle track routes and eleven performance measures along Stephen Avenue over the course of the pilot.

Pilot project data has been collected in accordance with evaluation timelines (Attachment 2) approved by Council in July 2014. Performance measure data was collected three months into operations (September) to show how the project is doing in relation to the baseline counts and the target counts for September 2016. The Evaluation Matrix which shows performance measures and targets (Attachment 3) has been updated to include September data collection and Stephen Avenue benchmark and target values. Bicycle volumes provided in this update are 16-hour counts to provide comparison to baseline and target data.

A sample cycle track route "Performance Measures Evaluation Sheet", hereafter called a 'report card' is provided in Attachment 4. The sample report card shows targets, baseline information (September 2014) and September 2015 data for each performance measure on a colour coded bar:

- Red- little or no progress
- Yellow- moderate improvement
- Green- meets or exceeds target

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### Data collection methods

Data collection specialists from the Transportation Department's Data Division gathered information about the pilot streets between September 15 and 17, 2015 and September 29 to October 1, 2015 using various methods including:

- Manual counts and observation
- Video cameras with automated counting software
- Automated counters in or on the pavement
- GPS and stopwatch trials to record driving travel times

Additionally, daily (24-hour) bicycle volumes are collected through automated counters at ten locations along the cycle track network. Permanent counters were installed into the pavement where feasible (eight locations) and seasonal tube counters were installed at the other two locations. Daily bicycle volume data is available for the public on [calgary.ca/bikedata](http://calgary.ca/bikedata). Three electronic display signs with live bicycle trip volumes will be installed on the sidewalks of the corridors.

### **Initial Results**

#### Public feedback

Administration has been tracking 311 calls related to the cycle track network pilot since April 10, 2015. As of November 13, 2015 the project team has received over 1,400 service requests, with 75% of them received in the first month of the network opening (summarized in Attachment 5). The project team uses feedback received through 311 and input directly from stakeholders to help guide adjustments along the network and to gauge perception about the project. Project adjustments are intended to improve the operation and experience for pedestrians, cyclists, motorists, businesses and residents located on the cycle track corridors.

#### On-going Adjustments

The 311s the project team has received have lead to dozens of adjustments to signal timing, signage, pavement markings, on-street parking and loading zones. Additional conflict markings were added at three driveways since the project opened to make cyclists and motorists more aware that their paths were crossing. One of the larger adjustments included re-introducing twenty-three on-street parking and loading stalls along 8 Avenue between 8 Street S.W. and 11 Street S.W. The project team continues to work with Calgary Transit Access to create loading stalls along the cycle tracks or along nearby side streets.

Many of the 311s relate to the end points of each cycle track and the transition in and out of the cycle track. The City adjusted some of the cycle track end points by:

- Changing the design of the cycle track for the last two blocks of 5 Street S.W. between 15 Avenue and 17 Avenue. Since the roadway operates as a two-way road for traffic south of 17 Avenue a bike box was installed to help people cycling transition safely.
- Installing a larger bike turn box and better signage for people driving at the west end of the 12 Avenue cycle track at 11 Street.

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- Installing a bike box on 8 Avenue at 5 Street S.W. to improve connectivity between two cycle tracks.
- Installing a bike detour at the east end of 12 Avenue to avoid construction of a new building between 3 and 4 Street S.E.

### Impact on driver travel times, parking and loading:

Every effort was made during construction and after opening to minimize the loss of on-street parking, maintain or replace lost loading zones, and optimize the flow of general traffic along corridors. Parking was maintained where possible and since 2014 over 500 new parking stalls have been created downtown. A net gain of 130 parking stalls has been achieved to offset the loss of parking as a result of the cycle track pilot and other day to day adjustments to the parking inventory.

Auto travel times were recorded during morning and afternoon peak periods from one end of each cycle track to the other for each route, before, during and after installation of the cycle track pilot. The project team anticipated some increases to auto travel times. Average peak period travel times for the entire length of each cycle track have increased between 10 to 120 seconds, which is equivalent to waiting at one or two average traffic signals:

- 12 Avenue (from 11 Street S.W. to 4 Street S.E.)- 120 second increase
- 5 Street (from 3 Avenue S.W. to 17 Avenue S.W.)- 90 second increase
- 8 Avenue (from 11 Street S.W. to 3 Street S.W.)- 40 second increase in the morning peak and a 10 second increase in the afternoon peak.

9 Avenue auto travel time before and after data is not comparable because construction hoarding affected September 2014 travel times and hoarding was removed for September 2015 data collection.

### Impact on pedestrians

Cycle track corridors are designed to maintain a high quality pedestrian experience. By placing cycle tracks in the roadway, sidewalks are further separated from vehicle traffic. In some locations, at the end of the cycle track routes and to create connections between cycle tracks, it was necessary to allow cyclists to ride on the designated sidewalk for short stretches, to avoid traffic impacts. For example, pedestrians and cyclists share a wide sidewalk to help connect cyclists from Olympic Plaza to the 9 Avenue cycle track on Macleod Trail S.E. and on a short stretch of 9 Avenue S.E..

The pilot project allows cyclists to share Stephen Avenue with pedestrians during the day and with cars during the evening. People cycling are asked to ride in the roadway and stay to the right. Smaller gates were installed to improve pedestrian flow on Stephen Avenue. Bicyclists, pedestrians and motorists (during evenings) are encouraged to travel courteously on the corridor and this message is the target of our education plan. During both the July and September manual data collection periods zero near-misses or examples of careless bicycle riding were observed.

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Unlawful sidewalk riding has decreased at all cycle track count locations from a network average of 17% in September 2014 to a network average of 3% in September 2015.

### Impact on transit

The project team worked closely with Calgary Transit during design to minimize impacts to the transit experience downtown. Cycle tracks on 5 Street and 12 Avenue were designed on the opposite side of the street from bus stops in order to reduce conflicts between bikes and busses. On 8 Avenue, which is a two-way roadway, this design was not possible. Small sections of the cycle track were downgraded to bike lanes to allow for curbside bus loading at bus stops.

On 9 Avenue just east of Macleod Trail, sidewalk riding has been allowed in a designated area on the south side of the road. Since the bus stop is very busy with pedestrians, the sidewalk was widened in order to minimize potential conflicts between people cycling and people waiting at the bus stop.

### Impact on cyclists

Cycle tracks on approved corridors were designed to provide people cycling separation from vehicle traffic using a mix of flexible posts, planters, concrete curbs and bike signals at intersections. There has been an average 95% increase in daily bicycle trips along the cycle track network from baseline September 2014 counts to counts three months after opening in September 2015. Despite the count days being 11 degrees cooler our increase is higher than other North American cities that have installed cycle tracks which on average see a 75% increase in bicycle trips in their first year.

The ratio of cyclists to motorists on roadways with cycle tracks has increased to 7.6% of all on-street trips. On 5 Street at the CPR underpass 9.5% of all on-street daily trips are made by bicycle and 13% of trips during the peak hour are made by bicycle. On 8 Avenue west of 3 Street S.W., 21% of daily on-street trips are made by bicycle.

Although the number of seniors and children remains relatively low on our weekday count, the number and percentage of women riding on the corridors has increased:

- Network average September 2014: 20%
- Network average September 2015: 27%

Daily bicycle volume data has been collected since each route opened and average daily, weekly, monthly and total trips to the end of October are shown in Attachment 6. Preliminary data collected along each cycle track corridor in September 2015 is summarized below.

### 5 Street S.W. cycle track

- All count locations have higher bicycle volumes and two count locations are exceeding September 2016 targets:
  - Average of 950 daily bike trips at 5 Street S.W. north of 5 Avenue, a 132% increase from 2014

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- Average of 1,220 daily bike trips at 5 Street at the CPR underpass, a 94% increase from 2014
- 5 Street S.W. is now the busiest on-street bikeway in the city.

### 12 Avenue cycle track

- Two count locations are either exceeding or approaching September 2016 targets and have the highest percentage increase from baseline to September 2015:
  - Average of 720 daily bike trips at 12 Avenue west of 8 Street, a 414% increase from September 2014
  - Average of 680 daily bike trips at 12 Avenue west of 2 Street, a 258% increase from September 2014

### 8 Avenue and 9 Avenue cycle tracks

- Bicycle volumes at 8 Avenue and 9 Avenue count locations are slightly lower than 2014 baseline counts.
  - However, volumes remain high on 8 Avenue, one of the busiest on-street bikeways in the city. An average of 840 daily bike trips was counted on 8 Avenue west of 3 Street S.W.
  - Ongoing construction has hampered the 9 Avenue S.E. cycle track from fully opening and contributed to low bicycle volumes since opening. An average 230 daily bike trips are counted along the route.

### Stephen Avenue Shared Space

- Highest increase in the percentage of female riders, 22% of all people counted were female, an increase of 10% from 2014.
- Average of 580 daily bicycle trips on Stephen Avenue, a 53% increase from 2014.
- 3,960 pedestrian were counted in a 6 hour period, a 13% decrease from 4,540 pedestrians in September 2014.

### Removal of 10 Avenue bike lane

As per council direction, with the opening of the pilot project Administration removed the part-time westbound bike lane on 10 Avenue and turned the space into on-street parking.

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

### Research

A cycle track pilot project Ipsos Reid telephone survey was conducted in September 2014 and 2015. The telephone survey contacted 515 Calgarians and is statistically valid. The telephone survey found that the majority of Calgarians continue to support (strongly support and somewhat support) the pilot projects: 64% support the cycle track pilot (63% in 2014) and 63% support the Stephen Avenue bicycle pilot (59% in 2014). A final survey will be conducted in September 2016.

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### Cycle track pilot and Stephen Avenue pilot engagement and communication

Since approval, the project team conducted significant engagement to listen and learn from stakeholders to inform the final designs. The project team shared the final plans for the cycle track network with Calgarians in March and April 2015. Construction began in May and the pilot cycle track network opened on June 18, 2015. The project team led an extensive communications and education program to inform the public about changes to the roadway and how to use cycle tracks when walking, driving and cycling which included a Report to Calgarians and a project fact sheet being mailed to approximately 60,000 stakeholders, residents, and business owners along the cycle track routes and across the Centre City. A full summary of the communications, engagement and education activities is found in Attachment 7. Since the project opened Administration has continued regular project updates and meetings with stakeholders and the public.

### Education

The City hired a seasonal team of Bicycle Ambassadors to help people walking, cycling and driving understand how to use the new network safely. Over the summer Bicycle Ambassadors had over 20,000 interactions with people across the city. A summary of the Bicycle Ambassador Program is provided in Attachment 8. A similar plan is in development for 2016.

### **Strategic Alignment**

This Centre City cycle track pilot aligns with the Council-endorsed Key Directions for Land Use and Mobility (2008), The Centre City Plan (2007), the Calgary Transportation Plan (2009) and the Cycling Strategy (2011).

The Centre City cycle track network pilot aligns with Council Priorities for the 2015-2018 business plan cycle. Specifically, the pilot project addresses:

- *A city that moves*
  - Action M4** Invest in active transportation infrastructure, including cycling and pedestrian networks as funding becomes available.
    - Designing and building Centre City projects that enhance pedestrian and cycling facilities.
- *A healthy and green city*
  - Action H7** Foster healthy lifestyles through a range of accessible and affordable recreational programs and opportunities that encourage active daily living.
    - Creating and implementing initiatives that are citizen centric and focus on community and environmental needs.

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

The Centre City Cycle Track Pilot has introduced a high-quality cycling facility in the Centre City in an urban environment that was previously very poor for cyclists. Improving cycling infrastructure has improved mobility options for Calgarians, increased the bicycle mode split along cycle track corridor routes and increased female ridership.

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This update report has little social, environmental and economic effect on Calgarians due to the short duration of the pilot to date (3 months into the pilot) and performance measures reported in December 2016 will provide some indication of the impacts of the pilot project.

### **Financial Capacity**

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

No additional funding is being requested with this report.

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

On 2014 April 28, as part of the response to TT2014-0159, Council approved \$7.47 million of the 2012-2014 Cycling Strategy funds for the cycle track pilot. The pilot project was delivered under budget at \$ 5.7 million. Detailed budget breakdown is included in Attachment 9. Additional budget is available to modify or remove pilot measures once direction is received from Council in December 2016.

### **Risk Assessment**

There are no significant risks associated with this project update report.

Multiple factors influence travel patterns and some are beyond the control of the municipal government. Examples include changes in the regional economy and severe weather. The current economic downturn and jobs lost in Centre City might impact travel pattern volumes and economic performance measures to date and over the next year.

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

To update Council on the status of the Centre City cycle track pilot project and share findings, three months after opening. Results after just three months of operations are preliminary, so are best received for information only.

### **ATTACHMENT(S)**

1. Centre City Cycle Track Pilot Project Network map
2. Evaluation Plan: Timing and Frequency
3. Evaluation Plan: Performance Measures and Targets
4. Sample: Partial Report Card- 12 Avenue cycle track
5. Public Feedback- Tone of 311 requests
6. Bicycle volume summary
7. Engagement and Communications Summary
8. Bicycle Ambassador Summary
9. Budget Update