



# 2019 Transit Service Review

Stakeholder Report Back: What We Did  
November 2019

## Table of Contents

<b>1.0</b>	<b>– Introduction</b>	4
<b>2.0</b>	<b>– Project Background and Engagement</b>	5
2.1	<b>– Project Overview &amp; Objectives</b>	5
2.2	<b>– Designing the Transit Network</b>	6
2.3	<b>– Plan Timeline</b>	7
2.3.1	– The Original Plan (March/April 2019)	9
2.3.2	– The Revised Plan (June 2019)	13
2.3.3	– Final Plan	15
2.4	<b>– Public Engagement Summary</b>	18
2.4.1	– Stakeholder Outreach and Project Advertisement	18
2.4.2	– Engagement Participation	19
<b>3.0</b>	<b>– Plan Modifications</b>	20
3.1	<b>– Budget Service Reductions</b>	21
3.1.1	– MAX Yellow Weekend Frequency	22
3.1.2	– Off-Peak Frequency on Routes 13, 22, and 66	22
3.1.3	– Route 7 Mid-Day Frequency	22
3.1.4	– Route 95 Palliser	22
3.1.5	– Route 410 Discontinued	23
3.2	<b>– Major Routing Changes</b>	24
3.2.1	– Glamorgan / Rutland Park / Lakeview / Marda Loop Redesign	24
3.2.2	– Lake Fraser Drive SE (Route 81)	31
3.2.3	– Foothills Medical Centre (Route 20)	33

**3.3 – Minor Routing and Schedule Adjustments**..... 35

    3.3.1 – John Ware School – Woodbine (Route 56) ..... 35

    3.3.2 – Oakmoor Drive SW (Routes 95 & 99)..... 36

    3.3.3 – Southland Leisure Centre – Evening Service to LRT ..... 39

    3.3.4 – West Calgary Transfers (Routes 13, 22, 66) ..... 42

    3.3.5 – Westgate Routing (Route 45 [March/April], Route 93 reinstated [June]) ..... 43

**3.4 – Operations and Other Community Impacts** ..... 45

    3.4.1 – Lakeview – 34 Street SW (Route 66) ..... 45

    3.4.2 – Lakeview – Connect Charter School (Route 66)..... 47

    3.4.3 – Kingsland – 4a Street SW (Route 81) ..... 48

**3.5 – No Changes Made**..... 49

    3.5.1 – MAX Yellow ..... 49

    3.5.2 – Mount Royal University (Route 18)..... 50

    3.5.3 – Mount Royal University (Route 20)..... 51

    3.5.4 – Route 7 (Downtown / 7 Avenue) ..... 53

    3.5.5 – Route 18 (Lakeview)..... 54

    3.5.6 – Route 39 (Acadia)..... 54

    3.5.7 – Route 47 (Lakeview)..... 55

    3.5.8 – Route 56 (Southland Drive)..... 56

    3.5.9 – Route 63 (Lakeview)..... 56

    3.5.10 – Route 79/80 (Oakridge – 90 Av SW) ..... 58

    3.5.11 – Route 94 (51 Street SW)..... 59

    3.5.12 – Route 107 (20 St SW) ..... 61

    3.5.13 – Route 112 (Glamorgan / Rutland Park)..... 62

3.5.14 – Westgate (Route 412 Discontinued in 2018) .....	64
<b>3.6 – Other</b> .....	<b>66</b>
3.6.1 – Proposed Route 51 and 141 (14 Street Crosstown).....	66
3.6.2 – Proposed Route 93 (Coach Hill/Chinook).....	67
3.6.3 – Proposed Route 132 (Glamorgan and 29 Street SW) .....	68
3.6.5 – Service to Garrison Green and Currie .....	69
3.6.6 – Comments for Routes outside Transit Service Review area .....	69
3.6.7 – Frequency Improvements (General) .....	69
<b>4.0 – Next Steps</b> .....	<b>71</b>
<b>4.1 - Monitoring</b> .....	<b>71</b>
<b>4.2 – Adjustments and Revisions</b> .....	<b>71</b>

## 1.0– Introduction

The 2019 Transit Service Review (TSR) marks the conclusion of a two year comprehensive review of Calgary Transit services in support of the implementation of the four new MAX Bus Rapid Transit (BRT) lines. The 2019 TSR focused generally within the catchment area of MAX Yellow (also known as the ‘Southwest BRT’ project) between Downtown and Woodbine.

The TSR project was undertaken primarily in support of implementing the new MAX lines and incorporating them as important pieces of Calgary’s Rapid Transit Network. A secondary consideration was to achieve a number of network improvements that could provide Calgarians with more attractive transit services that reflect the shifting and emerging travel needs of citizens. We reviewed dozens of routes within the area to be served by MAX Yellow, resulting in an initial plan. No plan is perfect from the start, and our customers will rely on these routes to get to work, school, shopping, or visit friends and family, and more. In order to identify how we could improve the plan to better meet the needs of our customers, Calgary Transit undertook a public engagement with customers and communities within the plan area. Encompassing over two dozen events, online engagement opportunities, and resulting in more than 4,400 comments, this engagement formed a critical part in shaping and improving the final plan. Through this process we made many modifications – some large, others small. The resulting final plan will see 10 bus routes being modified and 9 new routes introduced. 12 routes will be discontinued.

The purpose of this document is to outline how public feedback collected through the engagement process was used in shaping the plan, including specific changes and outcomes. This document should be read within the context of the 2019 Transit Service Review [What We Heard Report](#). Further details are also available in the [Verbatim Comments](#).



## 2.0– Project Background and Engagement

Since Calgary is a growing and evolving city, travel patterns are constantly changing. With new developments, schools, employment centres, and demographic change in communities, some bus routes no longer meet customer needs as well as they used to. Therefore, periodic reviews of the bus network are required.

### 2.1 – Project Overview & Objectives

Through the 2019 Transit Service Review, Calgary Transit reviewed existing bus services to develop a more effective and efficient bus service network for Calgarians. The goals of this Review, listed below, were to implement a revised network supporting the new MAX Bus Rapid Transit (BRT) network. The scope focused primarily on routes near the new MAX Yellow line.

#### **Transit Service Review Project Objectives:**

- **To implement a high-quality MAX rapid transit route that more customers are able to conveniently connect to;**
- **To leverage capital investment in MAX infrastructure (ex: MAX stations, queue jumps, dedicated lanes) by increasing the routes and customers who can benefit from it;**
- **To provide routes that are more direct and easier to understand;**
- **To reduce travel time;**
- **To operate more frequently with a longer span of service on some routes;**
- **To provide better service to key destinations;**
- **To reduce duplication of service; and,**
- **To increase ridership.**

Achieving these objectives will also be shaped by the need to stay within a budget of available service hours. In the currently constrained economic environment, an emphasis was placed on being able to do more and better within available resources.

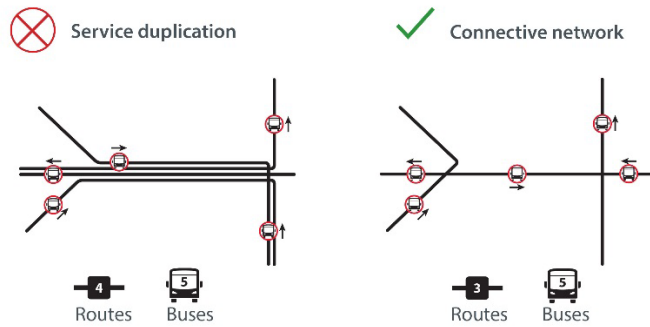
As a result, not all route improvements will result in achieving all of the above benefits, nor is it possible to distribute them equally across the network. To stay within budget, project staff needed to identify areas where efficiencies could be realized to offset some of these costs. This could take the form of reducing duplication of service, while service on some lower ridership corridors would be reduced or even eliminated. These efficiencies would then be reinvested back into the network to provide improved service elsewhere. In all cases, we worked to minimize coverage losses and ensure most customers remained within a convenient walk of transit service.

## 2.2 – Designing the Transit Network

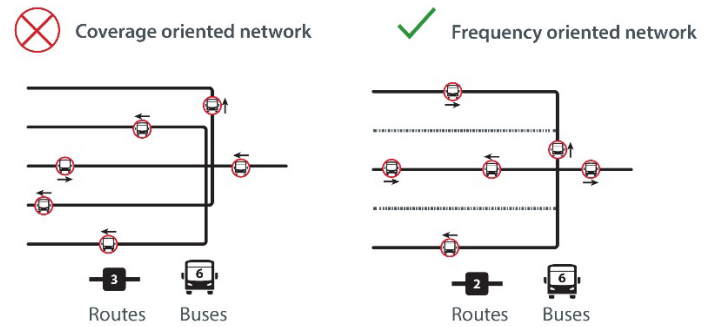
To help guide the route planning process and our decision making, we established some guiding design principles. These principles, summarized in the “Designing the Transit Network” graphic below, reflect priorities that Calgarians expressed to us through the [RouteAhead: A Strategic Plan for Calgary Transit](#) (see Driving Ideas in Designing the Transit Network, beginning on page 105, for a fuller discussion).

# Designing the transit network

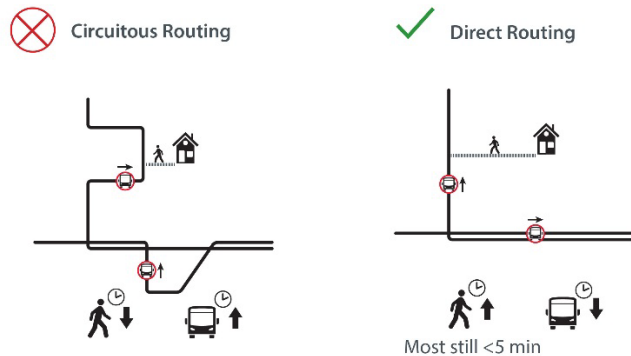
### Service Duplication vs. Connective Network



### Coverage vs. Frequency



### Circuitous Routing vs. Direct Routing



### Peak Service vs. All-Day Service



These design principles are not hard and fast rules, and routes should not be designed solely for “frequency” or “coverage” oriented purposes. Rather, the design principles inform how we should consider allocating our limited resources, and how we should balance these factors and to what degree. Ultimately a successful network is the one that will provide the greatest benefit to the greatest number of Calgarians. Along the way we will have to encounter challenges in designing this network, and in making difficult decisions about how to achieve this. Is a 15 minute travel time improvement for 50 people worth a 5 minute longer travel time for 100 others? Or is having that buses operate until midnight for most of a community worth some of them now having to walk up to 10 minutes to access the service? Or that transit service is available throughout the day worth experiencing more crowding or needing to connect during rush hour? These are among the questions that project staff had to tackle in this design, and which our public engagement process would help provide answers for.

## 2.3 – Plan Timeline

The 2019 Transit Service Review started well in advance of public engagement events. Working alongside the detailed design process for what would become the four MAX routes, it was important to consider how these rapid transit lines would impact not just their immediate surroundings, but how we could extend their benefits to more customers. The pre-design process involved data gathering and analysis as well as concept development and refinement. To assist us in this process, we conducted extensive on-board surveys on the existing routes in late 2015 and 2016. The Southwest BRT survey area resulted in more than 3,000 surveys which detailed the trips customers were making and values about service attributes<sup>1</sup>.

Public engagement for the TSR occurred between March and June of this year and included two phases: an **Original Plan (March/April)** and a **Revised Plan (June)**. The feedback collected was summarized and reported back to the public in August 2019 through the [What We Heard](#) report. Each comment received was also compiled and published in the [Verbatim Comments](#).

Analysis of public feedback happened concurrently with the engagement process. This allowed us to quickly identify potential plan modifications and prepare a revised plan for additional engagement. Analysis continued throughout the summer, with major routing decisions made in late summer.

Through the fall project staff worked on finalizing route details, including stop locations. This period was also used to prepare and finalize much of the customer-facing information and products that will be relied on to transition to the new network, including maps, a riders guide, and pocket schedules, among others. Information sessions and advertising changes were scheduled for late November and December to be closer to the implementation date while still providing sufficient advanced notice for customers to make any necessary adjustments for their trips.

---

<sup>1</sup> The same question was also asked in our original engagement. This helped verify results and see if proposed route changes impacted how these factors were valued. In most cases the results were consistent with the original survey. In only a few cases did we find differences, notably where “Do I Need To Transfer?” became more important for some areas than in the original survey.



# Project timeline



### 2.3.1 – The Original Plan (March/April 2019)

The **original plan** was presented to the public in March and April 2019. Twenty routes were proposed to be modified or discontinued, while twelve new routes would be introduced. The plan area comprised the entire catchment of the MAX Yellow route. Most changes would be within an area bound by Sarcee Trail SW to the west, the Bow River to the north, the Elbow River to the east, and Fish Creek Provincial Park to the south.<sup>2</sup> Parts of the original plan would later be replaced by the revised plan in June.

## Original Plan: Proposed Route Changes

**MY** MAX Yellow (NEW) - shown in original as MAX Southwest

### Proposed New Routes

- 22** Richmond Road
- 45** 45 Street SW
- 51** Garrison Green / Lions Park
- 95** Palliser
- 99** Acadia / Oakridge
- 101** Inglewood
- 106** Southland / Deerfoot Meadows
- 125** Cedarbrae
- 126** Braeside
- 132** Killarney 29 Street SW
- 141** 14 Street NW

### Proposed Modified Routes

- 6** Killarney 26 Av
- 7** Marda Loop
- 13** Altadore
- 20** Northmount / Heritage
- 56** Woodbine
- 81** Macleod Trail
- 93** Coach Hill / Westbrook
- 94** Strathcona / Westhills
- 149** Point Trotter
- 302** BRT Southeast

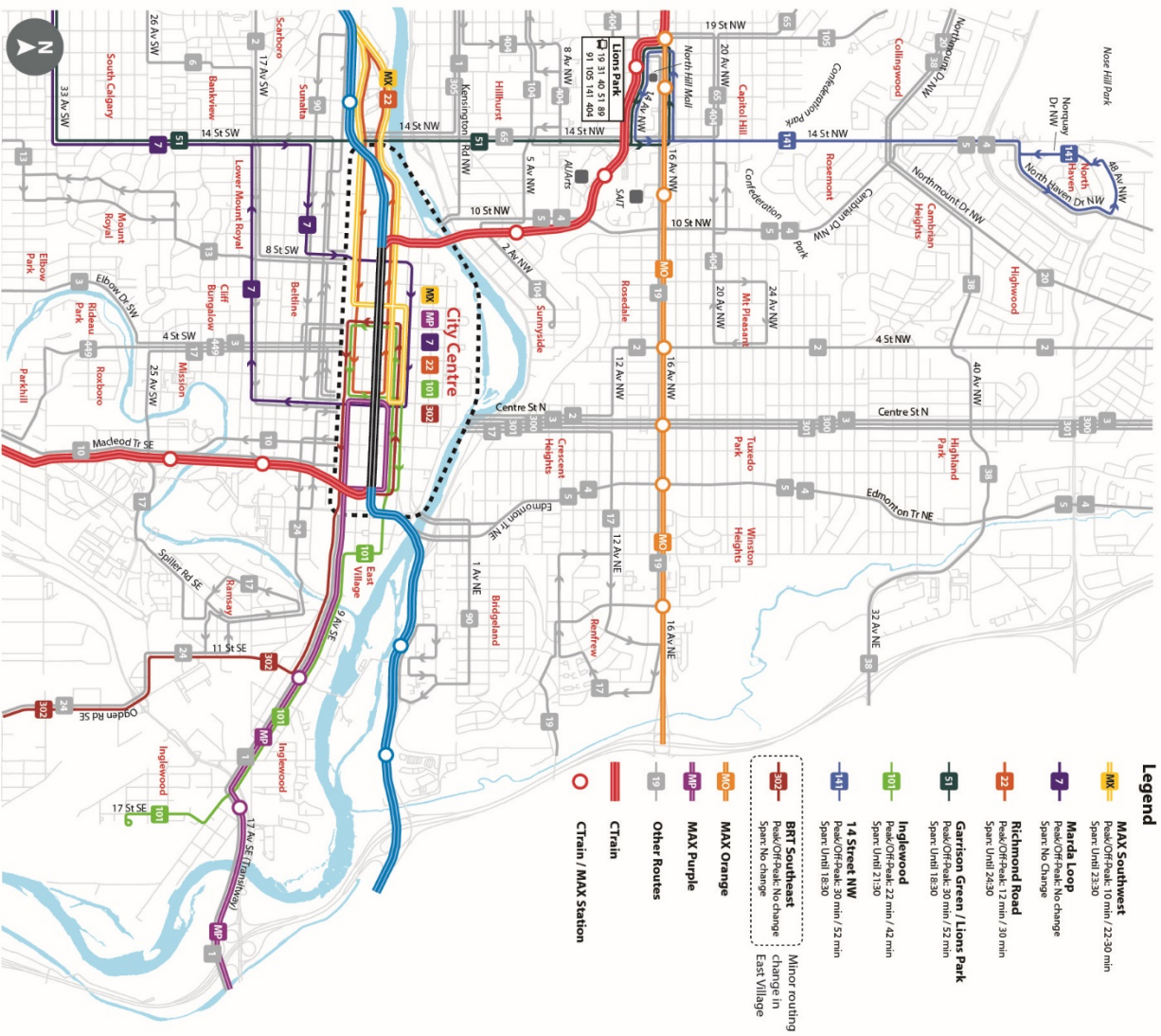
### Proposed Discontinued Routes

- 16** Palliser
- 18** Lakeview
- 39** Acadia
- 47** Lakeview
- 79** Acadia / Oakridge
- 80** Oakridge / Acadia
- 84** Palliser
- 112** Sarcee Road
- 411** East Calgary
- 414** 14 Street Crosstown

---

<sup>2</sup> Some route changes were proposed outside of this area. However, the impact of these changes were largely renumbering existing routes or else changes to routes once they entered the primary impact area. Customers on these routes that did not travel into the impacted area would likely only experience a route renumbering as a change.

# Proposed New Bus Routes: North Calgary



To aid in map readability, please note:

ROUTES 6 & 13: These routes are proposed to change, but not within this map area. Please see West Regional Map or Individual Route Maps for more information.

CITY CENTRE: Only Rapid Transit (LRT, MAX) and changing routes are shown in Downtown area. See Individual Route Maps for detailed route information.

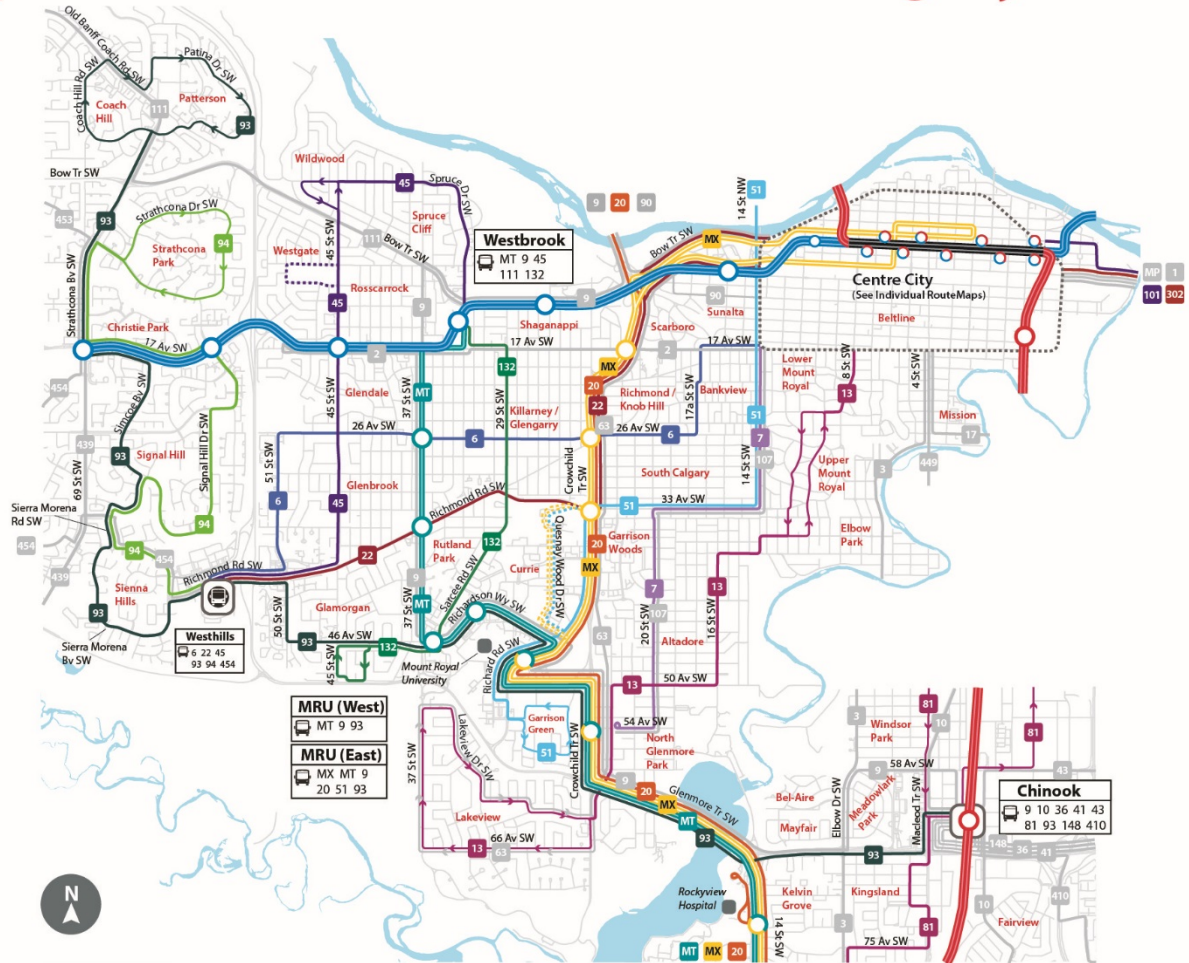
PEAK/EXPRESS: Peak-only (e.g. - Route 89 & 107) and Express routes are not shown

For more information, please visit [calgarytransit.com](http://calgarytransit.com) or call 403-262-1000

# Proposed New Bus Routes: West Calgary

## Legend

- MAX Southwest**  
Peak/Off-Peak: 10 min / 22-30 min  
Span: Until 23:30
  - Killarney 26 Ave**  
Peak/Off-Peak: 15 min / 25-30 min  
Span: Until 24:00
  - Marda Loop**  
Peak/Off-Peak: No change  
Span: No change
  - Altadore**  
Peak/Off-Peak: 15 min / 28-45 min  
Span: Until 23:30
  - Northmount / Heritage**  
Peak/Off-Peak: No change  
Span: No change
  - Richmond Road**  
Peak/Off-Peak: 12 min / 30 min  
Span: Until 24:30
  - 45 Street SW**  
Peak/Off-Peak: 17 min / 32 min  
Span: Until 24:30
  - Garrison Green / Lions Park**  
Peak/Off-Peak: 30 min / 52 min  
Span: Until 18:30
  - Macleod Trail**  
Peak/Off-Peak: 32 min / 32-45 min  
Span: Until 19:00
  - Chinook / Coach Hill**  
Peak/Off-Peak: 15 min / 33 min  
Span: Until 24:00
  - Strathcona / Westhills**  
Peak/Off-Peak: 20 min / 30 min  
Span: Until 24:00
  - Inglewood**  
Peak/Off-Peak: 22 min / 42 min  
Span: Until 21:00
  - Killarney 29 Street SW**  
Peak/Off-Peak: 17 min / 32 min  
Span: Until 24:30
  - BRT Southeast**  
Peak/Off-Peak: No change  
Span: No change
  - Other Routes (No Change)**
  - MAX Teal**
  - CTrain**
  - CTrain / MAX Station**
- Change to routing in downtown only
- Minor routing change at Mount Royal University
- Minor routing change in East Village

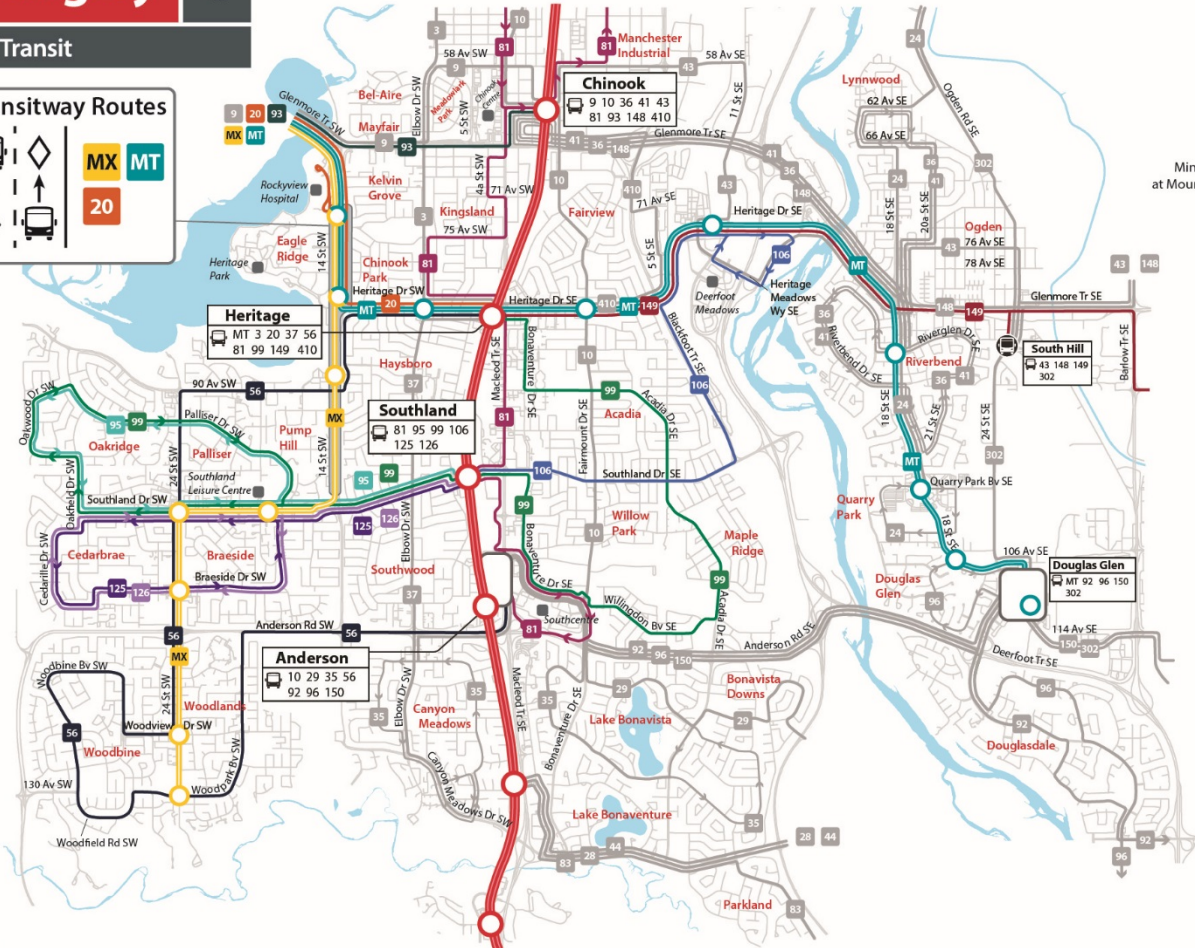


For more information, please visit [calgarytransit.com](http://calgarytransit.com) or call 403-262-1000

# Proposed New Bus Routes: Southwest Calgary

**Transitway Routes**

**MX** **MT**  
**20**



- Legend**
- MX** **MAX Southwest**  
Peak/Off-Peak: 10 min / 22-30 min  
Span: Until 23:30
  - 20** **Northmount / Heritage**  
Peak/Off-Peak: No change  
Span: No change
  - 56** **Woodbine**  
Peak/Off-Peak: 17 min / 35 min  
Span: Until 25:00
  - 81** **Macleod Trail**  
Peak/Off-Peak: 32 min / 32-45 min  
Span: Until 19:00
  - 95** **Palliser**  
Peak/Off-Peak: 32 min / 32 min  
Span: Until 21:00
  - 99** **Oakridge / Acadia**  
Peak/Off-Peak: 18 min / 30 min  
Span: Until 24:00
  - 106** **Southland / Deerfoot Meadows**  
Peak/Off-Peak: 22 min / 42 min  
Span: Until 18:00
  - 125** **Cedarbrae**  
Peak/Off-Peak: 16-30 min / 30 min  
Span: Until 24:00
  - 126** **Braeside**  
Peak/Off-Peak: 16-30 min / 30 min  
Span: Until 21:00
  - 149** **Point Trotter**  
Peak/Off-Peak: 25 min / 35 min  
Span: Until 19:00
  - 9** **Other Routes (No Change)**
  - MT** **MAX Teal**
  - CTrain**
  - **CTrain / MAX Station**

Minor routing change at Mount Royal University



For more information, please visit [calgarytransit.com](http://calgarytransit.com) or call 403-262-1000

### 2.3.2 – The Revised Plan (June 2019)

In reviewing the feedback provided during the original engagement, it was determined that incorporating the feedback into the plan would require a redesign of some of the routes, and that additional engagement was needed on these revisions. This resulted in the **revised plan**, which was presented to the public in June 2019. The revised plan focused on a smaller section of the plan area, approximately bound by Sarcee Trail SW to the west, 26 Avenue SW to the north, Downtown to the east, and the Glenmore Reservoir to the south.<sup>3</sup>

The revised plan consisted of revising proposals for two routes, and adding a new route. To accommodate these changes, additional service hours were required. As a result, some originally proposed improvements were removed from the plan and the existing routes reinstated, while two routes that were not originally impacted were now also proposed to be discontinued (Routes 63 & 107).

Stakeholders were informed that other changes from the original proposal were still under consideration and that decisions had not yet been made about them.

## Revised Plan: Proposed Route Changes

**MY** MAX Yellow (NEW) - shown in original as MAX Southwest

### Proposed New/Revised Routes

- 13** Altadore
- 22** Richmond Road
- 66** Lakeview

- 93** Coach Hill / Westbrook
  - 414** 14 Street Crosstown
- } Routes to be reinstated as today

### Routes No Longer Proposed

- 51** Garrison Green / Lions Park
- 93** Coach Hill / Chinook
- 132** Killarney 29 Street SW
- 141** 14 Street NW

### Additional Discontinued Routes

- 63** Lakeview Express
- 107** South Calgary

<sup>3</sup> Most of the impact of the proposed revisions would be inside of this area. Where trips would be impacted outside of this area, it would primarily be to customers travelling into/out of the impacted area.



# Revised Proposed Bus Routes: West Calgary

### Legend

#### Revised Routes

- 13 **Altadore**  
 Peak/Off-Peak: 15 min / 25-33 min  
 Span: Until 24:30
- 22 **Richmond Road**  
 Peak/Off-Peak: 15 min / 22-35 min  
 Span: Until 24:00
- 66 **Lakeview**  
 Peak/Off-Peak: 15 min / 22-33 min  
 Span: Until 24:30
- 414 **14 Street Crosstown**  
 Peak/Off-Peak: 30 min / 60 min  
 Span: Until 18:30

Route to be reinstated as today

#### Routes to be Removed

- 51 **Garrison Green / Lions Park**  
 Removed from plan  
 Route 414 to be reinstated
- 132 **Killarney 29 Street SW**  
 Removed from plan  
 Replaced by proposed Route 66
- 63 **Lakeview Express**  
 Route to be discontinued  
 Replaced by proposed Route 66
- 107 **South Calgary**  
 Route to be discontinued  
 Replaced by proposed Route 22

Not shown on map

- 6 **Previous Proposed Routes (Still Under Review)**
- 9 **Other Routes (No Change)**

- MT **MAX Teal**
- MX **MAX Southwest**
- CT **CTrain**
- O **CTrain / MAX Station**



Visit [engage.calgary.ca/routereview](http://engage.calgary.ca/routereview) for more information

### 2.3.3 – Final Plan

Following the completion of the public engagement, all comments received were analyzed and considered, and modifications were made to the plan. This resulted in the **final plan**, which will be implemented on **December 23, 2019**.

## Final Plan: Route Changes

### MY MAX Yellow (NEW)

#### New Routes

- 22 Richmond Road
- 66 Lakeview
- 95 Palliser
- 99 Acadia / Oakridge
- 101 Inglewood
- 106 Southland / Deerfoot Meadows
- 125 Cedarbrae
- 126 Braeside

#### Modified Routes

- 6 Killarney 26 Av
- 7 Marda Loop
- 13 Altadore
- 20 Northmount / Heritage
- 44 Deer Ridge / Avenida
- 56 Woodbine
- 81 Macleod Trail
- 94 Strathcona / Westhills
- 149 Point Trotter
- 302 BRT Southeast

#### Discontinued Routes

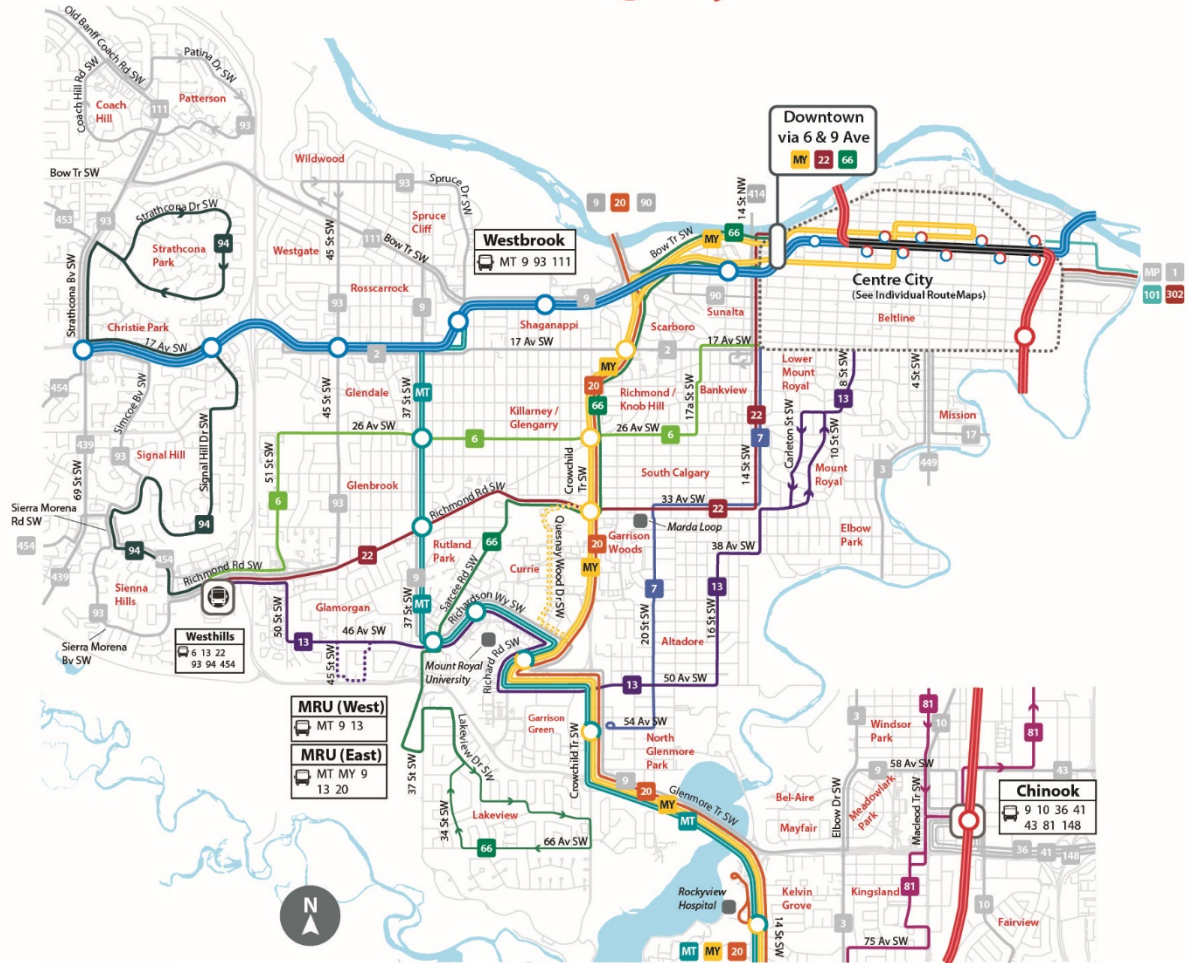
- 16 Palliser
- 18 Lakeview
- 39 Acadia
- 47 Lakeview
- 63 Lakeview Express
- 79 Acadia / Oakridge
- 80 Oakridge / Acadia
- 84 Palliser
- 107 South Calgary
- 112 Sarcee Road
- 410 Glenmore Business Park
- 411 East Calgary



# New Bus Routes: West Calgary

## Legend

- **MAX Yellow**  
Peak/Off-Peak: 10 min / 22-30 min  
Span: Until 23:30
- **Killarney 26 Ave**  
Peak/Off-Peak: 15 min / 23-30 min  
Span: Until 24:00
- 7 **Marda Loop**  
Peak/Off-Peak: No change  
Span: No change  
Change to routing in downtown only
- **Altadore**  
Peak/Off-Peak: 15 min / 25-35 min  
Span: Until 24:00
- 20 **Northmount / Heritage**  
Peak/Off-Peak: No change  
Span: No change  
Routing change at Mount Royal University and Foothills Medical Centre
- **Richmond Road**  
Peak/Off-Peak: 15 min / 23-35 min  
Span: Until 24:00
- **Lakeview**  
Peak/Off-Peak: 15 min / 23-33 min  
Span: Until 24:30
- **Macleod Trail**  
Peak/Off-Peak: 32 min / 32-45 min  
Span: Until 19:00
- **Strathcona / Westhills**  
Peak/Off-Peak: 20 min / 30 min  
Span: Until 24:30
- **Inglewood**  
Peak/Off-Peak: 22 min / 42 min  
Span: Until 21:00
- 302 **BRT Southeast**  
Peak/Off-Peak: No change  
Span: No change  
Minor routing change in East Village
- **Other Routes (No Change)**
- **MAX Teal**
- **CTrain**
- **CTrain / MAX Station**



For more information, please visit [calgarytransit.com](http://calgarytransit.com) or call 403-262-1000

# New Bus Routes: Southwest Calgary

**Transitway Routes**

**MY MT**  
**20**



- Legend**
- **MAX Yellow**  
Peak/Off-Peak: 10 min / 22-30 min  
Span: Until 23:30
  - **Northmount / Heritage**  
Peak/Off-Peak: No change  
Span: No change
  - **Deer Ridge / Avenida**  
Peak/Off-Peak: 20 min / 40 min  
Span: Until 19:15
  - **Woodbine**  
Peak/Off-Peak: 17 min / 35 min  
Span: Until 25:00
  - **Macleod Trail**  
Peak/Off-Peak: 32 min / 32-45 min  
Span: Until 19:00
  - **Palliser**  
Peak/Off-Peak: 32 min / -  
Span: Peak-Only
  - **Oakridge / Acadia**  
Peak/Off-Peak: 18 min / 30 min  
Span: Until 24:00
  - **Southland / Deerfoot Meadows**  
Peak/Off-Peak: 22 min / 42 min  
Span: Until 18:00
  - **Cedarbrae**  
Peak/Off-Peak: 16-30 min / 30 min  
Span: Until 21:00
  - **Braeside**  
Peak/Off-Peak: 16-30 min / 30 min  
Span: Until 24:00
  - **Point Trotter**  
Peak/Off-Peak: 28 min / 40 min  
Span: Until 19:00
  - **Other Routes (No Change)**
  - **MAX Teal**
  - **CTrain**
  - **CTrain / MAX Station**

Routing change at Mount Royal University and Foothills Medical Centre



For more information, please visit [calgarytransit.com](http://calgarytransit.com) or call 403-262-1000

## 2.4 – Public Engagement Summary

The 2019 Transit Service Review proceeded under the “Consult” level of the City of Calgary Engagement Framework. This means that we would actively seek stakeholder input and ensure that issues and concerns can be fully understood. To the maximum extent possible, this feedback will be incorporated into the plan. This document helps to outline how that feedback was understood and incorporated, both for plan modifications but also for those cases where it was not possible to incorporate it into the plan.

A key challenge in the plan was to reconcile the views, issues, and concerns of stakeholders within the framework of project objectives and budget. As stated above, some of the difficult decisions that needed to be made reflected balancing the needs of one area or group of customers with those of another. Thus, it was important for us to understand through this engagement why respondents felt a certain way about a proposed route change, and to understand the underlying aspects of the transit service that were most important to them. This is also reflected in many of the outcomes and final routing decisions – although the outcome may not reflect the individual expectation of the person providing the comment, the project team did review, consider, and incorporate as many of the key elements behind that comment into the plan while still meeting our overall objectives.

### 2.4.1 – Stakeholder Outreach and Project Advertisement

In advance of public engagement on the project, Calgary Transit conducted extensive outreach and advertised the project to build awareness and encourage participation. More than 120 stakeholder groups were contacted, including: community associations, institutions (ex: school boards), social service providers, City of Calgary partners, community organizations, and private stakeholders. Each received information packages about the route changes as well as engagement dates and locations.

Public advertisement included a variety of methods, including:

- Stop cards posted at stops on affected routes;
- On-board notices: distributed on buses on affected routes;
- Bold signs throughout affected communities;
- Digital displays at LRT and MAX Stations;
- A-Frame (sandwich board) signs at major terminals and stations;
- Calgary Transit website & App; and,
- Social Media (Twitter, Facebook) on City of Calgary and Calgary Transit accounts.



## 2.4.2 – Engagement Participation

The **What We Heard** report offers a fuller account of engagement events and outcomes. As a brief summary, the 2019 Transit Service Review included:



**10 Open Houses:  
1,600 participants**



**1,300 comments**



**6 Targeted Sessions:  
100 participants**



**Engagement Website:  
15,200 visitors**



**3,100 comments**

### 3.0– Plan Modifications

Calgary Transit has reviewed and considered all of the feedback received through the engagement process. This includes feedback provided formally through open houses and the online engagement portal, but also comments received through customer service requests (ex: Call Centre, 3-1-1) and Ward offices. This resulted in several changes and adjustments being made to the plan to better reflect the needs of our customers.

This section will describe the changes that were made in response to the feedback received. It is not intended to be completely exhaustive of any and all changes but focuses on key themes and decisions that emerged through public engagement.

This process for determining whether a feedback theme required a plan modification or not considered several factors. These included:

- (1) **Staying within budget:** Operating a transit bus can be very expensive, and so we must ensure that we carefully consider how each and every vehicle is deployed to ensure we are maximizing the benefit of using public resources. For this reason, major changes which add bus routes or make significant changes to bus frequency are made very carefully;
- (2) **How feedback fits within project objectives and design principles:** Our transit network should provide an attractive and convenient mobility option for as many Calgarians as we can, within the resources available to us. This means designing a network which reflects this, a process aided by establishing **project objectives** and **design principles**. Although a comment may come from a customer travelling to work downtown during rush hours, not all customers are going to downtown, and not all customers travel only during rush hours. Many are travelling elsewhere for other purposes, and they do so at various times of day; and,
- (3) **How accommodating the change will affect other elements of the plan:** Undertaking any transit plan will always have a number of impacts felt by various stakeholders. Many will be positive, and some will be negative. By engaging our customers, we can try to minimize the negative impacts while preserving the positive ones. But it also means that we must consider how any potential change suggested in the feedback will affect other customers. Would this change create an overall improvement? Or address the concerns of one area at the expense of another?

Following the implementation of the new bus routes, Calgary Transit will continue to monitor the routes and make additional adjustments as required.

The comments and themes that we heard in the engagement process resulted in one of four different outcomes:

***Major Routing Change:*** This would involve a more significant level of changes to the plan, involving a redesign of one or more routes. These types of changes have the potential to have a more significant impact on customers – both those who may have already been impacted by proposed changes as well as those whose trips may not yet have been impacted. Depending on the degree of impact for a major routing change additional engagement may be required.

***Minor Routing and Schedule Adjustments:*** This category involves changes and adjustments that may not be readily apparent in reviewing a proposed plan, but which can directly address or mitigate potential impacts of a proposed route change. These can include adjusting routing times to facilitate easier transfers, adjusting service spans, adding additional trips on a route to address overcrowding concerns, among others.

***Operations and Other Community Impacts:*** Some comments received may be questions or concerns about other impacts of transit changes. Typically, these may be questions about the suitability of a street to support transit service, potential safety concerns, and other community impacts that may be felt by non-transit customers. These section highlights areas where additional investigations and analysis were undertaken in this regard.

***No Changes Made:*** This section outlines themes and comments which suggest a particular change or action, but which we could not include in the plan. There may be several reasons for why this outcome was determined, including: incorporating the feedback would have conflicts or impacts to other routes or services, a limited availability of budget to address the comment, and/or incorporating this feedback would directly conflict with project goals and objectives.

### 3.1 – Budget Service Reductions

In July 2019, after the public engagement component of the 2019 TSR was completed and as the **final plan** was being assembled, Calgary's City Council undertook the difficult decision to reduce funding across the corporation. Calgary Transit's budget was not exempt from this outcome, and reductions in service were required to accommodate this change.

Although the required service reductions were implemented in September 2019 the budget reduction had an indirect impact on the service review plan as well. As reductions were implemented across the network, this affected some of the available service on routes within the plan area – and thus the available hours to fund proposed improvements. This effectively means that the budget for the service review was reduced.

Several changes were made to the final plan to accommodate the budget reduction. These changes are not tied to feedback we received through engagement, and all changes were proportional to the level of service change within the plan area only (ex: a reduction was not made in the service review plan to offset a reduction elsewhere in Calgary outside of the plan area). As with the broader network service reductions, Calgary Transit took a least harm approach to the budget service reductions in the service review plan in order to minimize the overall impact to customers.

### 3.1.1 – MAX Yellow Weekend Frequency

**Change:** Weekend service on MAX Yellow will be revised. Frequency after 20:00 will be reduced from every 27 minutes to every 35 minutes

**Impact:** Customers travelling later in the evening on weekends on MAX may have a longer wait for their bus.

### 3.1.2 – Off-Peak Frequency on Routes 13, 22, and 66

As part of the revised route proposals presented in June 2019, part of the strategy to minimize the impacts of transfers for customers was to improve off-peak frequencies on the routes. With buses arriving more frequently, the overall lengths of waits for a transfer would be reduced.

**Change:** Parts of the early evening (18:00-21:00) and Sunday components of this frequency improvement were removed on Routes 13, 22, and 66. The mid-day frequency improvements were retained.

**Impact:** Customers may have to wait longer for their connecting buses during these service periods.

### 3.1.3 – Route 7 Mid-Day Frequency

**Change:** Weekday mid-day frequency on Route 7 is reduced from every 15 minutes to every 20 minutes. This service change was implemented in September 2019.

**Impact:** Some customers on Route 7 will have longer waits for their next bus. The impact is partially mitigated through the introduction of Route 22 – Richmond Road, which also connects the Marda Loop area with Downtown.

### 3.1.4 – Route 95 Palliser

**Change:** Route 95 – Palliser will be revised to offer service during peak periods only. Alternate service is available on Route 99 – Oakridge / Acadia.

**Impact:** Some customers will have to wait longer for a bus. Some customers will have additional travel time by needing to ride the opposite direction of the loop through the Oakridge or Palliser communities

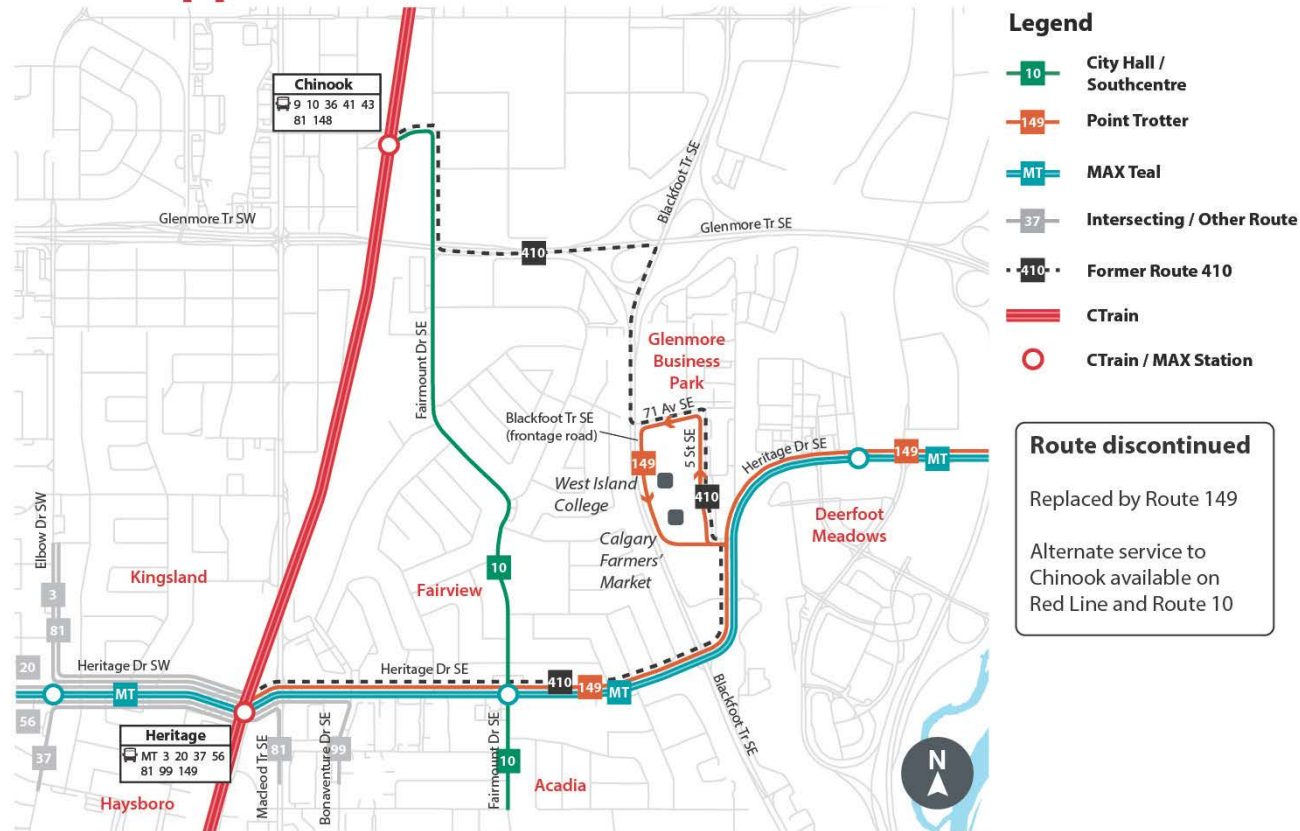
### 3.1.5 – Route 410 Discontinued

Route 410 currently provides peak-only service to Glenmore Business Park, connecting it to Chinook LRT Station and Heritage LRT Station.

**Change:** Route 410 will be discontinued. Service to Glenmore Business Park will be provided by realigning the new Route 149 – Point Trotter.

**Impact:** Glenmore Business Park will no longer have a connection to Chinook LRT Station. Customers accessing Route 410 from Chinook will instead need to travel to Heritage LRT Station and connect to Route 149. Service to Glenmore Business Park will be maintained, and new service is added during mid-day and Saturday service periods.

## What Happened To - Route 410





## 3.2 – Major Routing Changes

This section describes significant modifications to the plan, involving a redesign of one routes or several routes. These types of changes have the potential to make a more significant impact on customers – both those who may have already been impacted by proposed changes as well as those whose trips may not yet have been impacted. In some cases, additional engagement was undertaken.

### 3.2.1 – Glamorgan / Rutland Park / Lakeview / Marda Loop Redesign

Following the **original plan** presented in March/April 2019, we received a significant amount of feedback from the area served today by Routes 13, 18, 47, and 112. Several themes emerged from this feedback about connectivity to destinations and travel times. In order to address and incorporate this feedback into the plan while meeting project objectives and design principles, a comprehensive redesign of the routes in this area was required. This redesign addressed the feedback themes in part or in full, but would also impact other customers that would not previously have been affected and may impact other types of trips that would have improved or not be affected in the original proposals. As a result, it was determined that additional customer engagement would be required. The **revised plan** was presented to the public in June 2019 at several open houses and which also included additional opportunities to comment online.

The options presented to the community was whether or not Calgary Transit should continue with the **original plan**, or with the **revised plan**. Both options could consider minor adjustments or modifications to the plan, but no further significant route redesigns would be possible.



## Glamorgan / Rutland Park:

### *What We Heard*

Much of the feedback in this area concerned the proposed discontinuation of Route 112 and its replacement by alternate services. A key theme was that the original plan would have placed too high an emphasis on connectivity to other destinations at the expense of existing trip patterns made by customers. Downtown especially figured prominently in the comments, as the originally proposed Routes 93 and 132 would have required customers to connect to other routes in order to continue to downtown. This was further reinforced through an additional engagement session with the Developmental Disabilities Resource Centre, whose clients depend heavily on transit for their mobility and value convenient access to downtown. The originally proposed Route 22 was seen as a positive development by customers living closer to Richmond Road, but not as a suitable replacement for customers further away along 46 Avenue SW or on Sarcee Road.

The originally proposed Route 93 connection to Chinook did receive positive feedback, particularly from customers west of Sarcee Trail. Comments from east of Sarcee Trail were generally more negative, and typically tied to how well this route did or did not replace Route 112.

The **revised plan** was generally seen as more positive than the **original plan**. Sarcee Road would continue to have direct access to downtown along the same routing as today's route, albeit renumbered as Route 66. 46 Avenue SW in Glamorgan would also now have a single bus trip to downtown via a realigned Route 13. Customers in this section of Glamorgan could stay on Route 13 (approximately 10 minute additional travel time) or could transfer to Route 66 at the Sarcee Road MAX Station. Trip times between Route 13 and 66 were synchronized during peak periods – average transfer times are scheduled to be 5 minutes during AM Peak, and 7-8 minutes during PM Peak – reducing the travel time impacts of the connection.

### *What We Did*

Proceed with the **revised plan** as shown to the community in June 2019.

- **Route 13 (Revised)** connecting Westhills to Downtown, via Glamorgan, Mount Royal University, and Altadore
- **Route 22 (New)** connecting Westhills to Downtown, via Marda Loop
- **Route 66 (New)** connecting Downtown to Sarcee Road, continuing to Lakeview
- **Route 112 (Discontinued)**

### *Key Factors for Decision-Making*

- Travel times on Richmond Road are improved significantly
- Introduction of Route 22 supports the Primary Transit Network designation on Richmond Road and in Marda Loop
- Travel times for most customers on Sarcee Road are maintained as today

- Travel times are increased slightly from today on 46 Avenue SW, with a convenient connection available for customers who want to minimize this impact.
- Impact of additional transfers for other trips is mitigated through offering more frequent service throughout the day

### **Lakeview:**

#### ***What We Heard***

The **original plan** proposed to consolidate the service in Lakeview into a single all-day route supplemented by the existing peak-period express route. The feedback we received in this original engagement period was diverse, but three major themes were identified (further discussion of these themes is also available in section 3.5 which outlines why we did not retain **Route 18** or **Route 47**):

- (1) Additional Travel Time to Downtown;
- (2) Additional transfers required to access Mount Royal University and area; and,
- (3) A transfer being required to access Chinook Centre and Chinook LRT Station.

The route redesign sought to address all three of these themes, in part or in full, resulting in the proposed Route 66 – Lakeview in the **revised plan**. The revised proposal also included two additional changes that were not part of the original route proposals:

- (1) Discontinuation of **Route 63 – Lakeview Express**; and,
- (2) Modification of routing within the community of Lakeview itself, primarily the **introduction of service onto 34 Street SW**.

Comments received in the second phase of engagement were mixed. Positive comments were received from some customers heading downtown and connecting to MRU. Concern remained with the proposed discontinuation of Route 47. Many continued to express a desire to keep the three existing routes.

#### ***What We Did***

Proceed with the revised route proposals as shown to the community in June 2019.

- **Route 66 (New)** connecting Lakeview to Downtown, via Sarcee Road
- **Reviewed concerns on 34 Street SW**, including adjusting trips around the afternoon school bell
- **Routes 18, 47, 63 (Discontinued)**

### *Key Factors for Decision-Making*

- Travel times to downtown are similar for most customers. Some customers will have significant travel time improvements
- The new route provides more frequent all-day service to Lakeview
- Route 66 will have bus stops within a short walk of Mount Royal University
- Additional transfers may be required for some trips (notably to Chinook). But the revised plan reduces this impact, particularly through improved transfer locations and more frequent service in Lakeview.
- Consolidating services will make the route more financially sustainable

### **Marda Loop / Mount Royal / Beltline**

#### *What We Heard*

The **original plan** proposed Route 13 to be modified to serve Lakeview. Existing trips to places like Mount Royal University or Westhills Shopping Centre would be variously impacted – some customers would have an alternate route nearby that provided this connection, while others would have to walk additional distances or make a connection. These outcomes formed a significant proportion of the feedback we received in this area. Generally, it appeared that residents in or near Beltline particularly valued the existing Route 13 for its connection to Mount Royal University, while it was more common to hear Westhills as a valued connection in the Marda Loop communities.

The originally proposed Route 51, connecting Garrison Green to Lions Park via Marda Loop and 14 Street SW, received positive feedback. Residents valued the positive connections of better connecting Marda Loop to areas west of Crowchild Trail, and in providing a crosstown route that could connect them to the northwest without going through downtown. Some Route 13 customers in the inner city noted that although they could access Route 51 to get to MRU that the walk distance would be greater while the route would provide less frequent service. As a result, they would prefer to keep the existing Route 13.

The **revised plan** addressed many of the Route 13 connectivity concerns, revising it to be more similar to today's routing with two key changes. Firstly, Route 13 would take a more direct routing to Westhills via 46 Avenue SW rather than Richmond Road – reducing travel time to this destination but also for customers travelling between MRU and Westhills today. Secondly, a routing change was made in Elbow Park to connect the route to 33 Avenue & 14 Street SW. This latter change would improve connectivity to other routes and destinations (including Marda Loop), while generally improving route operations through the community.

Route 22 was also revised in this area, connecting to downtown via 33 Avenue and 14 Street instead of Crowchild Trail as in the original plan. This helped to maintain a connection over Crowchild Trail, while avoiding additional duplication on Crowchild Trail with MAX Yellow and the proposed Route 66. This realignment also resulted in the proposed discontinuation of the **Route 107**.

To offset the additional service hours required in these revisions, some originally proposed improvements were removed. This resulted in Route 51 no longer being proposed, and the existing Route 414 to be reinstated.

Feedback on these revisions was generally positive as most significant concerns were fully addressed. Most negative comments centered on the proposed discontinuation of Route 107 and how those customers would be impacted.

### *What We Did*

Proceed with the revised route proposals as shown to the community in June 2019

- **Route 13 (Revised)** connecting Westhills to Downtown, via Mount Royal University and Altadore
- **Route 22 (New)** connecting Westhills to Downtown, via 33 Avenue and 14 Street
- **Route 107 (Discontinued)**

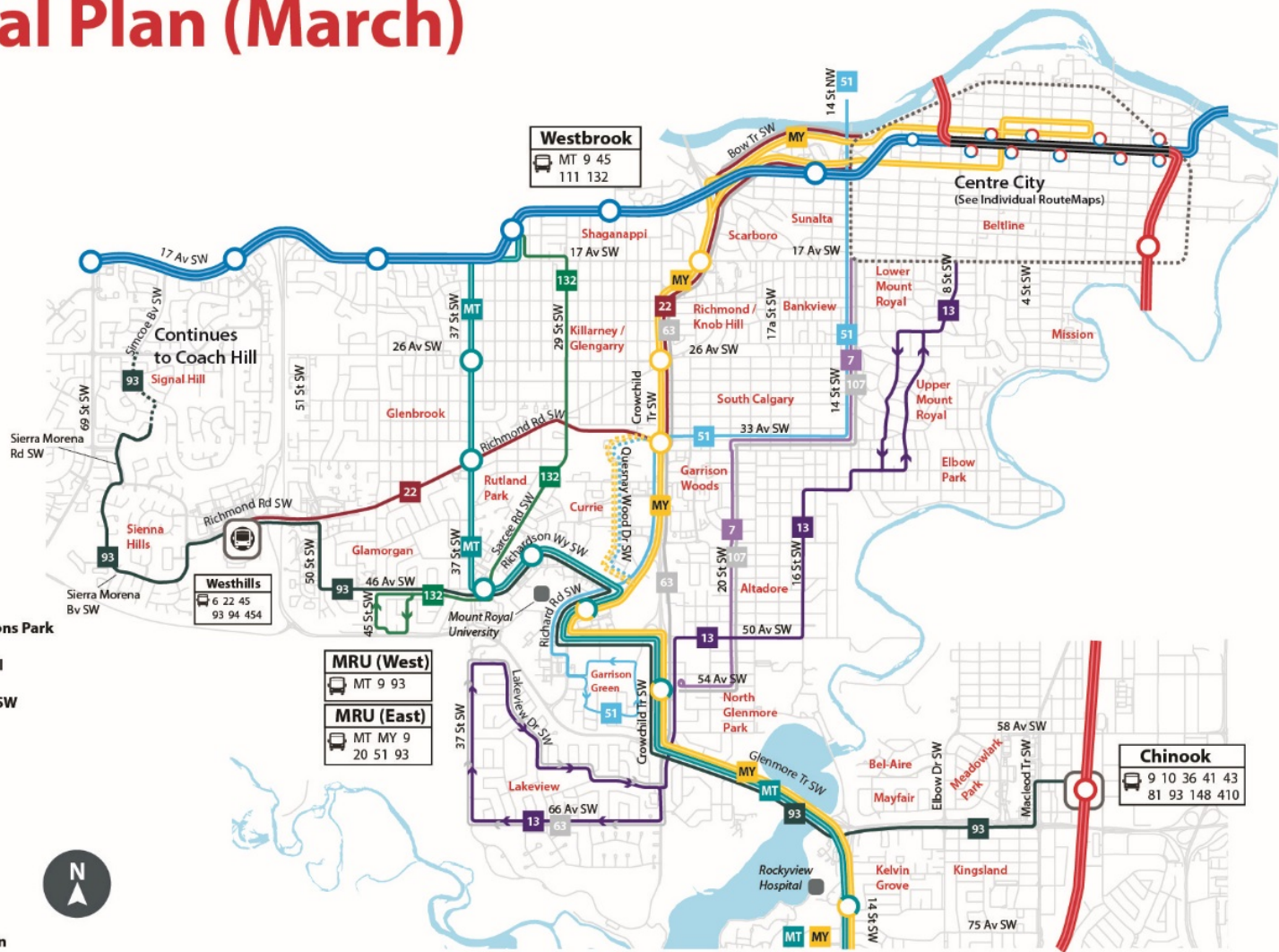
### *Key Factors for Decision-Making*

- Minimizes impact to existing Route 13 customers
- Route 22 provides improved connectivity for the area
- Route 22 provides similar service to majority of Route 107 customers
- Impact of additional transfers mitigated through offering more frequent service throughout the day

# Original Plan (March)

## Legend


- 7 Marda Loop
- 13 Altadore
- 22 Richmond Road
- 51 Garrison Green / Lions Park
- 93 Chinook / Coach Hill
- 132 Killarney 29 Street SW
- 63 Other Routes (No Change)
- MT MAX Teal
- MY MAX Yellow
- CTrain
- CTrain / MAX Station



# Revised Plan (June)

## Legend

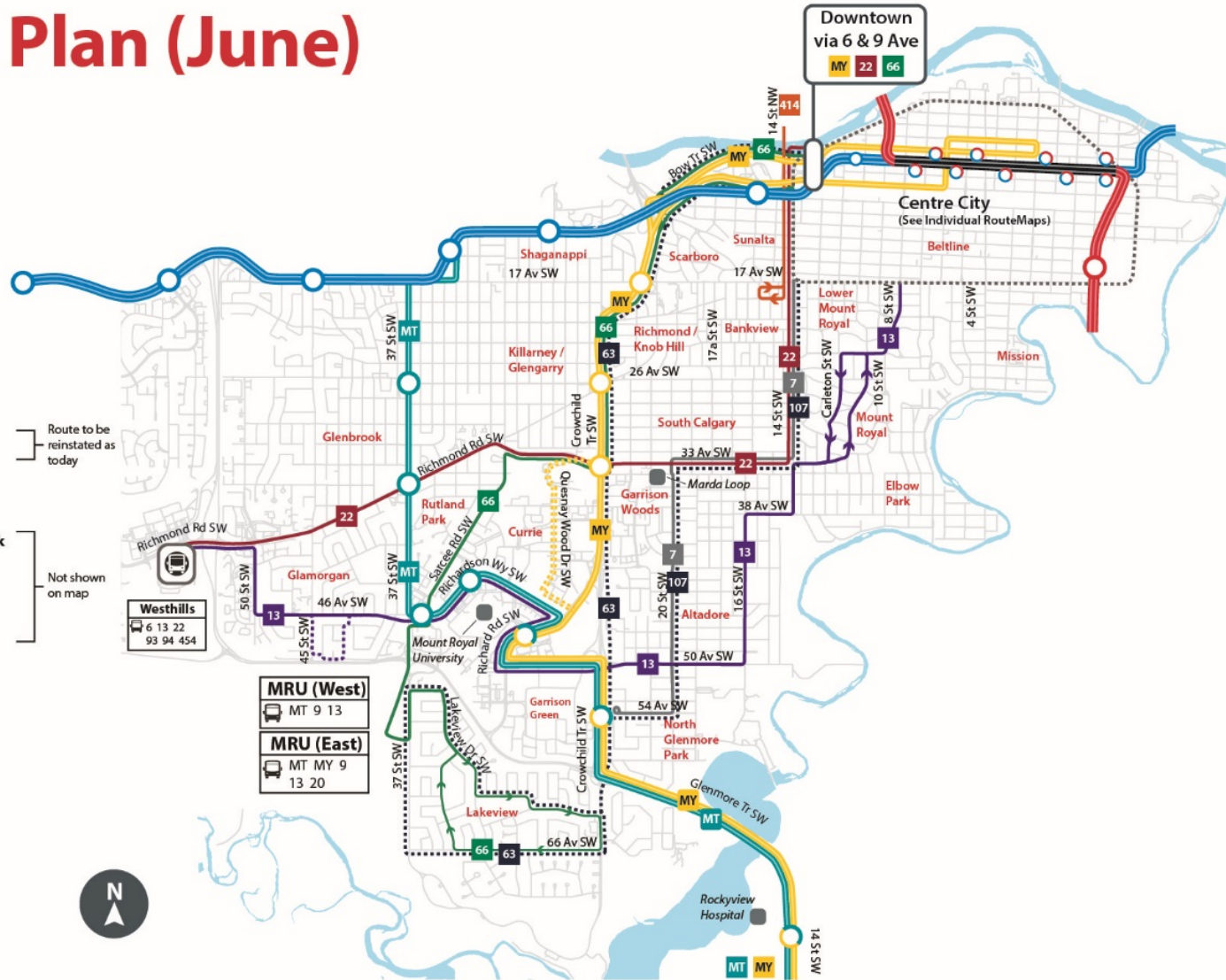
### Revised Routes

-  **13** Altadore
-  **22** Richmond Road
-  **66** Lakeview
-  **414** 14 Street Crosstown

### Routes to be Removed

-  **51** Garrison Green / Lions Park  
Removed from plan  
Route 414 to be reinstated
-  **132** Killarney 29 Street SW  
Removed from plan  
Replaced by proposed Route 66
-  **63** Lakeview Express  
Route to be discontinued  
Replaced by proposed Route 66
-  **107** South Calgary  
Route to be discontinued  
Replaced by proposed Route 22

-  **MT** MAX Teal
-  **MY** MAX Yellow
-  **C**Train
-  **C**Train / MAX Station



### 3.2.2 – Lake Fraser Drive SE (Route 81)

The proposed changes to Route 81 would see the portion of the route south of Anderson Road be discontinued. This section of the route comprised one-third of the route's length (and therefore, service provided), yet only one-tenth of its ridership. Shortening this section of the route would allow a revision to better serve the Kingsland Community<sup>4</sup>, and provide more frequent service on Saturdays (from every 60 minutes to every 45 minutes). All customers on Route 81 south of Anderson Road would remain within a short walk of other transit service. Although service would be discontinued along Lake Fraser Drive SE entirely, community walking paths meant that all customers could be able to access the existing Route 35 on Lake Bonavista Drive SE as an alternative.

#### *What We Heard*

Much of the feedback on Route 81 focused on this southern area, and in particular the segment of the route on Lake Fraser Drive SE. A significant proportion of concerns related from customers in this area who travel primarily to/from Canyon Meadows LRT Station to access the CTrain – although Route 35 does connect to the LRT it would add 5 to 8 minutes of additional travel time. Some comments also noted that Route 35 could be difficult to reach for some customers with limited mobility – with walk distances increasing from less than 50m to close to 400m in some cases. A retirement residence on this street would have walk distances increase from 50m to approximately 200m. A smaller section of comments valued the existing Route 81 for access to other destinations along Macleod Trail, including Southcentre Mall, medical offices, and other shopping destinations.

#### *What We Did:*

- **Route 44 (Revised):** extended north from Canyon Meadows LRT Station to provide service on Lake Fraser Drive SE. Service added in weekday mid-day and Saturday periods to match existing service on Route 81. Route 44 will operate every 20 minutes in peak and every 40 minutes during off-peak periods
- **Route 81:** Proceed with discontinuing service south of Anderson Road

#### *Key Factors for Decision-Making*

- Many customers in the impacted area travelled to/from Canyon Meadows LRT Station. This service would be restored
- Route 35 remains within walking distance for customers wishing to travel to Southcentre or other bus routes at or near Anderson station
- Customers travelling further north can do so via Red Line LRT
- Extension of Route 44 also connects residents to destinations at Deer Valley Mall to offset some lost with the change (ex: Walmart)

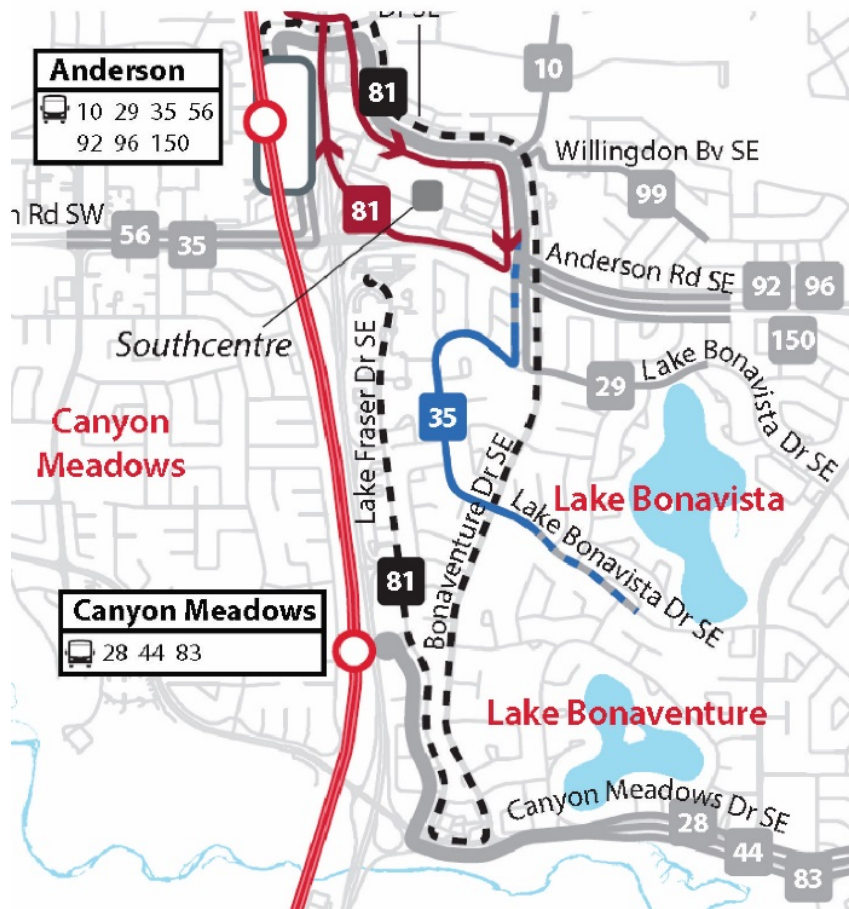
---

<sup>4</sup> More than twice as much ridership on Route 81 occurs at the two stops near Kingsland than on the entire portion of the route south of Anderson Rd SW. This occurs despite much of the community having a long walk distance to transit and needing to cross major roadways to access service by being near Glenmore Tr and Macleod Tr.

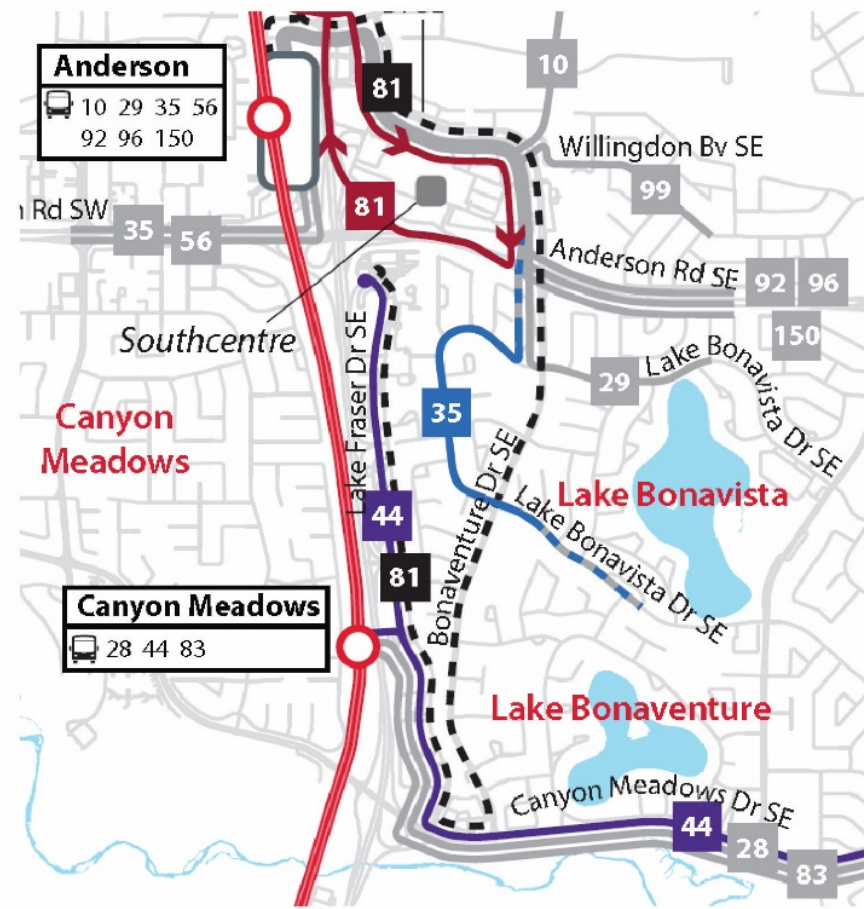


- Revisions to Route 44 provide additional benefits to surrounding neighbourhoods, improving connectivity to Avenida Shopping Centre and providing additional mid-day and Saturday service

## Original Proposal



## Final Plan



### 3.2.3 – Foothills Medical Centre (Route 20)

One of the most common comments received through last year's 2018 Transit Service Review, and repeated again this year, concerned the realignment of Route 20 away from Foothills Medical Centre. Some plan modifications made last year to minimize impacts to Route 20 customers were successful, including reintroducing Route 91 to connect to Lions Park, and the extension of Route 90 from Sunalta to the University of Calgary via Foothills Medical Centre.

Route 20 ultimately remained on University Drive in last year's TSR for three reasons:

- (1) Realignment back into Foothills Medical Centre completely would introduce a service gap on University Drive, requiring an additional route (and service hours) to serve;
- (2) A key goal in the changes to Route 9 and 20 in the 2018 Transit Service Review was to significantly reduce crosstown travel time on Route 20 (saving, for example, upwards of 15 minutes per direction for customers travelling from the northwest to MRU). Reintroducing the route to FMC would reduce about half of this travel time improvement; and,
- (3) Realigning Route 20 would add additional travel time on the route. This in turn would require additional buses to maintain service levels, and therefore additional costs, or a reduction in service frequency.

#### *What We Heard*

Over the past year, and in the feedback on this current project, we heard that there were still many customers who felt that the mitigation methods did not adequately address what had previously been a fast and convenient trip to a major destination. These comments seemed to originate from customers living on or near Crowchild Trail SW, as well as in the southwest near 14 Street SW and Heritage Drive SW. The connecting routes available near the University of Calgary worked well as an option for some, especially during the day when the routes operated more frequently. This was less so the case in the evenings and weekends where transfer times could be less reliable – yet passenger volumes could still be relatively high with shift changes at the hospital.

#### *What We Did*

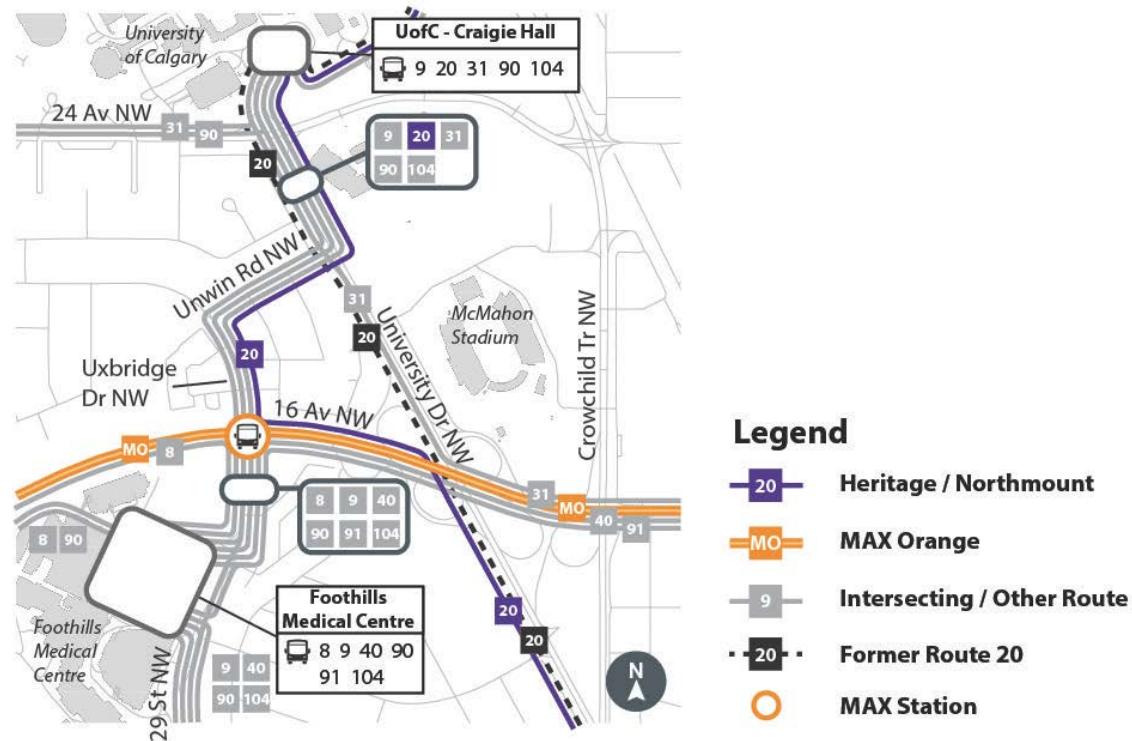
The realignment of Route 20 from Mount Royal Circle to Richard Road SW afforded some additional flexibility on the route, saving a few minutes in each direction of travel. This created an opportunity to make a route adjustment near the hospital which would further reduce the impact of last year's changes on customers.

- **Route 20 (Revised):** Routing modified to travel on 16 Avenue NW, Uxbridge Drive NW, and Unwin Road NW. Route 20 will now stop at/near the MAX Orange station at Foothills Medical Centre.

### Key Factors for Decision-Making

- Walk distances from Route 20 to the hospital will be comparable with MAX Orange – approximately 500m to the Health Sciences Centre and 750m to the main tower
- Customers with limited mobility will continue to have access to convenient connections – either from Route 20 or the CTrain at Lions Park – which can take them to the Foothills Medical Centre bus terminal
- Overall corridor travel times will remain consistent with those achieved after the 2018 TSR

## Foothills Medical Centre



### 3.3 – Minor Routing and Schedule Adjustments

This section describes changes and adjustments that may not be readily apparent in reviewing a proposed plan but which can directly address or mitigate potential impacts of a proposed route change. These can include adjusting routing times to facilitate easier transfers, adjusting service spans, or adding additional trips on a route to address overcrowding concerns, among others.

#### 3.3.1 – John Ware School – Woodbine (Route 56)

Route 56 was proposed to be realigned to connect to Heritage LRT Station instead of Southland LRT Station. Several comments about this change noted that students in Woodbine are designated to two junior high schools – Woodbine School within the community and John Ware School located near Southland Leisure Centre. The proposed changes would leave many of these students 1km away from the realigned route. Other comments related to potential safety concerns by requiring younger children to switch buses.

Although a transfer would be required in this instance, it could be made locally within the community at one of the new MAX stations. But detailed analysis of ridership figures supported the assertion that a high number of students depend on public transit for this connection, with occasional overloads reported on Route 56 near bell times at John Ware. Requiring a transfer could overload one or both legs of the transit trip, leading to excessive wait times for some students to complete their trip.

#### *What We Did*

- **Route 56:** Proceed with the **original plan** to realign Route 56 to Heritage LRT Station.
- **Route 786 (New):** A new school route will be added to connect Woodbine to John Ware School, oriented to bell times at the school.
  - **NOTE:** Due to bus overloads reported in Fall 2019, the service was introduced earlier, beginning service during afternoon peaks on October 28. Morning service will be added on the route following the winter break in January 2020
  - **NOTE (2):** School services are monitored and adjusted on a continual basis in consultation with the school boards. This route will be maintained on the basis of continued utilization and balancing school needs across the city

#### *Key Factors for Decision-Making*

- A significant number of students rely on the current Route 56 to access John Ware School. The route realignment would remove this connection
- Due to the higher number of students making this trip, a transfer based approach could overload one or both legs of the journey, contributing to higher than expected wait times in making the connection

### 3.3.2 – Oakmoor Drive SW (Routes 95 & 99)

The proposed routes would have removed service from Oakmoor Way, orienting it instead onto Southland Drive. This was proposed in order to reduce travel time for most customers coming from the Oakridge area to Southland LRT Station, and allow us to use new bus zones with concrete pads that could support amenities like benches and shelters (which cannot be added along the current routing via Oakmoor Drive and Oakmoor Way SW).

Feedback from this area indicated that customers at the stops valued proximity to the service more than the potential availability of amenities, and that some were concerned about safety in needing to cross Southland Drive to access one direction of their route.

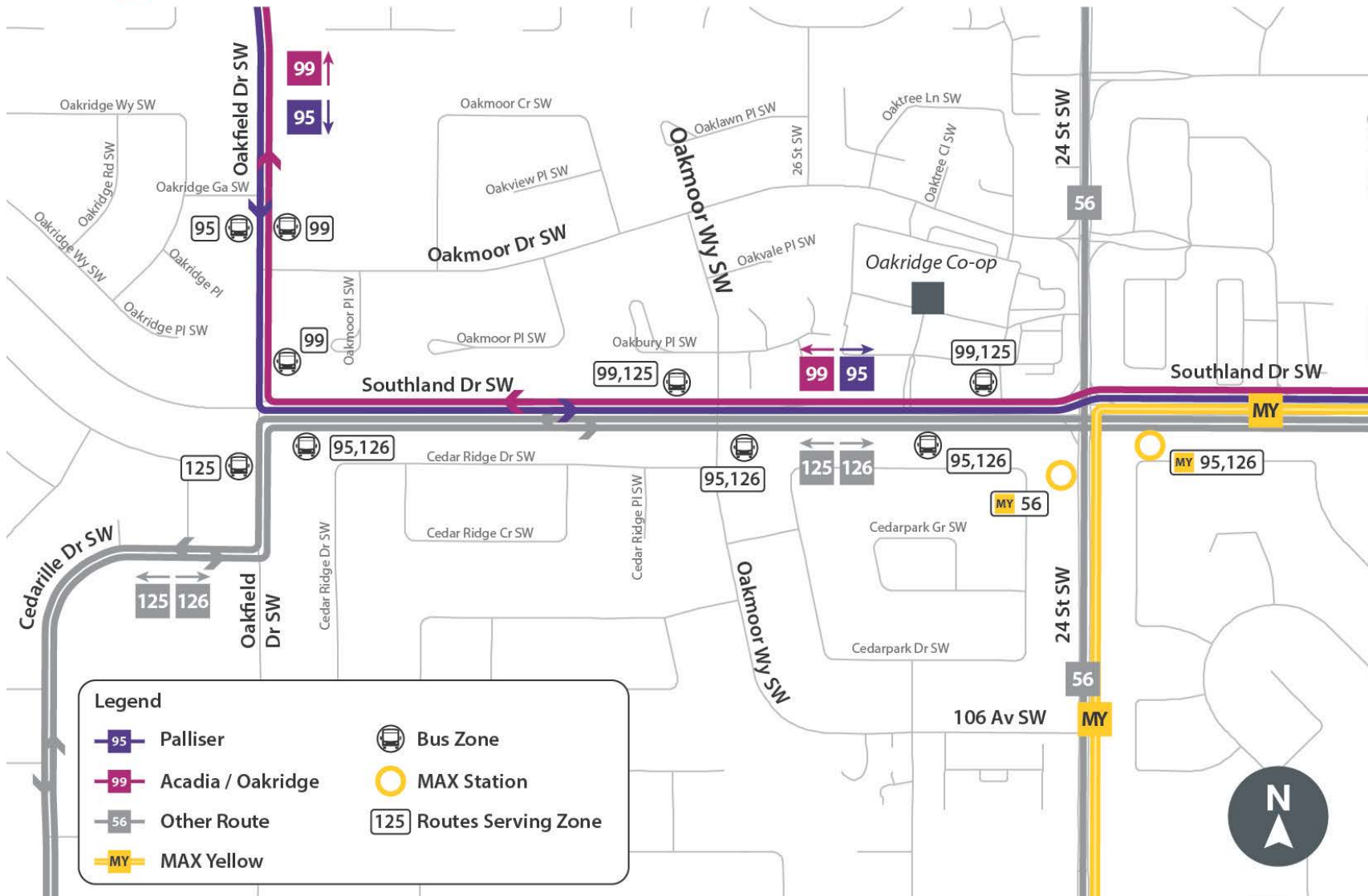
#### *What We Did:*

- **Routes 95 & 99 (New):** Routing was modified to go back to Oakmoor Dr and Oakmoor Wy SW, using the existing bus zones.

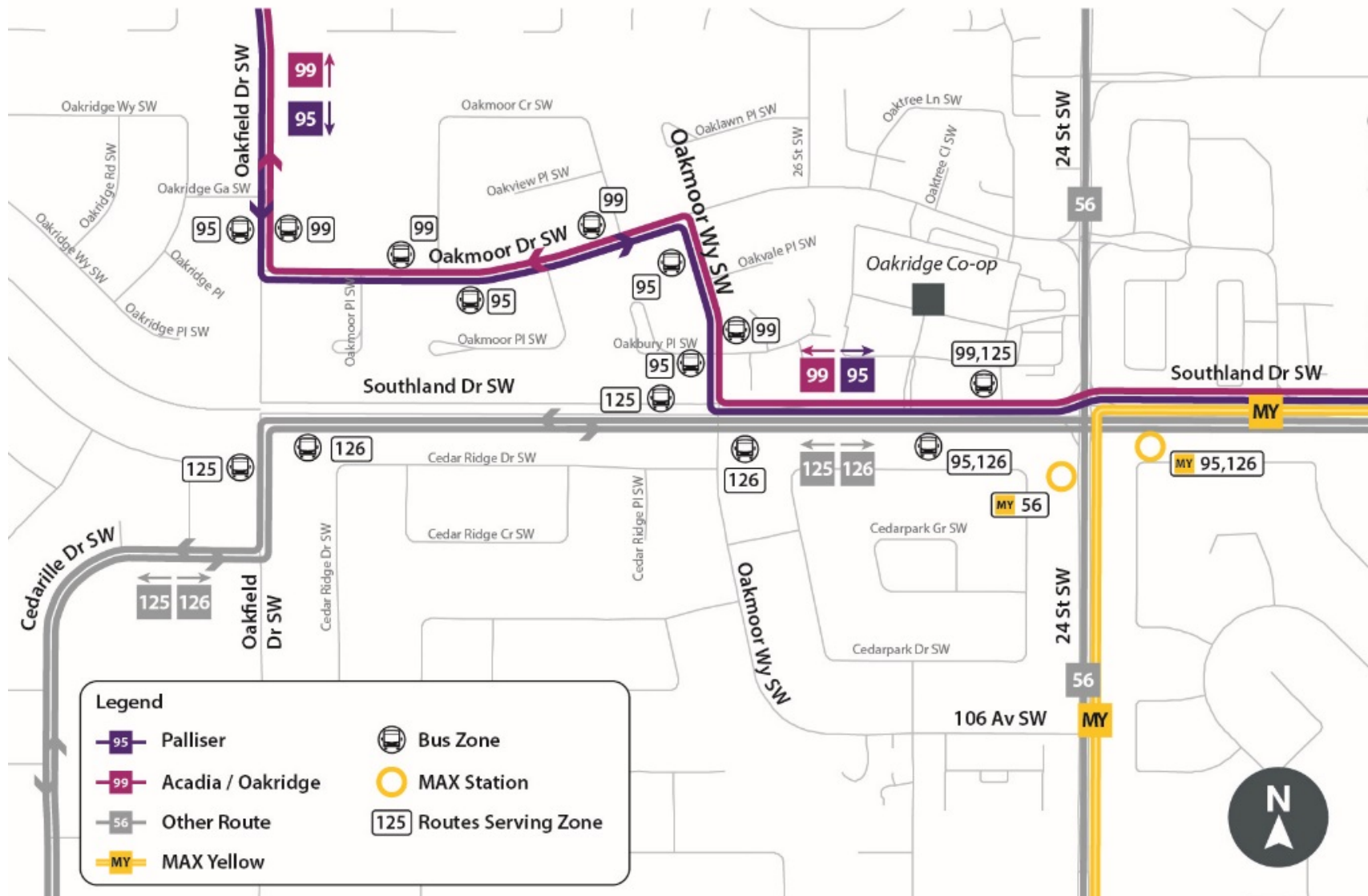
#### *Key Factors for Decision-Making*

- Although this creates a slight increase in travel time, customers will still be able to access the LRT more quickly than with existing routes due to other changes in these communities
- Routes 125 & 126 will remain on Southland Drive, offering an option for those customers who prefer access to the amenities or who are starting their trips south of Southland Drive SW.
- The impact of the routing change would not be significant outside of those customers in the immediate area of the change who provided the comments

# Original Plan (March)



# Final Plan



### 3.3.3 – Southland Leisure Centre – Evening Service to LRT

The proposed routings and service spans for Routes 95/99/125/126 meant that on evenings and weekends buses connecting customers from Southland Leisure Centre to Southland LRT Station would first go through their respective communities. This would increase travel time for customers desiring to go to the east (to the LRT Station) rather than to the immediately surrounding communities.

#### *What We Did*

- **Routes 125 & 126 (New):** Service spans on the Cedarbrae/Braeside routes were switched. Route 126 (clockwise) would now operate until late, while Route 125 (counterclockwise) will have reduced service spans.

#### *Key Factors for Decision-Making*

- Reduced travel time from Southland Leisure Centre (and other higher ridership areas along Southland Drive) to Southland LRT Station
- Customers travelling from Southland LRT Station to the communities of Braeside or Cedarbrae at night will have shorter travel times (Route 126 will travel to Braeside Drive SW and Oakfield Drive SW first, before Southland Drive SW; Route 99 will continue to provide a direct route to those living near Southland Drive SW)
- Some customers travelling from Southland Leisure Centre area to the communities of Braeside or Cedarbrae will have longer trips, but most will have an alternative nearby, and walk distances to bus routes serving these communities are still improved over existing service and are supplemented by MAX Yellow



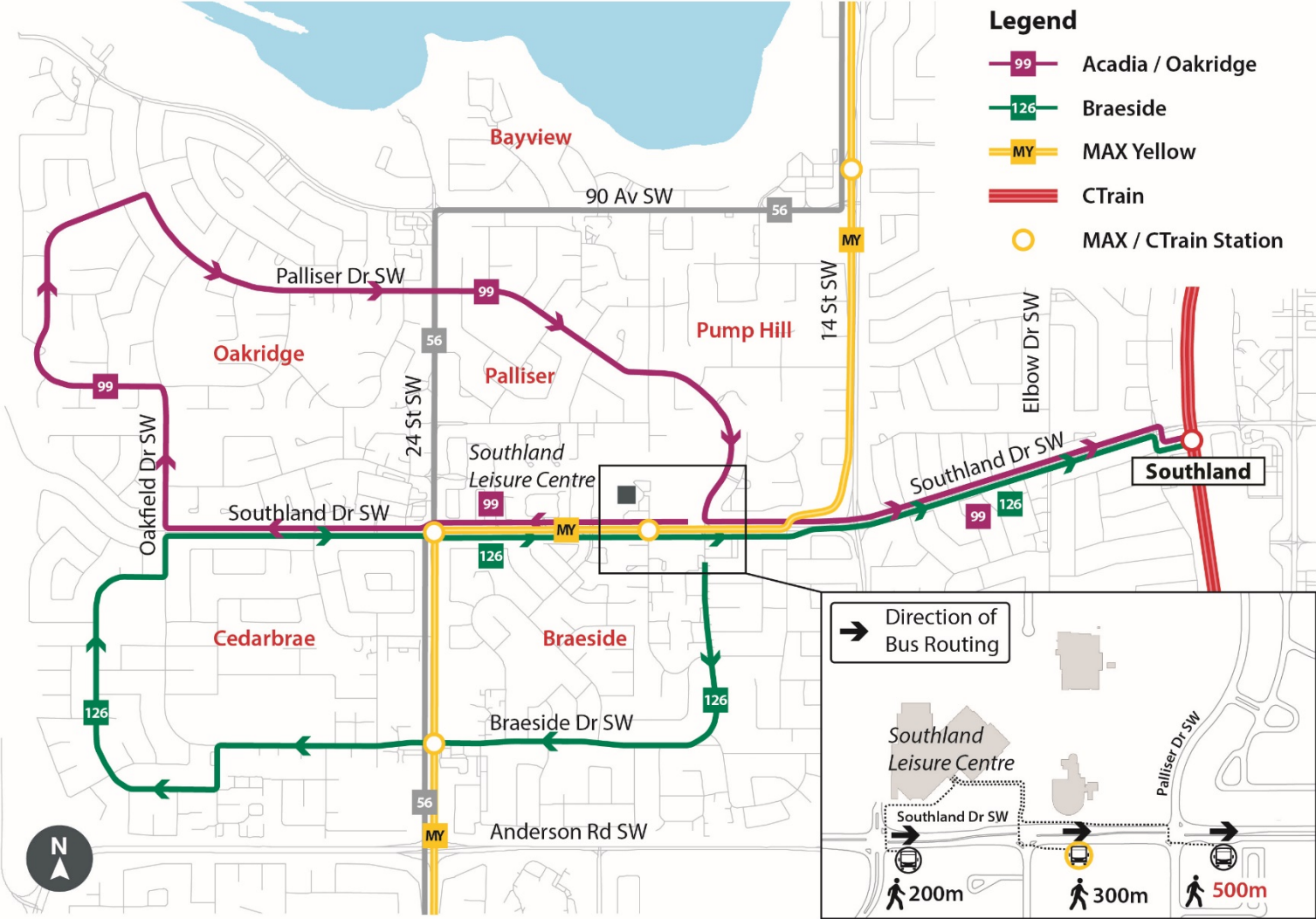
# Original Plan (March)

## Southland Leisure Centre - Evening (Mon-Sat) and Sunday Service to CTrain



# Final Plan

## Southland Leisure Centre - Evening (Mon-Sat) and Sunday Service to CTrain



### 3.3.4 – West Calgary Transfers (Routes 13, 22, 66)

A general comment throughout the feedback on many routes was that the proposed route changes would introduce additional transfers to complete existing trips, resulting in increased travel times, especially outside of peak periods. This was particularly notable in the ‘West Calgary’ plan area (north of Glenmore Trail SW), where a higher degree of change was proposed for existing routes than in areas south of Glenmore Trail SW.

Some of these concerns were addressed through the route redesigns that lead to the **revised plan**. For other trips, the available choices were to either add additional new routes or to improve service frequency on the already proposed routes. The former approach could address some concerns about transfers fully, but not all of them. Furthermore, the resulting routes would likely be infrequent and contribute to reduced utilization across other routes through duplication of services for some or all of their length. The latter approach would still require connections to be made, but reduce their impact for all customers by reducing wait times between connecting buses. This approach also benefits customers not needing a connection by reducing wait times between buses, while better meeting project objectives and budget availability.

Several bus routes in this area of the city (Routes 2, 6, 7, 9, and 20) already operate at frequencies of approximately every 20 minutes through mid-day and some evening/weekend service periods.

#### *What We Did*

- **Routes 13, 22, 66 (Revised and New):** Frequencies were improved on these routes during mid-day and Saturday service periods. Improvements for evening and Sunday service frequency were planned but ultimately removed to address budget savings mandated by City Council

#### *Key Factors for Decision-Making*

- Reduces the impact of additional connections required for trips not addressed directly through the revised routing changes. Wait times between buses are reduced
- Combined with a higher level of service already provided on other routes in the area means that most routes operate at least every 22-23 minutes through much of the day on weekdays and Saturdays
- Benefits customers who do not need additional connections by reducing wait times between buses.
- Supports project objectives and design principles

### 3.3.5 – Westgate Routing (Route 45 [March/April], Route 93 reinstated [June])

Since Route 412 was discontinued and replaced by Route 111 in June 2018, we have heard concerns from customers in the Westgate community about resulting walk distances to access transit service. The Route 111 change has proved to be a successful one, with ridership having increased more than two-thirds in the service area in one year. Modifying Route 111 to address these walk distance concerns would increase travel time while reducing service frequency – reducing many of the benefits that contributed to this ridership increase.

With the 2019 TSR, we offered two options for service in Westgate on how the route on 45 Street SW could operate (shown as Route 45 in the original plan).

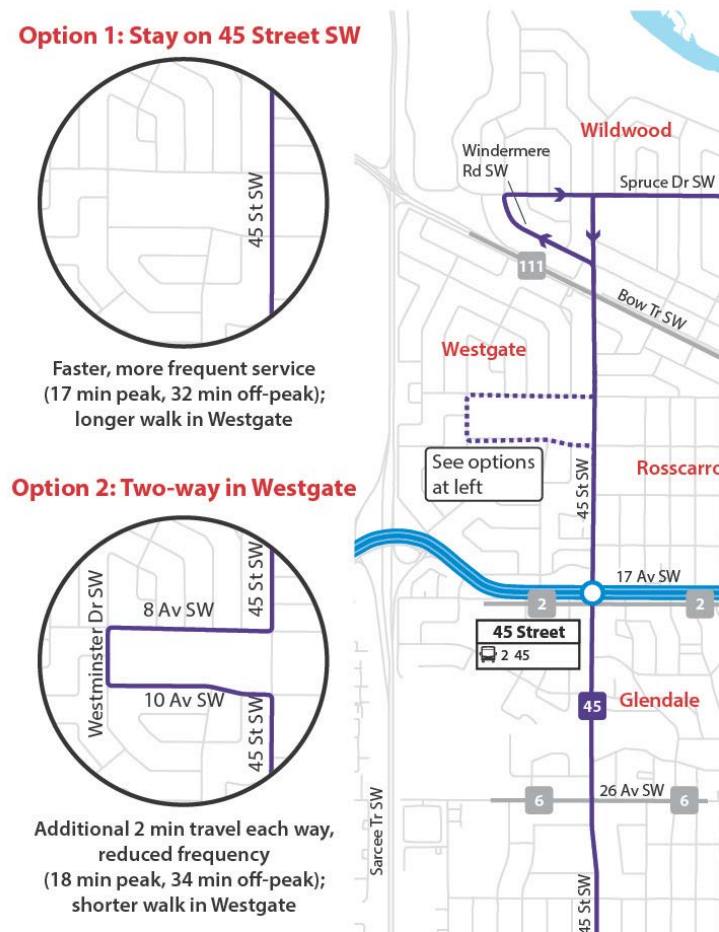
**Option 1: Stay on 45 Street:** The route would operate as it does today. Many customers in Westgate would continue to be within a 5 minute walk of transit service, but some affected by the discontinuation of Route 412 would have a longer walk.

**Option 2: Two-Way Service in Westgate:** The 45 Street route would travel through Westgate community around the schools via 8 Avenue SW, Westminster Drive SW, and 10 Avenue SW, before continuing on the existing routing. Travel time through this routing would increase by about 3 minutes per direction and have a corresponding reduction in route frequency.

Comments received that addressed these two options showed a preference for the route to stay on 45 Street. In addition to travel time impacts, some concerns were expressed over bus noise and parking impacts to accommodate bus zones.

#### What We Did

- **Route 93 (Existing):** Route 93 will continue to operate as it does today, staying on 45 Street



### *Key Factors for Decision-Making*

- There was a notable preference for the route to stay on 45 Street. This includes comments received from areas beyond Westgate that would be impacted, but also from some residents within Westgate
- Many customers in Westgate remain within a 5 minute walk of transit service. These numbers remained constant through the June 2018 changes as areas that had reduced access were offset by areas with improved access to transit



## 3.4 – Operations and Other Community Impacts

Some comments received may be questions or concerns about other impacts of transit changes. Typically, these may be questions about the suitability of a street to support transit service, potential safety concerns, and other community impacts that may be felt by non-transit customers. These feedback themes may not ultimately result in major changes to the plan but were evaluated by the project team. The results of two such cases are summarized here.

### 3.4.1 – Lakeview – 34 Street SW (Route 66)

In the **revised plan**, the routing of transit service in Lakeview showed a notable change. Rather than the current routing of a large one-way loop that travelled primarily on the community’s periphery, the revised proposal showed a section of two-way service on Lakeview Drive with a smaller one-way loop segment. Part of this one-way loop would also reintroduce transit service onto 34 Street SW – a collector street that had not had transit service since the early 1980s.

A significant amount of feedback was received about this proposed routing. Some focused on how the proposed routing impacted travel times, but a large proportion shared concerns about the suitability of this street to support a transit route safely. This included questions about street geometry, parking and related impacts, current safety concerns at some key intersections, and interactions with neighbouring community and school uses.

Calgary Transit examined these concerns in depth to determine if there were conditions about this street which would preclude its safe use as a transit route. The results of this investigation are summarized in [Lakeview – 34 Street](#).



### *What We Did*

- Adjustments were made to the transit route schedule to minimize conflicts with student dismissal, and Calgary Transit has committed to prioritizing monitoring of operations in this area

### *Key Factors for Decision-Making*

- 34 Street SW is classified as a collector and is designed to accommodate transit buses. The street cross-section is consistent with new collector standards that are being constructed in brand new communities for transit routes
- Traffic volumes on this street are low, and parking utilization is in line with typical community conditions in which Calgary Transit operates
- Calgary Transit has a long standing history of safely operating near and around schools, community associations, and other community sites around the city. Our operators are extensively trained to provide safe service for our customers and in our communities



### 3.4.2 – Lakeview – Connect Charter School (Route 66)

In the **revised plan**, service was proposed to be introduced in Lakeview on 34 Street SW. Some of the themes are described in further detail in the section above, but several respondents noted that accommodating a Transit bus zone in proximity to the Connect Charter School in the community could exacerbate existing concerns over traffic and parking. The location identified for the transit bus zone would also displace space currently designated for yellow school buses – potentially resulting in buses not able to access their designated zones or blocking crosswalks.

A meeting was held with representatives from both the school and the school bus provider to discuss these concerns, observe conditions around the school after afternoon dismissal, and discuss potential options to mitigate the concerns. Based on observations it seemed that the highest likelihood for the stated concerns to occur was between the dismissal bell and the scheduled departure of the school buses 10 minutes later.

#### *What We Did*

- **Route 66:** A trip was scheduled to arrive concurrently with the departure of school buses. This trip was rescheduled to arrive a few minutes after the departure of the buses, when most students would have left and to avoid displacing school bus parking
- **Further Monitoring:** Calgary Transit committed to prioritize this location for monitoring after the routes are implemented. This will include verifying if the schedule adjustments to Route 66 have worked, and what additional steps, if any, may be required to minimize impact in the area

#### *Key Factors for Decision-Making*

- The school has a large catchment area and depends heavily on many school buses to safely transport students. It was preferable to look at a solution that avoided displacing once of these school buses to another location
- Alternate locations for the Transit bus zone would have greater impact on other users around the school (ex: parent pick-up/drop-off, non-school related parking)
- The preferred location for the transit zone offered the greatest safety for operation in all service periods (including school dismissal).
- The routing of buses on 34 Street is a key contributor to the overall travel time benefits of the proposed Route 66. Realigning the route off of 34 Street would remove these benefits



### 3.4.3 – Kingsland – 4a Street SW (Route 81)

Route 81 was proposed to be realigned between Heritage Drive and Glenmore Trail to improve transit access for the Kingsland community. The realignment would see Route 81 travel through the community on 75 Avenue SW and 4a Street SW. The proximity of the community to two major roadways (Glenmore Trail and Macleod Trail) limits opportunities to establish bus zones and so much of the community today experiences longer walk distances to access transit service.

Some of the concerns shared in the engagement asked about the suitability for 4a Street SW to support transit service, as well as access concerns getting on/off Macleod Trail to get into this part of Kingsland. Additional concerns related to bus zone locations and potential parking impacts.

Additional analysis was conducted in the area, including site visits at various times of day. Operational tests were also conducted using a Transit Community Shuttle (the vehicle that will be used on Route 81), during weekday afternoon rush hour to test the routing in the community.

#### *What We Did*

- Two adjustments were made on the south side approach to 4a Street SW (coming from 75 Avenue SW):
  - The left turn from Macleod Trail at 73 Avenue SW had lower average delays for buses than the signalized turn at 71 Avenue SW. The signal control at 71 Avenue SW also provided several gaps in southbound traffic to safely make the turn
  - Southbound buses would have lower less delay by using 73 Avenue, in particular when using the Macleod Trail frontage road between 73-75 Avenues SW rather than Macleod Trail proper. This would reduce exposure to delays on Macleod Trail, and bus zones to be established on the sidewalk rather than force customers to cross to the median dividing the frontage road from Macleod Trail

#### *Key Factors for Decision-Making*

- 75 Avenue SW is a collector street designed to accommodate higher volumes of traffic and larger vehicles. The cross-section, at approximately 11.6m, exceeds standards necessary to support two-way transit service
- 4a Street SW varies in its cross-section widths. Only one block (between 69-70 Avenues SW) is below normal width standards. However, this block is already signed as No Parking Anytime on the east side, which increases the effective travel lane widths to be able to support transit
- No operational concerns were noted in accessing 4a Street SW from the north
- Bus zones on 75 Avenue SW would be established at 4a Street SW only. Combined with the existing bus zones on Elbow Drive at 75 Avenue SW, it would provide sufficient transit access in this area of the community

## 3.5 – No Changes Made

This section outlines themes and comments which suggest a particular change or action, but which we could not include in the plan. There may be several reasons for why this outcome was determined, including: incorporating the feedback would have conflicts or impacts to other routes or services, a limited availability of budget to address the comment, and/or incorporating this feedback would directly conflict with project goals and objectives. Some of the sections below may have partially been addressed through plan modifications, but not to the extent expected by those respondents providing comments.

### 3.5.1 – MAX Yellow

A variety comments were received regarding MAX Yellow. Some comments were related to the proposal to discontinue Route 18 and potential impacts to Mount Royal University (see sections on [Route 18](#) and [Route 20](#) below). Others suggested alternate routing, placement of stations, or service levels on the route.

#### *Routing and Station Locations*

Changes to the routing or station locations were not within the scope of the 2019 Transit Service Review. The planning process for MAX Yellow (also previously known as Southwest BRT and MAX Southwest) extends several years prior to the current review and included opportunities for public comment and feedback. More information about this process is available at [www.calgary.ca/swbrt](http://www.calgary.ca/swbrt), as well as the [Southwest BRT Response to Public Questions](#) (note that the file at this link is 18 MB in size).

This earlier public engagement process, along with additional detailed design by the project team and City Staff, resulted in several modifications to the route. The 2019 Transit Service Review instead focused on the rest of the transit network around the MAX line, and how to best integrate it into the network.

Select routing/station modifications made to MAX Yellow prior to 2019 Transit Service Review:

- Route was extended further into downtown to improve connectivity to major destinations and other transit lines.
- Stops were added on Crowchild Trail at 17 Avenue SW and at 26 Avenue SW.
- An originally planned station on 50 Avenue SW was relocated to Crowchild Trail & 54 Avenue SW.

#### *Service Levels*

Service levels (ex: frequency, span) are largely determined through anticipated demand, ridership patterns, and available resources. MAX Yellow will launch with the highest frequency of the four MAX lines, operating every 10 minutes during peak periods, and every 22-27 minutes through most other service periods. Once in operation ridership will be monitored and adjustments made as required (within available resources) to accommodate passenger loads.

### 3.5.2 – Mount Royal University (Route 18)

A large number of comments was received regarding the proposed discontinuation of Route 18 and its potential impacts for students travelling to/from Mount Royal University. Some were concerned about how to make the trip to the campus (especially from downtown), while others noted the additional walk distance required from Richard Rd SW over the current routing via Mount Royal Circle SW (East Gate).

#### *Downtown-MRU Connection*

Between downtown and MRU, MAX Yellow will provide a very similar routing and a better level of service. Customers will have convenient access to MAX Yellow in downtown, whether by walking, taking the CTrain, or other buses. Many of the stops between these two locations will also be served by MAX Yellow, with some notable exceptions:

- On Crowchild Trail at 24 Street SW: Will continue to be served by Route 66, providing connections to downtown. It will also stop near the MRU campus at the Sarcee Road MAX Station
- On Crowchild Trail at S. of 33 Avenue SW: Existing customers in Garrison Woods will be within walking distance of Route 7 on 20 Street SW that can connect them downtown. As the community of Currie (west of Crowchild Trail) continues to develop, MAX Yellow will eventually be realigned to Quesnay Wood Drive SW to serve that community, with a station to be located at Flanders Avenue SW.
- Bishop Carroll High School: The high school is within a 5 minute walk of the MAX Yellow Station at Mount Royal University.

#### *Walk Distance at MRU*

The MAX Station at Mount Royal University is planned on Richard Road at Westmount Way SW. This location helps to balance access to the various major destinations in the area, improve route efficiency and travel time, and allow suitable space to construct the station and its amenities. Customers accessing MRU will have additional walk to the main building, but it will remain a short walk and consistent with typical walk distances to transit service at other post-secondary institutions in Calgary (see map on page 52 below).

### 3.5.3 – Mount Royal University (Route 20)

Similar to comments received regarding Route 18, a notable theme was also concern about the impacts of removing Route 20 from Mount Royal Circle and operate instead on Richard Road SW, specifically with the impacts to walking distance to the campus buildings.

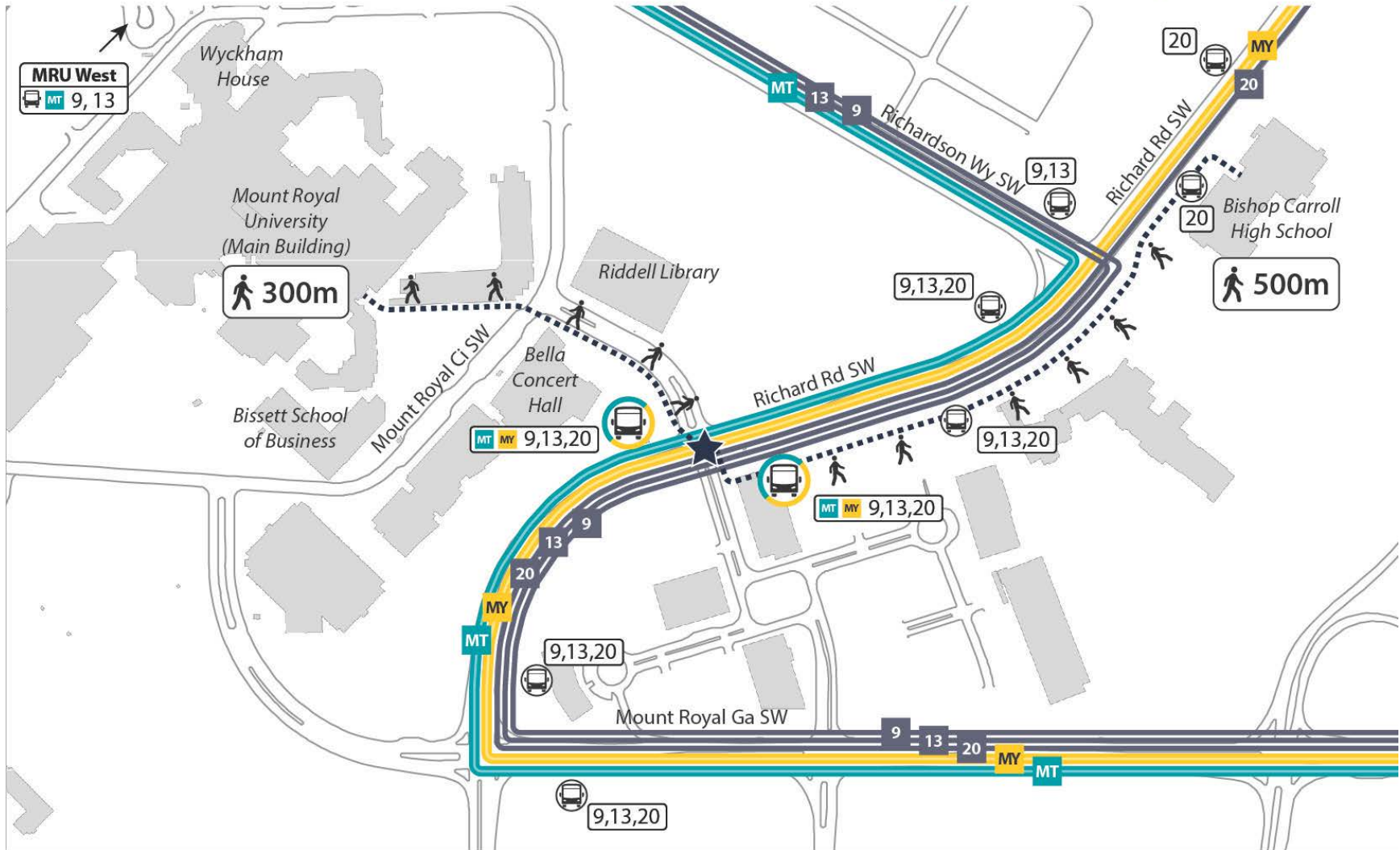
Despite this change, overall walking distances will remain short (less than 5 minutes) to the campus main building. Using the MAX Station will allow customers to access the amenities provided, including the heated shelter and real time bus information. By using the MAX Station on Richard Road, customers will also have improved access to comparable routes that can reduce overall wait time (e.g. - students can take either Route 20 or MAX Teal to Heritage Station, rather than having to choose between them as now).

This change also introduced some flexibility into the Route 20 schedule, which allowed us to make the realignment at Foothills Medical Centre to address comments received to improve access to the hospital.

Through conversations with Mount Royal University administration, it was indicated they had a desire to phase out bus service on Mount Royal Circle in their campus master plan.



# Walk Distances at Mount Royal University & Bishop Carroll



### 3.5.4 – Route 7 (Downtown / 7 Avenue)

Concerns were shared about the proposed realignment of Route 7 away from 7 Avenue SW. Many of the comments noted that this change would reduce access to destinations along the current Route 7 alignment, and particularly to the CORE shopping centre.

This change was proposed primarily due to bus service being phased out on 7 Avenue. These changes (along with the realignment of Route 1 and 305 during last year's Transit Service Review) will support improving CTrain operations, particularly as the amount of 4-car train service increases.

In light of the comments received, an alternative was considered to preserve the 8 Avenue portion of the existing routing. This was ultimately not pursued, due to:

- Supporting overall downtown mobility goals by promoting active modes. Safety concerns had arisen with the introduction of the cycle track as transit buses and cyclists shared space along 8 Avenue. Removing the bus service would remove this concern and improve cycling safety.
- Consolidating services on 5 Avenue would improve connectivity to other routes, reducing transfer distances.
- The majority of Route 7 customers use the stops on EB 8 Avenue at 8 Street SW, and EB 7 Avenue at 1 Street SW. Both of these locations would continue to be served nearby under the **original plan**.
- Many destinations that Route 7 customers are travelling to will remain within a short walk of the revised routing, while customers with limited mobility will have convenient connections to the CTrain available.

#### *CORE Shopping Centre*

The realigned route will still stop near to the shopping centre. A planned Route 7 stop on 5 Avenue SW, between 4-5 Streets SW, will be within 200m (two blocks) of the west side of the mall, while Route 7 will continue to stop near The Bay on SB 1 Street @ 7 Avenue SW (used by MAX Purple and Route 1 today).

### 3.5.5 – Route 18 (Lakeview)

One theme in the feedback concerned the proposed discontinuation of Route 18 and how this would affect Lakeview residents. Key figures of this feedback were concerned with the overall travel time impacts, as well as connectivity to some destinations such as MRU or Bishop Carroll High School that may now require a transfer.

Ultimately, Route 18 could not be kept as the route extensively duplicates the new MAX Yellow line. Keeping Route 18 would result in splitting ridership amongst two routes that provide very similar service and thus contribute to reduced productivity (and contribute to lower service levels being provided on both). One planning goal in the service review was how to provide an alternate service to Lakeview that could continue to provide an attractive transit option for trips going to the north without extensive duplication of other routes (see [Section 3.2.1](#)).

### 3.5.6 – Route 39 (Acadia)

Various concerns were raised with the proposed discontinuation of Route 39 in the community of Acadia. Some of these, such as maintaining access to transit service on Heritage and Southland Drives, are addressed in the plan with other alternatives (Routes 149 and 106, respectively). A more specific theme in the feedback concerned the removal of service in central Acadia, particularly on Ashworth Road SE and on 6 Street SE, and how this would contribute to additional walk distance to transit service.

The proposed changes to this area sought to improve connectivity from the residential areas to Deerfoot Meadows, an important shopping and employment destination for this area of the city, and to other destinations further to the east. Most customers using Route 39 today would be close to one of the new routes on Heritage and Southland Drives, or to the proposed Route 99 through the middle of the Acadia community.

Some customers in the Ashworth Rd SE and 6 St SE areas would have a longer walk distance to transit service, but many would remain within a 5 minute walk of another route. Most of the affected stops had low utilization, especially those that would be furthest away from the new routes.

Based off the feedback, an alternative was considered but ultimately decided against: realigning Route 106 to travel through Acadia prior to going to Deerfoot Meadows (instead of using Blackfoot Trail as proposed). This option would result in additional travel time for other customers that would use this route, reduce service quality on a route that already was proposed to operate every 42 minutes during non-peak periods, while benefitting comparatively fewer customers that would otherwise not have access to transit service.

Other options, including reintroducing Route 39, or similar type of service, were not feasible due to requiring additional service hours while duplicating other existing or planned routes.

### 3.5.7 – Route 47 (Lakeview)

A significant theme in the feedback we received was an expressed desire to keep the existing Route 47 between Lakeview and Chinook LRT Station. Reasons for this varied, including keeping access to Chinook Centre and the LRT Station, along with other secondary destinations (ex: the medical offices near Elbow Drive).

In planning service for Lakeview, an important design factor was to consolidate some of the services into fewer routes. This would allow us to provide more frequent service that operated later into the evening, while also improving route productivity and the sustainability of the routes.

Route 47 has the lowest route productivity (passengers carried per hour of service provided) of any route in this part of west Calgary, and thus the highest cost per passenger carried. The portion of Route 18 serving Lakeview and the Route 63 express also similarly underperform as compared to other similar routes. These outcomes are a direct result of the duplication of service by having three routes splitting the ridership from one community.

Keeping Route 47 as the all-day service for Lakeview was considered but ultimately decided against. The current alignment of the route means that Lakeview customers on Route 47 do not connect to any other route until they get close to Elbow Drive (Routes 3 & 9) or Chinook LRT Station. This means that trips to places like MRU, Westhills, or other destinations closer to Lakeview could not be made without additional connections and extensive backtracking from Chinook, while all trips to downtown would require a transfer to the train.

Examination of trip data taken via on-board surveys in late 2015 indicated that most customers in Lakeview were making trips to places north of the community (ex: Downtown, MRU) than to Chinook. Even among Route 47 customers, more people reported their trip going to or through downtown than to the Chinook area itself. These reasons all contributed to the decision that any consolidated service for Lakeview should continue to be oriented to the north (ex: Downtown).

We did recognize that despite these trends, it was still important to consider ways that we could connect customers to the Chinook area with as little impact as possible. The **original plan** minimized the amount of additional travel time by keeping the transfer point nearby and having two routes that could be connected to in order to continue to Chinook (but required additional walking across a pedestrian bridge to make the transfer), while the **revised plan** minimized walking distance at the expense of additional overall travel time.

Reintroducing Route 47 would undermine project objectives through duplicating other services while benefitting fewer customers. It would also require a considerable addition of service hours into the plan to reintroduce it without other modifications, and so would not support efforts to stay within budget.



### 3.5.8 – Route 56 (Southland Drive)

A number of comments were received about the proposal to realign Route 56 from Southland Drive to Heritage Drive, particularly from respondents in the Woodbine and Woodlands communities. A portion of these were related to school access to John Ware School, which was addressed in our plan modifications ([Section 3.3.1](#)). Another theme express concern that the realignment would add more travel time to access the CTrain. Other comments noted that the proposed change would impact accessibility to other destinations along Southland Drive, notably: Southland Leisure Centre, Southwood Library, and the medical offices near Southland LRT Station.

Many customers in Woodbine and Woodlands will be within walking distance of the new MAX Yellow that will connect them to the leisure centre. For destinations further east, a transfer will be required but may be accomplished to one of four routes (Routes 95, 99, 125, and 126) that serve this area and connection points occurring at MAX stations, mitigating this impact. Travel time from Woodbine to the LRT via the north direction of the route (as opposed to Anderson, which is unchanged), will increase by an average of 3 minutes per direction. Many customers will also be within walk distance of MAX Yellow, which will offer similar travel times to downtown as the existing bus routes to the LRT.

The proposed alignment along 90 Avenue SW and Heritage Drive SW has two main benefits in the plan area:

- (1) Two-way service can be maintained into the evening on the higher ridership portions of 90 Avenue, including a connection to Glenmore Landing shopping centre. The shopping centre today does not have service after 18:30 to return customers or employees back home to this area of the city but instead requires customers to travel through Acadia first; and,
- (2) Improves connections to many key routes that serve Heritage Station, including MAX Teal, Routes 3 and 20, and connections to industrial areas to the east (Route 149). Although MAX Yellow will similarly connect to some of these services (but not all), the proposed Route 56 would reduce the need for multiple transfers to get to these routes for customers not within walk distance of the MAX line.

Returning Route 56 to Southland Drive would duplicate the several routes already proposed in the area (Routes 95, 99, 125, and 126), and create a service gap on 90 Avenue SW. Realigning one or more of the proposed routes to provide coverage to this section of 90 Avenue SW would require additional service hours or providing a similarly limited level of service as exists today – removing the proposed improvement for this corridor and reducing the value of the connection to the Heritage LRT Station area.

### 3.5.9 – Route 63 (Lakeview)

In the **revised plan** brought to the community in June, the plan now included a proposal to discontinue the Route 63 – Lakeview Express. Several customers questioned this in the comments, valuing the express route for its fast travel time to downtown.

The **original plan** would have seen Lakeview served with Route 13 as its regular route. As the travel time on this route to downtown would be a few minutes higher than today, there would be a notable difference between the proposed Route 13 and the express route. In that case, balancing the needs of various customers supported retaining the express route.

In the **revised plan**, the now-proposed Route 66 would match today’s Route 18 for many customers, and in some cases even be faster. Other customers would have a comparable trip time in one direction (either morning or evening) and a few minutes longer in the other. Only one-third of Route 63 customers would have a longer trip in both directions as compared to today. With less difference in time between the two, keeping the express wouldn’t provide a significant benefit over Route 66, but it would carry a high cost while taking ridership away from the regular route by duplicating it to downtown.

Express routes are a specialized type of service, best used when there is a high volume of customers needing to travel to a specific area at a similar time and where existing services cannot adequately accommodate this demand either through insufficient capacity or because it would require excessive transfers and additional travel time.<sup>5</sup> But where existing services can and do provide a fairly comparable service (even if the express route is faster), an express route detracts ridership that would otherwise be using the regular service. This erodes the quality of service for other customers who are not travelling to that same destination.

We already see this sort of pattern with existing ridership in Lakeview. During periods where Route 63 is operating the ridership on Route 18 decreases. But as soon as the express is not operating, Route 18 ridership rebounds. This pattern contributes to why Route 18 only operates every 25 minutes or so in Lakeview during peak periods, and results in longer wait times for customers not travelling to/from downtown.

Express routes are also a particularly expensive type of service to operate, even in situations where the in-service trips are well used (see box at right). These two reasons, impacts to other routes and costs of providing the service, mean that we need to carefully consider appropriate contexts for where an express type of route may be warranted.

Another reason for why the route was proposed to be discontinued is to offset the additional costs of the revised plan. To incorporate the feedback we received into the **revised plan** would require additional service hours – hours that were not available in the budget. Additional efficiencies needed to be found to offset these costs. Route 63, by duplicating existing or proposed routes with similar travel times and destinations, was identified as one such efficiency.

#### Why Are Express Routes Expensive?

Express routes are designed to handle a specialized trip that has a particularly high demand to a specific location. Often there is little or no demand for the return trip, so once a bus finishes an express run it will go out of service and travel (or “deadhead”) to the start of another express trip.

Express type routes therefore spend more of their time out of service than buses on regular routes, but still cost money to operate during these periods.

A bus that makes two express trips in a 2 hour period with 80 people (40 per trip) would be more expensive than a regular route that can make two round trips in the same time: for example, with 40 customers in the peak direction, and 10-15 customers in the reverse direction, on each trip.

---

<sup>5</sup> School routes are another example of an express route

### 3.5.10 – Route 79/80 (Oakridge – 90 Av SW)

In several communities in the southwest of the plan area, current routes offer limited or low frequency service throughout much of the day. Some of the factors that contribute to this outcome include route duplication, inefficient and indirect routing (making routes longer, and so spreading out the time between buses), and extra route kilometres devoted to minimizing walk distances well beyond our normal standards. After analysis of the ridership in the area, we proposed to remove service from some lower ridership segments so that we could concentrate service at stops with more ridership.

This resulted in **original plan** to remove service on 90 Avenue SW, west of 24 Street SW, and which in turn created questions and comments from customers about why this was proposed. Among the concerns shared with us were those about increased walk distances, as well as a worry about increased travel time to access the LRT station, and connecting students to their high school.

Although some homes may now see a longer walk to access transit service, the majority of homes in this area will remain within a 5 minute walk of transit service on Palliser Drive. Some customers will see their walk will increase from 1-2 minutes up to 5 minutes, but the overall numbers of customers impacted is very low as compared with other streets served by transit in the area.

Travel time on the bus to the train station will also largely remain the same for these customers – the distances that buses need to travel to the station are about 5 kilometres at their greatest for both the existing and new routes.

Students attending Henry Wise Wood High School will still have convenient options for their trip. Calgary Transit currently operates a dedicated school service (**Route 780**) that will continue to operate on 90 Av SW and connect students with their bell times. We also work with both of the school boards to evaluate student enrollment and transportation needs, so routes can be adjusted over time to match where students are.

Another concern was that students that use the school before and after bell times for extracurricular activities would now face an additional transfer<sup>6</sup>. The planned Route 81 will ensure that a single transfer trip will remain available: students will be able to take Route 81 from Henry Wise Wood to Southland LRT Station, where they can connect to their bus back to Oakridge.

We also looked at alternatives for service to 90 Avenue SW, including suggestions provided in the feedback. Realigning Route 95 or 99 would result in reduced coverage on Palliser Drive (where there is higher ridership), and so was deemed infeasible. Realigning the proposed Route 56 would add 7-8 minutes of travel time per direction of travel. While this would save a couple of minutes of walk distance for the customers on 90 Avenue SW, this would be greatly offset by the additional travel time for other customers using Route 56. The additional distance would also result in reduced frequency (further impacting the other customers on the route) or additional service hours to maintain service frequency.

---

<sup>6</sup> Students today can take Route 3 and then connect to Route 79/80 at Heritage Drive SW. Respondents were concerned that now students would need to take Route 3 to Heritage LRT Station, then take Red Line to Southland Station, and then to Routes 95 or 99 to return to Oakridge.

Other options would have required new routes to be added to the area, requiring additional service hours, where most of the new route would be overlapping with another route. Combined with the low ridership at the stops in this area, it is not feasible in general, even if service hours were available.

### 3.5.11 – Route 94 (51 Street SW)

A number of comments received on Route 94 was how customers in Glenbrook would be impacted. Among these were concerns about requiring a transfer to access the Westbrook Mall area as a destination, as well as travel time impacts to get to downtown. Several commenters expressed a preference for using the Route 94 and connecting to the CTrain over using Route 6 to go downtown.

Many of the customers on Route 94 between Westhills and Westbrook will continue to be within a short walk of other bus routes that connect them to the CTrain or Westbrook Mall (MAX Teal, Routes 9 and 93). The most significant impact to existing trips would be felt on 51 St SW, where customers would be up to 600m (about a 7-8 minute walk) away from these alternatives.

The changes to Routes 6 & 94 were proposed for several reasons:

- (1) The existing Route 94 uses community shuttles in all service periods. As a result, this section of the route is prone to overcrowding at times. This is particularly so as there is a higher concentration of customers in this area that rely on mobility aids (ex: walkers, wheelchairs, shopping carts), which can be difficult to accommodate in the available space on shuttles. The rest of Route 94 does not require a standard bus to accommodate passenger loads, and so we needed to find a solution that could assign the proper vehicle for the demand – a standard bus on 51 Street SW but keeping a community shuttle on other parts of Route 94.
- (2) Since the routing changes with West LRT in 2012, we have continued to receive requests to provide a similar service to the old Route 6. The reasons for these requests largely correspond to improved connectivity across 37 Street SW. Examples include students from Glenbrook travelling to Western Canada High School, or those travelling from Bankview to go to Westhills to shop. Reintroducing this east-west connectivity also matched the project objectives to improve access to MAX – customers in this area would now be able to get directly to the route on Crowchild without additional transfers.
- (3) The current Routes 6 and 94 duplicate each other on 37 St SW, overlapping not only each other but as well as MAX Teal and Route 9 to connect to Westbrook Station. Removing this overlap will improve route productivity on the MAX and Route 9, and allowed us to improve service levels in Glenbrook and other areas nearby.
- (4) While additional connections would be required for some trips, in general the higher levels of service on the connecting routes will minimize this impact. This is particularly notable for connections to Westbrook Mall – even in mid-day MAX Teal and Route 9 operate every 20-23 minutes, or approximately 6 buses per hour that connect from 26 Avenue to the Mall.

We did further analysis on how trip times from 51 Street SW to downtown would be affected by the new routes.

- **Current (Route 94 to C-Train): Approximately 25-30 minutes**

Route 94 takes approximately 12 minutes to travel from 51 Street SW to Westbrook Station, while the Blue Line takes about 12 minutes to 3 Street SW Station. There is additional transfer time required at Westbrook Station.

- **New (Route 6): Approximately 35-40 minutes**

Route 6 will be scheduled to take approximately 35 minutes to travel from 51 Street SW to 7 Avenue & 1 Street SW.

- **New (Route 6 to MAX Yellow): Approximately 25-30 minutes**

Route 6 is scheduled to take approximately 10 minutes to travel from 51 Street SW to Crowchild Trail. Customers would disembark and walk to the MAX Stop on Crowchild. Both MAX Yellow and Route 66 travel to downtown from here, and take up to 15 minutes to get to 7 Avenue & 1 Street SW. An average of 5 minutes transfer time could be expected (MAX Yellow buses operate every 10 minutes in rush hour).

Based on this analysis, customers on 51 Street could expect a similar travel time if they continue making a transfer. Customers will now also have an option of getting to downtown without making a connection to another route, but it would take slightly longer than on the existing routes.

Although some trips will now require a connection to be made the impacts of this are mitigated by relatively frequent service on the connecting routes. Many customers will remain within walk distance of alternatives that do not require an additional connection to be made. Customers heading to downtown have options that will be faster than today. The realigned Route 6 will offer improved capacity on 51 Street, while improving connectivity between the communities in the area. For these reasons, it was recommended to proceed with the routes as proposed.

### 3.5.12 – Route 107 (20 St SW)

Through the comprehensive redesign of routes in the **revised plan**, Route 107 was now proposed to be discontinued. Comments received expressed concern about this removal of service and impacts to travel time to reach downtown. This was particularly so for customers going to destinations in the west part of downtown – in the afternoon Route 107 takes a more direct routing from here to South Calgary than Route 7.

Route 107 was proposed to be discontinued for three reasons:

- (1) In the revised plan, the realignment of Route 22 would overlap a large portion of Route 107. Approximately two-thirds of customers using today's Route 107 would have a very similar service on Route 22, but now operating all day. There would be little or no impact for these customers.
- (2) Another 10% of Route 107 customers today are within walking distance of the 54 Avenue Terminal. The addition of MAX Yellow to this area would provide a frequent all-day service connecting these customers to downtown.
- (3) The redesign of the routes after our original engagement required additional service hours. To stay within the project budget, we had to find ways to offset these costs. Some originally proposed improvements were removed from the plan, and some routes that were not originally affected were now included. Route 107 (along with the Route 63 Express) were two of the routes identified that overlapped new or existing routes, and where alternatives provided similar service quality for most customers using them.

Express routes are a specialized type of service, best used when there is a high volume of customers needing to travel to a specific area at a similar time, and where existing services cannot adequately accommodate this demand either through insufficient capacity or because it would require excessive transfers and additional travel time. Express routes are also a particularly expensive type of service to operate, even in situations where the trips are well used (see [Section 3.5.9](#) for why they are expensive). These two reasons, impacts to other routes and costs of providing the service, mean that we need to carefully consider appropriate contexts for where an express type of route may be warranted.

The corridor served by Routes 7 & 107 today is a high ridership corridor, reflected in the frequent service offered on Route 7 and the current additional capacity with a second route (Route 107). The introduction of Route 22 will further improve the capacity along much of the corridor (operating 4 times per hour during peak periods, as opposed to the current 2 times per hour on Route 107) and offer increased service at other times of day when Route 107 does not operate.

Keeping Route 107 in addition to the new Route 22 in this area would mean two routes that are providing a very similar type of service to the majority of customers on the existing Route 107, in effect splitting the ridership among these two routes. More than three-quarters of existing Route 107 customers will see a similar travel time with the new routes (being close to either MAX Yellow or Route 22). The remaining customers, primarily those on 20 Street SW in Altadore, will continue to have access to a frequent route that connects them to downtown. Those customers who are more sensitive to overall travel time can also connect to Route 22, with the trip time affected only by the additional time to make the transfer. With both Routes 7 and 22 operating every 10-15 minutes in peak, the average wait for the next bus should be short.

### 3.5.13 – Route 112 (Glamorgan / Rutland Park)

A significant theme throughout the comments we received concerned the proposed discontinuation of Route 112, and a dissatisfaction with the proposed alternatives for customers. This was particularly so in areas where proposed replacements would not connect to downtown. In general, respondents commenting on the changes to this route felt that too much emphasis was being placed on improving trips to other destinations at the expense of existing trip patterns (again, particularly so for those customers going to downtown). To incorporate this feedback into the plan, we underwent a **comprehensive redesign** of the routes in this area to better balance these factors. The **revised plan** received more positive feedback along some sections of the route. Remaining concerns related to travel time impacts to downtown, as well as some other trips that would now require transfers (notably from Sarcee Road to Westhills).

There are numerous factors which contributed to why Route 112 was included within the scope the Transit Service Review, and why changes were proposed in the **original plan**:

- (1) Consolidating some of our downtown service onto a more central corridor (Richmond Road) that provides a convenient and direct connection between Downtown and the Westhills area. This moves us towards realizing a high frequency Primary Transit Network on this corridor, while supporting the intensification over time as this area becomes a Main Street.
- (2) Improving the efficiency and productivity of our downtown routes through consolidating some of our services. Although Route 112 is well utilized in some periods, it carries fewer customers per day (as well as per hour of transit service provided) than many other routes that serve downtown. All of the downtown routes with performance metrics below Route 112 were part of recent Transit Service Reviews (2016, 2018) or are also included in this review.
- (3) Supporting improved travel time and connectivity between major destinations. The original plan proposed a Route 93 connection between Coach Hill and Chinook LRT Station that would considerably reduce travel time and transfers for residents west of 37 Street SW to getting to destinations along Red Line South. This route would also provide more direct routing and reduce transfers for customers travelling from west of Sarcee Trail SW to Mount Royal University.
- (4) Balancing travel times along transit corridors in this area while minimizing duplication of services. Communities in this area had a wide range of travel times to downtown on existing routes, ranging from 25-45 minutes. The original plan sought to balance this such that even accounting for transfer times most customers would have travel times approximately 30-35 minutes long (including transfers). In order to reduce duplication and overall project costs, some areas saw negative impacts in order to be able to provide these other improvements.
- (5) Impacts to existing trips could be mitigated with the proposed routes. Many customers using the existing Route 112 would have a smaller impact to travel time, and some would see an improvement. This includes: customers who now walk further to access Route 112 since the discontinuation of Route 108 in 2012, as well as those travelling between Westhills and Downtown. Many customers were also near other existing or proposed routes that would keep overall travel time increases minimal.

The most significant impacts to travel time were on portions of 46 Avenue SW that were not close to another route. Customers here would see an additional 7-14 minutes of travel time to downtown, but this comprised only one-fifth of the total ridership on the route.

Within this framework, maintaining Route 112 as today would have created duplication over portions of these routes. This would require additional service hours, while reducing the likelihood of productivity improvements where overlaps occurred.

The comments on the original plan indicated that in this area too great an emphasis was placed on connectivity to other destinations at the expense of existing trips to downtown. Many respondents also indicated that additional travel time on the bus or in needing to make a connection would be a significant impact on their trips. In the redesigned routes we brought to the public in June, we sought to address these key concerns while still being able to achieve many of the improvements listed above. The **revised plan** will see the majority of Route 112 customers have similar travel times to today. Where negative impacts remain, the revised routes replacing Route 112 offer the option of fewer transfers, or a smaller increase in travel time than the original plan.

The revised plan that was presented to the community required additional service hours over what was originally proposed. This resulted in some proposed improvements being removed from the plan, as well as identifying other efficiencies within the area that could offset these costs. Alternatives were considered which included keeping Route 112. However, these alternatives carried yet higher service hour costs due to increased amounts of service duplication or required significant negative impacts to other customers or communities in order to accommodate Route 112 into the plan. In order to stay within the project budget and realize other planned improvements in the area, it was determined that it was infeasible to keep Route 112 in the revised plan.





### 3.5.14 – Westgate (Route 412 Discontinued in 2018)

In June 2018, Calgary Transit implemented a route change which combined the then-existing Routes 412 & 452, resulting in the new Route 111 – Old Banff Coach Road. This change had impacts to transit coverage within the community of Westgate: although some areas received new or improved access, service was removed from 8 Avenue SW and Westminster Drive SW. Some customers would now have to walk up to 5 minutes to a bus stop (meeting transit coverage standards), while some others would now have a longer than 5 minute walk.

In the 2019 TSR, we proposed two options for service in this area – potentially realigning the route to travel further into Westgate, or maintain its current alignment on 45 Street SW. Ultimately the feedback we received favoured keeping the current alignment on 45 Street SW (see [Section 3.3.5](#)).

In addition to our regular engagement feedback, we also conducted a targeted engagement session with a social organization that operates in the area. Commenters shared with us their concerns about the walking distance to transit, especially how this impacts their perception of safety in the community. With a realignment of Route 93 not supportable based on the feedback, we looked at other alternatives.

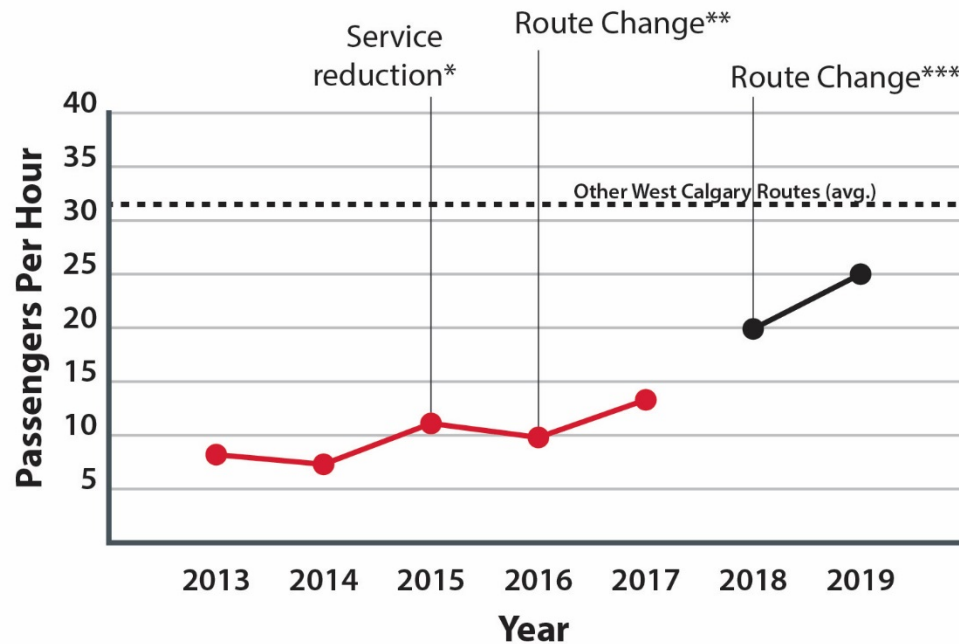
Realigning Route 111 would add an additional 5 minutes of travel time per direction, impacting the majority of ridership on the route.<sup>7</sup> The additional travel time could also impact all customers on Route 111 by reducing service frequency to account for the additional route distance, or else additional costs to add service to maintain frequency. The limitations of the road network also did not favour realigning the route, particularly in the westbound direction as no access exists from Westgate to westbound Bow Trail SW except at 45 Street SW.

Changing Route 111 was also not recommended due to the successful outcome of this route change. Since June 2018, ridership on Route 111 has increased by nearly 70% over the previous Routes 412 & 452, and a significant proportion of this has been new trips (ex: ridership on other routes near Route 111 has not changed significantly since it was introduced).

---

<sup>7</sup> Route 111 is usually at its busiest near 45 Street SW. It picks up customers from the West Springs, Coach Hill, and Westgate areas, and after 45 Street SW starts dropping many of them off at schools, the mall, or LRT Station (and vice-versa in the afternoon).

## Route 412 Performance (Passengers per Hour)



\* Service was removed in lower ridership periods to improve productivity.

\*\* Route discontinued east of Westbrook LRT Station. Renamed 412 - Bow Trail. Service added back during mid-day and evening periods (decline in productivity is expected to start)

\*\*\* Routes 412 & 452 discontinued. Replaced by Route 111. Service levels (frequency/span) are similar

**412** Route 412 (Dec. 2012 - June 2018)

**111** Route 111 (since June 2018)

Adding a new route that would provide this coverage was also considered. However, connecting this route to a CTrain Station or other destination outside of the Westgate community would mean that the majority of the route would overlap with existing services (with nearly the same routing as those other routes outside of Westgate). Due to the limited number of additional customers that would have access to transit, the high cost per new customer, and the extensive duplication of routes that would result, it was recommended that no additional new route be added to Westgate.

## 3.6 – Other

In this Review, two separate plans were ultimately developed and presented to the public. In the **original plan**, several new or modified routes were proposed, and comments provided by the public. This section will describe why they were no longer proposed in the revised plan in June. This section will also discuss some of the future plans that may arise out of outcomes from the 2019 Review, and comments provided on routes that were not within the scope of this current project.

### 3.6.1 – Proposed Route 51 and 141 (14 Street Crosstown)

The original plan called for the existing Route 414 to be divided into two routes at Lions Park. The north segment would be renumbered as Route 141 and largely follow the same routing as today's Route 414. The south segment was proposed to be renumbered as Route 51 and extended south from the end of today's Route 414 at 17 Avenue to the Garrison Green community, travelling via Marda Loop and Mount Royal University.

This extension would help improve cross-town connectivity, allowing customers from south of the Bow River to have better access to shopping (North Hill) and education (SAIT), while customers north of the river could have better access to the same (Marda Loop, MRU, respectively), without needing to go downtown first. Another benefit was to improve east-west connectivity across Crowchild Trail, as south of 26 Avenue no routes cross over the expressway. It would also introduce service into the Garrison Green community, which currently relies on longer walk distances to existing routes on 50 Avenue SW and Crowchild Trail SW.

To minimize impact to existing customers on Route 414, it was proposed that the two routes would be 'interlined' at Lions Park LRT Station. This means that Route 51 would turn into Route 141 at Lions Park, and vice-versa. We did not combine them into one route, as it was anticipated over time that demand would be diverge on the two routes – as additional service was added to Route 51 not all buses would turn into a Route 141, for example.

Not many comments were received on these new routes (as compared to other routes in the plan), but many of the ones that were made reflected a positive sentiment for the change.

#### ***Why We Removed It from the Plan***

There are three main reasons why this change was no longer proposed in the revised plan:

- (1) The redesign of routes in west Calgary to address public comments required additional service hours. To stay within the project budget, we needed to reduce the number of improvements proposed and/or find additional efficiencies within the plan area. Both approaches were used. Routes 63 and 107 were proposed to be discontinued, while planned improvements for Routes 51/141 and Route 93 were removed from the plan. Despite the lower frequency and service span of Routes 51/141, this was among the more expensive improvements in the plan.

- (2) As part of the redesign, Route 22 was realigned to Marda Loop and 14 Street SW. This helped address one of the goals of Route 51 (improving connectivity east/west across Crowchild Trail). Although Marda Loop and 14 Street SW are higher ridership corridors, having three routes serving these areas all day could undermine the productivity of the routes and make it not possible to support high levels of service.
- (3) Some comments noted that dividing the Route 414 but keeping it interlined would be confusing for customers, and that the route should either just be combined or kept completely separated. As the focus of the 2019 Review is primarily on the southwest, while the customers most impacted by a decision on this live in the northwest, it would be best to revisit this consideration at a future date in a project that focuses on that area.

### 3.6.2 – Proposed Route 93 (Coach Hill/Chinook)

The original plan proposed to divide Route 93 at Westhills. The east section (Westhills to Westbrook) would be renumbered as Route 45 and largely follow the same routing as today. The west section (Coach Hill to Westhills) was proposed to be extended to Chinook LRT Station via Glamorgan, Mount Royal University, and Glenmore Trail.

There were several benefits as to why this routing was proposed:

- (1) Connectivity from communities west of Sarcee Trail to destinations east of it would be greatly improved in both travel time and reduced numbers of transfers. Customers going to MRU would have saved 10-15 minutes on their trip and had fewer transfers, and customers going to Chinook or other destinations south or east of the Glenmore Reservoir would no longer have to double transfer through downtown.
- (2) Customers east of Sarcee Trail would have an improved trip to destinations west of it, by reducing travel time and/or transfers. This includes improved access to Westside Rec Centre, Ambrose University, and shopping/employment on 85 Street SW.
- (3) Although overlapping with Route 9, the extension of Route 93 would help to reduce the impact of transfers associated with other changes. This is particularly so for Lakeview, where customers in the original plan would need to transfer to reach Chinook and MRU.

Positive comments were certainly received about this route, particularly from west of Sarcee Trail. However, we also received concerns with this proposal as it would replace Route 112 in the community of Glamorgan. The value of improving access to these other destinations did not make up for the reduced access to downtown that some customers in this area depended on. Although alternatives were proposed, the customers providing these comments were concerned about now needing to make a transfer, and too much additional travel time compared with their existing trip.

### *Why We Removed It from the Plan*

There are three main reasons why this change was no longer proposed in the revised plan:

- (1) The redesigning of the routes reflected a rebalancing of what destinations to emphasize. We heard that it is great that customers can get to other places easier, but in some cases the plan deemphasized downtown too much.
- (2) Additional service hours were required to incorporate the feedback we received into the plan. To stay within the project budget, we needed to reduce the number of improvements proposed and/or find additional efficiencies within the plan area. Both approaches were used. Routes 63 and 107 were proposed to be discontinued, while planned improvements for Routes 51/141 and Route 93 were removed from the plan.
- (3) Although the degree of benefit is reduced, the revised proposal for Route 13 will still improve travel time from west of Sarcee Trail to the Mount Royal University and Bishop Carroll area. This is due to the more direct routing that the revised Route 13 would take (on 46 Avenue SW as opposed to Richmond Road). This will save about 3 minutes per direction in travel time per trip.

#### 3.6.3 – Proposed Route 132 (Glamorgan and 29 Street SW)

In the original plan, Route 132 was proposed to travel from Glamorgan to Westbrook LRT Station, via Sarcee Road and 29 Street SW. The route was designed to achieve several outcomes:

- (1) Customers using the current Route 112 who would no longer have a bus to downtown would be able to connect to one of several frequent services that did: the CTrain and Routes 2, 6, and 22. This would reduce the impact of making the transfer and the amount of additional travel time.
- (2) With the realignment of Route 6 to Westhills, customers in the Killarney area would continue to remain close to a route that could take them to Westbrook: Route 9 on 37 Street SW, and Route 132 on 29 Street SW.
- (3) Customers on Sarcee Road, particularly those further away from 37 Street SW, would be connected to the Westbrook area, offering improved access to the mall and connections to the train and other bus routes.
- (4) The portion of today's Route 112 in Glamorgan (49 Avenue, Galbraith Drive) that is served only during off-peak periods in one direction would now receive all-day service. This would reduce walk distances for these residents, including those at the Silvera and New Horizons facilities nearby.

The feedback we received for this route indicated, as with others in this area, that these benefits would not be as highly valued by customers as their existing connection to downtown. Additional comments received from respondents at retirement residences and social organizations along Sarcee Road also indicated that a transfer at Westbrook LRT Station could be especially onerous for those with mobility limitations due to the grade separation between the bus terminal and train platform.

The route was ultimately part of the comprehensive redesign of routes in the area, with much more positive feedback being noted in this area for the revised plan.

### 3.6.5 – Service to Garrison Green and Currie

As a result of the plan modifications to address public feedback, the Route 51 was removed and not included in the final plan. This results in no new route being designated for the Garrison Green community, and currently leaves the MAX Yellow as the only future route designated for Currie Barracks as that community develops over the coming years.

This was primarily the result of limited available funding for new routes, and that in order to incorporate public feedback into plan modifications it was necessary to find additional service hours through additional network efficiencies or by removing proposed improvements.

Although it was not possible to introduce the service via the 2019 TSR, the communities of Garrison Green and Currie will continue to be on Calgary Transit's investment plan for service to new communities. Over time as these communities (particularly Currie) continue to develop, and subject to available funding, service will be added to these areas.

The eventual alignment for MAX Yellow will continue to be through the Currie community along Quesnay Wood Drive SW. As the community develops out, a new MAX station will be constructed at the intersection of Quesnay Wood Drive and Flanders Avenue SW and the MAX route will eventually be realigned to serve it.

### 3.6.6 – Comments for Routes outside Transit Service Review area

Among the many comments we received as part of this Review, we also received hundreds about routes that were not proposed to change, or beyond the scope of the current review. All comments received in this project will be retained for consideration with any future route or community planning work. Comments related to route changes that were implemented as part of last year's Transit Service Review will also be considered in the monitoring of that project and any potential future adjustments.

### 3.6.7 – Frequency Improvements (General)

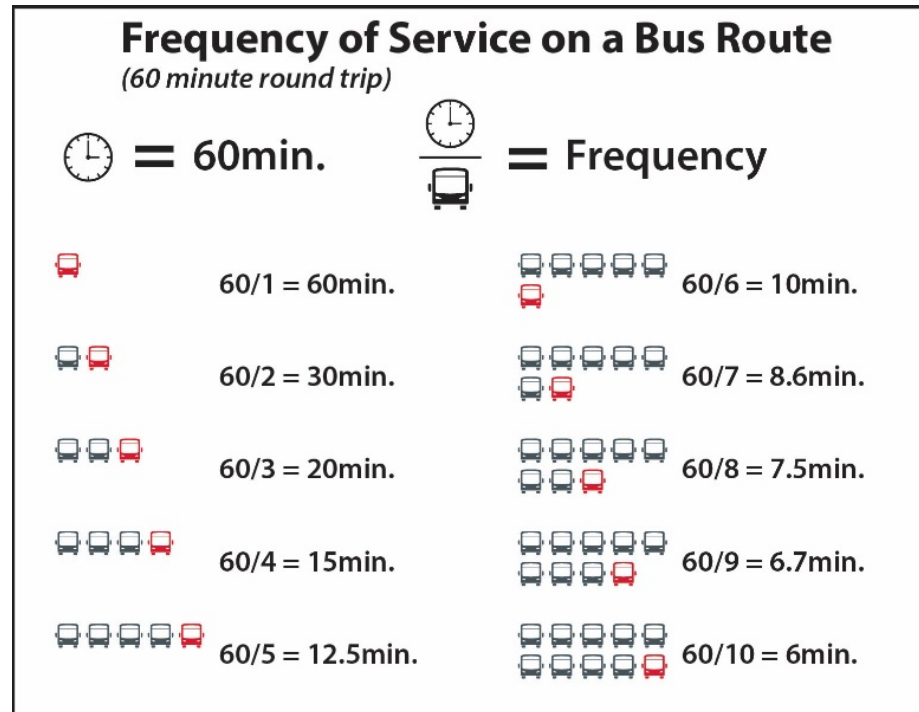
A common theme across many routes and areas was that buses should operate more often. This was applicable across many different times of day, trip types, and whether or not a transfer may be required. Many expressed how this outcome would contribute to more attractive transit trips through lower waiting times (especially in bad weather), reduced the impact of a missed bus, and less need to consult a schedule when making a trip.

We agree with all of these sentiments, and one of the main project objectives is to provide more frequent routes that operate later. However, the challenge that we face is to provide transit service within our budget, and frequency improvements can be among the most expensive to make. Operating a single bus can cost a lot, so we must be prudent in allocating our service hours.

Improvements in frequency also diminish with each additional bus, adding a considerable cost with a smaller and smaller difference in frequency. For example, let us assume we have a community bus route that takes 60 minutes to complete a round trip. That time, divided by the number of buses assigned to that route, will give us the frequency of service. If a bus route currently operates every 30 minutes on this route (two buses), and we add two buses, we can improve it to come every 15 minutes, doubling the frequency. But the next two buses would only get us to every 10 minutes – an improvement to be sure, but not as great as the first improvement.

**In order to double the frequency of any route, you need to double the amount of buses on that route (and therefore, double the cost).**

For this reason, on many of our routes we try to achieve a “base” level of service, to operate about every 30 minutes. During peak periods when more customers use the network, we add more service, typically proportionally to the expected ridership. Many of the routes will operate every 15-20 minutes during rush hour. Due to the cost of each subsequent improvement, only the busier routes will operate more often than every 15 minutes.



## 4.0– Next Steps

As the new MAX Yellow begins serving Calgarians on **December 23<sup>rd</sup>, 2019**, and all the new route changes are implemented, this will not be the end of the Transit Service Review. It will be important to ensure that the new network is operating smoothly, and that we make adjustments and refinements to better serve our customers. It will also be important to verify that the new routes do in fact meet our project objectives by providing more convenient and attractive transit service to southwest Calgary.

### 4.1 - Monitoring

Most important will be to let the new routes operate for a long enough period to permit a full evaluation of ridership and other impacts. It can take time for customers to adjust to new routes, and more time yet still for potential new customers to become aware of and try the services, especially those that are currently difficult to make by transit.

Having a longer period before any major changes to the routes allows our existing customers to gain experience with the new network. Many customers will find that their trip is better or at least the same as before. Others may find that their trip got longer, or perhaps encountered a problem with a trip that they did not originally consider when making their comment.

For these reasons, we typically will avoid making any substantive changes to new routes for at least one year.

### 4.2 – Adjustments and Revisions

It is important that we allow the new network to operate for some time to gain a fuller picture of ridership changes and other customer impacts. But that is not to say that no revisions can be made. In a complex network there are opportunities for smaller adjustments and refinements that can improve someone’s trip without completely redesigning a route.

Adjusting trip times to better match up with key transfer points, or to better align with school bells, adjusting a stop location, or adding an extra trip on a route to deal with crowding are among the actions that Calgary Transit can and does take after new routes are implemented to help smooth out the transition. The feedback we gather in our monitoring process, in the weeks and months after the route changes, from our customers as well as our operators, and from residents in the community, will all be carefully considered so that we can better serve Calgarians.



