Calgary Metropolitan Region Board
Land Use & Servicing Committee Meeting
Agenda – June 11, 2020, 1:30 PM
Go-To Meeting/Call-In

The purpose of this meeting is to convene, discuss and make decisions regarding recommendations to be made to the Calgary Metropolitan Region Board.

1. Call to Order & Opening Remarks   Sheard

2. Adoption of Agenda   All
   For Decision: *Motion to adopt and/or revise the agenda*

3. Review and Approve Minutes   (Attachment)   All   **3**
   For Decision: *Motion that the Committee review and*
   approve the Minutes of the May 7, 2020 meeting

4. Growth & Servicing Plan Project Update   (Verbal)   HDRC
   For Information: *Motion that the Committee receive for*
   information an update on the progress of the Growth &
   Servicing Plan

5. HDRC Phase 1 Report   (Attachment)   Tipman   **6**
   For Information: *Motion that the Committee receive*
   the HDR Calthorpe Phase 1 Information Gathering Report
   for information

6. Transit Background Report   (Attachment)   Tipman/LaFleche/
   For Decision: *Motion that the Committee recommend*   MacIsaac   **7**
   to the Board for approval the Transit Background Report

7. Approach to Development of Policy for Flood Prone Areas (Attachment) Graves/   **51**
   For Decision: *Motion that the Committee recommend*   HDRC
   to the Board approval of the approach to development
   of policy for flood prone areas

8. Draft Recreation Policy   (Attachment)   Hales   **58**
   For Decision: *Motion that the Committee recommend to*
   the Board approval of the Draft Recreation Policy
   for the Growth and Servicing Plan

9. Next Meeting: Thursday July 2, 2020

10. Adjournment   Sheard

Committee Members:

Mayor Peter Brown (Airdrie)
Councillor Gian-Carlo Carra (Calgary)
Mayor Marshall Chalmers(Chestermere)
Mayor Jeff Genung (Cochrane)
Reeve Suzanne Oel (Foothills) *Vice Chair*
Councillor Don Moore (High River)
Councillor Tara McFadden (Cochrane)
Mayor Pat Fule (Strathmore)
Deputy Reeve Scott Klassen (Wheatland)

Mayor Craig Snodgrass (High River)
Mayor Bill Robertson (Okotoks) *Vice Chair*
Reeve Greg Boehlke (Rocky View)
Councillor Tom Ikert (Wheatland)
Councillor Bob Sobol (Strathmore)

Christopher Sheard, Committee Chair
Dale Beesley, GOA Representative

Upcoming Meetings:

Land Use & Servicing Committee	Thursday July 2 - 9:30 AM	GoTo Meeting
Board Meeting	Friday June 26 – 9:30 AM	GoTo Meeting
Governance Committee	Thursday June 18 – 9:30 AM	GoTo Meeting
Advocacy Committee	TBD	

Calgary Metropolitan Region Board

Minutes of the Meeting of the
Land Use and Servicing Committee
of the Calgary Metropolitan Region Board
on Thursday May 7, 2020 by Go-To Meeting

Delegates in Attendance:
Mayor Peter Brown – City of Airdrie
Councillor Gian-Carlo Carra – City of Calgary
Mayor Marshall Chalmers – City of Chestermere
Mayor Jeff Genung – Town of Cochrane
Reeve Suzanne Oel – Foothills County (Vice Chair)
Mayor Craig Snodgrass – Town of High River
Councillor Ray Watrin – Town of Okotoks
Reeve Greg Boehlke – Rocky View County
Mayor Pat Fule – Town of Strathmore
Councillor Bob Sobol – Town of Strathmore
Reeve Amber Ling – Wheatland County
Councillor Tom Ikert - Wheatland County
CMRB Administration:
Christopher Sheard, Chair
Liisa Tipman, Project Manager–Land Use
Jaime Graves, Project Manager-Intermunicipal Servicing
JP Leclair, GIS Analyst
Shelley Armeneau, Office Manager

1. **Call to Order**
   Called to order at 9:30 AM.

2. **Approval of Agenda**
   Moved by Mayor Brown, **Seconded by** Mayor Fule, accepted by Chair

   Motion: That the Committee approve the agenda, moving item #8 Policy Discussion on Agricultural Lands to follow #5.

   Motion carried unanimously.

3. **Review Minutes**
   Moved by Mayor Fule, **Seconded by** Mayor Genung, accepted by Chair.

   Motion: That the Committee approve the Minutes of the April 2, 2020 meeting.

   Motion carried unanimously.

4. **South & East Calgary Regional Transportation Study**
   Aziz Merali of TransCan Engineering provided a presentation and answered questions.

Moved by Mayor Brown, **Seconded by** Mayor Snodgrass, accepted by Chair.

Motion: That the Committee recommend to the Board approval of the South and East Calgary Regional Transportation Study; and

Motion: That the Committee recommend that the Board share the South and East Calgary Regional Transportation Study with the Minister of Transportation and senior leadership at Alberta Transportation.

Motion carried.

5. Integration of North and South & East Transportation Studies

Aziz Merali of TransCan Engineering provided a presentation and answered questions. Wheatland County advised that the numbers for their municipality in the Growth Assumptions chart were inaccurate. Members discussed how to address this issue and the following motion was made:

Moved by Councillor Ikert, **Seconded by** Reeve Boehlke, accepted by Chair.

Motion: That the Committee recommend to the Board approval of the Integration Memo of the North Calgary Regional Transportation Study and the South and East Calgary Regional Transportation Study with an amendment to the population projection for Wheatland County to 1,000 in 2015 and any other commensurate changes.

Motion carried unanimously.

The motion proposed in the Agenda to share the integration technical memo with the Minister of Transportation and senior leadership at Alberta Transportation will be brought forward to a future meeting once the changes have been made to the growth assumptions.

Motion Arising
Moved by Mayor Brown, **Seconded by** Reeve Boehlke, accepted by Chair.

Motion: That the Committee recommend that the Board share the integrated project list with the Government of Alberta and indicate the Board's support for the timely proceeding of those projects that are shovel ready, in furtherance of the Government of Alberta's economic stimulus program.

Motion carried unanimously.

This motion arising will be circulated to the Board for an email vote as soon as possible.

6. Policy Discussion-Agricultural Lands

The Committee discussed a memo provided by HDR Calthorpe that outlines some policy issues and questions for discussion around agricultural lands. The purpose of the discussion was to help HDR understand the local context of the

CMR and to scope which implementation tools around the efficient use of land would support the success of agriculture in the CMR. A brief follow-up "what we heard" summary of the Committee discussion will be created by HDR and come back to a future meeting.

7. **Growth & Servicing Plan Project Update**
   Steve Power from HDR Calthorpe updated the Committee as follow:
   o Good progress on scenarios, business as usual mostly done, alternative scenarios well advanced.
   o Aiming to have workshop #3 in June by online virtual format, working out details now, likely a presentation of scenarios with opportunity for discussion followed by time for TAG groups to review technical details.
   o Will be scheduling meeting with TAGS to discuss specifics and where additional analysis is needed, and to consider technical issues around servicing and policy that arise from these scenarios. Rigorous engagement with TAGS will follow in terms of doing the analysis on scenarios and refinements that will lead to a final scenario.
   o Final task in short term is online public engagement process. Details are well advanced and HDR will be discussing the process with the communications and engagement team.

   Moved by Mayor Fule, **Seconded by** Mayor Brown, accepted by Chair.

   Motion: That the Committee receive for information an update on the progress of the Growth and Servicing Plan.

   Motion carried unanimously.

8. **Draft Recreation Policy**
   Jaime Graves introduced the Draft Recreation Policy for the Committee to discuss. Airdrie identified a recommendation from their staff to have further input on the Policy.

   Moved by Mayor Brown, **Seconded by** Reeve Boehlke, accepted by Chair.

   Motion: That the Committee table the recommendation for this period and recommend that we have professional administrators from across the CMR be the leadership group on the TAG so that they are able to provide much needed input to fill holes in what is currently be proposed.

   Motion carried unanimously

9. Next Meeting: Thursday June 11, 2020

10. Adjournment

   _____
   CMRB Chair, Christopher Sheard

![Calgary Metropolitan Region Board logo]

Agenda Item	5
Submitted to	**Land Use and Servicing Committee**
Purpose	**For Information**
Subject	**Phase 1 Report**
Meeting Date	**June 11, 2020**

Motion that the Committee receive the HDR Calthorpe Phase 1 Information Gathering Report for information

Summary

- Phase 1 of the HDR Calthorpe work plan is complete. Phase 1 included information gathering, building a database and map of existing conditions, and holding Workshop #1 to discuss and define key regional issues and challenges.

- The Phase 1 Information Gathering Report provides a brief and high-level overview of the activities and information gathered in Phase 1.

- The Committee discussed the report at the April 2020 Committee meeting and referred the report back to CMRB Administration to gather further input from members of the technical advisory groups. The Phase 1 report has been updated in consideration of the input received during the TAGs review.

- The Phase 1 Report is being presented to the Committee for information.

Attachments

1. Phase 1 Information Gathering Report, HDR Calthorpe – can be accessed and downloaded here: HDR|Calthorpe Phase 1 Information Gathering Report.

Calgary Metropolitan Region Board

Agenda Item	6
Submitted to	**Land Use and Servicing Committee**
Purpose	**For Decision**
Subject	**Transit Background Report**
Meeting Date	**June 11, 2020**

Motion that the Land Use and Servicing Committee recommend to the Board for approval the Transit Background Report

Summary

- The Transit Subcommittee was established in April 2019 to prepare a background report on transit in the Calgary Metropolitan Region ("CMR").

- Subcommittee member municipalities include the City of Airdrie, City of Calgary, City of Chestermere, Town of Cochrane, Town of Okotoks, and Rocky View County.

- In July 2019, the Subcommittee presented its recommendations to the Intermunicipal Servicing Committee. The ISC unanimously approved the recommendations.

- The draft report was circulated to the Subcommittee and the LU TAG for review and comment.

- The final draft report is being presented for recommendation to the Board for approval.

Attachments
- Presentation, Transit Background Report
- Draft *Transit Background Report*

1. Background

The Transit Subcommittee was established in April 2019. The Subcommittee was mandated to complete the following tasks:
- To complete an overview of existing and planned transit in the CMR
- To define what transit means at the regional scale
- To consider planning approaches and best practices for transit focused at the regional scale

Agenda Item 6

- To provide recommendations for consideration in the Growth Plan & Servicing Plan planning process

At the July 2019 ISC meeting, the ISC approved the recommendations of the Subcommittee. These recommendations included:

1. Focus on key themes of "integration," "connection" and "efficiency" in transit background report
2. Integrate transit specialists into the Growth & Servicing Plan planning process
3. Defer transit servicing and governance considerations until post-Growth & Servicing Plan approval
4. Consider a role for the Advocacy Committee in working with Province on providing accessible transit service to regional healthcare facilities

The Transit Background Report has been reviewed by the Transit Subcommittee and the LU TAG.

2. Outcomes

The Transit Background Report provides an overview of transit in the CMR and includes recommendations around goals, objectives, definitions and potential policy opportunities. The Transit Background Report highlights the importance of transit to the economic, social and environmental health of the CMR, and the importance or working towards an efficient, integrated and connected approach to planning for and delivering transit services. The transit system is best supported when all member municipalities consider how to incorporate transit into their communities and business areas at all stages of the planning process, as appropriate to the local scale and context.

The report is available for information, but it is not binding to the Growth and Servicing Plan. Understanding the location, population and scale of growth areas is an important aspect of planning for transit, which will be determined as part of the HDR|Calthorpe scenario process; as such, the Transit Background Report recommends the integration of CMR transit specialists into the scenario process to ensure the appropriate integration of transit into the Growth & Servicing Plan.

3. Recommendation

That the Land Use and Servicing Committee recommend to the Board for approval the Transit Background Report

Agenda Item 6

Transit Background Report

Agenda Item 6i

LAND USE AND INTERMUNICIPAL SERVICING COMMITTEE

June 11, 2020

Purpose

- Outcomes are intended:

  - To complete an overview of existing and planned transit in the CMR

  - To define what transit means at the regional scale

  - To consider planning approaches and best practices for transit focused at the regional scale

  - To provide recommendations for consideration in the Growth Plan & Servicing Plan planning process

- Outcomes will inform the development of the Growth & Servicing Plan but are not binding to the Plan

Overview

- April 2019 ISC approved the establishment of a background report and the development of a Transit Background Report

- July 2019 ISC approved recommendations from the Transit Subcommittee

  – *Motion: That the Calgary Metropolitan Region Intermunicipal Servicing Committee approve the recommendations of the Transit Subcommittee*

- Motion approved unanimously

ISC-Approved Transit Subcommittee Recommendations

1. Focus on key themes of "integration," "connection" and "efficiency" in transit background report

2. Integrate transit specialists into the Growth & Servicing Plan planning process

3. Defer transit servicing and governance considerations until post-Growth & Servicing Plan approval

4. Consider a role for the Advocacy Committee in working with Province on providing accessible transit service to regional healthcare facilities

Overview of Transit in the CMR

The Importance of Transit

- Public transit is an increasingly important mode of connecting people to jobs, housing and institutional uses

- Public transit serves the essential needs of communities, even during the most challenging times

- Demographic profiles are changing

- Costs are increasing for owning and operating a personal vehicle at a time when poverty and income disparity are growing

- Rural areas benefit from transit too

- There is a need to reduce environmental impacts

Existing and Planned Regional Transit Service

- Identified as:

  - Existing and planned intermunicipal bus routes (public and private providers)

  - Existing and planned higher order transit (LRT or BRT)

  - Existing and planned LRT stations where intermunicipal transit connections are facilitated

- Publicly provided services are identified in council approved plans
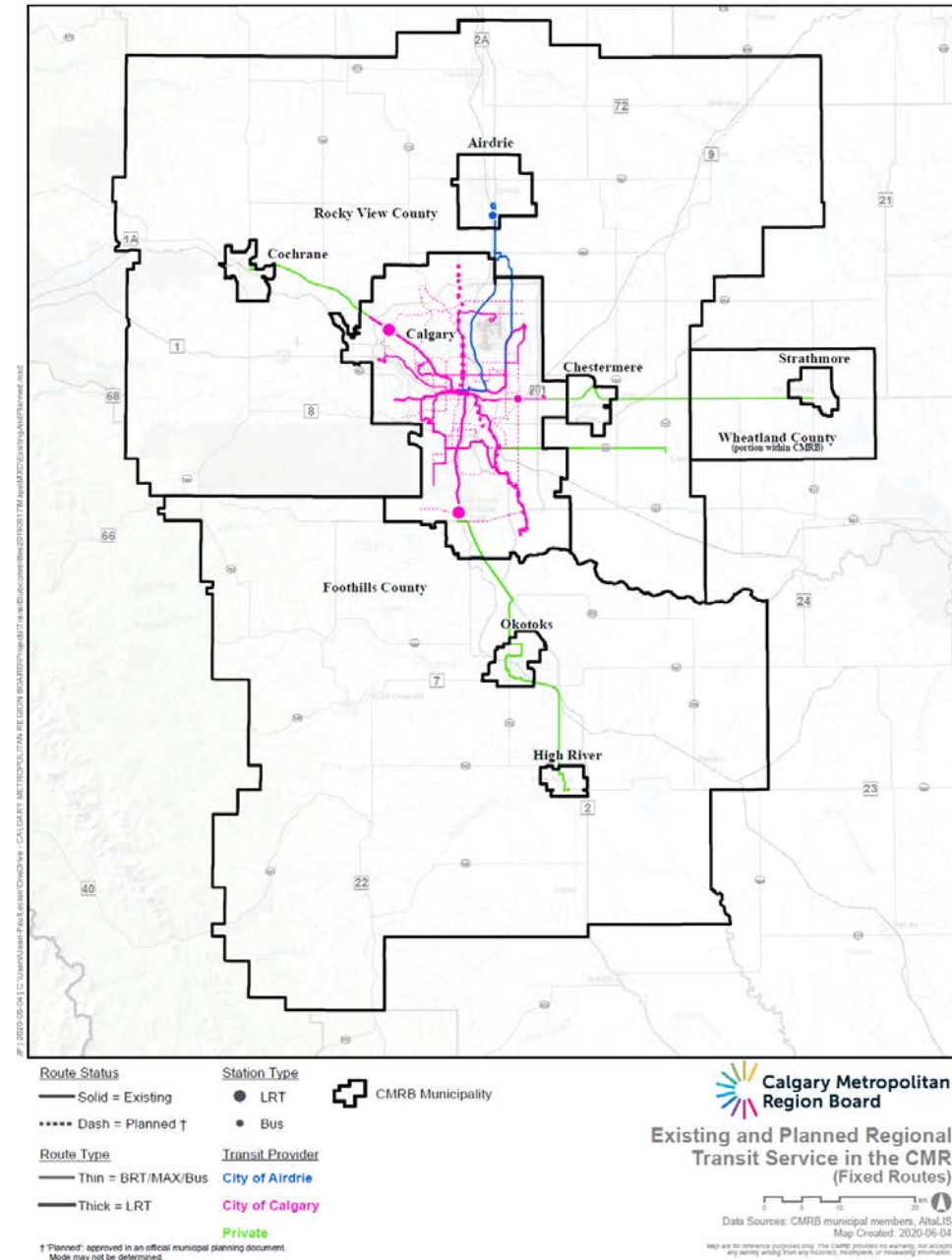
Potential Future Regional Transit Service

- Identified as:
  - Potential or aspirational intermunicipal bus routes (public and private providers)
  - Potential or aspirational higher order transit (LRT or BRT)
  - LRT stations where intermunicipal transit connections could be facilitated
- To be reconsidered as part of completing the Growth & Servicing Plan

Potential Future Regional Transit Service in the CMR

Calgary Metropolitan Region Board
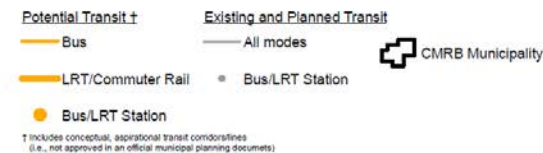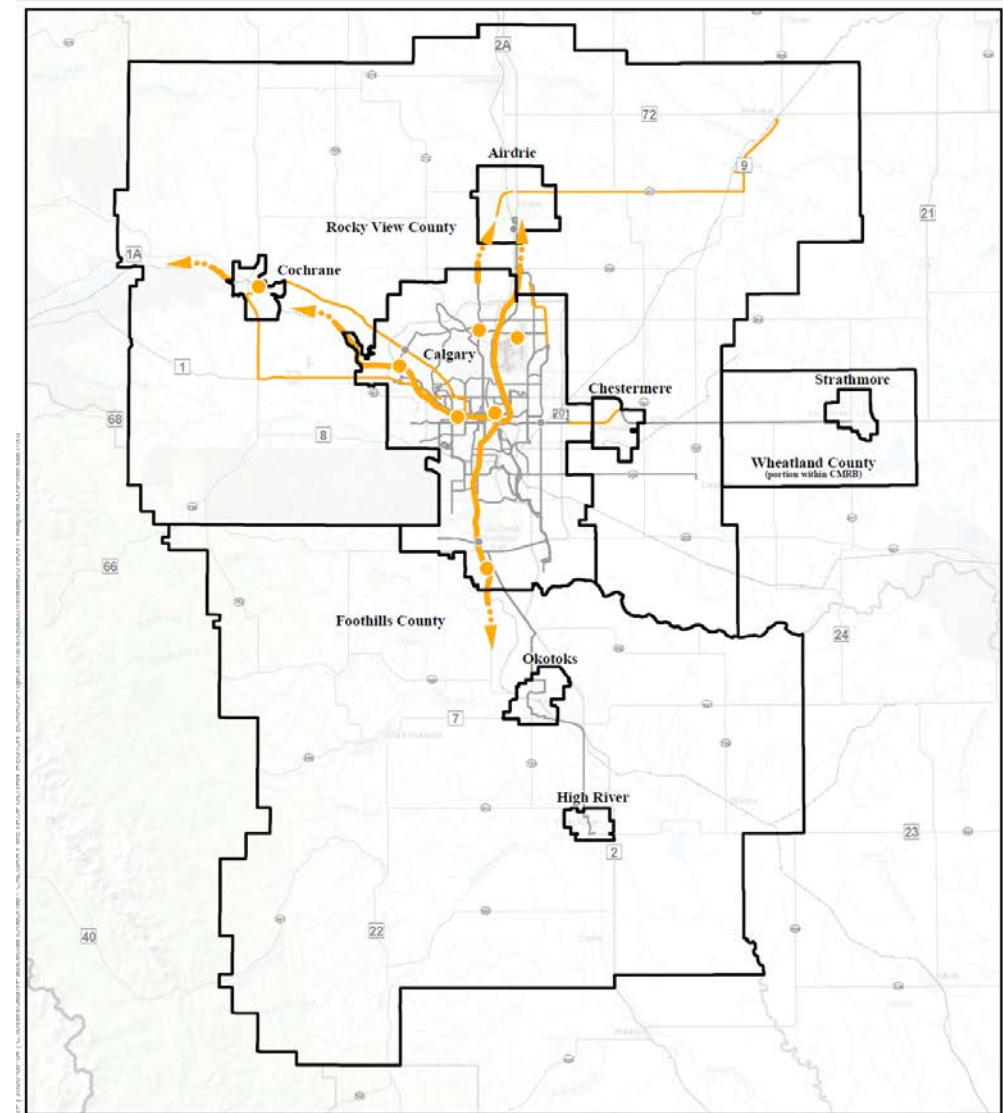
Report Outcomes

Definitions

- The Report defines the following terms:
    - Higher Order Transit
    - Transit-Oriented Communities
    - Transit-Oriented Development

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Recommended Goal

- *To support the economic, social, environmental health of the Calgary Metropolitan Region through an efficient, integrated and connected approach to planning for and delivering transit services*

Recommended Objectives

1. Promote transit-oriented communities across the CMR
2. Identify transit corridors that connect land use, regional transit areas, activity hubs, and higher density, mixed use development
3. Ensure transit is integrated in the Growth and Servicing Plan
4. Support an efficient transit service in the CMR
5. Promote coordination with provincial and federal governments

Objective #1 – "Promote Transit-Oriented Communities"

Objective	Approach
Promote transit-oriented communities across the CMR	• Coordinate land use and transportation to provide fast, direct and cost-effective access to more destinations for more people

Objective #1 – Policy Opportunities

Potential Policy Opportunities

It is recommended that, appropriate to the scale and context:

- MDPs provide direction on transit

- MDPs and ASPs identify ways to achieve infill along higher density, mixed use corridors

- New ASPs and ARPs provide direction on improving transit service in the future

- New ASPs and ARPs provide direction on transit-oriented design strategies and standards

Objective #2 – "Identify Transit Corridors"

Objective	Approach
• Identify transit corridors that connect land use, regional transit areas, activity hubs, and higher density, mixed use development	• To identify corridors as required by the Regulation • Enables corridor protection over time • Allows for the planning of higher density and mixed use nodes in a pattern that supports the efficient and effective delivery of transit

Objective #2 – Policy Opportunities

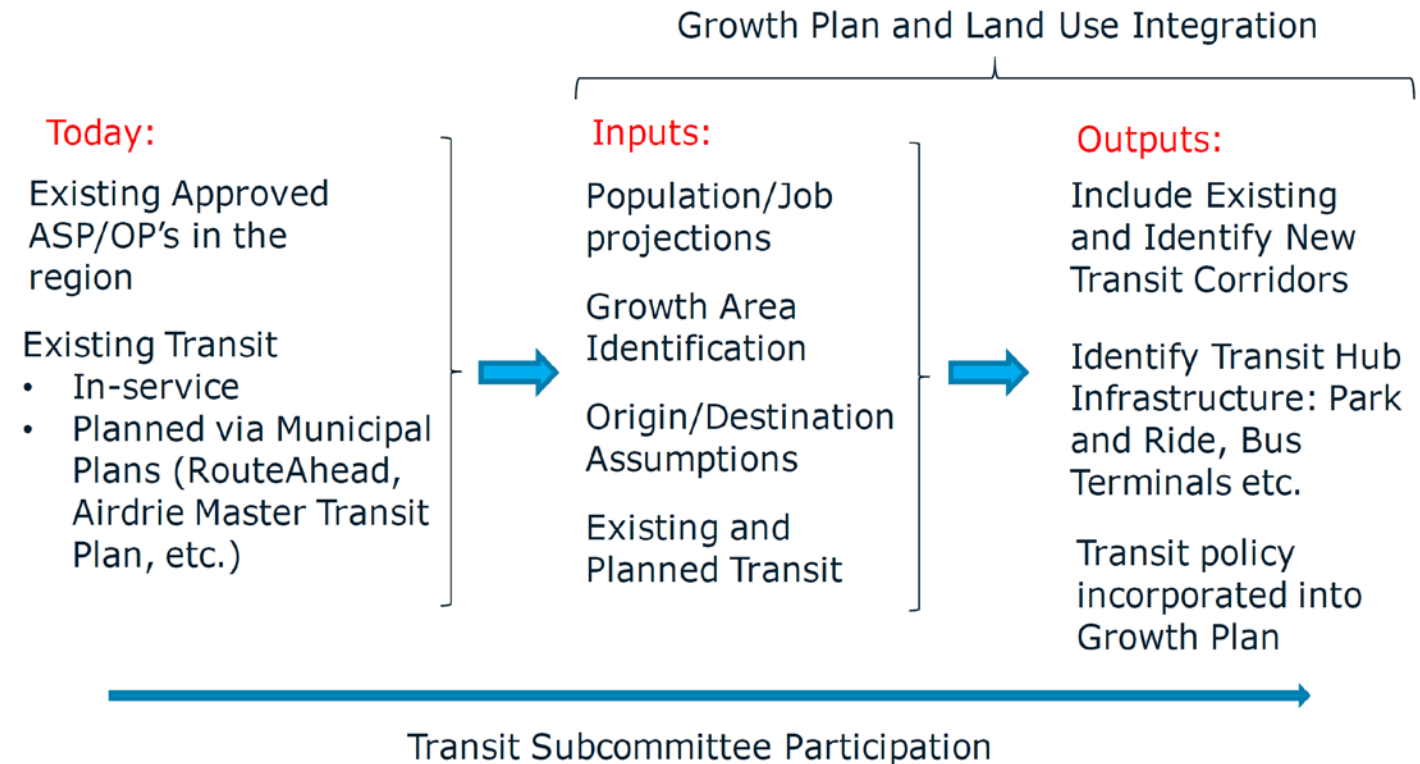## Potential Policy Opportunities

It is recommended that:

- The Growth & Servicing Plan identify transit corridors in ways that create an *efficient, integrated and connected* transit system

Objective #3 – "Coordinate with Infrastructure"

Objective	Approach
Ensure transit is integrated in the Growth & Servicing Plan	• Make Transit Subcommittee members available to support the regional planning process

Objective #3 – Policy Opportunities

Potential Policy Opportunities

Growth Plan and Land Use Integration

Today:

Existing Approved ASP/OP's in the region

Existing Transit
- In-service
- Planned via Municipal Plans (RouteAhead, Airdrie Master Transit Plan, etc.)

Inputs:

Population/Job projections

Growth Area Identification

Origin/Destination Assumptions

Existing and Planned Transit

Outputs:

Include Existing and Identify New Transit Corridors

Identify Transit Hub Infrastructure: Park and Ride, Bus Terminals etc.

Transit policy incorporated into Growth Plan

Transit Subcommittee Participation

Objective #4 – "A More Efficient Transit Service"

Objective	Approach
Support a more efficient model of shared services to enhance the use of ratepayer dollars	• Defer service delivery and governance considerations until after the completion of the Growth and Servicing Plan (post-2020) • This allows for the recommended growth areas to be fully considered in discussions about transit service delivery and governance

Objective #4 – Policy Opportunities

Potential Policy Opportunities

- Include next steps for transit implementation/servicing strategies in the Growth & Servicing Plan policies:

  - Recommendation for a Regional Transit or Regional Mobility Plan to implement Growth Plan. This could include a review governance and service delivery models based on the approved Growth Plan and supporting policies.
  - Recommendation to establish a collaborative regional group tasked with planning and deploying integrated and efficient transit services. This would enable the pursuit of efficiencies in transit service delivery on an ongoing basis.

Objective #5 –
"Coordinate with Other Government Agencies"

Objective	Approach
Coordinate with other government agencies to enhance use of ratepayer dollars	• Provide information to the CMRB's Advocacy Committee on matters of transit funding when a common regional interest is identified and the support of other government agencies is required

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Objective #5 –
Example of Need for Coordination with Other Agencies

Regionalization of Health Care Facilities

- For example, delivering clients to regional provincial health programs and other provincial service programs has left member municipalities to plan, deliver or fund these transit services in whole or in part

- Providing transit service to regional medical facilities is a significant challenge for smaller municipalities with limited access to regional transit

Thank you

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TRANSIT BACKGROUND REPORT

June 11, 2020

Contents

1. BACKGROUND TO THE REPORT

The purpose of this background report is to provide information about transit in the Calgary Metropolitan Region ("CMR") and to provide general direction on land use planning and servicing approaches that speak to the requirements of the *Calgary Metropolitan Region Board Regulation* ("Regulation"). The outcomes of the report will inform the development of the Growth and Servicing Plan, but the recommendations of the background report are not binding on either plan.

The Transit Background Report was drafted by municipal experts with backgrounds in both transit and land use planning who participate in the CMRB's Transit Subcommittee. Established in April 2019, the role of the Subcommittee is:

- To complete an environmental scan of existing and planned transit in the Calgary Metropolitan Region (existing conditions)
- To define what transit means at the regional scale
- To consider planning approaches and best practices for transit focused at the regional scale
- To provide recommendations for consideration in the Growth Plan and Servicing Plan planning process

The Subcommittee includes representatives from the City of Airdrie, City of Calgary, City of Chestermere, Town of Cochrane, Town of Okotoks, and Rocky View County. In addition to this expertise, a broad range of research sources were consulted.

Public engagement activities related to transit were deferred to the Growth and Servicing Plan engagement process as the content of the background report includes recommendations only and is not binding to the outcomes of the Growth and Servicing Plan.

Proper integration of transit into the Growth and Servicing Plan makes the ultimate delivery of transit services more efficient over time, creating higher levels of service at lower costs.

- This report provides an overview of some key considerations around transit-oriented communities with the understanding that discussions around growth areas, density, general land use, and intermunicipal transit corridors are within the scope of HDR Calthorpe's scenario work.
- The Regulation allows for regional consideration of shared service delivery. As noted in Section 6.4 of this report, it is recommended that transit planning and operations considerations be deferred until there is a consensus about the scale and location of growth areas.

2. DEFINITIONS

Higher Order Transit (HOT): Transit service planned and designed to maintain greater levels of speed, reliability and passenger capacity than can be achieved by transit vehicles operating in mixed traffic, often by operating transit vehicles in dedicated rights-of-way.

Transit-Oriented Communities (TOC): Places that, by their design, allow people to drive less and use other forms of transportation, such as walking, cycling, and transit. These regions, municipalities or neighbourhoods focus higher-density, mixed-use, pedestrian friendly areas within walking distance of frequent transit, and they implement mobility management measures to discourage unnecessary driving.

Transit-Oriented Development (TOD): Specific buildings or development projects whose form and design are shaped by their proximity to frequent transit.

3. REPORT CONTEXT

Transit is the only consideration listed as aspects of both the Growth Plan and the Servicing Plan in the *Calgary Metropolitan Region Board Regulation*:

- The Growth Plan must include the "identification of...corridors for recreation, transportation, energy transmission, utilities and intermunicipal transit" Section 9.1(b)(iv)
- Servicing Plan must "list the servicing required to support the development outlined in the Growth Plan, which may include transportation, including regional transit..." Section 16(a)(i)

These two elements of transit were identified and described by the Subcommittee as:

- incorporating transit into land use planning norms ("planning for transit"), and
- providing transit service and operational considerations ("transit planning").

4. THE IMPORTANCE OF TRANSIT

As discussed in the Transit Subcommittee, providing transit makes the CMR more resilient and adaptable to shifts in economic, environmental and demographic patterns. The following list defines the rationale for emphasizing transit as a fundamental aspect of the Growth and Servicing Plan. These considerations help to inform the recommended outcomes identified in this report.

- Public transit is an increasingly important mode of connecting to people to jobs, housing and institutional uses.
- Public transit serves the essential needs of communities, even during the most challenging times.
- Costs are increasing for owning and operating a personal vehicle at a time when poverty and income disparity are growing.
- Demographic profiles are changing, increasing the need for alternative modes of transportation.
- Promoting regional economic benefits is important.
- Rural areas benefit from transit too.
- There is a need to reduce environmental impacts.

Public transit is an increasingly important mode of connecting to people to jobs, housing and institutional uses

Transit is a more sustainable way to connect people to jobs, appointments, community services, retail opportunities, and friends and family, regardless of income or living situation. As discussed by the Transit Subcommittee, recent changes in general types of employment and the move to more shift work and part-time work has increased the need for transit services in the CMR. The regionalization of services, from healthcare facilities to recreation centres to employment areas, also increases the need for thoughtful consideration of regional transit connections and transit-oriented communities.

Although commuting to work in single-passenger vehicles remains the dominant mode of transportation for those commuting to jobs and services, more people are relying on other means of travel over time. According to StatsCan (2016 census), between 1996 to 2016 the number of people living in census metropolitan areas who commuted to work increased from 8.6 million to 11.7 million (35.9% increase). Over the same 20-year period, workers choosing to take transit to work grew as a proportion of new commuters:

- taking public transit increased by 58.7%,
- cycling increased by 87.9%,
- using a car increased by 31.5%, and
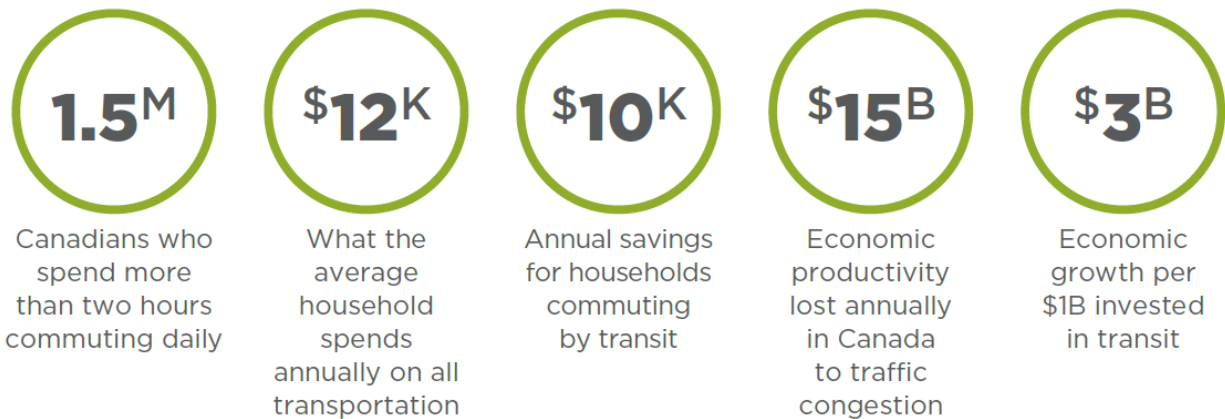- walking increased by 23.4%.

Public transit serves the essential needs of communities, even during the most challenging times
Transit is an essential service for those individuals who cannot drive due to financial or physical barriers, students and youth, but it also supports a range of lifestyle choices for those who prefer to commute using modes other than personal vehicles. During the COVID-19 pandemic, public transit services continued to provide service in communities, and to connect residents to essential services such as medical care and groceries, while also providing a mobility option for essential workers to access employment. The pandemic has highlighted transit as a core element of maintaining essential services and as a fundamental means of connecting people with the services they rely on.

Costs are increasing for owning and operating a personal vehicle at a time when poverty and income disparity are growing
The costs associated with commuting and mobility impact personal budgets. The Canadian Urban Transit Association (CUTA) notes that in 2001 in Canadian Communities, 19% of family expenditures went to housing, 13% went to transportation and 11% went to food. Household spending patterns remained generally unchanged by 2004, although transportation increased its budget share to 14%, a trend which would be expected to increase as fuel costs rise (CUTA Transit Vision 2040, page 22). The Federation of Canadian Municipalities (FCM) has also quantified the costs associated with transportation, identifying an annual savings of approximately $10,000 per household when occupants of the household commute by transit (First 100 Days, page 16).

Figure 1: The Economic Impacts of Mobility Choices

1.5^M	$\$12^K$	$\$10^K$	$\$15^B$	$\$3^B$
Canadians who spend more than two hours commuting daily	What the average household spends annually on all transportation	Annual savings for households commuting by transit	Economic productivity lost annually in Canada to traffic congestion	Economic growth per $1B invested in transit

Source: Federation of Canadian Municipalities, First 100 Days (page 16)

Demographic profiles are changing, increasing the need for alternative modes of transportation
Demographics profiles across Canada, Alberta and the CMR are changing as immigration increases, as poverty increases, and as the population ages. These changes play a significant role in the demand for transit. As described in an international transit research study completed by the University of Toronto for CUTA, "population characteristics such as the share of college students, population in poverty, average income, proportion of recent immigrants and ethnic composition are acknowledged as the most significant external socioeconomic factors [in transit ridership]" (page 17).

- The CMRB-approved population projections (2018) show that international migration and interprovincial migration are expected to be the two primary sources of population increase in the Region over the next 40 years. This aligns with the Government of Alberta's 2019 to 2046 growth projections which indicate that 47% of Alberta's growth will happen through international immigration, 33% by natural increase, and 20% by interprovincial immigration. The Federation of Canadian Municipalities (FCM) notes that new immigrants are twice as likely to commute by public transit as Canadian-born workers (First 100 Days, page 4).

- An aging population will drive an increase in the number of Canadians who rely on transit to get around. The Government of Alberta's 2019 to 2046 growth projections indicate that the number of seniors in the province will double, meaning that by 2046 one in every five Albertans will be a senior. These riders may also require a higher standard of accessibility and security than other transit users (CUTA Transit Vision 2040: 5 Years of Progress, page 4). Many older Canadians will maintain a high-level of activity, including longer working lives, and will have a higher need for mobility. Most will be accustomed to driving and be more likely to live in suburban areas currently underserved served by transit (CUTA Transit Vision 2040: 5 Years of Progress, page 19). This need for transportation to key services will especially affect rural areas of the CMR where the population is older on average and located a greater distance from services.

Promoting regional economic benefits is important
Promoting the movement of people and goods throughout the CMR promotes business and employment. Because all residents of the CMR do not have access to vehicle transportation - due to their age, income level and other factors - it is important to provide a means of connecting these residents to employment and retail services. This increases the economic potential of the region.
- Although transit is an expensive service to provide, it produces economic growth that promotes the overall health of the CMR. As noted in *Figure 1: The Economic Impacts of Mobility Choices*, FCM estimates that every $1 billion invested in transit creates about $3 billion in economic growth. In it's paper *The Importance of Public Transit in Canada and Calgary, and Who Should Pay*, The City of Calgary's Corporate Economics noted that "for all Calgarians of all ages whether riders or not, [it is] estimated the total benefits of Calgary Transit in Calgary at about $570 million. This results in a benefit to cost ratio as high as 1.8 to 1. Interestingly, about 2/3 of the total benefits to all Calgarians from Calgary Transit comes from reduced road congestion alone" (page 2).

Rural Areas Benefit from Transit Too
Rural areas in the CMR tend to be dispersed and automobile dependent. This isolation increases as the region urbanizes and public services such as healthcare facilities, recreation centres, shops and retails services, and employment areas are consolidated into regional centres to improve the efficiency of service delivery.

Studies done for the Victoria Transport Policy Institute note that improving rural travel options can provide benefits to rural users and businesses, reducing chauffeuring burdens imposed on drivers and increasing local tourist business activity (Rural Multi-Modal Planning, page 5).
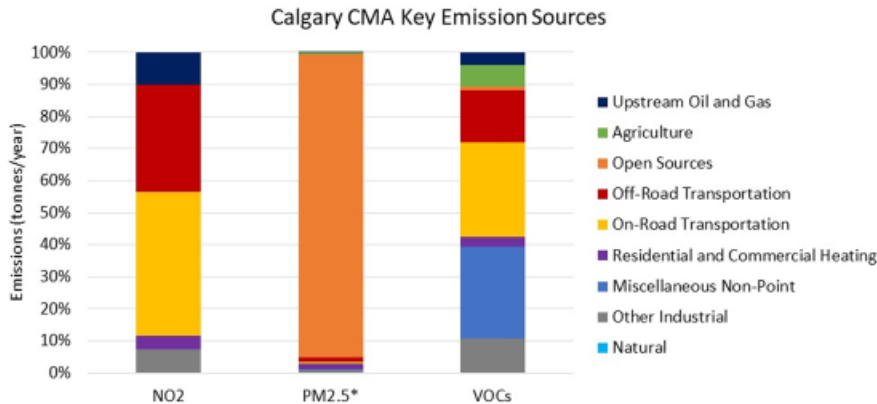- As noted by the Victoria Transport Policy Institute in their Rural Multi-Modal Planning report, rural communities are attracting a growing number of retired Canadians who need access to a range of goods and services, such as preventative health, social services and seniors housing. While the population of seniors aged 55 and older is increasing in both metropolitan and rural regions, smaller communities will have fewer local support resources.
- FCM notes that rural Canada continues to create jobs across different sectors of the economy, with job growth of more than 7% over fifteen years from 2001 to 2016. In 2016, almost 23% of Canadians worked in rural communities. FCM underscores the importance of youth retention in rural areas to promoting the long-term economic vitality of rural Canada, which has had more difficulty than non-rural areas in retaining youth employment (Rural Challenges, page 5-6).

There is a need to reduce environmental impacts
Transit use achieves the objectives of reducing energy use, air pollution, greenhouse gas emissions and congestion. Transportation emissions are the largest source of greenhouse gas (GHG) emissions in Canada, at 24% of all GHGs (CUTA Transit Vision 2040: 5 Years of Progress, page 27). As identified in *Figure 2: Key Emission Sources*, on-road transportation is a significant source of NO2 and VOCs in the Calgary census metropolitan area.

Figure 2: Key Emissions Sources (Calgary Census Metropolitan Area)

Source: South Saskatchewan Region Air Quality Management Framework: Alberta's Approach to Implementing the Canadian Ambient Air Quality Standards (CAAQS), 2019 Presentation to Calgary Regional Airshed Zone (CRAZ)

5. REGIONALLY SIGNIFICANT TRANSIT

In the CMR, there are a range of municipally and privately provided transit options at both the regional and local scales. A brief overview of transit services in the CMR is provided in *Appendix A: Transit in the CMR at a Glance.* Municipalities in the CMR are already providing a high level of transit service. Calgary, which offers 4,369 km of transit routes, 159 bus routes and 45 LRT stations, has the most rapid transit per million residents of any major Canadian city. Airdrie offers fixed route, dial a bus, and intermunicipal bus service. Both Cochrane and Okotoks offer on-demand transit services in their communities. Private operators are creating connections and accessibility for residents across the region and provide services for vulnerable populations in rural areas.

This Transit Background Report focuses on transit services and opportunities that are regionally significant in scale and support a regional system of transit. The Transit Subcommittee defined regionally significant transit as those aspects of transit in the CMR, including transit corridors and supportive infrastructure and transit services that connect municipalities together. Mapping provided in this background report captures existing, planed and potential fixed route transit.

5.1. INTERIM GROWTH PLAN

A first opportunity to define the regionally significant transit system came through the development of the Interim Growth Plan (IGP). The IGP was approved by the CMRB in September 2018 to provide an interim approval framework for statutory plans (Intermunicipal Development Plans, Municipal Development Plans, Area Structure Plans and Area Redevelopment Plans). The IGP map is provided below as *Figure 3: Interim*

Growth Plan, Schedule 4: Mobility Corridors – Transit and Active Transportation. The IGP identified several potential higher-order regional transit corridors, including currently planned extensions to the existing LRT lines in Calgary and the future Green Line.

Figure 3: Interim Growth Plan, Schedule 4: Mobility Corridors – Transit and Active Transportation
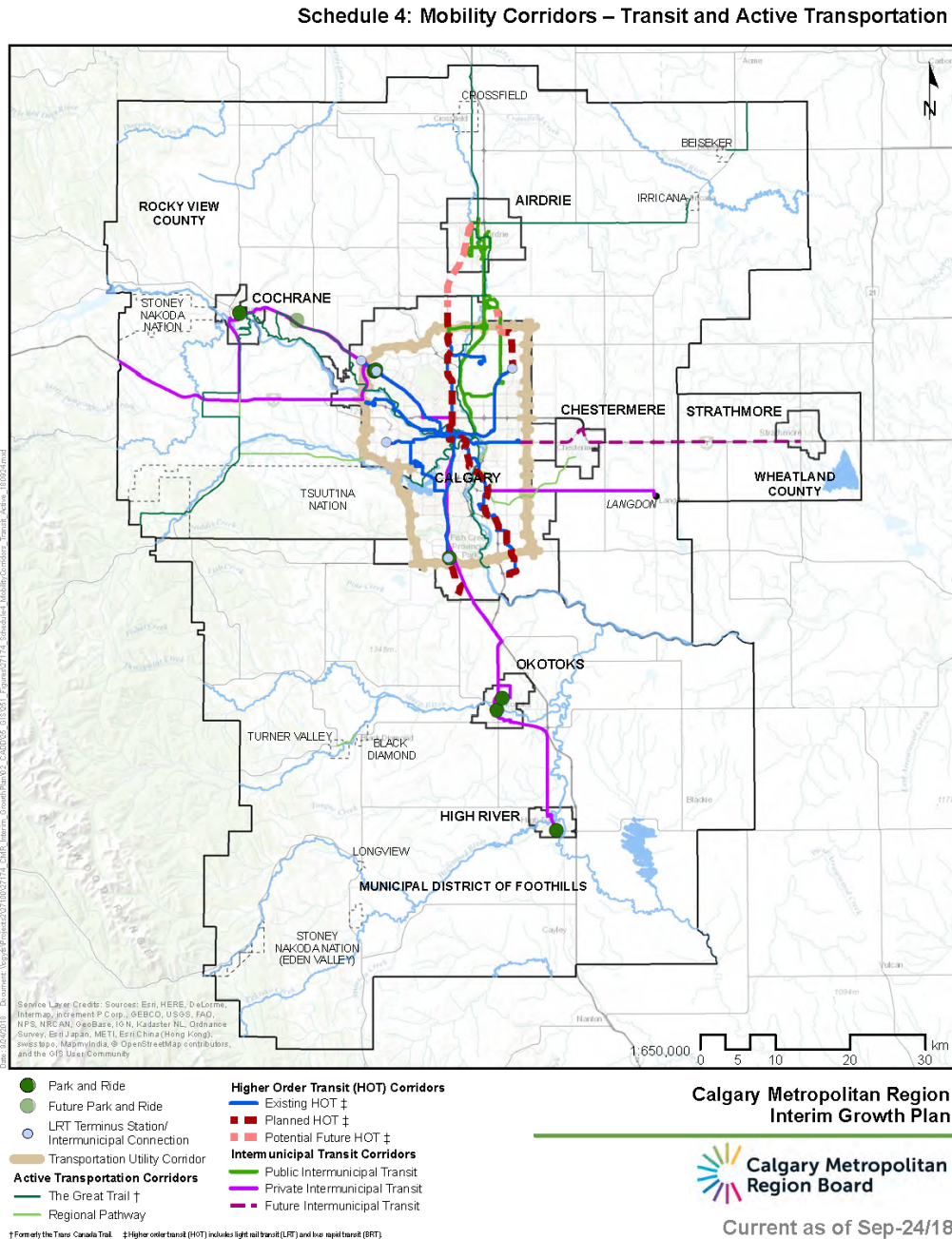
Source: Interim Growth Plan, Calgary Metroplitan Region Board

5.2. EXISTING AND PLANNED REGIONALLY SIGNIFICANT TRANSIT SERVICE

Since the development of the IGP, the Transit Subcommittee has worked to further refine the definition of regionally significant transit in the CMR. *Figure 4: Existing and Planned Regional Transit Service in the CMR* is a current snapshot of fixed route existing and planned regionally significant transit in the CMR as identified in municipally-approved documents.

5.2.1. Higher Order Transit

Higher order transit in the CMR is provided through light rail transit (LRT) and bus rapid transit (BRT).
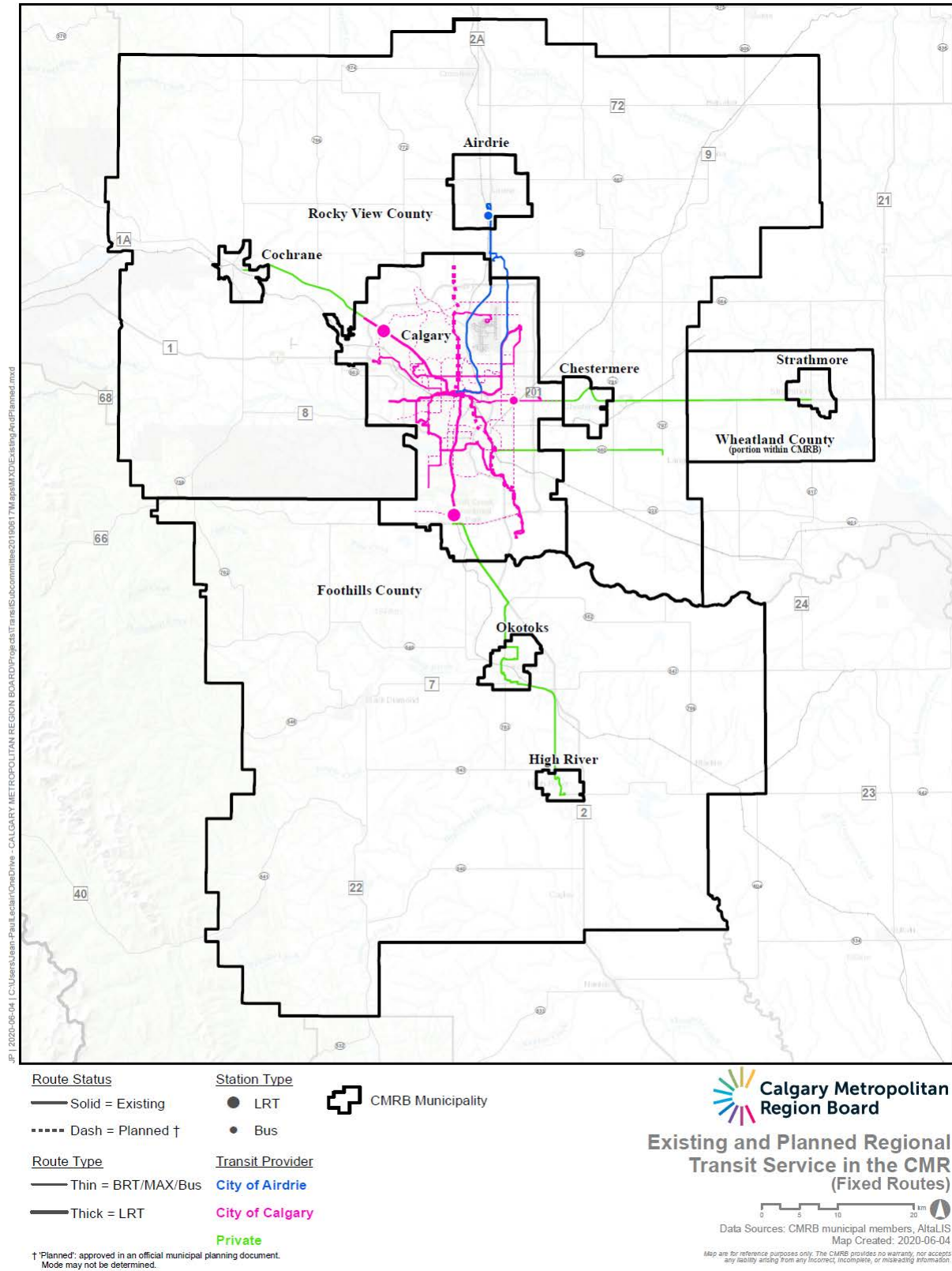
- Calgary Transit operates two light rail transit (LRT) lines with a mixture of on-street operation and dedicated right-of-way. The City of Calgary provides light rail transit and bus rapid transit, which are connected through an extensive network of local routes. Some of the stations offer a potential appropriate transfer point for future regional connections.

- Calgary Transit provides four high frequency bus routes with specialized shelters, real-time information and distinct branding to supplement the light rail network. Branded as 'MAX' rapid transit lines, routes currently include the MAX Purple, MAX Teal, MAX Orange and MAX Yellow MAX Purple and MAX Yellow have sections of dedicated right-of-way and other transit priority measures on all routes.

- Calgary Transit provides four BRT routes with limited stop, cross town connections including signal priority, queue jumps and short sections of transit only lanes. These routes connect major employment hubs include Calgary International Airport, Quarry Park and Seton Hospital.

- The City of Calgary is in the process of finalizing plans for a new Green Line that would add 46 kilometres of track to the existing 59-kilometre LRT system.

5.2.2. Intermunicipal Bus Routes

There are several public and private service provides in the CMR that offer bus transit service to connect municipalities together. These bus routes often link to LRT stations and park and ride facilities in Calgary.

- Airdrie Transit provides connections between Airdrie and Calgary. They have the highest level of service of all regional connections in the CMR with 24 return trips per day on three routes. The service is operated by Airdrie Transit under the ICE (InterCity Express) brand.

- First Student Canada operates a commuter service between Strathmore, Chestermere and downtown Calgary with a single trip in the AM and PM, in peak direction only. There are no stops within Wheatland County or Rocky View County.

- Southland Transportation operates regional services including routes between High River, Okotoks and downtown Calgary, Cochrane and downtown Calgary under the 'On-It' brand. This services focuses on regional commuters. On-It operates a weekend service between Calgary and Banff in the summer.

- Red Arrow operates a shuttle between the Somerset-Bridlewood LRT station and Spruce Meadows on Calgary FC Soccer games. Calgary Transit services are also accessible via park and ride lots at BRT and LRT stations in the south part of Calgary.

- The Rocky View Bus, Strathmore Handi-Bus, and High River Handi-Bus connect residents from small and rural communities to health and retail services.

Figure 4: Existing and Planned Regional Transit Service in the CMR

Figure 4: Existing and Planned Regional Transit Service in the CMR

Route Status
— Solid = Existing
---- Dash = Planned †

Route Type
— Thin = BRT/MAX/Bus
— Thick = LRT

† 'Planned': approved in an official municipal planning document.
Mode may not be determined.

Station Type
● LRT
• Bus

Transit Provider
City of Airdrie
City of Calgary
Private

CMRB Municipality

Calgary Metropolitan Region Board

Existing and Planned Regional Transit Service in the CMR (Fixed Routes)

Data Sources: CMRB municipal members, AltaLIS
Map Created: 2020-06-04

Map for reference purposes only. The CMRB provides no warranty, nor accepts any liability arising from any incorrect, incomplete, or misleading information.

5.3. POTENTIAL REGIONALLY SIGNIFICANT TRANSIT SERVICE

There are several regionally significant potential or aspirational transit opportunities that have been considered but are not yet planned. *Figure 5: Potential Future Regional Transit Service in the CMR* offers a current understanding of potential or aspirational regionally significant transit in the CMR. These opportunities will be reconsidered as part of developing the Growth & Servicing Plan once the location, scale and projected population of growth areas is known.

Potentially regionally significant transit opportunities include:

- The potential for passenger rail connection between Calgary and Banff alongside the existing heavy rail corridor.

- The City of Airdrie has a long-term vision for higher order transit that would align with the City of Calgary, including modal split targets. This is presented in the Airdrie Transportation Master Plan.

- The City of Chestermere is actively considering options for transit service between Chestermere and Calgary along 17th Ave SE.

- The Town of Cochrane and Southland Transportation are in the beginning stages of planning the integration of fixed local COLT routes with an enhanced On-It regional service. This service would connect COLT routes to the Town's new Transit Hub located at 360 Railway St. W. From here, regional coach buses would take people to/from Calgary destinations on regional routes along Highway 1A and Highway 22. Calgary destinations would include Brentwood LRT station, SAIT, Foothills and Downtown. Cochrane is also looking into a potential summer route to Banff.

Figure 5: Potential Future Regional Transit Service in the CMR
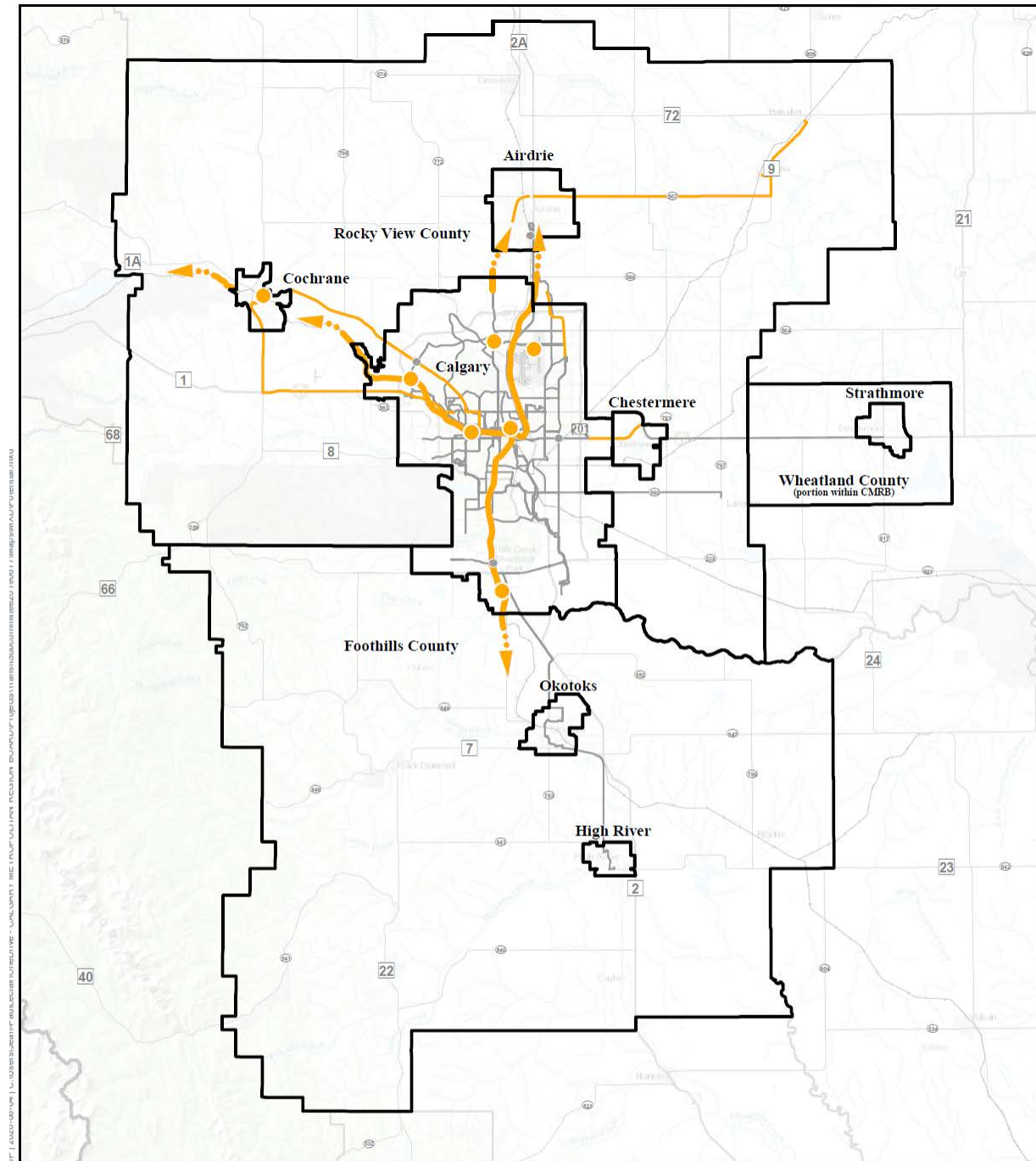
Potential Transit †
— Bus
— LRT/Commuter Rail
● Bus/LRT Station

Existing and Planned Transit
— All modes
● Bus/LRT Station

CMRB Municipality

† Includes conceptual, aspirational transit corridors/lines
(i.e., not approved in an official municipal planning documets)

Calgary Metropolitan Region Board

Potential Future Regional Transit Service in the CMR

0   5   10   20 km

Data Sources: CMRB municipal members, AltaLIS
Map Created: 2020-06-04

Map are for reference purposes only. The CMRB provides no warranty, nor accepts
any liability arising from any incorrect, incomplete, or misleading information.

6. PROJECT OUTCOMES

The Transit Subcommittee has created several recommendations around transit in the CMR. The recommendations of this report are not binding to the Growth and Servicing Plan process, but are intended to inform the development of the Growth and Servicing Plan.

In a region as large and diverse as the CMR, scale is an important consideration in planning for and delivering transit services. There is no single approach to providing transit services that fits all contexts. The Subcommittee recommendations take scale into account, allowing for design and planning solutions that are appropriate to each member municipality.

6.1. RECOMMENDED GOAL

The Subcommittee recommends the use of the following goal to guide a regional approach to transit in the Growth and Servicing Plan:

To support the economic, social, environmental health of the Calgary Metropolitan Region through an efficient, integrated and connected approach to planning for and delivering transit services.

6.2. RECOMMENDED OBJECTIVES

The Subcommittee recommends the use of the following objectives to guide a regional approach to transit in the Growth and Servicing Plan:

> Objective #1: Promote transit supportive communities across the CMR
> Objective #2: Identify transit corridors that connect land use, regional transit areas, activity hubs, and higher density, mixed use development
> Objective #3: Ensure transit is integrated into the Growth and Servicing Plan
> Objective #4: Support an efficient transit service in the CMR
> Objective #5: Promote coordination with provincial and federal governments

6.3. RECOMMENDATIONS: GROWTH PLAN

The following section provides recommended ways of achieving the objectives as outlined in Section 6.2 above.

Recommendations for Objective #1: Promote transit supportive communities across the CMR
Integrating land use and mobility is critical to a strong region. Transit-oriented communities and developments are a necessary part of growing the transit network in and efficient, integrated and connected manner. When land use and transportation are well coordinated, transit can provide fast, direct and cost-effective access to more destinations for more people. Transit-oriented communities support higher levels of walking, cycling and transit and result in lower levels of automobile use and greenhouse gas emissions. There are many examples of planning for transit at the regional scale around Canada which were reviewed by the Subcommittee.

1. Learning from other regions, the Transit Subcommittee recommends Growth and Servicing Plan maps identify:
   - key regional activity hubs,
   - regional transit infrastructure (stations, park and rides, etc.),
   - existing and future rapid transit or priority transit corridors,

- intensification overlays, or similar, to show where future regional hubs might develop areas of the transit network where mode progression is desirable, i.e. where BRT can be transformed into LRT when appropriate, and
- connections with regional pathway corridors when possible.

2. The Transit Subcommittee recommends that the Growth and Servicing Plan policies provide appropriate guidance to municipalities on planning for transit to create a consistent approach to transit in the CMR. Transit has a role to play in every community in the CMR, but it may be provided at different scales and may not always be municipally provided.

3. The Growth and Servicing Plan is an opportunity to incorporate best practices for land use planning to promote efficient, integrated and connected service delivery. The Transit Subcommittee offers the following policy opportunities:
   - Municipal Development Plans provide direction on appropriate approaches to transit.
   - Municipal Development Plans and Area Structure Plans identify how infill might be achieved along higher density, mixed use corridors to support the provision of transit along frequently travelled corridors, as appropriate to the scale and context.
   - New Area Structure Plans and Area Redevelopment Plans provide direction on how plans could provide or improve transit service in the future, as appropriate to the scale and context.
   - New Area Structure Plans and Area Redevelopment Plans provide direction on transit-oriented design strategies and standards, as appropriate to the scale and context. For example, at the municipal or local scale this might mean:
     - Locate institutions, employment and housing together and in proximity to existing or future transit.
     - Define walk catchments around transit stations and encourage higher intensity, mixed use development in those areas.
     - Provide policies for intensification and increasing mix of uses in existing built areas
     - Encourage pedestrian friendly street design.
     - Include transit corridors with direction on how the corridors will be realized over time, such as incorporating consideration of transit corridors into transportation impact assessments and other supporting documents where relevant.
     - Identify how local transit connects and feeds into regional transit.
     - Incorporate the recommendations of transit planners when writing transit into statutory plans.

Outcomes for Objective #2: Identify transit corridors that connect land use, regional transit areas, activity hubs, and higher density, mixed use development

The *Calgary Metropolitan Region Board Regulation* requires the identification of intermunicipal transit corridors in the Growth and Servicing Plan.
1. The Transit Subcommittee supports the identification of transit corridors in the Growth and Servicing Plan as an important part of planning the long-term growth of the regional transit system. Identifying transit corridors in the Growth and Servicing Plan enables corridor protection over time and allows for the planning of higher density and mixed use nodes in a pattern that supports the efficient and effective delivery of transit. It is recommended that park and ride infrastructure and regional connection opportunities be included in the consideration of corridors as these are important aspects of the regional system.

Outcomes for Objective #3: Ensure transit is integrated into the Growth & Servicing Plan

It is critical that transit be fully integrated into the Growth and Servicing Plan. This makes the provision of transit services more efficient and cost-effective over time.

1. The Transit Subcommittee recommends the following approach to integrating transit into the policies of the Growth and Servicing Plan (Figure 6). The Transit Subcommittee should be made available to the Growth and Servicing Plan consultant to support the scenario process.

Figure 6: Process for Integrating Transit into the Growth and Servicing Plan
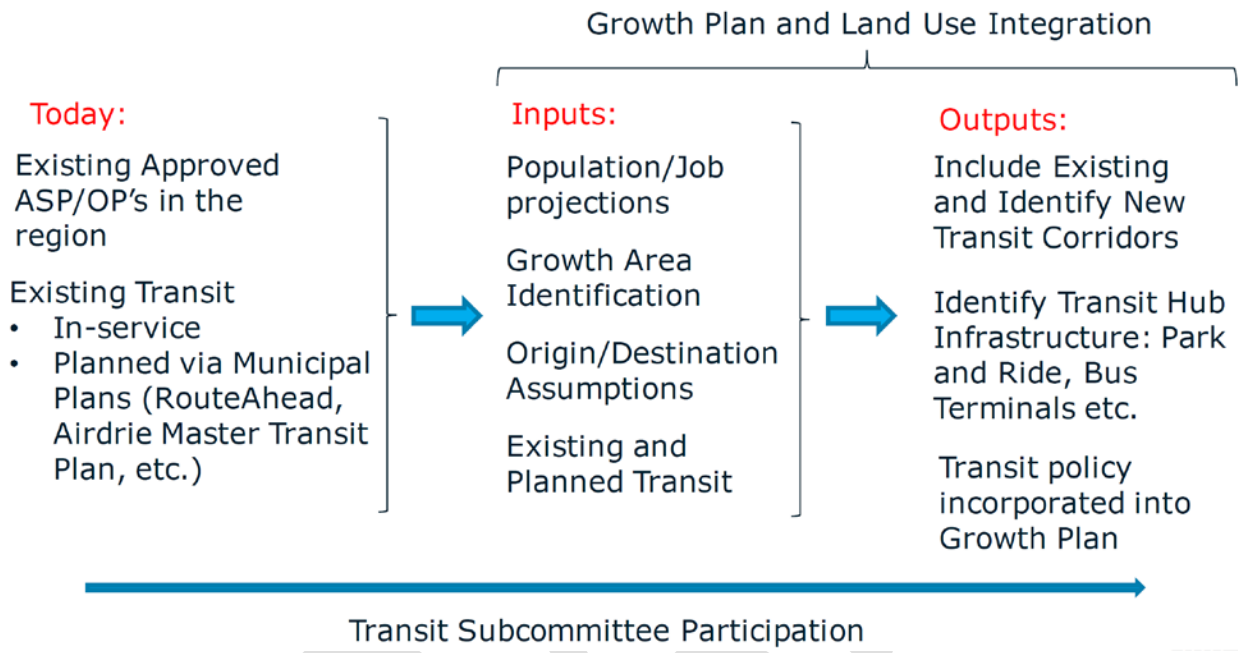
2. The Transit Subcommittee was established to act as a resource for the CMRB and to help integrate transit into the development of the Growth and Servicing Plan. The time and expertise of the Transit Subcommittee members should be made available to support the scenario process.

6.4. RECOMMENDATIONS: SERVICING PLAN

The following section provides recommended ways of achieving the objectives as outlined in Section 6.2.

Outcomes for Objective #4: Support an efficient transit service in the CMR
An objective of the *Calgary Metropolitan Region Board Regulation* is to support the optimization of shared services to enhance use of ratepayer dollars through collaboration. There are many examples of coordinated transit planning at the regional scale around Canada. For example, other regions outside the CMRB:
- Offer tools and support for smaller municipalities,
- Coordinate decision-making amongst member municipalities, through a regional transit service entity or other mechanism,
- Hold regular meetings amongst transit specialists, and
- Other.

1. The Transit Subcommittee recommends that the CMRB defer service delivery and governance considerations until after the completion of the Growth and Servicing Plan (post-2020). There is a need to understand the location and scale of growth areas prior to moving forward with transit planning and network considerations.

2. The Transit Subcommittee recommends the following next steps for transit implementation/servicing strategies be included in Growth Plan and Servicing Plan policies:
   - Complete a Regional Transit or Regional Mobility Plan to implement Growth and Servicing Plan recommendations. A regional study or plan of this type could include a review governance and service delivery models based on the approved Growth and Servicing Plan policies.
   - Establish a collaborative regional group tasked with planning and deploying integrated and efficient transit services. This would enable the pursuit of efficiencies in transit service delivery on an ongoing basis.

Outcomes for Objective #5 Promote coordination with provincial and federal governments
Policy decisions and funding mechanisms at the provincial and federal levels of government affect how transit is planned, built and operated at the regional scale.

1. The Transit Subcommittee recommends that the CMRB coordinate with other government agencies to enhance the use of rate payer dollars and promote the sustainability of the transit systems in the CMR. For example, the regionalization of health programs has created significant demand for transit in the CMR. Delivering clients to provincial health programs and other provincial service programs is driven by provincial policies but is not compensated by the Province. This leaves member municipalities to plan, deliver or fund these services in whole or in part. Providing transit service for medical trips is a significant challenge for smaller municipalities with limited access to community medical facilities and limited access to transit services with regional transit connections.

7. CONCLUSIONS

Planning for transit at the regional scale is an extremely effective way of creating an *efficient, integrated and connected* transit system. It supports a more cost-effective and better planned transit network over time. Transit is a fundamental part of achieving many regional goals for improved economic growth, environmentalism, resilience and quality of life.

APPENDIX A: TRANSIT IN THE CMR AT A GLANCE

Table 1: Transit in the CMR at a Glance	
Transit in Member Municipalities	
City of Airdrie	• Transit service goes back to 1980 • Aiming for 1,000,000 transit trips/year by 2026 • Focus on customer service, inclusivity • Considerate of financial stewardship, return on investment • Incremental implementation • Regional transit service is main use of transit • Provides local fixed route and local OnDemand services
City of Calgary	• Most rapid transit per million residents of any major CAN city • Ridership of 110 million customers • in 2015 • 4,369 km of transit routes • 159 bus routes and 45 LRT stations • Operates a fleet of accessible transit vehicles • Focus on investment in high use corridors • Calgary Transit Access provides accessible transit service
City of Chestermere	• New communities are being planned with transit in mind • Working with City of Calgary on possible transit extension on 17th Avenue into Chestermere downtown • Rocky View Bus provides privately delivered accessible transit
Town of Cochrane	• Successful 5-year pilot of on demand local transit started in 2019 • System could incorporate fixed or flexible routes • Expanding On It service to include additional stops (LRT/UofC/SAIT) • and schedule times • Rocky View Bus provides privately delivered accessible transit
Foothills County	• Provides subsidized transportation for medical appointments through existing taxi services and High River Handi Bus
Town of High River	• Communities are being planned with transit in mind • On It provides private regional service from High River to Okotoks and Calgary • High River Handi Bus provides privately delivered accessible transit, which is partially funded by the Town of High River
Town of Okotoks	• Demand for local transit • On demand service is provided by the Town • The Town has focused on customer service and accessibility as the community moves towards transit • Links to Town's Environmental Sustainability Plan

Rocky View County	• Recent ASPs include policy for accommodating transit into community and road designs • Investigating service to Balzac mall and possible partnerships with Airdrie • RVC Handi Bus provides privately delivered accessible transit, which is partially funded by RVC
Town of Strathmore	• Strathmore Handi Bus provides privately delivered accessible transit, which is partially funded by Town of Strathmore
Wheatland County	• Strathmore Handi Bus provides privately delivered accessible transit, which is partially funded by Wheatland County
Transit Provided by Private Operators	
On It	• Operated by Southland Transportation Ltd. • Includes commuter and recreation service • Calgary Banff Canmore (Summer) • Okotoks / High River / Calgary Anderson Station • Cochrane / Calgary Downtown

First Student Canada	• Provides commuter service from the following communities to downtown Calgary:
	    o Airdrie
	    o Carstairs
	    o Chestermere
	    o Didsbury
	    o Strathmore

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Calgary Metropolitan Region Board

Agenda Item	7
Submitted to	**Land Use and Servicing Committee**
Purpose	**For Decision**
Subject	**Approach to Development of Policy for Flood Prone Areas**
Meeting Date	**June 11, 2020**

Motion that the Land Use and Servicing Committee discuss and recommend to the Board approval of the approach to development of policy for flood prone areas;

Summary

a. The Scope/Contents of the Growth Plan were modified by the Board on April 20, 2018: the Growth Plan must include the following:

> (e) policies regarding flood prone areas;

- The Interim Growth Plan (IGP) contains interim policy on flood prone areas. The IGP anticipated that provincial flood hazard area maps would have been publicly available shortly following the finalization of the IGP. The IGP identified that 'Given the critical and complex nature of preparing a regional policy framework to address flood prone areas, the CMRB recognizes that the 2021 Growth Plan for the Region will require robust and substantive consideration of this matter.'

- Motion 2019-08 was unanimously passed at the Board in February 2019 and indicates that regional infrastructure that is planned, funded or in the approval process be integrated into the assumptions of the Calgary Metropolitan Region Growth and Servicing Plan. As such, the Government of Alberta SR-1 dry dam is assumed to be part of future flood mitigation infrastructure on the Elbow River.

- In March 2019, Intermunicipal Servicing Committee (ISC) granted CMRB Administration the authorization to complete a series of studies in support of the Water Roadmap, including the Flood Workshop.

- At the April 2019 ISC meeting, ISC requested that CMRB Administration, with support from technical advisory groups, develop a strategy for advancing policy in flood-prone areas.

- Per the Water Roadmap, policies regarding flood prone areas are meant to refer to riverine flooding at a regional scale. As a point of clarification, a stormwater background report was drafted by member municipality administrations and was approved by the Board in December 2019.

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- To begin the process of drafting regional policy regarding flood prone areas, CMRB Administration held a Workshop on October 10, 2019 to understand and identify policy goals and high level policy direction from member municipality elected officials and their administrations. A summary report from the Flood Workshop was prepared and was circulated to ISC, LUC, Land Use TAG, Water Table and HDR|Calthorpe.

- Following completion of the flood workshop summary report in February 2020, the next steps indicated in the report were to bring together Land Use TAG and Water Table in order to refine the goals, potential future policy direction and recommend a plan for next actions. Land Use TAG and Water Table met jointly in February, April and May, 2020 to discuss flood policy. This brief summarizes those discussions and proposes a path forward on this important topic for the Region.

- This agenda item describes the results of collaborating with the member municipalities Land Use TAG and Water Table, municipal experts, and the HDR|Calthorpe team

1. Introduction

On April 20, 2018, the Calgary Metropolitan Region Board voted to add "policies regarding flood prone areas" to the list of requirements to be included in the Growth and Servicing Plan. The Board has provided direction to CMRB Administration to address planning for flood prone areas with the intent of mitigating the impact of future flood events to the greatest extent possible.

The purpose of this agenda item is to report back to the Board on a recommended direction to achieve a more coordinated approach to flood prone areas over time.

At the February, April and May meetings, the Land Use TAG and the Water Table met to discuss the steps to develop policy for flood prone areas as directed by the Board. This report outlines why these considerations are key to the development of policies around flood prone areas and proposes how to move forward with policies around flood prone areas in light of the above factors.

2. Definitions

Land Use TAG and Water Table identified that the terminology used should be consistent with those used by the Province to ensure consistency among the member municipalities, development partners as well as consistency when communicating with the public. These definitions may be subject to change by the province. Many of these terms were also used in the Interim Growth Plan.

CMRB Definitions

Flood Prone Areas – Includes the flood hazard area as defined by the Government of Alberta's flood hazard maps and other areas that have been, or may be, affected by riverine flooding greater than the design flood as defined by member municipalities in respect of their local context.

<div align="right">Agenda Item 7</div>

Government of Alberta Definitions

Design Flood – The current design standard in Alberta is the 1% flood, defined as a flood whose magnitude has a 1% chance of being equalled or exceeded in any year. Although it can be referred to as a 100-year flood, **this does not mean that it will only occur once every hundred years**.

Flood Fringe – The portion of the flood hazard area outside of the floodway. Water in the flood fringe is generally shallower and flows more slowly than in the floodway. New development in the flood fringe may be permitted in some communities and should be flood-proofed.

Flood Hazard Area – The flood hazard area is the area of land that will be flooded during the design flood event under encroached conditions. Once this area is defined, the flood hazard area is typically divided into two zones, the floodway and the flood fringe.
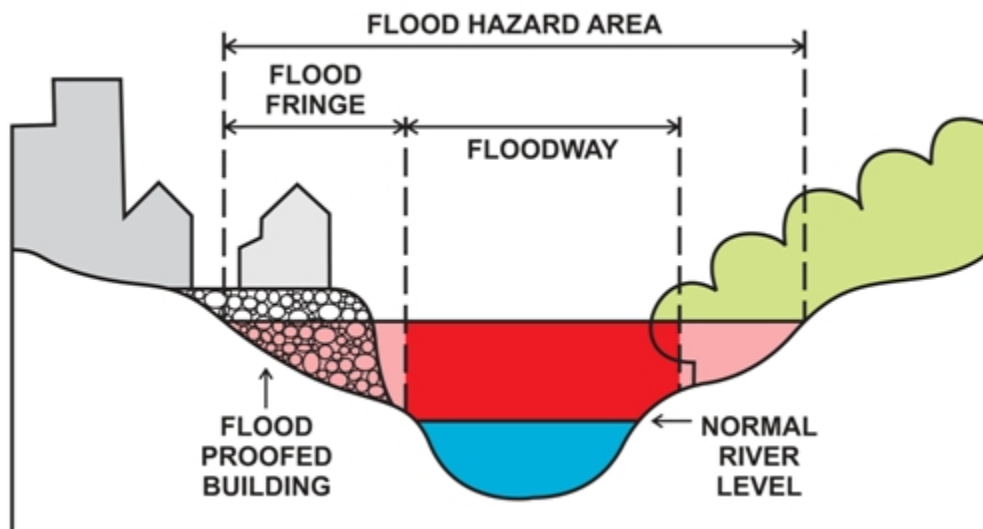
Source: Government of Alberta, www.alberta.ca/flood-hazard-mapping.aspx

Floodway – The portion of the flood hazard area where flows are deepest, fastest and most destructive. The floodway typically includes the main channel of a stream and a portion of the adjacent overbank area.

Mapping Tools and their Uses

Flood Inundation Maps: identify land areas on a map which would be inundated by water given a series of river flows, not just the 'design flood' flow. Flood inundation maps are created by hydraulic modelling using, among other data, historical precipitation information to simulate runoff and resulting river flows showing those areas which are overwhelmed by water. They are used for emergency preparedness and emergency response planning. The flood inundation map for a design flood flow informs the development of a flood hazard area map.

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Flood Hazard Area Maps show where the floodway and flood fringe would be located, if flow in the river reached the design flood flow. Flood hazard area maps are used for long range planning and are used to make land use decisions, among other uses.

3. Approach to Policy Development

The Land Use TAG and the Water Table have identified several key considerations that influence the development of policies for flood prone areas:
- the objectives of the CMRB for flood prone areas, and
- the need for updated flood hazard area mapping from the Province of Alberta in developing the CMRB flood mapping and policy.

HDR|Calthorpe would like to confirm the objectives of the Board related to flood prone areas, and to test the recommendations from the Land Use TAG and Water Table related to a phased approach to policy development. The information gathered today will support HDR|Calthorpe as they work to develop policies for the Growth and Servicing Plan.

3.1. Confirming Board Objectives

The policies of the Growth and Servicing Plan need to reflect the Board's objectives for flood prone areas. Given previous discussions at the Committee and the Board, and in consideration of information provided by the Land Use TAG and Water Table, a draft list of objectives is provided below for Board consideration:

- Prioritize public safety
- Mitigate risk to public, municipalities, businesses, park spaces, living assets and property/lands
- Over time and with appropriate inputs, examine how flood resilience might be achieved among CMR municipalities
- Educate the public and other development stakeholders on the risks of development in flood prone areas
- Maintain essential ecosystem function of flood protection and watershed health in environmentally sensitive areas (ESA)[1]

DISCUSSION: Does this list of objectives reflect the values of the Committee?

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[1] ESA is defined in the ESA Background Report

4. Phased Approach to Policy Development

Developing regional flood policy for the CMRB is complex, given the role of the province in developing flood hazard area mapping and the role of the mapping in guiding municipal plans. The Board has previously indicated the importance of achieving a high standard of protection against the impact of flood events. One method of achieving this seen in other jurisdictions is through a more stringent flood standard.

At the meetings of the Land Use TAG and Water Table, it was identified that to contemplate the impacts and regulatory nuances of moving to a more stringent flood standard, the updated publicly available flood hazard area maps are required as input. This maintains transparency, reduces the risk of overturns by the MGB for municipalities, and reduces regulatory risk for development partners. It also reduces the exposure to liability related to the preservation of lands that were previously identified as developable.

Given the Province's flood mapping is not yet publicly available (an update on the status of the mapping has been provided in Appendix A), it is recommended that the CMRB develop an approach to planning for flood prone areas that identifies short, medium and long-term approaches in achieving the Board's objectives once confirmed.

This phased approach focuses on riverine flood events and excludes consideration of overland flooding because these events, although significant and serious in nature, are usually local in context and not regional in scale.

4.1. Short-Term Actions – Growth and Servicing Plan Policies

The Growth and Servicing Plan provides an opportunity to further the policies of the IGP by considering the objectives of the Board to the extent possible given the lack of publicly available provincial mapping and the complexity of this issue.

Once the objectives of the Board are confirmed, recommended policy directions will be reviewed with the Land Use TAG and Water Table and brought forward by HDR|Calthorpe to the Land Use and Servicing Committee for review. These policies will use the policies of the IGP as a foundation.

4.2. Medium-Term Actions – Responding to the Public Release of Provincial Flood Hazard Mapping

As identified in *Appendix A – Update on Provincial Flood Hazard Mapping* the Government of Alberta is working towards the public release of updated provincial flood hazard area mapping. Given this mapping is a key consideration around if and how the CMRB might address flood mitigation in the CMR, LU TAG and Water Table recommend revisiting the policies of the Growth and Servicing Plan related to flood prone areas once this information has been made publicly available to determine the most appropriate next steps.

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To promote a comprehensive policy review, it is recommended that the CMRB:

a) Engage with province and member municipalities to understand modifications to provincial flood development regulation (if any),
b) Update the policies of the Growth and Servicing Plan to reflect changes to the provincial flood development regulation (if required),
c) Identify any additional studies, information or engagement activities necessary to refine the long term actions, such as a best practices review to identify gaps and inform next actions (e.g. consider two policy streams for existing development and future greenfield development),
d) Advocate to the Government of Alberta around incentives in the CMR that would help the CMRB achieve its identified objectives.

4.3. Long-Term Actions —Regional Approach to Flood Prone Areas

The outcome of implementing regional policies should lead to a more flood resilient region. Once the medium-term actions are complete, and a full understanding of the new provincial flood hazard mapping has been attained, the CMR will be in a position to develop a comprehensive approach to flood policy in the CMR. Potential measures **may** include:

- More stringent design flood (1:200, highest flood level experienced, other)
- Restricting all future development from the 1:200 flood hazard area
- Flood fringe development controls
- Meander belt management
- Stepping Back from the Water / environmental reserve setbacks
- Other

Depending on schedule and timing of the required inputs for these actions, the final product may be summarized in the updated version of the Growth and Servicing Plan, due to the minister by December 31, 2025 per the CMRB Regulation.

5. Recommendation

That the Land Use and Servicing Committee discuss and recommend to the Board approval of the approach to development of policy for flood prone areas

Appendix A - Update on Government of Alberta Flood Hazard Mapping Project

The following update was provided to CMRB by the technical team with AEP:

- Technical work on the 21 new provincial flood studies commissioned since 2015 is now complete, and the Government of Alberta is on track to deliver more flood mapping to Albertans this year than in the last 30 years combined.
- These studies create 1,500 km of new or updated flood mapping through more than 60 municipalities and 5 First Nations across Alberta, including CMRB members Calgary, Cochrane, Foothills County, High River, Okotoks, Rocky View County, and Wheatland County.
- About 600 km of the new mapping will replace existing maps and about 900 km of mapping will be completed for areas never mapped before.
- The total budget for these studies was approximately $15.4 million, including $5.2 million of federal co-funding.
- The first stage of the study engagement and finalization process is sharing draft reports and flood inundation maps with municipalities and First Nations, so AEP can carefully consider and address feedback prior to future public release of reports and flood maps.
- AEP shared draft reports and flood inundation maps for the first 5 new studies in July 2019 and for more 6 studies in December 2019. AEP plan to share reports and flood inundation maps for 10 recently completed studies as soon as possible this spring.
- AEP recognize there is tremendous interest in new flood mapping. AEP are exploring opportunities for future public engagement for the new studies, and will continue to provide updates at www.floodhazard.alberta.ca when more information becomes available.
- New studies include an enhanced flood inundation map library of thirteen different sized floods, showing areas at risk for a wide range of flood flows higher and lower than the 1:100 flood and identifying areas at risk behind local flood berms.
- Flood inundation maps are typically used for emergency response planning and to inform local infrastructure design, and are different than the flood hazard maps that define floodways typically used to guide long-term development planning.
- Even in draft form, flood inundation maps shared with municipalities and First Nations can support emergency responders on the ground during the upcoming flood season. Sharing these draft maps increases public safety, even if future changes are needed.

Agenda Item 7

Calgary Metropolitan Region Board

Agenda Item	8
Submitted to	**Land Use and Servicing Committee**
Purpose	**For Discussion and Decision**
Subject	**Draft Recreation Policy**
Meeting Date	**June 11, 2020**

Motion that the Committee recommend to the Board approval of the Draft Recreation Policy for the Growth and Servicing Plan

Summary
- In May 2018, the Intermunicipal Servicing Committee added recreation to the list of services to be addressed in the Servicing Plan
- On April 11, 2019, ISC directed administration to work with Recreation Servicing Technical Advisory Group (TAG) to develop a non-binding framework for regional collaboration on recreation and a definition for regional recreation.
- In February 2020, the Board approved the 'Options for Enhancing Regional Recreation' report which summarizes the framework requested by the ISC.
- Recreation is a policy area identified by HDR|Calthorpe that can be advanced independently of the outcome of the scenario process, given the circumstances of the COVID-19 pandemic.
- At the May 7, 2020 Land Use and Servicing Committee meeting, the draft recreation policy was sent back to Recreation Servicing TAG for additional refinements. Recreation Servicing TAG and Charlie Hales of HDR|Calthorpe met to discuss possible refinements and to communicate the overall approach to recreation in the Growth and Servicing Plan development by HDR|Calthorpe. The results of that discussion are incorporated into the Draft Recreation Policy document.
- Additional policy areas such as recreation corridors will be discussed at future stages of HDR|Calthorpe's process.

Attachments
- Draft Recreation Policy, HDR|Calthorpe

1.   Introduction

As summarized in the *Options for Enhancing Regional Recreation* report, the Board sees an opportunity for improved collaboration on regional recreation.

Agenda Item 8

The subject of regional and sub-regional collaboration will be discussed in the Workshop #3, presented on June 11.

2.   Recommendation

That the Committee recommend to the Board approval of the Draft Recreation Policy for the Growth and Servicing Plan.

Agenda Item 8

Draft Recreation Policy

Preamble

The policy brief focuses on the role of parks, natural areas, and public spaces in a regional plan for growth and development, and on recreation services delivered by government organizations for the benefit of individuals and communities. The recreation system across the Calgary Metropolitan Region is diverse, complex, and multifaceted. Recreation services provided by municipalities not only lead to residents and visitors being more physically active; it also brings people together and positively contributes to desired outcomes in other public service areas such as education, justice and health.

Collaboration to realize mutually agreed upon common outcomes may lead to achieving cost savings, reducing risk, sharing resources, sharing responsibility, increasing the quality of a service and other benefits. There are some areas of the CMR where collaboration is thriving currently, but areas where improvements can be made.

The CMRB recreation framework document, *Options for Enhancing Regional Recreation*, is non-binding and may be used to facilitate collaboration between willing parties. The definitions and policy outlined below were developed from the recreation framework document. Municipalities are interested in coordinating servicing efforts where greenfield developments within a potential recreation service benefitting area occur. Due to the high capital costs of recreation facilities, increasing operation and maintenance costs and the public's increasing demand for servicing, municipalities are finding it increasingly difficult to balance fiscal constraints with public demand for recreation. For these reasons, paired with a sincere interest for municipalities to provide residents a high quality of life, a more collaborative approach is being explored. Once a facility, program or service is defined as regional, areas for collaboration and coordination may include evidence-based planning for capital investment, operations and maintenance or facility planning.

Regional Recreation Definition

A regional recreation facility, space, program or service has a realistic potential of substantial use by, and broader benefits to, residents from outside the municipal boundaries in which it is provided.

Policy Purpose

The purpose of regional recreation policy is to:

1. Integrate the growth and development vision of the CMR with the goal of all residents having access to active parks and recreation services, natural areas, and public spaces.

2. Identify connectivity opportunities that exist between communities, often (but not always) related to multi-purpose ESA or transportation corridors which can also be classified as recreation opportunities;

3. Support the use of legal, policy and financial tools available to municipalities which enable them to provide parks, open space, and public spaces. The effective use of these tools helps create complete communities and ensure recreation opportunities for all residents;

4. Strengthen collaboration on regional recreation initiatives in an evidence-based process to identify recreation needs across the CMR and improve the coordination, planning and delivery of recreation services.

Policy Objectives

a. To conduct a current state analysis of the region.

b. To identify deficiencies, if any, in the access to parks, open space, and recreation services for current and future residents of the CMR.

c. To identify and enable coordinated planning for recreation corridors that connect multiple municipalities.

d. To establish a collaborative process for discussing regional recreation.

e. To promote an evidence-based approach to decision-making.

Scope
This policy applies to member municipalities.

Policy

1. ESTABLISH A COLLABORATIVE PROCESS

    1.1 Collaborative processes for regional recreation decision-making will build trust, be transparent, and respect an individual municipality's right to make its own recreation decisions.

    1.2 To further voluntary regional collaboration, the CMRB will establish a recreation working group of member municipalities to facilitate collaboration by identifying areas of common interest, coordination, regional challenges and to share information.

2. PROMOTE AN EVIDENCE-BASED APPROACH TO DECISION-MAKING

    2.1 When working together, member municipalities will establish processes that incorporate evidence-based decision making to the greatest extent possible.

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2.1 Member municipalities will collect and share data in support of evidence-based approaches to decision-making at the regional level.

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