

Calgary



Regional Planning and the Calgary Metropolitan Region Board:

Presentation to the Arizona Delegation

May 30, 2019





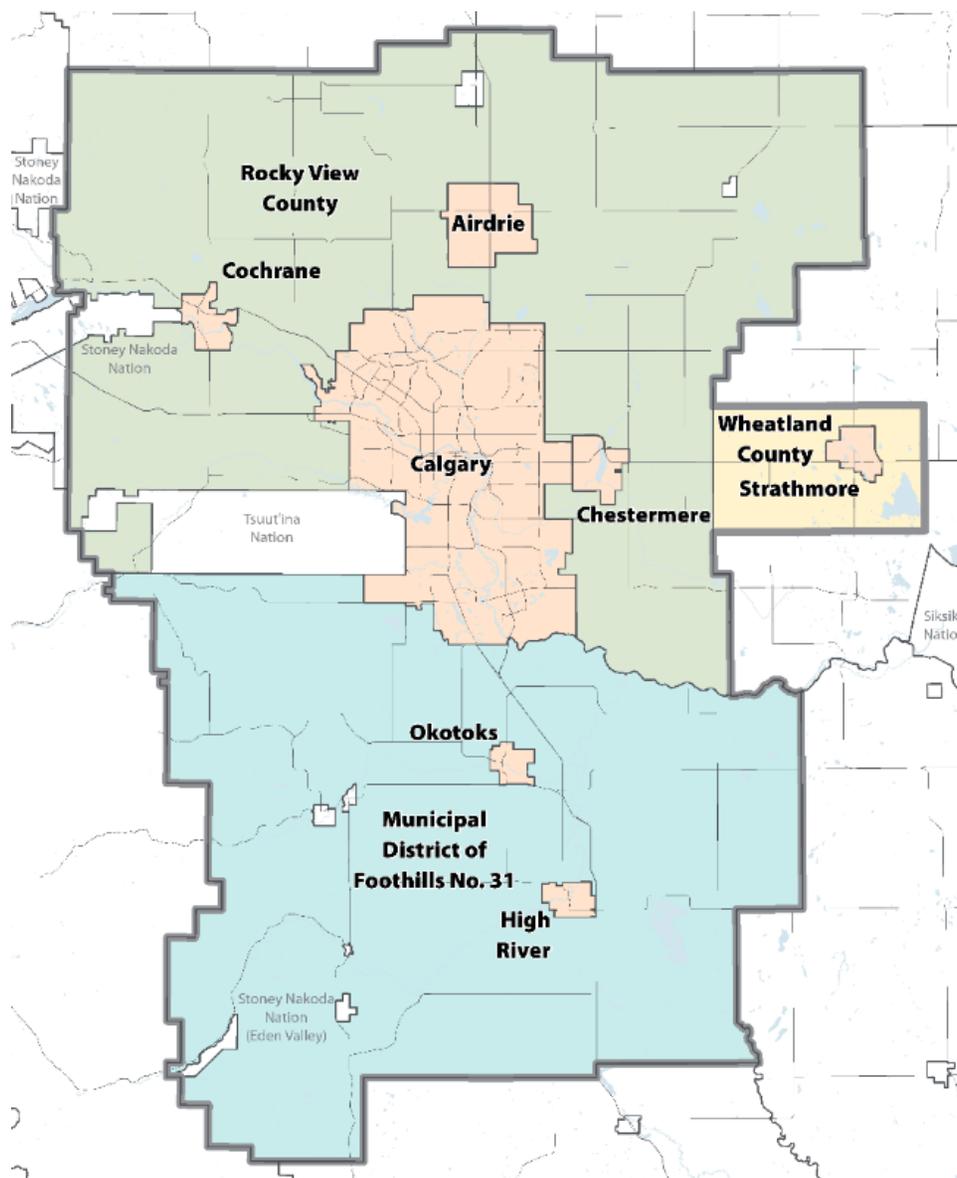
CMRB Municipal Members

- City of Airdrie
- City of Calgary
- City of Chestermere
- Town of Cochrane
- Town of High River
- Town of Okotoks
- Town of Strathmore
- Rocky View County
- Foothills County
- Wheatland County (Westerly portion only)

1 major city

6 small-mid sized cities/towns

3 rural municipalities



Calgary Metropolitan Region Board Mandate

- Promote sustainability and economic well being and competitiveness of the region
- Ensure environmentally responsible land use planning, growth management and efficient use of land
- Promote economic well-being and competitiveness
- To prepare a Growth Plan and Servicing Plan by 2021
- Develop policies for public engagement and coordination of regional infrastructure investment and service delivery



Board Decisions - Double Majority

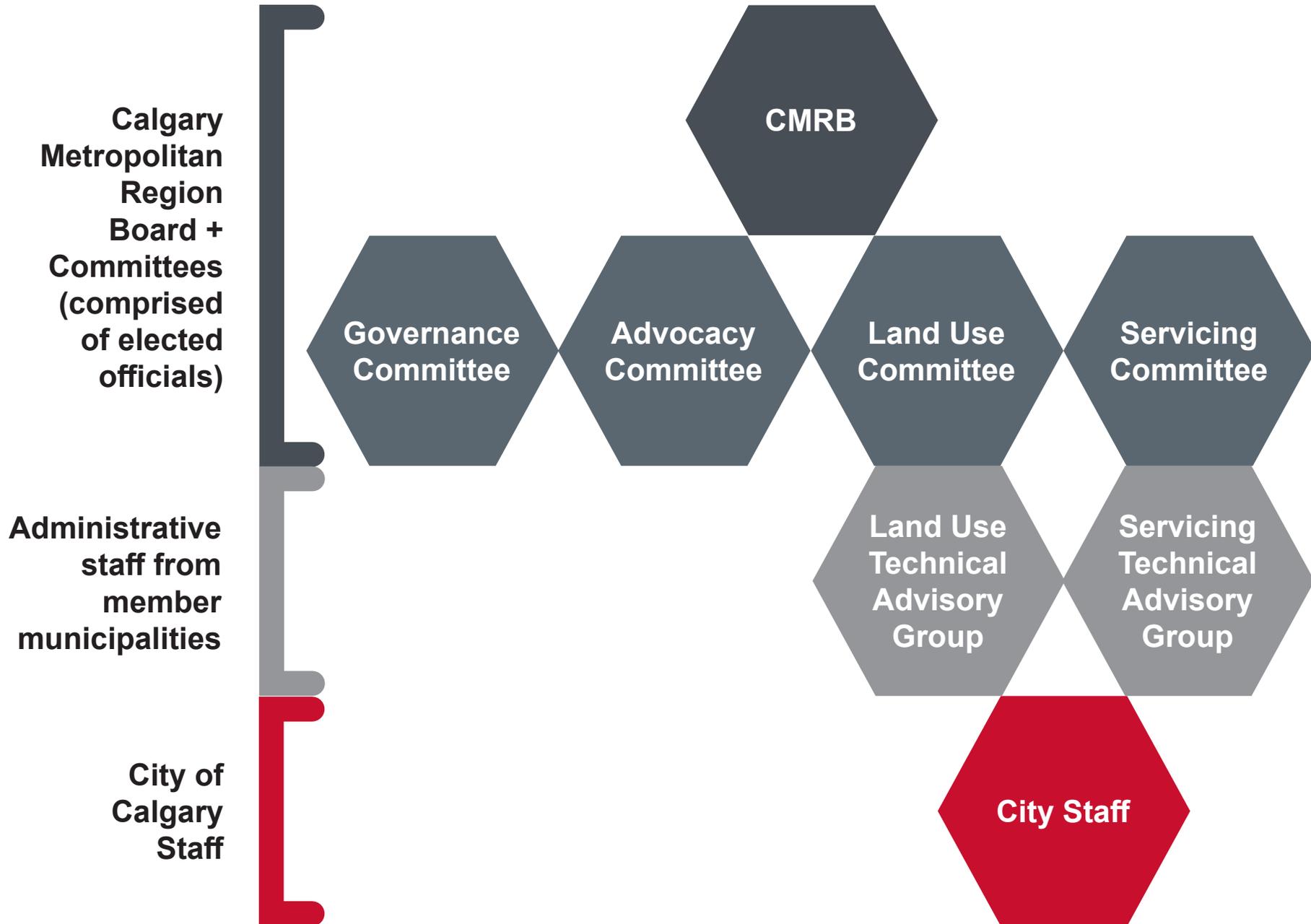
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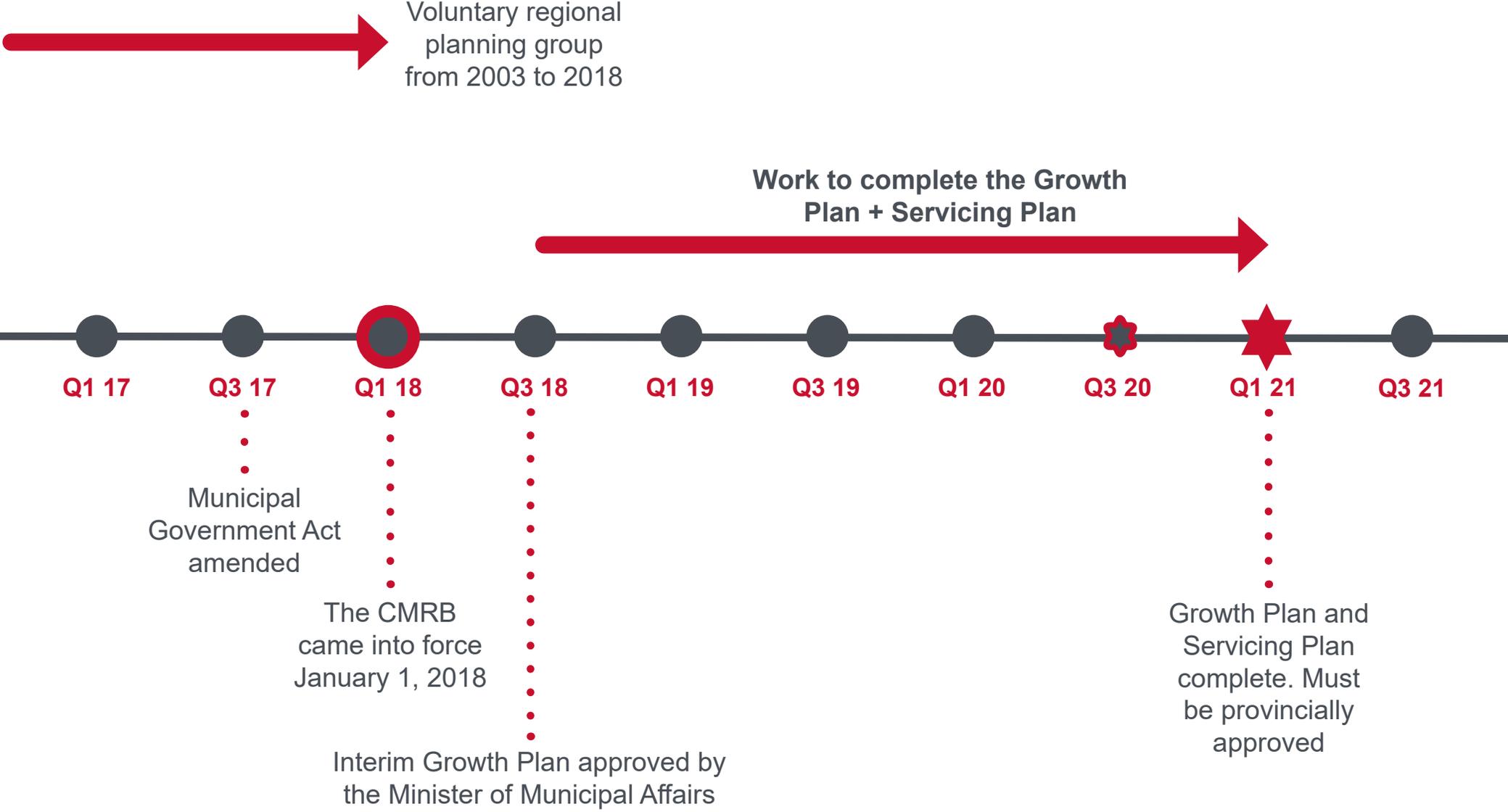
Population Members

- 4 members municipalities have a veto
- Calgary has a veto

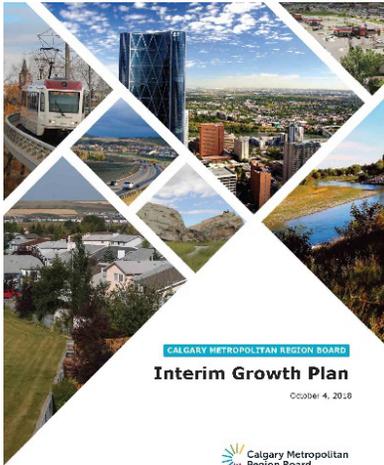


Governance Structure



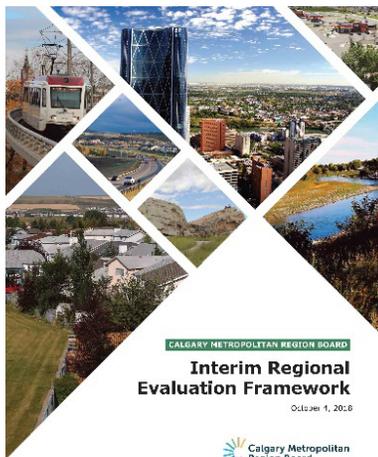


Approved CMRB Documents



Interim Growth Plan (IGP)

- In place until replaced by more fulsome Metropolitan Region Growth Plan
- All statutory plans and amendments must align to this policy framework
- Emphasis on collaboration, transit and address cross boundary impact



Interim Regional Evaluation Framework (IREF)

- Enables authority to the 10 member Board to approve statutory plans and certain amendments



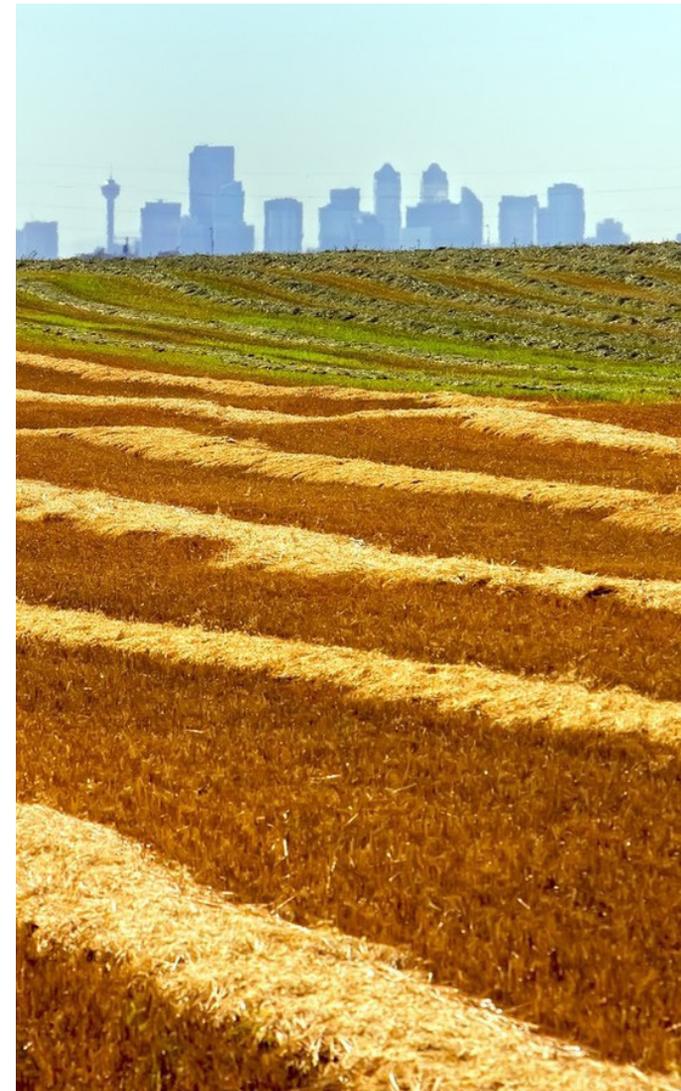
New Planning Hierarchy



Calgary Metropolitan Region Growth Plan

Integrated and strategic regional land-use plan that includes:

- Population + employment projections
- Identification of + policies for:
 - » Growth areas
 - » Land supply
 - » Agricultural lands
 - » Density
 - » Infrastructure and associated corridors
- Environmentally sensitive areas policy
- New settlement areas policy





Calgary Metropolitan Region Servicing Plan

Services to support the Growth Plan + their inter-municipal delivery, if appropriate:

- Identify and support optimization of services to facilitate orderly, economic and environmentally responsible growth
 - » Transportation and transit
 - » Water, wastewater and stormwater
 - » Solid waste
 - » Emergency services (e.g., fire, police)
 - » Recreation
 - » Any other services decided by the Board



CMRB Projects + Studies

Growth Plan Projects + Studies

- Regional population projections
- Regional employment projections
- Environmentally sensitive areas study
- Land use supply
- Agriculture sub-committee work

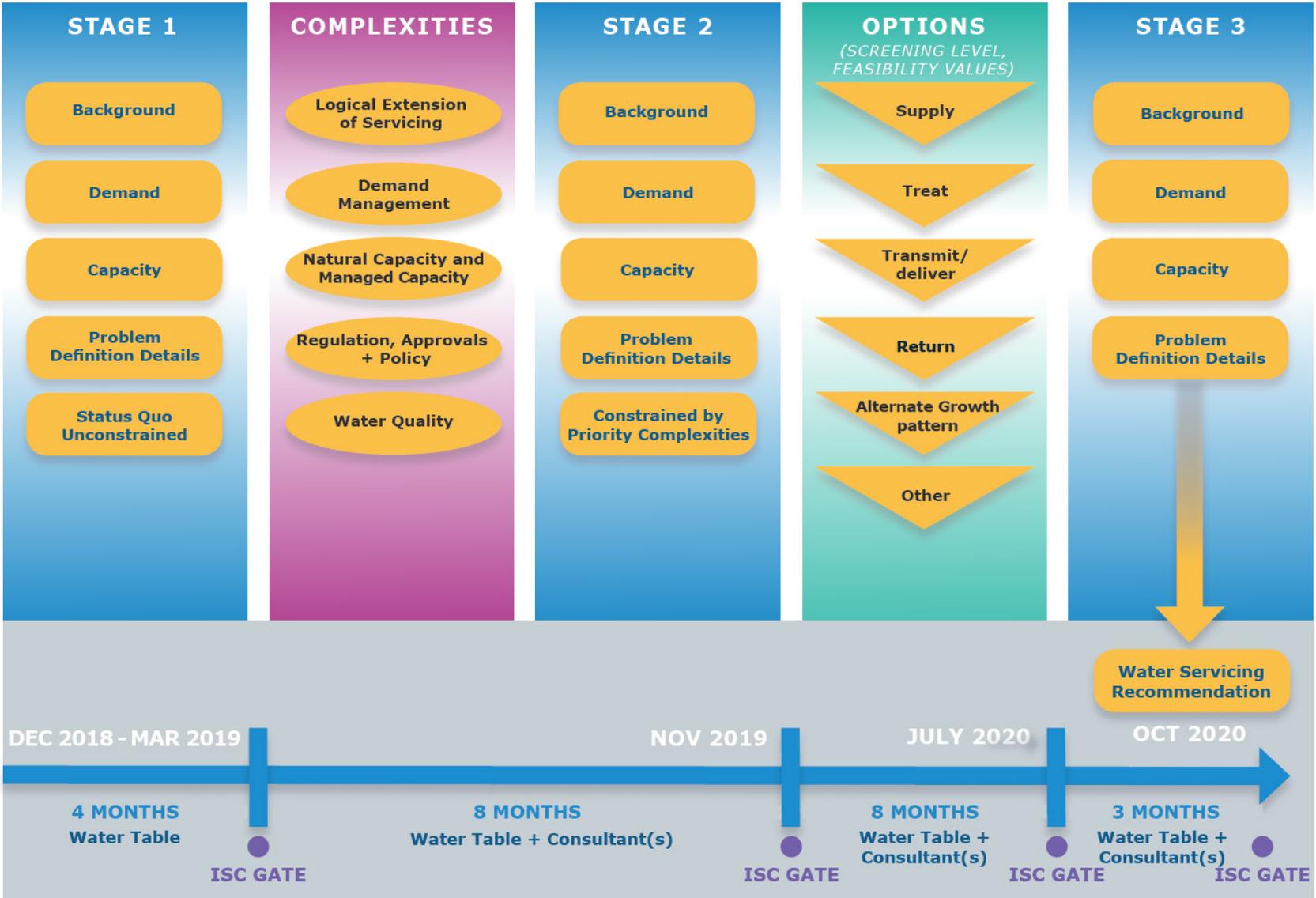
Servicing Plan Projects + Studies

- Transportation studies
- Transit sub-committee work
- Regional recreation framework
- Water, wastewater and stormwater studies

July 2019 - hire a growth plan consultant

CMRB Water Table Roadmap

DRAFT WATER TABLE ROADMAP



Additional work:

- Flooding and floodplain management
- Regional stormwater management
- Governance of shared water services

Key Areas of Interest

**Supporting
transit**

**Protecting water
supply + quality**

**Protecting
critical habitat +
watershed areas**

**Robustly
determining
growth areas**



Calgary



City of Calgary Business Environment

2019 May 30



Business Environment

Priorities

- Cultivating a healthy business environment
- Focusing on Service, Value and Innovation
- Being Responsive
- Expanding our Living Labs

Significant Achievements

- One Window for all business applications
- Business Advisory Committee of Council
- Pop-up and Interim uses City Wide
- 20 companies accessing City infrastructure to test products through Living Labs
- Calgary is the first major city in Canada to accept developer surety bonds as an alternative to letters of credit while also reducing the overall dollar amount held for securities by 10% to reduce financial burden, free up private capital and make it easier for businesses in Calgary to invest.

Calgary



May 30, 2019

City of Calgary Living Labs



The National for September 03, 2018



Posted: Sep 03, 2018 10:00 PM ET | Last Updated: September 4



Welcome to The National, the flagship nightly newscast of CBC News 46:34



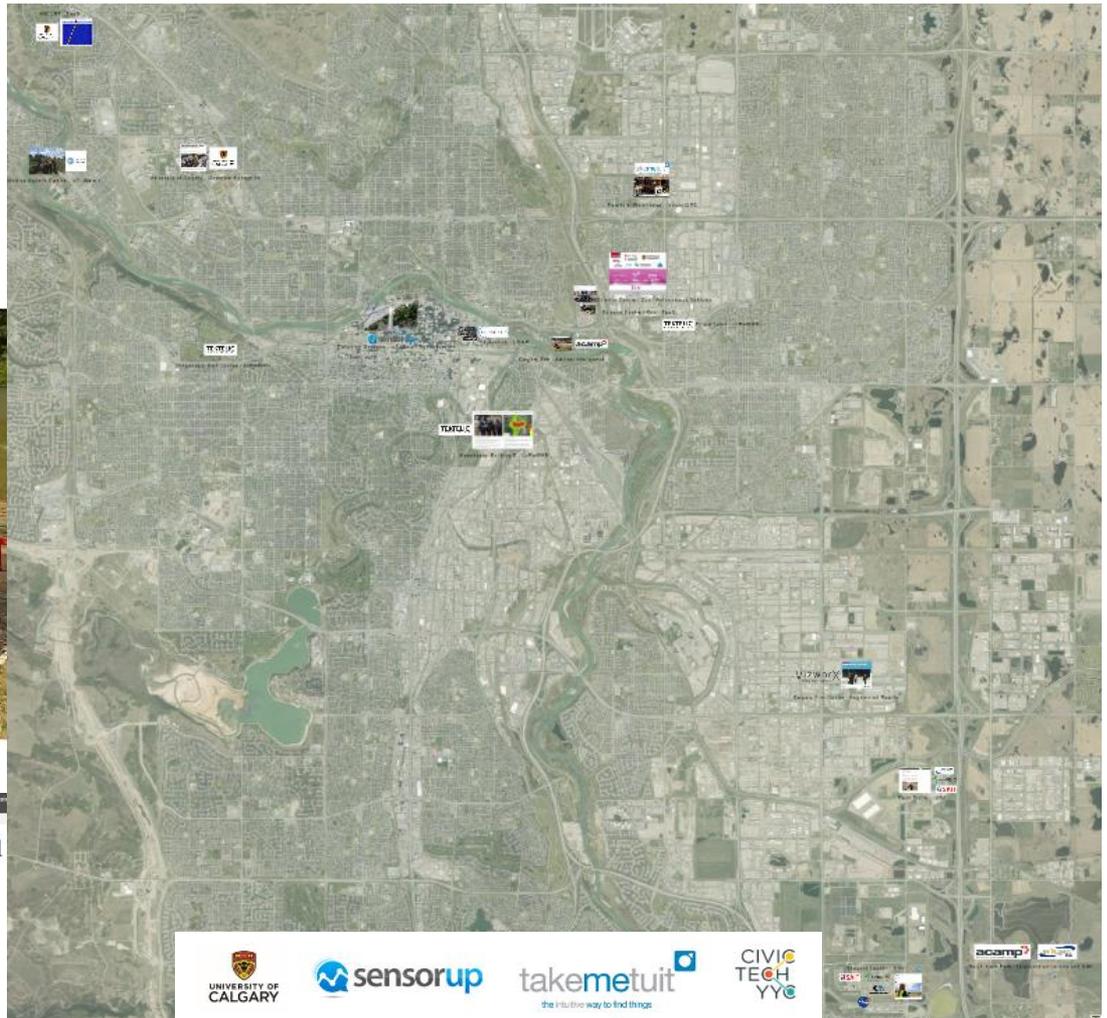
Sky's the limit as Calgary opens testing area for drones and new technologies

BILL GRAYLAND
CALGARY
THE CANADIAN PRESS
PUBLISHED OCTOBER 19, 2018

The sky's the limit as the city of Calgary opens what it believes is the first testing area in Canada for drones, autonomous vehicles and other technologies.

The city has set aside a 50-hectare site in its industrial southeast to offer airspace for an increasing demand from companies and educational institutions wanting to do mass tryouts of commercial drones.

A downturn in the energy industry when oil prices took a free fall in 2014 is spurred the development of geospatial sciences, said Pam Tomp of Calgary Economic Development.





Background



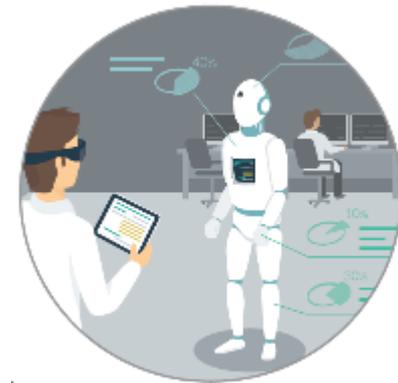


Future of Transportation in Calgary

Economic Angle

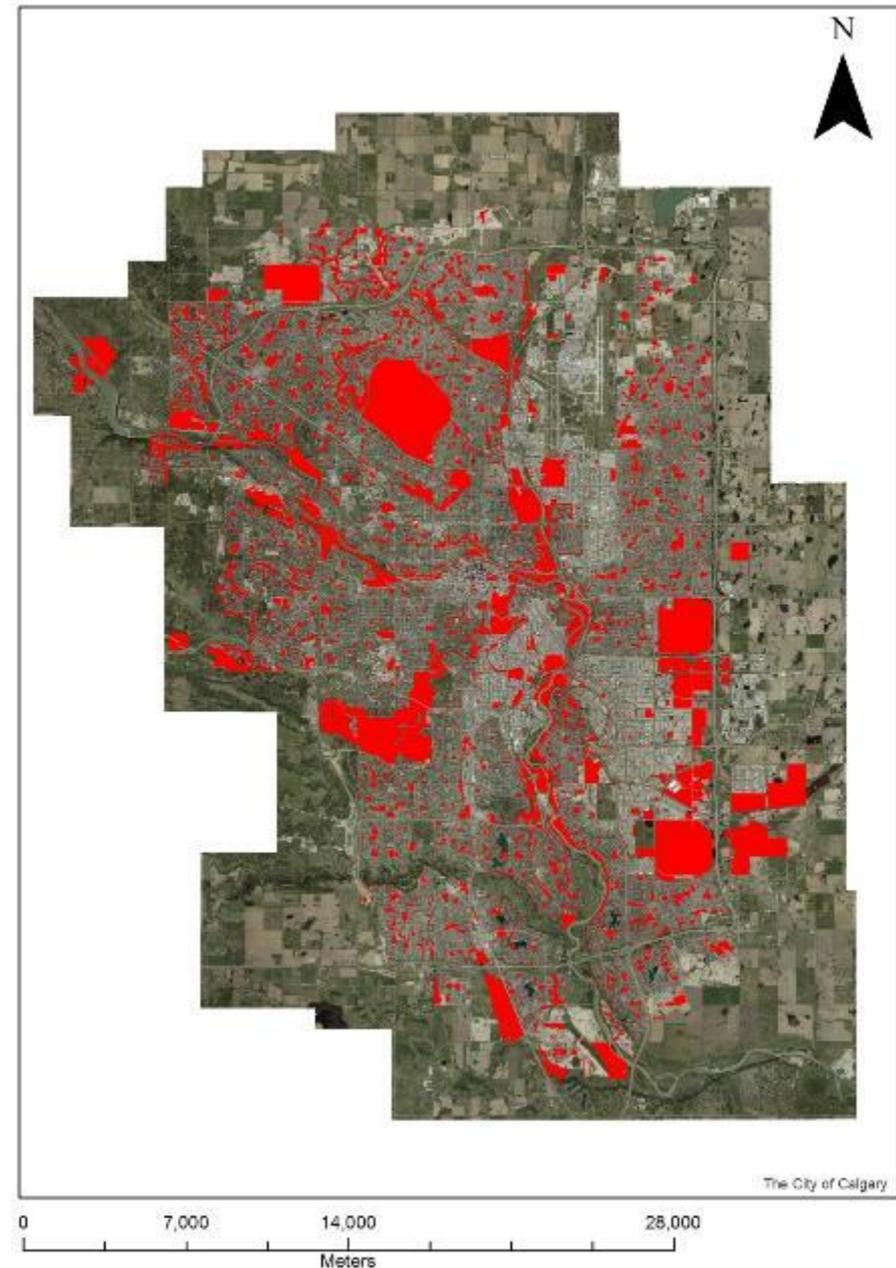


How do we support the tech industry in Calgary?



What do they need? - Industry Wish List

- a) Roadways & City personnel
- b) Parkades & personnel supporting the parkade
- c) Traffic lights/signals staff and equipment
- d) Parking lots
- e) Public Parks (Open Space tests wireless communication systems)
- f) Fleet vehicles maintenance personnel & operators & equipment
- g) Vehicle operators & maintenance staff
- h) Police & Fire Dept personnel & training facilities



Autonomous Systems Testing



- MANDATORY FORMS
- + COMMONLY USED FORMS
- + OTHER INFORMATION
- + MAPS OF CALGARY PARKS

Mandatory Forms

The following documentation must be on file with The City of Calgary or the Film, Television & Creative Industries Commission before any permits will be issued.

Please complete and submit the following forms.

1. Film Production Information Form

This form provides basic information about the production and the production company; a brief outline of all planned activities; the initial shooting schedule; and approximate number of cast and crew members.

2. Acceptance of Terms and Conditions Form

This form must be downloaded and can be emailed to film@calgaryeconomicdevelopment.com or faxed separately to (403) 221-7828

a) A location agreement (Acceptance of Terms and Conditions) with the City of Calgary must be signed for productions of 10 days or less. For productions of more than 10 days, a long form Location Agreement must be signed.



Calgary



+20 Projects



Shepard Landfill - UAV








Closest drops, drone help Calgary hold the tech festival together




Science Centre / Zoo - Autonomous Vehicles

Science Centre / Zoo - FaaS

Sky's the limit as Calgary opens testing area for drones and new technologies






Point Trotter - UAV

VIZWORX
Visibly Better Solutions



Calgary becomes living lab for augmented reality

Calgary Film Centre - Augmented Reality

takemetuit
the intuitive way to find things



Furniture Warehouse - Indoor GPS

What benefits have you experienced from working with us?

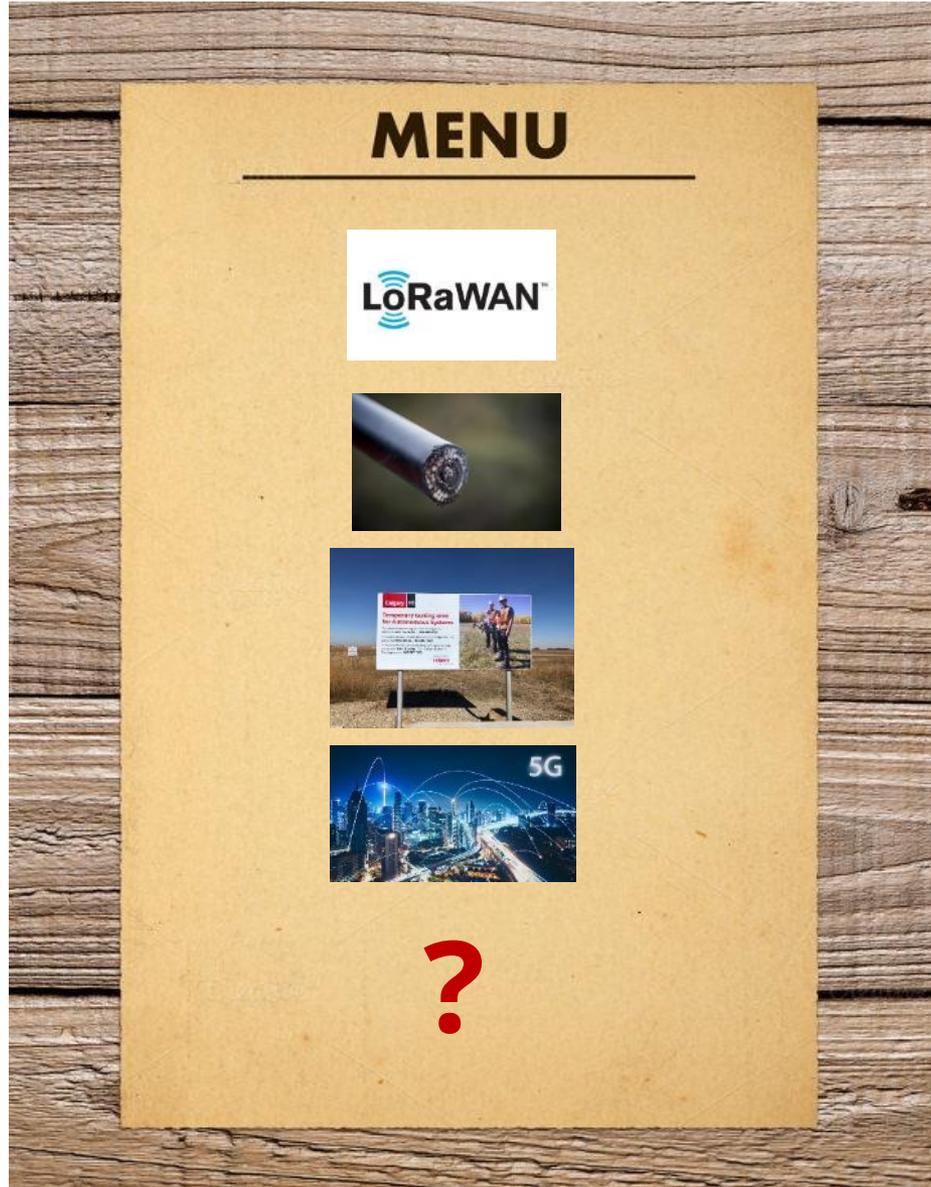
“Having the Living Lab as a partner allowed our product to mature in a realistic environment, demonstrated to our future customers that we were beyond the prototype stage and allowed our customers to better visualize how the final installation would look in their environment.

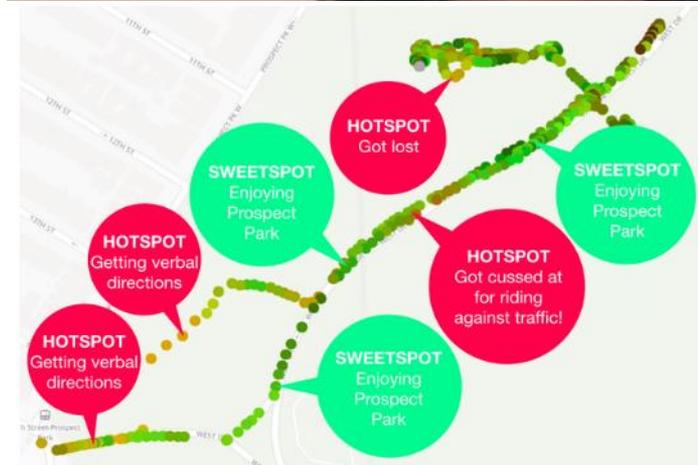
We were able to access the setup during the day – something we would not have been able to do in an operating store, and we were able to leave the setup in place over a longer duration. We really enjoyed the City’s active role in helping us and were able to take our learnings from our experimentation and further evolve and enhance our product”.





Long Term Goal





Current Students in the Faculty of Kinesiology

HOME ABOUT KINESIOLOGY CURRENT STUDENTS FUTURE STUDENTS PROGRAMS & FACILITIES RESEARCH CONTACT

[Current Students > Graduates](#)

Wearable Technology Program

Specialization in Wearable Technology

The University of Calgary is now offering a specialization in wearable technology for national and international students enrolled in a thesis-based MSc or PhD level program.

Wearable sensor technology is one of the fastest growing fields in the world and there is a growing demand for professionals in the field. Graduates will drive the future of smart technology in Canada.

The Wearable Technology Research and Collaboration (We-TRAC) training program is funded through a grant from the Natural Sciences and Engineering Research Council of Canada (NSERC) Collaborative Research and Training Experience (CREATE). Read more about how the program got started in the 'Media' section below.

Job prospects in wearable technology

It's estimated that for every wearable job posting, there are only 16 qualified professionals. This compares to an average of 59 applications for any other technology-related job posting.

Graduates can work with wearable technology companies, or receive training to start a business of their own with the new skills they gain in entrepreneurship. Many industries such as sports, recreation, healthcare and education need trained professionals.

Training in four areas

Successful applicants will receive hands-on job experience as well as training in these main areas:

- Human Movement Biomechanics
Learn how the bones and muscles in the human body work together to form movement.



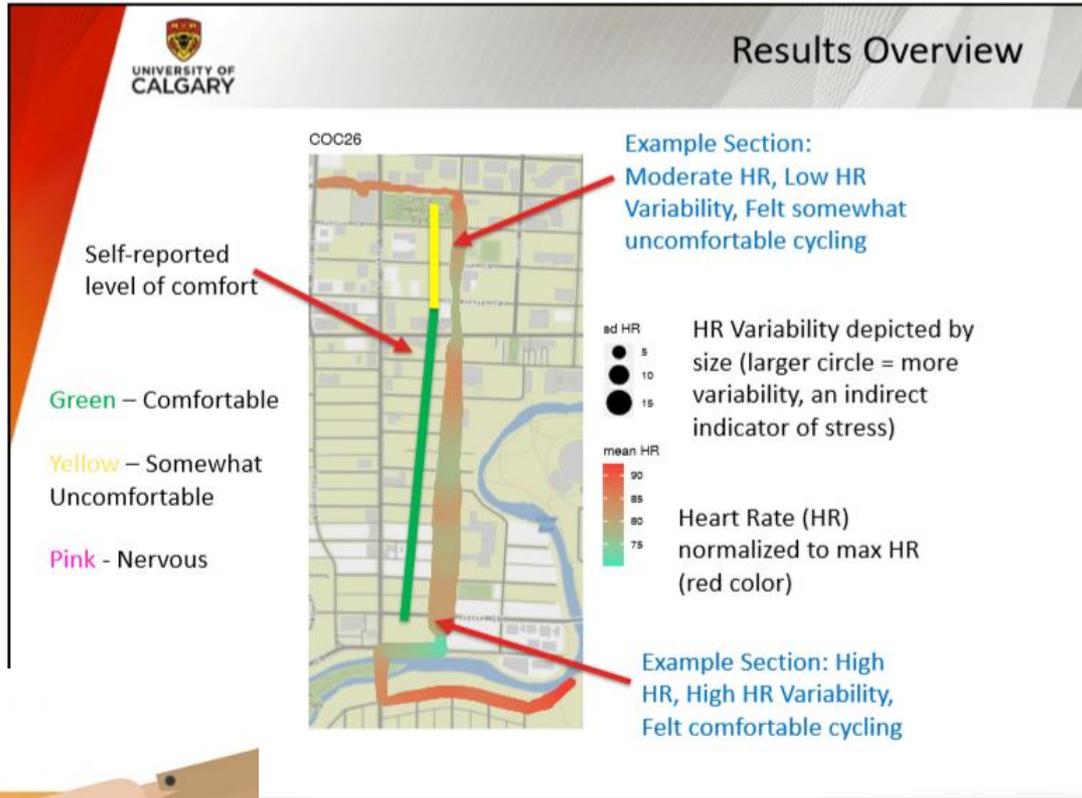
Undergraduates - Apply Now!

Wearable and data sensor research project: spring/summer 2019

UCalgary undergraduate students interested in doing summer research in wearable technology and sensor data can apply now. The research will be 35 hours per week between May 1 and August 30, 2019 at the University of Calgary main campus. Stipends of \$7,000 are available. Open to students in all faculties.

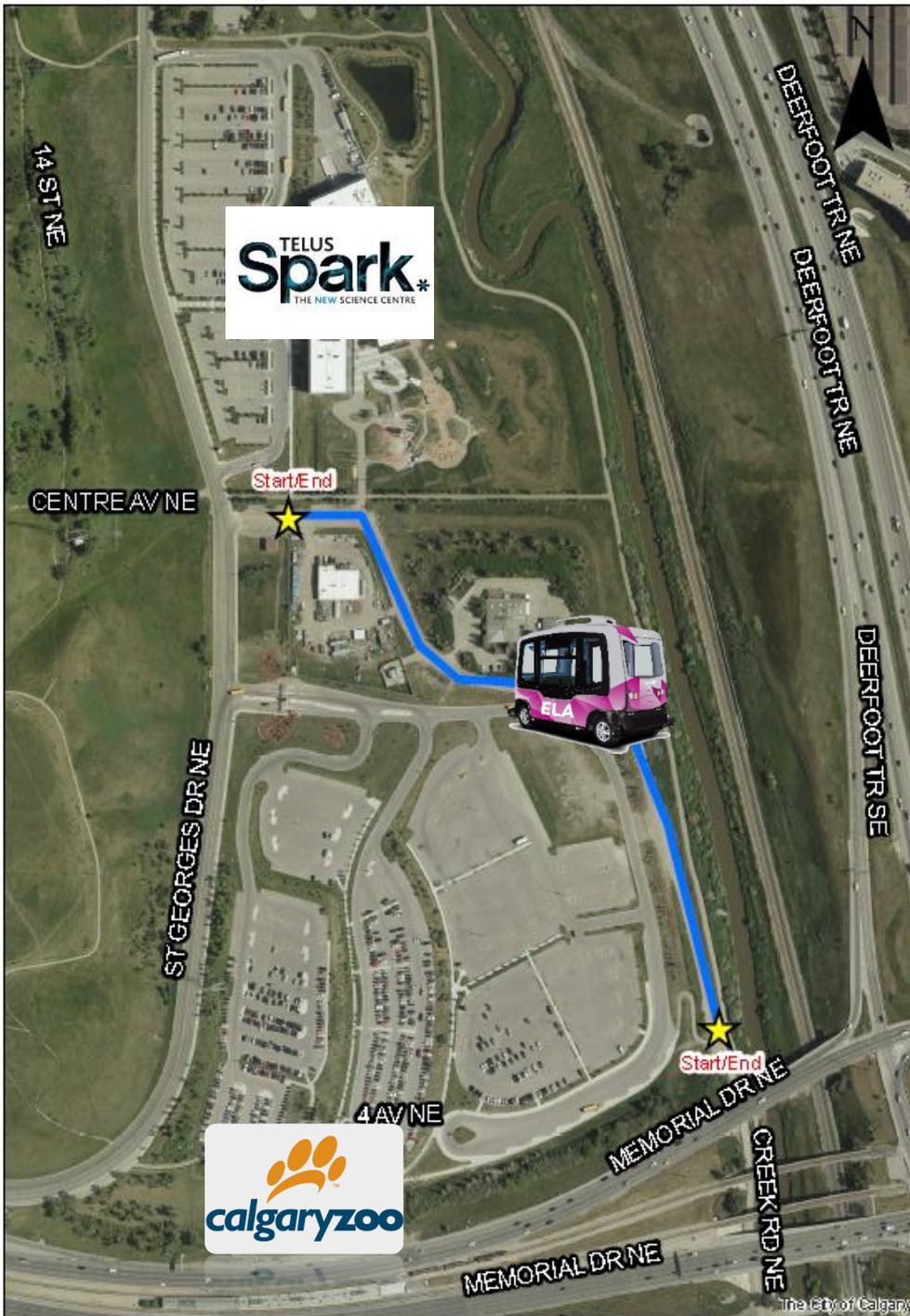
To apply:

Step 1 - Fill out the [application form](#) (PDF)





Thanks!



Why this route?

- Worked with the Province
- City owns the land
- Solves a last mile problem, without detracting from walking and cycling
- Promotes our partners
- Science Centre exhibit
- Operated during September 2018



Open to the public!!



Arizona Delegation – May 30, 2019

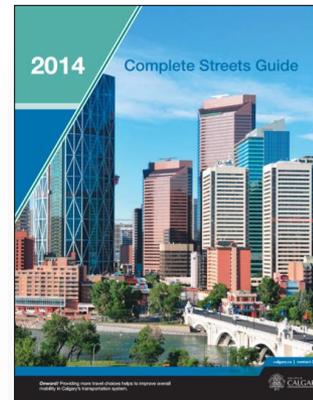
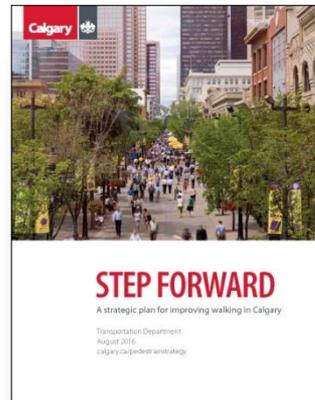
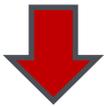
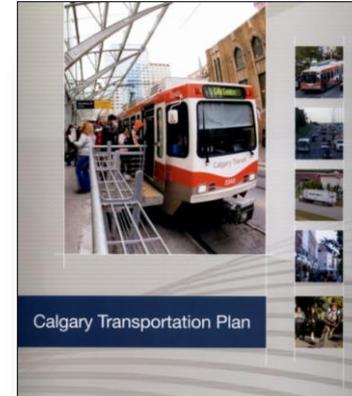
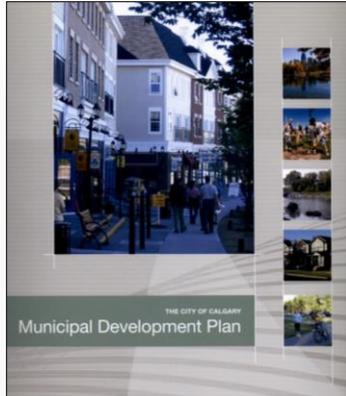
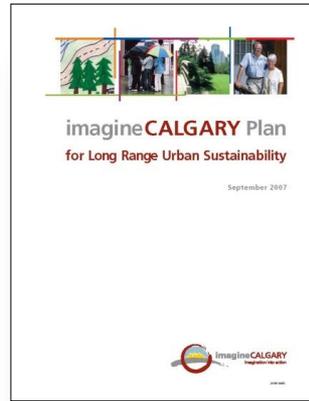
Transportation Planning

Feisal Lakha – Manager, Transportation Development Services





City of Calgary Policy & Strategies





Sustainability Principles for Land Use and Mobility

1 Create a range of housing opportunities and choices

7 Strategically direct and manage redevelopment opportunities within existing areas



2 Create walkable environments

8 Support compact development

3 Foster distinctive, attractive communities with a strong sense of place



9 Connect people, goods and services locally, regionally and globally



4 Provide a variety of transportation options

10 Provide transportation services in a safe, effective, affordable and efficient manner that ensures reasonable accessibility to all areas of the city for all citizens

5 Preserve open space, agricultural land, natural beauty and critical environmental areas

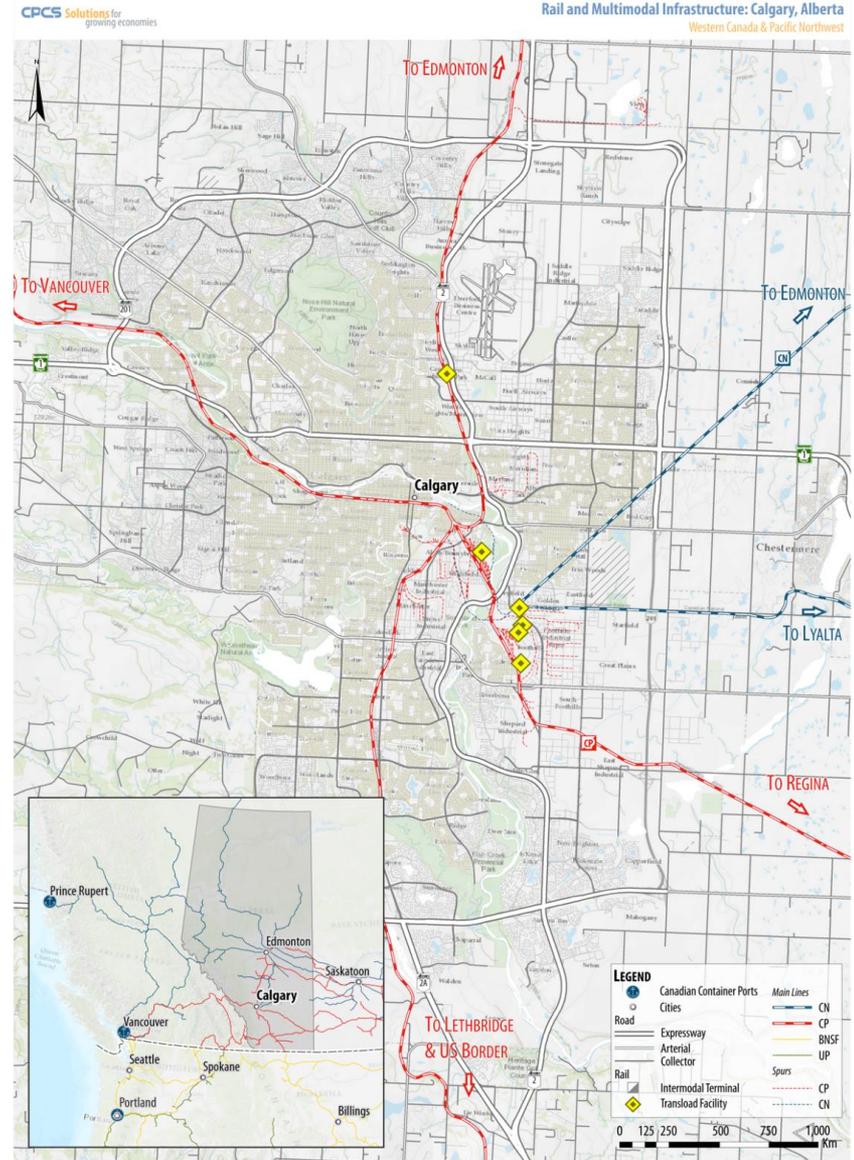
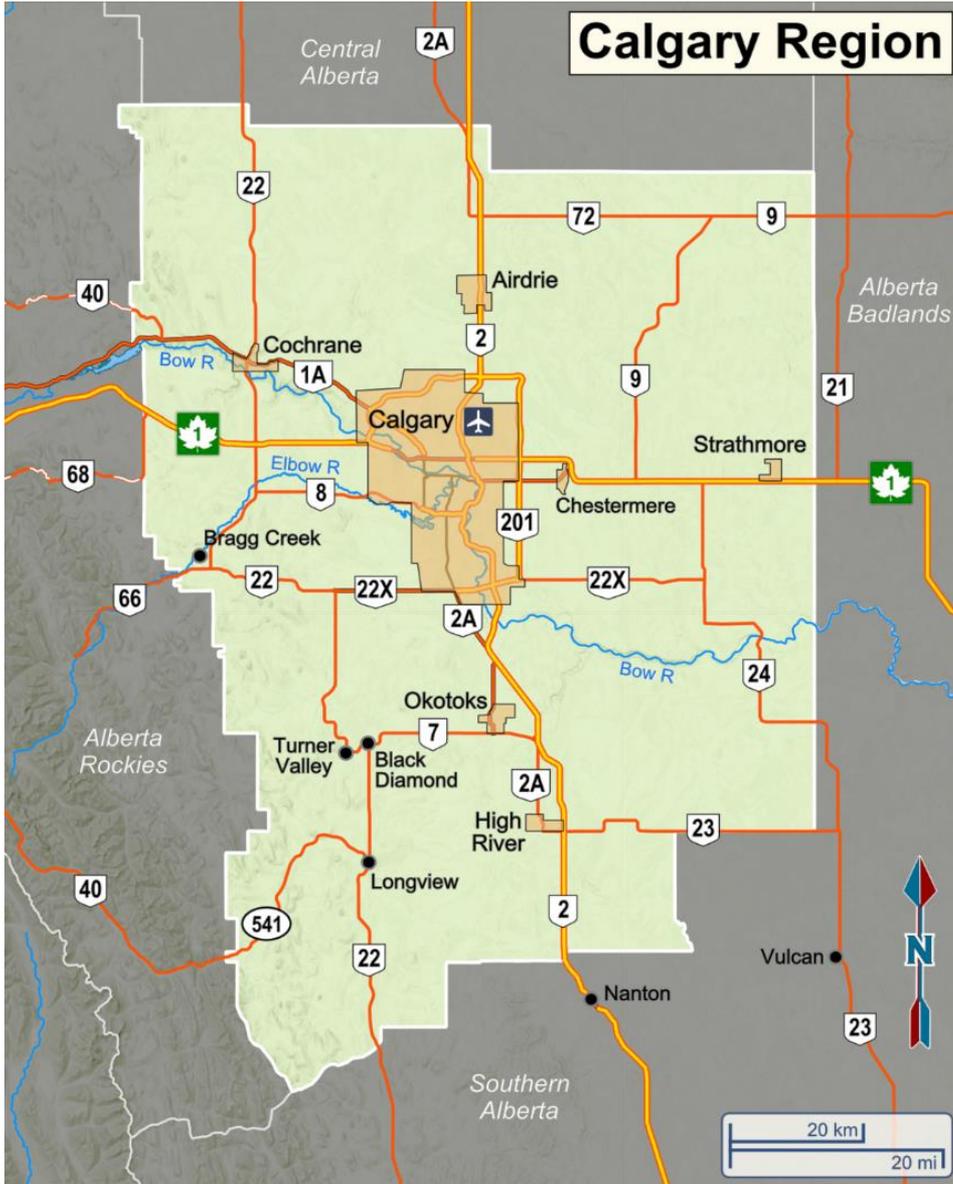
6 Mix land uses



11 Utilize green infrastructure and buildings



Calgary Metropolitan Region





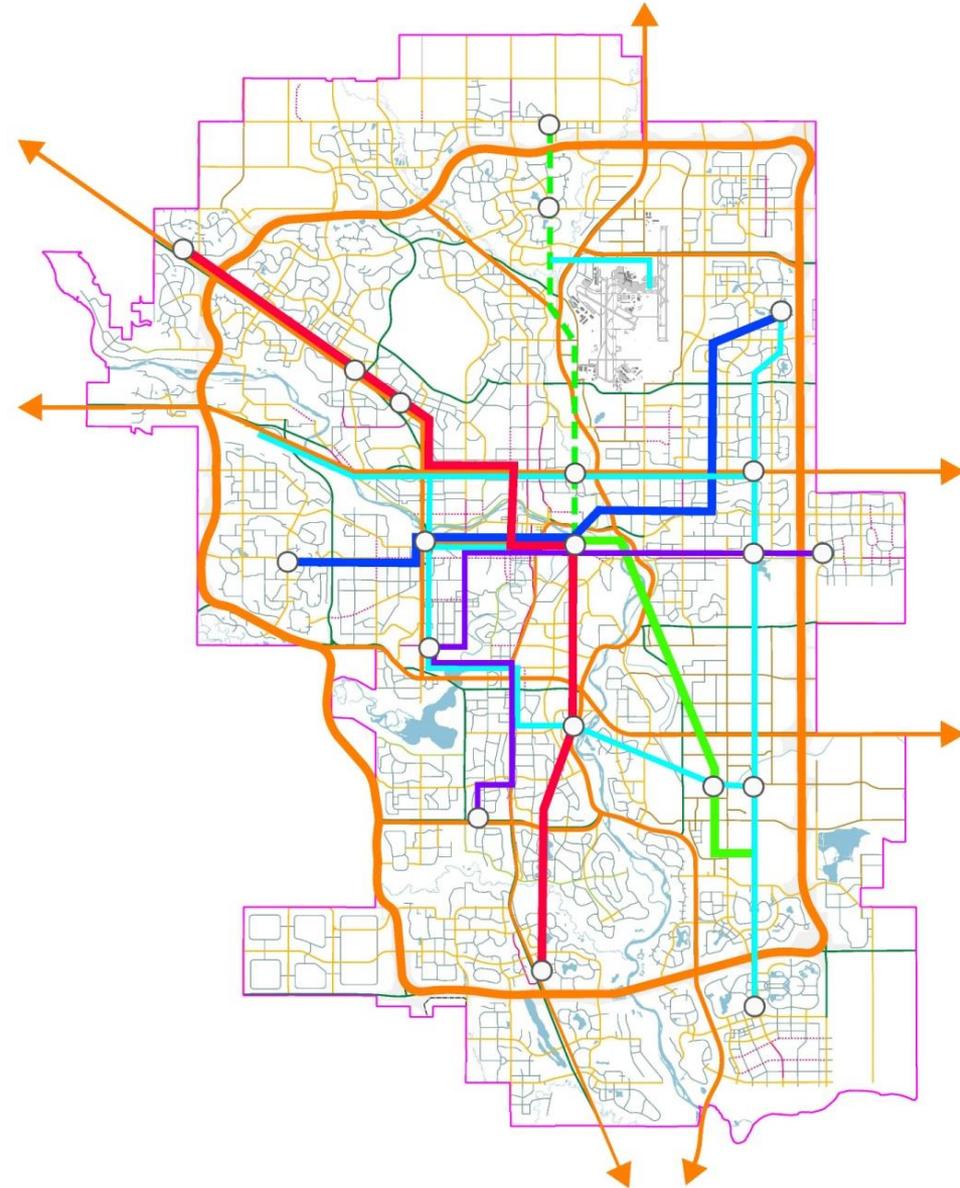
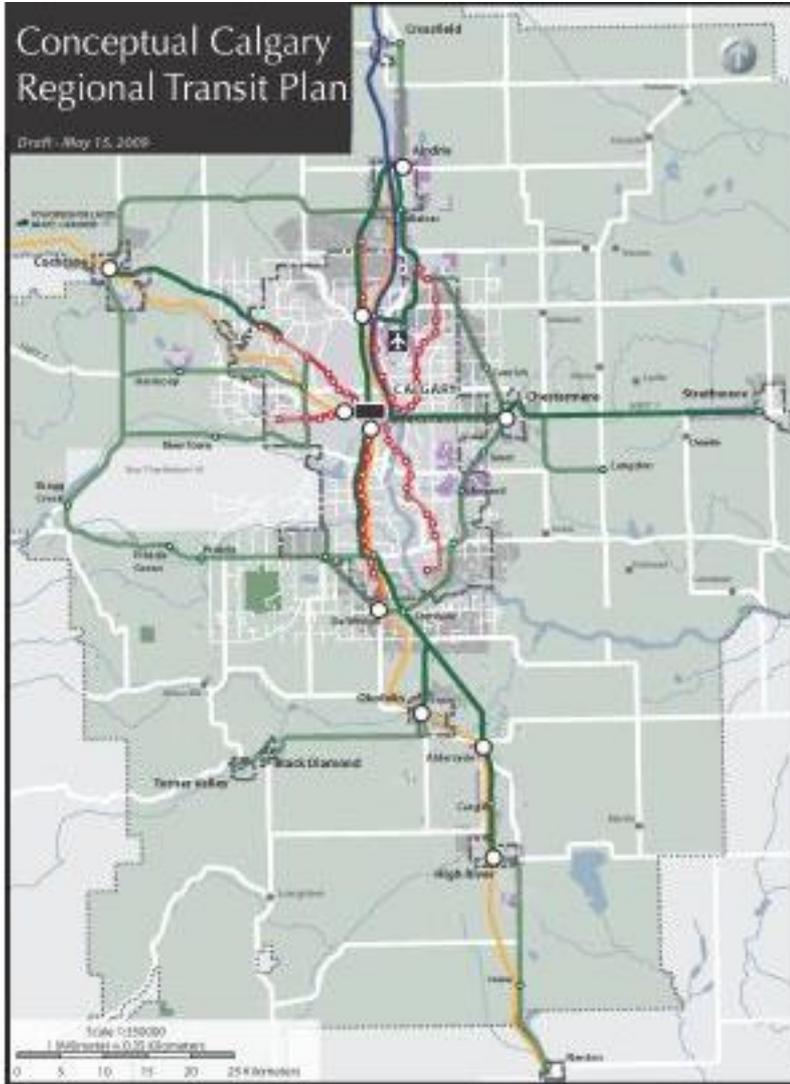
Calgary Metropolitan Region Board

Board Mandate

- Established in 2018, the Calgary Metropolitan Region Board is committed to working towards long-term, sustainable growth for the Calgary Region.
- Regional approach to meet servicing, investment, and growth challenges.
- Similar approach applied for Edmonton Metropolitan Region Board
- Established 2008, framework developed and strategies implemented that has yielded improved service delivery, stated amount \$5B in infrastructure investment efficiencies over the next 30 years realized through land savings of 160 square kilometers, or about 250 quarter sections.



Calgary Regional Transit

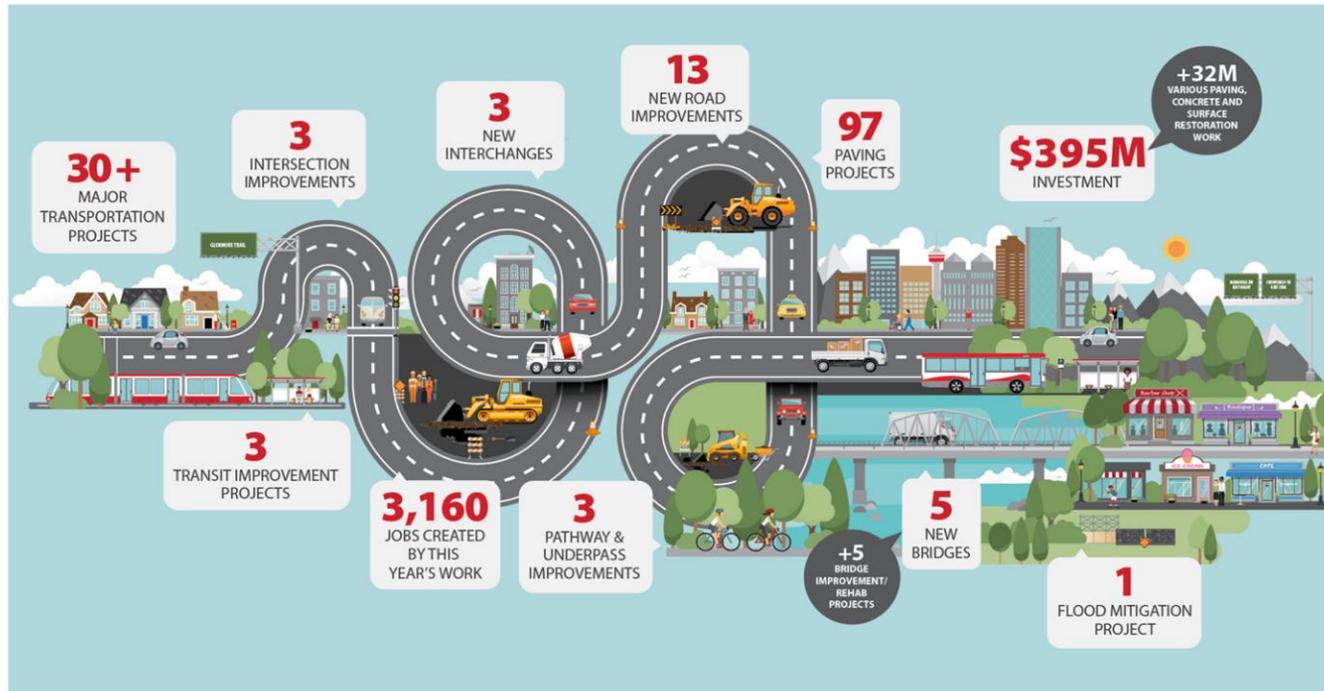


Calgary



Thank you

Transportation Infrastructure Investments in 2019



Delivering value to customers



102M public
transit trips
annually



18,834km
of street lanes



7027
taxi, limo and TNC
licenses issued



1364km
of pathways and
bikeways



1.17M specialized
transit trips annually



87%
customer satisfaction
with parking

Thank you!



Arizona Delegation – 2019 May 30
Calgary Transit and Transit Oriented Development
Asif Kurji – Coordinator, Strategic Transit Planning
David Couroux – Green Line Planning Lead



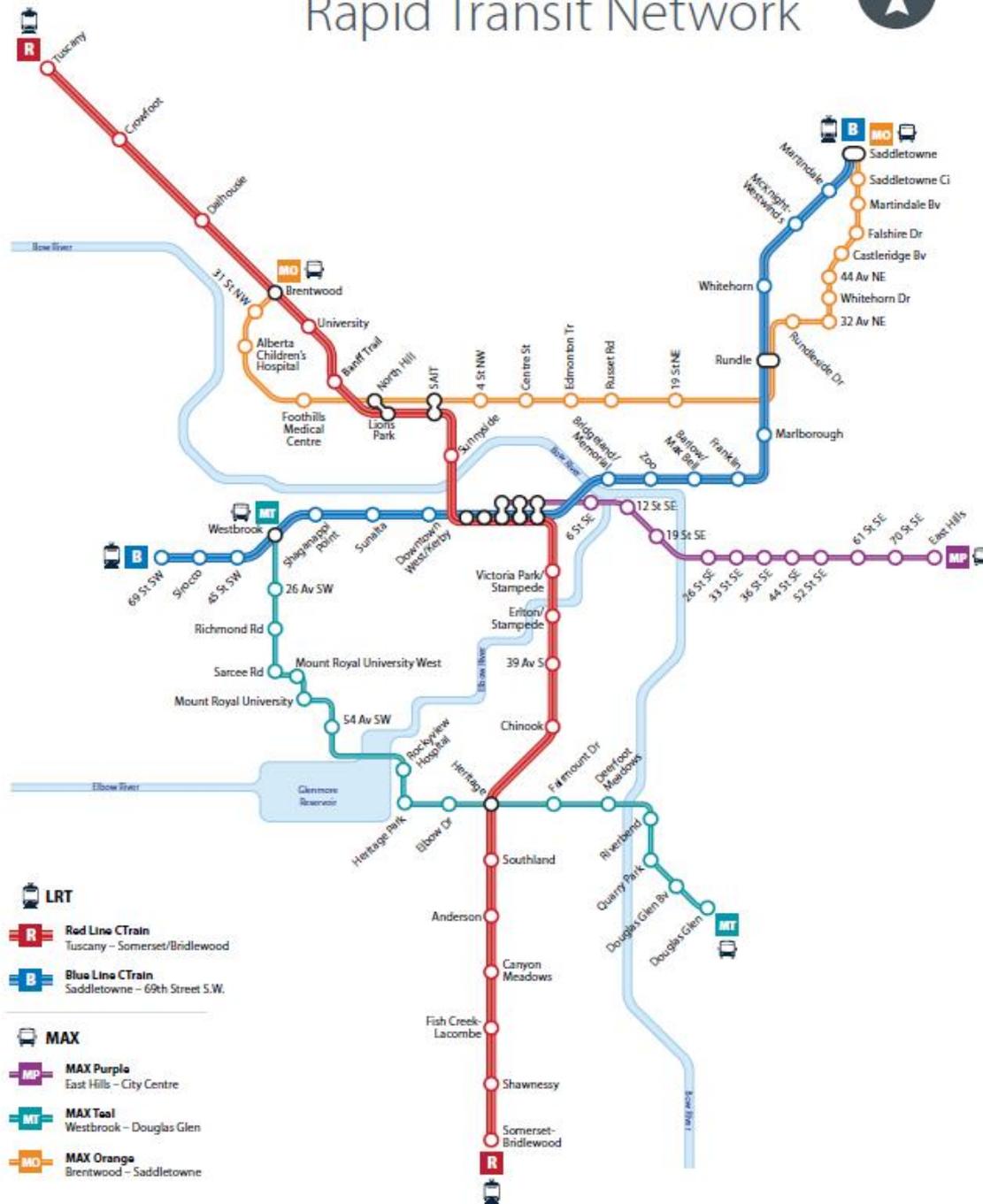


Calgary Transit

- Operating since 1909
 - Rail operations commenced in May 1981
- Integrated Multimodal System:
 - Bus
 - LRT
 - Calgary Transit Access
- 1,200 vehicles (970 bus and 230 LRV's)
- 163 Bus Routes
- 56km of Track
- 44 LRT Stations
- Approximately 3,000 employees
- Operations commenced in May 1981
- More than 300,000 people board the LRT network every weekday
- Approximately 50% of work trips to downtown are by public transit



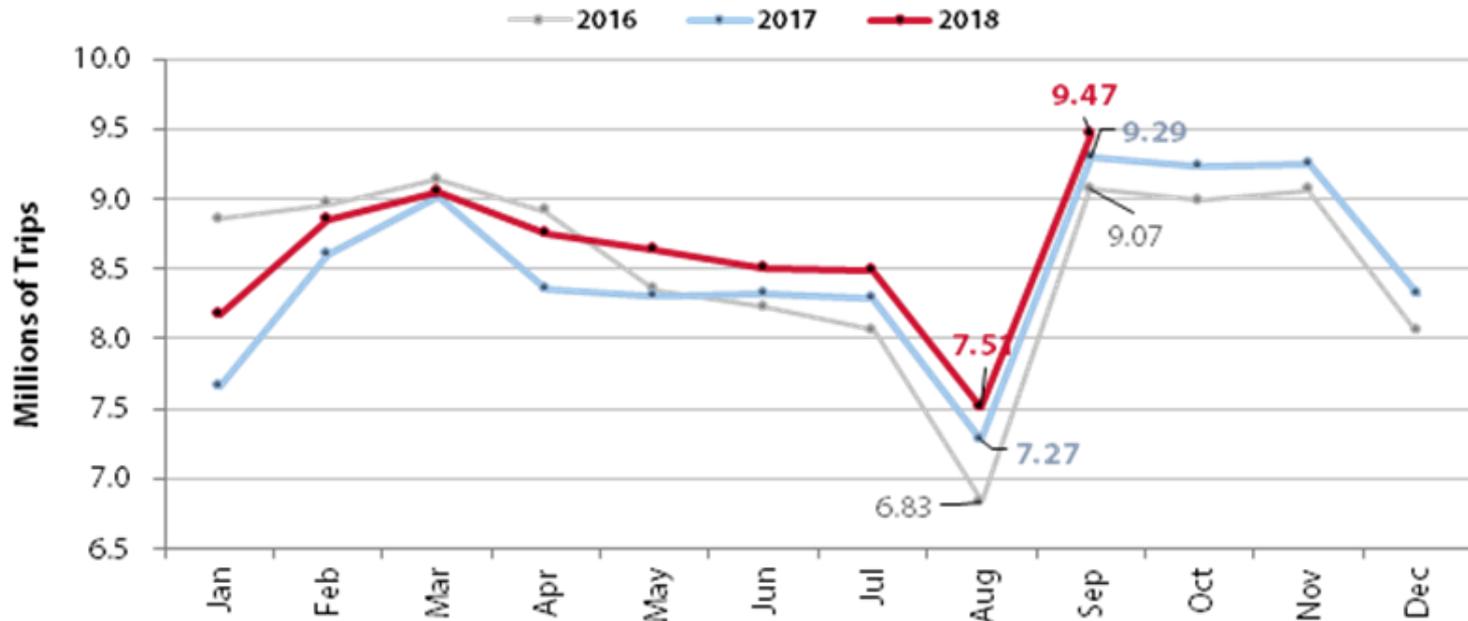
Rapid Transit Network

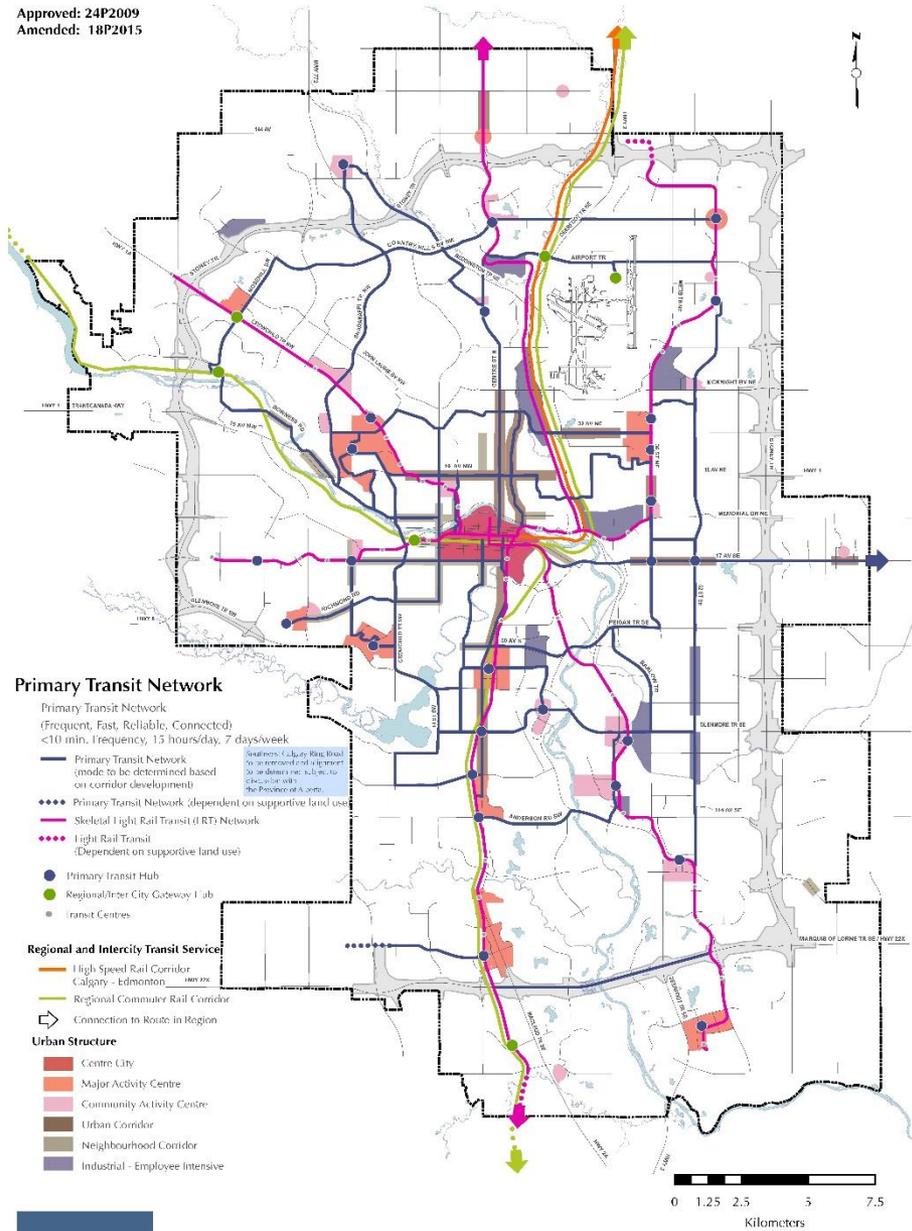


-  **LRT**
-  **Red Line CTrain**
Tuscany - Somerset/Bridlewood
-  **Blue Line CTrain**
Saddletowne - 69th Street S.W.
-  **MAX**
-  **MAX Purple**
East Hills - City Centre
-  **MAX Teal**
Westbrook - Douglas Glen
-  **MAX Orange**
Brentwood - Saddletowne

Ridership

- Calgary Transit’s ridership is closely connected with the economy and oil prices.
- Ridership declined 6.8 per cent (7.47 million trips) from 2016 to 2017.
 - Ridership loss primarily among downtown commuters
- Ridership improvements over Q1 2018.
 - Ridership is currently 3.5% higher compared to the same time period last year (still less than 2016).





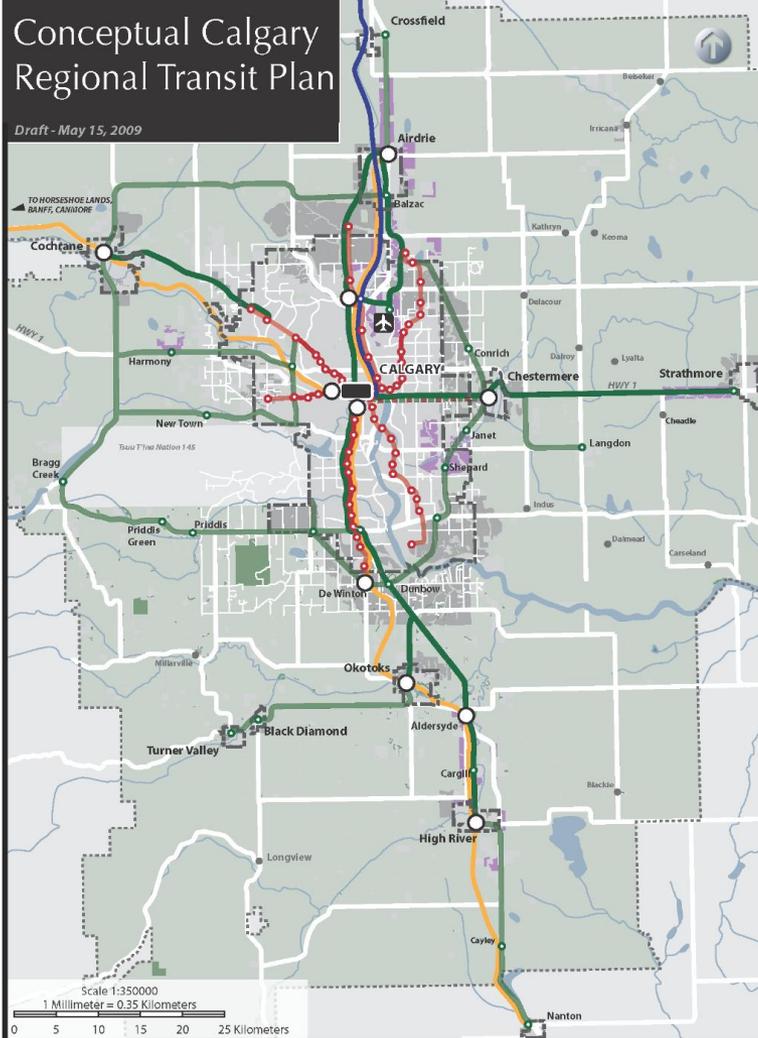
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Primary Transit Network

This map represents a conceptual line use structure and transportation networks for the city as a whole. No representation is made herein that a particular site use or City investment, as represented on this map, will be made. Site specific assessments, including environmental contamination, as well as the future financial capacities of the City of Calgary must be considered before any land use or City investment decisions are made.

Conceptual Calgary Regional Transit Plan

Draft - May 15, 2009



Existing LRT	LRT Station	Compact Urban Node	<i>*Stations would be located to optimize connections between modes and catchment areas of population/employment and still maintain travel times and reliability.</i>
Future LRT	BRT Station	Environmental Reserve/ Natural Open Space	
Commuter Rail Line	Future High-Speed Rail Station	Agriculture	
Initial BRT Services	Regional / Inter City Gateway Hub	Industrial Development	
Future BRT or Express Routes	Centre City	Calgary International Airport	
Future Alberta High-Speed Rail			
Future BRT or LRT			



This map represents a conceptual land use structure and transportation network for the city as a whole. No representation is made herein that a particular site use or City investment, as represented on this map, will be made. Site specific assessments, including environmental considerations, as well as the future financial capacities of the City of Calgary must be considered before any land use or City investment decisions are made.



Conceptual Calgary Regional Transit Plan



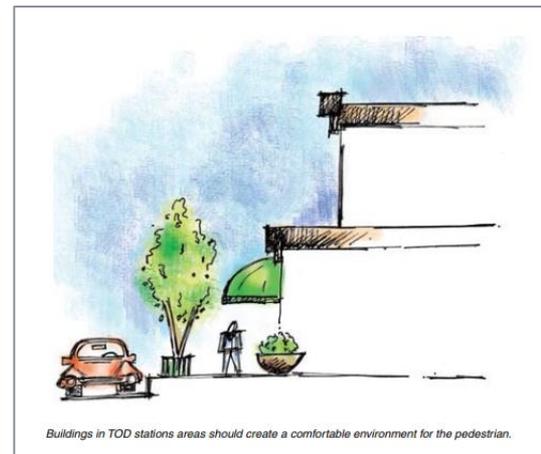
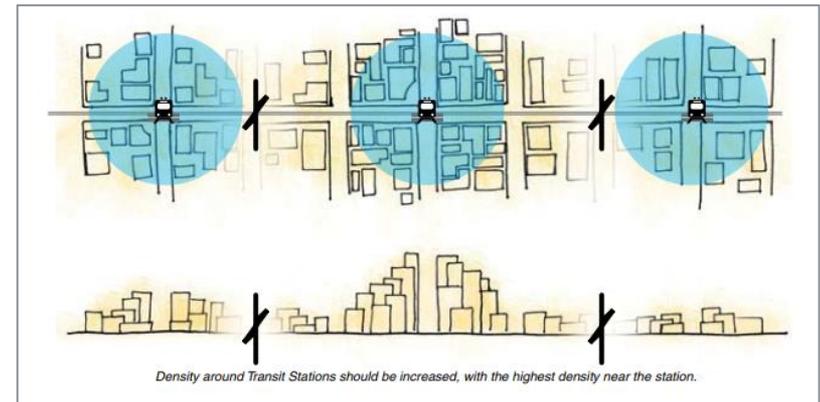
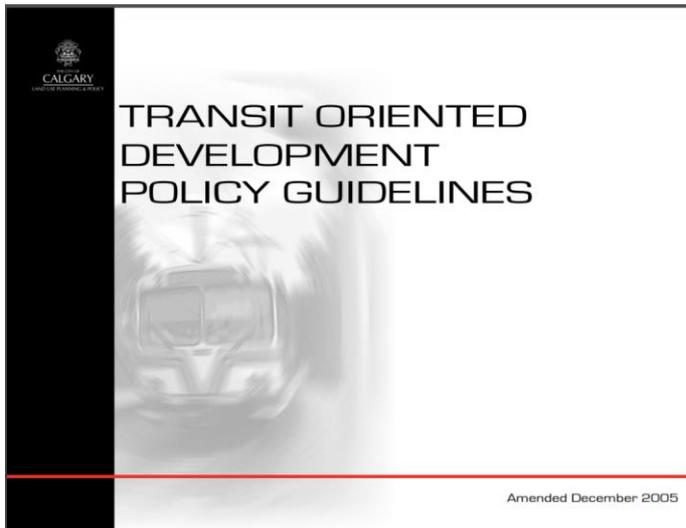
Transit-oriented development

Why support TOD?

- Return on investment
 - Increase land value (tax revenue)
 - Increase transit patronage
- Improve quality of life
 - Reduce traffic
 - Compact, vibrant communities improve social resilience
 - Mixed-use communities offer more opportunity for small business

Transit-oriented development

History of TOD planning in Calgary





Sunnyside station



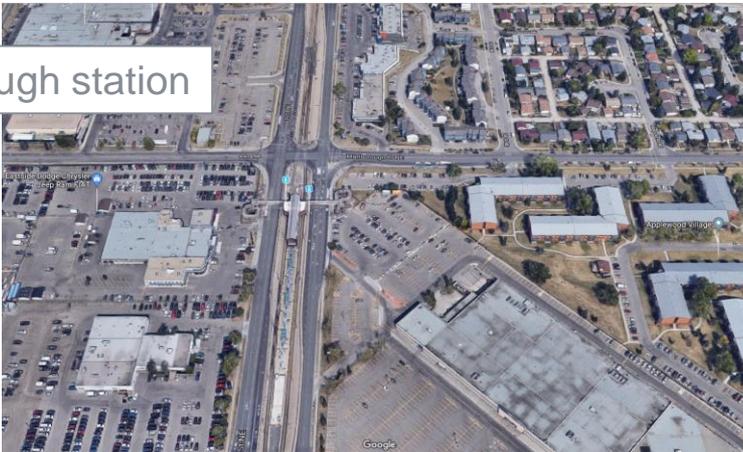
Bridgeland station



Anderson station



Marlborough station





Transit-oriented development

Identified barriers

- Location of stations and legacy of auto-commuter focus
- Unclear policies re: density, parking, ltd.-term development, heritage preservation
- Slow/inconsistent review process
- Lack of public investment and other incentives
- Market forces – eg. land value, land assembly



Transit-oriented development

Implementation strategy – action plan

- Create a station area inventory
- Develop clear policies
- Clarify the planning process
- Form a TOD planning team
- Develop financial tools
- Foster collaborative partnerships