



**Edmonton Metropolitan
Region Board**

Regional Action. Global Opportunity.

Edmonton Metropolitan Region Broadband Situation Analysis

Project Charter

May 2019

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Section 1. Charter Introduction

1.1 Document Change Control

This section will record the history of the document from first approval. Only approved changes to scope, budget, resources or schedule will result in changes to the Project Charter. Changes to the Project Charter will be documented by adding addenda to the original project charter.

Revision Number	Date of Issue	Author(s)	Brief Description of Change

1.2 Executive Summary

Broadband is an emerging issue for most municipalities in the Region and poses a significant threat to the economic competitiveness of the Edmonton Metropolitan Region and its municipalities. The Edmonton Metropolitan Region Board (EMRB) has identified the need to address the issues associated with gaps in regional broadband to increase regional prosperity, quality of life and economic competitiveness. A need for a regional broadband strategy was first identified during the development of the 2018-2023 EMRB Strategic Plan with a subsequent project being identified and a budget confirmed in the 2018-2022 Business Plan and 2018/2019 Budget.

Historically, the challenges and issues municipalities face regarding broadband have been assumed to be limited to rural municipalities; however, through a preliminary assessment by EMRB Administration, it has been determined both urban and rural municipalities are facing challenges regarding the provision of broadband and service levels. Given its importance as an enabling technology required by all types of business, residents and governments, it has been identified as a critically important issue which needs to be addressed across the Region. Reliable high-speed internet access is considered a necessity for any global economically competitive region.

The lack of universally available Internet access across the Region has been identified as a barrier to attracting new businesses and industries to the Edmonton Metropolitan Region. Further, municipalities across the Region have taken different approaches to addressing the gaps with no consistent or regional solution emerging.

To support a key policy area in the Edmonton Metropolitan Region Growth Plan – Economic Competitiveness & Employment, the Board has identified the need for a regional approach to addressing the gaps in access and service levels through the exploration of a regional broadband strategy.

Phase 1, the first step in developing a regional broadband strategy, is to complete the *Edmonton Metropolitan Region Broadband Situation Analysis*. This project will provide a regional perspective and understanding of the current broadband environment, identify gaps and opportunities, and provide recommendations to inform a future regional broadband strategy or action plan. Additionally, it will identify what role the EMRB may play in collaboration with member municipalities, identify potential external partnerships, as well as funding and advocacy strategies, where appropriate.

The primary goal of the *Edmonton Metropolitan Region Broadband Situation Analysis* is to gather the evidence and to build a compelling business case for how to address the gaps and opportunities. It is critical to enable the Region's economic competitiveness and quality of life through a clear strategy and corresponding level of investment.

1.3 Project Approval

This project charter formally authorizes the existence of the project, *Edmonton Metropolitan Region Broadband Situation Analysis*, and provides the project manager, appointed at the discretion of the Chief Executive Officer, with the authority to apply organizational resources to project activities described herein. If there is a change in the project scope, budget, resources or schedule, the project charter will be updated and submitted for re-approval.

Approving Body	Edmonton Metropolitan Region Board
Approval Date	June 13, 2019
Motion ID	B2019-25
Project Sponsor	Karen Wichuk, CEO
Project Manager	Taylor Varro

Section 2. Project Overview

2.1 Project Summary

On June 14, 2018, the EMRB approved the 2018-2023 EMRB Strategic Plan. *Strategic Priority 2: Responsible and Sustainable Growth* identifies regional broadband as a key enabling technology with the capability to contribute to the prosperity and quality of life in the Region. Further, the updated 2018-2022 EMRB Business Plan identifies the need to complete a scan and assessment regarding regional broadband to inform the development of a regional broadband strategy or action plan.

Broadband is intricately woven into all aspects of the EMRB work and supports the six policy areas of the Growth Plan. It is an integral component of business attraction, economic competitiveness and additionally impacts the provision of infrastructure, agriculture, transportation systems, and complete communities. Most recently, broadband has been linked to EMRB's top strategic priority, the *Shared Investment for Shared Benefit* initiative, which will create a framework for municipalities to collaborate on projects of regional interest.

The Internet of Things is a major global economic and social driver of the 21st Century. The global economy is transitioning from an industrial economy to a knowledge-based economy reliant on the internet – becoming a standard form of communication, setting expectations for instant access to and capacity for information and data, regardless of location.

In terms of internet speed, Canada ranks 17th worldwide. Alberta ranks 7th among Provinces and Edmonton ranks 21st among Canadian communities. Rural communities and smaller urbans are lagging behind even further; on average, download speeds are 25% slower in rural communities than in urbans. There is a regional need for increased broadband access and internet speeds to be a driver for global economic competitiveness, enabling the attraction and retention of businesses and skilled workers within the Region. (See Figure 1 – Regional Download Speeds)

As of 2016, the CRTC (Canadian Radio-television and Telecommunications Commission) with the Government of Canada now considers internet a basic telecommunications service for all Canadians. The Federal Government has set targets (which the majority of the Region's municipalities do not meet) of 50 Mbps (download) and 10 Mbps (upload) speed for 90% of residents and businesses by 2021 and identified \$750 million dollars in funding over 5 years through the Connect to Innovate Fund. In the 2019 Budget, the Government of Canada has earmarked an additional \$5 billion in several initiatives that will mainly focus on and support universal, high-speed internet in rural, remote and northern communities. While many of the communities in the Edmonton Metropolitan Region do not meet the targets set by the Federal Government, metropolitan regions, like ours, may be out of the scope of the Federal Government's initiatives and funding.

In 2017, the Province of Alberta approved to undertake work on broadband policy options and develop a Provincial Broadband Strategy. The proposed scope includes all of Alberta with a focus on rural and Indigenous communities. In January 2018, the Province released a survey to key stakeholders to better understand what challenges municipalities were facing with respect to broadband, including financial feasibility, timing and priorities. The original intent was to have

policy options released in the Fall of 2018, and implementation of a strategy to start in 2019; however, there has been no formal release to date.

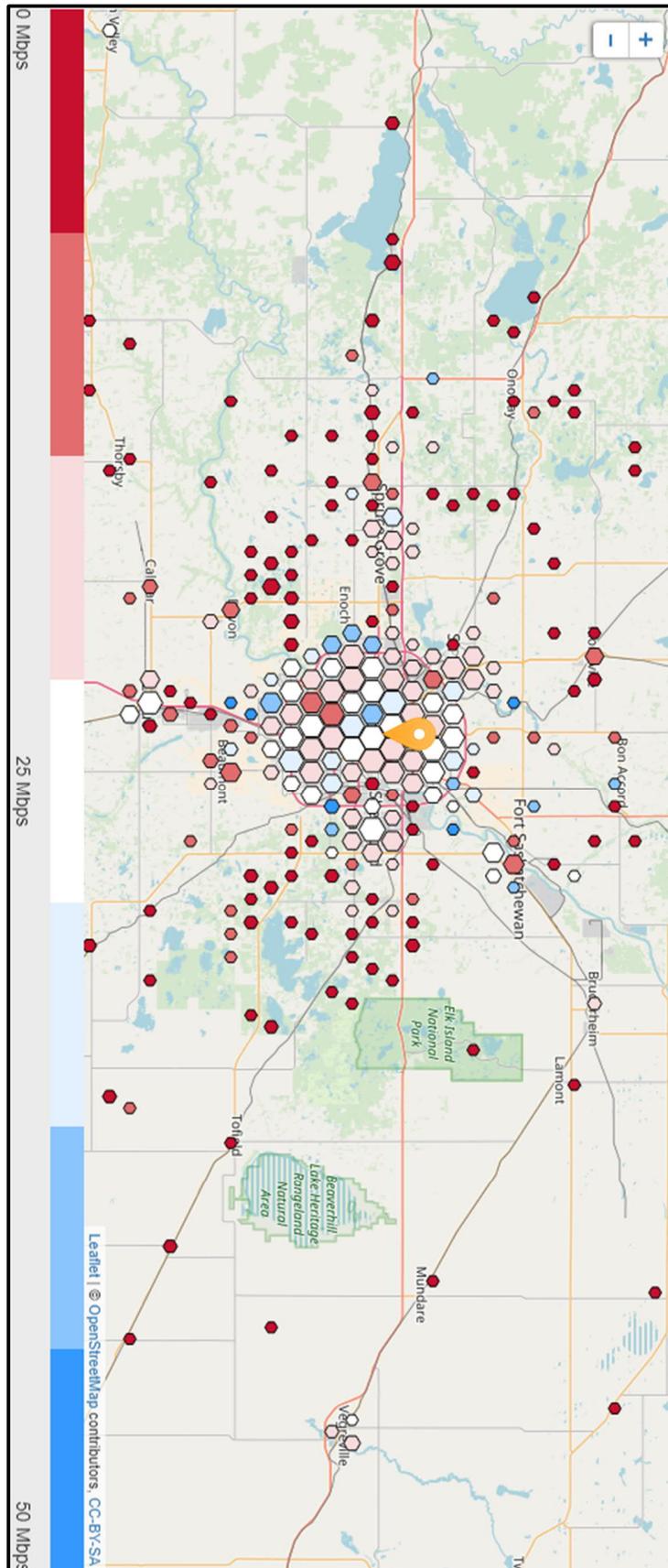
EMRB Administration met with member municipalities in the Fall of 2018 to get an initial understanding of the current situation for broadband provision and challenges at the local level. The results of these interviews provided a high-level view of the vast differences in broadband needs, service provision and challenges across the Region. A summary of the preliminary findings includes:

- Service throughout the Region is dominated by major Internet Service Providers (Telus, Shaw and Bell) creating a virtual monopoly;
- Most municipalities face a wide range of issues and challenges regarding broadband access and capacity;
- There are a diverse range of service delivery models currently in use and being studied locally;
- The need for broadband impacts several land use types locally including residential, commercial, industrial and even agricultural;
- Municipalities are often working independently to address broadband issues and gaps with very little intermunicipal collaboration and coordination;
- Broadband has varying degree of importance for municipalities and councils locally. The degree of interest varies from no importance, to council priority, completing studies and funding/partnering with private industry for service provision;
- To date, needs assessments, feasibility studies, progress reports and grant applications have been completed to different degrees locally; and
- There is a strong belief EMRB can play a vital role to solve regional broadband issues and fill the gap between local and provincial decisions.

While both the Federal and Provincial Government's initiatives have not been firmly established and may ultimately be focused in specific underserved areas, it is imperative the EMRB takes a leadership position in identifying what is needed in the region and work with other orders of government on creative solutions as they arise.

The development of an *Edmonton Metropolitan Region Broadband Situation Analysis*, is a critically important strategic initiative to inform all decision makers as to the opportunities and challenges across the Region, provide clarity and direction regarding next steps, including defining a potential role where the EMRB can add the most value to addressing the broadband needs for all municipalities across the Region.

Figure 1: Regional Download Speeds – Canadian Internet Registration Authority (CIRA) 2018



2.1.1 Project Objectives and Outcomes

No.	Objectives	Outcomes
1	<i>To understand the current state of broadband in the Region including non-member municipalities and other jurisdictions.</i>	<ul style="list-style-type: none"> • <i>Regional broadband asset inventory (public and private).</i> • <i>Service delivery model comparison and best practices.</i> • <i>Contextual and visual representation of current internet coverage and speed analysis.</i> • <i>Summary and status of municipal broadband initiatives.</i>
2	<i>To understand the impediments, challenges and opportunities facing the Region in enhancing global economic competitiveness that are caused by current broadband service levels.</i>	<ul style="list-style-type: none"> • <i>Identified regional broadband gaps and opportunities.</i>
3	<i>To understand the consequences of not addressing regional broadband.</i>	<ul style="list-style-type: none"> • <i>Status quo analysis / Opportunity cost / Quantify the economic impact.</i>
4	<i>To conceptually understand future need and how broadband services are connected to and will aid in achieving Growth Plan objectives and growth projections.</i>	<ul style="list-style-type: none"> • <i>Desired future regional state.</i>
5	<i>To identify strategic synergies; linkages to EMRB initiatives and key external partnerships EMRB may pursue to enhance regional broadband.</i>	<ul style="list-style-type: none"> • <i>Recommend potential partnership to support the future regional state.</i> • <i>Identify federal, provincial directives and programs, eligibility, timing and funding.</i>
6	<i>To define a clear path forward to address regional issues.</i>	<ul style="list-style-type: none"> • <i>Recommendations for future next steps to inform a regional action plan or strategy.</i> • <i>Identify dependencies, risks and risk mitigation strategies.</i>

2.1.2 Project Scope

The *Edmonton Metropolitan Region Broadband Situation Analysis* will provide a holistic view and perspective on the current state and future needs to enable a consistent level of broadband services across the Region. The project will be completed by February 2020.

Activities in Scope in Phase 1	Activities out of Scope in Phase 1
1. Current state analysis	1. Broadband action plan
2. Gap analysis	2. Advocacy strategy
3. Status quo analysis / Opportunity cost / Economic impact	3. Recommended policy framework
4. Desired future state	4. Regional Broadband Solutions

Activities in Scope in Phase 1	Activities out of Scope in Phase 1
5. Recommended Partnerships	
6. Recommendations next steps	

The above activities will enable the development of a Region-wide view of broadband and provide the basis for identifying a future regional state of broadband to support the economic competitiveness and quality of life in the Region. Recommendations for strategic synergies (with EMRB Members, external partners and higher-order governments) and next steps will inform a future regional broadband action plan or strategy.

2.2 Deliverables

The project deliverables are outlined in the table on the following page.

Generally, a Communication Plan and an Engagement Plan are mandatory deliverables for all EMRB projects. As Phase 1 of the broadband project is limited to a Situation Analysis, it is recommended that the development of specific communication and engagement strategies be deferred to future phases of this project, as approved by the EMRB.

Project Deliverable 1: Broadband Situation Analysis	
Stakeholder:	EMRB
Description:	The <i>Edmonton Metropolitan Region Broadband Situation Analysis</i> is the major deliverable of this project. The overall intent is to create a holistic regional view of the current state of broadband in the Region. The Situation Analysis will package the analysis and findings to best inform decision-makers, EMRB Members, on the next steps they may ultimately face to enable regional solutions.
Acceptance Criteria:	<p>Completion of the following components:</p> <ul style="list-style-type: none"> • Regional broadband asset inventory including the mapping and GIS data of publicly and privately-owned infrastructure; • Service delivery model comparison and best practice research including analysis on different service models and different roles public and private organizations may play; • Scan of municipal broadband initiatives currently in place or underway. • Regional broadband gaps informed by internet coverage and speed analysis to highlight areas of focus; • Status quo / Opportunity cost / Economic impact analysis to provide evidence of the need for action and to provide the business case to inform the next steps; • Desired future regional state connecting broadband to Growth Plan objectives, population and employment forecasts, regional infrastructure and land use policies; • Strategic synergies including linkages to internal EMRB initiatives, potential external partners, alignment with higher orders of government and the potential to leverage external resources or funds; and, • Recommended high-level next steps to inform a future regional broadband strategy or action plan to address the identified gaps and capitalize on identified opportunities.
Due Date:	December 2019
Project Deliverable 2: Lessons Learned Register	
Stakeholder:	EMRB
Description:	The Lessons Learned Register will capture lessons learned consistently across EMRB project work that helps project managers identify relevant lessons learned to inform future projects and initiatives. The Lessons Learned Register will be completed throughout the entire time line as project work is being completed; however, it is due upon completion of the project.
Acceptance Criteria:	The Register reflects regular updates and details successes, problems and solutions encountered throughout the project. The Register should be of sufficient detail to inform strategies to be used in subsequent projects.
Due Date:	March 2020

Project deliverables formally accepted as information and/or approved by the project sponsor will constitute project milestones. Acceptance criteria for major deliverables will include appropriate formatting consistent with the level of professionalism described in the statement of work and the EMRB’s style guidelines.

Phase 1: Edmonton Metropolitan Region Broadband Situation Analysis	2018		2019												2020		
	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Project Initiation																	
Edmonton Metropolitan Region Broadband Situation Analysis																	
Project Approval & Next Steps																	
Lessons Learned Register																	

2.3 Project Cost Estimate and Source of Funding

2.3.1 Project Cost Estimate

The budget for the Broadband Situation Analysis is \$40,000 - \$50,000. This budget is inclusive of all associated project costs including professional consulting fees, as well as costs for communications, meetings, travel and honoraria.

2.4 Dependencies

Dependency Description	Critical Date	Contact
<i>Provincial Broadband Strategy Update</i> is an external project that is related as it may provide an overall provincial framework or funding opportunities for municipalities	Unknown	<p>Claudette Dusing, Manager Provincial Broadband Strategy, Service Alberta</p> <p>Stephen Bull, Assistant Deputy Minister, Provincial Telecommunications & Registries of Government of Alberta</p>

Dependency Description	Critical Date	Contact
<i>CRTC Broadband Fund</i> is an external project that is related as it will provide funding to build or upgrade infrastructure for fixed and mobile wireless broadband internet service to underserved areas.	2019	CRTC
<i>EMRB Regional Broadband Action Plan</i> is Phase 2 of the EMRB broadband project and will be informed by the <i>Edmonton Metropolitan Region Broadband Situation Analysis</i> .	Unknown	Taylor Varro, Project Manager, EMRB
<i>EMRB Shared Investment for Shared Benefit Initiative</i> is a Strategic Initiative of the Board and aims to provide a framework for sharing investments to support regionally beneficial projects.	December 2020	Alex Bonokoski, Project Manager, EMRB
The role of <i>Edmonton Global</i> needs to be understood, including where priorities and investment opportunities exist in the Region.	Unknown	Malcolm Bruce, CEO, Edmonton Global

2.5 Project Risks, Assumptions, and Constraints

2.5.1 Risks

No.	Risk Description	Probability (H/M/L)	Impact (H/M/L)	Risk Management Plan
1. Municipal Capacity	Capacity of municipal staff particularly related to the collection of municipal data and plans.	M	M	CAOs to be consulted and informed throughout the project to understand expectations and assign municipal resources as required.
2. Political Shifts	Potential of new provincial and federal governments may result in a shift in broadband programs and funding (i.e. Provincial Broadband Strategy Update).	H	L	Remaining aware of the Provincial Broadband Strategy Update and communicating with Service Alberta. This risk will have a higher impact in future phases of the project.

2.5.2 Assumptions

The following table lists the items that cannot be proven or demonstrated when this project charter was prepared, but they are taken into account to stabilize the project approach or planning. Changes in these assumptions have the potential to impact the success of the project.

No.	Assumptions	Potential Area(s) of Impact
1	Municipalities have and will supply data and information upon request	2.2 Deliverables

2.5.3 Constraints

The following table lists the conditional factors within which the project must operate or fit.

No.	Category	Constraints
1	Budget	Predetermined budget for the project
2	Capacity	Internal organizational and external regional capacity

Section 3. Project Organization

3.1 Project Governance

The Edmonton Metropolitan Region Board is the project sponsor for Phase 1, *Edmonton Metropolitan Region Broadband Situation Analysis* and provides the authority and support for the project.

The Project Sponsor (CEO) will assign a Project Manager from EMRB Administrations through the Director of Regional Growth Planning, to oversee the planning, execution and completion of the *Edmonton Metropolitan Region Broadband Situation Analysis*. The Project Manager is responsible for project administration including project resource management, project schedule, budget management, and issues management throughout the project.

Participation by member municipalities may be required to support the development of the Situation Analysis. Therefore, regional CAOs and member municipalities may be informed at strategic points while developing the Situation Analysis. Consultant(s) will be contracted to assist in all phases of the project and prepare the final *Edmonton Metropolitan Region Broadband Situation Analysis*.

Additional identified key stakeholders include non-member municipalities within the Region, educational institutions (schools, libraries and post-secondary) and First Nations.



Figure 2: Project Governance

3.2 Roles and Responsibilities

Activity	Board	Project Sponsor	Director	Project Manager	CAOs	Member Municipalities
Project Initiation	A	C	R	R	C	I
Define Requirements	I	C	A	R	I	I
Execute Project Work	I	C	A	R	I	I
Engage Stakeholders	I	C	A	R	C	I
Validate Deliverables	I	C	A	R	I	I
Approve Major Deliverables	A	C	R	R	I	I
R = Responsible, A = Accountable, C = Consulted, I = Informed						

Section 4. Project References

More information concerning this project can be found in the following documents:

Document Title	Date	Status	Body	Location
2018-2022 Business Plan	April 11, 2019	Approved	EMRB	http://emrb.ca/Website/files/83/8399a3e5-e90c-4f5a-bb18-032c0e13498d.pdf

Document Title	Date	Status	Body	Location
2018-2023 Strategic Plan	June 14, 2018	Approved	EMRB	http://emrb.ca/Website/files/83/83fa492b-d3bd-43f4-b5f3-d417b025c8c0.pdf
Edmonton Metropolitan Region Growth Plan	October 26, 2017	Approved	Government of Alberta	http://emrb.ca/Website/media/PDF/Publications/EMRGP-Interactive.pdf
Edmonton Metropolitan Region Board Regulation	October 26, 2017	Approved	Government of Alberta	http://www.qp.alberta.ca/documents/orders/Orders in Council/2017/1017/2017_355.pdf

Section 5. Glossary and Acronyms

Term	Definition
Growth Plan	The Edmonton Metropolitan Region Growth Plan
Region	Edmonton Metropolitan Region as defined in the Edmonton Metropolitan Region Board Regulation (including non-member municipalities and other jurisdictions within the Edmonton Metropolitan Region boundary)
Acronym	Name in Full
CAO	Chief Administrative Officer
CEO	Chief Executive Officer
EMR	Edmonton Metropolitan Region
EMRB	Edmonton Metropolitan Region Board