



**RECYCLING  
CENTRE**



# 2019 METROPOLITAN REGION SERVICING PLAN REPORT

 **Edmonton Metropolitan  
Region Board**  
Regional Action. Global Opportunity.

## Part 4 Preparation of Edmonton Metropolitan Region Servicing Plan

### Servicing Plan

**14(1)** The Board shall, within 2 years from the coming into force of this Regulation, prepare a Metropolitan Region Servicing Plan for the Edmonton Metropolitan Region and file a copy with the Minister.

**(2)** The Board shall review the Servicing Plan every 5 years.

### Objectives of Servicing Plan

**15** The objectives of the Servicing Plan are as follows:

- (a) to identify the services required to support the goals of, and to implement, the Growth Plan;
- (b) to support the optimization of shared services to enhance use of ratepayer dollars;
- (c) to facilitate orderly, economical and environmentally responsible growth in the Edmonton Metropolitan Region;
- (d) to coordinate planning and decisions regarding services among member municipalities to ensure the optimization of ratepayer dollars.

### Contents of Servicing Plan

**16** The Servicing Plan must

- (a) list the servicing required to support the development outlined in the Growth Plan, which may include
  - (i) transportation including, regional transit,
  - (ii) water, waste water and storm water,
  - (iii) solid waste,
  - (iv) emergency services, and
  - (v) any other services, identified by the board which benefit residents in more than one of the municipalities that are parties to the Servicing Plan,

- (b) for services to be provided on an intermunicipal basis, outline how each service will be
  - (i) intermunicipally delivered, including which municipality will lead delivery of the service, and
  - (ii) intermunicipally funded,
- (c) set the timeframe for implementing services to be provided on an intermunicipal basis,
- (d) contain other matters necessary to support the Growth Plan, and
- (e) contain any other matter the Minister considers appropriate



# Contents

- 01** A Message from the Edmonton Metropolitan Region Board
- 02** A Message from the Task Force Chair

## 03 EXECUTIVE SUMMARY

## 11 BACKGROUND

## 25 IMPLEMENTATION PLAN

- 04** Introduction
- 05** The Growth Plan – Guiding Transformative Change in the Region
- 06** From Planning to Regional Action
- 07** The MRSP – Working Together
- 08** Our Approach – MRSP Regional Collaboratives
- 09** Implementation Plan
- 10** Monitoring and Reporting

- 12** The Edmonton Metropolitan Region
- 13** Context for the Metropolitan Region Servicing Plan
- 14** Why Act Now?
- 15** Regionally Significant Service Areas for the Inaugural MRSP
- 17** Regionally Significant Service Area Rationale
- 19** Our Options for Proceeding
- 20** Our Approach – MRSP Regional Collaboratives
- 21** MRSP Guiding Principles
- 22** EMRB Objectives for the Inaugural MRSP
- 23** Regionally Significant Servicing

- 27** Governance
- 29** Regional Collaboratives
- 30** Action Plans for Regional Collaboratives
- 33** Monitoring and Reporting
- 33** EMRGIS
- 33** Updates to the MRSP

# 35

## APPENDICES

### **37 APPENDIX A: Service Area Profiles**

- 38 A1 Solid Waste
- 42 A2 Stormwater
- 46 A3 Fire/EMS
- 50 A4 Emergency Management

### **53 APPENDIX B: Additional Service Areas**

- 54 B1 Water
- 57 B2 Wastewater
- 60 B3 Transportation - Roads
- 63 B4 Transportation - Transit

### **67 APPENDIX C: MRSP Alignment to the Growth Plan**

- 68 Edmonton Metropolitan Region Growth Plan (EMRGP)
- 69 Alignment of the Metropolitan Region Servicing Plan to the Growth Plan

### **77 APPENDIX D: Summary of Current State Governance / Planning / Service Delivery / Funding Model by Service Area**

### **79 APPENDIX E: Acknowledgements**

### **81 APPENDIX F: Regional Maps**

- 82 Map 1 Regional Roads
- 83 Map 2 Air and Rail Facilities
- 84 Map 3 Regional Transit
- 85 Map 4 Transit Park and Ride (2010)
- 86 Map 5 Major Water Bodies
- 87 Map 6 Major Water Bodies and Watersheds
- 88 Map 7 Watersheds and Planning Bodies
- 89 Map 8 Solid Waste Facilities
- 90 Map 9 Planning Entities for Solid Waste
- 91 Map 10 Facilities and Planning Entities for Solid Waste
- 92 Map 11 Regional Fire Stations

### **93 APPENDIX G: Environmental Scan**

# 95

## GLOSSARY OF TERMS, ABBREVIATIONS, AND ACRONYMS



...our inaugural MRSP provides the opportunity to coordinate and optimize our municipal services, reduce duplication and inefficiency...

## A MESSAGE FROM THE EDMONTON METROPOLITAN REGION BOARD

The Chair and Members of the Edmonton Metropolitan Region Board (EMRB) are pleased to present the inaugural Metropolitan Region Servicing Plan (MRSP).

The MRSP represents the ongoing work of the Board toward fulfilment of our mandate as a growth management board under the Edmonton Metropolitan Region Board Regulation; but moreover, is representative of our commitment to working together with a focus on planning regionally to achieve responsible growth.

The MRSP is an essential plan to support the implementation of the Edmonton Metropolitan Region Growth Plan and supports a key component of the Region’s 50 Year Vision in that “*the Region is committed to growing collaboratively through the efficient use of infrastructure, building compact communities, and fostering economic opportunities and healthy lifestyles*”.

To achieve this vision, we understand the many challenges our future growth will bring. We are the second youngest, second fastest growing Region in Canada, and represent one-third of the province’s population and economic activity. We are planning for an additional one million residents and nearly half a million new jobs in the Region by 2044.

As a Region, we have had nearly a century to plan for the municipal service needs of our first million regional citizens, and we will have just 25 years to plan and build for the next million. The municipal services and infrastructure needed to keep pace with our future growth are significant. There are complex challenges associated with the doubling of our regional population; however, the core principle by which we plan for growth is to work together as one interconnected Region.

Working together in the development of our inaugural MRSP provides the opportunity to coordinate and optimize our municipal services, reduce duplication and inefficiency, leverage the tremendous economies of scale and strengths inherent in our Region, learn from each other and adopt best practices to maximize the value and benefits residents receive from municipal services thereby contributing to a high quality of life and an attractive, competitive Region.



**EMRB Chair**  
Dr. Jodi L. Abbott



**Vice Chair**  
Mayor William Choy  
Town of Stony Plain



**Mayor Tanni Doblanko**  
Leduc County



**Mayor Rod Frank**  
Strathcona County



**Mayor Cathy Heron**  
City of St. Albert



**Mayor Alanna Hnatiw**  
Sturgeon County



**Mayor Stuart Houston**  
City of Spruce Grove



**Mayor Don Iveson**  
City of Edmonton



**Mayor Gale Katchur**  
City of Fort  
Saskatchewan



**Mayor Ray Ralph**  
Town of Devon



**Mayor Rod Shaigec**  
Parkland County



**Mayor John Stewart**  
City of Beaumont



**Mayor Barry Turner**  
Town of Morinville



**Mayor Bob Young**  
City of Leduc



## A MESSAGE FROM THE TASK FORCE CHAIR

The inaugural MRSP Report is the product of two years of future-oriented regional collaboration. I am proud to have served as Chair of the MRSP Task Force, and I would like to extend my congratulations and gratitude to all my Task Force colleagues from across the Region, the Advisory Group, Technical Working Groups, and subject matter experts representing a number of service areas, and the dedicated EMRB Administration; all of whom have committed their time, expertise, and perspectives to creating a plan for a more efficient and collaborative regional future.

The MRSP is a core deliverable of the Board under the mandate established by the Government of Alberta. It also represents our commitment to thinking and acting with a regional mindset, and to working smarter to reduce duplication and improve value to citizens of the Region.

The MRSP Report provides a clear path forward to a more efficient and cost-effective regional future and provides direction for the next phase of regional collaboration in priority service areas.

We know there are opportunities to work more efficiently today in services like stormwater management, waste management, Fire/EMS, and emergency planning. As individual municipalities, we can no longer afford to go it alone. We're planning for an anticipated one million additional regional residents and nearly half a million new jobs in our regional economy by 2044. With this "made in the region" approach to growth planning, we know there is so much more we can do together to guarantee the Region has the municipal services and infrastructure needed to be competitive for business and investment, and to attract and retain talented people and families for generations to come.

I am optimistic for the future of the Region and the solutions-oriented innovation we can unlock as one Region. I look forward to advancing the Metropolitan Region Servicing Plan with the same level of regional trust and commitment that defines our work to create a region for every ambition.



**Mayor Ray Ralph**  
Chair of the Metropolitan Region  
Servicing Plan Task Force

...provides a clear path forward to a more efficient and cost-effective regional future...



The success of the Region will be defined by the quality of life we can provide to our residents. By working collaboratively as one Region we can leverage expertise and economies of scale to ensure we can provide exceptional services at the best value for the citizens of the Region.





# EXECUTIVE SUMMARY



# INTRODUCTION

The Edmonton Metropolitan Region Board (EMRB) is a diverse group of four rural and nine urban municipalities with one common goal — to make the best decisions in the interest of the Region by creating the conditions for all municipalities to thrive and prosper for current and future generations.

The EMRB mandate is to provide collaborative regional leadership in the development and implementation of the Edmonton Metropolitan Region Growth Plan (Growth Plan) and a Metropolitan Region Servicing Plan (MRSP) to meet the future population and employment needs of the Region.



---

## THE GROWTH PLAN – GUIDING TRANSFORMATIVE CHANGE IN THE REGION

On October 26, 2017, the Government of Alberta approved the Edmonton Metropolitan Region Growth Plan – *Reimagine, Plan, Build*. The Growth Plan establishes the direction for planning as one interconnected Region committed to growing more responsibly. The Growth Plan provides an integrated policy framework and establishes specific outcomes that represent a commitment to responsible growth.

The Growth Plan calls for a reduction in the urban development footprint through higher densities, increased transportation choices, protection of the environment, mitigation of impacts of climate change, wisely managing prime agricultural resources, coordinated regional land use and infrastructure decisions, to create the conditions for a diversified, globally economically competitive region and to create complete communities.

The outcomes of the Growth Plan acknowledge and reinforce the interconnectivity of the Region and the importance of leading with a regional mindset in planning for growth. The MRSP is an essential plan to support the implementation of the Growth Plan and is focused on regional opportunities to coordinate, harmonize and streamline municipal services, in alignment with the outcomes of the Growth Plan.



---

## FROM PLANNING TO REGIONAL ACTION

This inaugural MRSP Report provides a forward strategy and a comprehensive overview of the significant progress to date in developing the first MRSP. This report outlines a proposed strategic and operational direction, and the enabling structures necessary to achieve enhanced municipal collaboration and service coordination in regionally significant municipal service areas. Our inaugural MRSP is based on four Regional Collaboratives to advance four regionally significant service areas.

The MRSP will leverage the unique strengths and experiences of municipalities to realize efficiencies in planning for regionally significant services, identifying and prioritizing regional infrastructure investments and identifying opportunities to coordinate delivery of services. Through continued regional collaboration, the MRSP will help municipalities make evidence-based decisions that support efficient and cost-effective investments to reduce duplication and redundancy, optimize services between municipalities, and ensure citizens have the full range of services they require.

As capacity and resourcing is a major consideration of both planning and implementation, the EMRB will provide ongoing oversight to ensure the Regional Collaborative action plans and related projects are effectively and efficiently prioritized, approved, and managed relative to the capacity of member municipalities to participate.

The MRSP recognizes that as we grow – and grow closer together – the costs associated with providing infrastructure and efficient services for another one million regional residents will be greater than one individual municipality can manage alone.

The work of the EMRB and the introduction of the MRSP demonstrate the spirit of trust, collaboration, and problem-solving that defines our Region. The EMRB continues to plan without boundaries to create the conditions for a resilient and sustainable and prosperous Region, based on providing efficient municipal supports and services necessary for healthy individuals and a healthy environment, a thriving business and industrial community, and livable municipalities.

**...the costs associated with providing infrastructure and efficient services for another one million regional residents will be greater than one individual municipality can manage alone.**

...realize efficiencies in planning for regionally significant services, identifying and prioritizing regional infrastructure investments and identifying opportunities to coordinate delivery of services.

---

## THE MRSP – WORKING TOGETHER

The development of the MRSP was led by a seven-member MRSP Task Force of Mayors and Councillors from across the Region. Representation on the MRSP Task Force is considerate of the distinct contexts, capacities, and experiences of member municipalities.

The work of the MRSP Task Force was further supported by an MRSP Advisory Group comprised of senior municipal administration, and by four MRSP Technical Working Groups consisting of subject matter experts from the four service areas.

The first project deliverable was the development of a *MRSP Environmental Scan* of seven service areas including *transportation (roads), regional transit, water, wastewater, stormwater, solid waste, and emergency services*. The *MRSP Environmental Scan* provides a concise, region-wide understanding of the current state of these municipal service areas at a point in time to inform the focus and future work of the MRSP.

The *MRSP Environmental Scan* identified three service areas – *stormwater, solid waste, and emergency services* as having the greatest potential for achieving greater efficiency and optimization of resources through a collaborative regional approach. Through subsequent collaboration and discussion, emergency services was further divided into two service areas; fire/EMS and emergency management based on unique stakeholders and legislation.

For the remaining four service areas, *water, wastewater, transportation – roads and transit*, the Task Force recognized current mechanisms, existing entities and regional partnerships already exist to effectively plan for future growth, and therefore do not require a regional level servicing plan at this time. In the event there is a regionally significant change to any of these service areas, the Board reserves the right to consider the implications with respect to the MRSP.

In particular, the Task Force acknowledged work is underway to establish a Regional Transit Services Commission which will provide leadership for the planning of regional transit services, and therefore will not be addressed as part of the inaugural MRSP.

In addition, the update to the Integrated Regional Transportation Master Plan (IRTMP) is currently underway within the EMRB and will ensure the Region's transportation infrastructure to include roads and transit service needs are reviewed and aligned in support of the continued implementation of the Growth Plan.



---

## OUR APPROACH – MRSP REGIONAL COLLABORATIVES

Acknowledging the findings of the *MRSP Environmental Scan* and through collaborative engagement with member municipalities, the MRSP Task Force unanimously agreed to recommend focusing on advancing work in the four regionally significant service areas.

The MRSP Task Force further acknowledged that identifying the four service areas for consideration and inclusion in the MRSP was simply a first step in the substantial work to be undertaken.

The MRSP Task Force explored a number of enabling structures to support the development of regional approaches for the four service areas. The goal of such a structure would be to leverage regional efforts and expertise, provide a supportive forum to foster research, share best practices, to build a common base of data and terminology necessary for evidence-based decisions and actions. The Task Force endorsed establishing Regional Collaboratives for each of the four service areas as an effective approach to advance the MRSP to include all 13 member municipalities and identified stakeholders. The Regional Collaboratives will focus on a specific mandate, scope and set of stakeholders.

Each Regional Collaborative will have varying goals and objectives including specific plans of action to be approved by the EMRB. The expected outcomes, in time, include regional level planning and/or service delivery, prioritization of regional investments, as well as engagement and ongoing collaboration with key stakeholders towards the implementation of the Metropolitan Region Servicing Plan.

...establish Regional Collaboratives for each of the four service areas; solid waste, stormwater, fire/EMS and emergency management.



## IMPLEMENTATION PLAN

With final accountability and approvals required by the Board, and to ensure alignment to the Growth Plan, it is recommended the Regional Collaboratives report to an MRSP Standing Committee; comprised of elected officials from member municipalities. The MRSP Standing Committee will provide ongoing guidance and direction to the four Regional Collaboratives (i.e., solid waste, stormwater, fire/EMS, and emergency management) and monitor development, opportunities and challenges for all services areas (i.e., roads, transit, water, and wastewater) to ensure alignment with the Growth Plan.

Given the investment in time and resources and the learnings from the process of building the inaugural MRSP Report, the Task Force is committed to advancing the work of all four Regional Collaboratives in 2020, in a staged manner. The MRSP Task Force believes it is essential to maintain momentum behind this work and is recommending the Board proceed with implementing the MRSP Standing Committee once the Plan is approved by the Board and submitted to the Province.



**SOLID WASTE**



**STORMWATER  
MANAGEMENT**



**FIRE AND EMS**



**EMERGENCY  
MANAGEMENT**

## MONITORING AND REPORTING

The development of the inaugural MRSP Report serves to confirm the MRSP strategic objectives and direction, the planning framework, and the enabling structures necessary to develop an implementable and operational shared municipal services model; however, the MRSP Report makes no attempt to detail the specific municipal coordinative service arrangements nor the actual execution of the shared services model – such is the critical, complex and multifaceted work to be undertaken by the Regional Collaboratives.

Therefore, monitoring, evaluating, and reporting on MRSP progress, including the work of the Regional Collaboratives action plans and/or projects, is essential to ensure continued and ongoing incremental progress towards an implementable MRSP while ensuring continued support and alignment to the Growth Plan.

Key Performance Indicators (KPIs) will be developed by each respective Regional Collaborative based on approved action plans and projects. Critical to the measurement of results are the adoption and incorporation of the MRSP Guiding Principles into our actions and decisions as a Region. The action plans and/or projects of the Regional Collaboratives will propose measurable timelines and identify significant milestones to ensure continued progress towards development of an implementable plan

for each service area.

Once the priority service area has been fully implemented, the EMRB is committed to “evergreening” the MRSP through a review every two to three years and to undertake an update every five years. A comprehensive review of the MRSP will be completed in association with any major updates to the Growth Plan.

...the inaugural MRSP Report serves to confirm the MRSP strategic objectives and direction, the planning framework, and the enabling structures necessary to develop an implementable and operational shared municipal services model.



FIGURE 1: MRSP Evolution



# BACKGROUND





## THE EDMONTON METROPOLITAN REGION

The Edmonton Metropolitan Region is 9,879 km<sup>2</sup> of land in the heart of Alberta. As of 2016, the Region is home to approximately 1.3 million people and approximately 725,000 jobs, representing 30% of Alberta's total population and economic activity. The Region is expected to reach approximately 2.2 million people and approximately 1.2 million jobs in the next 25 years.

To date, municipalities have largely planned, built and delivered the municipal services and infrastructure needed for their residents independently, but our growing pains will be shared, and our success as one metropolitan region will depend on a collaborative approach to planning for the future growth of the Region.

Our regional challenge is therefore two-fold: we must chart a path to sustainability while maintaining existing assets in an environment where shared regional use is increasing, and we must develop an effective model to plan as one interconnected Region, invest and build for our collective future needs to accommodate future growth.

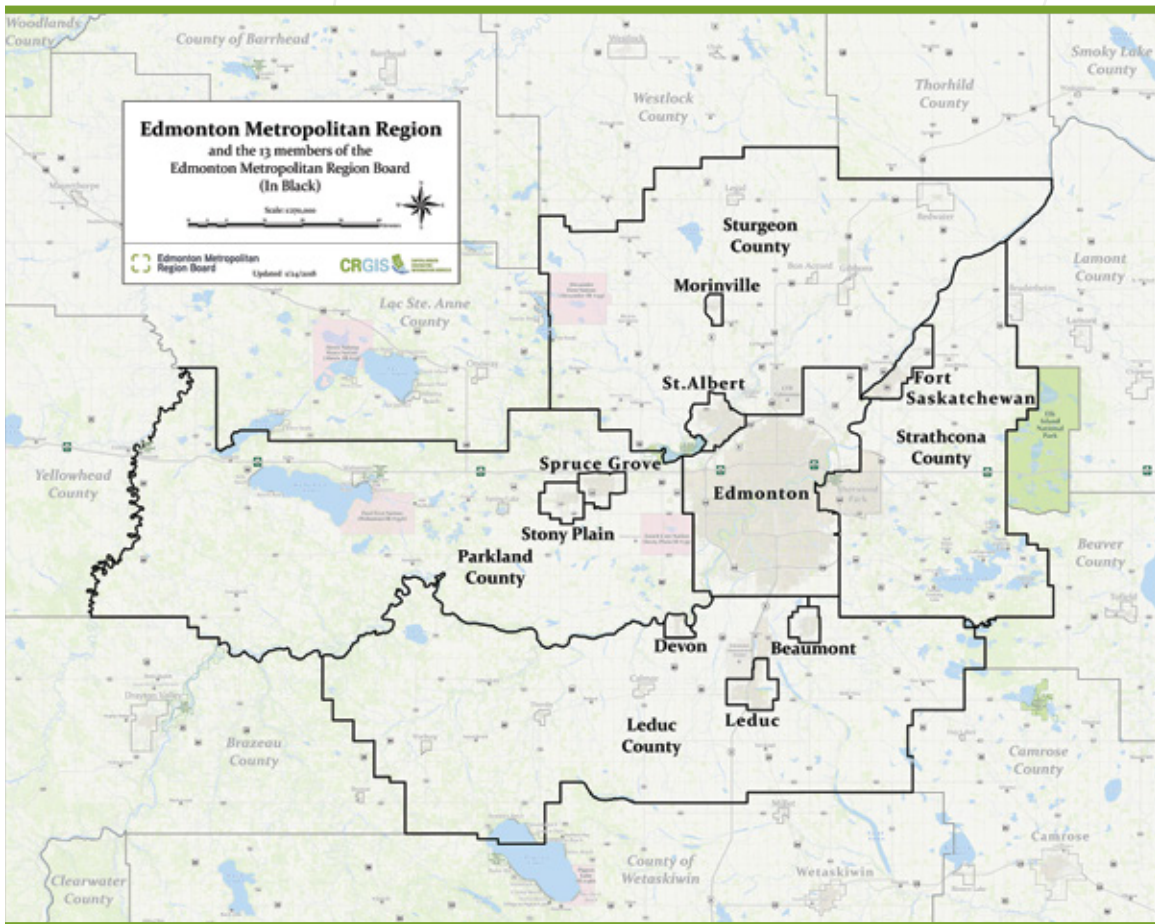


FIGURE 2: Edmonton Metropolitan Region Map



---

## CONTEXT FOR THE METROPOLITAN REGION SERVICING PLAN

The development of the inaugural MRSP is our commitment to delivering on our mandate as a growth management board and to ensure the future sustainability, prosperity and livability of the Region.

The MRSP will provide, where appropriate, for regional planning to support the delivery of efficient, cost-effective services and prioritized infrastructure vital to the needs of the current and future residents of the Region and will be a critical plan to support the implementation of the Edmonton Metropolitan Region Growth Plan.

MRSP will leverage the unique strengths and experiences of municipalities to realize efficiencies in planning for regionally significant services, identifying and prioritizing regional infrastructure investments and identifying opportunities to coordinate delivery of services. Through continued regional collaboration, the MRSP will help municipalities make evidence-based decisions that support efficient and cost-effective investments to reduce duplication and redundancy, optimize services between municipalities, and ensure citizens have the full range of services they require.

...regional planning to support the delivery of efficient, cost-effective services and prioritized infrastructure vital to the needs of the current and future residents of the Region...

---

## WHY ACT NOW?

The addition of an MRSP as part of the mandate of the EMRB is an acknowledgement of the need and opportunity to collaborate among member municipalities on the planning and/or service delivery of regionally significant services and to create a more efficient and sustainable future for the Region.

As the Region grows, municipalities and other service providers will be challenged to maintain existing infrastructure and service levels

without considering the opportunity to plan at a regional level and to explore opportunities to better coordinate service planning and/or delivery in the future to the benefit of all regional citizens.

Municipal services form the backbone of vibrant, safe communities and a competitive regional economy. Some of these services are omnipresent in your day to day; they are the recreation centres where you stay active and connected to your neighbours, the streetlights that guide you home, the bus that gets you to work, or the clean water that comes from your taps.

While such municipal services are vital, some are less visible than others such as stormwater management to prevent flooding, solid waste management to decrease greenhouse gas emissions and reduce waste, emergency management to enable recovery from major incidents, or fire/EMS services to save lives and property. They are vital services that keep our communities safe and healthy.

### It is recognized that...

- together we are stronger, more efficient and effective ensuring the highest quality of life and prosperity for citizens of the Region.
- citizens of the Region are already acting regionally, and as the communities within the Region grow - and grow closer together - the lines separating them continue to blur.
- our regional growth challenges - like traffic congestion, accumulation of waste, water demand or major emergencies and disasters - won't respect municipal boundaries.
- the services and infrastructure in municipalities today, will not be able to support an additional million regional citizens without a collective approach.

Above all, the inaugural MRSP recognizes that our thinking and decisions must embrace a regional mindset; MRSP is focused on those regionally significant services to ensure responsible growth as one interconnected region and will continue to provide value to citizens of the Region for current and future generations.

...opportunity to collaborate among member municipalities on the planning and/or service delivery of regionally significant services and to create a more efficient and sustainable future for the Region.

---

## REGIONALLY SIGNIFICANT SERVICE AREAS FOR THE INAUGURAL MRSP

In 2018, the EMRB established an MRSP Task Force to lead the development of the MRSP. An MRSP Environmental Scan was completed in 2018. That Environmental Scan considered the following service areas important to the implementation of the Growth Plan:

- Transportation - Roads
- Transportation - Transit
- Water
- Wastewater
- Stormwater
- Solid Waste
- Emergency Services (Fire)

The Environmental Scan Final Report and the Environmental Scan Summary, approved by the Board in February 2019, provided an understanding and context for each service area for EMRB member municipalities. This baseline assessment considered the following for the above service areas:

- existing agreements and collaborative service delivery structures;
- current infrastructure and service capacity;
- service levels; and
- service costs, where known.

A key challenge in the baseline assessment was the variation in information availability and interpretation of data for the service areas from member municipalities. This challenge represents a significant opportunity for the Region to work together to achieve a consistent baseline of data and information to inform future planning and opportunities for efficient service delivery and has been identified in the next steps for regional collaboration as the MRSP advances.

Subsequent to the *MRSP Environmental Scan*, the Task Force prioritized three service areas for further collaboration and consideration within an inaugural MRSP. Three service areas were deemed to have the greatest near-term potential for regional coordination of planning





and service delivery and greatest opportunity to support the implementation of the Growth Plan. These included:

- Stormwater;
- Solid Waste; and
- Emergency Services (Fire).

While the four service areas of *water, wastewater, roads, and transit* are critical to the Region, the MRSP Task Force determined the existing services, planning structures, and service delivery mechanisms as provided through various entities (e.g., Commissions, Authorities, Groups, Alliances, and municipalities) do not require a metropolitan regional-level servicing plan at this point in time. (See Appendix D)

Through further advice from the Advisory Group and technical advisors, the Task Force subsequently recommended the Emergency Services service area be split into two distinct service areas based on unique stakeholders, service needs, and legislation:

- Fire/EMS
- Emergency Management



---

## REGIONALLY SIGNIFICANT SERVICE AREA RATIONALE

Within the four regionally significant service areas in the inaugural MRSP, the Task Force identified specific areas of concern supporting a regional imperative for collaborative action for metropolitan region servicing. While growth pressures from within will challenge municipal servicing, external pressures will also have an impact on the future of the Region which will require that we plan without boundaries for a responsible and sustainable regional future.

Some of the growth pressures identified as part of this work include:



### SOLID WASTE MANAGEMENT:

- landfilling of organic material generates greenhouse gases which accelerate climate change;
- solid waste is currently managed at a local level, and costs and efforts are duplicated across geographies to achieve similar outcomes
- trends towards densification in urban centres will require updates and improvements to solid waste service delivery for multi-family buildings and industrial, commercial and institutional (ICI) waste generators;
- major solid waste infrastructure development is planned by member municipalities for the near future, making this an ideal time to forecast and address regional solid waste processing needs and consider opportunities for collaboration;
- increased uptake of circular economy models globally is resulting in changing social and environmental attitudes and changed expectations towards solid waste management from local stakeholders;
- changes to overseas recycling markets have left Canada with a very limited market for its current stream of recyclable materials, resulting in opportunities for an expanded recycling industry in the Region; and
- more effective waste management, including waste reduction and diversion, can reduce the energy and raw material required to manufacture goods.



### STORMWATER MANAGEMENT:

- impacts of climate destabilization and increasing unpredictability of weather;
- effects of densification and urban growth increasing pressure on stormwater management infrastructure;
- impacts to community safety and public and private property; and
- impacts of stormwater drainage on natural water systems and the environment.



### **FIRE/EMS:**

- increasing call volumes relative to population growth and density;
- increasing resource challenges to accommodate population growth;
- provision of services across a larger service area;
- citizen expectation for response and services; and
- costs of maintenance, new services, and infrastructure.



### **EMERGENCY MANAGEMENT:**

- increased occurrence of weather incidents and an evolving risk profile;
- increased demand for coordination and communication across a larger service area and relative to a larger regional population;
- public costs and impacts of disasters and major incidents;
- costs of not being resilient; and
- costs of recovery and reconstruction.



## OUR OPTIONS FOR PROCEEDING

A major consideration for the inaugural MRSP is how to continue to advance and work towards an integrated MRSP. The Task Force examined three possible scenarios for the future of the MRSP.

Those scenarios include:

- continuing “as-is” based current service levels and models;
- proceeding with four priority service area Regional Collaboratives; and
- establishing a new legal entity to plan and provide municipal services.

Many current mechanisms and entities for service planning and delivery are working well. In fact, this is the case for *water, wastewater, roads, and transit*, each having existing strategies that are reasonable and appropriate at this time.

For transit, EMRB member municipalities are pursuing a new legal entity, a Regional Transit Services Commission, to position this service area going forward.

For other service areas, emerging and future challenges and opportunities indicate new models and an enhanced regional approach should be considered.

...emerging and future challenges and opportunities indicate new models and an enhanced regional approach should be considered.



FIGURE 3: Go-Forward Options

---

## OUR APPROACH – MRSP REGIONAL COLLABORATIVES

The MRSP is built around eight distinct service areas, each presenting challenges and opportunities for collaboration now and into the future. Based on considerable collaborative study and engagement across the Advisory Group, Technical Working Groups, and the MRSP Task Force, the inaugural MRSP will focus initially on four regionally significant service areas: *solid waste, stormwater, fire/EMS, and emergency management*.

The remaining service areas (i.e., *water, wastewater, roads and transit*) will continue to be planned for and delivered based on current mechanisms and entities. All eight services areas will continue to be reviewed against the Growth Plan, future MRSP updates, and future Growth Plan updates.

The MRSP Task Force further acknowledged that proceeding with the four service areas is simply a first step in the substantial work to be undertaken. The MRSP Task Force determined that an enabling structure was also required to concentrate and focus regional efforts and expertise, provide a supportive forum to foster research and to build and share regionally relevant intelligence, and to provide the data necessary for evidence-based decisions and actions in relation to municipal services.

The Task Force endorsed establishing Regional Collaboratives for each of the four service areas as an effective approach to advance the MRSP to include all 13 member municipalities and identified stakeholders. The Collaboratives will focus on a specific mandate, scope and set of stakeholders.

Each Regional Collaborative will have varying goals and objectives including specific plans of action to be approved by the EMRB. The expected outcomes, in time, include regional level planning and/or service delivery, prioritization of regional investments, and engagement and ongoing collaboration with

key stakeholders towards the development of a Metropolitan Region Servicing Plan.

Each Regional Collaborative will be guided by a unique Regional Collaborative Vision Statement reflecting the needs of the specific service area, the desired future state and demonstrating alignment with the Guiding Principles and Vision of the Growth Plan. (See Appendix C)

Regional Collaboratives are the enabling structure required to concentrate and focus regional efforts and expertise, provide a supportive forum to foster research and to build and share regionally relevant intelligence and to provide the data necessary for evidenced-based decisions and actions.

---

## MRSP GUIDING PRINCIPLES

Creating common understanding of the shared servicing challenges is vital to creating an environment where municipalities can think and act in the best interest of the Region. The *MRSP Principles* reflect the regional imperative for working together and will provide critical guidance for the planning, investment and coordination of the delivery of metropolitan services. The *MRSP Principles* are aligned with the guiding principles of the Growth Plan.

### The MRSP Principles are:

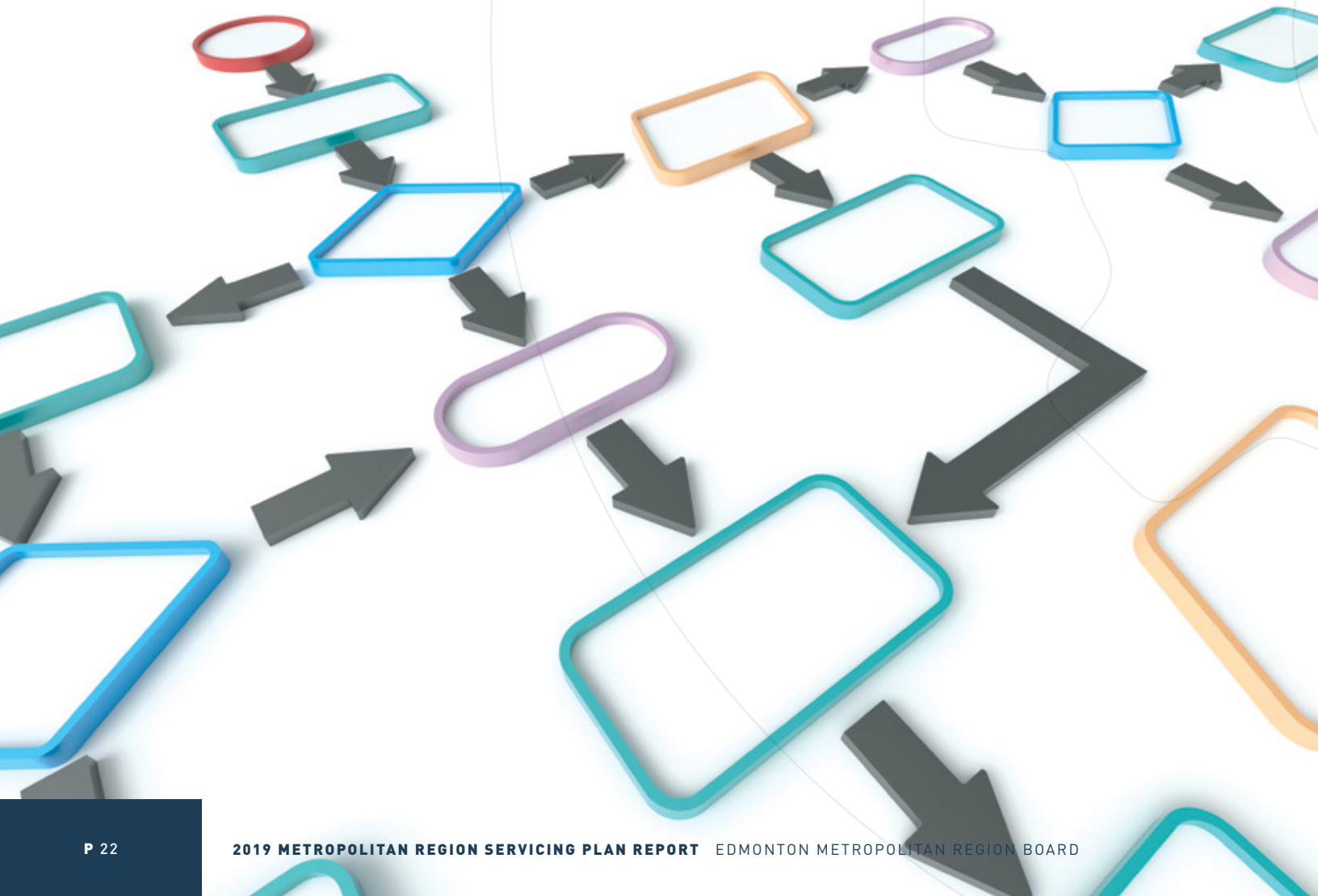
- Lead with a metropolitan mindset for the greater good.
- Pursue leading and innovative research, technology, and best practices.
- Build, collect, and share regionally relevant data, information and knowledge.
- Prioritize regionally scaled service investments informed by evidence.
- Leverage sub-regional service initiatives to benefit the Region.
- Recognize the unique municipal service contexts.
- Guarantee the safety and wellness of citizens.
- Act in a regional manner with a unified voice.

---

## EMRB OBJECTIVES FOR THE INAUGURAL MRSP

The MRSP Objectives are:

- identify existing services, including current capacity and service provision, and their ability to support current growth;
- identify existing municipal and intermunicipal services and existing shared servicing agreements;
- identify the services required to support future growth through the implementation of the Growth Plan;
- identify opportunities for increased efficiency and collaboration in the sharing of services;
- identify the benefits of enhanced efficiency and optimized services shared amongst municipalities in the Edmonton Metropolitan Region; and
- prepare implementation recommendations for consideration by the Board.





---

## REGIONALLY SIGNIFICANT SERVICING

Common across all service areas is a desired future state for metropolitan servicing. This desired future state is intended to support and complement the outcomes of the Growth Plan.

The intended MRSP outcomes are:

- harmonized data and information collection and sharing to support regional evidence-based decision making for service planning, investment and delivery;
- pro-active regional planning for future growth, where appropriate;
- seamless and optimized service delivery ensuring appropriate service levels, where needed;
- efficient and cost-effective regional investments supported by all levels of government;
- globally recognized metropolitan servicing leveraging best-practices and innovative service delivery technology and processes;
- effective engagement of stakeholders and communication to citizens;
- enhanced community safety, livability and sustainability; and
- an investment-ready region for business growth and investment attraction.

Achieving a regional future for metropolitan servicing will require the following:

- a unified voice in the Region;
- a structured, mandated, and supported regional approach;
- regional-level servicing information and data;
- common terminology, indicators, and measures;
- greater collaboration and knowledge sharing about metropolitan servicing;
- clear, well-defined, and evidence-based regional priorities; and
- regional leadership and change management.





# IMPLEMENTATION PLAN

The implementation of the Metropolitan Region Servicing Plan requires continued commitment and collaboration among EMRB member municipalities, the Government of Alberta, and other regional stakeholders.

As the mandate and authority of the EMRB are derived from the *Municipal Government Act* and the EMRB Regulation, the MRSP will come into force once approved by the Government of Alberta.

This section provides guidance and direction to implement the inaugural MRSP. It describes the intended approach and governance by the EMRB for the MRSP. It also lists the intended actions to support the go-forward strategies for each of the four regionally significant service areas.



## GOVERNANCE

The EMRB will use existing governance mechanisms for the leadership and oversight of the MRSP. As the MRSP will represent several service areas over time, each with distinct legislation, stakeholders and subject matter expertise, the EMRB will use the following organizational structure for the MRSP:

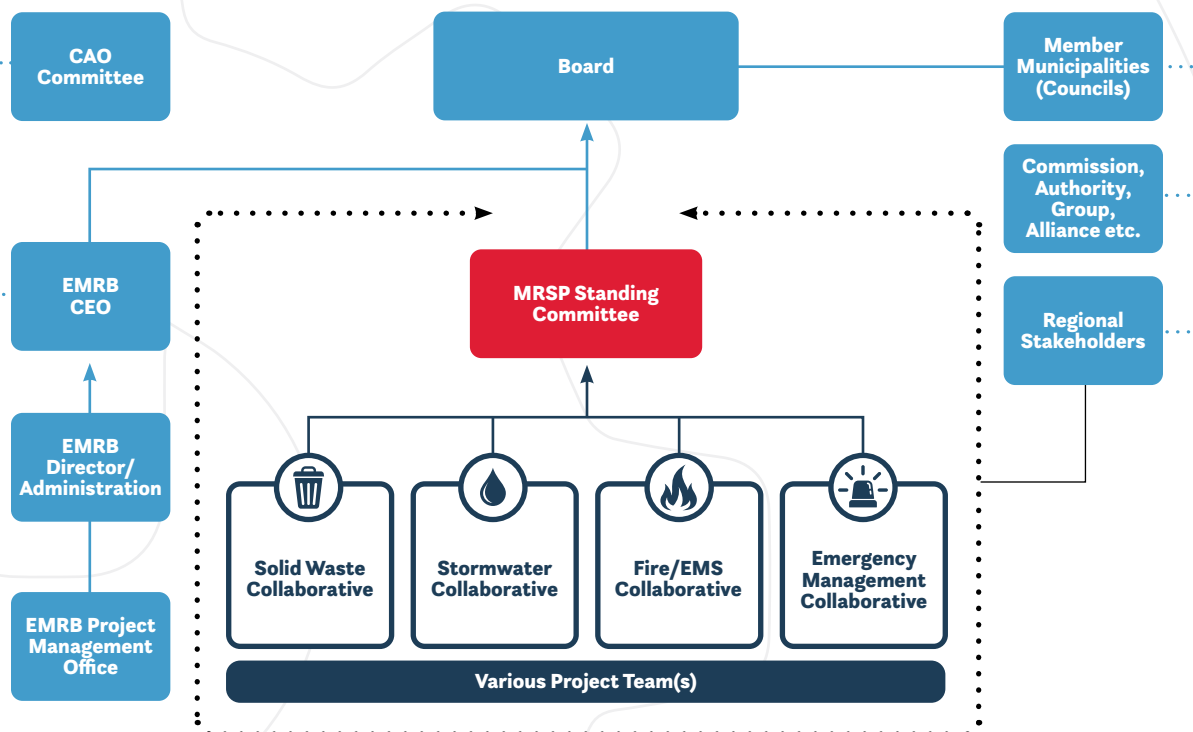


FIGURE 4: MRSP Governance

The above governance structure is essentially what is in place today by the EMRB for its many strategic initiatives (e.g., Regional Agriculture Master Plan, Integrated Regional Transportation Master Plan, and Shared Investment for Shared Benefit).

The following defines some of the key roles within the governance structure:

- **Board** – role as per the Regulation; comprised of elected officials from the 13 member municipalities.
- **MRSP Standing Committee** – role to oversee and lead the implementation and oversight of the MRSP including alignment of the MRSP and go-forward strategies and actions with the Growth Plan; make recommendations to the Board; comprised of elected officials from 3-7 member municipalities, similar to the MRSP Task Force structure. The MRSP Standing Committee will provide ongoing guidance and direction to the four Regional Collaboratives (i.e., *solid waste, stormwater, fire/EMS, and emergency management*) and monitor development, opportunities and challenges for all services areas (i.e., *roads, transit, water, and wastewater*) to ensure alignment with the Growth Plan.

- **Regional Collaboratives** – role to lead in the regional collaboration discussions for each service area centered around the defined action plan; develop a framework to identify additional areas deemed to be of regional significance and where the Region may undertake further collaborative municipal service initiatives, further advance coordinated planning and investment, and realize cost efficiency; report to and provide guidance to the MRSP Standing Committee; comprised of non-elected officials and may include senior subject matter experts for the service area from the 13 member municipalities.
- **Project Teams** – role to develop and implement projects, as needed, and approved by the Board; report to a specific Collaborative; comprised of Collaborative members, advisors, and regional stakeholders, as agreed.
- **Regional Stakeholders** – role to be engaged where and when needed for the broader interests of the Region.

---

## REGIONAL COLLABORATIVES

For the inaugural MRSP, the EMRB will establish four Regional Collaboratives – one for *solid waste, stormwater, fire/EMS, and emergency management*. Where and when approved by the Board, Regional Collaboratives for other service areas may be established or replaced by an alternate governance mechanism.

Each Regional Collaborative will have a common framework for the Terms of Reference; however, each Regional Collaborative will have a specific mandate, scope, and set of stakeholders. The following summarizes the key elements of the Terms of Reference:

- Report to the MRSP Standing Committee.
- Mandatory representation from all 13 member municipalities; however, optional participation in projects, where approved by the Board.
- Chair representation from a member municipality.
- Meet 4-6 times per year, or as needed and approved.
- Optimize regionally relevant data and information gathering, sharing, and consensus.
- Advance the service areas regionally, where appropriate, while engaging with regional stakeholders.
- Determine the need for and scope of projects relevant for advancement of the service areas regionally.
- Contribute to the support and implementation of the Growth Plan.

For the inaugural MRSP, the EMRB will establish four Regional Collaboratives – one for solid waste, stormwater, fire/EMS, and emergency management.

---

## ACTION PLANS FOR REGIONAL COLLABORATIVES

Each Regional Collaborative will have distinct goals and objectives including specific action plans. These action plans must be supported by the MRSP Standing Committee and approved by the Board.

EMRB capacity and resourcing is a major implementation consideration. As such, EMRB will be responsible for ensuring the Regional Collaborative action plans and related projects are effectively and efficiently prioritized, approved, resourced, and managed within the inaugural MRSP.

While not yet resourced nor approved by the Board, the following provides the intended direction for action plans for the four municipal service area Regional Collaboratives.



### SOLID WASTE

- Develop a common set of solid waste terminology, measures, indicators, criteria for prioritization of investments.
- Discuss regional solid waste efforts with the Edmonton Region Waste Advisory Committee (ERWAC) and determine best strategy for the future of ERWAC.
- Gather a foundation of regional level solid waste data and information for residential solid waste management.
- Advance regional discussion and advocacy of Extended Producer Responsibility (EPR) focused on enacting legislation.
- Conduct an enhanced Environmental Scan of processing capacity and waste generation rates including organics, construction and demolition waste, and industrial, commercial and institutional (ICI) waste.
- Consider disaster debris management.
- Identify and assess opportunities for innovation in solid waste management.
- Review success of landfill bans on successful waste diversion.
- Develop policy recommendations on single use items.
- Advance a regionally relevant and common toolkit for communications related to solid waste management.
- Identify and assess opportunities for regionally scaled investments (e.g., organics processing, material recovery facilities, waste processing).
- Develop a common full cost accounting and life cost analysis including carbon footprint and the impact of greenhouse gases in the Region.
- Conduct a detailed service delivery analysis and best practices review for service delivery models; and make recommendations to EMRB.





## STORMWATER

- Develop a common set of stormwater terminology, measures, indicators, criteria for prioritization of investments.
- Gather a foundation of regional level stormwater data and information– a library and repository.
- Conduct an enhanced Environmental Scan of creeks, trunks, etc. – measures and monitoring.
- Determine risks (e.g., impacts, liability) of current practices.
- Advance and facilitate good practices and lessons learned.
- Consider projects for design standards, sedimentation, and erosion.
- Advance/elevate regional discussion and advocacy of water quality and design standards.
- Determine opportunities for regionally scaled investments.



## FIRE/EMS

- Develop a common set of fire/EMS terminology, measures, indicators, criteria for prioritization of investments.
- Discuss Regional Fire Chiefs Committee (including Sub-Committees) and determine its best strategy for the future.
- Gather a foundation of regional level fire/EMS data and information.
- Advance regional discussion and advocacy of interoperability and emergency communications.
- Advance regional discussion of “Auto-Aid” for priority calls.
- Inventory local and sub-regional initiatives and agreements – in detail.
- Inventory specialty services and equipment – incorporate into Edmonton Metropolitan Region Geographic Information Services (EMRGIS).
- Conduct an enhanced Environmental Scan of servicing levels, ranges of services – descriptive in nature, not prescriptive.
- Determine opportunities for regionally scaled investments.



## EMERGENCY MANAGEMENT

- Develop a common set of emergency management terminology, measures, and indicators;
- Prepare a region-wide hazard and threat assessment to inform decisions and actions;
- Discuss regional Emergency Management efforts with Capital Region Emergency Preparedness Partnership (CREPP) and determine best strategy for the future;
- Gather a foundation of regional level emergency management data and information in an integrated and accessible repository or clearinghouse;
- Engage with public, not-for-profit, business, and industrial partners on advancing emergency management challenges and opportunities;
- Develop criteria for prioritization of investments; and
- Determine opportunities for regionally scaled investments.

A more detailed summary of each Collaborative which includes a definition of the service area, a future vision, rationale, a description of current state, future state, a list of regionally significant topics for further discussion, next steps and measures of success under Appendix A.



---

## MONITORING AND REPORTING

Monitoring, evaluating, and reporting on the MRSP including the work of the Regional Collaboratives and/or their projects are critical to ensuring support and alignment to the Growth Plan. Key Performance Indicators (KPIs) will be used to determine the effect of the Collaborative plans of action in achieving the desired outcomes of the MRSP and the Growth Plan. The KPIs will be developed by the Collaboratives based on any approved plans of action and/or projects.

Key Performance Indicators (KPIs) will be used to determine the effect of the Collaborative plans of action in achieving the desired outcomes of the MRSP and the Growth Plan

---

## EMRGIS

Central to the success of the MRSP is the quality and availability of current data and information. The Edmonton Metropolitan Region Geographic Information Services (EMRGIS) will be used as one of the principal tools to capture and share regionally relevant information and analysis.

The success of the MRSP and its alignment to the Growth Plan will enable regional maps, regional data, and regional KPIs to inform decision making and the advancement of regional collaboration.

The regional maps may be static (see Appendix F) or dynamic and will promote the sharing and leveraging of regional information for member municipalities – both for EMRB purposes and for use sub-regionally (e.g., sub-regional service planning) or locally (e.g., local service delivery).

---

## UPDATES TO THE MRSP

To ensure the MRSP continues to support and be aligned to the Growth Plan, the EMRB is committed to “evergreening” the MRSP through a review every two to three years and an update every five years. A comprehensive review of the MRSP will be completed with major updates to the Growth Plan.





# APPENDICES





# APPENDIX A

## SERVICE AREA PROFILES

**A1** SOLID WASTE

**A2** STORMWATER

**A3** FIRE/EMS

**A4** EMERGENCY MANAGEMENT

# A1 SOLID WASTE

## DEFINITION

Solid waste management refers to the collection, transfer and disposal of all solid waste material, including garbage, recyclables, hazardous waste, and organic material.

## VISION FOR A REGIONAL FUTURE

The vision for solid waste management in the Region is:

Leading the way to a zero waste Edmonton Metropolitan Region.

## THE CASE FOR REGIONAL SOLID WASTE MANAGEMENT

Identified by the MRSP Task Force as the service area with a high priority, the case for a long-term regional plan for solid waste management is simple. The *MRSP Environmental Scan* identified a number of growth pressures already facing existing solid waste management facilities, as well as increasing costs of collection and processing as the Region grows.

The work of the solid waste service area Regional Collaborative will be to address the challenge of how to best manage the waste created by an additional one million regional residents, and nearly half a million new jobs in the Edmonton Metropolitan Region by 2044.

In advancing a regional approach to solid waste management, municipalities have the opportunity to share valuable information related to service delivery and data on current and projected service levels. By working collaboratively to plan service delivery, municipalities could make more informed, efficient and cost-effective decisions about investment and service delivery that stretches ratepayer dollars further without compromising service levels.

A shared regional approach to solid waste management also has the potential to create opportunities for shared investment and service delivery models, to meet the needs of growing communities and increased demands on waste management services and infrastructure.

In addition to developing a sustainable cost-effective plan to service Solid Waste management needs as a Region, we are also challenged to identify and advance strategies to reduce the overall volume of solid waste generated as part of a goal of increased regional sustainability and environmental stewardship.

## SOLID WASTE MANAGEMENT IN THE REGION TODAY

Solid waste services include all stages of the solid waste lifecycle, including generation, collection, transfer, and end of life management, including possible re-introduction into the material stream.

Solid waste management services also include relevant public education and communication efforts.

Solid waste management is required for all communities, and requires service be delivered to all sectors including residential, construction and demolition, as well as industrial, commercial and institutional (ICI) generators. Solid waste management services are primarily delivered locally. There is no single entity responsible for delivering solid waste management services in the Region.

There are numerous sub-regional and local initiatives for solid waste servicing and management. Solid waste management services are primarily delivered to single family homes through their local municipalities; however, the majority of the services are operated by private contractors. Many of the private companies provide services to more than one municipality and operate privately on a sub-regional or regional scale. Businesses and multi-family residential buildings are often required to contract solid waste management services independently and are not serviced through their local municipality.

The opportunity exists to provide an array of solid waste services on a regional scale to all generators of waste within the Region and address waste management from generation through to end-of-life disposal, or re-introduction into the material market stream. The goal of Solid Waste management is to minimize the impact of solid waste disposal on the environment, which includes managing risks associated with end-of-life disposal, as well as and to identify opportunities for beneficial use of waste.

The planning for Solid Waste services and Solid Waste management is conducted by individual municipalities and/or through various planning entities and processes.

---

The opportunity exists to provide an array of solid waste services on a regional scale to all generators of waste within the Region and address waste management from generation through to end-of-life disposal, or re-introduction into the material market stream.

---

## FUTURE STATE

In the next 10 and 25 years, solid waste management services will meet new challenges and opportunities. Some of these challenges and opportunities will be of regional relevance including:

- significant growth in population and employment – the increases in population and employment will increase the amount of waste generated, which will require additional resources and infrastructure to manage;
- densification and intensification of population will require that improved solid waste management service delivery be developed for multi-family homes, as well as for the industrial, commercial, and institutional (ICI) sector;



- changes to the character of the solid waste streams being generated within the Region, and a result of changing consumer habits or changes in industry;
- developments in solid waste processing technology;
- ongoing changes and evolution of global markets for recyclables;
- increased demand for sustainable disposal and processing options for construction and demolition waste, and hazardous waste;
- opportunities to develop local recycling processing capacity, which would generate locally available raw material for processing into goods; and
- potential changes to provincial and federal guidelines applicable to solid waste management.

Solid waste management has seen a number of leading practices being embraced locally and regionally across Europe, North America and Canada more specifically. These have included:

- development and implementation of Circular Economy frameworks for municipalities and businesses;
- implementation of Extended Producer Responsibility (EPR) programs, specifically for paper and packaging materials in Canada;
- bans on single use items and other items of specific concern;
- diversion of organic waste from landfills, and processing at industrial scale composting or anaerobic digestion facilities; and
- development of robust climate change adaptation plans, which include detailed disaster debris management strategies.

Future Solid Waste topics of interest in the Region may include:

- developing a single voice for solid waste management advocacy;
- hazardous waste management processing capacity and best practices;
- landfill closures and site remediation;
- development of Circular Economy frameworks for implementation;
- long-term strategy related to facility access and processing capacity;
- increased focus on waste reduction and strategies for improvement;
- landfill bans;
- expanded Extended Producer Responsibility (EPR) programs;
- staging and long-term servicing for major infrastructure; and
- continued engagement with the Government of Alberta and the Federal Government.

# NEXT STEPS

## COLLABORATIVE

EMRB member municipalities will establish a Regional Collaborative to advance regional collaboration for solid waste.

## MEASURING OUR SUCCESS

As we proceed toward our shared vision for regional solid waste management, our success will reflect our progress in:

- planning collaboratively on regional topics and priorities;
  - we view solid waste management within the context of a regional circular economy;
  - we understand and recognize the full lifecycle of a product or material, from raw material extraction through production, use, and end-of-life management;
  - we have developed solid waste management initiatives and innovation to address each phase throughout the material lifecycle, and prioritize waste management options based on the Waste Management Hierarchy;
  - we recognize materials as resources to be maintained at their highest value within the economy for as long as possible;
  - we are reducing negative impacts to the environment in which we live, including protection of groundwater and air quality;
- collecting and leveraging quality information and knowledge to support regional decision making and investments;
- advancing cost-efficient and cost-effective investments for regional benefits; and
- optimizing regional collaboration and intermunicipal framework for solid waste management.

## A2 STORMWATER

### DEFINITION

Stormwater management means the collection, conveyance, storage and discharge of stormwater runoff (e.g., rainfall, snow melt).

### VISION FOR A REGIONAL FUTURE

The vision for stormwater management in the Region is:

The Edmonton Metropolitan Region will have protected natural assets while achieving resilience from stormwater impacts.

### THE CASE FOR REGIONAL STORMWATER MANAGEMENT

Rainfall does not respect municipal boundaries, and moreover, while rain may fall in one municipality, it typically flows downstream. The summer of 2019 provided ample context for this challenge as record levels of consistent precipitation caused overland flooding in multiple regional municipalities. The costs of such flood damage and responding to flood incidents are borne by municipalities and property owners, diverting tax dollars from other needed investment in public services and infrastructure.

As the effects of climate change continue to increase the unpredictability of weather events and natural disasters, and as communities across the Region continue to grow, municipalities will be challenged to ensure stormwater management assets are planned and built to balance the impacts of urban growth, protect communities and investment, and manage natural water systems.

In planning for stormwater management regionally, planning without boundaries, and sharing information about existing capacity and regional needs, the Region will be positioned to prioritize investment in growth areas and make regional-based decisions to protect regional neighbours from the impacts of flooding. In doing so, the Region will protect communities and natural water systems, realize efficiencies in planning and investment, and reduce the costs associated with emergency response and recovery from flooding.

## STORMWATER MANAGEMENT IN THE REGION TODAY

Stormwater servicing typically consists of collection and conveyance systems (e.g., swales, ditches, roadway gutters, storm sewers, major stormwater trunks), storage and control or management facilities (e.g., dry ponds, wet ponds, wetlands, control structures), water quality treatment and Low Impact Development (LID) facilities (e.g., wet ponds, wetlands, oil/grit separators, rain gardens, bioswales, green roofs), and discharge facilities (e.g., outfall trunk, outlet structures, erosion control).

Stormwater is unique in that stormwater runoff will occur naturally even if stormwater servicing is not provided. Stormwater servicing is required to manage and convey stormwater runoff from various types of development to the receiving water body. Without stormwater servicing, naturally occurring stormwater runoff will result in adverse impacts such as flooding, erosion and sedimentation, and deterioration in the water quality of receiving water bodies.

Stormwater servicing is required for all new urban and rural development, including residential, commercial, institutional, industrial, transportation and recreational.

Stormwater servicing is primarily delivered locally and sub-regionally within watersheds.

Stormwater servicing is a municipal responsibility in the Region under the governance of Alberta Environment and Parks (AEP). The Government

of Alberta plays an important role in this service area through AEP as the stormwater regulator.

Municipalities are generally allowed to discharge stormwater to downstream municipalities through creeks and rivers, with discharge controlled to approved unit discharge rates (e.g., Litres/second/hectare or L/s/ha).

Stormwater is typically managed by local municipalities, using local collection systems and stormwater management facilities to discharge stormwater runoff to natural waterbodies. EMRB member municipalities are responsible for delivering their own stormwater servicing. Stormwater infrastructure is typically constructed as part of the land development process, including local storm sewers and/or ditches, stormwater management facilities, and outfalls to natural watercourses.

Stormwater planning is conducted by individual municipalities and/or through various planning entities and processes. Municipalities or municipal utilities are responsible for the planning, approvals, asset management and operation and maintenance of the stormwater drainage system. Municipalities typically carry out Stormwater Master Drainage Plans for their entire municipality, which may define the overall drainage basin boundaries and the allowable discharge rates to the various receiving watercourses or existing stormwater infrastructure. These plans are then refined at the Area Structure Plan level, with increased level of detail in the location of stormwater management facilities, the basin and sub-basin boundaries, and the type of conveyance system (e.g., storm sewers and ditches). The plans are further refined at the development permit stage when developers obtain approval to construct specific Stormwater infrastructure.

---

...the Region will protect communities and natural water systems, realize efficiencies in planning and investment, and reduce the costs associated with emergency response and recovery from flooding.

---

Where necessary, municipalities collaborate to plan the stormwater drainage system at the local watershed level (e.g., Whitemud/Blackmud Creek). This may include studying the existing hydrologic conditions and existing constraints to develop mutually agreed design criteria, such as the allowable discharge rate in L/s/ha. These municipalities then approach AEP with their recommendations.

There are various watershed groups whom plan for, manage, and report on Stormwater at a sub-regional basis, either bilaterally or multilaterally. The Edmonton Metropolitan Region is part of the North Saskatchewan River watershed, with several sub-watersheds located within the Region's boundaries. The watershed alliances are advocacy groups, promoting environmental protection with orderly development, and generally have limited authority provided to them by AEP. EMRB municipalities have organized watershed working groups on a sub-regional basis under the authority of the partner municipalities. These municipalities then approach AEP with key recommendations (e.g., allowable discharge rates in L/s/ha), applicable to that sub-watershed, for approval.

## **FUTURE STATE**

In the next 10 and 25 years, stormwater servicing will see continuing and new challenges and opportunities; some of which, will be of an evolving regional interest and significance.

- changes to provincial legislation and standards, potentially including greater emphasis on water quality and/or erosion in natural watercourses;
- significant growth in population and employment, with the resulting land development, which will result in:
  - likely increase in annual runoff volume to receiving watercourses;
  - potential increases in erosion rates in watercourses;
- densification and intensification, which could impact flood risk, annual runoff volume and/or water quality;
- encroachment, infilling, and other urban development;
- climate change, with increase in extreme weather events, which can impact flood risk;
- flooding and drainage constraints;
- bed and bank erosion;
- sedimentation and silt accumulations;
- municipal servicing strategies and management criteria;
- on-site stormwater storage, treatment and reuse - interior (e.g., toilet flushing);
- pre-development run-off rates;
- funding constraints especially for major facilities; and
- stakeholder perspectives.



Future stormwater topics of interest in the Region may include:

- ensuring a single voice regarding stormwater;
- staging and long-term servicing for major infrastructure; and
- continued engagement with the Government of Alberta.

## **NEXT STEPS**

### **COLLABORATIVE**

EMRB member municipalities will establish a Regional Collaborative to advance regional collaboration for stormwater management.

### **MEASURING OUR SUCCESS**

As we proceed toward our vision, our success will be measured by the following:

- we will plan on regional topics and priorities of significance and relevance;
- we will have quality information and knowledge to support regional investments;
- we will have cost-efficient and cost-effective investments for regional benefits; and
- we will have optimal regional collaboration and a metropolitan framework for stormwater management.

## A3 FIRE/EMS

### DEFINITION

Fire/EMS means all fire services (e.g., suppression, alarms, and rescue) and emergency medical services (e.g., medical first response).

### VISION FOR A REGIONAL FUTURE

The vision for fire/EMS management in the Region is:

An integrated citizen-centric approach to fire/EMS with a holistic level of excellence in the Edmonton Metropolitan Region.

### THE CASE FOR REGIONAL FIRE/EMS

As we look to add another one million residents to the Region by 2044, our communities will grow, and so will the demands placed on first responders who keep our communities safe. Not only will service providers face increased demands from a larger population, but they will be challenged to ensure services can be provided across a larger service area; all while working to maintain the expectations of response time and service that residents currently receive at the costs that municipalities can afford.

Municipalities receive excellent fire and emergency medical services, but challenges persist in service delivery from the maintenance of existing assets, to the duplication of service provision between municipalities, and in allocating resources appropriately and strategically. Beyond the costs borne by individual budgets of municipalities, however, there are greater costs. Those costs are related to the safety and security of communities within the Region and the peace of mind of regional citizens that fire and ambulance services will be there when and where they are needed.

Good neighbours look after each other. Regional planning and decision making will benefit from consistent, timely information collection and sharing as well as further support the identification of system gaps and opportunities for shared investment in new technology and infrastructure to the benefit of the Region.

By planning collaboratively as one Region for fire and emergency medical services, municipalities will be able to make stronger evidence-based decisions in planning, investment, and service delivery that ensure cost-effective use of public dollars in resource allocation and support public safety across the Region. The MRSP Regional Collaborative for fire/EMS will help provide a pro-active plan to maintain services we have today, reduce duplication, and ensure future generations will be protected.

## FIRE/EMS IN THE REGION TODAY

Fire/EMS servicing is primarily delivered locally. There is no single entity responsible for delivering fire services in the Region.

It is critical to understand that fire, medical aid, and other emergency situations do not know borders and that each incident or event requires a practical and affordable plan to service - whether that is in a metropolitan, urban, suburban, rural, or wilderness area. The plans to service may be local, between municipalities, and/or with other levels of government and partners.

EMRB member municipalities are responsible for delivering their own fire services and basic emergency medical services. In addition, each member municipality is accountable for emergency management, within their jurisdictions. Funding of fire services is diverse, and municipalities use a variety of mechanisms including a tax levy for operating and capital, reserves, grants, and revenue generation.

Some municipalities in the Region have service and/or mutual aid agreements for the provision or support of emergency management and fire services. There are in addition, several industrial and commercial sites with emergency services capability. Alberta Health Services is responsible for delivering ambulance services, which for most of the population outside of the City of Edmonton is delivered through integrated service models.

The current processes or entities for planning are essentially those defined by each member municipality. In most cases, member municipalities have developed a fire services bylaw enabling and describing the services. In some cases, municipalities have bylaws or policies for Standards of Cover, Standard Operating Procedures, and Standard Operating Guidelines that describe the levels of service.

The current plans to service are typically local and include a wide variety of local Fire Master Plans, Fire Strategic Plans, and various Operating and Capital Plans supporting Fire Services or Departmental Business Plans. Services, service levels or targets, service capacity, and service staffing for Emergency Services vary broadly across the Region and amongst member municipalities.

The Region has a wide variance in service delivery, service capacity and service standards for emergency services. However, each EMRB member municipality has unique cultures, assets, strengths, and needs.

---

By planning collaboratively as one Region for fire and emergency medical services, municipalities will be able to make stronger evidence-based decisions in planning, investment, and service delivery that ensure cost-effective use of public dollars in resource allocation and support public safety across the Region.

---

## FUTURE STATE

In the next 10 and 25 years, each municipal service will meet new challenges and opportunities. Some of these challenges and opportunities will be of regional relevance including:

- significant growth in population and employment;
- overall influence of risk and risk management;
- funding constraints for infrastructure (e.g., facilities, apparatus, and specialty equipment);
- coordinated response to major incidents and disasters;
- changing demographics; and
- changing technology.

Regional growth will have a broad set of influences and impacts beyond increases in population and employment. While not linear to population and employment changes, Emergency Services can reasonably be anticipated to change in the following ways:

- increased fire calls;
- increased fire stations;
- increased and diversified fire equipment and apparatus;
- increased firefighters (not including management); and
- increased need for public awareness and education.

Future Fire/EMS topics of interest in the Region may include:

- ensuring a single voice regarding Fire/EMS;
- risk identification and management;
- training, education and standards;
- recruitment and human resource support;
- specialty services response (e.g., hazardous materials);
- major facilities, apparatus, and equipment;
- service agreements;
- staging and long-term servicing for major infrastructure and technology; and
- continued engagement with the Government of Alberta.

## NEXT STEPS

### COLLABORATIVE

EMRB member municipalities will establish a Regional Collaborative to advance regional collaboration for Fire/EMS.

## MEASURING OUR SUCCESS

As we proceed toward our vision, our success will be measured by the following:

- we will plan on regional topics and priorities of significance and relevance;
- we will have quality information and knowledge to support regional investments;
- we will have cost-efficient and cost-effective investments for regional benefits; and
- we will have optimal regional collaboration and a metropolitan framework for fire/EMS.



## A4 EMERGENCY MANAGEMENT

### DEFINITION

Emergency management means services in preparation and mitigation, prevention, response, and recovery to major incidents and disasters.

### VISION FOR A REGIONAL FUTURE

The vision for emergency management in the Region is:

The Edmonton Metropolitan Region will collectively mitigate against all-hazards by preparing for, responding to, and recovering from major incidents and disasters that optimize the interests of the Region and Albertans.

### EMERGENCY MANAGEMENT IN THE REGION TODAY

In Alberta, the *Emergency Management Act*, RSA 2000, c E-6-8 defines that municipalities are responsible for the direction and control of emergency responses, and the preparation and approval of emergency plans and programs. Municipalities must also appoint an Emergency Advisory Committee (members of Council) and an Emergency Management Agency (responsible to Council) to exercise responsibilities under the *Emergency Management Act*, updated in November 2018.

In addition, the *Municipal Government Act*, RSA 2000, c M-26 provides for Councils to establish bylaws. One other item of legislation is the *Local Authorities Emergency Management Regulation* which defines expectations of municipalities in the areas of regional collaboration, training, emergency management plans and emergency management exercises. This regulation comes into effect January 1, 2020.

Emergency management in the Edmonton Metropolitan Region is characterized by the following:

- servicing is primarily planned for and delivered locally;
- some support is provided through the Alberta Emergency Management Agency (AEMA);

- all member municipalities, with many other municipalities in the Region, are members of the Capital Region Emergency Preparedness Partnership (CREPP), an *ad hoc* entity representing local municipalities;
- most member municipalities do not have full-time positions supporting this service area;
- much of emergency management has evolved out of emergency services and now engages a cross-municipal set of representatives;
- the Edmonton Metropolitan Region plays a major role in supporting the consequences of disasters in this province;
- there are acknowledged gaps in the regional approach to emergency management, especially in business continuity, emergency social services, and crisis communications;
- local capacity is a major issue including the ability to support Incident Management Teams for response and recovery of municipalities; and
- emergency management is now a political and economic risk for municipal executive and elected officials.

---

*...the Local Authorities Emergency Management Regulation which defines expectations of municipalities in the areas of regional collaboration, training, emergency management plans and emergency management exercises.*

---

## **FUTURE STATE**

The future state of emergency management will be characterized by the following:

- there is a rapidly changing landscape of risks and a risk profile in the Region;
- major incidents and disasters do not respect borders nor jurisdictions;
- emergency management is increasingly multi-sectoral issue (e.g., public, business, industry);
- collaboration will lead to innovation and resulting region-wide and collective strategies; and
- the requirements for education, training and exercises are evident and will increase in time.

## **THE CASE FOR AN EMERGENCY MANAGEMENT COLLABORATIVE**

The case for a Regional Collaborative for emergency management includes the following:

- there is a clear willingness and desire by front-line municipal emergency management professionals to work together;
- a collaborative approach can optimize investment decisions and the sharing of resources and capacity;

- the occurrence and cost implications of major incidents and disasters are increasing; and
- regional emergency management is a strategy in optimization of investments for collective benefits – not a cost saving strategy.

## **NEXT STEPS**

### **COLLABORATIVE**

EMRB member municipalities will establish a Regional Collaborative to advance regional collaboration for emergency management.

### **MEASURING OUR SUCCESS**

As we proceed toward our vision, our success will be measured by the following:

- we will plan on regional topics and priorities of significance and relevance;
- we will have quality information and knowledge to support regional investments;
- we will have cost-efficient and cost-effective investments for regional benefits; and
- we will have optimal regional collaboration and a metropolitan framework for emergency management.

# APPENDIX B

## ADDITIONAL SERVICE AREAS

**B1** WATER

**B2** WASTEWATER

**B3** TRANSPORTATION – ROADS

**B4** TRANSPORTATION – TRANSIT

# B1 WATER

## DEFINITION

Water means potable water.

## WATER SERVICES IN THE REGION TODAY

Water servicing includes the supply, treatment, transmission, storage and distribution of potable water. Water servicing is delivered through a combination of regional, sub-regional, and local means. Almost all of the supply and treatment is delivered by EPCOR including all EMRB member municipalities (except Devon, which has its own water treatment plant). Regional water servicing focuses on water treatment and major water pumping and transmission systems.

EPCOR provides water treatment plus transmission within the City of Edmonton boundary. Treated water is then transferred to adjacent municipalities and/or the three connecting water commissions (Capital Region Parkland Water Services Commission, Capital Region Northeast Water Services Commission and Capital Region Southwest Water Services Commission). Water is then transferred to other EMRB member municipalities and to other water commissions and municipalities beyond the Region's boundaries.

Storage and local distribution are provided locally within each municipality. There are no known locations where one municipality's distribution system connects directly to the distribution system of another municipality (Enoch and Canadian Forces Base Edmonton may be exceptions).

EPCOR Water undergoes a Transmission Master Planning Exercise every five years focusing on the upcoming 10-year capital requirements. They are currently in the process of updating the Transmission Master Plan, which will include a greater focus on potential transmission upgrades to accommodate regional growth in the long term (up to 2060).

Most municipalities also prepare master plans on a regular basis and use the results to budget for major water transmission and storage facilities. Master plans are typically updated every 10 years with a 20 to 30-year planning horizon.

## FUTURE STATE

To ensure that EPCOR Water can meet water treatment and transmission needs and accommodate regional growth in the near term, they undertake the following process:

- Annually, each regional customer provides EPCOR a written forecast of the quantity of water the customer reasonably expects to purchase during each of the next five calendar years (procedure is outlined in each regional water commission's Water Supply Agreement with EPCOR).



- EPCOR approves this quantity of water, or suggests a reduced amount based on a bona fide reason including economic, legal, regulatory, technical or engineering aspects. As stated in each Water Supply Agreement, it is not reasonable for EPCOR to refuse to agree to a quantity of water primarily for the purpose of limiting the growth of residential, commercial or industrial development within the customer's boundaries.

EPCOR anticipates regional customer growth. To meet increased regional demands EPCOR can either:

- 1) construct capital upgrades to the Edmonton municipal water supply system, or
- 2) potentially operate the system in an alternate manner.

Future infrastructure/upgrades will be designed and constructed to accommodate both internal and regional growth, ensuring servicing standards are achieved.

In the next 10 and 25 years, water services will meet new challenges and opportunities. Some of these challenges and opportunities will be of regional relevance including:

- significant growth in population and employment - water conservation has generally mitigated the impact of regional growth on withdrawals from the North Saskatchewan River, however it is not clear to the degree that this will continue to be the case in the future;
- increases in population and employment may lead to increased water demands on the North Saskatchewan River at a time when the long-term supply available may be impacted by climate change; and
- densification and intensification - upgrades in the water storage, transmission and distribution systems will allow infill development without impacting available fire flows.

Water has seen a number of leading practices being embraced locally and regionally across North America and Canada more specifically. These have included:

- regionalization of treatment and transmission services, primarily when the water commissions were set up;
- water conservation has resulted in the total demands for treated water to stay fairly constant for several years as the Region's population and employment has increased; and
- water treatment technologies continue to evolve. The current challenges include removal of pharmaceuticals from raw water.

Future Water topics of interest in the Region may include:

- ensuring a single voice regarding the North Saskatchewan River water withdrawals;
- water conservation;

---

Water servicing is delivered through a combination of regional, sub-regional, and local means.

---

- staging and long-term servicing for major infrastructure;
- servicing of major growth areas; and
- continued engagement with the Government of Alberta.

## NEXT STEPS

### AS-IS

The current “as-is” approach by EPCOR, various Water Commissions, the Town of Devon, and EMRB member municipalities will continue to lead and manage all aspects of this service area.

This service area will be monitored by EMRB for implications to the Growth Plan. The EMRB may consider specific go-forward strategies in the coming years including the collection and awareness of sub-regional and local plans including Master Plans, Engineering Studies so as to better position knowledge and information about the Region for future updates to the MRSP and the Growth Plan.

## B2 WASTEWATER

### DEFINITION

Wastewater means wastewater generated from residential, industrial, commercial and institutional developments.

### WASTEWATER MANAGEMENT IN THE REGION TODAY

Wastewater servicing is primarily regional and focuses on major wastewater transmission and treatment facilities. Wastewater services are delivered through a combination of regional, sub-regional and local means. Almost all of the transmission and treatment is delivered by either EPCOR or the Alberta Capital Region Wastewater Commission (ACRWC) and the Town of Devon. Collection is delivered locally, with some larger municipalities providing their own transmission systems. There are almost no locations where one municipality's collection system connects directly to the distribution system of another municipality (34 St Trunk in Edmonton and Strathcona County are exceptions).

The ACRWC and EPCOR Drainage Services (formerly City of Edmonton Drainage Services) regularly carry out joint wastewater system planning studies. They also developed a Master Regional Servicing Agreement that dictates how wastewater transmission and treatment services are shared between the two organizations. In addition, the ACRWC and EPCOR meet quarterly to conduct joint planning of wastewater transmission and treatment facilities. EPCOR and the ACRWC's current long-term plan include wastewater transmission and treatment servicing to 2059.

In addition to the above joint planning initiatives, EPCOR Drainage Services regularly undertakes wastewater system planning studies for each of the main wastewater trunk systems servicing the City of Edmonton and the ACRWC south system. These studies typically review historic and projected growth, estimate peak wastewater flows using hydraulic models, and plan for staged construction of the wastewater transmission system.

The ACRWC regularly undertakes planning studies to assess the capacity of the transmission and treatment facilities. Recent planning studies indicate that upgrading to their Parkland Sanitary Trunk Sewer (PSTS) and St. Albert Regional Trunk Sewer (START) is required to convey peak wet weather flows. Portions of these trunks have been upgraded and plans are in place to continue upgrading over the next 10 years. The upgrading is generally to address growth to approximately 2045.

The ACRWC site was designed to facilitate significant expansion. The ACRWC adds plant capacity as needed to meet both growth requirements and changing environmental regulations

---

Wastewater services are delivered through a combination of regional, sub-regional and local means.

---

for discharges to the North Saskatchewan River. Most municipalities also prepare wastewater master plans on a regular basis and use the results to budget for expanding their wastewater collection and transmission systems. Master plans are typically updated every 10 years with a 20 to 30-year planning horizon.

## **FUTURE STATE**

In the next 10 and 25 years, wastewater services will meet new challenges and opportunities. Some of these challenges and opportunities will be of regional relevance including:

- Significant growth in population and employment – the latest regional planning studies document how wastewater servicing will be provided to the Region (excludes Devon) to the year 2059. This will require expansion of the major wastewater transmission systems including new trunks within Edmonton and upgrading of ACRWC systems. Expansion of the two major wastewater treatment plants will eventually be required but is currently being offset by reduced water use across the Region.
- Densification and intensification causing increases in wastewater flows can adversely impact downstream sewer systems and upgrading is often needed.
- Funding constraints, especially for major facilities such as major trunk systems and wastewater treatment plants, is currently managed through construction staging and long-term interim servicing. The wastewater utilities and commissions generally have predictable long-term funding through utility rates.

Wastewater has seen a number of leading practices being embraced locally and regionally across North America and Canada more specifically. These have included:

- regionalization of transmission and treatment services, primarily when the ACRWC was set up in the mid-1980s;
- water conservation has resulted in the total wastewater flows to the Region's wastewater treatment plants increase at well below the rate of population/employment increases;
- wastewater treatment technologies continue to evolve, with removal of nutrients (e.g., nitrogen, phosphorus) and bacteria now being standard practice. The current challenges include removal of pharmaceuticals and the treatment of wastewater within a smaller plant footprint; and
- detailed wastewater planning studies are now standard practice for both servicing new greenfield areas and redevelopment/intensification of existing development areas.

Future wastewater topics of interest in the Region may include:

- ensuring a single voice regarding the North Saskatchewan River assimilative capacity and allowable effluent discharge parameters;
- management of inflow and infiltration to the wastewater system;

- staging and long-term servicing for major infrastructure; and
- continued engagement with the Government of Alberta.

## NEXT STEPS

### AS-IS

The current “as-is” approach by EPCOR, ACRWC, the Town of Devon and EMRB member municipalities will continue to lead and manage all aspects of this service area.

This service area will be monitored by EMRB for implications to the Growth Plan. The EMRB may consider specific go-forward strategies in the coming years including the collection and awareness of sub-regional and local plans including Master Plans, Engineering Studies so as to better position knowledge and information about the Region for future updates to the MRSP and the Growth Plan.

## B3 TRANSPORTATION - ROADS

### DEFINITION

Transportation - Roads means the transportation system of roadways, air, and rail as well as active transportation.

Regionally significant roadways are identified in the Integrated Regional Transportation Master Plan (IRTMP) as linking municipalities, major destination centres, and employment centres as well as providing access to air and rail.

### ROADWAYS IN THE REGION TODAY

The primary mechanism for Transportation Planning is the IRTMP.

- **Roads**

This service area is provided locally through regional, sub-regional and provincial collaboration. Examples of these include the IRTMP (Regional), Transportation Master Plans (Local), Alberta Transportation (Provincial) and Intermunicipal Development Plans (IDP) and Intermunicipal Collaboration Frameworks (ICF), both sub-regionally. Transportation (roads) networks in the Region comprise of several regionally significant roads classified as either arterial, expressway or freeway, and are identified in the IRTMP. The regional roadway classifications system serves to respect the correlation between moving people and reflecting the nature and character of the surrounding land uses and development pattern. The Government of Alberta owns and operates the majority of regionally significant roadways in the Edmonton Metropolitan Region, but often works with EMRB member municipalities in completing planning studies for future roadways.

- **Goods Movement**

Goods movement networks are provided provincially and locally through high and heavy load corridors, dangerous goods routes and truck routes. All provincial highways, which form part of the regional network, are designated as truck routes and dangerous goods routes. The Province also designates specific corridors as high/heavy load routes. Local goods movement networks provide connectivity to the provincial goods movement network.

- **Air**

Air services are operated regionally by the Edmonton Regional Airport Authority (ERAA) and regulated federally. ERAA currently operates two airports in the Edmonton Metropolitan Region, Edmonton International Airport (EIA) and Villeneuve Airport in the best interests of the Region.



- **Rail**

Rail services are provided federally and regulated by Transport Canada. An extensive network of railway facilities serve passenger and cargo needs in the Edmonton Metropolitan Region. Rail based cargo transportation in the Region is provided by the Canadian National and Canadian Pacific railways.

An EMRB Working Group, including representation from member municipalities, reviews regional transportation priorities annually. Priority transportation projects are identifying by inventorying regional projects, scoring each project against policy areas weightings based on the Growth Plan and adjusting for priority. Each transportation project in the Region is given a score using the policy area weightings, which is multiplied by a priority score of one, two or three, depending on the priority, with three being the highest priority.

## **FUTURE STATE**

The future state of transportation – roads includes how demand for transportation services changes and how transportation services are delivered.

Factors affecting the demand for transportation services are as follows:

- increased population and employment growth result in increasing demands on the transportation system;
- changes in development patterns affecting the transportation services in demand;
- changes in demographics affecting the transportation services in demand; and
- economic factors, including changes in goods movement needs, affecting the transportation services in demand.

Factors affecting how transportation services are delivered are as follows:

- new technologies changing how transportation systems are provided;
- changes to how existing transportation networks are used;
- changes in public policy, funding mechanisms, and priorities affecting the types of transportation services provided;
- maintenances costs for existing (and future) infrastructure affecting funding decisions; and
- balancing the need to accommodate future changes while maintaining or limiting impacts on current services.

---

Regionally significant roadways are identified in the Integrated Regional Transportation Master Plan (IRTMP) as linking municipalities, major destination centres, and employment centres as well as providing access to air and rail.

---

Future Transportation - Roads topics of interest in the Region may include:

- ensuring a single voice regarding roads;
- staging and long-term servicing for major infrastructure; and
- continued engagement with the Government of Alberta.

## NEXT STEPS

### AS-IS

The current “as-is” approach by EMRB member municipalities will continue to lead and manage all aspects of this service area. This service area will be monitored by EMRB for implications to the Growth Plan.

The IRTMP 2.0 project will address the longer-term servicing needs of this service area consistent with the Growth Plan. The EMRB may consider specific go-forward strategies in the coming years including the collection and awareness of sub-regional and local plans including Master Plans and Engineering Studies so as to better position knowledge and information about the Region for future updates to the MRSP and the Growth Plan.

## B4 TRANSPORTATION - TRANSIT

### DEFINITION

Transportation - transit means the transportation system of transit.

### TRANSIT IN THE REGION TODAY

The transportation - transit service area will focus on intermunicipal transit services offered between EMRB member municipalities, as such, local routes are not considered, although intermunicipal routes with connections to local routes are noted as needed. Intermunicipal transit services focus on intermunicipal transit routes, park and ride facilities, and accessible transit.

Public transit is expected to play a significant role in servicing Priority Growth Areas and reducing the regional footprint. The *MRSP Environmental Scan* was completed in November 2018. This is an important input to understanding the transportation - transit service area including the reports detailed information on the current state.

The components of the transit system include routes, vehicles, stations and facilities. In addition, the major influencers to the transit system include – legislation, governance, funding/maintenance, policies, enforcement, and design standards and criteria.

---

The Regional Transit Services Commission project will address the longer-term servicing needs of this service area.

---

### Intermunicipal Transit Routes

- Seven of the 13 EMRB member municipalities operate intermunicipal transit routes.
- All members offering transit connect to at least one City of Edmonton Transit Centre. Spruce Grove is the only member providing a transit connection to an area outside of Edmonton (Acheson).
- Currently, Beaumont, Edmonton, Fort Saskatchewan, Leduc, Spruce Grove, Strathcona County, St. Albert, and Morinville offer intermunicipal transit services with Edmonton transit stations as the primary destinations. The most common destinations of the intermunicipal services are the Northern Alberta Institute of Technology (NAIT), Century Park Transit Centre, MacEwan University, Downtown Edmonton, University of Alberta (U of A), Government Centre, West Edmonton Mall, and Edmonton International Airport (EIA).

### Park and Ride Facilities

- Park and ride facilities are an essential part of an integrated multi-modal transportation system as they offer commuters in low-occupancy automobiles a convenient connection to local and intermunicipal transit thus increasing the transit mode share.

- Park and ride utilization varies greatly within the Region. The majority of Edmonton’s park and ride facilities are approaching capacity. Strathcona County’s and St. Albert’s park and ride facilities are at or above capacity.

### **Accessible Transit**

- The following EMRB member municipalities offer accessible transit, including trips to local and regional destinations: Edmonton, Fort Saskatchewan, Leduc, Spruce Grove, St. Albert, Stony Plain, and Strathcona County.
- Booking process for an accessible transit ride varies by municipality and is either by phone, email and/or online. Accessible transit service providers apply different age thresholds for providing their service, ranging from 16 years old and up to 65 years old and up.
- Edmonton Transit Service (ETS) Disabled Adult Transit Service (DATS) provides all trip administration services for both St. Albert and Leduc (registration, bookings, complaints, scheduling, and dispatch).

The EMRB Transportation Priorities working group reviews regional transportation priorities annually. Priority transportation projects are identified by inventorying regional projects, scoring each project against policy area weightings based on the Growth Plan and adjusting for priority. Each transportation project in the EMRB is given a score using the policy area weightings, which is multiplied by a priority score of one, two or three, depending on the priority, with three being the highest priority.

## **FUTURE STATE**

In the next 10 and 25 years, transit services will meet new challenges and opportunities. Some of these challenges and opportunities will be of regional relevance including:

- Funding requirements for future build out of the LRT system, including connections that penetrate the Anthony Henday, especially to support where intensification, densification and complete communities are planned. This includes expansion of intermunicipal bus transit routes, connecting to more areas in the Region and providing more opportunities for park and ride facilities connecting to the LRT system.
- Integrating land use and transit services, including build out of existing and future transit-oriented developments (TOD), improving access for more people to use transit as a primary mode of transportation.
- Integrating non-vehicular transportation infrastructure with transit services, including enhancement of active transportation infrastructure, reducing the demand for vehicle only modes connecting to a transit service and improving access for more people to use transit as a primary mode of transportation.
- Developing and adopting intermunicipal and accessible transit service standards, including frequency, scheduling, fares, ride quality, utilization, park and ride, route performance and others, developed in collaboration with EMRB members and the Regional Transit Services Commission, to plan and improve future intermunicipal transit services.

- Obtaining provincial regulation for the creation of the Regional Transit Services Commission and further development and future implementation of the objectives of the Commission, which could include the following aspects: improving service efficiencies, reducing costs for all, coordinating planning efforts, creating a better customer experiences, supporting long-term regional developments and others, as needed.
- Accounting for the impacts of new transportation technologies that could be leveraged to improve transit services or potentially impact the utilization of transit services, including ride sharing technologies allowing more people to connect and share non-transit transportation and autonomous vehicles.
- Continual maintenance requirements, including replacement to the aging bus fleet (if applicable at the regional level, depending on the Commission's role) and/or improvements/replacement of bus fleets and facilities appurtenances accounting for environment initiatives, including change over to electric vehicles to reduce emissions.

Future Transportation - Transit topics of interest in the Region may include:

- ensuring a single voice (e.g., Regional Transit Services Commission) regarding Transit;
- staging and long-term servicing for major infrastructure; and
- continued engagement with the Government of Alberta.

## NEXT STEPS

### AS-IS

The current "as-is" approach by EMRB member municipalities will continue to lead and manage all aspects of this service area.

This service area will be monitored by EMRB for implications to the Growth Plan. The EMRB may consider improving the collection and awareness of sub-regional and local plans including Master Plans and Engineering Studies so as to better position knowledge and information about the Region for future updates to the MRSP and the Growth Plan.

The Regional Transit Services Commission project will address the longer-term servicing needs of this service area. The EMRB may consider specific go-forward strategies in the coming years.





# APPENDIX C

## MRSP ALIGNMENT TO THE GROWTH PLAN

EDMONTON METROPOLITAN REGION  
GROWTH PLAN (EMRGP)

ALIGNMENT OF THE METROPOLITAN REGION  
SERVICING PLAN TO THE GROWTH PLAN

# EDMONTON METROPOLITAN REGION GROWTH PLAN (EMRGP)

The EMRB completed the Edmonton Metropolitan Region Growth Plan in 2016. The Government of Alberta approved the Growth Plan on October 26, 2017 in conjunction with the EMRB Regulation. The EMRGP provides an integrated policy framework to plan for and manage the challenges and opportunities of growth through a holistic approach to land use planning, infrastructure and servicing, and investment.



Edmonton Metropolitan Region Growth Plan Cover

The Growth Plan is a 50-year vision for the Region, including Guiding Principles, a framework for responsible growth, an Edmonton Metropolitan Regional Structure, and an implementation plan, all working together to achieve the following outcomes:

- a diversified, globally competitive economic region;
- a smaller more compact urban footprint;
- coordinated regional land use and infrastructure decisions;
- resilient, adaptable and complete communities;
- an interconnected multi-modal transportation system;
- the growth and sustainability of the agriculture sector; and
- environmental stewardship.

# ALIGNMENT OF THE METROPOLITAN REGION SERVICING PLAN TO THE GROWTH PLAN

The MRSP is an integral component contributing toward the effective management of growth in the Region. The MRSP can be seen as well-aligned to the EMRGP as illustrated by some of the many interrelationships between the MRSP service areas and the six policy areas defined within the EMRGP:

The following sections will summarize the strategies to advance the MRSP for each of eight service areas. In the future, the EMRB may add other service areas (e.g., recreation) and may establish new strategies to address the growth and change in regional servicing needs.

The following tables illustrate more of the alignment of MRSP service areas to policy objectives along with examples of touchpoints or initiatives reflecting current and future planning and service delivery of metropolitan services.

**TABLE 1: WATER**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>WATER CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<b>1.2.4</b> Regional infrastructure investment, including municipal services, and utilities, will support commercial and industrial development	<b>2.2</b> Protect regional watershed health, water quality and quantity. <b>2.3</b> Plan development to promote clean air, land and water and address climate change impacts. <b>2.4</b> Minimize and mitigate the impacts of regional growth on natural living systems.	<b>3.2.2</b> Within the built-up urban area and centres, infill development...will be encouraged. <b>3.2.3</b> The greatest density...will be directed to centres and areas with existing or planned regional infrastructure	<b>4.1</b> Establish a compact and contiguous development pattern to accommodate employment and population growth. <b>4.2</b> Enable growth within built-up urban areas to optimize existing infrastructure and minimize the expansion of the development footprint. <b>4.3</b> Plan and develop greenfield areas in an order and phased manner. <b>4.6</b> Prioritize investment and funding of regional infrastructure to support planned growth.	n/a	n/a
<b>Touchpoints</b>	Regional wastewater planning studies, wastewater master plans	Advances in wastewater treatment will mitigate impact of growth on the North Saskatchewan River ecosystem	Upgrades in the wastewater collection and transmission systems will allow infill development without impacting flooding risk or impacts on the environment	Regional wastewater planning studies, wastewater master plans, wastewater servicing plans to support Area Structure Plans	n/a	n/a

**TABLE 2: WASTEWATER**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>WASTEWATER CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<p><b>1.2.4</b> Regional infrastructure investment, including municipal services, and utilities, will support commercial and industrial development</p>	<p><b>2.2</b> Protect regional watershed health, water quality and quantity.</p> <p><b>2.3</b> Plan development to promote clean air, land and water and address climate change impacts.</p> <p><b>2.4</b> Minimize and mitigate the impacts of regional growth on natural living systems.</p>	<p><b>3.2.2</b> Within the built-up urban area and centres, infill development...will be encouraged.</p> <p><b>3.2.3</b> The greatest density...will be directed to centres and areas with existing or planned regional infrastructure</p>	<p><b>4.1</b> Establish a compact and contiguous development pattern to accommodate employment and population growth.</p> <p><b>4.2</b> Enable growth within built-up urban areas to optimize existing infrastructure and minimize the expansion of the development footprint.</p> <p><b>4.3</b> Plan and develop greenfield areas in an order and phased manner.</p> <p><b>4.6</b> Prioritize investment and funding of regional infrastructure to support planned growth.</p>	n/a	n/a
<b>Touchpoints</b>	Regional wastewater planning studies, wastewater master plans	Advances in wastewater treatment will mitigate impact of growth on the North Saskatchewan River ecosystem	Upgrades in the wastewater collection and transmission systems will allow infill development without impacting flooding risk or impacts on the environment	Regional wastewater planning studies, wastewater master plans, wastewater servicing plans to support Area Structure Plans	n/a	n/a

**TABLE 3: ROADS**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>TRANSPORTATION (ROADS) CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<p><b>1.1.1.e</b> Coordinating sustained investment in infrastructure and planning for the efficient movements of goods, services, and people.</p> <p><b>1.2.3.c</b> Planning and coordinating infrastructure to support employment and diversification opportunities.</p> <p><b>1.3.1</b> The movement of people, goods, and services... by improving air, road, and rail connectivity</p>	<p><b>2.3.1</b> Planning, design, and construction of new development and infrastructure in greenfield areas and build-up urban areas will incorporate...green building practices.</p>		<p><b>4.2.4</b> Intensification will optimize existing and planned infrastructure. Infrastructure investments to support intensification will be identified and planned appropriately.</p> <p><b>4.6.1</b> Regional infrastructure priorities will be identified to target and focus public investments to support employment and population in the Region and the policies of this Plan.</p>	<p><b>5.1.1</b> The regional transportation system... will...ensure that regional transportation corridors provide connections to major employment areas and link the Region with local and extra-regional markets in Canada and abroad... provide an efficient system of regional truck routes and over dimensional corridors to ensure the effective and efficient movement of goods...ensure that access, intersection and interchange practices recognize and support the economic activities and provide a reasonable balance between access, efficiency and safety.</p>	<p><b>4.7.5</b> Future multi-use corridors will minimize the fragmentation of greenfield areas, prime agricultural lands and natural living systems.</p>
<b>Touchpoints</b>	Annual updating of the transportation priorities	Land development	Access of communities	Land development	Integrated Regional Transportation Master Plan (IRTMP)	Regional Agriculture Master Plan (RAMP)

**TABLE 4: TRANSIT**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>TRANSIT CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<p><b>1.1.1.e</b> Coordinating sustained investment in infrastructure and planning for the efficient movements of goods, services, and people.</p> <p><b>1.2.3.b</b> Planning for and promoting... increasing employee density in areas with multi-modal transportation access in the metropolitan core and metropolitan area.</p> <p><b>1.4.2</b> Downtown Edmonton, urban centres, TOD centres,... will be planned... with multi-modal transportation access.</p>	<p><b>2.3.1</b> Planning, design, and construction of new development and infrastructure in greenfield areas and build-up urban areas will incorporate...green building practices.</p>	<p><b>3.1.3</b> ...areas will be planned and developed as complete communities and support active transportation</p> <p><b>3.1.4</b> ...areas will be planned. incorporate higher density uses along existing and planned transit corridors.</p> <p><b>3.3.3</b> Priorities will be established for location of... housing...800 meters of a major transit station</p>	<p><b>4.2.4</b> Intensification will optimize existing and planned infrastructure.</p> <p><b>4.3.1.d</b> incorporate an interconnected street network and open space network to support...transit viability.</p> <p><b>4.5.3</b> Urban centres will be planned and developed to provide connections between local and intermunicipal transit and promote...transit</p> <p><b>5.4.5.e</b> downtown Edmonton will be planned and developed to optimize investment in existing and planned transit service and infrastructure, and support integration of regional transit services.</p>	<p><b>5.1.1</b> The regional transportation system...will be planned [to] deliver viable multi-modal transportation choices</p>	<p><b>4.7.5</b> Future multi-use corridors will minimize the fragmentation of greenfield areas, prime agricultural lands and natural living systems.</p>
<b>Touchpoints</b>	Regional Transit Services Commission	Land development	TODs	Implementing or improving transit systems to make existing infrastructure more efficient	IRTMP	RAMP



**TABLE 5: STORMWATER**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>STORMWATER SERVICING CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<p><b>1.2.4</b> Regional infrastructure investment, including municipal services, and utilities, will support commercial and industrial development</p>	<p><b>2.1</b> Conserve and restore natural living systems.</p> <p><b>2.2</b> Protect regional watershed health, water quality and quantity.</p> <p><b>2.3</b> Plan development to promote clean air, land and water and address climate change impacts.</p> <p><b>2.4</b> Minimize and mitigate the impacts of regional growth on natural living systems.</p>	<p><b>3.2.2</b> Within the built-up urban area and centres, infill development...will be encouraged.</p> <p><b>3.2.3</b> The greatest density...will be directed to centres and areas with existing or planned regional infrastructure</p>	<p><b>4.1</b> Establish a compact and contiguous development pattern to accommodate employment and population growth.</p> <p><b>4.2</b> Enable growth within built-up urban areas to optimize existing infrastructure and minimize the expansion of the development footprint.</p> <p><b>4.3</b> Plan and develop greenfield areas in an order and phased manner.</p> <p><b>4.6</b> Prioritize investment and funding of regional infrastructure to support planned growth.</p>	<p><b>5.3</b> Coordinate and integrate land use and transportation facilities and services...</p>	<p><b>6.3</b> ...the diversification and value-added agriculture sector</p>
<b>Touchpoints</b>	Sub-regional watershed studies, stormwater master plans	Stormwater Management Facilities for water quality and quantity control; Low Impact Development; integrate wetlands into development	Low Impact Development	Watershed studies, stormwater master plans, stormwater plans to support Area Structure Plans	Integrated land use planning and transportation planning stormwater studies	Stormwater quality control, Low Impact Development

**TABLE 6: SOLID WASTE**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>SOLID WASTE CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<b>1.1</b> ...Promote global economic competitiveness and diversification of the regional economy	<b>2.3</b> ...Plan development to promote clean air, land, water and address climate change impacts	<b>3.1</b> ...the planning and development of complete communities, to accommodate people's daily needs	<b>4.4</b> ...Plan for and accommodate rural growth in appropriate locations with sustainable levels of servicing	<b>4.6</b> ...Prioritize investment and funding of regional infrastructure to support planned growth	<b>6.2</b> ...minimize the conversion of agricultural lands for non-agricultural use <b>6.3</b> ...the diversification and value-added agriculture sector
<b>Touchpoints</b>	Solid waste diversion can create opportunity for recyclers and waste processors to build local presence  Market Opportunities  International recognition for Solid waste management sustainability goals  Service Delivery Innovation	Solid waste reduction will decrease environmental impacts, and proper waste management practices will decrease GHG emissions and impacts to groundwater  Organics Diversion  Solid Waste Management Regulations and Policy (AEP)	Solid waste services will need to evolve to provide collection for areas of increased densification, while continuing to provide service to rural areas  Collection Service Capacity  Efficiency of service delivery	Costs associated with providing solid waste management services to rural communities tend to be high, and may benefit from regionalizing services deliver to rural areas  Regional waste disposal facilities  Efficiencies from regional service delivery	Solid waste infrastructure could be built with a regional funding and operations approach to decrease cost to rate payers  Shared investment in solid waste infrastructure	Regional appetite for developing new landfills on agricultural land is decreasing  Opportunities exist for diverting biosolids and compost material and applying to agricultural land for increased yields  Organics Processing, Biosolids Land Application, Recycling Initiatives

**TABLE 7: FIRE/EMS**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>FIRE/EMS CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<b>1.4</b> ...the livability and prosperity of the	<b>2.4</b> ...the minimization and mitigation of the impacts of regional growth	<b>3.1</b> ...the planning and development of complete communities	<b>4.7</b> ...the investment into infrastructure and the compatible land use patterns and risks to public safety and health	<b>5.3</b> ...the efficient and safe movement of people, goods and services	<b>6.3</b> ...the diversification and value-added agriculture sector
<b>Touchpoints</b>	Master Plans, Strategic Plans	Mutual Aid and Service Agreements	Fire Planning	Fire Stations, Fire Apparatus	Fire Services	Fire Protection

**TABLE 8: EMERGENCY MANAGEMENT**

Policy Area	Economic Competitiveness and Employment	Natural Living Systems	Communities and Housing	Integration of Land Use and Infrastructure	Transportation Systems	Agriculture
<b>EMERGENCY MANAGEMENT CONTRIBUTES TO...</b>						
<b>Policy Objective</b>	<b>1.4</b> ...the livability and prosperity of the Region and plan for the needs of a changing population and workforce	<b>2.4</b> ...the minimization and mitigation of the impacts of regional growth	<b>3.1</b> ...the planning and development of complete communities	<b>4.7</b> ...the investment into infrastructure and the compatible land use patterns and risks to public safety and health	<b>5.3</b> ...the efficient and safe movement of people, goods and services	<b>6.3</b> ...the diversification and value-added agriculture sector
<b>Touchpoints</b>	Emergency Management Programs	Mutual Aid and Service Agreements	Community Resilience, Community Partnerships	Emergency Operations Centres, Risk Assessments	Emergency Evacuations	Disaster Recovery and Relief



## **APPENDIX D**

# **SUMMARY OF CURRENT STATE GOVERNANCE / PLANNING / SERVICE DELIVERY / FUNDING MODEL BY SERVICE AREA**

## SUMMARY OF CURRENT STATE BY SERVICE AREA

Service Area	Governance	Planning	Service Delivery	Funding
<b>Water</b>	Local (e.g., Utility), Commissions	Local, Sub-Regional	Local, Sub-Regional	Various local, utility, user-based, provincial, etc. sources
<b>Wastewater</b>	Local, Commission	Local, Sub-Regional	Local, Sub-Regional	Various local, utility, user-based, provincial, etc. sources
<b>Roads</b>	Local, Provincial	Local, Regional (IRTMP), Provincial	Local, Provincial	Various local, utility, user-based, provincial, etc. sources
<b>Transit</b>	Local, Regional (Transit Commission)	Local, Regional (Transit Commission)	Local, Regional (Transit Commission)	Various local, utility, user-based, provincial, etc. sources
<b>Emergency Services (i.e., Fire/EMS, Emergency Management)</b>	Local	Local	Local	Various local, utility, user-based, provincial, etc. sources
<b>Solid Waste</b>	Local, Commission, Authority	Local, Sub-Regional	Local, Sub-Regional	Various local, utility, user-based, provincial, etc. sources
<b>Stormwater</b>	Local, Alliances, Groups, Provincial	Local, Sub-Regional, Provincial	Local	Various local, utility, user-based, provincial, etc. sources



# APPENDIX E

## ACKNOWLEDGEMENTS

# ACKNOWLEDGEMENTS

In addition to the EMRB member municipalities, the following are acknowledged for their contributions to this inaugural MRSP:

## TASK FORCE MEMBERS

Ray Ralph [ CHAIR ]  
*Mayor, Town of Devon*

Dave Anderson [ VICE CHAIR ]  
*Councillor, Strathcona County*

Don Iveson [ MEMBER ]  
*Mayor, City of Edmonton*

Gordon Harris [ MEMBER ]  
*Councillor, City of Fort Saskatchewan*

Tanni Doblanko [ MEMBER ]  
*Mayor, Leduc County*

Ray Watkins [ MEMBER ]  
*Councillor, City of St. Albert*

William Choy [ MEMBER ]  
*Mayor, Town of Stony Plain*

## TASK FORCE ALTERNATES

Chris Fish  
*Councillor, Town of Devon*

Brian Botterill  
*Councillor, Strathcona County*

Michael Walters  
*Councillor, City of Edmonton*

Gale Katchur  
*Mayor, City of Fort Saskatchewan*

Kelly Vandenberghe  
*Councillor, Leduc County*

Wes Brodhead  
*Councillor, City of St. Albert*

Linda Matties  
*Councillor, Town of Stony Plain*

## ADVISORY GROUP MEMBERS

Grant Bain, *Leduc County*

Barry Belcourt, *City of Edmonton*

Kevin Cole, *Strathcona County*

Paresh Dhariya, *Town of Devon*

Trevor Duley, *City of St. Albert*

Richard Gagnon, *City of Fort Saskatchewan*

Corey Levasseur, *City of Spruce Grove*

Rob McGowan, *Parkland County*

Ian McKay, *Town of Stony Plain*

Eleanor Mohammed, *City of Beaumont*

Shawn Olson, *City of Leduc*

Travis Peter, *Sturgeon County*

Brad White, *Town of Morinville*

## STORMWATER TECHNICAL WORKING GROUP

Jessica Jones, *Strathcona County*

Liliana Malesevic, *EPCOR*

Kate Polkovsky, *City of St. Albert*

Tyler Tymchyshyn, *City of Beaumont*

## SOLID WASTE TECHNICAL WORKING GROUP

Kerra Chomlak, *City of Leduc*

Leo Girard, *Parkland County*

Michael Labrecque, *City of Edmonton*

Sadie Miller, *City of Fort Saskatchewan*

## FIRE/EMS TECHNICAL WORKING GROUP

Brad Boddez, *Town of Morinville*

Devin Capcara, *Strathcona County*

Robert Kosterman, *City of Spruce Grove*

Keven Lefebvre, *Leduc County*

Rob Squire, *City of Edmonton*

## EMERGENCY MANAGEMENT TECHNICAL WORKING GROUP

Everett Cooke, *City of Beaumont*

Tony Kulbisky, *Town of Devon*

Chad Moore, *Parkland County*

Rob Squire, *City of Edmonton*

Gerald Unger, *City of Leduc*

Brad Ward, *City of Fort Saskatchewan*

## PROJECT TEAM AND CONSULTANT ADVISORS

Barry Huybens, *Senior MRSP Project Manager*  
*iStrategic Advisors Inc.*

Jeannie Bertrand, *Consultant Advisor*  
*Dillon Consulting Ltd.*

Barry Raynard, *Consultant Advisor*  
*ISL Engineering and Land Services Ltd.*

Daniel Zeggelaar, *Consultant Advisor*  
*ISL Engineering and Land Services Ltd.*

## EMRB ADMINISTRATION

Karen Wichuk, *Chief Executive Officer*

Sharon Shuya, *Director, Regional Growth Planning*

Bryan Haggarty, *Director, Strategic Initiatives and Operations*

Stephanie Chai, *Project Manager*

Taylor Varro, *Project Manager*

Dan Rose, *Senior Communications Advisor*

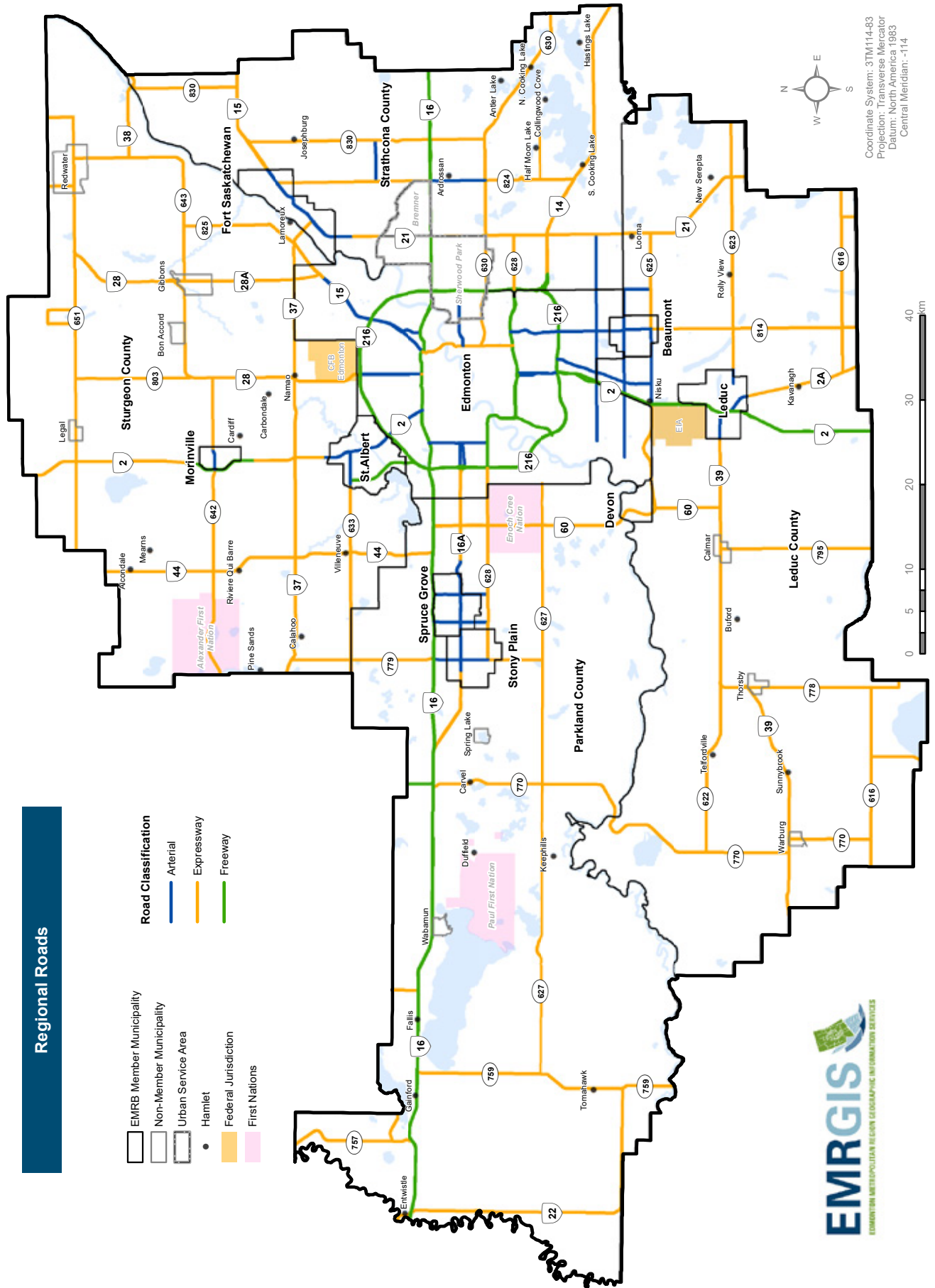
Carol Moreno, *Project Coordinator*

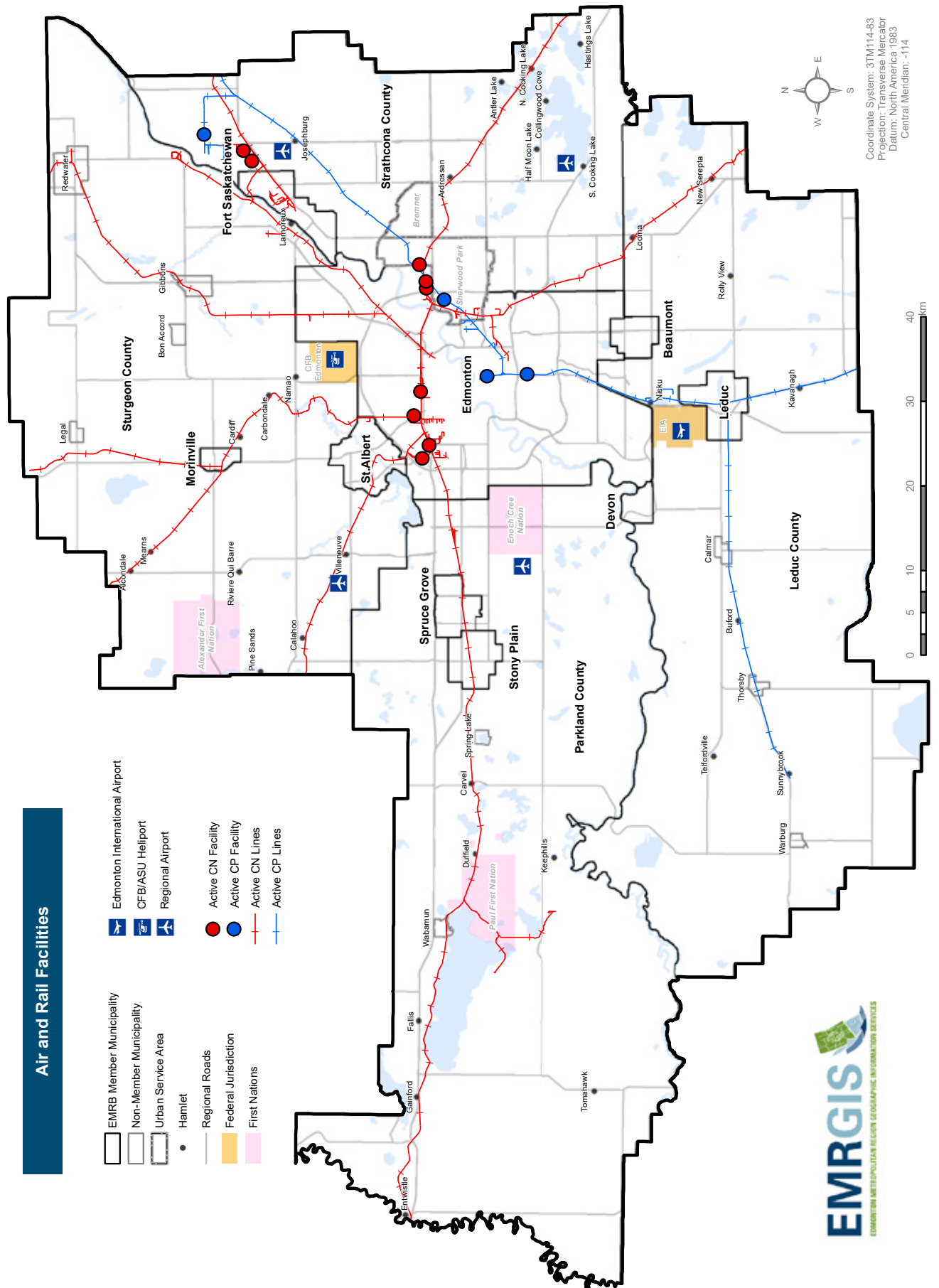
Joseana Lara, *Municipal Planning Intern*

# APPENDIX F

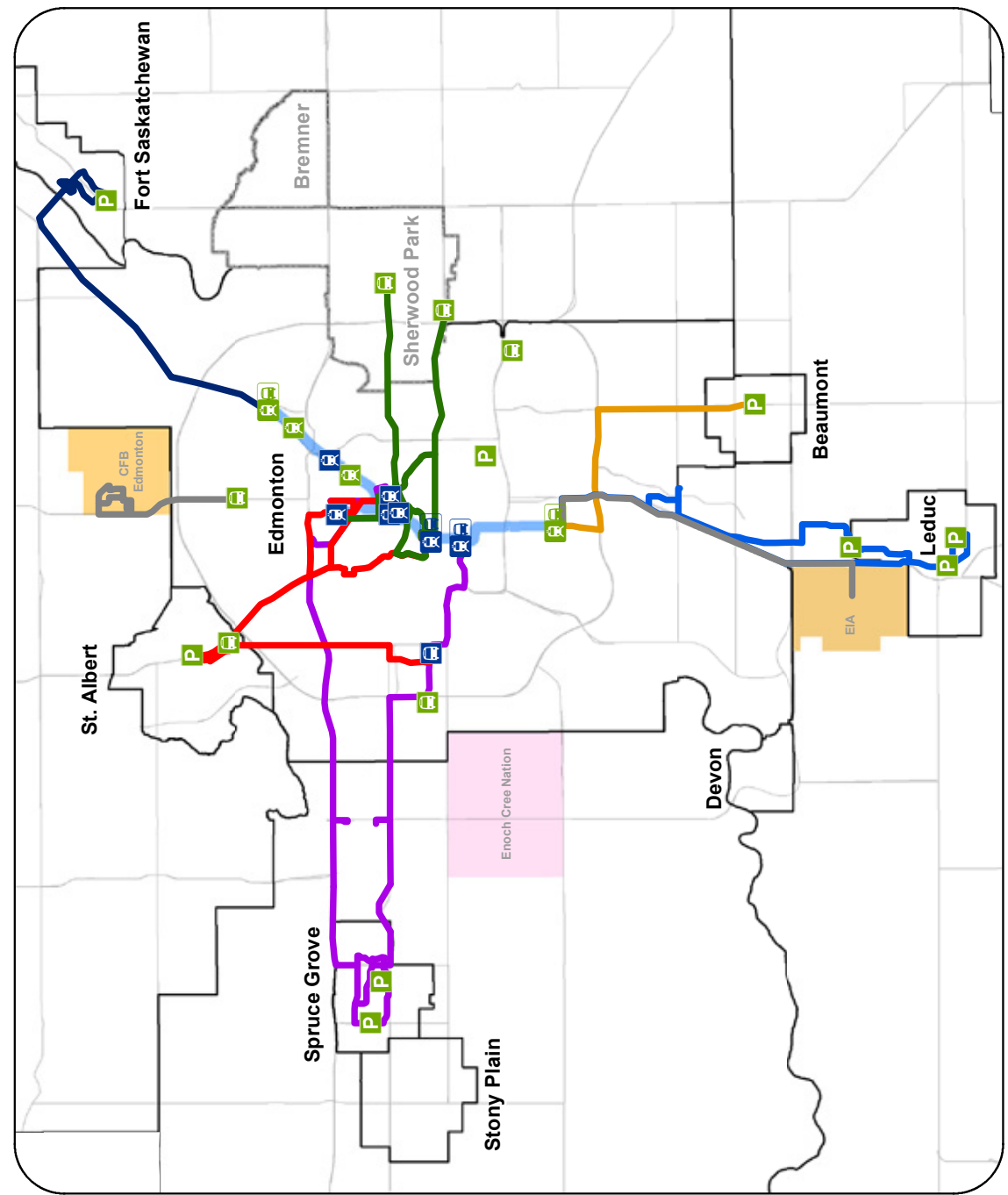
## REGIONAL MAPS

- MAP 1** REGIONAL ROADS
- MAP 2** AIR AND RAIL FACILITIES
- MAP 3** REGIONAL TRANSIT
- MAP 4** TRANSIT PARK AND RIDE (2010)
- MAP 5** MAJOR WATER BODIES
- MAP 6** MAJOR WATER BODIES AND WATERSHEDS
- MAP 7** WATERSHEDS AND PLANNING BODIES
- MAP 8** SOLID WASTE FACILITIES
- MAP 9** PLANNING ENTITIES FOR SOLID WASTE
- MAP 10** FACILITIES AND PLANNING ENTITIES FOR SOLID WASTE
- MAP 11** REGIONAL FIRE STATIONS





Regional Transit Routes and Park & Rides



**Legend**

- EMRB Member Municipality
- Urban Service Area
- Regional Roads
- Federal Jurisdiction
- First Nations

**Stations and Park & Rides**

- LRT Station
- LRT Station (Park & Ride)
- Transit Centre
- Transit Centre (Park & Ride)
- LRT and Transit Centre
- LRT and Transit Centre (Park & Ride)
- Major Stop (Park & Ride)

**Regional Transit Routes**

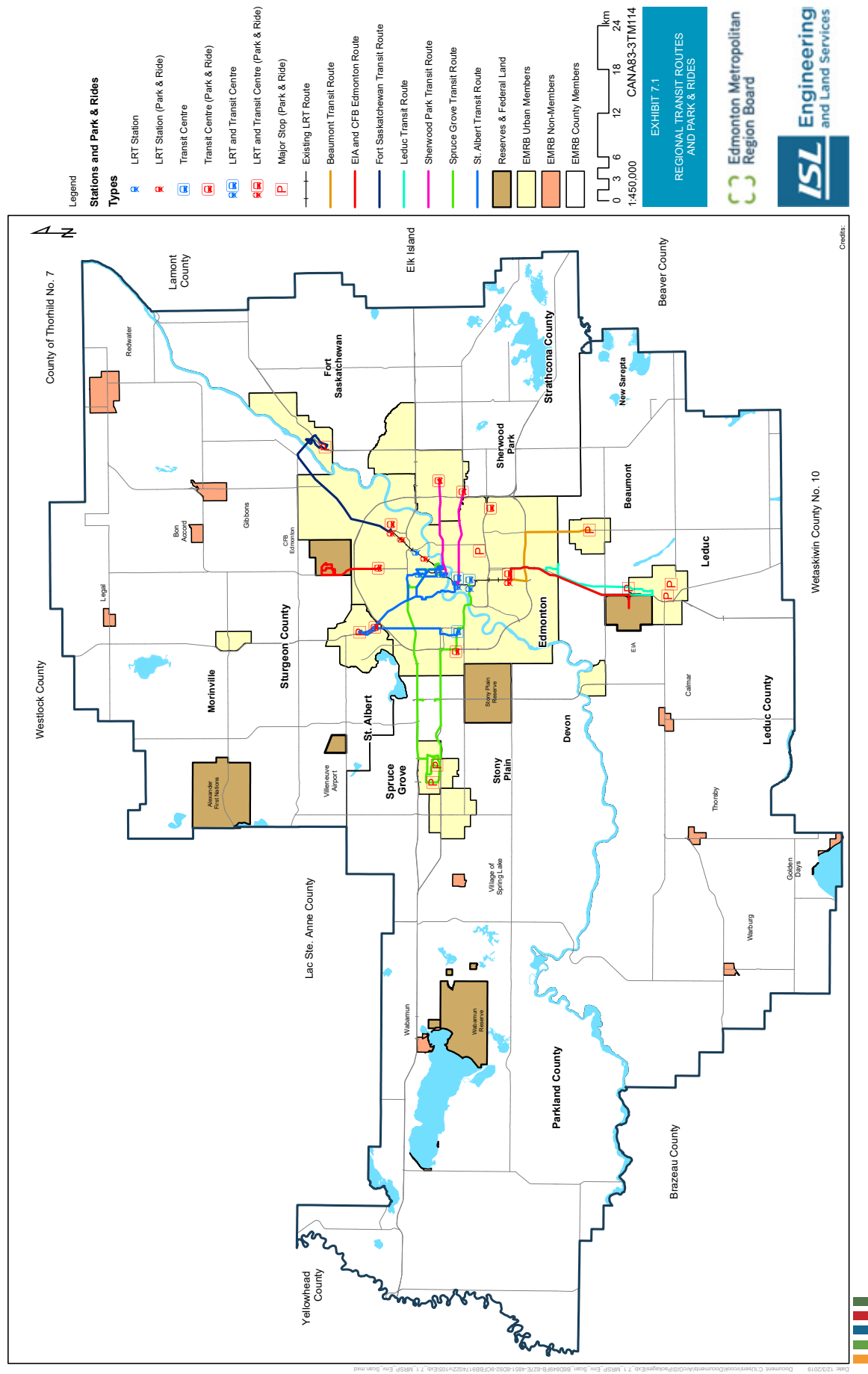
- EIA and CFB Edmonton Route
- Leduc Transit Route
- Beaumont Transit Route
- Fort Saskatchewan Transit Route
- Sherwood Park Transit Route
- St. Albert Transit Route
- Spruce Grove Transit Route
- Existing LRT Route

**Map Details:**

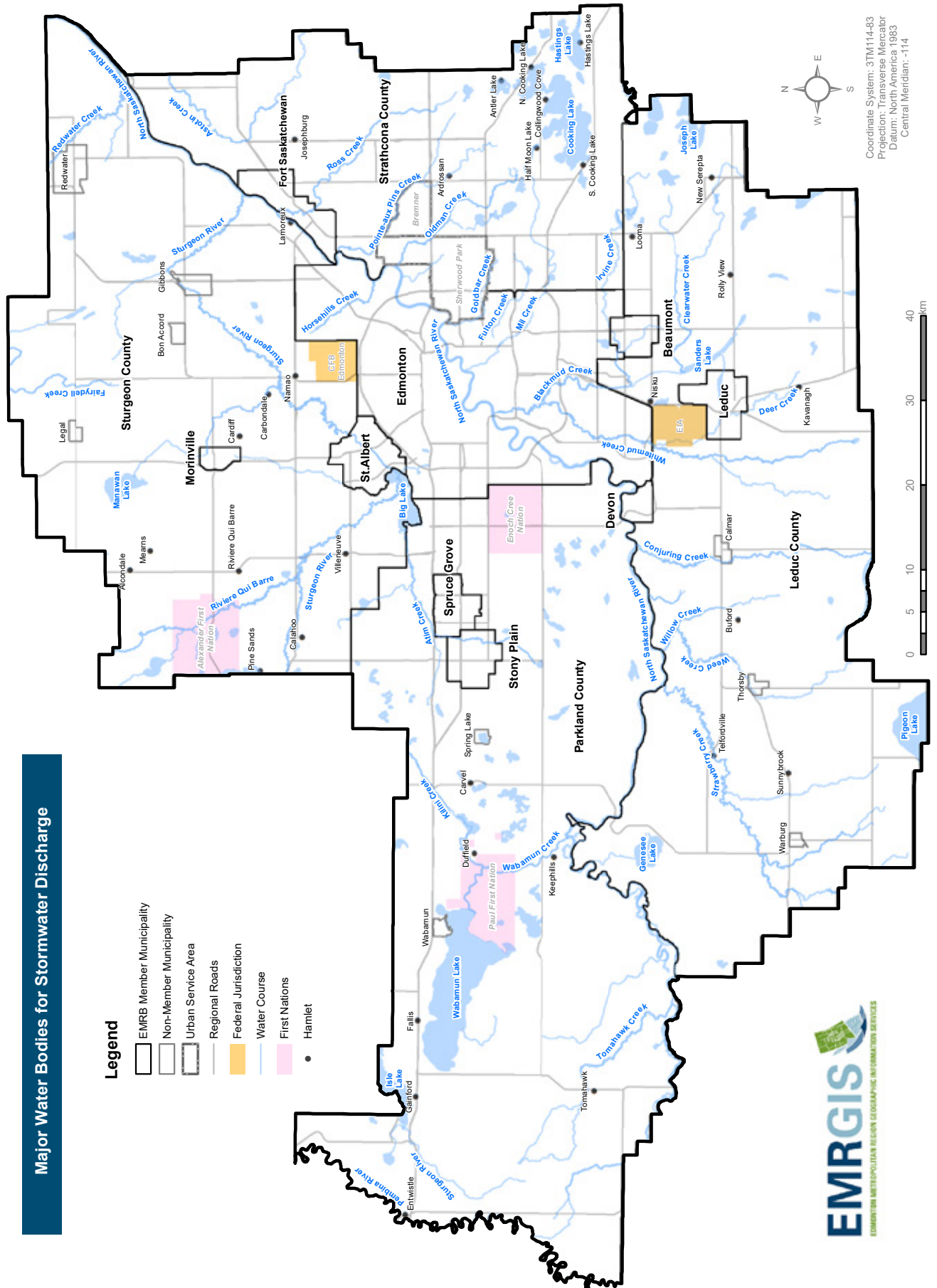
- Coordinate System: 3TM114-83
- Projection: Transverse Mercator
- Datum: North America 1983
- Central Meridian: -114

**Scale:** 0 to 16 Kilometers

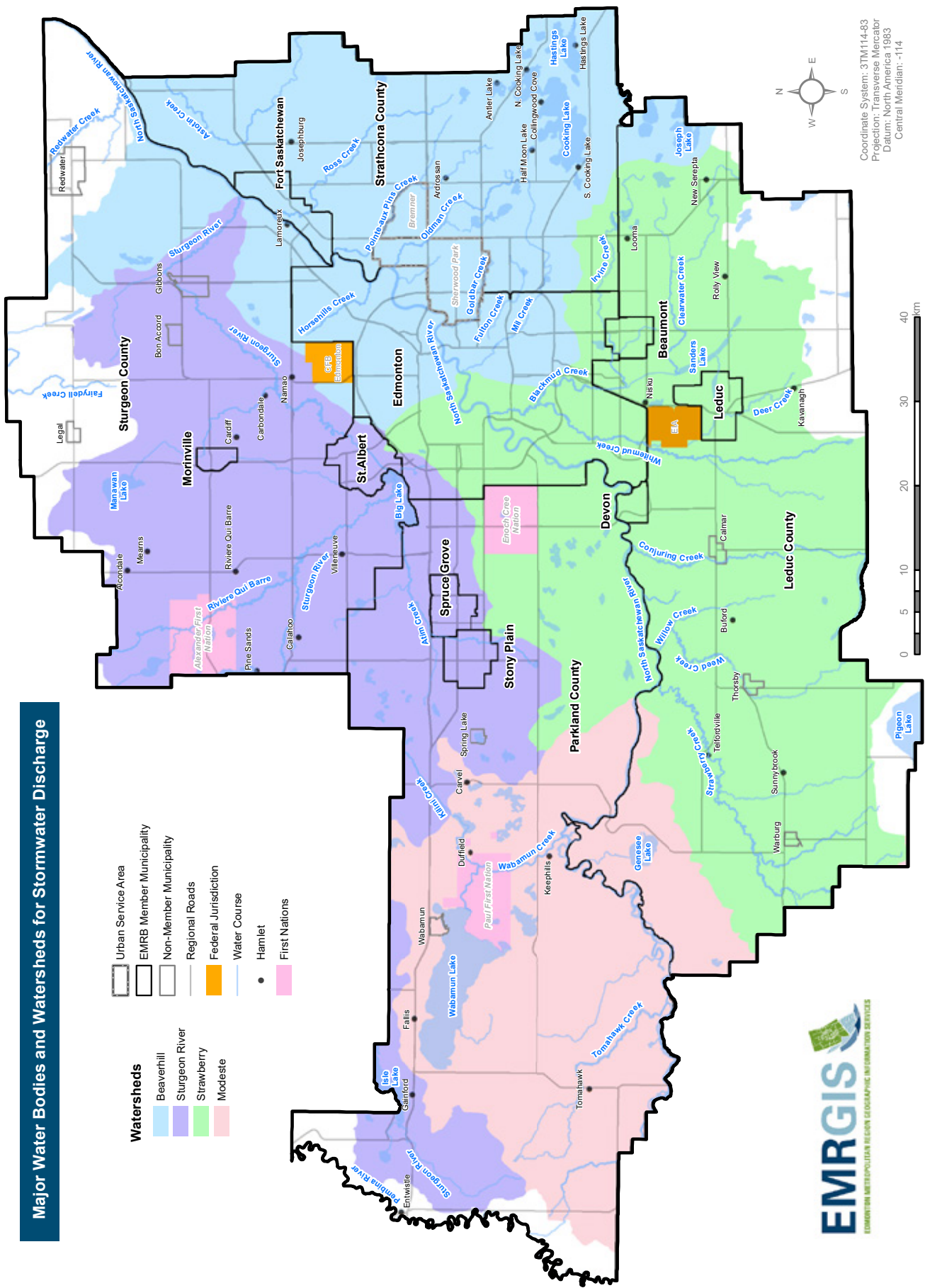
**EMRGIS**  
EDMONTON METROPOLITAN REGION GEOGRAPHIC INFORMATION SERVICES







Major Water Bodies and Watersheds for Stormwater Discharge

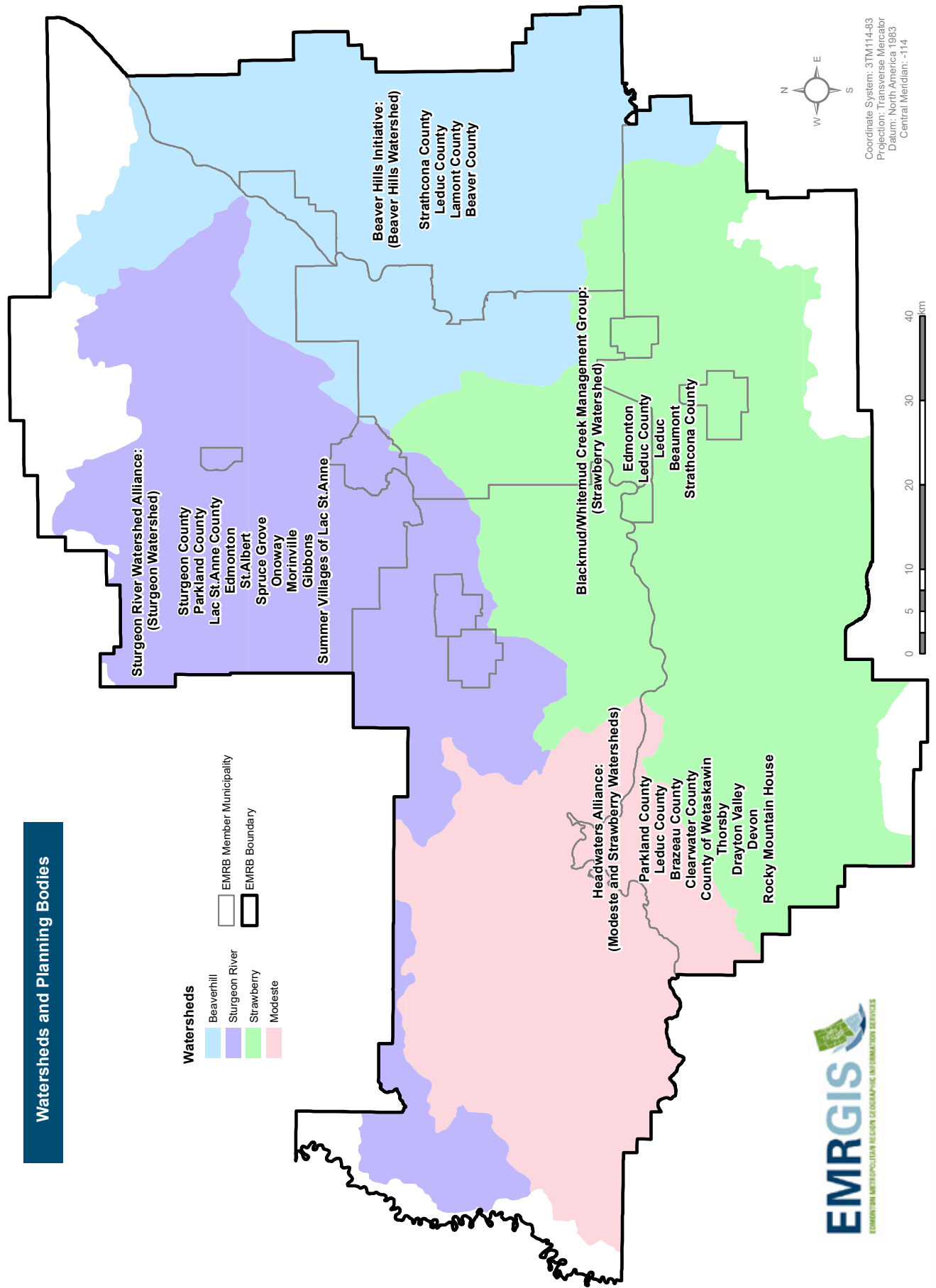


- Watersheds**
- Beaverhill
  - Sturgeon River
  - Strawberry
  - Modeste
- Urban Service Area
  - EMRB Member Municipality
  - Non-Member Municipality
  - Regional Roads
  - Federal Jurisdiction
  - Water Course
  - Hamlet
  - First Nations



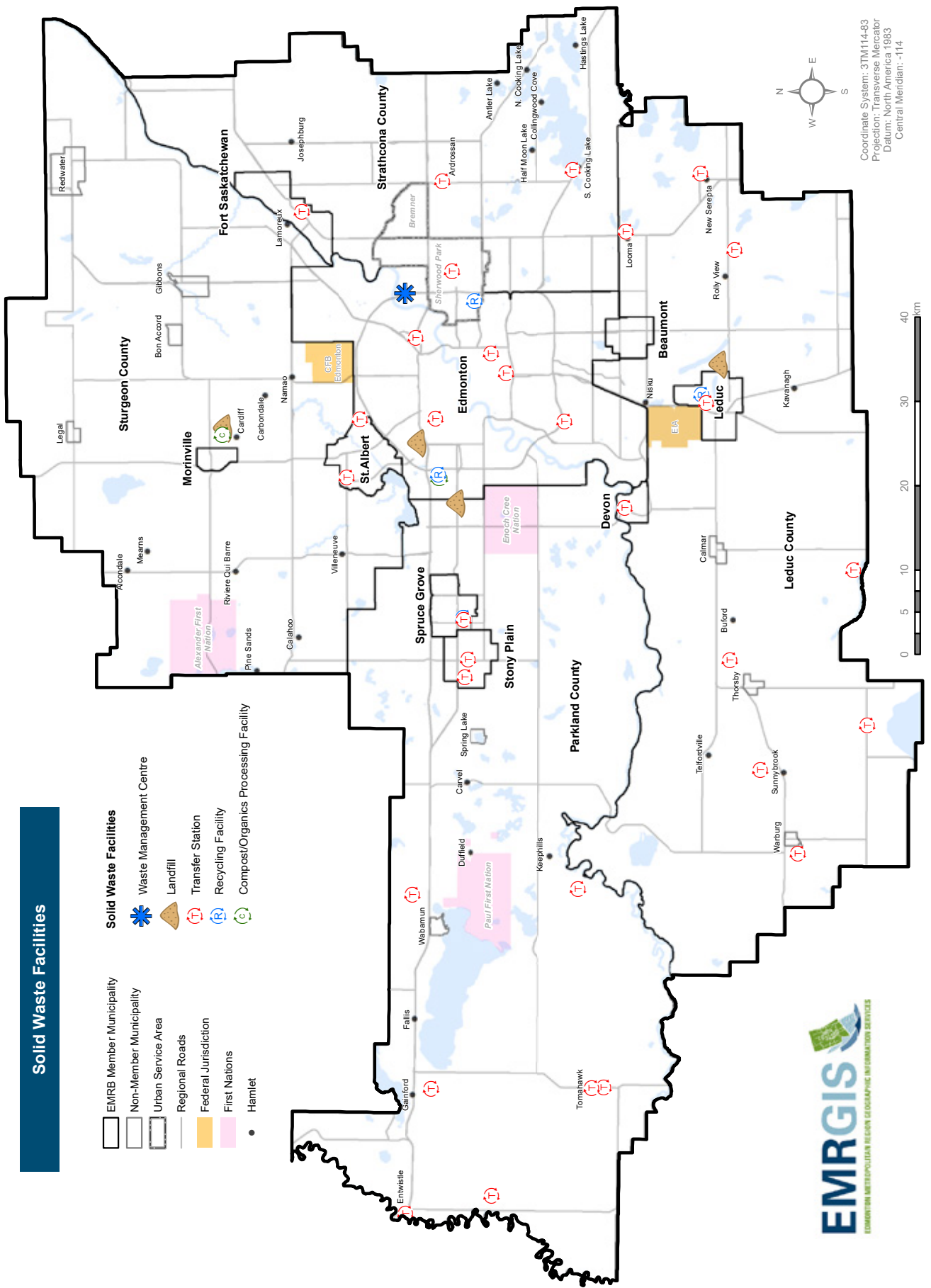
Coordinate System: 3TM114-83  
 Projection: Transverse Mercator  
 Datum: North America 1983  
 Central Meridian: -114

**Watersheds and Planning Bodies**



**Solid Waste Facilities**

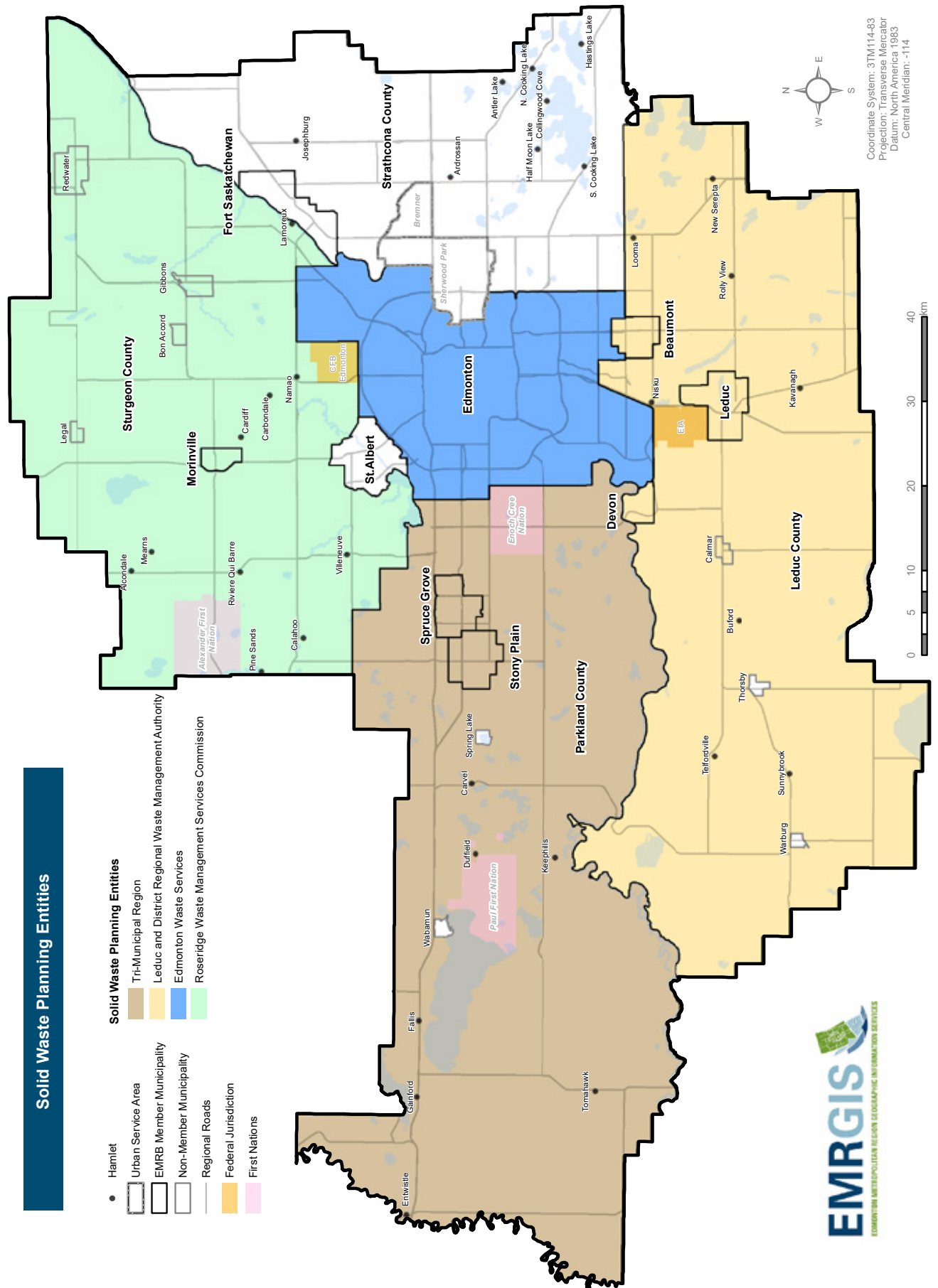
- EMRB Member Municipality
  - Non-Member Municipality
  - Urban Service Area
  - Regional Roads
  - Federal Jurisdiction
  - First Nations
  - Hamlet
- 
- Solid Waste Facilities**
  - Waste Management Centre
  - Landfill
  - Transfer Station
  - Recycling Facility
  - Compost/Organics Processing Facility



Coordinate System: 3TM114-83  
 Projection: Transverse Mercator  
 Datum: North America 1983  
 Central Meridian: -114





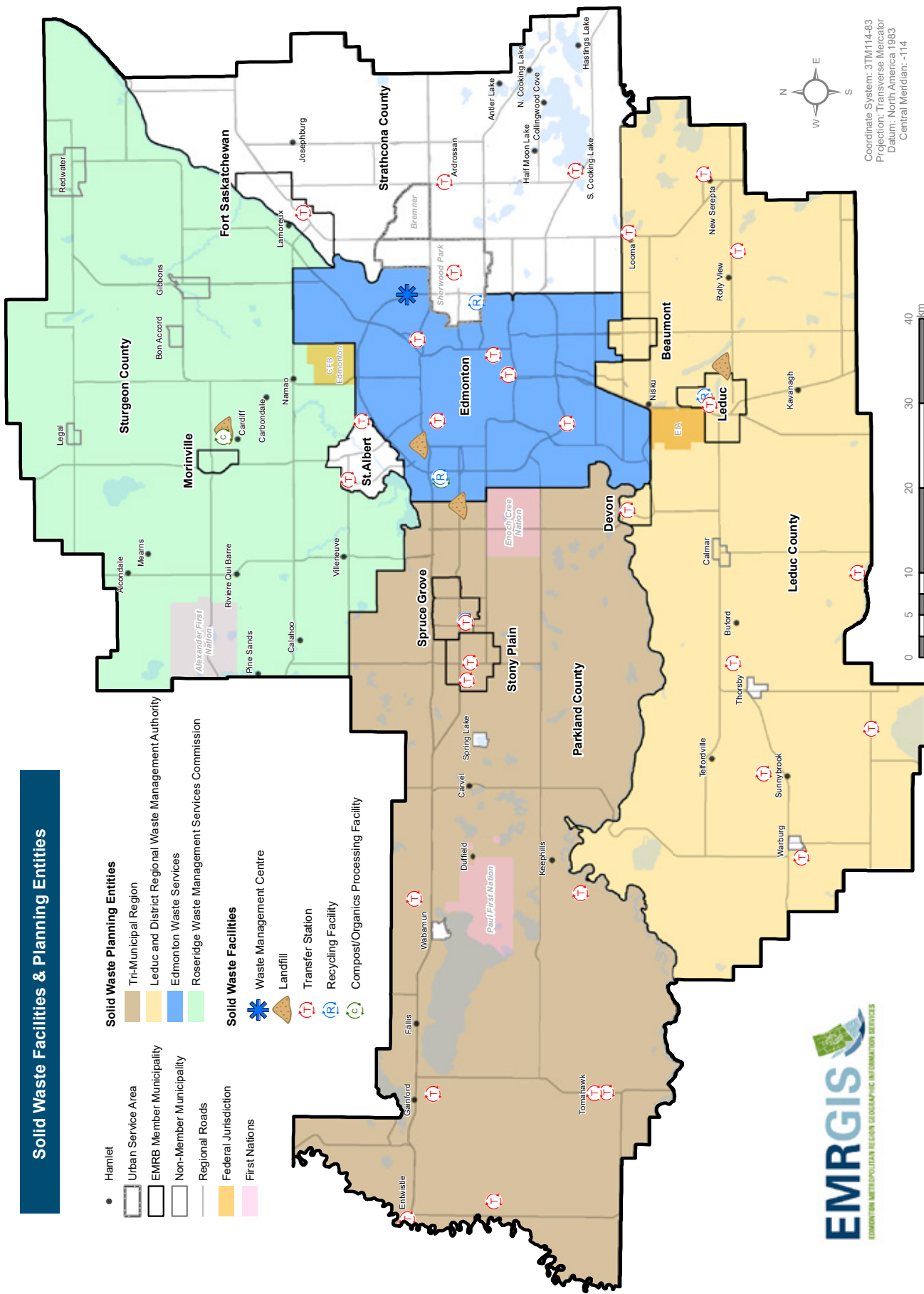


Coordinate System: 3TM114-83  
 Projection: Transverse Mercator  
 Datum: North America 1983  
 Central Meridian: -114

**Solid Waste Planning Entities**

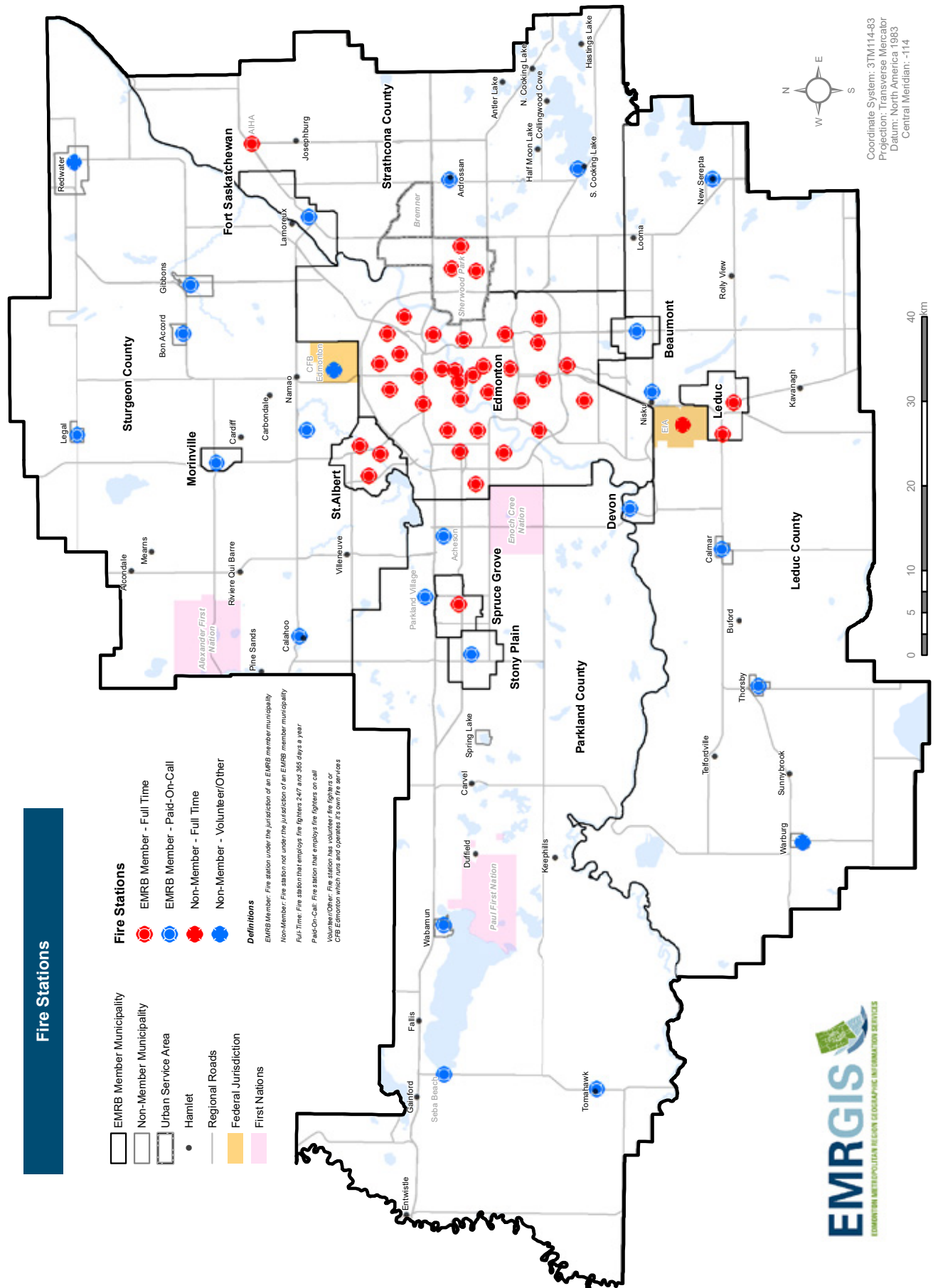
- Hamlet
  - ▭ Urban Service Area
  - ▭ EMRB Member Municipality
  - ▭ Non-Member Municipality
  - ▭ Regional Roads
  - ▭ Federal Jurisdiction
  - ▭ First Nations
- 
- Solid Waste Planning Entities**
  - ▭ Tri-Municipal Region
  - ▭ Leduc and District Regional Waste Management Authority
  - ▭ Edmonton Waste Services
  - ▭ Rosebidge Waste Management Services Commission





Solid Waste Facilities & Planning Entities





Coordinate System: 3TM114-83  
 Projection: Transverse Mercator  
 Datum: North America 1983  
 Central Meridian: -114





# APPENDIX G

## ENVIRONMENTAL SCAN

# ENVIRONMENTAL SCAN

The full document of the MRSP Environmental Scan - Final Report (February 2019) can be downloaded from the MRSP section of the [emrb.ca](http://emrb.ca) website.

**ISL** Engineering  
and Land Services

Inspiring sustainable thinking  
[islengineering.com](http://islengineering.com)

**Metropolitan Region Servicing Plan  
Environmental Scan**

Edmonton Metropolitan Region Board  
Final Technical Report  
ISL Engineering and Land Services

Edmonton Metropolitan  
Region Board  
Regional Action. Global Opportunity.

February 2019

# GLOSSARY OF TERMS, ABBREVIATIONS, AND ACRONYMS

<b>AEP</b>	Alberta Environment and Parks
<b>AEMA</b>	Alberta Emergency Management Agency
<b>Auto-Aid</b>	assistance that is dispatched automatically by a contractual agreement between two or more municipalities or other entities
<b>CAO Committee</b>	an EMRB Standing Committee comprised of Chief Administrative Officers from all 13 member municipalities
<b>Circular Economy</b>	an economic system aimed at eliminating waste and the continual use of resources emphasizing reuse, sharing, repair, refurbishment, remanufacturing and recycling to create a close-loop system, minimising the use of resource inputs and the creation of waste, pollution and carbon emissions
<b>CRB</b>	Capital Region Board
<b>CREPP</b>	Capital Region Emergency Preparedness Partnership
<b>DATS</b>	Disabled Adult Transit Service
<b>EIA</b>	Edmonton International Airport
<b>Emergency Management</b>	services in preparation and mitigation, prevention, response, and recovery to major incidents and disasters
<b>Emergency Medical Services (EMS)</b>	providing patient services that might include provision of assessment, treatment (e.g., first aid, basic and advanced life support) and other pre-hospital procedures, including ambulance transportation of patients
<b>Emergency Services</b>	police, protective services, fire, medical (i.e., EMS and ambulance) and emergency management services
<b>EMRB</b>	Edmonton Metropolitan Region Board
<b>EMRGP</b>	Edmonton Metropolitan Region Growth Plan
<b>EMRGIS</b>	Edmonton Metropolitan Region Geographic Information Services
<b>EPR</b>	Extended Producer Responsibility
<b>ERAA</b>	Edmonton Regional Airport Authority
<b>ERWAC</b>	Edmonton Region Waste Advisory Committee
<b>ETS</b>	Edmonton Transit Service

<b>Fire/EMS</b>	all fire services (e.g., suppression, alarms, and rescue) and emergency medical services (e.g., medical first response)
<b>Fire Services</b>	career, paid on call or volunteer fire prevention, public safety education, emergency incident response (i.e., fire and EMS) and mitigation, and other related activities, in support of the communities served
<b>ICI</b>	Industrial, Commercial, and Institutional
<b>IRTMP</b>	Integrated Regional Transportation Master Plan
<b>KPI</b>	Key Performance Indicator
<b>Local</b>	a single municipality
<b>LID</b>	Low Impact Development
<b>LRT</b>	Light Rail Transit
<b>MRSP</b>	Metropolitan Region Serving Plan
<b>Regional</b>	all of the 13 member municipalities of the Edmonton Metropolitan Region Board
<b>Regional Collaborative</b>	organized by service area, a group of representatives from all 13 member municipalities tasked to concentrate and focus regional efforts and expertise, provide a supportive forum to foster research and to build and share regionally relevant intelligence, and provide the data necessary for evidence-based decisions and actions in relation to municipal services
<b>RTSC</b>	Regional Transit Services Commission
<b>Solid Waste</b>	any garbage, refuse, sludge, and other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from residential habitation and industrial, commercial, mining, and agricultural operations
<b>Solid Waste Management</b>	the collection, transfer and disposal of all solid waste material, including garbage, recyclables, hazardous waste, and organic material
<b>Stormwater</b>	stormwater runoff from rainfall and snowmelt to a receiving water body
<b>Stormwater Management</b>	the collection, conveyance, storage, and discharge of stormwater runoff (e.g., rainfall, snow melt).
<b>Sub-Regional</b>	a group of two or more municipalities, not necessarily on the same border(s)
<b>TOD</b>	Transit-oriented Development

**Transportation – Roads**

the transportation system of roadways, air, and rail as well as active transportation

**Transportation – Transit**

the transportation system of transit

**Water**

potable water

**Wastewater**

wastewater generated from residential, industrial, commercial and institutional developments

**Waste Management Hierarchy**

The waste management hierarchy indicates an order of preference for action to reduce and manage waste with the aim to extract maximum practical benefits from products and to generate the minimum amount of waste



Edmonton Metropolitan  
Region Board

Regional Action. Global Opportunity.

## CONTACT US

#1100 BELL TOWER

10104 - 103 AVENUE

EDMONTON, AB T5J 0H8

P. 780.638.6000 E. [info@emrb.ca](mailto:info@emrb.ca)

[EMRB.CA](http://EMRB.CA)



[@AYEGMETRO](https://twitter.com/AYEGMETRO)









# Edmonton Metropolitan Region Board

Regional Action. Global Opportunity.

**ONE REGION...ONE VOICE**