Transit Committee

Agenda

Thursday, March 24, 2016
9:00 a.m. – 11:30 a.m.
La Cite Francophone – Hall Jean-Louis Dentinger
8627 rue-Marie Gaboury (91 Street), Edmonton

Agenda Items

1. Call to Order – Councillor Wes Brodhead, Chair

2. Chair Opening Remarks

3. Approval of Agenda – Councillor Wes Brodhead, Chair

4. Approval of Minutes of January 28, 2016 – Councillor Wes Brodhead, Chair

5. Priorities & Process regarding Growth Plan – Councillor Wes Brodhead, Chair
   5.1 Board Chair’s perspective – Mayor Nolan Crouse, Board Chair

6. Capital Region Transit Priorities – Councillor Wes Brodhead, Chair
   6.1 Draft 2016 Transit Priorities Project List – Neal Sarnecki, Project Manager

   **Recommended Motion:** That the Transit Committee receive the Draft 2016 Capital Region Transit Priorities Project List for information.

   6.2 Provincial Transit Engagement – Ashley Bhatia, Alberta Transportation

7. Transit Governance – Councillor Wes Brodhead, Chair
   7.1 Joint Edmonton/St. Albert Transit Discussions – Neal Sarnecki, Project Manager

   **Recommended Motion:** That the Transit Committee receive the update on the Joint Edmonton/St. Albert Transit Discussions for information.

8. Transit Committee Terms of Reference – Councillor Wes Brodhead, Chair
   8.1 Revised Terms of Reference: Biennial Chair/Vice Chair Review – Neal Sarnecki, Project Manager

   **Recommended Motion:** That the Transit Committee approve the amendment to the Transit Committee Terms of Reference to include a biennial review of the Chair/Vice Chair.
9. **Transit Policy** – *Councillor Wes Brodhead, Chair*

9.1 Draft Transit Policy – *Neal Sarnecki, Project Manager*

**Recommended Motion**: That the Transit Committee approve and refer the Transit Policy to the Governance, Priorities & Finance Committee for review, and ultimately the Capital Region Board for approval.

10. **Project Updates** – *Councillor Wes Brodhead, Chair*

10.1 Specialized Transit Needs Assessments (verbal) – *Neal Sarnecki, Project Manager*
10.2 HOV/Transit Priority Study (verbal) – *Neal Sarnecki, Project Manager*
10.3 Household Travel Survey (verbal) – *Neal Sarnecki, Project Manager*

**Recommended Motion**: That the Transit Committee receive the Transit Committee project updates for information.

11. **Growth Plan Update 2.0** – *Councillor Wes Brodhead, Chair*

11.1 Task Force Update/Transportation Working Paper – *Sharon Shuya, Project Manager*

**Recommended Motion**: That the Transit Committee receive the Growth Plan Update 2.0 update for information.

12. **Adjournment** – *Councillor Wes Brodhead, Chair*
Transit Committee

Thursday, January 28, 2016
9:00 a.m. – 11:30 a.m.
Strathcona County Community Centre – Rooms 3 & 4
401 Festival Lane, Sherwood Park, AB

Members:
Wes Brodhead, City of St. Albert (Chair)
Dave Anderson, Strathcona County
Susan Evans, Sturgeon County
Glen Finstad, City of Leduc (alternate)
Gale Katchur, City of Fort Saskatchewan
Andrew Knack, City of Edmonton (alternate)
Searle Turton, City of Spruce Grove

Guests:
Ashley Bhatia, GOA - Transportation
Brian Botterill, Strathcona County
Wade Coombs, Strathcona County
Gibby Davis, City of Edmonton
Brianna Franz, GOA - Transportation
Ettore Iannacito, CRP/GOA - Transportation
Patrick Inglis, City of Spruce Grove
Judy Koschade, Town of Bruderheim
Mike Koziol, WSP/MMM
Marnie Lee, Strathcona County
Kathy Lewin, Town of Beaumont
Kasey Machin, City of Edmonton
Chad Paddick, City of Fort Saskatchewan
Nisha Patel, Strathcona County
Glenn Tompolski, City of St. Albert
Karl Tracksdorf, WSP/MMM
Mike Vivian, City of Edmonton
Tim Vrooman, Town of Morinville
Kevin Wenzel, City of Leduc
Forest Yang, Strathcona County

1. Call to Order

Chair, Wes Brodhead called the meeting to order at 9:00 a.m.

2. Chair Opening Remarks
3. Approval of Agenda

It was approved by unanimous consensus that the Transit Committee agenda of January 28, 2016 be approved.

4. Approval of Minutes, November 26, 2015

**Motion:** That the Transit Committee minutes of November 26, 2015 be approved as amended.

**Moved by:** Mayor Gale Katchur, *City of Fort Saskatchewan*

**Decision:** Carried unanimously

5. Transit Committee Terms of Reference

5.1 Review of Terms of Reference

It was approved by unanimous consensus that the CRB Administration will review adding a clause with respect to the bi-annual review of the Chair and Vice Chair in accordance with CRB Policy G012 section 4.

6. CRB/CRP Transit Policy Workshop

6.1 December 4, 2015 Workshop Meeting Notes

**Motion:** That the Transit Committee receive the CRB/CRP Transit Policy Workshop meeting notes for information, and refer them to the Capital Region Board for information.

**Moved by:** Councillor Dave Anderson, *Strathcona County*

**Decision:** Carried unanimously

7. Project Updates

7.1 Specialized Transit Needs Assessments

7.2 Transit Priorities List

7.3 HOV/Transit Priority Study

7.4 Household Travel Survey

**Motion:** That the Transit Committee receive the Transit Committee project updates for information.

**Moved by:** Alderman Searle Turton, *City of Spruce Grove*

**Decision:** Carried unanimously
8. Growth Plan Update 2.0

8.1 Task Force Update

**Motion:** That the Transit Committee receive the Growth Plan Update 2.0 update for information.
**Moved by:** Councillor Dave Anderson, *Strathcona County*
**Decision:** Carried unanimously

9. Adjournment

**Motion:** That the Transit Committee meeting be adjourned.
**Moved by:** Councillor Dave Anderson, *Strathcona County*
**Decision:** Carried unanimously

Meeting adjourned at 9:50 a.m.

**Next Meeting:** March 24, 2016 at 9:00 a.m., La Cite Francophone – Hall Jean-Louis Dentinger

Committee Chair, Councillor Wes Brodhead
Draft 2016 Capital Region Transit Priorities Project List

Recommended Motion

That the Transit Committee receive the Draft 2016 Capital Region Transit Priorities Project List for information.

Background

- On December 2, 2015, the Board Chair sent an update list of regional GreenTRIP priorities for the second call for applications. As of September 2015, all seven of the Capital Region Transit priorities received approval for funding.

- On October 27, 2015, the provincial government released the 2015/16 Provincial Budget. While it did indicate that there would be a 3rd call for GreenTRIP applications, CRB Administration was advised that the Capital Region allotment had been reached and that no further funding requests would be considered. However, the budget did include new funding for “Municipal transit initiatives: $480 million, the majority of which is new funding starting in 2016-17, to support regional, urban and rural transit.”

- On December 4, 2015, the Honourable Brian Mason, Minister of Transportation and Infrastructure advised the Joint CRB/CRP Transit Workshop attendees that $330 million for new municipal transit initiatives and $16 million for rural bus services would be available in the new year following a stakeholder engagement process and the development of funding criteria.

- The Transit Advisory Group met on February 19, 2016 to review the previous GreenTRIP priorities and prepare a new list of priorities for 2016 (see Attachment 1).

- The Alberta government launched the provincial transit engagement program on March 1, 2016. The purpose of the consultation program is to give Albertans a say about funding criteria for new municipal transit initiatives and rural bus services, as well as input into a new provincial transit strategy. An announcement regarding the funding criteria is targeted for summer 2016.

Rationale

- The updated list of transit priorities ensure the most current projects have been identified in preparation for the new funding program. Once the program criteria are established the priority list will be revisited by the Transit Advisory Group to confirm the eligibility of the projects for funding.

Attachments

1. Draft 2016 Capital Region Transit Priorities Project List
## 2016 Capital Region Transit Priorities Project List

<table>
<thead>
<tr>
<th>Regional Ranking</th>
<th>Municipality</th>
<th>Project</th>
<th>Shovel Ready</th>
<th>Weighted Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Edmonton</td>
<td>All other LRT projects</td>
<td>N</td>
<td>8.55</td>
</tr>
<tr>
<td>2</td>
<td>Strathcona</td>
<td>Ordze Rd Transit Center renos to support double decker buses</td>
<td>Y</td>
<td>7.93</td>
</tr>
<tr>
<td>3</td>
<td>St. Albert</td>
<td>North Transit Centre and Park &amp; Ride</td>
<td>N</td>
<td>7.50</td>
</tr>
<tr>
<td>3</td>
<td>Edmonton</td>
<td>Heritage Valley Park &amp; Ride</td>
<td>N</td>
<td>7.50</td>
</tr>
<tr>
<td>5</td>
<td>Fort Saskatchewan</td>
<td>Bus Purchase for local service</td>
<td>Y</td>
<td>6.94</td>
</tr>
<tr>
<td>6</td>
<td>St. Albert</td>
<td>Bus purchases (2016-2022) Electric</td>
<td>Y</td>
<td>5.72</td>
</tr>
<tr>
<td>7</td>
<td>Strathcona</td>
<td>Bus storage, maintenance &amp; office - expansion/renos/upgrades</td>
<td>N</td>
<td>4.89</td>
</tr>
<tr>
<td>8</td>
<td>Strathcona</td>
<td>Intelligent transportation system (Smart Bus)</td>
<td>Y</td>
<td>3.36</td>
</tr>
<tr>
<td>9</td>
<td>St. Albert</td>
<td>Transit garage expansion</td>
<td>N</td>
<td>3.26</td>
</tr>
<tr>
<td>10</td>
<td>Regional</td>
<td>Lifeline service for municipalities (&lt; 3500 pop.) Study in progress</td>
<td>N</td>
<td>3.22</td>
</tr>
<tr>
<td>11</td>
<td>St. Albert</td>
<td>LRT design and construction (Campbell Rd to North St. Albert)</td>
<td>N</td>
<td>2.85</td>
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<tr>
<td>12</td>
<td>Edmonton</td>
<td>Regional Park &amp; Rides</td>
<td>N</td>
<td>2.50</td>
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<tr>
<td>13</td>
<td>Strathcona</td>
<td>Baseline Road transit priority corridor</td>
<td>N</td>
<td>1.91</td>
</tr>
<tr>
<td>14</td>
<td>St. Albert</td>
<td>Downtown parking structure (500 Spaces)</td>
<td>N</td>
<td>0.81</td>
</tr>
</tbody>
</table>

**Definitions:**

- **Shovel Ready** mean the project is ready for Tender in 2016, and in the case of Bus Purchases, orders are pending.

March 24, 2016
Amended Transit Committee Terms of Reference

Recommended Motion

_That the Transit Committee recommend the Capital Region Board approve the amended Transit Committee Terms of Reference._

Background

- On October 9, 2014, the Capital Region Board approved the Transit Committee Terms of Reference (TOR).

- On January 28, 2016, the Transit Committee reviewed its Terms of Reference. It was noted by CRB Administration that the Leadership section of the TOR lacked the biennial review of the chair and vice chair of the committee, a requirement found in all other committees of the Board. The Committee requested CRB Administration add a clause to the TOR to be consistent with the other committees.

Attachments:

1. Amended Transit Committee Terms of Reference – March 24, 2016
2. Amended Transit Committee Terms of Reference – March 24, 2016 – Track Changes
BACKGROUND

This committee provides leadership and strategic oversight of regional transit projects to support the implementation of the Intermunicipal Transit Network Plan.

MANDATE

Reporting to the Board, this standing committee will be responsible for the following:

- To provide strategic advice about the future direction of Intermunicipal transit service that will enable the CRB to achieve its economic, social and environmental objectives, advocating for transit as a convenient and competitive mode of transportation.
- To provide leadership in the planning and implementation of Intermunicipal transit service to support the mobility needs of residents and visitors to the Region.
- To ensure the region’s transit plans are integrated with the Land Use and Transportation Infrastructure Plans for the region.
- To ensure transit plans are incorporated into regional highway plans to allow for alternate modes of transportation for the efficient movement of people throughout the region.
- To ensure policies are developed to support Transit Oriented Development in the region.
- To provide strategic oversight for the implementation and delivery of regional intermunicipal transit services through various studies, projects, policy frameworks and measurement tools that support effective management of public transit, including special transit services for persons with disabilities.

MEMBERSHIP

Membership for this committee requires the participation and expertise of the existing transit operators in the region and those who currently contract with the existing operators. It will consist of seven members: Edmonton, Fort Saskatchewan, City of Leduc, St. Albert, Spruce Grove, Strathcona County and Sturgeon County. Membership will be reviewed by the Board, every two years.

LEADERSHIP

At its first meeting, the committee will select its Chair and Vice-Chair from amongst its membership. If there is a change in the committee’s membership, the committee should review and select its Chair and Vice-Chair. At the end of a two year period, once the committee membership has been reviewed by the Board, the committee will also review and select its Chair and Vice-Chair.

SUPPORT/RESOURCES

The CEO will support this committee, drawing upon CRB administration as required.
This committee will also be supported by consultant resources, and others as determined by its mandate and the Board’s approved business plan and budget. The Chief Executive Officer may establish an administrative working or advisory group as deemed necessary to support a committee project.

**Meeting Frequency**

It is proposed that this committee meet bi-monthly or at the call of the Chair as warranted.

**Authority**

All meeting groups established by the Board are considered advisory bodies to the Board and therefore must, by a passed motion, provide recommendation(s) to the Board for decision.

**Ex-officio**

The Board Chair will be considered non-voting ex-officio member of this committee.

Whenever viable, Provincial and/or key stakeholder representatives will be invited to attend committee meetings as ex-officio members to contribute their expertise and knowledge towards a particular outcome.

**Decision-Making**

Decisions, recommendations and actions determined by the committee will be driven by the desired outcome to do what is in the best interest of the Capital Region. Only elected officials that are designated as voting members of the committee, or their designated alternate, may vote. Each member will have one vote. All motions must be moved by a voting member. Motions require a majority of members in attendance to pass (50 percent plus one).

The approved Governance Model for Transit requires a majority vote (four of seven) including unanimous support of the three transit operators (Edmonton, St. Albert, and Strathcona County) on matters pertaining to conventional transit.

**Quorum**

Quorum is defined as 50 percent plus one of standing membership.

**Dispute Resolution**

The committee Chair is accountable for ensuring effective and collaborative committee operations and decision-making. Where the Chair’s efforts are unable to resolve a dispute, the matter will be brought to the Board for discussion and resolution.

**Communications**

The Chief Executive Officer will act as the single point of contact for all communications requests for this committee and will determine the appropriate level of response required. This may result in responses being required from the Board Chair/Interim Chair, the committee Chair, members, Board administration, or the Chief Executive Officer.
STATUS OF MEETINGS

Committee meetings are open to the public including all members of the CRB (elected officials and their alternates), administrative representatives from all CRB member municipalities and members of the public. Individuals from the Province, industry, the general public or other Board/committee members may be invited to participate in specific agenda items. Committee minutes are public records.

Section 602.08 (1) of the Municipal Government Act (MGA) states that the committee may close all or part of their meetings to the public if a matter to be discussed is within one of the exceptions to disclosure in Division 2 of Part 1 of the Freedom of Information and Protection of Privacy Act.

All members (elected and administrative) attending the in camera session shall respect the confidentiality of the in camera items.

REPORTING

This committee is expected to provide the Board, through established communication channels and schedules, sage advice and recommendations to resolve existing issues, and progress as it relates to its mandate and expected deliverables.

MEETING AGENDAS AND MINUTES

All meeting agendas, minutes, reports, briefings and supporting documentation will be provided in an electronic format.

In general, meeting agendas and pre-read materials, where available, will be provided at least one week in advance of a scheduled meeting.

The committee will include its meeting minutes with the next Board meeting agenda package.

Nolan Crouse, Board Chair
BACKGROUND

This committee provides leadership and strategic oversight of regional transit projects to support the implementation of the Intermunicipal Transit Network Plan.

MANDATE

Reporting to the Board, this standing committee will be responsible for the following:

- To provide strategic advice about the future direction of Intermunicipal transit service that will enable the CRB to achieve its economic, social and environmental objectives, advocating for transit as a convenient and competitive mode of transportation.
- To provide leadership in the planning and implementation of Intermunicipal transit service to support the mobility needs of residents and visitors to the Region.
- To ensure the region’s transit plans are integrated with the Land Use and Transportation Infrastructure Plans for the region.
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**MEETING FREQUENCY**

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The approved Governance Model for Transit requires a majority vote (four of seven) including unanimous support of the three transit operators (Edmonton, St. Albert, and Strathcona County) on matters pertaining to conventional transit.

**QUORUM**

Quorum is defined as 50 percent plus one of standing membership.

**DISPUTE RESOLUTION**

The committee Chair is accountable for ensuring effective and collaborative committee operations and decision-making. Where the Chair’s efforts are unable to resolve a dispute, the matter will be brought to the Board for discussion and resolution.

**COMMUNICATIONS**

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The committee will include its meeting minutes with the next Board meeting agenda package.

Nolan Crouse, Board Chair
Capital Region Board Transit Policy

Recommended Motion

That the Transit Committee approve and refer the Transit Policy to the Governance, Priorities & Finance Committee for review, and ultimately the Capital Region Board for approval.

Background

- The Capital Region Board has established a consistent approach and philosophy for the development, review and approval of policies according to Policy G001 - Policy Development. Since 2010, the Board has approved corporate policies pertaining to administration, finance, and governance.

Rationale

- The Board recently approved a GIS Policy, and the Housing and Land Use & Planning Committees are also preparing policies to guide decision making.

- The attached policy is to be reviewed by the Transit Committee for recommendation to the Governance Priorities & Finance Committee recommendation to the Board for approval.

Attachments:

1. G021 Transit Policy
PURPOSE
To have in place a transit policy for the Capital Region Board to assist in the movement of people.

POLICY
The Capital Region Board (CRB) shall have in place a plan for an intermunicipal transit network that enables the Capital Region to achieve its economic, social, and environmental objectives by making transit a convenient and competitive mode of transportation, as directed by “Appendix 3 Capital Region Inter-municipal Transit Network Plan” of the “Growing Forward Capital Region Growth Plan”.

GUIDELINES
1. The CRB shall help ensure the integration of public transit infrastructure and land use development occurs in the region.
2. The CRB shall strive to improve the availability of intermunicipal transit to all areas and communities within the Capital Region.
3. The CRB shall recognize that in villages and towns that offer transit, and where mass transit is not applicable, transit may include vans, carpooling, and small buses for the sole purpose of movement of people.
4. The CRB shall identify and help protect existing and future intermunicipal transit corridors and opportunities for Transit Oriented Development (TOD) near transit centres.
5. The CRB shall encourage and support high density development along transit corridors and at TODs.
6. The CRB shall help determine the degree of intensity for each transit corridor and TOD based on its location.
7. The CRB shall support making access to various forms of transit barrier free.
8. The CRB shall support the planning of multi-modal transportation options.
9. The CRB shall prioritize investments in multi-modal transportation, Park-and-Ride lots, public transit, buses, vans, and transit related services.
10. The CRB shall advocate for direct public infrastructure investment to support the development of transit corridors and transportation projects that support regional growth policies.
11. The CRB shall support transit service that expands and extends the level, quality and range of public transportation options available to serve the region.
12. The CRB shall support planning for expanded transit options through investment in alternative transit methods (e.g. designated transit lanes, high-occupancy vehicle (HOV) lanes, Park-and-Ride facilities, vans, buses, LRT, etc.).

13. The CRB shall support public transportation options that are environmentally friendly and safe.

14. The CRB shall have in place a Transit Committee with its primary mandate defined as transit and further defined within its Terms of Reference which shall be reviewed and updated on a regular basis.

PRINCIPLES

This policy will be realized through the guiding principles defined in the Capital Region Intermunicipal Transit Network Plan:

Capital Region Intermunicipal Transit must be:

1. Integrated with land use planning in the Region

2. Integrated with regional roadway investments to ensure that the benefits of transit service are levered to the greatest extent possible through the protection of transit corridors and provision of Transit Priority Measures within regionally significant roadway and highway corridors.

3. Easily expandable as the Region grows and travel demands evolve.

4. Complimentary to regional, local, and private services.

5. Flexible enough to support local community needs and services within the regional network.

6. Enabling for equitable, barrier-free access to mass transit for persons with disabilities.

7. Available to persons with disabilities, where warranted and practical.

8. Mandated by relevant legislation, administered through an appropriate regional governance structure, and characterized by cooperation and coordination.

9. Recognized by funders and the public as a valuable public service.

10. Supported through dedicated cost-sharing from all levels of government, industry, and users.

11. Delivered fairly and equitably to citizens of the Capital Region recognizing the shared benefits of a well-planned and integrated regional transit network.
<table>
<thead>
<tr>
<th>Date</th>
<th>Status</th>
<th>Comments</th>
</tr>
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Nolan Crouse, Board Chair
Capital Region Board
Growth Plan Update

Transportation Systems
Working Paper

Hassan Shaheen, P. Eng.

January 29, 2016

DISCLAIMER

The analysis and recommendations presented in this Working Paper are expressed by the author and have not been endorsed by the Capital Region Board. Rather, its purpose is to provide background and information on key issues facing the Capital Region. The information contained in this document is being used as part of the input and decision process to inform policy directions the CRB may choose to consider as part of updating the regional growth management plan.

This document has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Capital Region Board (CRB) does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose. Readers are responsible for assessing the relevance and accuracy of the content of this publication. CRB will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this publication.
1.0 INTRODUCTION

1.1 Background and Context.

The Edmonton Metropolitan area has evolved over the last 50 years with growth being accommodated in a highly dispersed fashion. The majority of population and employment growth occurred in Edmonton's suburbs and in the surrounding urban communities, such as St. Albert, Spruce Growth, Stony Plain, Beaumont, Leduc, Fort Saskatchewan and Sherwood Park. This dispersal of people and jobs over time has been supported by expansion and enhancement of the region’s highway network along with the addition of a major ring road, Anthony Henday Drive, around the City of Edmonton, beginning in the early 1990’s. This has resulted in highly dispersed travel patterns wherein vehicular travel between spatially dispersed residential and employment areas became the predominant pattern.

In virtually all areas of the Region, the provincial grid of primary and secondary highways has enabled the region’s urban and rural residents to access their jobs, social and recreational needs by car with relative ease across the region. Both provincial highways and certain designated municipal roadways allow heavy vehicles to access industrial and commercial areas as well as travel cross-country between regional municipalities and access the broader Canadian and American markets.

The City of Edmonton has experienced perhaps the most dramatic and complex evolution in its transportation system. Up to the early 1970’s Edmonton planned to address its growth related transportation challenges through aggressive freeway plans that if implemented would have transformed the city in ways that would be unrecognizable today. As a result of extensive public and political debates, Edmonton decided to largely abandon the freeway based transportation system and opted for a system that would rely more heavily on an arterial roadway based roadway network and significant investment in LRT and bus-based transit. Today, Edmonton has few freeways (in sharp contrast to Calgary). With the adoption of its most recent Transportation Master Plan and its long term LRT Network Plan, the City has affirmed its commitment to addressing the growth in travel demand through investment in public transit in general and LRT in particular.

St. Albert and Strathcona County have also developed transit systems that have offered local and inter-municipal transit service for several decades. The inter-municipal services provided by St. Albert and Strathcona County serve mostly downtown Edmonton commuters and the central post-secondary education institutions through express bus services. A number of other urban municipalities offer commuter bus service in and out of Edmonton: Spruce Grove, City of Leduc/Leduc County, Fort Saskatchewan and Sturgeon County with more anticipated in the near future (Beaumont).

In addition to municipal and provincial transportation facilities, the region benefits from a number of federally regulated facilities. This includes the Edmonton International Airport and several smaller airports, as well as major CN and CP railway corridors, yards and intermodal terminals. These air and rail facilities are critical ingredients to the region’s current and economic future economic well-being. The Edmonton Airport while has a transit link, it is not robust.
Prior to the formation of the Capital Region Board, there has been no formal regional transportation planning framework that would foster a coordinated response to the region’s transportation challenges. In recognition of the need for a Regional Transportation Plan, the CRB supported and approved the Integrated Regional Transportation Master Plan (IRTMP) in 2011. The IRTMP filled a strategic gap in the regional planning framework by defining a regional transportation system that serves the region’s land use and transportation needs in a manner that is consistent and compatible with the objectives of the Capital Region Growth Plan. The Policy Framework in the IRTMP further supported the need to manage land use distribution patterns to reduce reliance on automobiles, increase transit accessibility, improve connectivity and accessibility to community amenities, services, and employment, and identify and protect transit corridors. Finally, the IRTMP recommended Ten Year Investment Priorities. Amongst the new roads and infrastructure improvements identified were a number of Transit Priority projects on select intermunicipal corridors. Building on the work of the IRTMP, a prioritization exercise was undertaken by the CRB in 2014 and 2015 to analyze roadway and transit projects and rate them as to their alignment with the policy framework in the IRTMP. This then led to a list of regional transportation priorities that is now annually provided to the Province for consideration in its three year capital planning process.

By 2044, as the region grows to a population of 2.2 million people and about 1.2 million jobs, there will be a commensurate increase in travel to be accommodated in an environment whereby major population and job locations will remain dispersed. Efforts to accommodate growth and related travel patterns will require multifaceted approaches that involve land use changes, changes to the supply of transportation facilities and services and changes to transportation demand throughout the region. In other words, modal shifts from primarily a vehicle focus to one that better incorporates all forms of transportation.

1.2 Scope and Purpose of this Paper

This working paper discusses the major challenges, policy issues, and potential responses that the Capital Region Board needs to consider as it formulates a more integrated approach to planning its regional transportation systems as part of the Growth Plan Update. Consultation with various CRB stakeholders to inform this update has identified the following goals with respect to the Transportation Systems policy area:

- An efficient, cost-effective and integrated regional transportation network to support growth and connect the region
- Coordination of land use and transportation networks to support the efficient movement of people, goods and services through the region and beyond
- A mode shift towards transit, active transportation and shared auto use at levels that recognize the different urban and rural contexts within the region

Specific priority issues that these stakeholders wish to have addressed are:

- Encourage a mode shift to transit, high-occupancy vehicles and active transportation networks appropriate to the scale of the community or area within the metropolitan region.
- Continued investment in the regional highway system to support the efficient movement of goods between regional municipalities and external markets.
• Coordinate land use and transportation to support the efficient and safe movement of people, goods and services.
• Develop and maintain municipal and inter-municipal transit systems to create an integrated and seamless inter-municipal transit network which includes servicing rural communities.
• Establish transit funding priorities and a long-term investment strategy with regional and provincial alignment.
• Explore long-term potential for regional commuter rail service.
• Ensure efficient access to the EIA and other regional airports in a manner that is commensurate with their roles within the region.

2.0 Future Regional Transportation Policy Questions

In the context of the history of development patterns and transportation infrastructure and services in the Capital Region, there are a number of key policy questions that need to be addressed in the Growth Plan Update to manage the mobility and accessibility challenges that will face a region with 2.2 million people and 1.2 million jobs. These are:

**Congestion:** At a point in the region’s history where traffic congestion has reached relatively high levels, how do we come to terms with it? And how do we manage it and moderate its perceived negative effects on the region?

**Multi-jurisdictional Planning:** How should the provincial highway network within the region be integrated and aligned with the strategic direction of the Capital Region Board’s Integrated Regional Transportation Plan?

How does the Region’s transportation system, within urban and rural areas, evolve and mature over time given where it is today?

• Road network expansion?
• Major interchanges? Bridges?
• Transit, its role and manifestation?
• Goods movement and Over-dimensional vehicle routes?
• Access to major inland port facilities such as EIA and major truck and rail terminals?
• Potential co-location of major transportation facilities with energy corridors?

**Measures to encourage a Mode Shift in some urban areas:** In the context of an irreversibly dispersed mix of people and jobs, how can a meaningful mode shift away from cars and towards transit and active modes be affected?

• Provision of high quality transit? LRT, BRT, transit priority measures, other?
• Moderation in and more targeted investment in the regional roadway network?
• Changes in Land Use regulations?
• Changes in parking regulations?
• Congestion Management and Roadway Pricing strategies?
• Customer satisfaction ensuring efficient, cost-effective, safe and integrated systems.
**Policy Mechanisms:** What Land Use Policies/ Strategies measures can be adopted to assist in resolving the mobility questions at play?

- Changes and Land Use regulations?
- Changes in parking policies both within and outside of land use regulations?
- Where is integration of the system addressed? Governance?

**Funding/ Financing?**

- What funding/financing mechanisms can be drawn upon to alleviate the chronic shortage of infrastructure funding?
- What are the opportunities for cost and revenue sharing within the region to facilitate a more equitable allocation of the costs and benefits of regional transportation infrastructure?

**Economic Development & Resiliency?**

- How can the region’s transportation facilities be improved to attract people, jobs and commerce to the Capital Region?
- What level of transportation facilities and services are required to sustain a high quality of life and vibrant business environment in the capital region?
- How can the movement of goods by road, rail and air be supported?

**Environmental Impacts?**

- What types of transportation infrastructure choices do we need to make to moderate the environmental impacts of our choices; this includes impact on air quality, greenhouse gases, land, natural features and wildlife?

3.0 Discussion of Key Policy Issues

3.1 Managing Traffic Congestion

“Traffic Congestion” occurs when the demand for roadway capacity exceeds the supply; that is, there are too many vehicles wishing to use the roadway network than its capacity. In the vast majority of cases, traffic congestion is most prevalent during the hours of the day when people travel to or from work, although there are other periods of the day when traffic congestion can also be observed. As the Capital region has grown, so have traffic volumes and related traffic congestion. Congestion has become commonplace within many urban municipalities, but also on many regional highway links in rural municipalities of Parkland County, Sturgeon County, Strathcona County, Lamont County and Leduc County.

While there is usually no single indicator of a region’s level of traffic congestion’s recent advances in technology have allowed companies like TomTom, the manufacturer of GPS based mapping and navigation products to provide city-wide estimates of changes in traffic delay and system-wide indices of congestion. According to TomTom, Edmonton has the fifth highest levels of congestion in Canada after Vancouver, Toronto, Montreal and Calgary. Traffic data for major arteries within the larger urban areas in the Capital Region and highways linking the urban municipalities indicate that many roads are operating at or near capacity; i.e. speeds are slow and delays at intersections are high. The significant investments in transportation
infrastructure have not been able to keep up with traffic growth and maintain reasonable levels of service - this is common to major cities and regions.

The topic of traffic congestion has elicited decades' worth of research and analysis aimed at understanding its causes and managing its effects. The effects of congestion are often felt in number of different ways, including:

- Slower and more erratic travel speeds
- Stop and go traffic flow
- Higher wear and tear on vehicles
- Higher fuel consumption
- Higher incidence of collisions
- Higher levels of pollution and greenhouse gas emissions
- Higher human health risks due to air pollution, collisions and congestion
- Higher costs for the transport of goods

Researchers studying the phenomenon of congestion have compared it to one where a public good is offered to users free of charge, with the result that demand is unfettered and unmoderated by any incentives or disincentives. Researchers from the University of Toronto and the London School of Economics have found that the “number of vehicle-kilometers traveled (VKT) increases in direct proportion to the available lane-kilometers of roadways.”

Results from previous (1994, 2005) Edmonton Region Household Travel Survey illustrate that vehicular trips in the region are increasing in number, are getting longer and also getting slower, despite the fact that hundreds of millions of dollars have been invested to add additional roadway infrastructure in the form of additional links, interchanges and other infrastructure.

The traditional means of dealing with traffic congestion by policy makers has been to simply add more road capacity; i.e. build more roads, widen existing ones and or construct interchanges that allow conflict free travel at intersections. This strategy has a history of being somewhat effective for a short to moderate period of time, before the demand for the added capacity again reaches a point where it exceeds the supply and where more fiscal resources are demanded to address the problem.

During the evolution of urban areas, it is often economically and politically feasible during a community’s early development to expand roadway capacity, but much more difficult during a more mature stage of its development. The Capital Region has reached the point where some communities have already reached or are reaching the point where they are contemplating a different approach to addressing traffic congestion. For example, Leduc County, the City of Leduc and Sturgeon County now provide transit service to some of their residents and/or employment areas, while Parkland County is considering strategies for how to provide transit service to the Acheson Industrial Park.

Edmonton began its paradigm shift in the mid 1970’s and culminated with an explicit policy on congestion management and mode shift in its 1999 Transportation Master Plan; Edmonton reaffirmed and strengthened this policy direction with its 2008 Transportation Master plan and Long Term LRT Network Plan. It is noteworthy that Edmonton has understood that managing congestion involves more than just providing transit and other alternatives; it involves also being clear about what is done (or not done) on the roadway network with respect to provision of new roadway capacity. In Edmonton’s case improvements to the roadway network are focused on
key goods movement routes such as Whitemud Drive, Yellowhead Trail 170 street and 75 street, as well as some corridors that connect to this “Inner Ring Loop” such as Manning Drive in the northeast and Terwillegar Drive/170 Street in the southwest. Outside of Edmonton, both the City of St Albert and Strathcona County have invested in transit services to alleviate commuter traffic and provide an alternative to private auto transportation.

Outside the larger urban municipalities areas in the Capital Region, Alberta Transportation focuses on improvements to its highway network to serve both person and goods movement with particular focus on linking communities together and ensuring good levels of service on high priority economic corridors such highway connections to Alberta’s Industrial Heartland (Highways 15, 21), Fort McMurray (Highways 28/28A, 63), Grande Prairie (16/16A, 43) and Calgary (QE2 Highway).

The current IRTMP adopted as part of the CRB Growth Plan reflects an approach that is aimed at raising the region’s commitment to a greater mode shift to transit coupled with targeted improvements to the roadway network that recognizes the context and different evolution of communities outside Edmonton.

Going forward, it is clear that both the general public and elected officials are increasingly motivated to adopt an ever-increasing commitment to public transit as an alternative to private auto transportation in larger urban areas. More importantly, transit is in addition to being viewed as having congestion mitigation role is also viewed as an economic development tool in terms of enhancing labour mobility and supporting access to businesses throughout the region.

While provision of a broad range of transit services and other types of shared ride services are often employed to mitigate and manage traffic congestion in urban settings, they are often accompanied by other measures aimed at making transit more viable and realistic for travelers.

These other strategies generally fall within the realm of moderating the demand for automobile travel and include:

- **Limiting or moderating investment in roadway infrastructure by being highly selective about where roadway investment is made; this can be deliberate or out of necessity due to lack of financial resources (Edmonton, Vancouver, Toronto….)**
- **Pricing the use of certain roadway facilities (e.g. tolls; Vancouver, Toronto…)**
- **Pricing of emissions such as carbon or other substances (e.g. BC’s carbon tax)**
- **Adjusting the supply (and) price of public and commercial parking (Edmonton, Calgary, Vancouver….)**
- **Restricting car use in some areas (car-free zones such as London, Singapore and many others…)**
- **Incentivizing car sharing, (such as HOV lanes, HOT lanes, car sharing schemes, employer sponsored ride pooling schemes etc.)**
- **Staggered work hours and telecommuting, (many cities)**

While the above noted strategies may seem aggressive for the CRB context, it should be noted that a number of these strategies are already being practiced within the region (limited provision of new roadway capacity, reduction of road capacity along LRT corridors, reduced parking standards, staggered work hours, telecommuting, and private car share clubs).
The application of certain technologies is also another option for managing congestion. Transportation agencies around the globe will avail themselves of a wide range of technologies aimed at improving the efficiency of transportation systems. These technologies are typically referred to as Intelligent Transportation Systems (ITS) and include a variety of sensors, cameras, communications equipment, traffic control devices and changeable message signs that allow the owner agency to dynamically manage capacity, speed, and collision information and to communicate that information to users of the transportation system on a real-time basis. These types of technologies are beginning to be used in the Capital Region and could offer benefits on the region’s highways and be of assistance to communities such as Spruce Grove, Stony Plain, Devon, Morinville, Leduc, Fort Saskatchewan, Nisku (Leduc County) and Sherwood Park (Strathcona County).

A major barrier to successful implementation of measures to moderate car use is a society-wide attitude towards car use being a relatively unfettered right. This makes such measures politically challenging to implement unless there is fairly explicit voter support. As well, there is some research that suggests that any measures that are applied may have unintended consequences on social equity with respect to different segments of society.

### 3.2 Affecting a Mode Shift to Transit

As noted under the “Managing Traffic Congestion” topic, affecting a mode shift from autos to transit is one of the fundamental principles underpinning both the current Growth Plan and the current update. While there has been a commitment to a mode shift in the Capital Region and a strong fiscal commitment to LRT and expanding bus transit service, the actual change in traveler behavior has, for a variety of reasons, occurred only very slowly. In Edmonton, daily transit mode share is near 10% and in the low single digits for St Albert and Sherwood Park.

As noted earlier, the evolution of the Capital Region’s growth has been one of continued dispersal of people and jobs. This pattern of development has made it difficult for transit service to compete with the private automobile mode, both in terms of convenience and in terms of cost to the municipality. Efforts to increase development densities in built-up areas and in new Greenfield areas should begin to accelerate the pace and extent of a mode shift to transit over time.

Major employment areas such as Alberta’s Industrial Heartland, the Nisku Business Park, Acheson Industrial Area and Edmonton International Airport are by virtue of the nature of these assets well removed from population centres and requiring of some buffers to a greater or lesser degree.

So, in light of these challenges, what can CRB municipalities do to effect a real change in travel choice by its population?

**Transit Service…**

Edmonton is aggressively pursuing buildout of its LRT network to provide a high level of transit mobility and accessibility to all sectors of the City including a possible extension into St. Albert. While this initiative is extremely positive for the region, it is one that is highly capital intensive and one that will take decades to complete. The pursuit of a city-wide LRT network in Edmonton will need to be supported by enhancements to the surface bus system to better feed the LRT lines that are being built. At the moment, there are very few on-street transit supportive features...
that would allow better bus access to the LRT stations; there may be an opportunity to explore such options within Edmonton’s recently initiated Transit Strategy project.

Likewise, there appears to be no pre-LRT strategy in place to begin to effect change in travel choice in advance of LRT deployment. It may be prudent for some CRB member municipalities to consider an interim regional BRT system which would offer LRT-like service to more sectors of the region so as to provide a higher quality transit offering pending completion of the LRT network, or in sectors where LRT may never be viable.

At a regional level, there are a number of inter-municipal transit services that operate independently without any common operating standards or protocols with respect to services, fares and branding. CRB has already completed a number of studies (Transit Governance, Regional Transit Fare Strategy, Regional transit standards) which offer guidance on how the disparate transit services can be better integrated to provide regional transit patrons with a better transit travel option. This represents “low hanging fruit” that could and should be implemented.

In rural areas of the Capital Region (Parkland County, Sturgeon County, Leduc County Lamont County, Strathcona County) there are increasing demands for publically or privately provided “lifeline transit” services that would provide residents of smaller urban centres with once or twice weekly service into larger centres to access medical appointments, shopping, banking, social or other personal needs. In addition, there is a need for provision of “specialized transportation services” to cater to the needs of disabled individuals.

Land Use and Related Issues

As noted earlier the extent of low density development, as well as the highly dispersed urban footprint in the Capital Region are serious inhibitors to efforts to increase transit use. Regional municipalities that wish to support transit service within the thirty-five year timeframe of the growth plan will need to aggressively pursue development and redevelopment in areas that can be effectively served by bus transit and LRT. This applies in particular to Edmonton, St. Albert, Sherwood Park, Fort Saskatchewan, Spruce Grove, Stony Plain, Beaumont and the City of Leduc;

On the commercial/office/ business land use front, a serious effort at moderating car use and incentivizing transit use is related to the density of such land uses in suburban settings as well as the convenience and cost of driving (and parking) to store a vehicle at its destination. Measures to increase densities both in existing built-up areas and in Greenfield areas will make it more efficient for transit service to capture ridership.

The availability and cost of parking is a significant determinant of mode choice. In suburban settings, office/commercial land uses are typically built at low FARs with high amounts of usually free parking. North American society has been conditioned to view parking as a resource that is an essential determinant of business success and a near personal right. The organization of our land use patterns around a significant supply of free parking, particularly in suburban settings, permeates the entire land development/ real estate valuation and financing apparatus. Changing this dynamic to affect changes in mode choice behaviour will take time and significant leadership, but is a necessary ingredient to changing modal choices; the imperative for such change is particularly pressing in all suburban-styled developments throughout the region.
On the transit service front, while 400m and 800m are typical walking distance thresholds for accessing bus and LRT service respectively, these should be seen as maximums rather than desirable walking distance targets. Instead, regional municipalities that have or aspire to have transit service should strive to locate higher density developments directly adjacent to, or within 200m of an arterial transit corridor. All too often medium density housing sites are located deep within a neighborhood where transit route is required to follow a circuitous, time consuming route to capture ridership – this needs to change.

Other Measures

In addition to the transit related and land use measures listed above, effecting meaningful changes to mode choice may over time require the Region’s municipalities to collectively or individually consider some of the more difficult congestion management strategies listed in section 3.1.

3.3 Support to Economic Development and Resiliency

It is often stated that a good transport system is crucial to the economic health and well-being of a municipality. While this general statement implies a simple relationship, this relationship is complex and by no means easy to implement or to extract benefits from. There are many definitions and perceptions of what constitutes a “good transportation” system, with many voices choosing to equate freedom from congestion as the key determinant. If it were as simple as freedom from congestion, then most economically successful communities would fail that test.

For the purpose of this working paper, support for the region’s economic development and resiliency will be discussed in terms other than congestion relief.

The Capital Region in general and its constituent municipalities in particular constitute the economic engine of northern Alberta, providing goods and services to the northern part of the province but also serving significant export markets for raw, finished and semi-finished materials. The region’s transportation system plays an instrumental role in supporting industries and services that serve these local and global markets.

The region’s transportation system provides important linkages between producers, exporters and shippers that allow goods to be moved locally from raw to finished state or to be transported directly in their raw form. As such, the network of roads and highways in the region needs to accommodate goods movement efficiently to minimize cost and to maximize the region’s competitiveness. An important component of the goods supply chain is the set of inland “ports” through which goods need to pass. The ports include:

- Major Truck terminals
- Rail yards and Intermodal rail terminals
- Airports (EIA, Villeneuve, Josephburg)
- Major industrial areas

In the context of efficient and cost-effective goods movement, the Region’s transportation system needs to ensure that there is an appropriate network of regional truck routes across the region; the current Growth Plan does not identify such a network. The regional goods movement network needs to include the key inland ports that bind and connect the network with the region’s markets, both in Alberta and abroad. The regional goods movement network should include regionally significant primary highways and arterials in the Region and will include well
known major arteries such as QE 2 Highway, Highway 16, Highway 28/28A, Highway 21, Highway 19, Highway 15, Highway 2, Terwillegar Drive/170 Street, Whitemud Drive, Yellowhead trail, 75 Street, Manning Drive and many other corridors.

In addition, there is a severe shortage of over-dimensional corridor routes within the region which imposes significant detour costs on local shippers in some industries.

The EIA is a unique and crucially important inland port for the Capital Region. Its uniqueness and importance in the future should not be underestimated. Its importance and value to the Region must be supported with good, reliable access for both passenger and freight movement on a 24/7 basis. Access to EIA can and should be enhanced on multiple fronts:

- Provision of high quality public transit access
- Provision of reliable and effective roadway and highway access from multiple sectors of the region.

The EIA is currently served by one main access route - the QE 2 Highway. This main highway is essentially the only viable route to the Airport from the region and the route’s resiliency is frequently undermined by traffic incidents and the absence of transit preferential features. Improvements that are targeted at the EIA should be identified, planned and programmed at least in part on the basis of its economic development benefits to the region as a whole. The improvements should include one or more high quality access routes to either side of QE2 Highway as well as transit preferential treatments on these routes.

3.4 Emerging Technologies

This working paper has already referenced Intelligent Transportation Systems as a suit of technologies whose use is likely to become more commonplace in the Capital Region in future. In addition to ITS technologies, there have been rapid advances in various on-vehicle technologies aimed at enhancing driving safety (Lane Keeping Assist, Blind-spot monitoring) and/or automating certain driving functions (dynamic cruise control, automating braking, fully autonomous vehicles). These technologies are evolving at a rapid pace and offer potentially significant benefits that include collision reductions, network-wide road capacity efficiencies and improved traffic flows. As these technologies become more prevalent, there are likely to be significant transitional and adaptation challenges particularly when there is a mixture of conventional, semi-autonomous and fully autonomous vehicles on the roads. Municipalities will likely be faced with a need to adjust their infrastructure and O&M practices to allow for more effective integration of these new technologies over time. In the area of land use regulation the emergence of electric vehicles will generate need for charging facilities and these could generate new development types that integrate electric vehicle charging facilities and obviate the need for purpose built charging stations.

Another area of technological advancement is the possibility of more frequent ride-sharing aided by ride hailing technologies similar to the Uber and Lyft apps. If ridesharing behaviours scale up to become more prevalent, they could reduce traffic volumes on the region's roads. With ride sharing becoming more popular, it may become cost-effective for municipalities to create HOV facilities throughout the region. At present, HOV facilities in the region are restricted to use by buses, taxis and bicycles. Ridesharing in high numbers could reduce car ownership levels with commensurate impacts on roadway infrastructure and other side effects.
As policy makers devote more attention to climate change and abating the growth of greenhouse gases, car manufacturers are increasingly but not uniformly developing electric vehicles. Together with changing policies relating to coal based power generation, the advent of electric vehicles has the potential to dramatically improve air quality, reduce greenhouse gas emissions and reduce traffic noise. In addition, they will reduce the soil contamination effects associated with conventional gas stations.

Railways play a significant role in supporting the Capital region’s economy. Both Canadian National and Canadian Pacific railways own and operate major railway facilities throughout the Capital Region that provide connections with major North American and Asian markets. In addition to the railways’ major and short-line trackage, there is a CN Intermodal yard in northwest Edmonton, a CP intermodal yard in south Edmonton, and the multi-commodity oil and gas distribution centre in Fort Saskatchewan. The effectiveness of the region’s goods movement system relies in part on the availability of appropriate road and rail infrastructure as well as appropriate integration of these interdependent freight movement modes. To that end, there need to be good connections between the road-based network of truck routes and the rail yards and intermodal terminals that serve as transfer points between the rail and trucking systems. In addition to facilitating good connections between modes, it is also important to resolve at-grade crossing conflicts between truck routes and rail lines within the Capital Region. At-grade rail crossings can be a source of significant delays to road based freight movement in the region particularly in light of the increasing lengths of freight trains. While the City of Edmonton has reviewed all at grade rail crossings and developed priorities for rail grade separations, a similar effort has not been carried out across the Region. Completing such a review for the region will need to involve multiple municipalities and the Province.

3.5 Funding of Transportation Infrastructure and Services

In Canada, there are only a limited number of funding sources for transportation capital projects and services.

Transportation infrastructure is typically funded through the following mechanisms which inevitably trace back to revenues from individual or business taxpayers. At the municipal level, capital projects and transportation operations (including transit) are funded from:

- Municipal property taxes
- Local improvement levies
- Business taxes and fees
- Levies from developers
- Municipal debt financing
- Grants from the provincial government
- Grants from the federal government

Municipalities in Canada do not have access to the wide range of funding mechanism available in the United States due largely to the constitutionally mandated devolution of powers in Canada; municipal authorities are defined by the provinces through the Municipal Government Act or similar legislation.

At the provincial level, transportation infrastructure is funded through revenues collected from individuals (income taxes and user fees) and businesses. More recently, the Government of Alberta has begun to fund construction of the Edmonton and Calgary ring roads through a
funding model typically referred to a public private partnership (PPP or P3). The P3 model adopted by the Province entails entering into a 30 year contract with a consortium of companies who agree to finance, design, build and operate (and maintain) the project for a period of 30 years; the province repays the consortium an annual amount over the 30 year term of the contract. The main advantage of such a model is that the province can stretch the time frame for payment over several decades rather than spending the entire capital cost of the project over the short construction timeframe of a project. In addition, the P3 model allows the province to transfer any construction and operational risks to the private consortium.

Municipalities in Alberta have very limited experience with P3 projects although Edmonton is in the process of engaging in a P3 process to build its Valley LRT line.

3.6 Rural Communities

Rural communities and those who live and work on the rural landscape play a vital role in the vibrancy and resiliency to Region as a whole. This is both culturally and economically. Alberta has a rich history in agriculture. This will continue and take on greater significance as the region’s population grows. Food production, water, resources and recreation are vital outcomes of what the rural landscapes provides. It also provides choice to the residences of the Region on where they wish to live and the rural communities also provide levels of service to support those who live and work on the rural landscape. Transportation choice is vital to ensuring these communities remain a core feature of the region. While the road network will continue to be the primary choice for transportation mode, other public or specialized transportation (life-line) will need to be considered to support seniors aging in place and flexibility for the citizens in the rural communities.

4.0 What are Other Regions Doing?

The issues and challenges facing the Capital Region are not unique; Canada's largest metropolitan areas experience the same issues with respect to high levels of congestion, lack of mobility options, limited capital and operating funds and very limited sources of alternative funding. Following are some of the initiatives across the country that showcases the range of approaches being taken to address the transportation needs of growing cities.

Ottawa

The City of Ottawa’s Transportation Master Plan (2013) was designed to support their Council’s “vision of a sustainable, resilient and liveable Ottawa. It incorporates the City’s goals for economic prosperity, environmental and social well-being, vibrant culture and identity.”

Ottawa’s Plan is underpinned by the following goals:

Create a supportive built environment
  - Use Planning Processes to Support Sustainable Choices
  - Foster development to support higher order Transit

Maximize walkability
  - Build a Continuous, Well Connected Pedestrian Network
  - Create a Walkable Environment
  - Improve Pedestrian Safety and Promotion
Develop a great cycling city
- Build and Maintain a Network of Quality Cycling Facilities
- Offer Attractive Intermodal Connections and Trip end Facilities
- Improve Cycling Safety and Promotion

Transform Ottawa’s transit system
- Expand the Rapid Transit and Transit Priority Network
- Integrate the Rapid Transit and Transit Priority Network into the Community

Provide safe and efficient roads
- Design and Build Complete Streets
- Strategically Modify Road Network
- Maximize Road Network Efficiency
- Maximize Road Safety for All Users
- Enable Efficient Goods Movement
- Protect Neighbourhoods from Undesirable Impacts
- Minimize Environmental Effects

Encourage sustainable mobility choices
- Offer Incentives, Promotion and Education
- Make Carpooling More Attractive
- Enhance City Parking Facilities and Services

Calgary
The City of Calgary’s Transportation Plan is underpinned by the following goals:

Transportation Goal #1:
Align transportation planning and infrastructure investment with city and regional land use directions and implementation strategies.

Transportation Goal #2:
Promote safety for all transportation system users.

Transportation Goal #3:
Provide affordable mobility and universal access for all.

Transportation Goal #4:
Enable public transit, walking and cycling as the preferred mobility choices for more people.

Transportation Goal #5:
Promote economic development by ensuring the efficient movement of workers and goods.

Transportation Goal #6:
Advance environmental sustainability.

Transportation Goal #7:
Ensure transportation infrastructure is well managed.
Winnipeg

The City of Winnipeg’s Transportation master plan offers the following “key directions” to guide the provision of transportation infrastructure and services:

**Integrating Transportation and Land Use**
Integration of transportation and land use planning ensures the vision for land use development for Winnipeg, as articulated in Our Winnipeg and Complete Communities is achieved by providing a transportation network that supports the urban structure and the concept of complete communities.

**Improving Travel Choices**
Providing opportunities to access multiple modes of transportation to people of all ages and abilities that will improve the quality of life, economic vitality, and system efficiency.

**Goods Movement**
Balancing the needs of efficient and sustainable goods movement with those of complete communities will allow the City to remain economically competitive while maintaining neighbourhood liveability.

**Regional Connections**
The provision of effective and efficient regional transportation links in the Capital Region is essential to economic prosperity.

**Parking**
Parking should facilitate access for bicycle and motor vehicle users of the transportation network to adjacent development in a manner that supports the concept of complete communities.

**Asset Management**
Continuing support for a transportation asset management program will enable the existing and future transportation infrastructure to be maintained in a state of good repair, while not compromising on safety, level of service, or the life expectancy of assets.

**Implementation, Funding, and Plan Monitoring**
It is essential to have a comprehensive implementation, funding, and plan monitoring framework as part of the transportation master plan. It provides guidance for the actions to be taken by different stakeholders and city agencies in the short, medium, and long-term. Most importantly, it provides the framework necessary to evaluate and monitor the progress of the plan.
5. Recommended Policy Directions

A scan of the transportation policies and practices in other jurisdictions, together with reference to the overall principles for the Growth Plan Update, that have already been approved, points to the following recommended transportation policy themes for the Capital Region:

- The region should plan a network of regionally significant roadway and transit corridors that support the region’s economic resilience and enables the movement and accessibility of people and goods to, from and within the region. The network of roadway and transit corridors should reflect and be consistent with the goal of fostering less reliance on the automobile and more reliance on transit, higher occupancy auto use and ridesharing options. As such, facilities such as a second regional ring road, which would foster further dispersal of growth and travel patterns and is discouraged. In addition, the plan should identify regional goods movement and over dimensional vehicle networks to effectively support the needs of businesses and heavy industry.

- The region should, through the provision of a network of transit facilities and services (LRT, Express and Limited Stop Bus Services, Specialized Transit Services, Transit Centres, Park and Ride lots, HOV facilities), encourage a mode shift to transit and active transportation modes appropriate to the scale of the community. This should include consideration of lifeline transit services and specialized transit services for rural communities.

- The region should pursue and implement a variety of traffic demand management strategies to optimize the effectiveness of the transportation system and to manage and shape travel choices toward higher occupancy modes.

- There should be a high degree of coordination and integration between transportation facilities/services and land use to support the efficient and safe movement of people, goods and services within a compact development footprint. This integrated approach needs to apply to existing urban areas and planned centres/nodes. This integration will typically take the form of higher density mixed use developments (residential/office/retail) adjacent to high quality (fast, reliable) transit service.

- The region should continue to plan and periodically update the regional transportation master plan (IRTMP) whose purpose is to align and coordinate municipal plans and actions as well as to influence provincial and federal funding priorities and choices.

- The Region, in partnership with the Province, should to consider alternative governance, funding and cost sharing models to affect a regional transportation system that fully and effectively responds to its challenges.