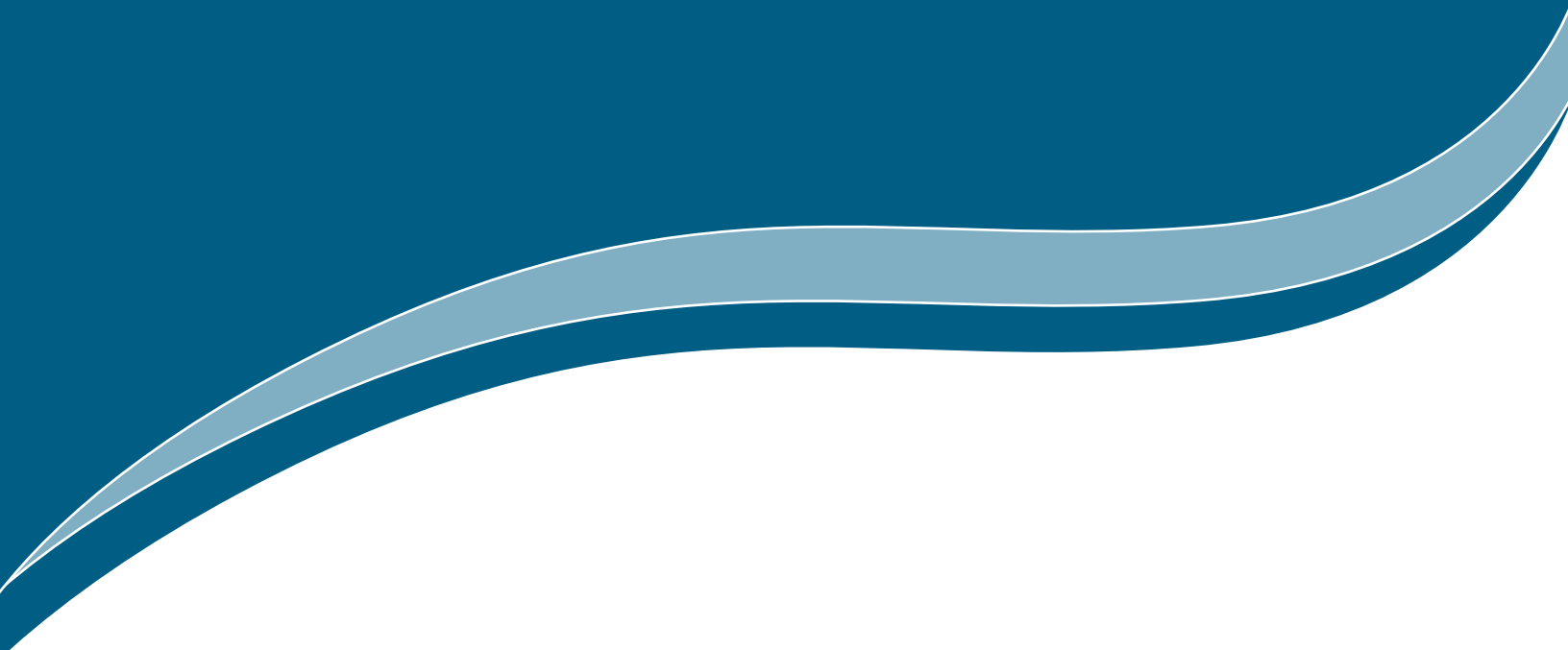


MOBILITY STRATEGY

TOWN OF MORINVILLE



September 2017



MOBILITY STRATEGY

TOWN OF MORINVILLE

Prepared for the **Town of Morinville**

Prepared by **EDS Group Inc.**

Acknowledgments

Several individuals contributed to the success of this report, and we wish to acknowledge the following people for providing insight and report review:

Cr. Nicole Boutestein - Morinville Council

Andrew Isbister - Town of Morinville

Vicki Dodge - Town of Morinville

Schaun Goodeve - Town of Morinville

Greg Hofmann - Town of Morinville

Tim Vrooman - Town of Morinville

Donald Fairweather - Town of Morinville

Jim Gourlay - Town of Morinville

William Norton - Town of Morinville

Felicity Bergman - Town of Moinville

Dallas Karhut - Bunt & Associates

Anne McKinnon - EDS Group Inc.

John Buchko - EDS Group Inc.

Also, we want to acknowledge the contributions of many local residents and other stakeholders that participated in the various engagement sessions during the course of this study. The commitment of local residents makes for a very successful process and end result.

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EXECUTIVE SUMMARY

In 2017 Morinville commissioned a Mobility Strategy as an initiative completed by its internal administration, with some assistance from outside consultants. This Mobility Strategy sets the stage for a future update to Morinville's transportation master plan by gathering public input, collecting necessary information on current conditions, and making high level recommendations for getting around Morinville for future studies to validate. While there is a focus on making streets and public open space safer, attractive and inviting to pedestrians, the Mobility Strategy recognizes the importance of balancing the needs of both pedestrians and vehicles in various contexts.

Concurrently with this project Morinville updated its Municipal Development Plan (MDP), and that process was done in conjunction with this Mobility Strategy. Some graphics, images and text statements are shared between the two initiatives. The two processes also had coordinated public engagement to maximize the efficiency of surveys and the public open houses. While the two projects are not directly applicable, a significant requirement for the current MDP update was to recognize the importance of making streets and public open space in Morinville safer, attractive and inviting for pedestrians. Beyond the MDP, there are several related studies, both statutory and non-statutory, that were considered as influencing information to this plan. The Mobility Strategy identifies the gaps in each of those related studies regarding mobility so that each one, when updated, can better recognize the importance of moving people and goods through Morinville.

The Mobility Strategy was guided by a Technical Advisory Committee (TAC), comprising internal and external staff who met approximately monthly. The TAC contained an array of expertise related to mobility planning, implementation and governance, with knowledge sets from planning, engineering, landscape architecture, community engagement, public safety and bylaw, Council, etc. At the onset of this study, the TAC conceived "13 Big Ideas" that set the stage for some of the goals and objectives for the Mobility Strategy, and also future implementation planning. The goal is to have these big ideas achieved once all of the recommended actions of this plan are realized.

Stakeholder engagements included live surveys, telephone surveys, on-line surveys, specific engagements with special interest groups, meetings and correspondence with local and regional stakeholders, and a public open house. Engagements confirmed the need for this study in that all groups highlighted challenges of various sorts regarding getting around their community. These engagements also highlighted the need for additional projects to be commissioned in the immediate, near and medium term, such as the importance of a trails master plan to identify missing gaps in community trails and ways of resolving current challenges in pedestrian movement in Morinville.

This plan will be put into action as each of the recommended special studies and planning initiatives listed in Section 6.0 of this report are completed.

“With a high proportion of residents under the age of 18 and very high population retention, Morinville should continue to grow at significant rates over future generations.”



1.0 SETTING THE STAGE

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1.1 Community Profile

Morinville is a beautiful western Canadian community celebrated by rich history, strong economy and surrounded by majestic agricultural landscapes. With a population of nearly 10,000 people (2016 Municipal Census), Morinville is located in the heart of Sturgeon County in central Alberta. Located just north of the cities of Edmonton and St. Albert, Morinville provides relatively close access to regional amenities such as the Edmonton International Airport, Canadian Forces Base Edmonton, and other amenities within the communities of the Capital Region. Other nearby communities include the towns of Legal, Bon Accord, Gibbons and Redwater.

According to Statistics Canada's 2011 National Household Survey, 26% of Morinville's population is under the age of 18, with 80% of its population being residents that are third generation or more. With a high proportion of residents under the age of 18 and very high population retention, Morinville should continue to grow at significant rates over future generations.

For a community of its size, Morinville has excellent amenities within the municipal limits. A mix of residential districts, commercial and industrial developments makes Morinville a great place to live, work, play and invest. Morinville has recently constructed a modern Community Cultural Centre, refurbished its Municipal Administration office, and announced new school projects in some of the expansion areas of the community. Morinville is also in the process of developing a new multi-use recreational complex at the far-east side of Morinville, within Sturgeon County. Private developers continue to complete new area structure plans for growth areas of Morinville. Significant growth in Morinville is quite evident.

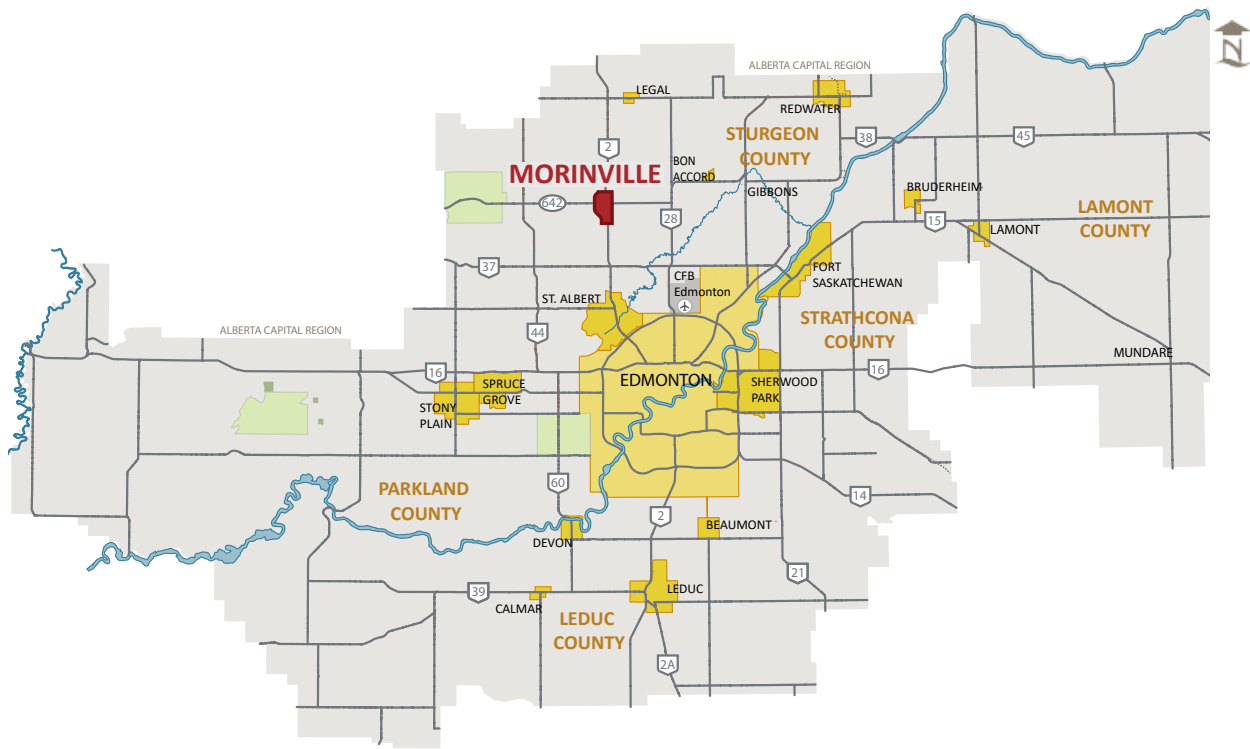


FIGURE 1 Context Plan

Top five things Morinville residents have told us they value most about their community:

1. nature: access to naturalized areas such as Heritage Lake, the Fish and Game Pond and wetlands in South Glens;
2. sense of community: small town feeling with ample amenities within, or in close proximity to Morinville;
3. history: with some of Alberta’s first Historic Buildings - St. Jean Baptiste Church and Rectory and Notre Dame Convent - and other structures, generations of local history;
4. trails: while they are disconnected and not a great “system”, trails are very popular in Morinville and should be a priority in recreational planning; and
5. personal safety: people generally feel safe in the public realm in Morinville.

1.2 Study Purpose: A Mobility Strategy

Streets, trails and networks of public open space are not only transportation linkages but should also be designed to act as places for community gathering, celebration, and daily recreational activity. The revitalization of established areas of a community can help demonstrate local identity, create places for community gathering, and have a tie to promoting the success of local business. In 2017, Morinville began an initiative called a Mobility Strategy. In essence, this initiative involves a series of steps taken in advance of updating Morinville’s Transportation Master Plan (TMP) to ensure a careful balance of needs for all users of streets and public open space. The Mobility Strategy sets goals and objectives for the movement of people and goods through the municipality, and will help guide the development of the updated TMP. In essence the updated TMP will be the implementation plan for this Mobility Strategy.

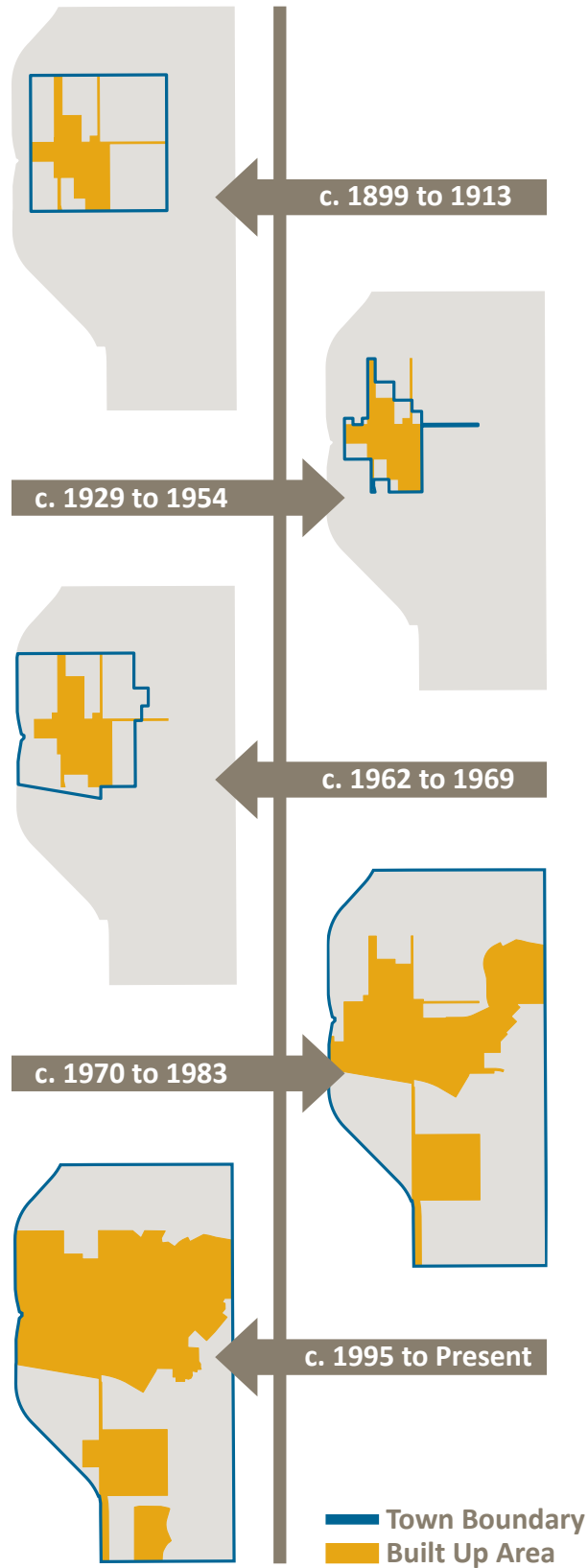


FIGURE 2 Historical Boundaries

The existing TMP was prepared 13 years ago in 2004. The TMP focused exclusively on roadways and highways, and did not consider the integration of active modes of transportation (such as cycling and walking) or how those could be integrated into the overall transportation network. The TMP was also prepared prior to the Highway 642 Functional Planning Study (FPS) and the Cœur de Morinville Area Structure Plan (ASP) that were prepared in 2013, and therefore does not reflect the findings, recommendations or policy directions of these two pivotal long-range planning documents.

This Mobility Strategy does not fully resolve challenges and concerns that exist in Morinville’s mobility network, rather presents a series of best management practices that should be considered when completing the upcoming TMP update and other implementation projects. The strategic stakeholder engagement program of the Mobility Strategy ensures that we fully understand the current challenges, opportunities and public sentiment that should support decision-making. This grassroots approach to planning will encourage a plan that comes with more local buy-in and community support, and start local conversations on how Morinville can improve its mobility network.

1.3 Key Concerns

Through public engagement, this plan seeks to confirm a series of assumed concerns. The following challenges and opportunities were identified at the onset of this plan, all of which are listed below, have been confirmed through the public engagement process. Many of the best management practices identified in this plan seek to address these constraints and opportunities:

- traffic and pedestrian safety – at key locations such as pedestrian crossings at Highway 642 / 100th Ave., mitigation is required to increase personal safety;
- misguided development – as new areas of Morinville expand, private developers are lacking guidance on how streets should be best developed to meet the vision and goals of Morinville as it relates to wise mobility planning;
- aesthetics of Morinville can be improved by how the public realm is developed and maintained;
- trails are extremely popular and well used, however the network of trails is extremely limited with numerous gaps and missing segments;
- with an active senior’s population, Morinville is lacking clear direction on accessibility guidelines for its streets and public open space; and
- currently Morinville streets are not designed to support celebration, and this plan seeks to identify key areas where street corridors can be converted into places of play celebration and vibrant economic success for local businesses.

1.4 Study Goals, Objectives and Expected Outcomes

The study goals and objectives are to:

- examine the local and regional context for mobility planning in Morinville;
- find gaps and misalignments within all existing statutory and non-statutory documents regarding mobility, and the direction of this Mobility Strategy;
- prepare a framework for future detailed technical analyses to support and validate this Strategy’s recommendations; and
- engage various internal and external stakeholders, general public and Council during the course of developing this strategy.

The expected outcomes of this study included:

- developing a comprehensive set of strategies and supporting graphics to ensure synergy between various modes of moving people and goods through Morinville and to the surrounding region;
- giving context and direction to future technical analysis in support of a Transportation Master Plan expected to be completed as soon as possible;
- with a strategic stakeholder engagement program, establishing the community’s mindset for this study, and other related planning projects; and
- creating a robust background report to support the 2017 MDP Update project.



1.5 Dream Big: Thirteen Big Ideas

To set the stage for this initiative, a technical advisory committee for the Mobility Strategy established a set of “Big Ideas” related to getting around Morinville. Through this document, the upcoming update to the 2004 Transportation Master Plan, public engagement as well as other recommended initiatives coming out of the Mobility Strategy, the following Big Ideas may be achieved through diligent and coordinated planning efforts:

1. Enhancing Our Lifestyle:

- I want walking and cycling to be practical, not just a leisure activity;
- I want family bike rides that allow us to explore Morinville; and
- I want to run 10km without having to double back or run along the same route.

2. Improving Trail and Street Function:

- I want roads that make drivers watch out for pedestrians as much as pedestrians have to watch out for drivers;
- I want a trail all around the outskirts of Morinville – connecting East Boundary Road to Cardiff Road, to South Glens and back around Morinville to connect with 107 Street trails by the transportation yard; and
- I want to ride a bike and connect to every neighbourhood park without having to travel along a roadway.

3. Safety In The Public Realm

- I want to be able to walk safely from place to place without having to cross the street multiple times in order to stay on designated sidewalk;
- I don’t want to describe any of our streets as “dangerous” to my kids;
- I want the ability to safely get to Heritage Lake without walking on highway; and
- I want my kid to be able to walk and bike to school and be safe crossing Highway 642 / 100 Ave.

4. Well-Planned Future Growth

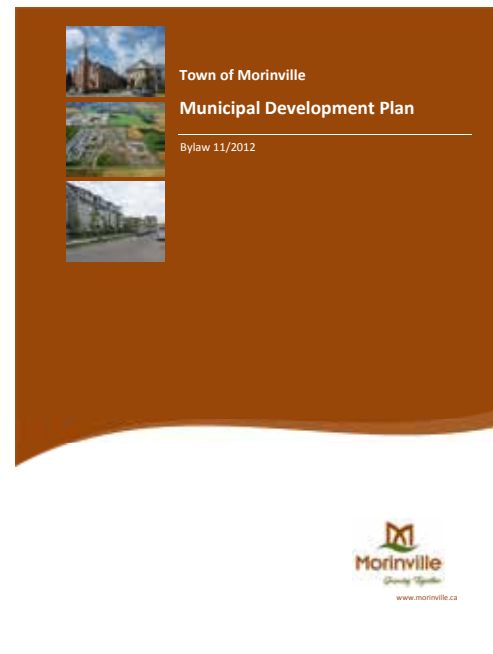
- I want the new recreation centre to support links and connections for Olympic distance Triathlon – trails of 10km running and 40km cycling;
- I want to see all new development areas use boulevard-separated sidewalks; and
- I want an expanded trails network to have dual season trails with a range of activities – winter (having both walking on asphalt and cross country skiing) and summer (accommodating running, biking, walking, etc.).

1.6 Related Initiative: Municipal Development Plan Update

Concurrent with the completion of this Mobility Strategy, Morinville was also leading an update to its Municipal Development Plan (MDP). Many of the goals and objectives as well as stakeholder engagement programs between the two studies are directly related. As a result, many of the graphics, ideologies and engagement processes are shared between the two projects.

While the MDP update is part of its five-year review cycle to align it to current realities and trends, several initiatives further triggered the need for a review and update:

- the Edmonton Metropolitan Region Growth Plan requires each member municipality of the Edmonton Metropolitan Region Board to update their MDP to align to the plan;
- the Provincial government passed several amendments to the *Municipal Government Act* which impacts certain aspects of municipal development plans; and
- several transportation and mobility projects and assumptions have changed since the 2012 Municipal Development Plan. Most specifically, the 2004 Transportation Master Plan is out-dated and in need of a review and update to assess existing transportation system performance, forecast future travel demand, and define actions and policies to address future road and active transportation needs for Morinville. Development continually adds pressure to plan for and upgrade the arterial road network (particularly 100 Street, Range Road 252 / East Boundary Road, and Cardiff Road), and further emphasis on alternative modes of transportation needs to be integrated into the transportation master plan. Additionally, construction of roadways of regional significance are causing a shift in local commuter traffic patterns, the Highway 642 Functional Planning Study was adopted in 2013, and the Highway 2/Cardiff Road interchange has been postponed indefinitely.





“A trails master plan would help guide human and financial resources directed to trails planning by setting priorities for the most critical work to be completed first, and to accurately forecast capital and operational costs”



2.0 PROJECT BACKGROUND

2.1	Related Plans, Bylaws and Initiatives	9
2.2	Absent Plans, Bylaws and Initiatives	21

2.1 Related Plans, Bylaws and Initiatives

Figure 3 demonstrates a web and hierarchy of some of the statutory and non-statutory plans that exist in Morinville. Some of the main objectives of the Mobility Strategy is to collect all existing plans, studies, bylaws, etc. related to mobility, identify which discuss elements of mobility, and find gaps and misalignments within all existing statutory and non-statutory documents regarding mobility. The following documents have been reviewed, and pertinent mobility related content is summarized with the gaps and misalignments summarized below.

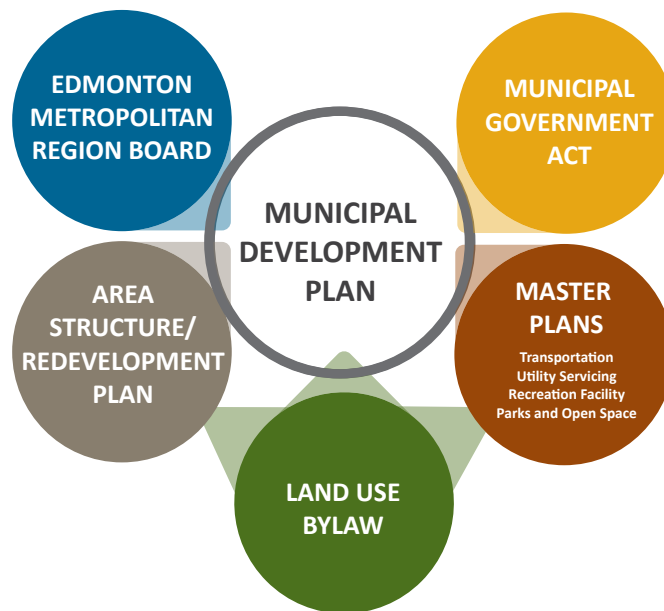


FIGURE 3 Web of Statutory Plans

2.1.1 Edmonton Metropolitan Region Growth Plan

The Edmonton Metropolitan Region Growth Plan (formerly known as the Capital Regional Board Regional Growth Plan) is the culmination of ongoing research, trend monitoring, consultations and feedback from our members. The Growth Plan guides the daily work of the Capital Region Board, ensuring decisions and programs are integrated to support the long term economic prosperity and quality of life for all citizens of the Edmonton Metropolitan Region.

The Growth Plan is updated regularly. The 2016 Growth Plan The Edmonton Metropolitan Region Growth Plan: Re-Imagine. Plan. Build. is a substantive update to the 2010 Growth Plan: Growing Forward. A responsible and collaborative approach ensures that as a Region we become more competitive on the global stage; create vibrant communities; move efficiently throughout the Region and preserve our natural environment and agricultural lands for future generations. (Source: CRB Website).

No substantive gaps or misalignments were found in this document.



2.1.2 Municipal Sustainability Plan

Sustainable development (or sustainability) has significant implications for how we live our lives and make decisions as individuals, businesses and communities. Its most common and widely accepted definition is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”, as coined by the United Nations Brundtland Commission in 1987.

In October 2010, an Environmental Scan Report was completed. The purpose of the Environmental Scan was to provide a background document that provides definitions, context, and information about current sustainability trends and issues relevant to municipal sustainability planning from a global, national and regional context. A current state description for Morinville is also included in this report.

Informed by the Environmental Scan and public consultations that took place between 2009 and 2011, Morinville 2035 Growing Together was developed to establish a 25-year vision for the community. Citizen input was vital to its development and will continue to be critical as the Municipal Sustainability Plan is implemented.

Gaps and misalignments are as follows:

- this plan could be implemented more fully;
- sustainability initiatives do not fall under any particular department and therefore responsibility or accountability is not assigned; and
- no resources have been directed to establishing a staff position with the responsibility for implementing the MSP.

2.1.3 2004 Transportation Master Plan

In 2004 Morinville retained the services of Alliant Engineering & Consulting Ltd. to complete the Town of Morinville Transportation Master Plan (TMP). The Transportation Master Plan includes review of the existing transportation network, analysis of short and long term issues and presents conclusions and recommendations.

Gaps and misalignments are as follows:

- this plan is out-of-date;
- does not take into consideration the Highway 642 Functional Planning Study or the Coeur de Morinville ASP (which advocates for higher density in the Downtown and adjacent neighbourhoods);
- doesn't reflect the Edmonton Metropolitan Region Growth Plan;
- a number of traffic impact assessments have been undertaken since this plan was prepared;
- significant discussion given in TMP to Cardiff Road/Hwy 2 intersection and need for improvement;
- speaks to service roads along 100 Street south of Canadian National Railway to service strip commercial development being likely to occur; and
- doesn't take into consideration improved school access at Notre Dame nor the increase in/changes to traffic volumes/patterns around the Morinville Public School.

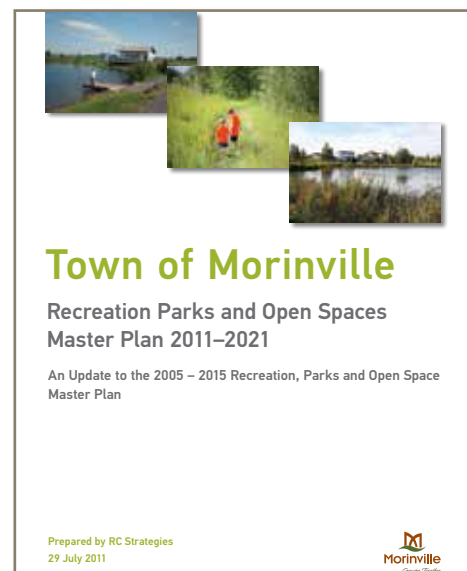
2.1.4 Recreation, Parks and Open Space Master Plan

The 2011 to 2021 Town of Morinville Recreation, Parks and Open Space Master Plan provides a template for Morinville to follow in ensuring that the delivery of publicly provided parks, open space and leisure services are delivered efficiently, effectively and in line with the leisure needs of Morinville residents. This Plan represents an extension of the 2005 to 2015 Recreation Parks and Open Space Master Plan, which has been used to guide service delivery up to the present. As an "update" it responds to both past, existing and new values and priorities identified by Morinville's residents. It also responds to changing demographics, changing patterns of leisure activity and, as new neighbourhoods continue to grow, the need to guide parks, pathways and leisure facility infrastructure.

As a Master Plan, this plan makes few recommendations for individual parks, programs or facilities. Rather, it provides an overall assessment of the delivery system and a framework for making decisions about allocating and expanding resources. Helpful planning tools and standards for design are presented and/or referred to where applicable in this new, updated Plan or in the 2005 to 2015 Plan.

Gaps and misalignments are as follows:

- all references to the "Town & Country" leisure hub should be amended to make reference to the future regional recreation facility on the identified site;
- no cross sections illustrating pathway standards; and
- discussion regarding general lack of cultural services and facilities is out of date.



2.1.5 2012 Municipal Development Plan (MDP)

The Municipal Development Plan (MDP) is the primary land use planning document for the community. This document provides policy direction in relation to land use planning and development decision-making. The purpose of land use planning is to manage and direct growth. Land use planning shapes the physical environment of a community in order to maximize the quality of life for its citizens. Residential development, commercial and industrial growth, transportation and utility infrastructure, and community services and amenities are all developed through land use planning.

The MDP provides specific policies for the development of future residential, commercial, industrial, and other land uses; as well as policies surrounding transportation and utility infrastructure, heritage preservation, open space, economic development, and inter municipal planning. The policies stated in the MDP also provides information to private and public sectors on land use matters such as population growth, economic function, development patterns, transportation patterns, utility servicing; and, offers a long-term growth management strategy.

Gaps and misalignments are as follows:

- weak discussion of transportation;
- outdated population projections;
- outdated references to the Capital Region Board growth plan; and
- lower quality graphics.

2.1.6 Area Structure Plans

There are seven adopted area structure plans (ASPs) and two approved conceptual schemes in Morinville. These neighbourhood-scale plans provide important background information regarding land use, population density and local road networks that can be used to give direction to the TMP. Of the seven adopted ASPs, two are commercial (South Business Commercial ASP and Westmor ASP) and the remaining five contain residential (Champagne District ASP, Coeur de Morinville ASP, Grandin Heights ASP, South Glens ASP, and Westwinds ASP). Based on the projected populations of each of the five residential plans, the total additional population at full build out of these plan areas is between 14,895 and 15,712 and are approximately 25% built out.

The two conceptual schemes (Meadows of Morinville Conceptual Scheme and Morinville 10 Acre Site Conceptual Scheme), both support residential developments. The increase in population attributed to these two areas is 638 people.

These ASPs and conceptual schemes suggest which areas of the community will generate the greatest population growth and where community amenities are anticipated or may be required. In turn, this data informs required road standards necessary to serve a particular neighbourhood, identifies where expansion of the trails network could provide alternative transportation routes to amenities, and illustrates how open spaces can be used to both link and separate different land uses.

What the ASPs and conceptual schemes do not offer is detailed demographic breakdowns that would further inform a TMP. However, some assumptions can be made based on general population information provided and the types of houses being proposed. For example, the Meadows of Morinville Conceptual Scheme assumes an average occupant density of 2.5 people per manufactured home unit, indicating the target market is likely families. Further, the Morinville 10 Acre Site Conceptual Scheme assumes 16.6% of its population will be school-aged children. This type of information offers clues to the mobility needs of particular neighbourhoods.

Several Area Structure Plans (ASPs) have been completed for expansion areas of Morinville. Area Structure Plan documents are not necessarily completed to the same level of detail or in the same format. Overall, more recent ASP documents have more details related to how mobility will be enhanced, and best management practices to help promote safe streets, more walkable public open space, and a balance between pedestrian and vehicular movement. Area Structure Plans and how their policies and discussion relate to mobility are summarized as follows:

a) Champagne District ASP

This ASP was adopted in 2006, replacing the former 1991 Northeast Morinville Area Structure Plan. The 2006 ASP comprises approximately 71 ha of land, including the neighbourhoods locally known as The Lakes, Village Champlain, Montreax, and Edgewood; and includes the lands on which the Morinville Community High School and Community Cultural Centre sit.

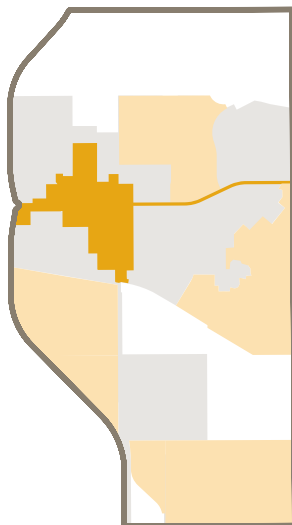
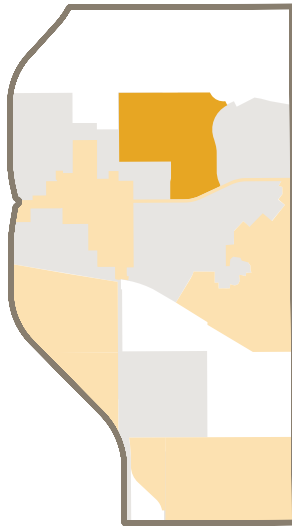
The plan as prepared in 2006 estimated a population at build out of 3,153. Since then, a number of amendments have changed the overall density of the area to include more narrow lot product and more duplexes.

Relation to Mobility:

This Plan area is almost completely built out, so there is little opportunity for further amendments to the plan or to influence the built form any further. That being said, the Plan shows a number of linear pathways, including along the Pembina Pipeline right-of-way.

b) Coeur de Morinville ASP

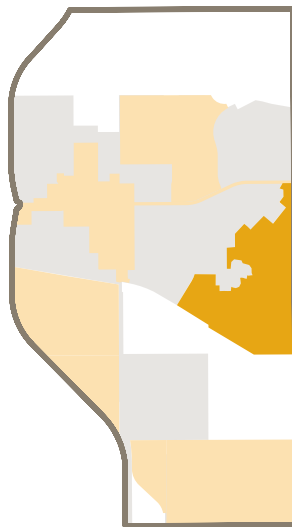
The Cœur de Morinville ASP establishes policies and guidelines to ensure the ‘heart’ or mature core of the community evolves over time in an aesthetic, cohesive, and appropriate manner. The ASP evaluates the suitability of redevelopment, infill and increased residential density in the mature core from the perspectives of existing residential neighbourhoods, supporting economic development and maximizing use of existing infrastructure capacity. Further, this ASP supports the development of Highway 642 in accordance with the Highway 642 Functional Planning Study.



The ASP policies and guidelines give direction to future land use and redevelopment decision-making processes in the mature core of the community. The desire is that through careful planning and conscientious decision making, Morinville will capitalize on economic development opportunities, celebrate its rich heritage, recognize the unique character of established residential neighbourhoods, move ever closer to a sustainable state and encourage more people to live, shop, work and socialize in the heart of the community. The time horizon of this ASP is 2035, a time span that is consistent with Morinville's existing guiding documents, the Municipal Sustainability Plan and the Municipal Development Plan.

Relation to Mobility:

This Plan identified the need for a formalized parking study, along with a revitalization, beautification and way finding plan. While not gaps of this plan, these implementation tasks have yet to be articulated into the budgeting process and await recognition as priority projects.



c) Grandin Heights ASP

Adopted in 2006 and amended in 2016 for the remaining undeveloped areas, the Grandin Heights ASP establishes the growth strategies for lands in the central-eastern portion of Morinville, located adjacent to Range Road 252 / East Boundary Road and to the north of the CN Rail line. Completed by EDS Group Inc. on behalf of TAG Developments, this ASP makes considerable efforts to organize MR in such a way that nearly all lots will back on to or be nearby multi-use trails. A large portion of the MR dedication of this site was designated to a 13 acre school park site, which will be the neighbourhood's primary large-scale public open space. The 2016 ASP was an amendment to a previous ASP for this area, dating back to 2006. The updated ASP was required to address a change in market conditions, primarily to reduce lot sizes and to implement more walkable open spaces embedded throughout the development.

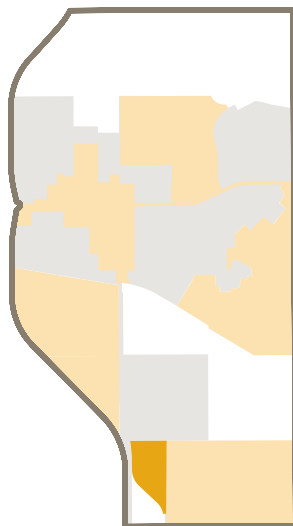
This ASP identified:

- non-prescriptive and flexible development typologies through a suggested zoning of residential, commercial and public open space network;
- a mobility network for both vehicles and active transportation that accommodates a very well-connected pedestrian system and an efficient network of roads;
- a high-level servicing strategy that demonstrates how basic services will be best implemented to achieve the proposed plan; and
- a comprehensive strategy to program public open space, to ensure this development area meets the needs of its future residents as well as the community as a whole.

Relation to Mobility:

Relevant to mobility planning, the Grandin Heights ASP identified several aspects of Morinville’s MDP that influenced the final ASP, some including:

- sense of place – inviting, innovative, dynamic and adaptable;
- urban fabric – mix of land uses that supports walkability;
- place-making – balancing pedestrian, transit and vehicular movement while reflecting local community values and establishing a strong sense of place; and
- growth management for developing neighbourhoods and planned areas – alignment with the Recreation Parks and Open Space Master Plan with priority to the trails system connectivity.

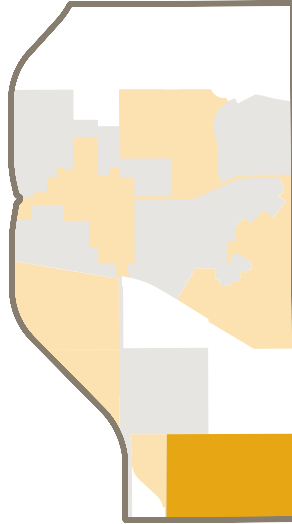


d) South Business Commercial ASP

Prepared in 2015 to give direction for future commercial and light industrial development and servicing requirements for a 15.72 ha site located in south Morinville, adjacent and to the west of the established South Glens residential neighbourhood, and lying north and east of 100 Street.

Relation to Mobility:

In terms of mobility, the ASP’s Figure 4 shows pedestrian connections along the primary road network, in part as sidewalk and in part as the existing asphalt surfaced trail that runs along 100 Street into the South Glens neighbourhood.

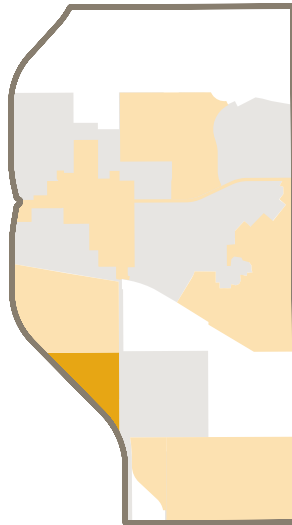


e) South Glens ASP

This ASP was prepared in 2002 to describe the land use framework and development objectives for land located in south Morinville, approximately one and a half sections abutting Cardiff Road. The plan calls for approximately 50 ha of single family residential and 3.4 ha of medium/high density residential, a school site, a neighbourhood commercial site and an estimated population of just over 3900 people. South Glens is approximately 1/3 built out.

Relation to Mobility:

Connectivity between this neighbourhood and the rest of Morinville is not discussed in the ASP, yet is a continual source of concern for residents residing in South Glens. Regional linkages leading north from South Glens, such as connections via 100th Street or Range Road 252 / East Boundary Road, may best accommodate better connectivity for modes of transportation other than vehicles.

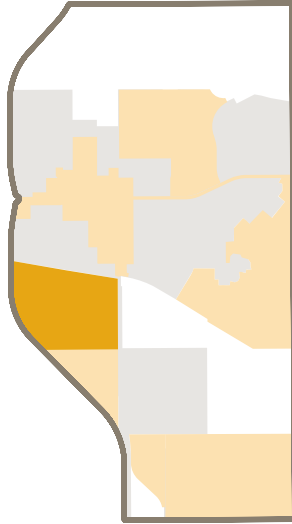


f) Westmor Development Park ASP

The Westmor Development Park ASP was developed in 1991 to provide a framework for future decision-making on subdivision and development proposals within the plan boundary, containing approximately 28.22 ha. The ASP identified this area for future commercial and business development, focused on attracting larger format retail and warehousing, business support services, highway service uses and general retail and service uses.

Relation to Mobility:

The plan is in need of an update to reflect current standards of planning and highway access protocols; and, potentially, developer needs in a changed marketplace. Further, the Westwinds ASP prepared in 2016 immediately to the north provides for residential uses, and consequently connectivity between the Westwinds and Westmor lands should be revisited.



g) Westwinds ASP

Originally adopted in 2004 and thoroughly revamped in 2016, the Westwinds ASP identifies the 68 ha of land for future commercial and residential, with a school site and a large stormwater management facility (SWMF) centrally located.

Relation to Mobility:

This Plan demonstrates connectivity within the neighbourhood, showing a perimeter trail along the north and west boundaries, with several internal connection opportunities along sidewalks, PULs and trails. The SWMF is a destination recreation area showing a pathway encircling the pond with a number of access points to surrounding residential development. It also identifies the limitations of connecting directly north with existing residential neighbourhoods because of the CN Railway line. Connections northward are available only at the existing at-grade railway crossing.

2.1.7 Highway 642 / 100th Ave. Functional Planning Study

The Highway 642 Functional Planning Study (FPS) provides guidance and recommendations for:

- short term, medium term and ultimate right-of-way requirements including intersection control standards; and
- access management, including pedestrian access, and urban design elements that will promote a pedestrian friendly commercial core.

As it relates to this Mobility Plan, this study has the following gaps and misalignments:

- doesn't take into account short term upgrades to key intersections, in other words; there is no direction on best interim solutions between now and the ultimate design 75+ years out;
- signal lights at intersection at Cardiff and Highway 2 were not in place when the Functional Planning Study was completed;
- still considers Cardiff/Highway 2 interchange in the short term, however it is now identified as a long term project; and
- a projected growth rate of 2% per the former CRB Growth Plan was used.

2.1.8 Engineering Standards

First adopted by bylaw in 2003, the Engineering Standards were last amended in 2005. Well over 10 years later, the Engineering Standards are currently under review. As it relates to mobility planning, the Engineering Standards prescribe roadway designs for various types of road systems, identifying carriageway and lane widths, locations of sidewalks and utilities, and construction procedures for traffic networks. These standards do not delve into describing more contemporary urban design matters, such as complete streets.

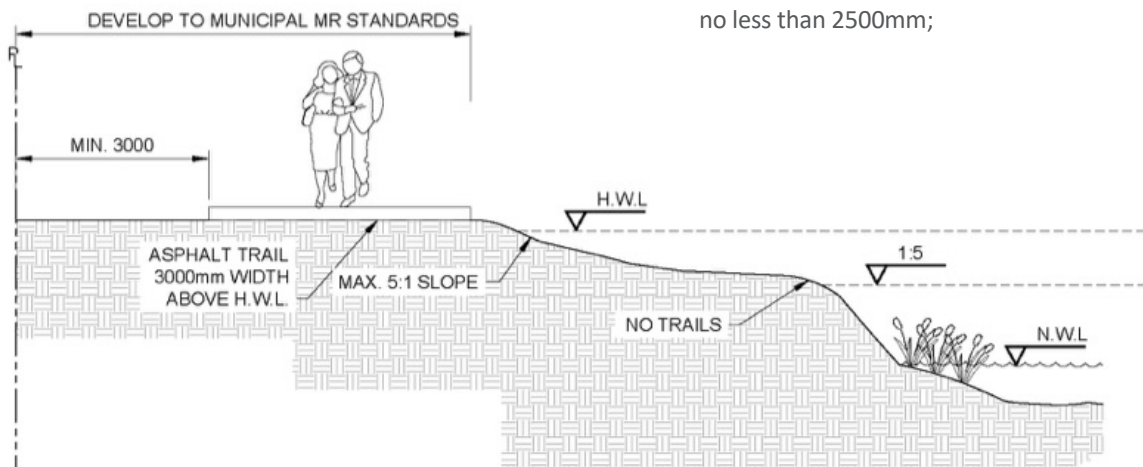


FIGURE 4 Stormwater Management Facility

2.1.9 Municipal Open Space Standards

The Municipal Open Space Standards (MOSS) was recently adopted as a statutory document through Council in April 2017. The MOSS compliments the existing Engineering Standards and directly addresses development standards for streets and all other public open space. It does not, however, address open space development standards for private property, as the Land Use Bylaw covers those areas.

Relation to Mobility:

MOSS was completed in anticipation of this Mobility Strategy and embeds many principles of mobility planning. Some of the mobility strategies that MOSS promotes include:

- introducing the need for a design brief at the onset of any development. The design brief must identify overall design strategies and how they conform to various supporting documents such as this Mobility Strategy, the Strategic Plan, Recreation Parks and Open Space Master Plan, etc. At this time, Morinville can assess aspects of mobility for proposed development and influence designs before detailed drawings are completed;
- the requirement for separate walks along all collector roads that have boulevard trees and ample room for furniture such as benches, lighting, etc.;
- minimum standards for paved trails in all municipal reserves and stormwater management facilities, including paved surfaces no less than 2500mm;

- the requirement for pedestrian lighting along all multi-use trails;
- the requirement for pedestrian furniture in municipal reserves, and placing all seating areas in highly visible areas to promote personal safety; and
- the development of multi-use regional trails, also known as multiways, that conform to ASPs, the Recreation Parks and Open Space Master Plan, and other larger scale plans – built to a minimum of 3000mm width. The developer is also required to provide an overall plan of the entire development, including future phases of development, to demonstrate how multiways will link to the surrounding multiway system in the community.

MOSS requires that trails and pedestrian furniture be implemented in various areas of the public realm that to date were not a minimum requirement for new development. The need for developers to demonstrate how their development fits with regional trail linkages for multiways ensures opportunities for community-wide trail networks are not lost.

2.1.10 Economic Development Strategic Action Plan

In May 2015 Morinville completed the Economic Development Strategic Action Plan (EDSAP) that sets out clear objectives to achieve economic development success within Morinville from 2015-2020. This plan is aligned to the Municipal Sustainability Plan (MSP) however provides far greater detail in delivering tangible results within a much shorter time frame than prescribed with the MSP (i.e. complete by 2020 rather than 2035).

The EDSAP addresses business retention, expansion and attraction, factors relating to the local tourism sector, marketing and promotions of Morinville to potential investors, housing mix and parking for visitors and businesses.

Relation to Mobility:

Annual economic development work plans are created based on the EDSAP and yearly goals are established and implemented upon. The EDSAP relates directly to Mobility in the context of suitable and appropriate parking for the local businesses (staff and customers) as well as addressing the means by which staff and customers travel to local businesses.

2.1.11 Municipal Utility Servicing Plan (2016)

In 2016 Morinville retained the services of AECOM to complete the Town of Morinville Municipal Utility Servicing Plan (MUSP) Update to the 2008 study. This municipal utilities servicing plan update includes the wastewater collection system and the water distribution system and updates the Stormwater Management Plan. The storm drainage, water distribution and sanitary sewer systems were reviewed and evaluated and improvements recommended for the projected interim and ultimate development scenarios.

Gaps and Misalignments:

This plan was recently updated, and there are no gaps identified; however, it identifies options and scenarios that require further analysis and consideration for stormwater management north and west of Morinville Business Park which particularly impacts the ultimate design of 100 Street.



Trail and Stormwater Management Facility

2.1.12 Morinville Transportation Safety Study

This study identifies traffic control and pavement marking issues within Morinville, proposes four priority areas for improvements, and related priority projects to attempt to resolve the existing issues. The four priority areas are:

- intersection controls;
- pedestrian crossing controls;
- school and playground controls; and
- emergency vehicle signals.

Another objective is to create and develop consistent application standards for traffic control signage and pavement markings.

The report makes the suggestion to review engineering standards and how they shape operating speed through geometry and physical design. Also suggests updating the TMP to include alternative transportation modes for all users. Finally, the study suggests a parking study to understand occupancy rates along commercial corridors.

Gaps and Misalignments:

- key pedestrian area of downtown not identified specifically in the context of a shopping district. 100 Ave is analyzed from a crossing and speeding perspective, but not as a destination requiring differing standards; and
- no discussion of complete streets and connections to improved safety, although some reference to urban design and road geometry and physical design allude to this.
- At the time of this study it was understood that the above two elements would be evaluated as part of the Functional Plan / Coer de Morinville Area Structure Plan.

2.1.13 Traffic Safety Bylaw

This Bylaw regulates vehicles and pedestrian traffic within Morinville's corporate limits. As it relates to mobility, it describes:

- locations where parking is permitted within Morinville and special non-permitted parking periods during events such as snow removal. It also describes various types of vehicles and trailers, and permitted storage and parking for those units;
- truck routes within Morinville, including the physical route locations and operational considerations such as use of engine retarder brakes;
- licensing of mobility aid vehicles;
- the use of, and restrictions applied to surrounding traffic, flashing amber lights on school buses;
- the non-permitted use of off-highway vehicles within Morinville's corporate limits;
- riding wheeled apparatus on sidewalks and trails, and permitted surfaces where bicycles and other wheeled apparatus can be used; and
- snow removal off private and public lands.

This Bylaw only scratches the surface as it relates to enhancing the safety of pedestrians and active modes of transportation when combined with large vehicular traffic on truck routes. This Bylaw would be an important premise to a parking and access management study that is recommended to be completed, as described in Sections 7.4 and 7.5. Some of the gaps in this Bylaw as it relates to mobility include:

Gaps and Misalignments:

- the co-existence of pedestrians and large trucks and dangerous goods routes in Morinville, and ways to better incorporate active modes of transportation in these significant vehicular corridors;
- accommodation of wheeled apparatus in all public open space, and not providing as many limitations on where vehicles such as bicycles can be used; and
- accommodating street closures for special events such as neighbourhood block parties or festivals.

2.1.14 Dangerous Goods Control Route Bylaw

This Bylaw regulates the transport of dangerous goods inside the Municipality. Any dangerous goods carriers may not stop anywhere in the community, unless loading or unloading, refueling or getting repairs, or at a vehicle storage location. An exemption or special permit may be granted to applicants under certain conditions. The Bylaw describes signage that is required by Morinville to designate permitted dangerous goods transport routes.

Gaps and Misalignments:

Currently, the only permitted dangerous goods transport routes in Morinville include Highway 642 / 100th Ave. from the east to west limits of the community, and 100th St. from the north to the south end of the community.

2.2 Absent Plans, Bylaws and Initiatives

Section 7.0 provides a consolidated summary of several plans, bylaws and initiatives that this Mobility Strategy recommends be completed to best support mobility of people and goods through Morinville. Resulting from the review of the above statutory and non-statutory plans, the following are recommended to be completed in the immediate term:

- Trails Master Plan;
- Complete Streets Guidelines (excerpt of revised Engineering Servicing Standards); and
- 100th Street Functional Planning Study.

2.2.1 Trails Master Plan

During public engagement for this project, a large proportion of residents surveyed expressed concern with the existing network of trails in Morinville. Trails are a very prominent public asset and highly valued to residents of Morinville, and engagement identified that the majority of those surveyed feel there are too many gaps in trails, a lack of looping options, insufficient or non-existent signage and a need for new trails. Further, the Recreation, Parks and Open Space Master Plan does not provide adequate details on

trail development. While it identifies conceptual alignments for proposed multiway development, it does not provide adequate details on other aspects of trail development. The following should be addressed in a trails master plan to best suit the needs of Morinville:

- mapping to clearly show all existing trail assets, which can be used to promote trails use for not only residents but visitors to the community;
- inventory of various trail types existing in Morinville, from undeveloped goat paths to paved multi-use trails, and recommendations to change any surface types;
- gap analysis to identify missing trail links and new proposed trail segments;
- perceived and actual safety concerns of the trails network, and strategies to promote public safety of the trails network;
- signage strategy that proposed a new style of signs which conform to the Corporate Branding of Morinville. A family of signage is required, including but not limited to, trail head kiosks, safety signage, regulatory signs, directional and wayfinding devices and distance markers;
- regulatory considerations for development, such as Provincial legislation that relates to trails planning and construction in Morinville; and
- trail amenities planning, such as location for benches, trail heads, waste receptacles, maintenance facilities, etc.

Each year, Morinville's Public Works department pursues the construction of new segments of trail and maintains several kilometers of trails of varying types. A trails master plan would help guide human and financial resources directed to trails planning by setting priorities for the most critical work to be completed first, and to accurately forecast capital and operational costs. Section 6.1 describes the implementation strategy for a trails master plan.

2.2.2 Complete Streets Assessment

The current Engineering Standards do not include the provision of special circumstances where there is a demand for roads that have a strong need for increased mobility for active uses. The concept of complete streets are described in more detail in Section 6.2. Figure 5 identifies various zones of a typical street that is a “shared corridor”, demanding more detail on how vehicles, pedestrians, cyclists and other active modes of transportation can best co-exist. A complete streets assessment would identify which streets would be prioritized for this new type of standard, and identify appropriate treatments that suit the needs of Morinville. Section 7.2 describes the implementation strategy for a complete streets assessment.

Figure 5 demonstrates five design zones that are commonly part of a complete street:



FIGURE 5 Streetscape Zones

Frontage Zone:

Oftentimes a very narrow width of privately owned land, accommodating access into buildings and a transition of grade between the sidewalk and building door threshold. This strip can also include temporary signage, furniture and other promotional items that are off the common sidewalk;

Pedestrian Thoroughfare:

Separate sidewalk set back from the roadway curb that has predominantly walking pedestrian traffic;

Furniture Zone:

Space between the sidewalk and roadway curb that can accommodate amenities such as light standards, benches, waste receptacles, street trees, protection bollards, etc.;

Flexible Zone:

Traditionally a parking lane, a lane of roadway that can transition between vehicular parking and pedestrian or commercial uses such as bistro tables, bicycle racks, food trucks that address the curb, etc.; and

Vehicular Lane

Lanes dedicated to the movement of vehicular traffic.

“In recent years there is a profound shift toward people including their daily exercise into getting from place to place, sacrificing the efficiency of time and not necessarily relying on passenger vehicles to get around.”



3.0 EXISTING CONDITIONS

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A significant proportion of employed residents rely on passenger vehicles for their daily commute. According to Statistics Canada’s 2011 National Household Survey, of the 4,630 Morinville residents that are currently employed and aged 15 years and over, 94% rely on a car, truck or van. Only 1% claimed the use of public transit, 3% walking, with the remaining 2% claiming other means such as cycling. In summary, reliance on passenger vehicles for daily commuting is by far the most significant means. The median commuting duration, sourced from the same data set from Statistics Canada, is approximately 30 minutes. This suggests that a large number of residents work outside Morinville, and likely in larger centres such as Edmonton and St. Albert as well as in large regional employers such as Forces Canada.

3.1 A Changing Paradigm Lifestyle Habits, Technology and Social Change

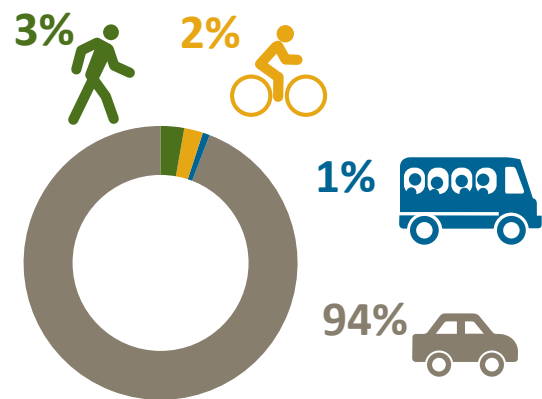
Planning for a community that promotes active modes of movement such as walking and cycling can lead to a variety of health and community growth benefits, such as:

- offering convenient choices for transportation;
- reducing our dependence on vehicles;
- reducing the demand for public infrastructure, and reducing long-term capital costs;
- creating more aesthetically pleasing, safe and liveable streets for vehicles and pedestrians to co-exist; and
- increasing physical activity for all people.

Canadians now seek choices in their mobility, and base the decision to drive, walk or cycle on a combination of cost, time and personal preference. In past generations, the automobile was by far the mode of choice for day-to-day commuting from home to work, school, and other daily destinations. In recent years there is a profound shift toward people including their daily exercise into getting from place to place, sacrificing the efficiency of time and not necessarily relying on passenger vehicles to get around. Many of our urban areas have also become congested to the point of causing frustration in dealing with rush hour traffic, inadequate parking and of course the escalated cost of fuel, parking, and other vehicular needs.

Morinville certainly does not have the rush hour traffic nor the parking demands that many of Canada’s larger centres do. As a result, commuters are not forced to alternative modes of transportation such as car-pooling, cycling or walking due to the by-product of dense urbanization. Earlier statistics indicate that 94% of Morinville residents rely on passenger vehicles to get from place to place on a daily basis, and with a median commute time of 30 minutes. Because such a large proportion of the work force that live in Morinville appear to work outside the community and spread throughout the capital region, it is difficult to expect the local population to embrace alternative modes of transportation for daily commutes to work. Further, a new transit system leading from Morinville into surrounding centres may not be feasible unless commuters are traveling to a common destination. A regional transit study that explores the feasibility of regional transit programs should be conducted. Section 6.0 – Special Studies summarizes the various studies and initiatives recommended throughout this Mobility Strategy.

STATISTICS CANADA’S 2011 NATIONAL SURVEY



There are a number of challenges that Morinville faces as it seeks to improve mobility in this community. Some of these challenges include:

- land required to fill in trail or road gaps in the transportation network that are now privately owned and not in public control, without purchase or expropriation;
- much of Morinville is low density development, therefore the various destinations are far away from each other causing excessive time to get from place to place outside the use of passenger vehicles;
- high traffic and industrial routes crossing through Morinville, such as rail lines and provincial highway corridors; and
- a roadway network that is not necessarily in grid-form, which creates less efficient flow for traffic of all types.

New technologies in mobility have arrived in recent years. Smartphone applications allow people to gain instant access to information such as maps, transit schedules, locations of public washrooms, key public amenities, parking lots, etc. Applications such as Trail Forks include maps of various trail systems in communities across Canada and the United States. Upon completing a trails master plan, Morinville would be recommended to upload its trails information to applications such as this as one means of keeping up with modern technology related to pedestrian mobility.

Similar communities across Canada are experiencing a paradigm shift in the way people choose to get place to place. Through recent survey, Statistics Canada documents an increase in personal reliance on public transit opposed to personal vehicle use. Far less people – particularly millennials – now maintain a drivers licence with the availability of more economical and cost effective transit options. While Morinville does not have public transit or the availability of transportation options such as ride sharing, this may change in the near future as Morinville’s population grows and demands rise.





102 Street



Grandin Drive



100 Street



100 Street



Highway 642 (100 Ave)

3.2 Street Experience—Existing Road Network

Morinville's physical form can be described as having four unequal quadrants, defined by the CN Railway line bisecting the community west to east, and by 100 Street bisecting the community north to south. These dominant transportation corridors are concurrently important to Morinville's success and challenging to connectivity between quadrants. Figure 6 identifies numerous walking distances leading from the centre of the community, however due to impediments such as rail lines times will vary.

Roads are designed in accordance with the Town of Morinville's Municipal Engineering Standards and the Municipal Open Space Standards Bylaw. Morinville has a very typical hierarchy of road types, from least to largest in daily trips including back lanes, local roads, minor collectors, major collectors, arterials and Provincial highways. Morinville commonly requires traffic impact assessments in support of new development to determine all required traffic and roadway conditions such as road type, lane widths, intersection treatments, road geometry and traffic control devices such as speed limits and signalization. Figure 8 on the following page shows the community's current transportation network, with the addition of roadway layouts for known developments under approved area structure plans.

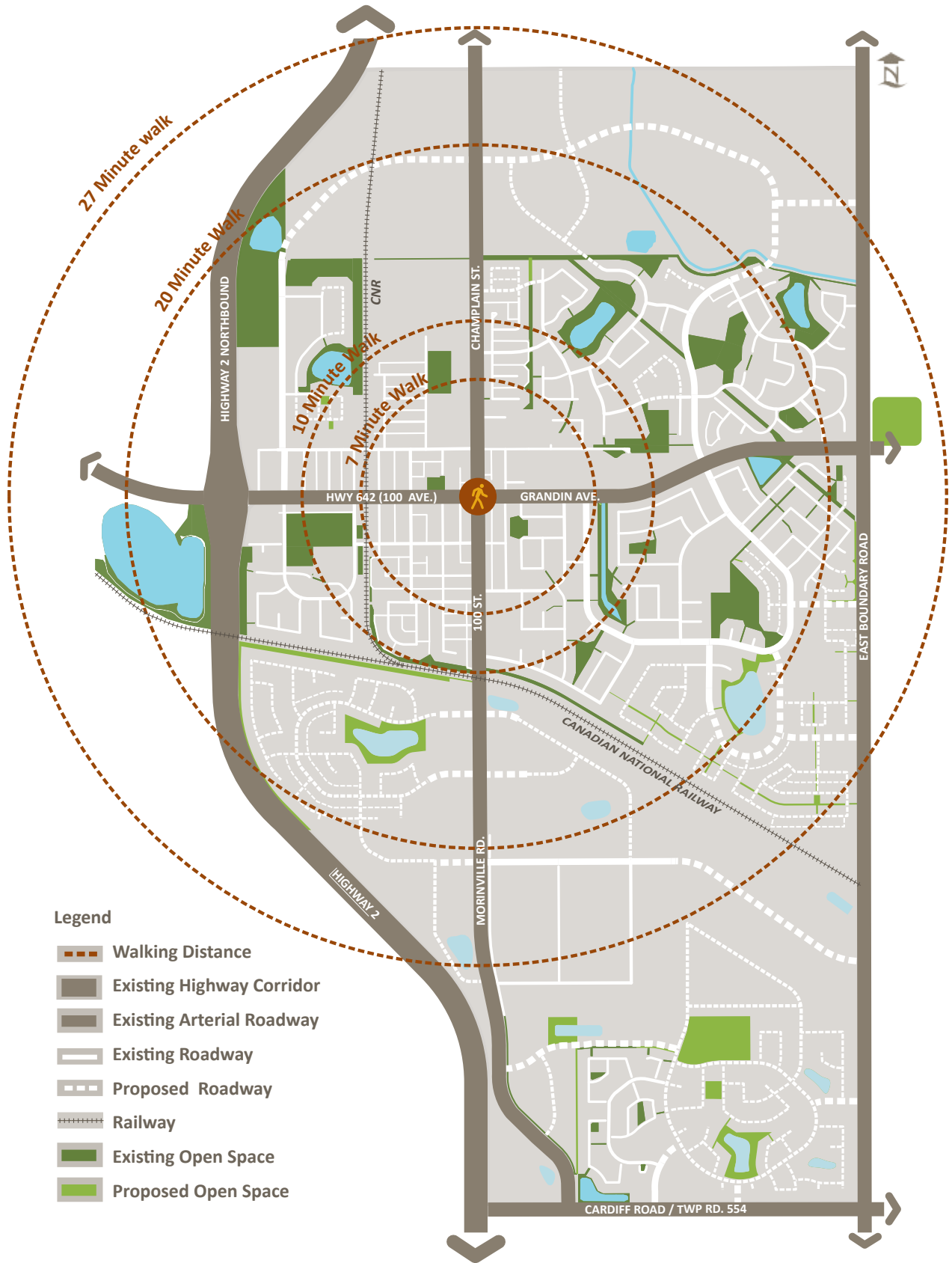


FIGURE 6 Walking Distances



FIGURE 7 Trail Comfort

A large proportion of road rights of way in Morinville have pedestrian sidewalks on one or both sides of the road. Pedestrian personal comfort varies significantly depending on the scale and design speed of roads, and the separation distance between the designated pedestrian carriageway and traveling vehicles. Figure 7 demonstrates the range of personal comfort that active modes of movement (ie. walking and cycling) experience on various types of roads.

Pedestrians and other active means of movement have varying levels of comfort while traveling along different types of streets and trails through public open space. There seems to be a direct correlation between personal comfort of active users and the distance between them and moving vehicles – using trails in parks that are entirely separated from streets lead to the highest level of comfort, and on the other side of the spectrum having pedestrians using rural roads with no delineated pedestrian carriageway being the least comfortable. The above figure summarizes various types of walking

surfaces found in Morinville and a qualitative gradation of personal comfort, based on known literature and professional experience.

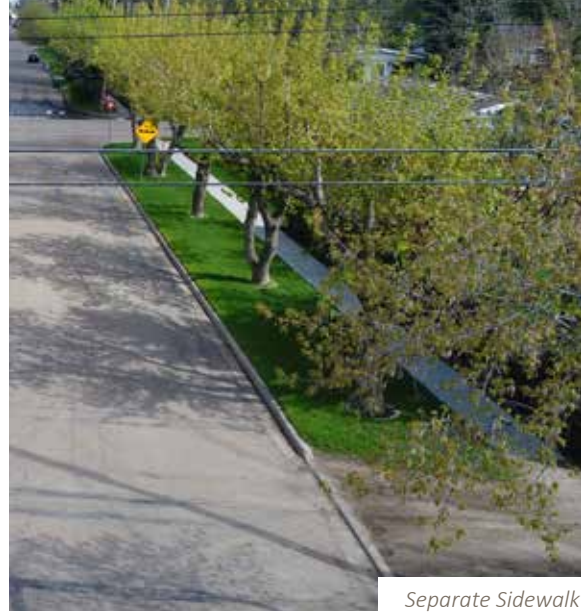
In some new developments, developers have implemented streets with sidewalks on only one side of the street. There are also some roads in more established areas of Morinville that do not have sidewalks on either side of the road. Neither of these approaches are preferred to promote good pedestrian connections even along local roadways. To improve pedestrian comfort within road right of way, a separate sidewalk (see Figure 7) is preferred over monolithic sidewalk (see Figure 7). Separate sidewalks also help accommodate snow loading within the grassed boulevard areas, allowing for better pedestrian access to roads during winter months.



FIGURE 8 Road Network



Monolithic Sidewalk



Separate Sidewalk

From a physical perspective, Provincial highways and established rail lines passing through Morinville are the most significant impediments to mobility, mostly due to stringent restrictions from regulatory authorities outside Morinville’s control. There are also other impediments to mobility, such as gaps in trails networks, lack of marked crosswalks, public open space without formal trails, poor access for vehicles leading into developed areas, and poorly designed parking lots. Figure 9 identifies some of the different types of impediments in Morinville.

Some of these impediments can be described as follows:

- Provincial highways – both Highway 2 at the west end of Morinville and Highway 642 / 100th Ave are under Provincial jurisdiction, overseen by Alberta Transportation. The Municipality does not have jurisdiction over the redevelopment of any lands within road right-of-way of Provincial roads, therefore must work with Alberta Transportation to see through any proposed improvements. This Mobility Strategy recommends that the Highway 642 Functional Planning Study be revisited to deal with impediments to active movements within, and crossing, this road right-of-way. Another type of impediment related to provincial highways as identified on Figure 9 is “challenging crossings”. An updated Highway 642 Functional Plan should address pedestrian crossings at the key intersections shown on this figure.

- rail lines – an active CN rail line passing generally in an east-west orientation segregates Morinville, with few approved crossings for traffic to pass over. Figure 9 identifies the locations of the seven approved crossings over existing rail lines. A spur leading north near the Public Works yard and the Fish and Game Pond also creates an impediment to traffic over this rail line;
- no connectivity – there are several locations in Morinville that lack connectivity due to impediments such as wide roadways. Strong desire lines for active transportation movement must be addressed with best management practices such as intersection bump-outs to reduce pedestrian time crossing roads and to provide traffic calming for oncoming vehicles. Many other best management practices may be used; and
- discontinuous sidewalks and roadways – obvious need for connections between busy road and sidewalks.



FIGURE 9 Impediments



3.3 Public Realm Experience – Existing Open Space Network

Figure 10 identifies areas of public open space that extends outside of road right of way, including municipal reserves, utility rights of way, stormwater management facilities, and other easements that form part of the public realm. There is a significant network of these areas for public use. Some of these areas contain formal activities such as playgrounds, trails, outdoor skating and community gardens; other areas are simply grassed areas with no programming or formal function. While Morinville has this network of public open space, each space tends to be poorly connected with a lack of trails, sidewalk connections or other safe linkage.

Section 4.2 summarizes the findings of public engagement of dog walkers, parks and open space users of the community. Our team spoke with over 40 residents while within various areas of Morinville’s park system and gathered survey information. Based on conversations during this engagement activity, some of the ways people described the public realm outside streets include:

- a need for more substantive trails that provide good loops and connections to key places in the community without having to walk along streets;
- a general sense of personal safety when outdoors, with a few concerns about unsafe conditions while outdoors;
- hesitation to use some park spaces such as Heritage Lake because of the poor or non-existent pedestrian trail connections; and
- better pedestrian crosswalk safety needed, particularly on Highway 642 / 100th Ave.



FIGURE 10 Open Space

3.4 Development Typologies: Land Use

Figure 11 demonstrates the current generalized land use designations for all of Morinville. The land use assumptions used as the basis for modeling in the existing TMP are no longer current, and do not reflect the housing densities called for in current planning documents (Edmonton Metropolitan Region Growth Plan, Municipal Development Plan and Cœur de Morinville ASP), or current population growth projections. Updated population and growth projections will be completed as part of the current MDP update initiative. As lands within each ASP area are taken to detailed design, each developer should work with the Municipality to explore ways of including the various concepts of this Mobility Strategy and the upcoming Transportation Master Plan update.

Morinville can be characterized by having a mix of active land uses, some that support high levels of pedestrian activity. These land uses, mostly in commercial zoning districts, would best support street typologies such as shared corridors and complete streets. Other areas of Morinville with predominantly residential development would be better candidates for more traditional road carriageways that include standard road widths and separate sidewalks. There is generally a direct correlation between adjacent land use and the type of street treatments that best be

developed beyond the curbs at either side of the street. Also, other open space such as storm water management facilities (SWMFs) or utility easements would have differing types of trails based on the surrounding land use. For example, SWMFs within industrial developments arguably demand less trail access than would SWMFs within a residential neighbourhood.

Existing Land Use

Morinville comprises four predominant land use categories: residential, commercial, industrial and urban reserve. The 1,134 ha of land within Morinville’s municipal boundaries are roughly broken out by land use category in Table 1 below.

This coarse analysis of existing land use categories shows that residential development and large tracts of undeveloped land dominate Morinville, representing almost 75% of the total land within Morinville’s boundary. Commercial and industrial development represents just over 10% of the total land base. The remaining approximately 15% of land consists of parks, institutions, CN Railway lands, and various Direct Control properties that may be residential, commercial or mixed use in nature.

TABLE 1 Land Use Categories by Area

Land Use Category	Area of Land (ha)	% of Total
Residential	345.7 ha	30.5%
Commercial	51.2 ha	4.5%
Industrial	66.9 ha	5.9%
Urban Reserve	496.7 ha	43.8%
Other*	173.4	15.3%
TOTAL	1134.0	100.0%

* ‘Other’ includes DC, POS, PS and un-zoned lands, such as CN Railway lands.

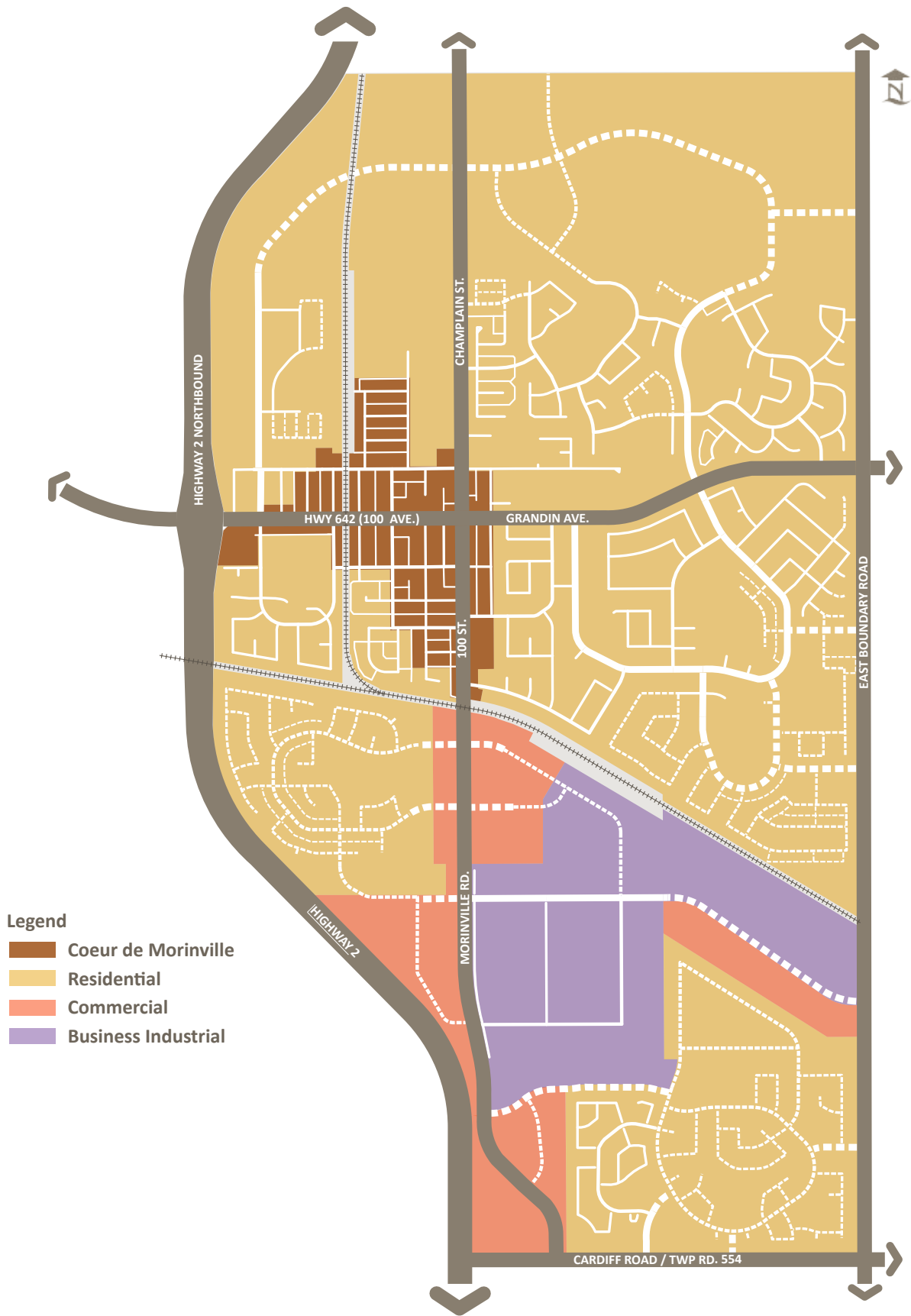


FIGURE 11 Existing Land Use

3.5 Key Public Amenities: Community Destinations

Figure 12 identifies the most significant community destinations within Morinville, as identified by project stakeholders. As the future Mobility Master Plan is developed, understanding how residents and visitors to Morinville travel to and from each of these key destinations should be addressed. A prioritization of improving the access to certain amenities completed through parking and access management studies for developed arterial roads. Section 6.5 outlines the need for this type of study as part of the functional planning studies. An access management study would also address parking requirements for various areas of Morinville, and these key amenities, as well as types and locations of entrance and exit points.

Morinville has a number of public amenities that service the daily needs of the community (see Figure 12). Among these amenities are:

Schools in both the public and separate (Catholic) school districts:

- Morinville Public School (preschool to 9) – public;
- Notre Dame Elementary School (preschool to 5) – separate;
- Primeau Junior High School (6 – 9) – separate;
- Morinville Community High School (10 – 12) – separate; and
- Also Christian school grades 1-12.

Recreation facilities both indoor and outdoor:

- Ray McDonald Sports Complex (arena and curling rink);
- Skyline Ball Diamonds;
- Morinville Fish and Game Pond;
- Heritage Lake Morinville RV Park and Campground;
- Trails system;
- Running track (at Morinville Community High School); and
- Various playing fields, parks and playgrounds

Community gardens

- Morinville Centennial Community gardens at two locations, one at the Morinville United Church and the other at Champlain Park near the Ray McDonald Sports Complex.

Grocery stores

- Morinville is well served by two grocery stores, Sobey's and No Frills. Sobey's is located in the northern half of the community and No Frills is located at the south end of Morinville.

Places of Worship

- There are a number of churches in Morinville.

Culture & Heritage

- Morinville Community Cultural Centre provides access to theatrical and musical productions, hosts art exhibitions and offers conference and special events spaces for rent; and
- Musée Morinville Museum is located in the basement of the old convent, which was converted into an apartment complex, located adjacent to the St. Jean Baptiste Park, church and rectory.

Food & Beverage

- Morinville is served by a wide range of food and beverage establishments, including full service restaurants, fast food restaurants, coffee shops and cafes.



FIGURE 12 Community Destinations

Conditions in the
Stormwater Management
Pond can change rapidly
including fluctuating
water levels and thin ice.
Morinville

IT'S THE LAW
CLEAN UP
AFTER
YOUR
DOG
\$100.00 FINE
BYLAW 26.2010
Town of Morinville

Small white sign on a post near the pond.

Utility box with a black object hanging from it.

Small white sign on a post below the utility box.


Morinville
PARKS & TRAILS
SURVEY

“I love living in Morinville, but we really are lacking an identity.”

4.0 PUBLIC ENGAGEMENT

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4.2	Stakeholder Outreach	43

The foundation of this study’s recommendations is based on a strategic stakeholder and engagement program. In summary, the engagements included:

- Technical Advisory Committee (TAC) – numerous individuals from Administration and external consultants with varying professional and technical backgrounds;
- municipal website and social media outlets used to advertise public events and surveys;
- direct meetings with stakeholders as required to address group-specific knowledge and points of view;
- youth, seniors, business owners, park users and industrial developments as specifically targeted stakeholders;
- communication with Administration with other departments at the Provincial and Federal levels to obtain data and project information as required;
- two public open houses to present the final recommendations; and
- presentations to Council during and at the completion of the study.

The objectives of the engagement program for this project are to:

- provide the opportunity for known stakeholders of Morinville’s public open space and transportation networks to have meaningful involvement in the development of the Mobility Strategy;
- ensure a balance in consulting with all modes of movement – vehicles, pedestrians, cyclists, open space users, etc.;
- facilitate a fair, equitable, respectful and professional sequence of engagements that allow stakeholders to convey ideas and share perspectives to support the finalization of a Mobility Strategy;
- demonstrate to stakeholders that the Municipality values public input in day-to-day planning of public assets;
- affirm project objectives, meet local needs and develop a plan that is locally relevant;
- test ideas that the Consulting Team and Administration have for the management and development of mobility networks;
- set the stage for a future Transportation Master Plan Update with meaningful public input that can be used for that process; and
- assure Administration that the study process has had meaningful involvement of local perspectives to improve the success of plan acceptance, and Council has the confidence in the plan for easy adoption.



4.1 Technical Advisory Committee

The Mobility Strategy established a project-specific technical advisory committee (TAC) comprised of 11 individuals from both Morinville and from the consulting industry. The TAC members and their respective roles included:

- Greg Hofmann, Morinville Planning & Economic Development – Project Sponsor, primary accountability on approving the Mobility Strategy;
- Vicki Dodge, Morinville Planning & Economic Development – Municipal Project Manager, primary accountability on delivering the Mobility Strategy and strong focus on the MDP Update;
- Tim Vrooman, Planning & Economic Development – technical expertise related to planning, and a primary focus on the MDP update;
- Shaun Goodeve, Planning & Economic Development – technical expertise related to economics, commerce;
- John Buchko, EDS Group – External Project Manager, assisting Vicki with primary accountability on delivering the Mobility Strategy and leading public and stakeholder engagement process;
- Anne McKinnon, EDS Group – external technical support related to planning graphics and report formatting;
- Dallas Karhut, Bunt Associates – external advisor related to transportation;
- Jim Gourlay, Public Works – internal advisor related to transportation and utilities;
- Donald Fairweather, Public Works – internal advisor related to public open space;
- William Norton, Community & Protective Services – internal advisor related to bylaws, safety consideration;
- Felicity Bergman – Corporate Communications Coordinator; and
- Nicole Boutenstein, Morinville Council – internal advisor related to governance and direct liaison to Council.

4.2 Stakeholder Outreach

During the course of completing this project, numerous stakeholders were identified and consulted with using a range of tactics. These stakeholders included:

- Alberta Transportation;
- general public
- business owners;
- general park users and dog walkers;
- persons with disabilities and limited mobility;
- youth; and
- seniors.

Each of the named stakeholders are best engaged in different ways. The following summarizes each of the stakeholders engaged during the course of this project, the type of information sought, tactics used to gather the information and the venue for engagement activities.

Youth

Information Sought

- experience using public realm
- modes of getting around

Tactics

- online surveys provided through school mailouts
- develop a “prize” to encourage participation;
- contact with school principals and teachers to encourage discussion on mobility

Venue

- on-line

Questions Asked

- age dependent survey, having two options for drivers and non-drivers;
- means of getting to school;
- choose facilities in Morinville that they frequently visit;
- reasons for choice of walking vs. driving (for kids over 16);
- willingness to walk / ride a bike: how far would they be willing to walk or ride to a destination;
- inaccessible places – memorable and special places in Morinville that have limited access; and
- safety concerns



Seniors

Information Sought

- mobility challenges in the community
- evolution of getting around in Morinville: history
- mobility programs (ie. mobility van, private / public) ease of getting around

Tactics

- coffee table sessions
- invitation to public open house

Venue

- Rendez Vous Centre

Questions Asked

- qualitative assessment of how transportation in Morinville has improved or degraded;
- challenges and impediments in the public realm;
- willingness to walk: how far would they be willing to walk to a destination;
- key amenities, and means of getting to these places;
- programs that may improve accessibility; and
- inaccessible places - memorable and special places in Morinville that have limited access.



Municipal Committees

Information Sought

- technical advice
- plan endorsement

Tactics

- liaise with key members of committee (involve them on TAC) and allow them to report back to their respective committees

Venue

- n/a

Questions Asked

- using a TAC member to report back to their respective committees and bring any feedback to a regular TAC meeting; and
- ask for a letter from the Committee Chairperson suggesting they have been meaningfully reported to and informed.

Municipal Council

Information Sought

- plan support

Tactics

- Mobility Strategy referred to in the MDP update as a place for statutory reference
- three project updates as Mobility Strategy is completed

Venue

- council chambers

Business Community

Information Sought

- adequacy of roadway and access networks to their businesses
- staff experience as influenced by transportation network
- customer experience as influenced by transportation network

Tactics

- telephone survey, coordinated along with other business survey

Venue

- telephone

Questions Asked

- challenges and impediments in the public realm;
- effectiveness of current roadway and access design and conditions;
- importance of complete streets, and encouraging more pedestrian traffic, improving aesthetics of streets, etc.;
- programs that may improve accessibility;
- customer feedback on accessibility to their business – what is in their control vs. Morinville’s control;
- safety and crime, and ways to improve perceived and actual safety of the public realm;
- parking accessibility; and
- role of businesses, and what they can do to help.

Dangerous Goods & Heavy Haulers

Information Sought

- adequacy of roadway and access networks to their facilities
- staff experience as influenced by transportation network
- customer experience as influenced by transportation network

Tactics

- personal visits and conversations

Venue

- on-site visits by Project Team

Questions Asked

- challenges and impediments in the public realm, with an emphasis on trucking TDG routes;
- effectiveness of current roadway and access design and conditions;
- importance of complete streets, and encouraging more pedestrian traffic, improving aesthetics of streets, etc.;
- problematic intersections, turn bays, access points, parking;
- customer feedback on accessibility to their operations – what is in their control vs. Morinville’s control;
- safety and crime, and ways to improve perceived and actual safety of the public realm;
- parking accessibility; and,
- role of businesses, and what they can do to help.



Dog Walkers and Park Users

Information Sought

- experience using parks and open space amenities

Tactics

- survey using tablets on-site

Venue

- on-site various park spaces during peak use

Questions Asked

- challenges and impediments in the public realm;
- access to Heritage Lake, Fish & Game Pond – challenges of Highway 642 and Highway 2, and rail lines;
- effectiveness of current trails and park design and conditions;
- willingness to walk / ride a bike: how far would they be willing to walk or ride to a destination;
- importance of complete streets, and encouraging more pedestrian traffic, improving aesthetics of streets, etc.;
- safety and crime, and ways to improve perceived and actual safety of the public realm; and
- access for pets: getting around, accessing key amenities, facilities or amenities that may improve pet accessibility.

Public at Large

Information Sought

- resident perspectives
- plan support

Tactics

- public open house near conclusion of the project

Venue

- Community Cultural Centre

Questions Asked

- choose facilities in Morinville that they frequently visit;
- reasons for choice of walking vs. driving;
- inaccessible places – memorable and special places in Morinville that have limited access;
- safety concerns;
- challenges and impediments in the public realm;
- willingness to walk / ride a bike: how far would they be willing to walk or ride to a destination;
- effectiveness of current roadway and access design and conditions;
- importance of complete streets, and encouraging more pedestrian traffic, improving aesthetics of streets, etc.;
- programs that may improve accessibility;
- safety and crime, and ways to improve perceived and actual safety of the public realm;
- parking accessibility; and,
- role of residents, and what they can do to help.



Provincial Departments

Information Sought

- access to related technical studies that may be of assistance
- technical advice
- plan support
- regulatory considerations

Tactics

- in-office meetings, telephone calls and email exchanges

Venue

- Municipal office boardroom, telephone conversations and email exchange

Questions Asked

- Transportation and Environment and Parks
- any technical studies that may exist that would be relevant to this study; and
- any regulatory considerations that would limit or support our stated objectives of the plan.

Federal Departments

Information Sought

- staff experience as influenced by transportation network
- access to related technical studies that may be of assistance

Tactics

- in-office meetings, telephone calls and email exchanges

Venue

- Municipal office boardroom, telephone conversations and email exchange

Questions Asked

- Forces Canada
- any statistics on how residents of Morinville that work at the base get there;
- rationale for a lack of car pooling;
- opportunities for partnerships for ride-share programs, shuttles, busing, etc.



The following summarizes information gathered during engagement activities with some of the key interest groups that the study team met with during the course of this assignment:

4.2.1 Seniors Engagement

Approximately 15 people met with the study team, and three main topics of discussion included favourite and important destinations within Morinville, words or phrases that best describe Morinville and challenges in the public realm regarding mobility.

Figure 12 (see page 39) identifies various destinations throughout Morinville. The following ten destinations resonated most with the seniors that were engaged:

1. Catholic Church and Rectory - a landmark, and historical development;
2. St. Jean Baptiste Park - the hub of our community;
3. Museum - collection of our community's deep rooted history;
4. Library - a lot of great programming and activities for all ages;
5. Rendezvous Centre - community gathering place;
6. Schools - playgrounds, school-based activities

- and play areas in school grounds;
7. Seniors' Housing - Aspen House, Heritage Lodge are two primary developments;
8. Arena & Curling Club - trade show, hockey, curling and other activities;
9. Legion - meetings, community gathering and celebration; and
10. Community Gardens and Trails – great exercise and public gathering spaces.

A great discussion on what best defines Morinville helped identify both what the Municipality has, and what is missing. Ten descriptors coming out of the discussion include:

1. strong community feeling;
2. festivals and celebration;
3. more beautiful than ever before - such as banners, street lights coming into Morinville;
4. a bedroom community;
5. nearby important facilities such as Edmonton Garrison;
6. need to reinvigorate our identity as we don't seem to have one;
7. love the trails;
8. feeling of safety and security;
9. nature - such as fish and game pond area, wetlands in South Glens; and
10. great gathering places, such as the Rendezvous Centre.



Seniors Engagement Meeting

Numerous challenges related to mobility were identified, including:

- curbs and curb cuts - many of these are in the wrong location or not existing at all, making it very challenging to get around with scooters, walkers, strollers, etc.;
- parking for the elderly - it is difficult to get from street side parking stalls up onto the sidewalk;
- connecting north and south - the significant distance and lack of sidewalks to connect the south end of the community with the rest of Morinville, particularly along 100 St. between Forest Glen and South Glens;
- public washroom at Rotary Park - a great amenity, however getting into the bathroom is very challenging due to what seems to be an unfinished site;
- back alleys - a lot of rutting, ponding water and potholes;
- Community bus - while this is a great service, it only has capacity for one wheelchair and there is a great demand for more;
- Community Cultural Centre parking lot is poorly designed, and does not have sufficient handicap parking along the front doors at the drop off zone. The parking lot can use a second entrance / exit as getting out is near impossible during events at the CCC and school;
- handicap parking along roadways - a lowered curb would help users to get onto sidewalks without having to lift walkers / strollers as high up onto the curb;
- snow removal - more targeted snow removal in areas of priority rather than leaving snow piled up on the sidewalk for extended periods of time. Need to focus on handicap parking areas, curb cuts and crosswalks to ensure no snow is left there;
- dangerous crossing locations on Highway 642 / 100th Ave. The road is too wide and needs more controlled crosswalk locations and less roadway to cross to make it safer for pedestrians. Including more traffic lights may help;
- education is required for both pedestrians and drivers so that they look out for one another - make eye contact;
- overnight parking is not permitted at the Community Cultural Centre, however allowing this for certain events such as weddings with out of town guests would be a great benefit.



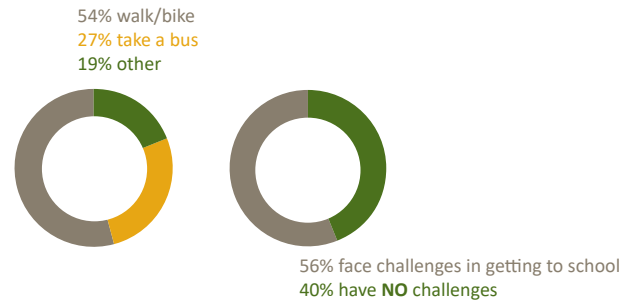
4.2.2 Youth Engagement

Online surveys were distributed through all public and separate schools in Morinville, with the option of students to respond. Two different surveys were distributed – 8-15 years and 16-18 years – because of the minimum age required to obtain a drivers licence. The following summarizes the responses from each survey.

Ages 8-15 – a total of 66 respondents:

- approximately half of students take the bus to school, with 27% being driven to school by a family member. Of all respondents, over 80% travel along roads opposed to sidewalks or trails; only one student has the luxury of walking only through a park between home and school;
- some of the more prominent challenges of getting to school included the bus taking too long, streets not feeling safe and a lack of sidewalks. Nearly 38% of respondents felt there were no challenges in getting to school;
- the most common destination for students include Heritage Lake (44%), spray park (35%) and the skate park (33%); and
- 64% of respondents do not feel safe riding their bikes on any road and stay on sidewalks in their neighbourhood, while 73% do not feel safe on roads going to school.

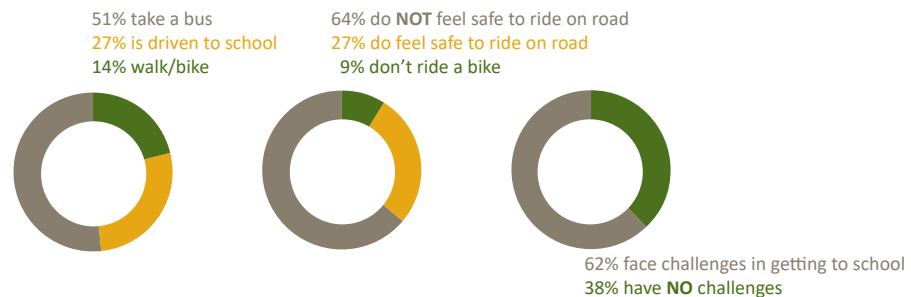
SCHOOL KIDS 16-18



Ages 16-18 – a total of 139 respondents:

- 57% of respondents have a drivers license, and of those drivers 94% have daily access to a vehicle. Of these drivers, 81% drive to school as regular routine;
- 27% of respondents take a bus to school, with 54% walking or riding a bike;
- half of the students use roads to get to school, and only one respondent with the ability to get to school only through park trails;
- 56% of respondents felt that there are no challenges in getting to school, with 40% feeling streets are too busy and commuting takes too long;
- Heritage Lake is by far the most common destination for students in this age category; and
- 72% feel comfortable riding their bikes on streets of their neighbourhood, and 44% feeling comfortable biking on streets between home and school.

SCHOOL KIDS 8-15



4.2.3 Parks and Open Space General Users

Project team members spent a day in various park areas in Morinville interviewing park users with an on-line based survey questionnaire. Over 40 surveys were collected, and the following provides highlights of survey responses:

- almost half of all respondents use parks daily, and nearly 40% using parks weekly;
- the most prominent parks being used include the Fish & Game Pond, Skyline Ball Diamonds, and Sunshine Lake Park. Some of the least used parks included St. Jean Baptiste Park, Champlain Park and Lion’s Park;
- nearly 40% of all park users drive to park destinations;
- the most common reasons for park users to avoid using certain parks include a lack of washrooms facilities, being too far away or inconvenient to get to, and being intimidated by the types of people that hang around;
- of those people who use the off-leash dog park, over 70% use it 1-3 times per week, with the remainder using it daily;

- nearly 60% of respondents feel that the trails in Morinville are either fair or poor, with less than 5% saying the trails are excellent;
- the most preferred type of trails are wide, paved trails, while the least preferred were narrow gravel trails; and
- over 75% of respondents feel that trails in Morinville are safe.

Other comments were collected during conversations, and there was a consistency of responses summarized as follows:

- a need for more substantive trails that provide good loops and connections to key places in the community without having to walk along streets;
- a general sense of personal safety when outdoors, with few concerns about unsafe conditions while outdoors;
- hesitation to use some park spaces such as Heritage Lake because of the poor or non-existent pedestrian trail connections; and
- better pedestrian crosswalk safety needed, particularly on Highway 642 / 100th Ave.

PARK AND TRAIL USERS

60% consider trails are fair to poor conditions
 5% consider trails are excellent
 35% other



50% use daily
 40% use 1-3 times a week
 10% other



4.2.4 Business Owners Engagement

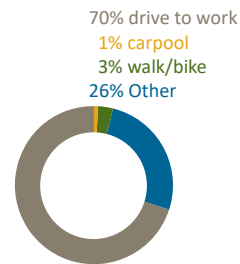
Of the 377 local business currently operating in Morinville (2016 business licenses), 100 local businesses were randomly contacted directly by phone in April 2017 as part of the Business, Retention and Expansion Project. A 15-20 minute interview was held with businesses owners (or their designate) to address questions relating to current business activity, labour force, export development, mobility and parking. The results were then aggregated and presented to the Morinville Planning & Economic Development Manager.

Responses from the business owner survey can be summarized as follows:

- business owners have a strong reliance on personal vehicles to get to work each day. 70% of businesses surveyed indicated that they drive a personal vehicle alone to work each day, with only 3% indicating that they walk or bike to work, while 1% carpool's with a family member or a colleague;

- many businesses operate with no staff, having almost 1/3 of over 100 business respondents claiming they work as sole employees;
- most businesses (87%) feel there is sufficient parking for their business, and only 13% claiming that having limited parking is a concern to their day to day operations; and
- only 6% of respondents feel that there are traffic problems in Morinville, and that it's difficult to get from place to place by vehicle. Regarding trails and sidewalks, just over half of respondents felt that sidewalks are poor, or exist but have limited connectivity.

BUSINESS OWNERS



4.2.5 Dangerous Goods & Heavy Haulers

The project team conducted a series of telephone interviews as well as live discussions with several individuals tied to the transportation of bulk goods in Morinville. 12 interviews were completed, ranging from parking lot interviews nearby the southerly industrial area of Morinville to phone discussions with local business owners with needs for large transport trucks. The following describes some of the key findings and consistent messages from these interviews:

- The need for large transport trucks is generally limited to 100th Street and Highway 642 / 100th Ave. and there is little need to get access to other areas of the community. These are already designated truck routes and existing controls on these truck routes are not prohibitive to business;
- Morinville does not offer amenities for professional truckers passing through the area, such as large truck stop gas stations, weight scales, overnight parking and idling areas, etc. therefore look to other communities (primarily north of Morinville on Hwy 2) for these amenities;
- Regional courier and transport trucks that stop in Morinville and continue on to other communities with the same load do not feel the road network in Morinville poses challenges to mobility such as inadequate turning areas, too narrow of road widths, missing driveways, etc.;
- The Tim Horton's coffee shop is known to be a landmark for Morinville's transportation industry where people most often meet. There are some challenges moving through this parking lot with tractor-trailer units, particularly those people not familiar with this parking lot and the drive aisles;
- As new industrial development progresses in Morinville, attention should be paid to how sidewalks and trails cross roads. Crosswalks should be just as well marked for truck drivers to see as much as they are visible to pedestrians; and
- Illegal jay-walking is very common in the downtown areas of Morinville, and its often challenging for large trucks to suddenly stop. Pedestrians need to be respectful of the laws of the road, even though Morinville is a small community.





"I don't want to describe any of our streets as 'dangerous' to my kids."

5.0 TRANSPORTATION MASTER PLAN FOR 2035

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The following principles shall guide the design, implementation and operation of trails, streets and other public open space in Morinville:

- **great places** – safe, attractive, multi-use and flexible space for people to enjoy day to day and during programmed events, year-round;
- **a network of efficiency** – planning our mobility network not in isolation but ensuring phased development and redevelopment projects are cognizant to the larger context of community-wide mobility;
- **adaptable open space** – streets, trails and open space that can accommodate different uses, such as a street segment closed for occasional festivals, or an urban sidewalk that can accommodate businesses occupying portions of municipally-owned land for retail or dining through special contractual arrangement;
- **sustainability** – being mindful of construction techniques and the wise use of land that minimizes long-term operational, maintenance and replacement costs; and
- **adaptability** – lasting the test of time of this plan, while adapting to the needs of the community as Morinville develops and redevelops considering a changing dynamic of citizen and business owner needs.

What does great mobility planning do for my community?

- increases quality of life by providing access to public open space that is safe, attractive and comfortable to use year-round;
- promotes more active lifestyles by providing safe and comfortable alternatives to getting around Morinville without the use of a personal vehicle; and
- guides developers to plan better by setting the course for a systems-based mobility network that balances the needs of vehicles and pedestrians, and creates consistency throughout Morinville.

5.1 Integrating Land Use and Transportation

Linking land use with transportation and mobility is essential. Unfortunately, new growth patterns seen in Morinville as of late favour sprawling of development. Sprawl leads to longer commutes and neighbourhoods that may be poorly served with less local amenities inside each area. Morinville is currently growing around its perimeter, with the most notable residential, commercial and industrial growth at the north, south, and southeast ends of the community. Current development patterns along with areas of already established community fabric is making Morinville quite long north and south, bound by Highway 2 on the west and Range Road 252 / East Boundary Road to the east. An important attribute of successful mobility planning is infill, rather than sprawl – densification of new development in established neighbourhoods opposed to simply expanding outward. Outward expansion can pose challenges to successful mobility planning because of:

- the cost of infrastructure leading to new areas, opposed to using existing services such as roads, storm, water and sanitary connections;
- a diminished sense of place and local identity that is often best found on main streets or town centres, that cannot be replicated in suburban developments;
- the ability for densification and infill to bring more people to existing streets, which activates and animates existing streetscapes;
- significant distances often associated with outward growth, and in some cases in Morinville creating commute distances from many new homes to one of the many destinations too far for modes such as walking or cycling; and
- the sparse availability of amenities such as shopping, libraries and recreational centres.

A mix of land uses such as retail, restaurants, entertainment, civic functions and residential development that are of higher density create the most vibrant streets. Accommodating vehicles outside the road right of way, such as parking lots, drive thru restaurants and vehicle repair facilities detract from pedestrian experiences. In areas of Morinville where pedestrian experience is a high priority, those types of adjacent land uses should not be permitted.



5.2 Complete Streets

The concept of a complete street was established several years ago, and is now a widespread urban design philosophy around the developed world. A complete street is a segment of roadway that maximizes use, safety and comfort for a variety of users within a shared corridor. Ideally, complete streets have:

- design speeds for vehicles no greater than 50 km/h, with posted speeds at or less than that;
- minimal lane widths for vehicles, and minimizing the width of roadway that pedestrians need to cross at intersections and crosswalks;
- accommodation for various modes of movement, including vehicles, cyclists, runners and leisure walkers;
- efficient placement of different carriageways that are cognizant of operations such as snow clearing and removal, while still allowing safe movement of people;
- street oriented buildings that have a good mix of residential and commercial uses;
- an overall priority to pedestrians and transit, opposed to giving priority to a high level of service for passenger vehicle traffic; and
- various vehicular and pedestrian accommodations and amenities such as lighting, parking, bicycle racks, benches and waste receptacles – while working with traditional road right-of-ways and not increasing required road carriageway widths.

Figure 5 (page 30) demonstrates five design zones that are commonly part of a complete street:

- **frontage zone:** oftentimes a very narrow width of privately owned land, accommodating access into buildings and a transition of grade between the sidewalk and building door threshold. This strip can also include temporary signage, furniture and other promotional items that are off the common sidewalk;
- **pedestrian thoroughfare:** separate sidewalk set back from the roadway curb that has predominantly walking pedestrian traffic;
- **furniture zone:** space between the sidewalk and roadway curb that can accommodate amenities such as light standards, benches, waste receptacles, street trees, protection bollards, etc.;
- **flexible zone:** traditionally a parking lane, a lane of roadway that can transition between vehicular parking and pedestrian or commercial uses such as bistro tables, bicycle racks, food trucks that address the curb, etc.; and
- **vehicular lane:** lanes dedicated to the movement of vehicular traffic.



5.3 Universal Design

All streets and other public open space should be designed to accommodate a full spectrum of users of all abilities, including people with mobility aids. Design of the public realm should address physical access for all users, and must also be cognizant of materials used for various surfaces. There are many principles of universal design, and those most applicable to this Mobility Strategy for Morinville include:

- implementation of curb ramps at all formal crosswalks, and at all intersection radiuses leading in each direction that there is a sidewalk;
- curb ramps should be no less than 2.0m wide to accommodate a wheelchair passing by others. Ramp slopes should not exceed 7% in any instance, with side flares no steeper than 10% (see Figure 13);
- reducing straight faced curbs adjacent to any handicap parking stall to a max. 100mm ht., or using a rolled face curb where possible;
- marked crosswalks should include highly visible, tactile walking surfaces with tactile ground surface indicators;
- new or renovated crosswalks should be retrofitted with audible crossing signals to indicate designated crossing;
- adequate surfacing of trails, at minimum compacted gravel surfaces to meet accessibility guidelines such as the ADA Standards for Accessible Design;
- minimizing, or eliminating sudden grade changes of drops between doorway thresholds of public buildings or businesses and adjacent sidewalks;
- ensuring boulevard trees and other vegetation adjacent to sidewalks and trails do not have any protruding branches that may obstruct pedestrian movements; and
- developing trails at longitudinal slopes of no steeper than 1:20 (5%), and a clear width of no less than 1500mm to allow passing by.

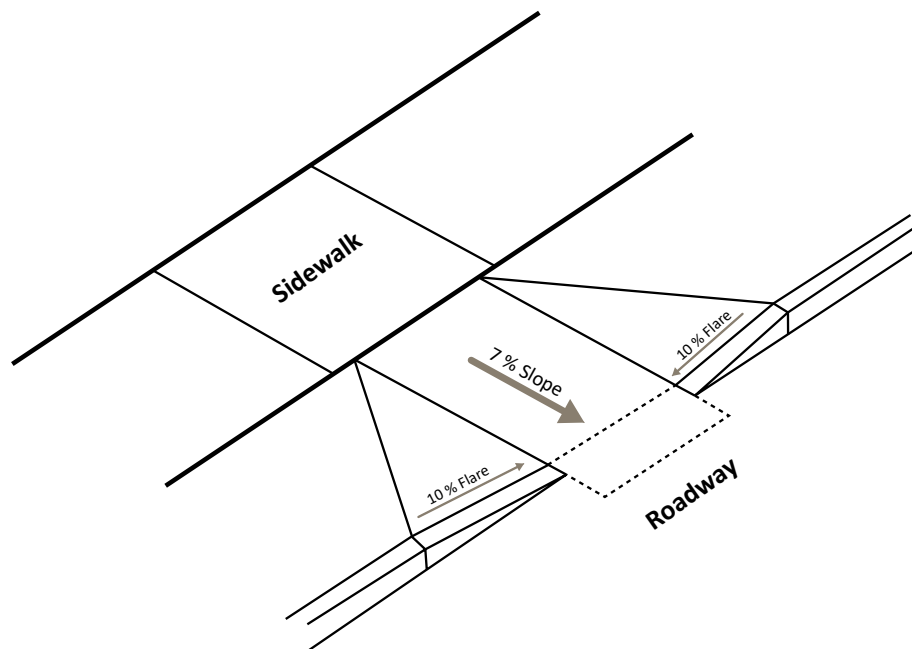


FIGURE 13 Curb Ramp

5.4 Economic Development: Benefit of a Mobility Strategy

Effective, reliable and safe mobility for workforce and customers is critical in the economic development of any community and directly impacts local business' success. Ensuring that the workforce and customers can access a business utilizing various forms of modality from vehicular use to walking to cycling can attract new customers and provide greater options for workers.

Numerous studies have identified that employees seek out non-vehicular means to travel to and from work, regardless of seasonality. For instance, even in so called 'winter cities' there has been an increase in bicycle commuters despite a lack of infrastructure to support safe cycling. When bike lanes are created and pathways cleared and maintained, the number of cycling commuters increases significantly. It is therefore important to recognize that employees are seeking healthier, non-motorized means of travel to work and a mobility strategy can address the factors to meet this demand.

Similarly, residents and visitors to a community are also seeking non-vehicular options for getting around a community for intentional shopping experiences. Morinville's geographic location may require public parking areas to facilitate visitor experiences to Morinville from a shopping or purchasing experience (i.e. dining, retail, etc). A mobility strategy seeks to address the impacts of efficiently planned parking and transportation corridors.



5.5 Future Road Network: Corridor Typologies & Best Management Practices

Figure 8 (page 39) identifies the network of known roads and lot layouts for future developments within community growth and expansion areas of Morinville. This map was based on approved ASPs within Morinville corporate limits. Areas of land without a proposed detailed road network (aside from a conceptual collector road layout) are not currently subject to an ASP.

Four typologies of corridors have been established in this Mobility Strategy, which can be found within either road rights of way or in other public open space. These four generic typologies can be described as follows:

Vehicular Dominated Corridor

Streets such as the northerly section of 100th Street that is maintained primarily for vehicular traffic. There is little to no demand for multi-modal access such as walking or cycling on separate pedestrian corridors such as separate walks or trails. There is little need to explore best management practices for improving mobility for active modes of transportation along these corridors.



Shared Corridor

Streets such as Highway 642 / 100th Avenue that are maintained for both vehicles and pedestrian and active mode traffic. Some principles of complete streets would enhance the co-existence of large numbers of non-vehicular users of this shared space. In these corridors, efficient movement of vehicles is equally important as safe, comfortable and memorable pedestrian movement.



Celebration Corridor

During normal conditions, these corridors, such as a segment of 104th street, could function as a shared corridors. At scheduled times these identified corridors could be easily closed off entirely to vehicular travel for short durations to host special events such as festivals, street markets, and other programmed events. Principles of complete streets would enhance these segments when acting as a shared corridor between vehicles and active transportation modes.



Pedestrian Dominated Corridor

These alignments are predominantly outside road rights of way and are found in public open space such as the multi-use trail by the off-leash dog park, municipal reserves and pipeline rights of way. With exception of municipal maintenance equipment, motorized vehicles are not permitted on these trail systems.



Figure 14 is a map of corridor typologies. This is not an exhaustive catalogue that classifies every street and trail in Morinville, rather provides a set of examples of where each typology currently exists. The upcoming TMP should provide a detailed inventory of all streets in the community, and potentially introduce new typologies of roads that will have their own individual characteristics.

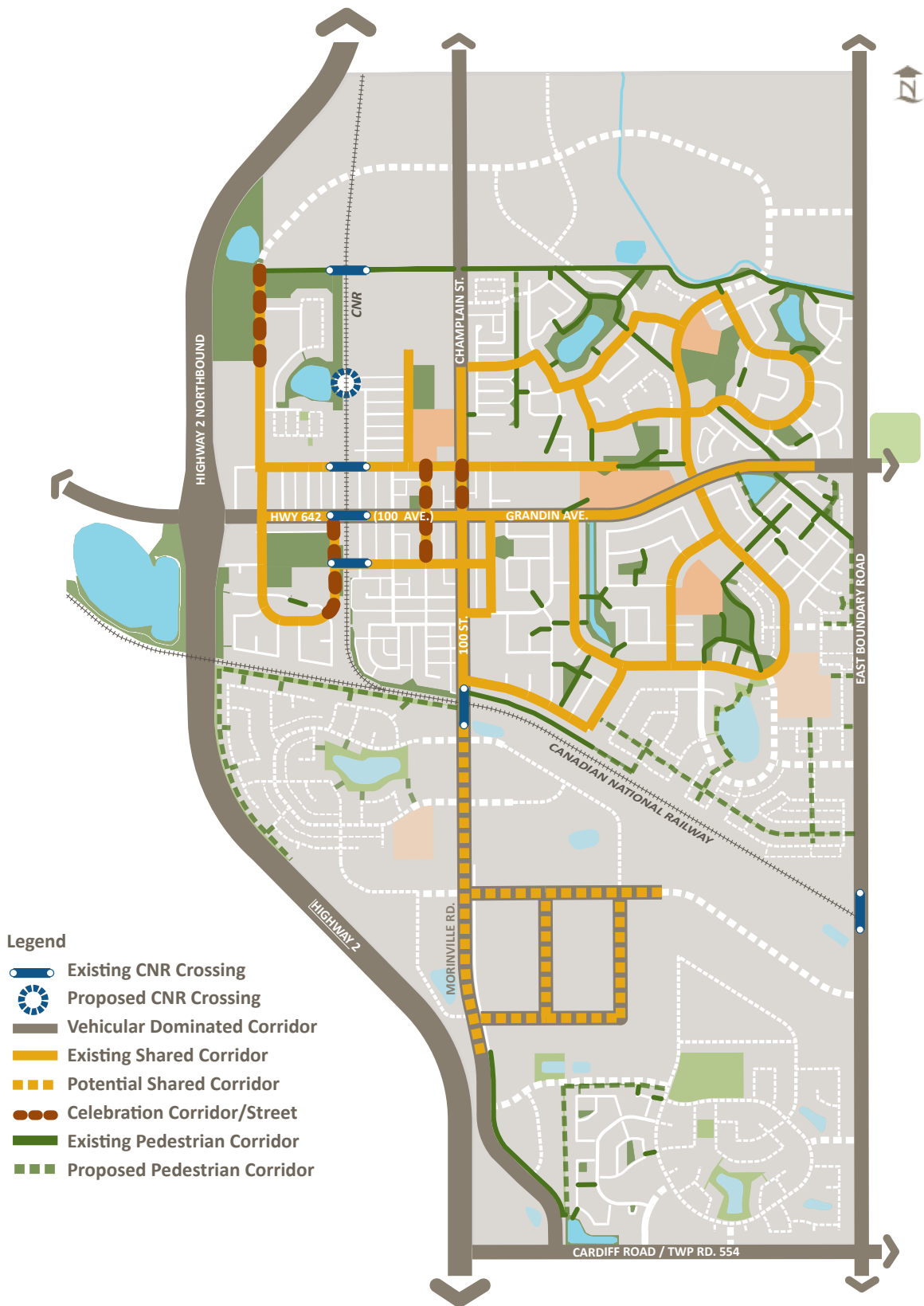


FIGURE 14 Corridor Typologies

To promote safer conditions for movement in these corridors, various best management practices can be applied to each of the corridor typologies. The following best management practices for mobility planning should be considered, amongst others, in completing the upcoming TMP.

The following assigns the 16 best management practices to each of the four typologies by using colour coding:

1. Curb extensions

SHARED CELEBRATION

Also known as intersection bulbs, curbs are extended into the intersection to reduce the crossing distance for pedestrians crossing the street. Image 1 provides an example of curb extensions.

1



2



2. Raised Platform Crosswalks

SHARED CELEBRATION

Located at key crosswalks over highway, arterial, and collector roads, crosswalks are elevated from the surrounding roadway, giving pedestrians more profile and also providing physical traffic calming with a speed bump.

3



3. Signalized Or Signed Crosswalks

VEHICULAR SHARED CELEBRATION

Electronic signage that cues pedestrians to cross the street, including a countdown clock for time before no crossing is permitted, for highway, arterial and major collector road crossings. Highly visible crosswalk signs are recommended for crosswalks along minor collector and local roads.

4



4. Extended Pedestrian Signal Timing

SHARED CELEBRATION

Longer durations for pedestrians to cross streets at key intersections with anticipated crowds, segments nearby larger populations of people with limited mobility, etc.

5. Bicycle Parking Facilities

PEDESTRIAN CELEBRATION

Amenities such as bike racks along a roadway, within the “furniture zone” as shown on Figure 5.

6. Reduced Speed Limits

VEHICULAR SHARED CELEBRATION

Based on a traffic impact assessment for each set of streets, reducing speed limits in key locations such as road segments nearby key destinations, school zones, celebration corridors, etc.

7. Reduced Traffic Lane Widths

SHARED CELEBRATION

Acting as a physical traffic calming measure, reduced traffic lane widths inadvertently reduce speed and increase driver attentiveness. The reduced lane widths create additional widths for other aspects of a street cross section such as pedestrian walking surfaces and furniture zones.

8. Textured Pavement

PEDESTRIAN SHARED CELEBRATION

Use of patterned pavement surfaces or unit pavers with a coarse texture to provide audible, visual and physical cues of a special circumstance such as pedestrian crosswalk.

9. Human Scale Elements

PEDESTRIAN SHARED CELEBRATION

Both functional and decorative elements such as lighting, benches, waste / recycling receptacles, banners and other components of a street that support the function and use of a street. These elements can often become place-defining elements that are replicated throughout the community.



10. Commercial Boardwalk

SHARED CELEBRATION

Either temporary or permanent walking surfaces that allow the entire sidewalk area to be overcome with commercial uses from adjacent businesses, with an example as shown on Image 10. Boardwalks should be no less than 2.5m wide, and must be coordinated with parking lanes as the boardwalk will lead to reduced or eliminated parking stalls.

10



11. Commercial Patios

SHARED CELEBRATION

Similar to commercial boardwalks, development of the curb lane into a temporary or permanent patio for adjacent business use. The existing sidewalk carriageway would continue to be the primary pedestrian thoroughfare for the street. Image 11 demonstrates a commercial patio.

11



12. Improve Waiting Experience

SHARED CELEBRATION

Providing additional amenities such as interactive displays, information kiosks or enhanced landscaping to create a more interesting experience for people waiting at bus stops, in front of key destinations, drop off zones, etc.

12



13. Landscaping

VEHICULAR SHARED PEDESTRIAN CELEBRATION

Including overhead canopy of mature trees with high-headed form, and well placed shrubs that allow adequate sightlines.

13



14. Auxiliary Power

VEHICULAR SHARED CELEBRATION

Provision of power available for a variety of public uses, such as lighting up street trees and banners, or powering temporary amenities such as food trucks during special events and celebrations.

14



15. Programming

PEDESTRIAN SHARED CELEBRATION

Planning public functions for segment of municipal streets for a variety of special events, from short-term events lasting a few hours to multi-day festivals.

15



16. Buffered Sidewalks

VEHICULAR SHARED CELEBRATION

Also known as separate walks, the designated sidewalk surface is set back from the curb to provide distance between pedestrians and vehicles. The buffer can have a number of functions, such as landscaping or furniture zones.

16



5.6 Major & Industrial Linkages

Morinville is most commonly accessed off Highway 2, which is a major highway under the jurisdiction of Alberta Transportation linking the Canada / USA border at Caraway, north to the City of Grande Prairie. Highway 2 passes through several major communities such as Calgary, Airdrie, Red Deer, Lacombe, Edmonton, St. Albert, Slave Lake and Grande Prairie. There are two main access points to Morinville on Highway 2, one at the far south end of Morinville and the other at Highway 642 / 100th Ave. The second noted intersection includes an elevated bridge passing over top Highway 642 / 100th Ave. as well as rail lines passing below. This elevated profile creates a physical and visual barrier between the downtown area and development to the west, located is Sturgeon County, which includes Heritage Lake, RV and day use camping and some rural industrial and residential developments. Highway 2 is a significant barrier to pedestrians with the desire to travel east to west from the downtown through the road right-of-way.

Highway 642 / 100th Ave. is a secondary access for Morinville, providing a direct link to Highway 28 (east of Morinville) and Highway 44 (west of Morinville). This street is under the jurisdiction of Alberta Transportation. Morinville and the Province of Alberta have a joint use agreement for some of the maintenance, operations and development within the Highway 642 corridor as it passes through the community, however Alberta Transportation retains the control of final approval of any changes to the road, sidewalks and amenities proposed for the corridor.

Rail lines connect many communities across Canada, including Morinville. Section 5.6.2 describes rail amenities in Morinville. To date, industrial developments do not have private spurs off the main rail line.

5.6.1 Alberta Transportation and Highway Infrastructure

Highway 642 / 100th Ave. is under the jurisdiction of the Province of Alberta, department of Alberta Transportation (AT). While the Municipality

maintains some aspects of the streetscape, there is a joint use, maintenance and operations agreement between Morinville and AT to formalize this arrangement. Any intervention to Highway 642 / 100th Ave. within the road right of way, such as implementing crosswalks or intersection bulbs, is exclusively the jurisdiction of AT.

5.6.2 Rail

Rail activity has changed since 2004 and its impacts on safe and efficient movement of people, goods and services (including emergency services) are not considered in the existing TMP. A network of existing rail lines, as shown on Figure 9, can be found in Morinville, that:

- are under the control of CN Rail;
- bisect Morinville north and south, and also east and west;
- have limited numbers of approved vehicular and pedestrian crossings, as seen on Figure 9;
- provide rail thoroughfares passing through Morinville, but no spurs that are used to penetrate into any industrial development areas; and
- has a combination of raised profiles and at-grade elevation, which has an impact on blocking sightlines, inhibiting wildlife crossings and impeding potential pedestrian crossings.

5.6.3 Air Transport

Morinville is located approximately 70km north of the Edmonton International Airport (YEG), and the closest regional airport is Villeneuve Airport which is to the 32km southwest. Edmonton Airport (YEG) supports a vast range of scheduled and private flight options. The Villeneuve Airport, controlled by Edmonton International Airport, is the only general aviation airport in the Capital Region with a Navigation Canada air traffic control tower and hosts both commercial general aviation and personal recreation flights. The Villeneuve Airport is home to approximately 23 businesses, providing roughly 100 jobs with current plans for additional expansion.

Nearby Morinville, located 22km to the southeast, is the Edmonton Garrison - Canadian Forces Base Edmonton. A significant number of Morinville residents work, or are in a family of those who work at Edmonton Garrison, therefore Morinville is a prominent bedroom community to its staff. CFB Edmonton has a series of runways and heliport landing areas, and portions of Morinville are located inside the Edmonton Garrison heliport restricted airspace. This means that some aspects of development, such as implementing stormwater management facilities or towers within this airspace, must be reviewed and accepted by Forces Canada.

5.6.4 Truck Routes, Oversize Loads and Dangerous Goods Routes

Dangerous goods routes are described in Dangerous Goods Control Route Bylaw 3/2004.

100th Street provides the primary linkage between the new development areas at the south end of Morinville, passing by the industrial zone on the east side of 100th Street, to the downtown core of Morinville. With industrial developments along the east side of 100th Street on the south half of Morinville, 100th Street is one of several designated truck routes within the corporate limits. Truck routes are identified in Traffic Safety Bylaw 24/2012. The various public engagements in this project continually identified 100th Street south of the CN rail line as an unsafe and challenging roadway to safely walk or cycle.

5.7 Operational Considerations

The way in which the public realm is maintained can help promote better mobility. The following principles and maintenance practices should be considered as a way of improving overall mobility:

- prioritizing roadway and sidewalk snow clearing in key locations, with areas surrounding the most popular destinations being cleared entirely of snow opposed to temporary on-site storage of snow (ie. on boulevards or medians which may inhibit pedestrian sightlines and access to sidewalks);
- ensuring complete snow removal from all designated handicap parking stalls and adjacent curbs and sidewalks and curb ramps;
- diligent tree and shrub pruning to eliminate any protruding branches;
- regular inspection of all walking surfaces including trails and sidewalks to identify and repair major cracks, separations, potholes or uplifts of paved surfaces;
- installation of root barrier products alongside trails near trees with aggressive roots such as poplar and willow trees; and
- repairing walking and driving surfaces with similar materials, for example not using gravel to patch asphalt surfaces.





“We need to provide better amenities on key streets for celebrations and more vibrant public events.”

6.0 SPECIAL STUDIES & IMPLEMENTATION PLAN

6.1	Transportation Master Plan (Immediate-Term)	69
6.2	Trails Master Plan (Immediate-Term)	69
6.3	Complete Streets Guidelines- Excerpt of Engineering Standards (Immediate-Term)	69
6.4	Regional Transit Feasibility Assessment (Medium-Term)	70
6.5	Highway 642 / 100th Ave. Functional Planning Study Update (Medium-Term)	70
6.6	100th Street Functional Planning Study (Immediate-Term)	70
6.7	Implementation Plan- Actions Arising From the Strategy	72

The following provides a summary of all the special studies and planning initiatives that have been recommended in various sections of this Mobility Strategy. Each has also been designated a recommended priority for completion, namely immediate, near (1-3 years) and medium-term (3-5 years) completion.

6.1 Transportation Master Plan (Immediate-Term)

This strategy sets the stage and introduces priorities for an update to the 2004 Transportation Master Plan. Now 13 years dated, the current plan in place does not reflect the configuration of many of Morinville's new growth areas. It is also inconsistent with the current MDP, and of course the recommendations of this Mobility Strategy.

6.2 Trails Master Plan (Immediate-Term)

Section 2.2.1 describes the requirement for Morinville to complete a trails master plan. This plan will identify a hierarchy of trails within Morinville, gaps in the trails network, proposed upgrades to existing trails, trail amenities such as signage, furniture and trail heads, and capital cost estimates and phasing plans.

6.3 Complete Streets Guidelines – Excerpt of Engineering Standards (Immediate-Term)

Section 2.2.2 identifies the need for a new type of street design to compliment other street typologies within the Engineering Standards. Because the Engineering Standards are currently being reviewed for an overhaul and update, completing guidelines for the placement and design of complete streets is warranted in the immediate term. It is recommended that the complete streets guidelines be embedded into the Engineering Standards as part of roadway design.

6.4 Regional Transit Feasibility Assessment (Medium-Term)

Section 3.1 discusses the trend of many Morinville residents commuting outside Morinville for daily work, with a median travel time of 30 minutes and a strong reliance on personal passenger vehicles. While there is taxi service in Morinville, there is no public bus service available. This study recommends that Morinville investigate the feasibility of partnering with larger employers such as Forces Canada and developing communal transit or group commute programs for people traveling to the same destination on a daily basis, and lifeline transportation services for medical, shopping, and recreational purposes, in collaboration with regional partners.

6.5 Highway 642 / 100th Ave. Functional Planning Study Update (Medium-Term)

Section 3.2 recommends that the Highway 642 Functional Planning Study be revisited to reaffirm it's findings based on recent traffic growth and trends and to deal with impediments to active movements within, and crossing this road rights-of-way. This planning study should

also include a parking study to ensure roadway design incorporates the needs for the provision of parking. The functional planning study should also address additional and/or interim intersection and roadway. safety improvements, such as implementing the various best management practices noted in this report amongst others. With an update to the MDP in 2017, its generalized terms of reference expands on these needs, most notably:

- volume and capacity monitoring and upgrading of East Boundary Road, providing better east-west connections to relieve pressure on 100th Street; and
- road right of way design needs for ultimate capacity and lane requirements, cross sections and drainage for both urban and rural cross sections.

6.6 100th Street Functional Planning Study (Immediate-Term)

Many stakeholder groups noted a number of mobility challenges with 100th Street, such as its lack of pedestrian accommodation and significant development pressure on either side of the Street toward the southern half of Morinville. A functional planning study for this street will help resolve impediments to transportation presented on this street. This planning study should also include a parking and access management study to ensure roadway design incorporates the needs for accessing each property and the provision of parking. The functional planning study should also address intersection safety improvements, such as implementing the various best management practices noted in this report amongst others. Completing this functional planning study will help guide future design of new growth areas, planning approvals, and detailed design of new growth areas along the southern half of this street.



Highway 642 (100 Ave.)



East Boundary Road



Existing Trail with rail crossing

The generalized terms of reference in the MDP update expands on these needs, most notably to highlight here:

- Volume and capacity monitoring and upgrading of East Boundary Road and providing better east-west connections (i.e. improve Cardiff Road, extend 90 Ave) to relieve pressure on 100 St.; and
- rights-of-way requirements for ultimate capacity and lane requirements, cross section and drainage (urban vs. rural).

ADMINISTRATION

6.7 Implementation Plan Actions Arising From the Strategy

This Mobility Strategy precedes a proposed update to the Morinville Transportation Master Plan. Feedback from the Mobility Strategy's strategic engagement program will be used to develop the terms of reference for the master plan update. The role of the implementation plan is to provide the tools required to continue with further study looking to achieve the desired outcomes identified in the Mobility strategy.

The successful implementation of this Mobility Strategy requires actions from several key players as follows:

ACTIONS:

Recommendation to Council that subsequent studies, as noted previously in this section, such as a trails master plan, regional transit facility assessment, functional planning studies, etc. be completed and update the existing Transportation Master Plan.

Review new development proposals through an accessibility lens to ensure that all modes of transportation, specifically active modes (walking, cycling, ride-sharing, transit), are appropriately accommodated. New development proposals should align with the findings of the plans proposed in Section 6.0.

Engage Alberta Transportation to collaboratively develop a methodology to assess and analyze traffic conditions on Highway 642 that ensures the Highway continues to provide the level of service expected of a Provincial facility while allowing Morinville to achieve the desired mobility and accessibility outcomes.

Review operational and maintenance procedures to ensure that the public realm is maintained to promote mobility for all modes.



PUBLIC

ACTIONS:

Continue to participate in engagements related to community planning and help to shape decision making regarding how their community is developed.

Continue to provide feedback to Morinville Administration regarding the condition of existing facilities and identifying missing links.

Increased involvement in animating our streets, such as volunteering with community groups or assisting in organizing public events that occupy our streets.

COUNCIL

ACTIONS:

Support Administration's undertaking of the background studies recommended in this plan.

Respect and advocate for the established modal priorities when evaluating reports, development proposals and plans. Ensure that decision-making is well supported by the various stakeholders in Morinville and surrounding area.

DEVELOPMENT INDUSTRY

ACTIONS:

Newly proposed development, from the development of individual parcels to area structure plans, should align with the findings of the plans proposed in Section 6.0 in terms of the accommodation of all travel modes and connectivity to the municipal network.

Developers will work with Administration to identify any gaps in background studies and progressively resolve transportation challenges in new developments.



