



CITY OF WETASKIWIN

TRANSPORTATION MASTER PLAN

Final Report

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McElhanney

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1

INTRODUCTION

The City of Wetaskiwin is located at the junction of Highway 2A, Highway 13 and the Canadian Pacific (CP) railroad in Central Alberta and has served as a cultural and economic hub in this region. With a current population of almost 13,000 residents, Wetaskiwin is considered the smallest city in Alberta and is growing steadily with a young but aging population. As the City of Wetaskiwin continues to grow and evolve, City Administration will be faced with numerous infrastructure enhancement studies and initiatives that can often compete for funding.

This Transportation Master Plan (TMP) will develop an approach that prioritizes recommended initiatives to address how people and goods move around and within Wetaskiwin. While the TMP has a focus on roads, it is also about guiding investments to provide safe, attractive, effective and accessible transportation options to meet all mobility needs over the next 25-years.

1.1 BACKGROUND

The City of Wetaskiwin is a cultural, economic and industrial hub for central Alberta. With a current population of approximately 13,000 residents, Wetaskiwin is considered the smallest city in Alberta. Census data indicate that the City's overall population grew by 8% from 11,675 in 2006 to 12,655 in 2016 and is projected to continue growing at this rate over the next 25 years and beyond. The median age in Wetaskiwin also increased from 40.3 years old in 2006 to 41.2 years old to 2016. As the aging population increases in the years to come, it will be critical to ensure the community's transportation needs are addressed and reflect the evolving activities, development initiatives and community dynamics.

Mobility plays a key role in everyday activities such as transporting goods, commuting to work, travelling to and from school or appointments, and connecting with social and recreational activities. The transportation system provides the foundational links that support the community of Wetaskiwin, affecting quality of life, cost of living, and public health. For these reasons, the City of Wetaskiwin strategically plans, designs and implements critical upgrades to the transportation system as and where required. The City's current Transportation Master Plan was adopted in 2012 and provided recommendations for the transportation network over the short, medium and long-term horizons. Since that time, the City have completed many of the construction recommendations. Recognizing the changing market and population trends, the City requires a new Transportation Master Plan to reflect current growth trends and the transportation needs of the growing community. As the City of Wetaskiwin continues to grow and evolve, City Administration will be faced with numerous infrastructure enhancement studies and initiatives that can often compete for funding. To move

forward with these initiatives in an effective and efficient manner, it is important to establish an integrated approach to planning and design that aligns existing and promised physical, cultural and social community investments.

The TMP provides an opportunity to proactively plan to address current and future mobility needs, develop a common vision, as well as prioritize goals and initiatives. This Transportation Master Plan (TMP) will develop a plan that prioritizes recommended initiatives to address how people and goods move around and within Wetaskiwin. While the TMP has a focus on roads, it is also about guiding investments to provide safe, attractive, effective and accessible transportation options to meet all mobility needs for the short term (0-5 years), medium-term (5-10 years) and long-term (25 years) time horizons..



1.2 APPROACH

The Transportation Master Plan was developed through a three-phase approach between Summer 2018 and Winter 2019.



1.3 TRANSPORTATION MASTER PLAN OVERVIEW

This Transportation Master Plan document presents the following sections to support analysis of issues, documentation of common themes, identification of opportunities and prioritization of recommendations. The final product resulting from this process is a prioritized plan to guide transportation initiatives and investment now and into the future.

Section 1.0 - Introduction

Provides a summary of the project background and outlines the overall purpose, objectives and approach in developing the Transportation Master Plan.

Section 2.0 - Community Engagement

Outlines the engagement goals and objectives and highlights the community engagement process undertaken to inform stakeholders, as well as to solicit feedback on the current and future issues, opportunities and aspirations regarding Wetaskiwin's transportation network.

Section 3.0 - Existing & Future Conditions Assessment

Highlights the influencing factors that shapes this Transportation Master Plan including current demographic and travel patterns. The outcome of the traffic count program and traffic analysis and forecasting, as well as the issues and opportunities as it relates roads, goods movement, sidewalks and trails and transit are also outlined in this section.

Section 4.0 - Road Safety Strategy

Outlines the recommended strategies to address current and future road safety issues identified through technical review and public feedback.

Section 5.0 - Traffic Network Strategy

Identifies the strategies to address current and future traffic operational issues identified through technical review and public feedback.

Section 6.0 - Alternative Modes Strategy

Outlines the strategies to encourage use of Active Transportation and Transit within Wetaskiwin, including walking and cycling.

Section 7.0 - Goods Movement Strategy

Identifies the Goods Movement Strategy to address issues around road classification, truck routing, as well as goods movement in and around industrial areas.

Section 8.0 - Transportation Infrastructure Strategy

Highlights the strategies to preserve and maintain the City's road and sidewalk network based on the technical review and public feedback.

Section 9.0 - Implementation Strategy

Outlines the strategy to prioritize the recommended network improvements and the associated costs over the short, medium and long-term horizons.



1.4 TRANSPORTATION MASTER PLAN OBJECTIVES

This Transportation Master Plan process incorporates several technical streams of analysis and stakeholder engagement to develop a plan that will guide transportation infrastructure investments today and into the future. Based on stakeholder input and assessment of the City's transportation needs, the following key project objectives were identified and became foundational to the transportation strategies identified in this TMP:



Objective 1: Address Identified Safety & Traffic Operations Concerns

Through Public Engagement and Consultation, Wetaskiwin residents identified safety as a primary concern. As a result, the first objective of the Transportation Master Plan will be to improve identified concerns, from intersection safety and operations, to rail and pedestrian crossings. The Transportation Master Plan will provide recommendations on road safety initiatives, including traffic safety reviews and rail crossing improvements.



Objective 2: Improve Traffic Operations

This Transportation Master Plan process focuses on developing a city-wide traffic model that captures transportation demands—current and future—to assess network needs and assist the City with ongoing transportation decision-making. The Transportation Master Plan will focus on intersection performances and network connection and links to minimize travel delays for road users.



Objective 3: Encourage Use of Active Modes

Transportation investments are shaped by growth demands and community culture. Growth bolsters the economy, but also increases travel demand. Whether it is travelling to school, work or other activities, safe and desirable options are needed so people of all ages and ability may move around the city. Within Wetaskiwin, it has been identified that pedestrian traffic is a key priority in the City. This Transportation Master Plan process will strive to achieve more pedestrian-friendly streets and create community connections through trail development and new linkages.



Objective 4: Develop a Goods Movement Strategy

Regional commerce and industry depend on safe and efficient transportation within and Wetaskiwin. Goods movement can be delayed by traffic congestion and rail crossings, affecting reliability of the transportation network and increasing cost of transport. This Transportation Master Plan process focuses on understanding potential for changes in goods movement patterns resulting from industry growth and community expansion to plan for appropriate infrastructure investments and bylaw or policy updates that support goods movement needs.



Objective 5: Improve Road and Sidewalk Conditions

A well-maintained transportation network provides a safe environment for all users, promotes economic vitality and enhances mobility and accessibility. The Transportation Master Plan will address the level of importance around the existing infrastructure and the need to maintain and rehabilitate certain segments of the City with a sustainable and transparent approach.

1.5 INTEGRATION WITH OTHER PLANS

The Transportation Master Plan must align with and build upon existing foundational directives that are driving current and ongoing City initiatives, these plans and studies will help set the framework for the TMP and are outlined in the following section.

2018 - 2022 Strategic Plan

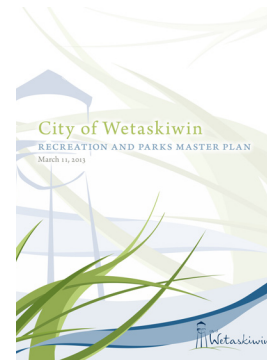
The 2018 – 2022 Strategic Plan provides a framework for the City to guide decision-making and delivery of services within the community. The Plan identifies the City's vision and mission and its commitments to the community. The Strategic Plan is based on four guiding pillars - Building the Community, Building the Economy, Building Infrastructure and Building Strong Government and outlines several key goals that are pertinent to this Transportation Master Plan, including:

- To increase the overall quality of life of the community
- To focus on the downtown an active area for citizens
- To approve infrastructure investment that will be strategic, predictable, and sustainable through advanced planning
- To ensure that the wider community is knowledgeable of City projects and understands the needs, costs, and impacts of those projects
- To ensure that the community is knowledgeable about City projects and understand City programs and needs and costs involved

“VISION AND MISSION”

Vision: Wetaskiwin is a secure, connected, and inclusive community.

Mission: The City of Wetaskiwin fosters strong relationships, community pride, and opportunities for citizens.

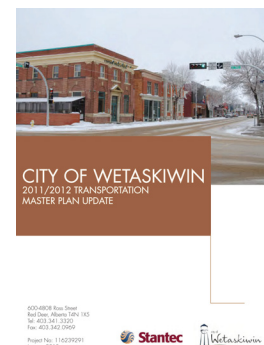


City of Wetaskiwin. Recreation and Parks Master Plan (2013)

The Recreation and Parks Master Plan provides a framework for decision-making around future recreation and parks facilities and services provided by the City. The Plan identified current and future needs for recreation and park facilities including trails, parks and open spaces and programs in Wetaskiwin. It also outlined strategies to address future needs that should also be considered

in this Transportation Master Plan, including recommendations to enhance the City's current trail network. These recommendations include:

- Implement an annual overlay/replacement program for both new and existing trails
- Strategic crossings of the rail line
- Potential development of a regional trail connecting the City of Wetaskiwin with the Town of Millet



2012 Transportation Master Plan

The 2012 Transportation Master Plan provided guidance in addressing the transportation needs required to support projected growth over the short, medium and long-term horizon. Overall, the plan identified recommendations and strategies to improve the existing transportation network to provide the City with a safe, efficient and sustainable transportation system over a 25-year period. Since the adoption of the last TMP,

the City have constructed many of the recommendations, including the upgrade of intersections to include dedicated left-turn lanes (e.g. addition of westbound turn lanes at Highway 2A/50 Avenue and 56 Street/40 Avenue) and extension of 37A Avenue across Highway 2A. This Transportation Master Plan will revisit those recommendations that have not yet been implemented and confirm whether these improvements are still aligned with current and future City initiatives and goals. These recommendations include the installation of signals at key intersections (e.g. Highway 2A/Centennial Drive and Northmount Drive/47 Avenue), new roadways to support commercial and industrial growth such as the extension of 60 Street south to Highway 13 West, as well as new truck routes.

Municipal Development Plan (2011)

The Municipal Development Plan completed in 2011 is the primary land use framework to guide future growth and development in the City of Wetaskiwin. It outlines several key goals related to transportation that are relevant to this Transportation Master Plan, including:

- To have a safe, economical, and efficient multi-modal transportation system that is accessible to all and will meet current and future needs
- To continue to improve the appearance and safety of all roadways in the City
- To alleviate negative impacts generated by vehicle traffic
- To encourage the expansion of the present walking and bicycle trail system, providing, where possible, connected linkages to all parts of the community
- To work with railway company to minimize the negative impact of train traffic on urban life
- To continue to maintain roadways and trails in good condition and in an efficient and sustainable fashion

Traffic Safety and Speed Limit Review (2010)

The Traffic Safety and Speed Limit Review was conducted in 2010 by Opus International Consultants (Canada) to review and provide recommendations towards the City's practices around speed limits, and to address safety issues at specific locations. Regulatory speed limit, school and playground zones and intersection traffic controls were reviewed as part of this study. A summary of findings and recommendations were identified in this review and will be used to guide recommendations as it relates to traffic safety and operations in this Transportation Master Plan.

Intermunicipal Development Plan (1998)

The Intermunicipal Development Plan (IDP) adopted in 1998 was a joint agreement between the City and the County of Wetaskiwin to ensure that *“development in the County does not unreasonably interfere with the long- term growth of the City”*. The Plan sets out principles in establishing land use and protecting existing investment in public roads and utilities. Any transportation recommendations made in this Transportation Plan will ensure it meets that terms of the agreement set out in the IDP.

Land Use Bylaw (2011)

The Land Use Bylaw outlines the land use and zoning information within the City of Wetaskiwin and establishes the rules and regulations of development in the City. The City is currently updating its Land Use Bylaw to better align with current policies and strategies.

Area Structure Plans

Area structure plans were reviewed to understand the City's growth areas and were considered to develop future forecasts for traffic growth.



2

COMMUNITY ENGAGEMENT

The Wetaskiwin Transportation Master Plan is ultimately a document that will guide the development of plans and policies for public investment in transportation infrastructure over the coming years. Community engagement, including active engagement of residents and stakeholders is a critical component of the TMP development. This engagement will not only provide opportunities for input into the plan considerations and direction but will also increase the level of endorsement the public and stakeholders are likely to have for the TMP findings and recommendations.

This section summarizes the strategy, methodology, and results of the public and stakeholder engagement completed for the Transportation Master Plan.

2.1 ENGAGEMENT OBJECTIVES

The primary goal of the community engagement was to facilitate the development of the Transportation Master Plan that aligns with the community's vision, goals and priorities for travel and infrastructure investment over the next 25 years. Engagement was to foster meaningful discussion so input was valuable to the technical analysis, and resulting technical recommendations that was checked against how well they met the community's needs. Finally, the feedback loop was clear, so stakeholders can understand how their input was used, if it was used, and why / why not. This was achieved by following the objectives for engagement identified below:



Accessible: Project information was easily accessible to the population at large, using plain language, in an engaging format and using a variety of avenues to deliver the information. The project/City webpage was recognized as key touchpoint for delivering information, providing links to content, surveys and contact information, alongside a clear explanation of what to expect next. Other activities that supported this key touchpoint, including in-person engagement and events.

Meaningful: Engagement fostered meaningful discussion so input was valuable to technical analysis, and the resulting technical recommendations were checked against how well they met the community's input. Finally, the feedback loop was clear, so stakeholders understood how their input was used, whether it was used, and why and why not.

Broad and Diverse: Engagement was broad and diverse, reflecting a range of stakeholder groups. Lines of communication were flexible so key stakeholder groups that were involved had ample opportunity to participate. Whether stakeholders wanted to passively or actively engage, opportunities were presented that met a variety of desired participation levels.

Responsive: Engagement was responsive to evolving stakeholder needs as the project unfolded, adapting approaches as per ongoing feedback. To that extent, engagement success was measured to gauge what works and what needs adjusting. Measurements were qualitative and quantitative, building upon various forms of stakeholder and project team feedback to ensure engagement hears, acknowledges and responded to evolving needs.

The proposed feedback loop, illustrated in **Figure 1**, was established to implement the engagement objectives and to provide a responsive and flexible approach to evolving community engagement needs and direction throughout the TMP development process.

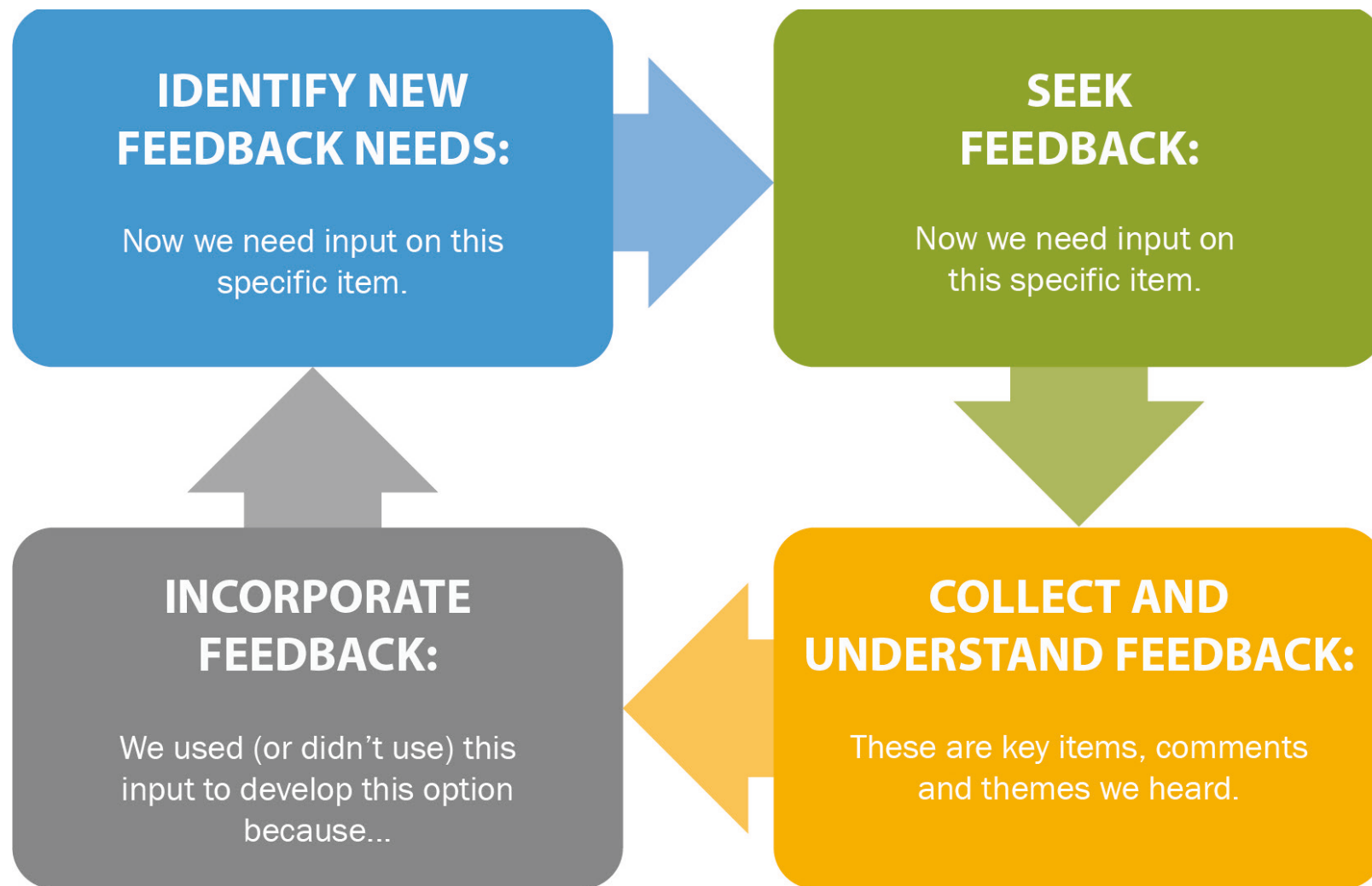


Figure 1: Engagement Feedback Loop

2.2 KEY MESSAGES

The following key messages provided a basic overview of the project to communicate what is happening, why it is happening and how it will happen. These messages evolved as the project unfolded and more clarity was developed regarding specific technical directions.

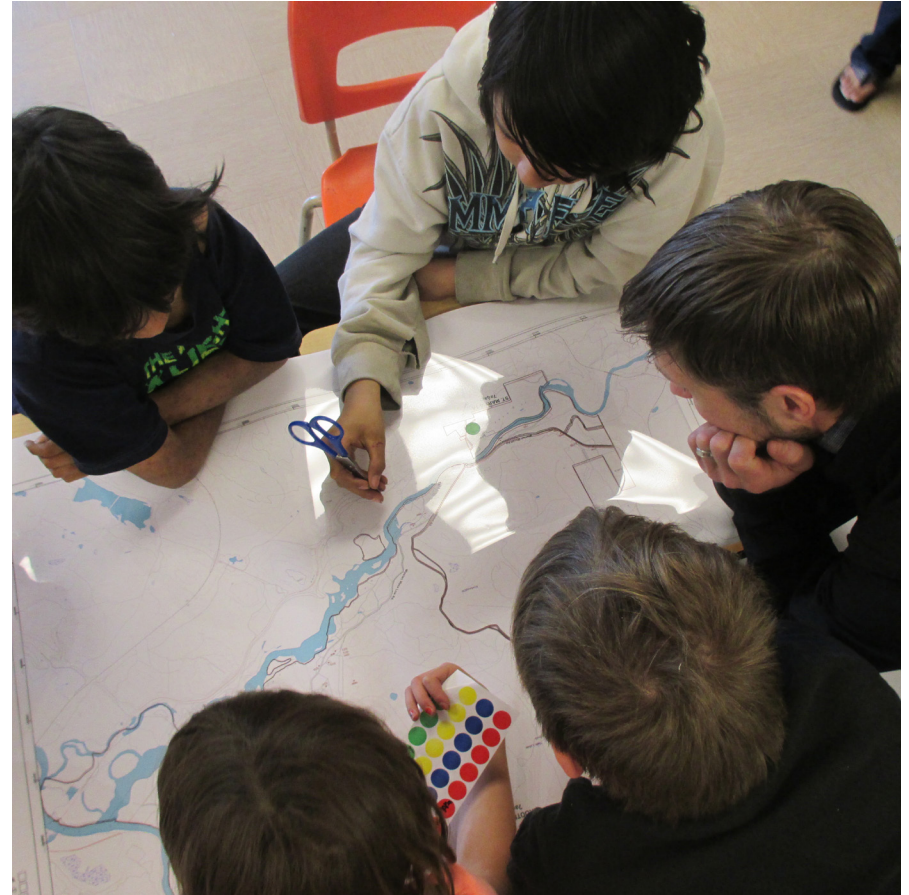
What is the project?

The engagement process was clear in addressing the importance of the Transportation Master Plan and its role in supporting Wetaskiwin's transportation needs for today, tomorrow and into the future. It was emphasized that the Transportation Master Plan is about more than just roads, it is about guiding transportation investments to provide safe, attractive and efficient options for moving people and goods around the city. It was specifically noted that the Transportation Master Plan will provide the opportunity to:

- Assess what is currently happening with Wetaskiwin's transportation network;
- Address what needs to happen as the community continues to grow and evolve; then
- Advance an implementation plan with recommendations for projects, initiatives, and investments to guide transportation network management and growth.

Why is this project happening?

Wetaskiwin is growing, and the transportation needs of the community are evolving alongside that growth. As a result, the engagement process emphasized the need to obtain input and establish a direction that reflects how evolving economic activities, development planning and community dynamics are changing transportation needs.



Why is this project important?

Recommendations generated from the engagement process and selectively applied into the Transportation Master Plan will impact how Wetaskiwin invests in transportation infrastructure and manages growth. Some recommendations will impact how the City does business by clarifying transportation links for future neighbourhoods or feeding into the policies and bylaws that guide how the transportation network is managed. Other recommendations will impact how transportation projects are prioritized for funding, including corridor improvements, pathway construction and transit facility investments.

There are many competing needs for how people and goods move around Wetaskiwin, whether it is walking, rolling, bussing, driving or trucking. The Transportation Master Plan will recommend a prioritized implementation plan that balances how the community invests in mobility as it grows.

Who was involved?

Involvement from the entire community was fulfilled so that recommendations from the Transportation Master Plan incorporated and reflected the needs and priorities of residents, visitors, developers, and businesses.

How the community was involved?

Three rounds of engagement were introduced, at critical points in the project, to obtain confirmation and input on key transportation issues and opportunities, as well as establishing the key principles to support and guide the development of the Transportation Master Plan. Participant feedback was incorporated in the testing and prioritizing phase of the Transportation Master Plan and, as per the engagement feedback loop approach the community was updated on how the City plans to implement the Transportation Master Plan.



2.3 ENGAGEMENT PROCESS

Engagement discussions, timelines, tools and activities evolved as the project progressed to ensure that the right stakeholder groups were addressed in the most appropriate manner. In addition to the planned engagement activities led by McElhanney, the City's Project Steering Committee utilized the engagement materials for other engagement activities including:

- Project presentations and roundtable discussions at planned stakeholder group meetings
- Informal "pop-up" booths at community events.
- Information tables at other City engagement events.

In addition, ongoing meetings, phone and email communications with key

stakeholders' groups (e.g., County of Wetaskiwin, Chamber of Commerce, School Board) were conducted throughout the project.

Public and agency stakeholder engagement was completed through three rounds of engagement to support the development of the Transportation Master Plan.

Figure 2 illustrates the engagement process timeline and the key objectives during each phase of the project.



Figure 2: Engagement Timeline

2.3.1 Round 1 - Where Are We Now and Where Do We Want to Go?

Engagement Overview

The first round of public engagement occurred on August 2018 with the purpose of presenting, confirming and seeking input on key City transportation issues and opportunities, and framing the Transportation Master Plan guiding principles. Vertisee, an interactive map was launched on June 5, 2019 on the City's webpage subsequently with the TMP booth featured at the Annual City Open House at the Drill Hall.

Round 1 engagement focused on the following questions:

- How is today's transportation network meeting our needs and vision?
- What are the gaps and opportunities for improvement?
- How do we expect our mobility needs to change as the City grows?
- How do we want the transportation network to evolve to address our changing needs and growth?
- How should we prioritize transportation investments to meet current and evolving needs?

How was feedback used?

Feedback from Round 1 engagement directly impacted the technical work completed in Phases 1 and 2 of the project. Input from Round 1 engagement confirmed the key transportation issues and opportunities and informed the development of guiding principles and alternatives to be further assessed and refined in Round 2 of the project.

What We Heard

The key themes of the primary issues and opportunities identified by residents via Vertisee included:



The results of the Vertisee engagement results are provided in **Appendix A**.

2.3.2 Round 2 - How Do We Get There?

Engagement Overview

The second round of engagement included a Council Workshop to seek out Council's priorities and direction as it relates to transportation. The workshop was held on November 12, 2019 and included a presentation to Council that outlined the TMP progress, findings from the Public Engagement and preliminary strategies to address the identified transportation issues. Workbooks, which included a series of questions regarding the Transportation Master Plan, were distributed to Councillors to obtain written feedback.

The engagement discussion focused on the following questions:

- How is today's transportation network meeting our needs and vision?
- What are the gaps and opportunities for improvement?
- How should we prioritize transportation investments to meet current and evolving needs?
- What are the key principles that should guide the Transportation Master Plan?

How was feedback used?

Feedback from this round of engagement influenced the technical work completed in the final Phase 3 of the project. Engagement commenced with an explanation of how input from Round 1 engagement was or wasn't used to develop options and why, so the community understands the value of their feedback and where it was incorporated. The key guiding principles developed during Round 1 was confirmed with Council to ensure nothing was missed. Once guiding principles were confirmed, input was sought regarding options and priorities that were developed using Round 1 input. Feedback received during this round of engagement was used to refine

and prioritize recommendations for the Transportation Master Plan, and the final recommendations were weighed against how well they align with the key guiding principles developed with community.

What We Heard

A summary of the feedback from Council are highlighted in **Figure 3** and was used to drive technical analysis of issues and identification of opportunities to be explored during the Transportation Master Plan development. More detailed Council feedback is provided in **Appendix A**.

2.3.3 Round 3 - What Happens Next?

Round 3 engagement provided the opportunity to report back to the community and present how their input was addressed and/or applied to the of engagement Transportation Master Plan, and to introduce how the proposed plan and its priorities will be implemented.



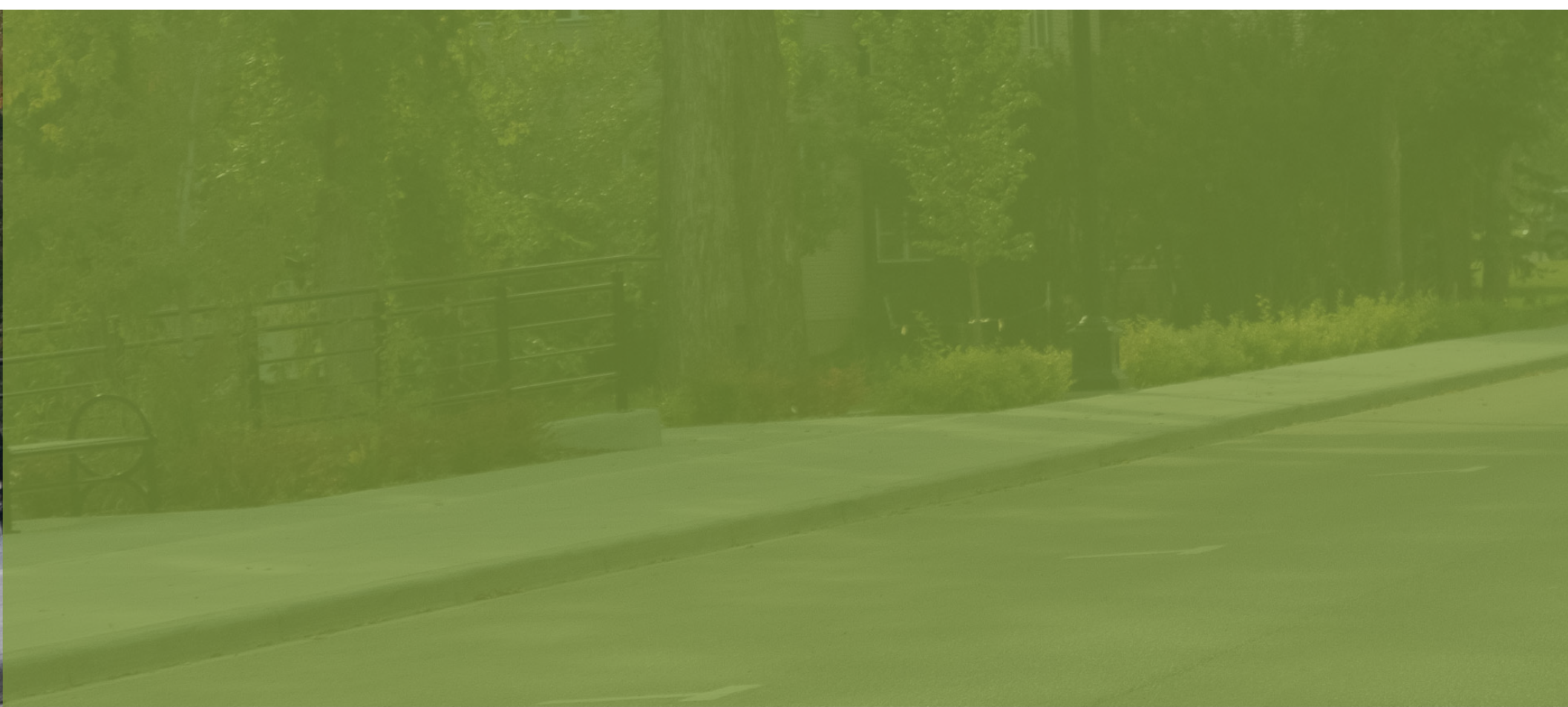
THINGS WE HEARD



Figure 3: Things we Heard & Key Priorities - Council Workshop

6 KEY ISSUES & PRIORITIES

- 1 Maintaining and enhancing existing road space
- 2 Making the most out of our existing road space
- 3 Improve safety for people who walk, cycle, and drive
- 4 Maintaining and enhancing active transportation infrastructure
- 5 Making it easier for people to bus around the City
- 6 Improving network reliability, including across rail lines



3

EXISTING & FUTURE CONDITIONS ASSESSMENT

A photograph of a city street with a green overlay and a grey triangle graphic. The street is paved with asphalt and has a white line marking. There are trees and buildings in the background. A car is visible on the right side of the street. The green overlay is semi-transparent and covers the entire image. A grey triangle is positioned on the right side of the image, pointing towards the center.

This section of the document details the influences that shapes travel in Wetaskiwin today and in the future, and the technical work completed to assess the City's current transportation network as it relates to roads, goods movement, sidewalks and trails and transit. The purpose of the conditions assessment is to identify existing and future transportation network issues and opportunities, and provide a foundation for well-conceived, responsive and innovative transportation network enhancement and development.

3.1 COMMUNITY PROFILE

3.1.1 Demographic

The City of Wetaskiwin have experienced steady growth over the past decade. According to Census Canada, the City's population in 2006 was approximately 11,690 people and by 2016, the City's population increased to approximately 12,500 people – an average increase of 0.8% per year. Based on the growth projections highlighted in the Municipal Development Plan, Wetaskiwin's population is projected to grow at a rate of approximately 1% to 2% per year over the next 25 years. The historical and projected population trends are illustrated in **Figure 4**.

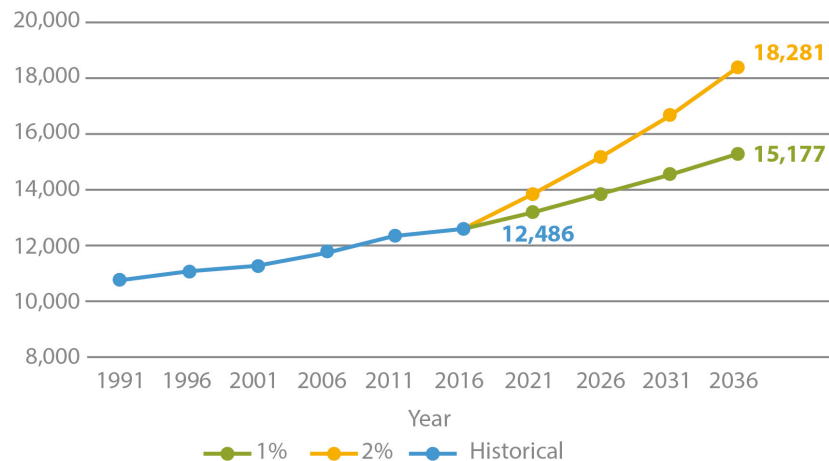


Figure 4: Wetaskiwin Historical and Projected Population (source: 2011 MDP/ Census Canada)

In 2016, the median age in Wetaskiwin was 41.2 years old, higher than Alberta's median age of 36.7 years old. Approximately two-thirds of the population fall within the under 15 years (19%) and over 65 years (20%) age groups, while the remaining population is in the 15 to 64 years age group. The proportion of each age group have remained relatively the same over the past decade. The population by age groups are highlighted in **Figure 5**. Recognizing that the City is growing with a young but also aging population, it is critical that this Transportation Master Plan supports mobility for all age groups.

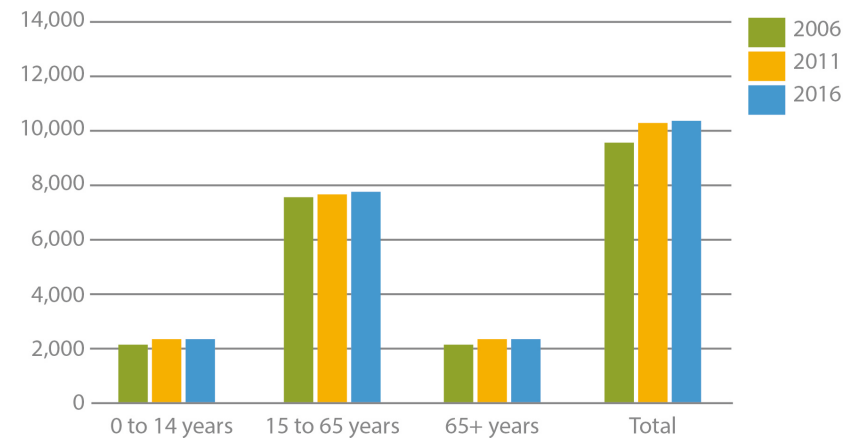


Figure 5: Population by Census Age Groups (source: Census Canada)

3.1.2 Land Use

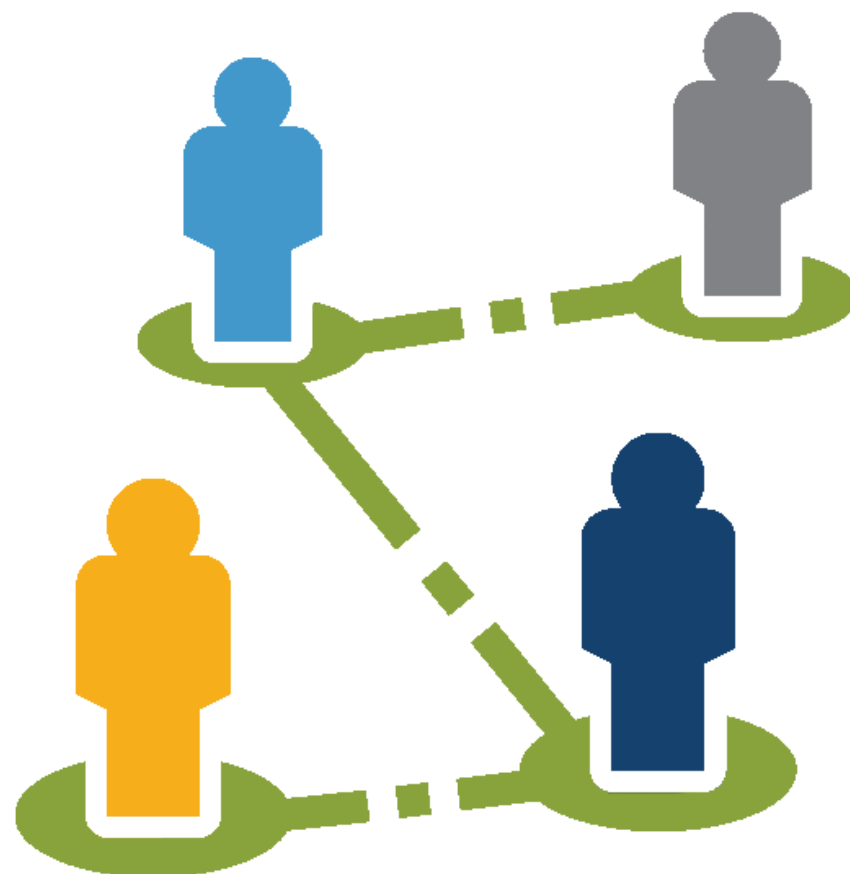
Wetaskiwin is comprised of established mixed-use areas within the urban core in addition to industrial and agricultural land uses surrounding the core. **Figure 6** illustrates existing land use patterns and key generators in Wetaskiwin, which generally includes:

Historic Downtown - Downtown Wetaskiwin is a key destination for shopping, employment and recreation. The grid network, as well as the proximity of residential areas surrounding the downtown core make active transportation possible.

Parks - There are 30 parks throughout Wetaskiwin, including school parks, off-leash parks and ball parks. And many of these parks are connected by the sidewalk and trail network.

Industrial & Agricultural - The industrial and agricultural areas surrounding the urban core is vital to the economic health of the City. Providing residents safe and reliable connections to these areas supports economic growth in and around the City.

Regional Connections - The Edmonton International Airport is only a 25-minute drive from Wetaskiwin and can be accessed via Highway 2A. Both the City of Edmonton and City of Leduc are also important regional destinations for employment, shopping and recreation. The need to maintain good access to the provincial highway network is key in moving people and goods in an efficient and safe manner.



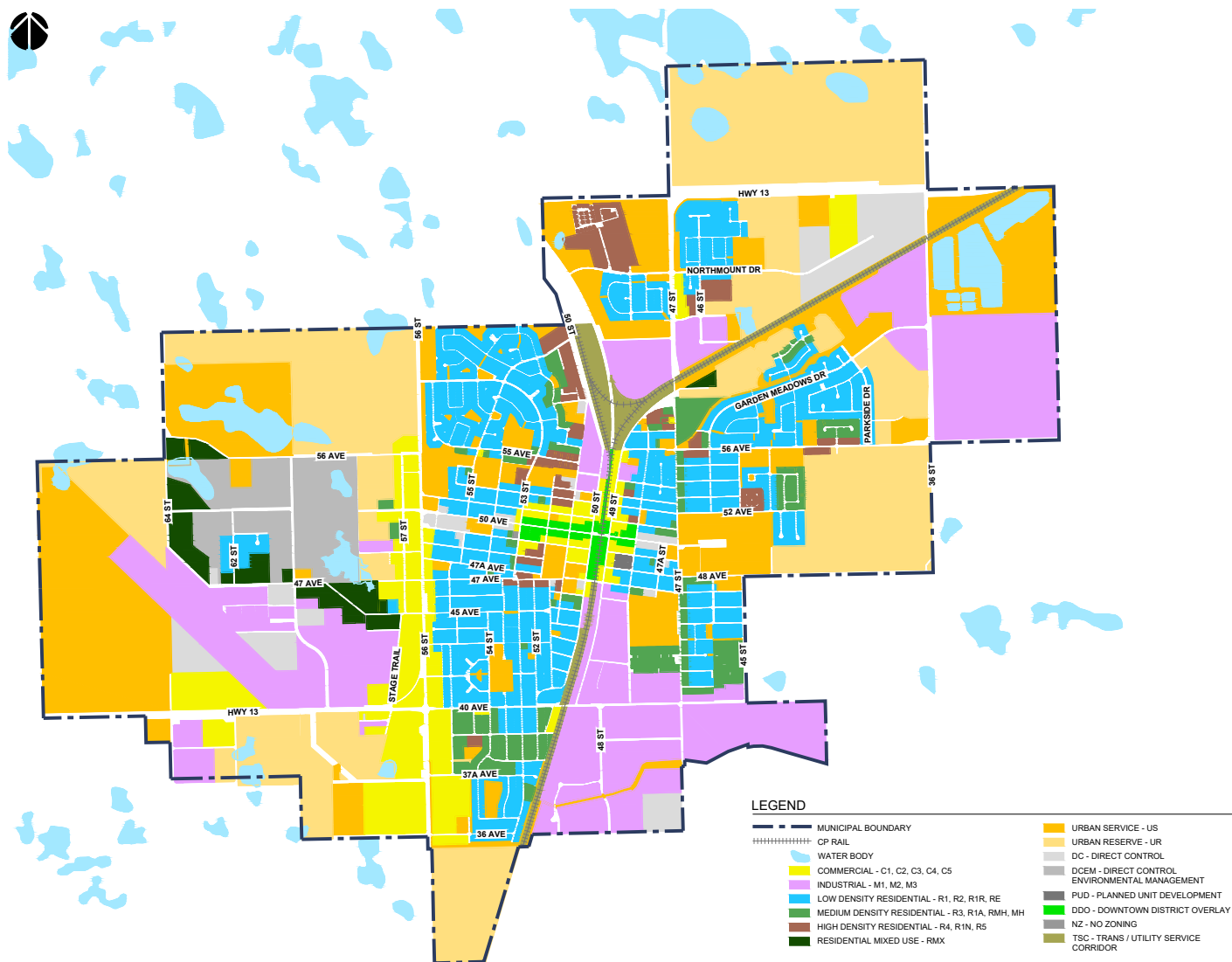


Figure 6: Existing Land Use

3.1.3 Travel Patterns

According to Census Canada Journey to Work Survey, approximately 90% of commute trips to work in 2016 were made by private vehicles – both drivers and passengers. The use of walking (7%), cycling (1%), transit (0.5%) and other (2%) modes made up the remaining 10%.

Over 60% of the trips made to work were less than 15 minutes – indicating that most commute trips are done within the City. Approximately 25% of the commute trips were 30 minutes and longer suggesting that these trips are likely made within the region. These patterns are illustrated in **Figure 7**.

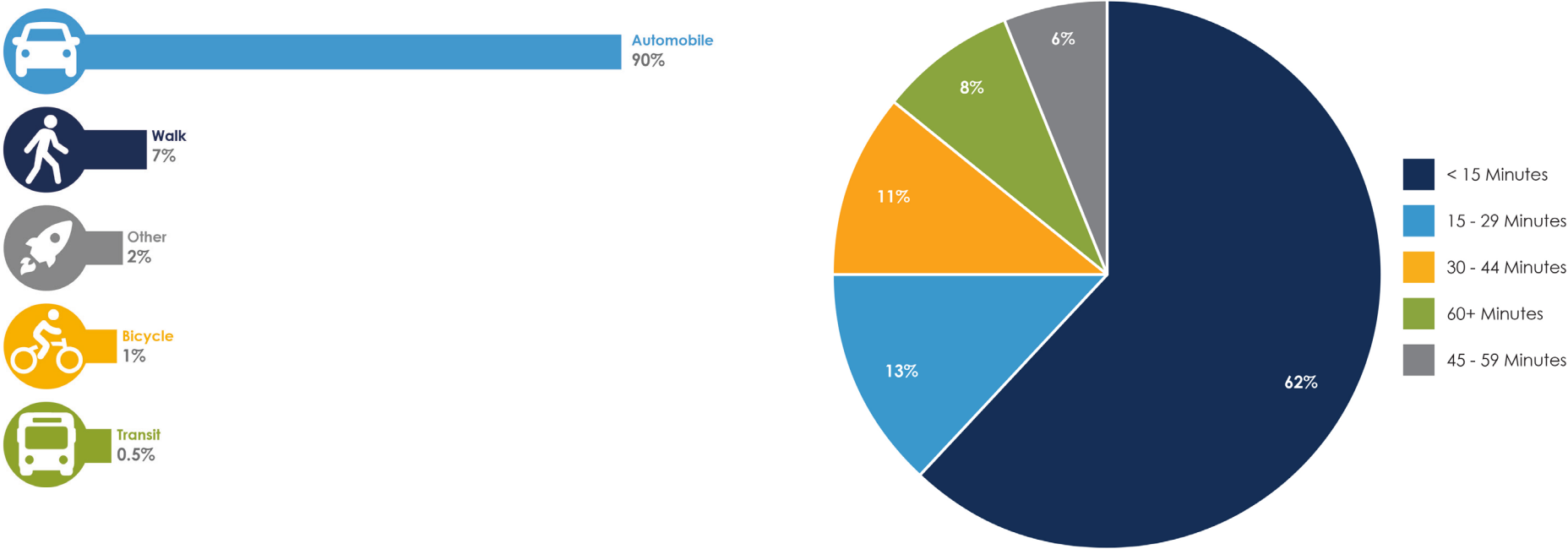


Figure 7: Daily Mode Split & Commute Time (source: 2016 Journey to Work, Census Canada)

3.2 ROAD NETWORK

3.2.1 Road Network Classification

The City's roadway system is comprised of a network of provincial highways, arterial, collector and local roadways. The classification of a roadway dictates the function of the road and design features such as lane widths, design speeds, signage, pavement structure requirements. Wetaskiwin's road design standards are based on the 1999 Transportation Association of Canada Geometric Design Guide for Canadian Roads.

Figure 8 illustrates the existing roadway network and classification in Wetaskiwin, including the designated truck routes. The City has approximately 105 km of roadways comprised mostly of collector and local roads (87.5km). The remaining sections of the network are connected through arterials and the Provincial Highways (Highway 2A and Highway 13). **Table 1** outlines the extent of each road classification in Wetaskiwin.

Table 1: Wetaskiwin Road Network Classification

Road Classification	Length (KM)	Percentage
Provincial Highway	4.9	4.6%
Arterial	13.0	12.3%
Collector	29.6	28.1%
Local	57.9	54.9%

Although the design features, operational needs, and adjacent land uses may vary and overlap between different corridor types, traffic and access functions generally govern the determination of the functional classes, as outlined below.

- **Provincial Highways** accommodates the movement of people, goods and services on an inter-provincial, intra-provincial and international level. Access on provincial highways is restricted and only connects with arterial roads. Wetaskiwin is served by Highway 2A and Highway 13, which provides north-south and east-west connection respectively.
- **Arterial Roads** are intended primarily to move large volumes of traffic safely and efficiently over relatively long distances. Arterials typically have higher traffic speeds, with little or no direct access to adjacent properties. These roads generally support heavy truck traffic and bus routes. The arterial roads in Wetaskiwin include 40 Avenue, 56 Street, 47 Street and 36 Street.
- **Collectors Roads** connect neighbourhoods to the arterial road network with a moderate degree of traffic mobility, while also accommodating a higher degree of property access. Collector roads may accommodate some traffic but should not be used as a main truck route. Centennial Drive, Northmount Drive, 50 Avenue, and 50 Street are all collector roads within Wetaskiwin.
- **Local Roads** are intended primarily to provide access to adjacent properties. On local roads, there is generally less tolerance for large volumes of traffic and fast traffic speeds. The local road network in Wetaskiwin serves the residential areas and local businesses.

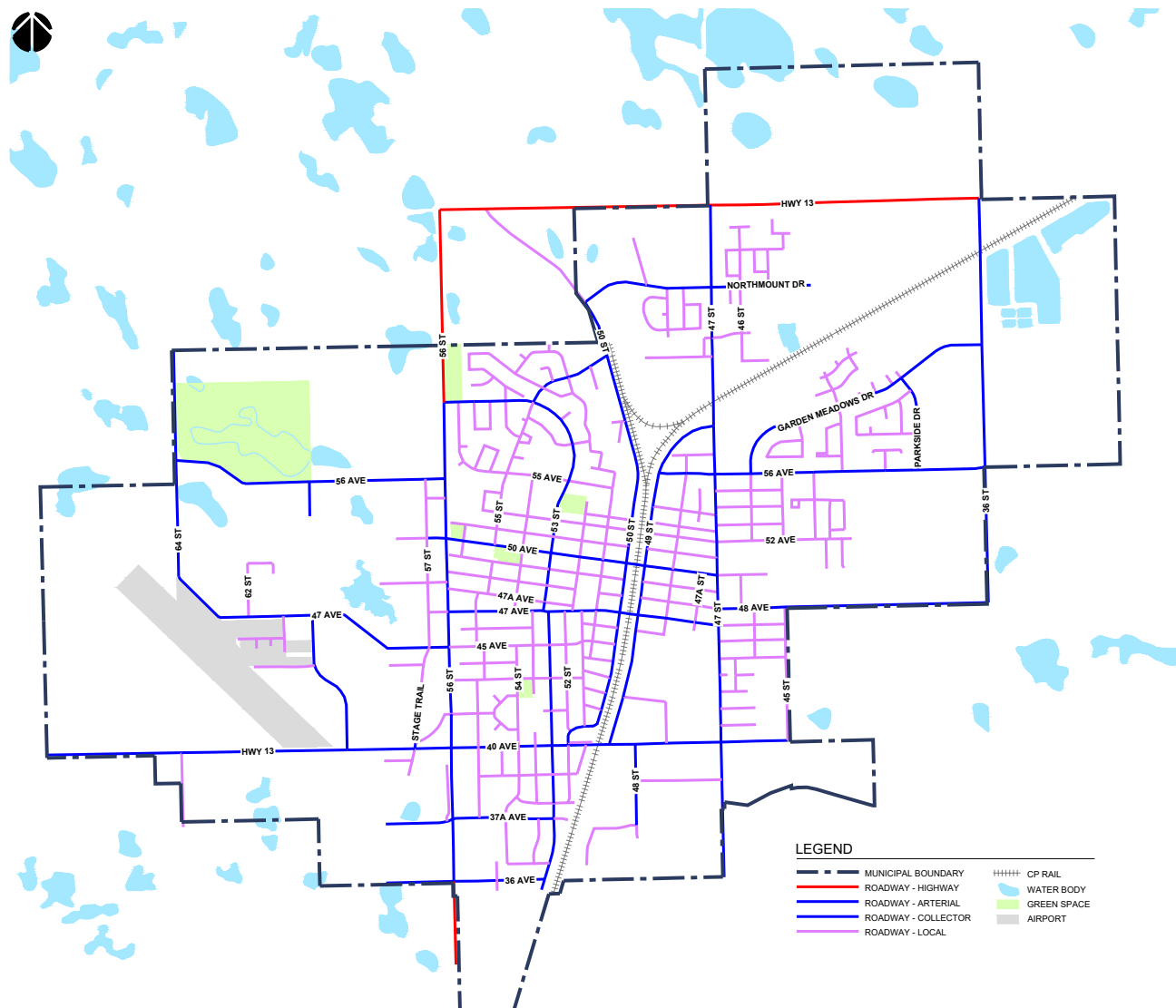


Figure 8: Road Classification

3.2.2 Goods Movement

The movement of commercial and industrial trucks through and within Wetaskiwin is directly related to the economic viability of the City. The industrial and manufacturing sectors both depend on trucking to move freight between the open highway system. The construction sector also depends on trucking to support the development of public and private enterprises and most commercial and retail business in the City rely on the shipping and receiving of goods.

Goods movement through Wetaskiwin is currently served by the designated truck routes as illustrated in **Figure 9** and utilizes the highway system within the City, as well as the arterial and collector roadways. The City's Traffic Bylaw No. 1893-17 establishes 13 truck routes in the City, with over half of these routes on collector roadways. As noted previously, collector roads typically connect neighbourhoods to the arterial road network and should not be used as a main truck route.

Table 2 outlines the roadways that are designated as a truck route by the City's Traffic Bylaw. The Traffic Bylaw also identified 48 Avenue and Stage Trail/57 Street as routes with road bans, which takes into effect as required. The City currently does not have a Dangerous Goods Route.

Table 2: Designated Truck Routes

Street / Avenue	From	To	Road Classification
53 Avenue	56 Street	64 Street	Collector
Hwy 13 / 40 Avenue	45 Street	64 Street	Arterial
Hwy 13	36 Street	47 Street	Hwy
Northmount Drive	47 Street	50 Street	Collector
48 Avenue*	36 Street	44 Street	Collector
64 Street	56 Avenue	City Boundary	Collector
60 Street	40 Avenue	47 Avenue	Collector
Stage Trail / 57 Street*	40 Avenue	56 Avenue	Local
56 Street	36 Avenue	City Boundary	Arterial / Hwy
50 Street	53 Avenue	Northmount Drive	Collector
49 Street	40 Avenue	47 Street	Collector
47 Street	49 Street	Hwy 13	Arterial
36 Street	48 Avenue	Hwy 13	Arterial

* Truck route in effect as required.

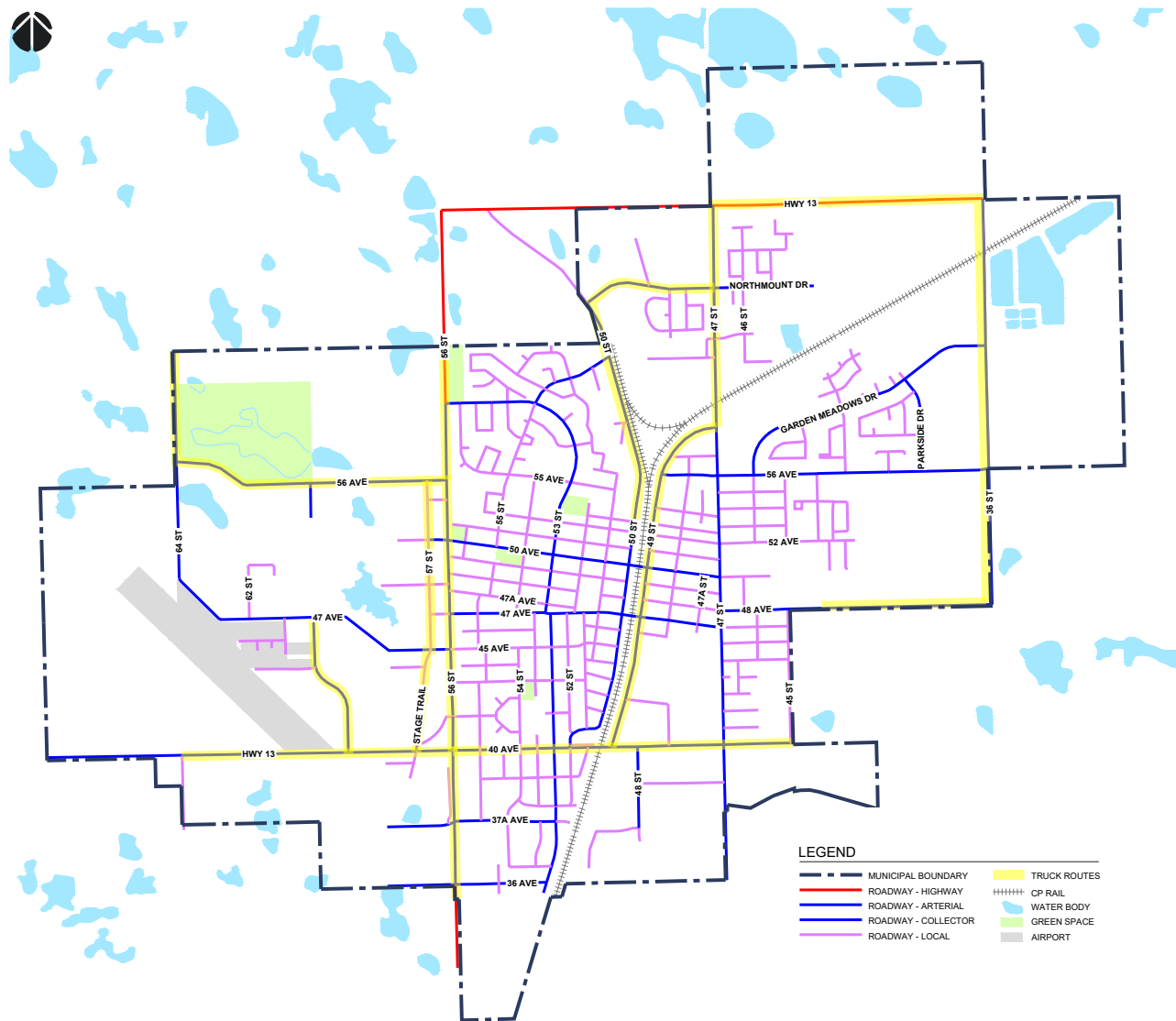


Figure 9: Truck Routes

3.2.3 Traffic Volumes and Operations

Existing Traffic Volumes

A data collection program was developed as part of the Transportation Master Plan process to better assess existing traffic patterns in Wetaskiwin. 24-hour traffic counts were completed in May 2019 at 12 key intersections in the City and recorded the movement of vehicles, bicycles and pedestrians by 15-minute intervals.

The traffic counts indicate that peak traffic volumes vary throughout Wetaskiwin and are considered relatively modest with the greatest demands observed along 56 Street, 50 Avenue, Highway 13 and 40 Avenue. **Figure 10** illustrates the existing (2019) morning and afternoon peak hour volumes along key corridors in the City. As illustrated, peak directional volumes on 56 Street accommodates over 600 vehicles per hour in the afternoon, while most of the other key corridors carry approximately 100 to 300 vehicles per hour per direction.

Intersections along 56 Street are considered the busiest intersections in the City, accommodating higher turning movements during the peak hours than other locations in Wetaskiwin. **Figure 11** illustrates the existing (2019) morning and afternoon peak hour turning movement volumes at 12 of the key intersections in the City.



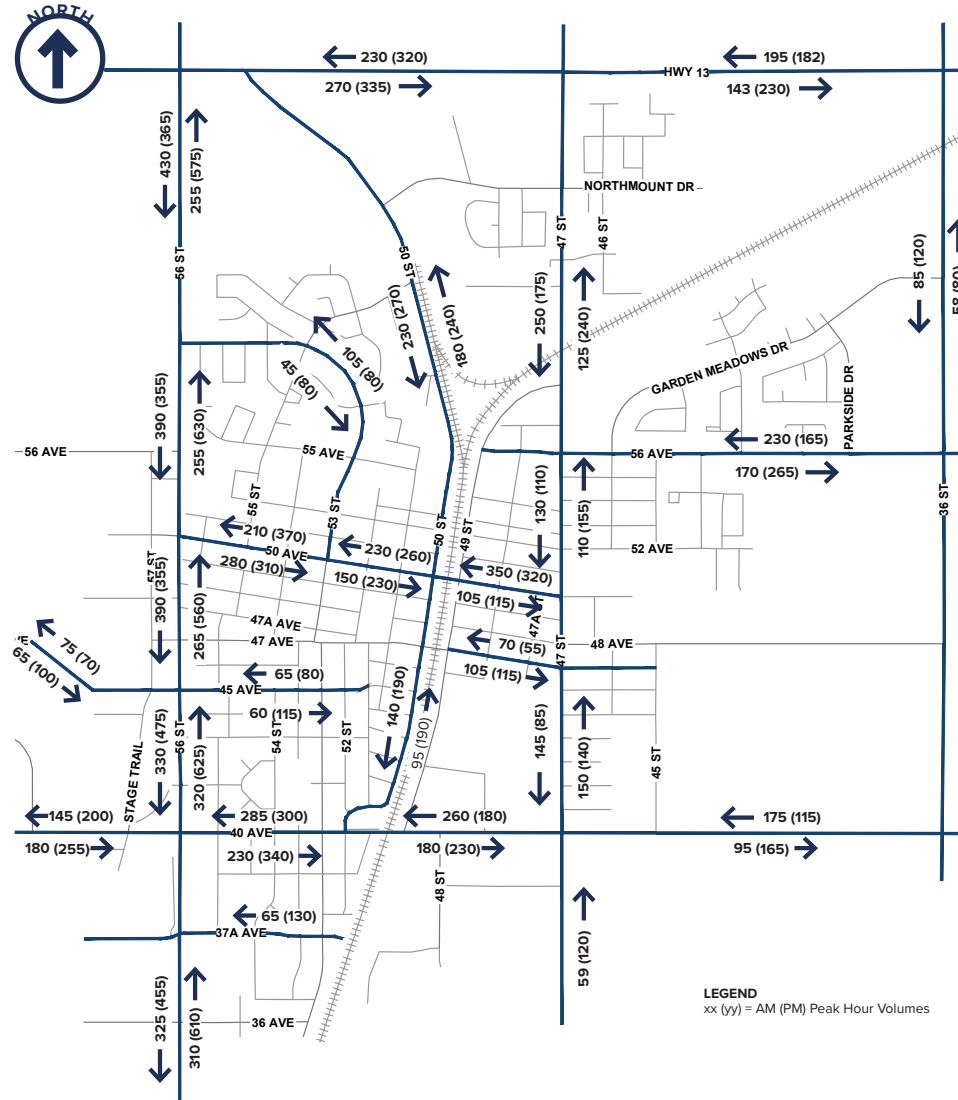


Figure 10: Existing (2019) AM and PM Peak Hour Corridor Volumes

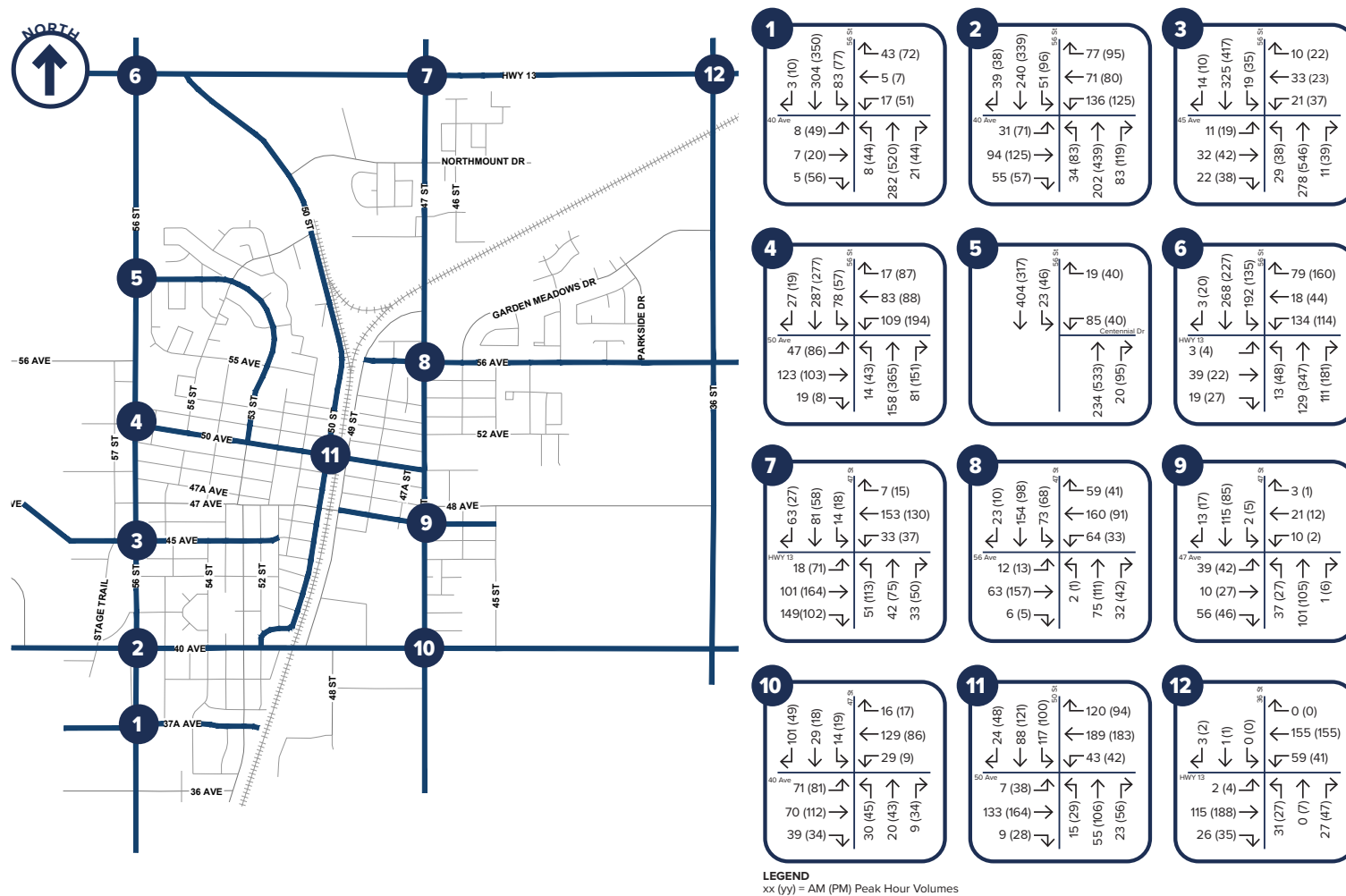


Figure 11: Existing (2019) AM and PM Peak Hour Intersection Volumes

Existing Traffic Operations

Intersection analysis using Synchro traffic analysis software was completed to assess current operating conditions at key intersections in the City. The Level of Service (LOS) is a performance measure typically used to assess how well an intersection or turning movement is performing relative to vehicle delay. For unsignalized intersections, the LOS is based on the computed delays on each of the critical movements. LOS 'A' represents minimal delays for minor street traffic movements, and LOS 'F' represents a scenario with an insufficient number of gaps on the major street for minor street motorists to complete their movements without significant delays.

For signalized intersections, the methodology considers the intersection geometry, traffic volumes, the traffic signal phasing/timing plan, and pedestrian and cyclist volumes. The average delay for each lane group is calculated, as well as the delay

for the overall intersection. The operating conditions can also be expressed in terms of volume-to-capacity (v/c) ratio. The signalized and unsignalized LOS criteria as summarized in the 2010 Highway Capacity Manual (HCM) are also shown in **Table 3**.

Typically, the AM and PM peak hours are analyzed since they represent the most critical periods that are prone to congestion. The existing AM and PM peak hour volumes for each intersection were input into Synchro 10 to evaluate AM and PM peak hour operating conditions based on the methodology outlined in the 2010 HCM.

Figure 12 illustrates the morning and afternoon peak hour levels of service at key intersections throughout the City under existing condition. Peak hour traffic conditions within Wetaskiwin today, are generally good and operate with minimal traffic delays and congestion.

Table 3: Level of Service Criteria

	Description	Unsignalized Intersection Delay (seconds per vehicle)	Signalized Intersection Delay (seconds per vehicle)
A	Represents free flow. Individual users are essentially unaffected by others in the traffic stream	≤10	≤10
B	Stable flow, but the presence of others begins to be noticeable. Occasionally, minor delay due to conflicting traffic	>10 to 15	>10 to 20
C	Stable flow, but occasionally some delay due to conflicting traffic. Delay is noticeable, but not bothering.	>15 to 25	>20 to 35
D	Represents high-density, but stable flow. Delay is noticeable and bothersome.	> 25 to 35	> 35 to 55
E	Represents operating conditions at or near the capacity level. Delay approaching tolerance levels.	> 35 to 50	> 55 to 80
F	Traffic demand exceeds capacity of intersection, very long queues and delays. Represents forced or breakdown flow. Delay exceeds tolerance level.	> 50	> 80

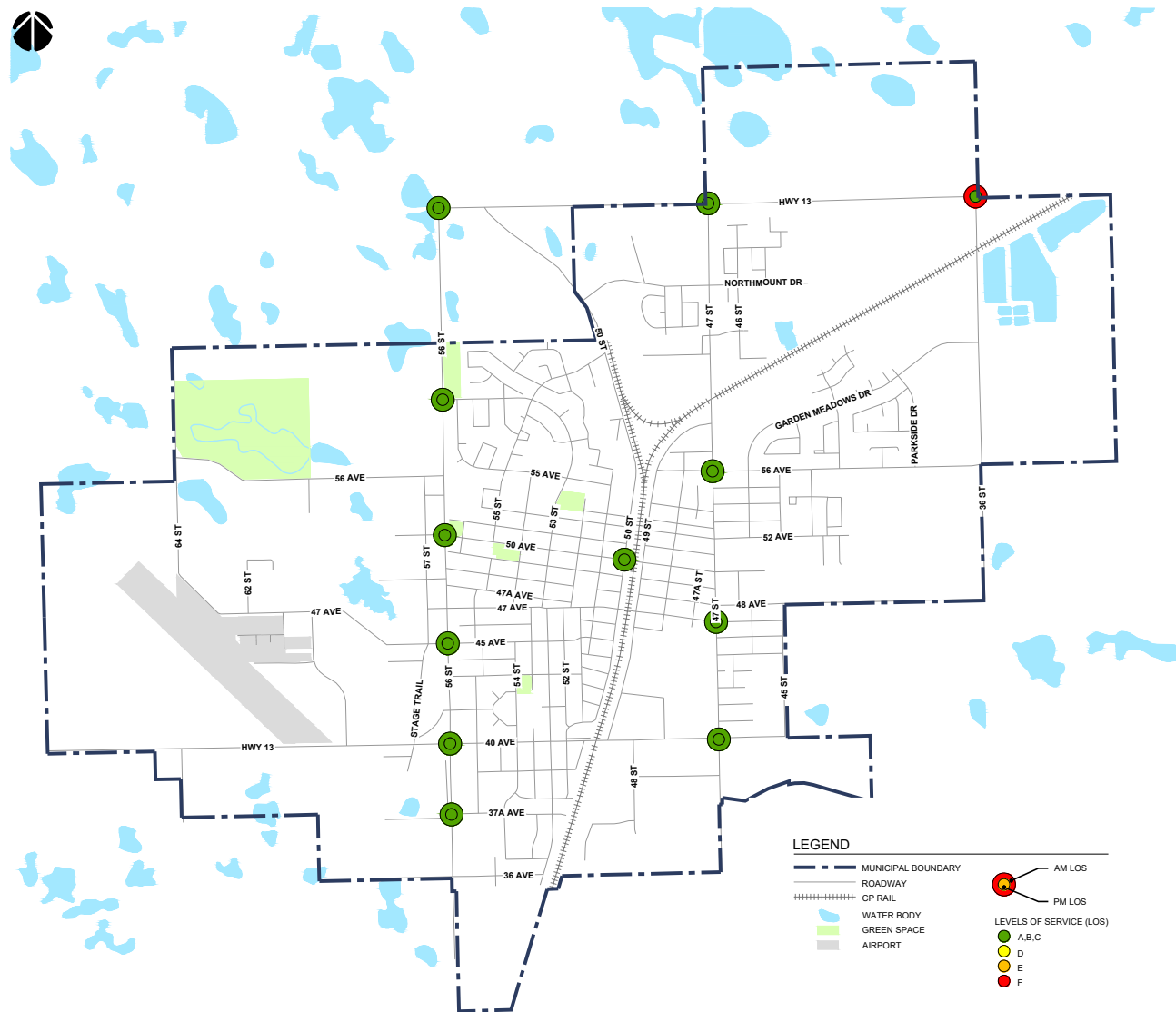


Figure 12: Existing (2019) AM and PM Peak Hour Intersection Performance

Future Traffic Volumes and Operations

Future traffic volumes were projected for the 10-Year (2029) and 25-Year (2044) horizon using an annual linear growth rate of 2% per year. While the historic population growth rate is approximately 1% per year, a 2% annual growth rate would account for local population growth and the additional traffic related to the approved ASP development as well as other developing areas and the surrounding region. Historic traffic volumes obtained from Alberta Transportation's count stations, located along the City Boundary, indicate traffic growth is generally between 2% and 3% per year over the past decade.

Figure 13 and **Figure 14** illustrates the peak hour intersection volumes under the 10-Year and 25-Year horizon, respectively. By 2044, traffic volumes in Wetaskiwin is projected to double from today. Key intersections in the City will continue to perform under acceptable levels of service over the next 25 years except for the intersection

at Highway 13 and 47 Street. This intersection will operate under a LOS E during the PM peak hour and is a result of increased delays for vehicles turning or crossing Highway 13 from 47 Street. It should be noted that the City already have plans to implement improvements at this intersection to address current safety and operational concerns. The analysis also indicates that the intersection at Highway 13 and 36 Street will operate under a LOS F in the future during the PM peak hour; however, these results are due to the limitations of the Synchro software in analyzing merging right-turns (northbound to eastbound movement). This intersection is expected to perform under acceptable levels of service given the relatively low northbound and eastbound volume and the volumes on Highway 13. **Figure 15** and **Figure 16** illustrates the peak hour intersection performance under the 10-Year and 25-Year horizon.



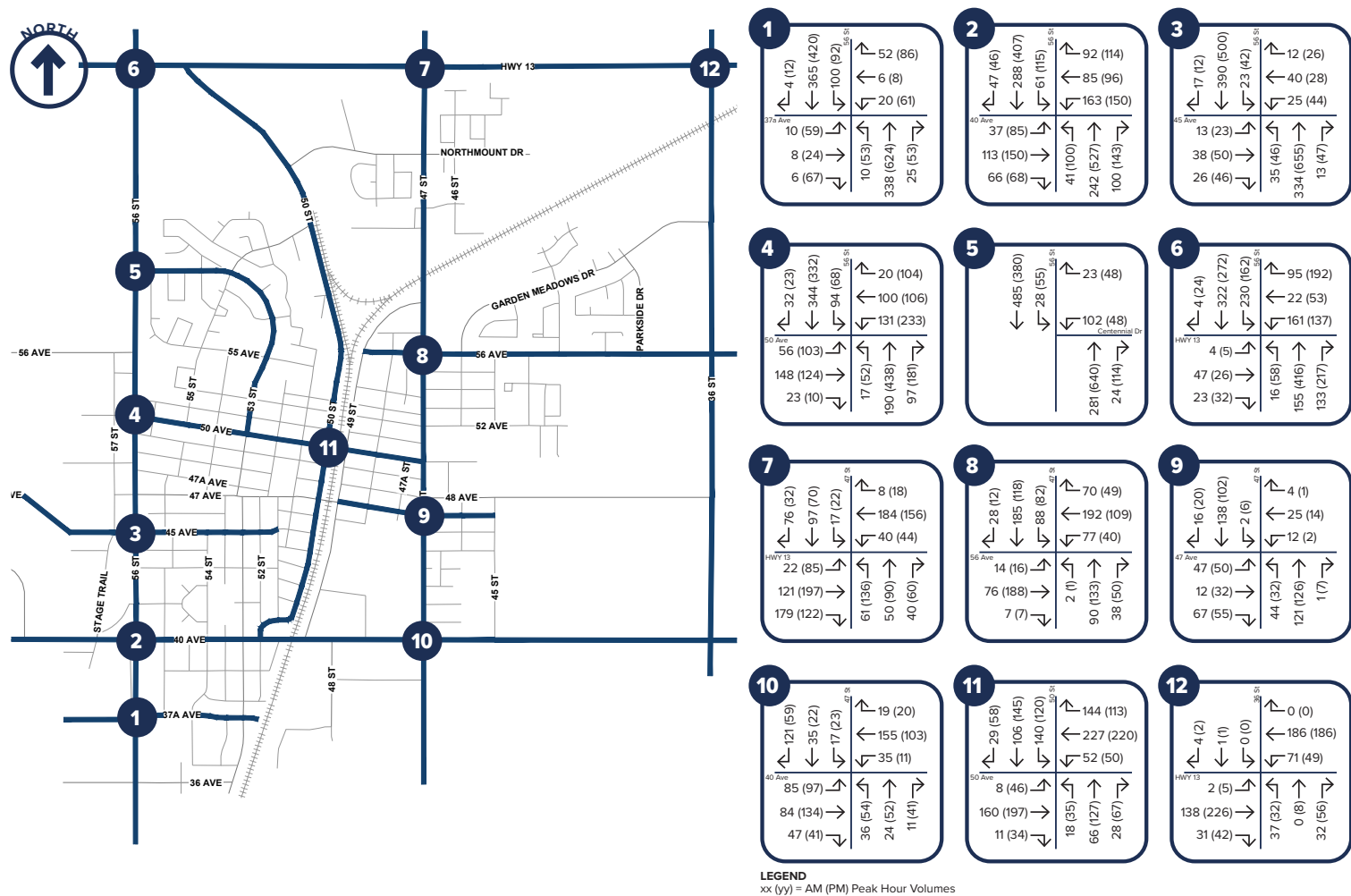


Figure 13: 10-Year (2029) Horizon AM and PM Peak Hour Intersection Volumes

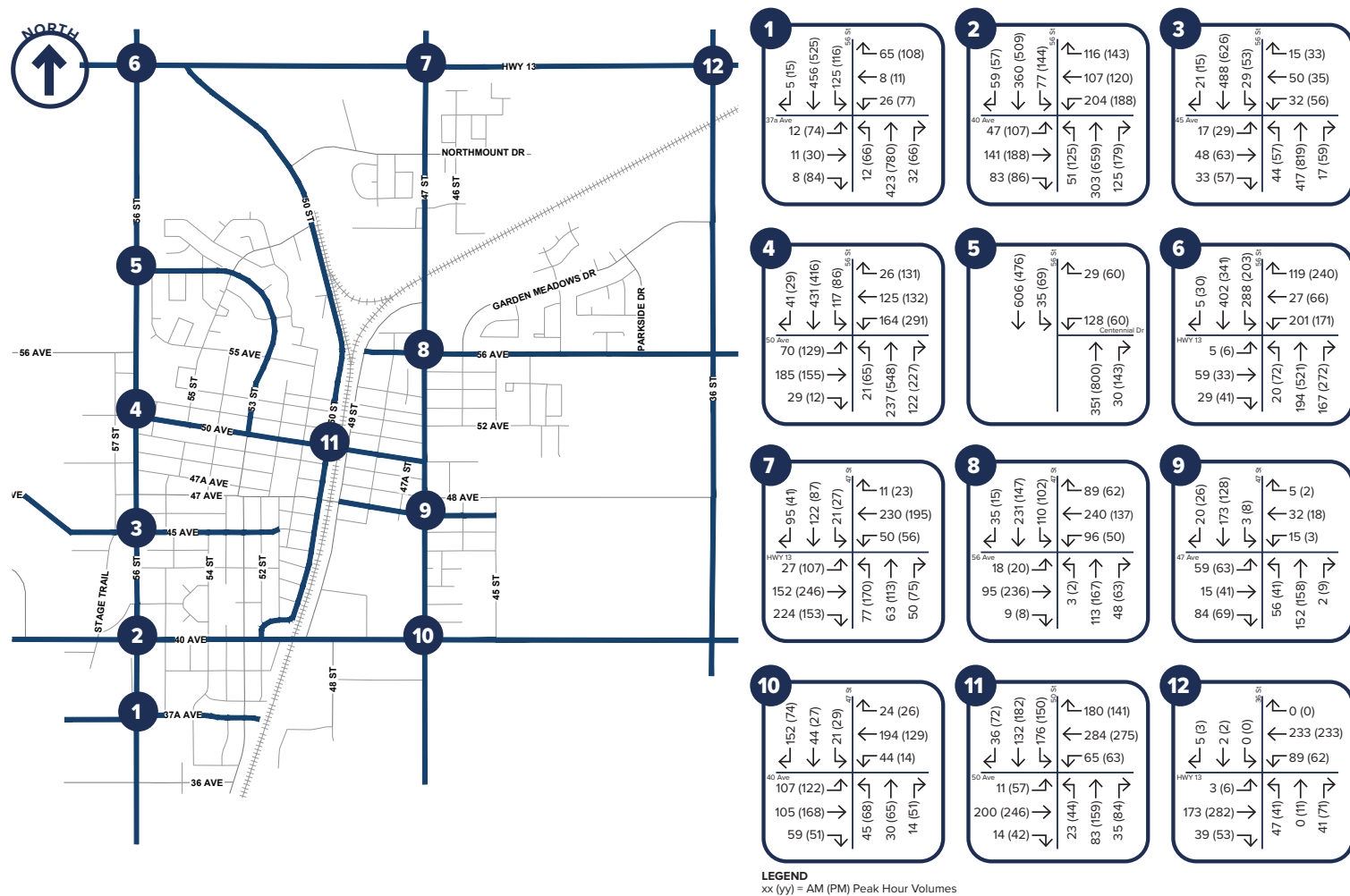


Figure 14: 25-Year (2044) Horizon AM and PM Peak Hour Intersection Volumes

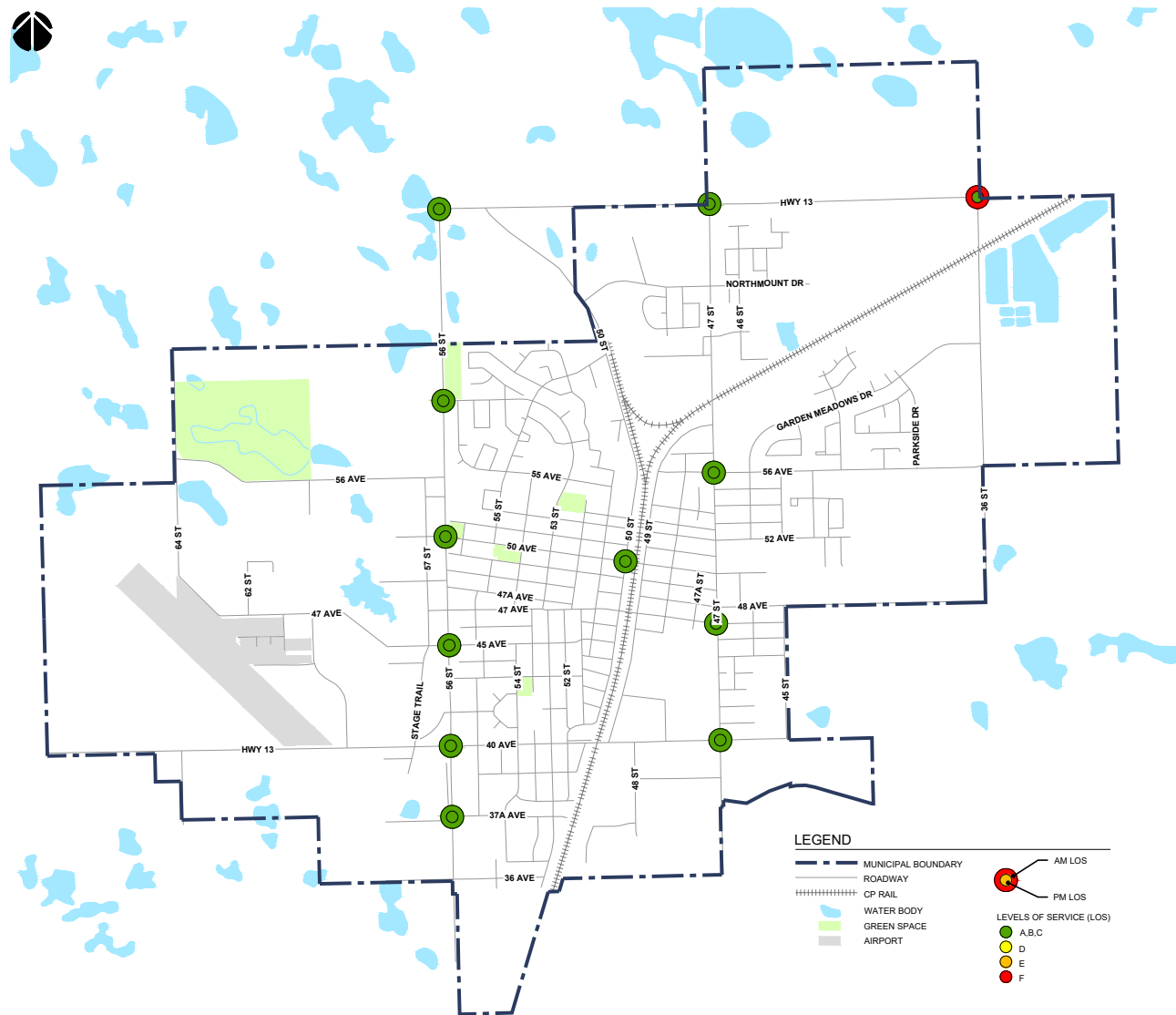


Figure 15: 10-Year (2029) Horizon AM and PM Peak Hour Intersection Performance

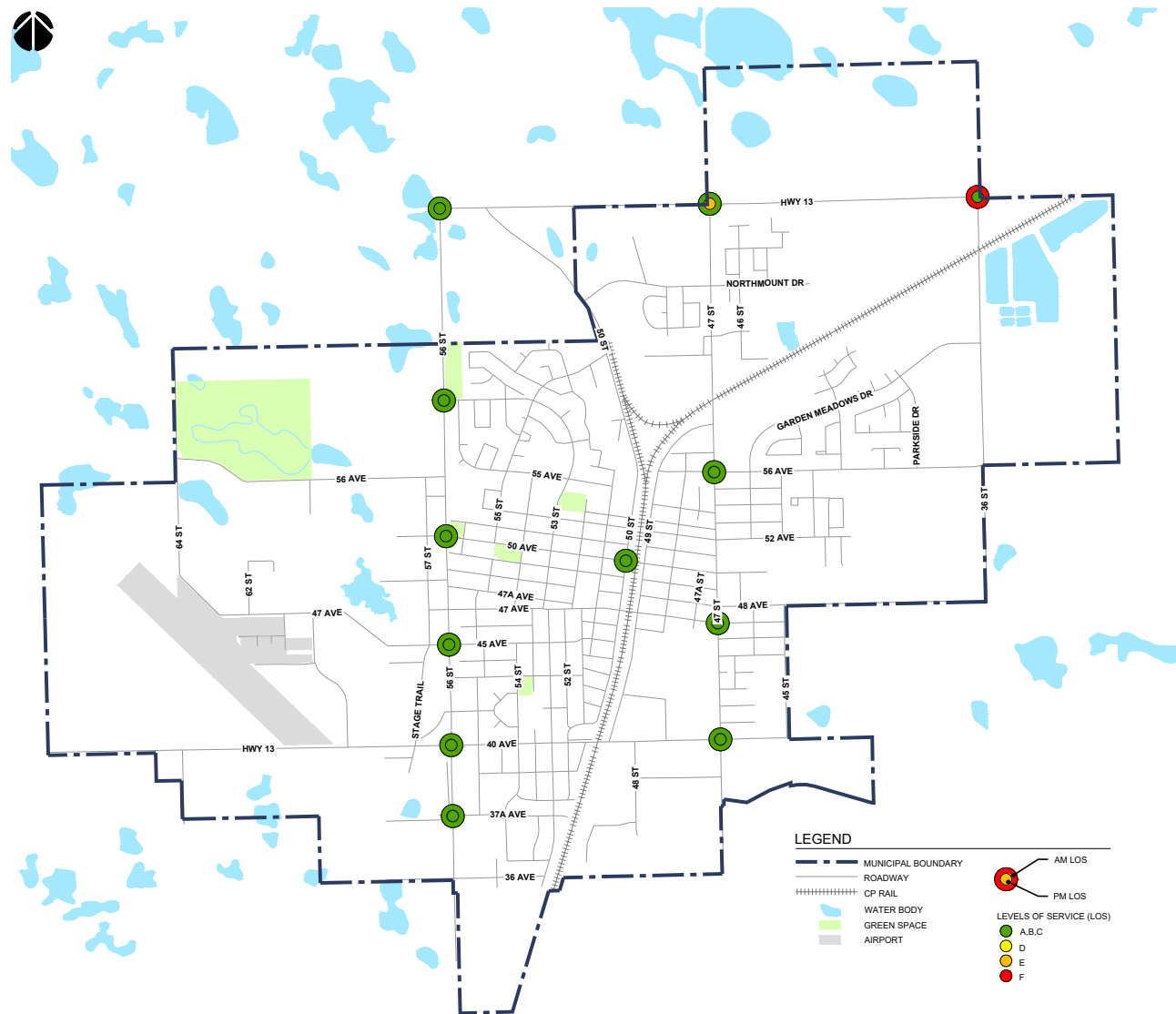


Figure 16: 25-Year (2044) Horizon AM and PM Peak Hour Intersection Performance

3.2.4 Traffic Safety

Road safety is an important consideration in the development of the Transportation Master Plan. Regardless of the operation of the transportation system, traffic and pedestrian collisions represent key performance measures of the functionality and integrity of the transportation system. Traffic safety was identified as the top priority to address in this Transportation Master Plan during the public and agency stakeholder engagement.

Figure 17 illustrates the locations of collisions that were reported to the RCMP in a 3-year period from 2017 to 2019. A review of the corresponding collision dataset indicates that over 100 incidents were reported in 2017, over 200 in 2018 and

approximately 225 in 2019. Over 75% of these incidents occurred at an intersection. While many of the collision types were typical of intersections, such as rear ends, sideswipe, and left turns, most of the collisions resulted in property damage. It should be noted that these findings were based on three years of collision reports and do not necessarily represent the historical safety trends on the road network; however, these findings do provide a snapshot of the road safety conditions in Wetaskiwin.

As shown in **Figure 17**, several locations along 56 Street, 40 Avenue and 50 Avenue were the primary areas where collisions were reported from 2017 to 2019. The top collision locations are summarized in **Table 4**.

Table 4: Top Collision Locations in a 3-Year Period (2017-2019)

Avenue	Street	No. of Collisions
50 Avenue	52 Street	27
36 Avenue	56 Street	26
50 Avenue	50 Street	22
50 Avenue	56 Street	20
40 Avenue	53 Street	18
40 Avenue	56 Street	18
50 Avenue	59 Street	16
47 Avenue	56 Street	13
45 Avenue	56 Street	10
49 Avenue	56 Street	10

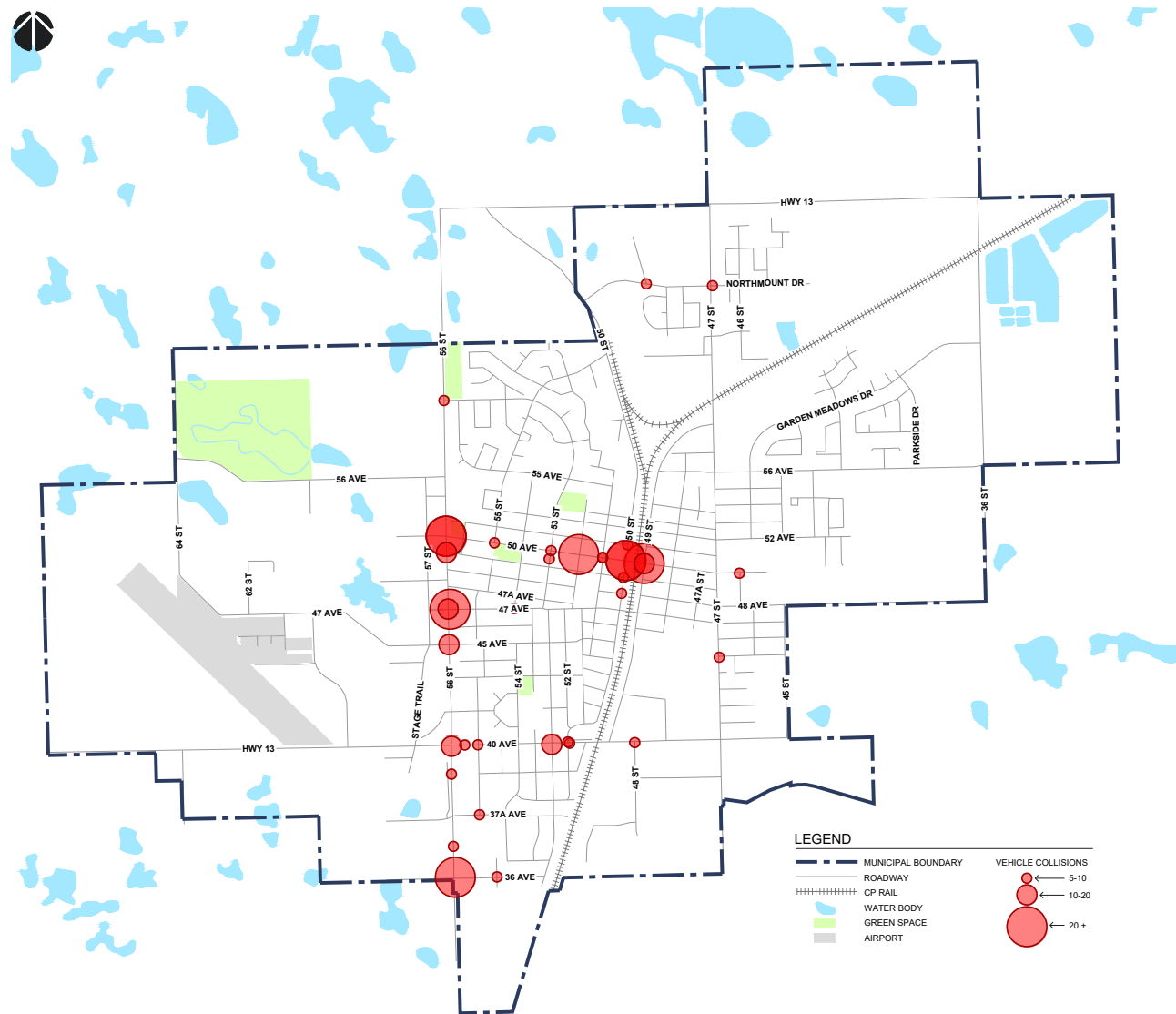


Figure 17: 3-Year Collisions Map

3.2.5 Rail Crossing

The Canadian Pacific (CP) Railway runs north-south and then east-west through the eastern side of Wetaskiwin. As illustrated in **Figure 18**, there are currently six at-grade rail crossings in the City. The nearest grade-separated rail crossing is located on Highway 13 near the City boundary. Each of the at-grade crossings are equipped with gates and bells. The alignment of the railway inhibits road and trail connections, creating a barrier for connectivity, particularly for pedestrians. The at-grade crossings also contribute to delays at key intersections. Field observations found that on average, train delays over a 24-hour period is equivalent to approximately 3 minutes per hour. As traffic demands grow, these delays can impact travel times and reliability.



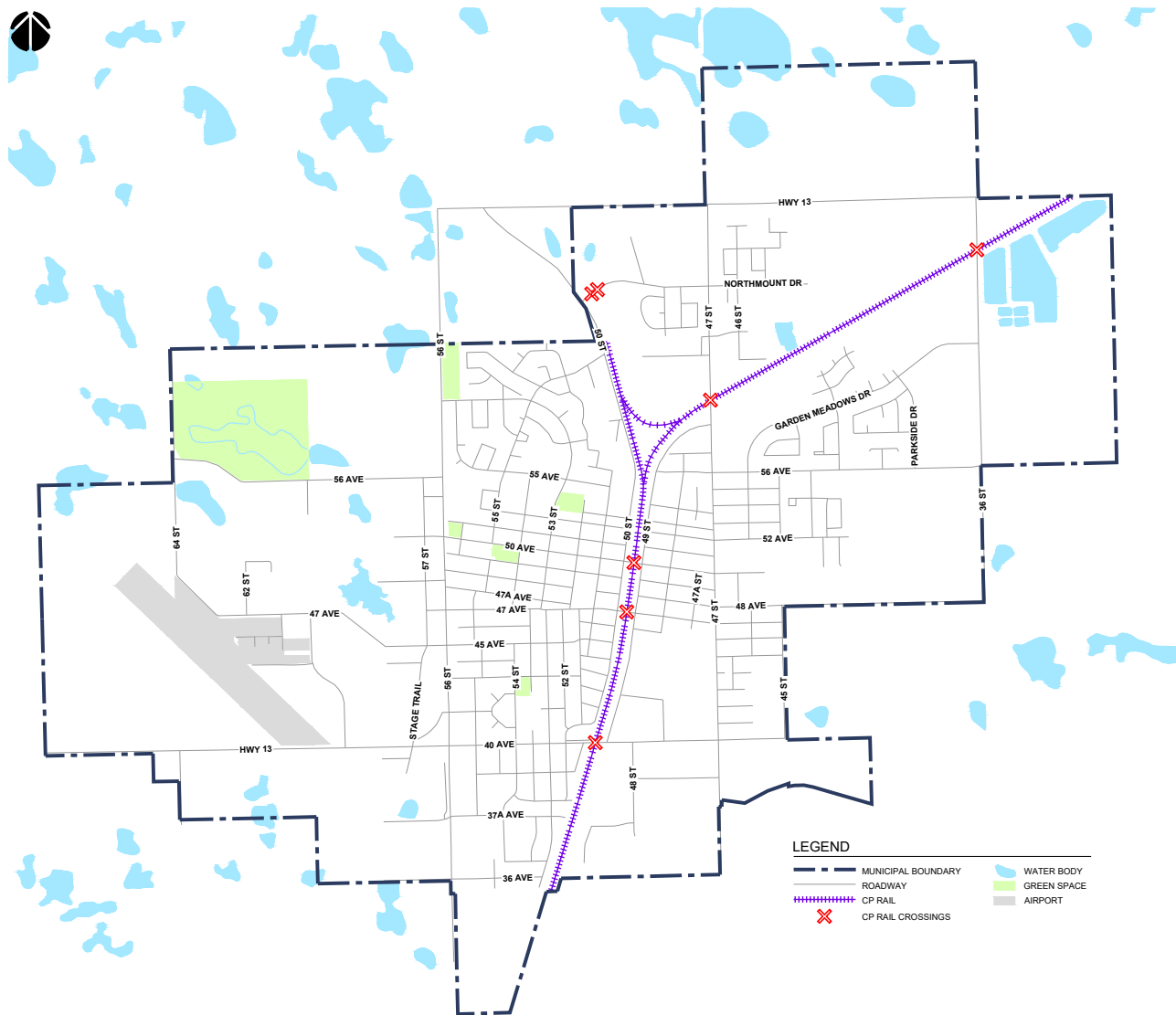


Figure 18: Railway Crossing Locations

3.2.6 Road Infrastructure Condition

The roadway network within a community is a critical piece of infrastructure that enables the movement of people and goods, and therefore, it is vital that the infrastructure is well maintained to support mobility and economic development and growth.

A comprehensive assessment of the current surface roadway conditions was completed by an experienced materials technician through careful field inspections. All surfaces were split into four grading categories: Grade A (Excellent), Grade B (Good), Grade C (Moderate) and Grade D (Failure/Poor) – using the following design criteria:

- **Lateral Cracking (Transverse Cracking):** Cracking is perpendicular to the centerline of the pavement. These cracks can be addressed with crack sealing and regular maintenance. These can occur due to a variety of different causes such as the freeze/thaw cycles or improper asphalt application.
- **Longitudinal Cracking:** Cracking is parallel to the centerline of the pavement. Often concentrated near the centerline joint of the roadway, these cracks, if sealed properly with regular maintenance should not cause significant

concern. These can occur due to a variety of different causes such as the freeze/thaw cycles or improper asphalt application.

- **Alligator Cracking (Fatigue Cracking):** Cracking is a combination of multiple small interconnected cracks at all angles. Cracking is usually caused by load-related conditions. Often this indicates that base course or subgrade is failing, and potholes may form as a result of small pieces breaking up over time.
- **Pothole:** Potholes are bowl-shaped holes caused by the disintegration of the pavement surface. These holes may arise from alligator cracking or other cracks and failures.
- **Pitting:** Pitting is a result of soft aggregate wearing away from the surface of concrete. This is often a result of improper maintenance of the sidewalk over time or improper aggregate in the installation of the concrete.
- **Spalling:** Spalling generally appears as if the surface of the concrete is flaking off. It is sometimes the result of temperature change during the curing process or improper mixing of the cement. It is also commonly a result of water entering the concrete and can eventually cause the section of concrete to crumble.



GRADE A EXCELLENT

This surface has recently been replaced. There is little to no cracking and no significant cracking at all. No evidence of base course or subgrade failing and little to no crack sealing has been previously performed. No evidence of potholes.



GRADE B GOOD

Surface has some longitudinal/lateral cracking however cracking is not of significant concern. Some crack sealing on major cracks. No major potholes forming.



GRADE C MODERATE

Surface has significant longitudinal/lateral cracking. Some alligator cracking is developing and potholes are forming. Crack sealing has been performed on some cracks. Evidence of some base course or subgrade failure.



GRADE D FAILURE / POOR

Surface is nearing or has reached failure. Significant potholes have formed and cracks are propagating across surface. Evidence of base course or subgrade failure. Roadways is within City limits and is gravel.

The City of Wetaskiwin currently has over 100 km of roadways and most of the road surfaces is in excellent to good condition. As illustrated in **Figure 19**, there are several roadways outside the City core that is in poor condition. These roadways are mainly gravel roads, which do not meet the City’s current roadway standards.

Table 5 summarizes the total kilometres of roadway by condition rating. Over 85km of roadway are in excellent to good condition and 13km in moderate condition, while over 7km of roadway are considered in poor condition. Regular roadway maintenance will preserve current assets, lower future costs to the City and taxpayers, as well as providing a safer infrastructure for all users.

Table 5: Total Length of Roadway Surfaces by Condition

Condition Rating	Total Length	Percentage
Excellent	6.3 km	5.9%
Good	80.4 km	74.9%
Moderate	13.1 km	12.2%
Failure/Poor	7.5 km	7.0%
Total	107.3 km	100%



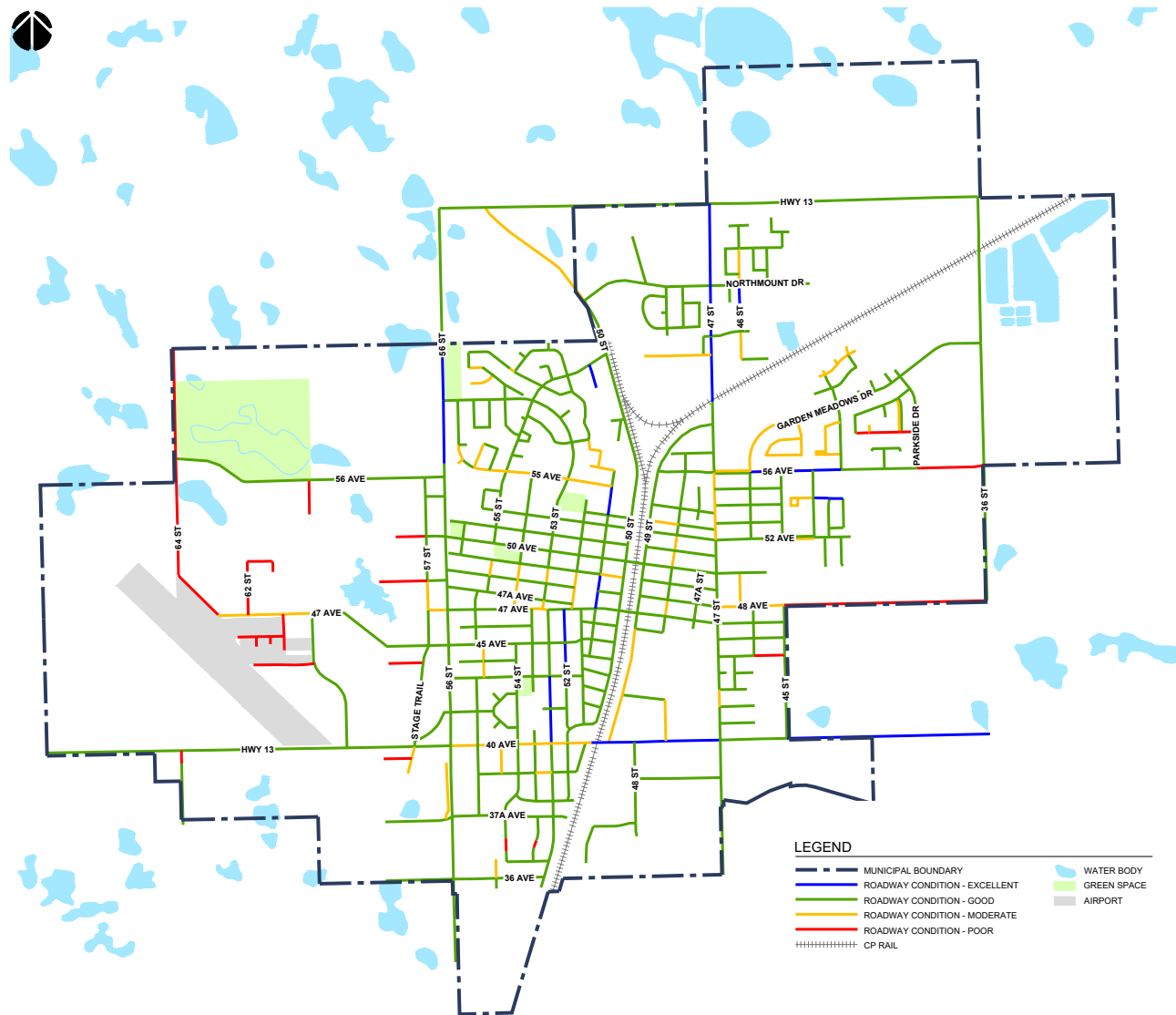


Figure 19: Existing Road Surface Condition

3.2.7 Issues and Opportunities

Issues		Opportunities
Safety	• Lack of dedicated turn lanes • Speeding in school zones and park areas • Foliage around intersections reduces sight distances • Railway crossing safety and barriers	• Implement more turn lanes and dedicated left turn signals • Traffic calming in school and park areas • Maintain trees and shrubs around intersections • Grade separate pedestrians at railway crossings
Traffic Operations	• Busy intersection at Highway 2A and 37/37A Avenue and lack of signals • Increasing traffic demands on Northmount Drive • High traffic area at 40 Avenue & 52 Street, including pedestrians	• Intersection improvements to address operations and pedestrian crossings • Roadway improvements to accommodate future growth
Road Infrastructure	• Gravel within City limits • Isolated areas with potholes/etc. • Improve pavement markings, lane delineation	• Improve roads within City limits to meet City design guidelines • Regular rehabilitation and maintenance • Enhance winter maintenance • Improve pavement markings and signage

3.3 SIDEWALK AND TRAIL NETWORK

3.3.1 Network Coverage

Active transportation is an integral component of the City's transportation network and building community sustainability with respect to health, social exchange, the environment and the economy. Currently, the City of Wetaskiwin supports active transportation through its extensive walking network, which includes sidewalks on many streets as well as through the trail network. The City currently has over 100km of sidewalks and approximately 15km of trails. As illustrated in **Figure 20**, approximately two-thirds of the roadways in Wetaskiwin have sidewalks on either one side or both sides of the road, while the remaining roadways have no sidewalks at all.

Wetaskiwin's trail network provide access to parks, green spaces, and other places for recreation. Despite the City's extensive sidewalk and trail network coverage, there are still existing barriers to walking including gaps in the sidewalk and trail network and barriers at railway crossings.



3.3.2 Sidewalk and Trail Infrastructure Conditions

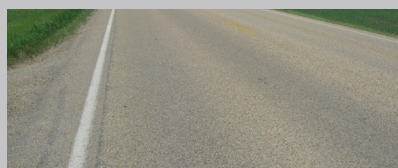
Continued investment in the City's sidewalk and trail network is critical in providing a safe and reliable infrastructure for active mode users. The sidewalk and trail surfaces were assessed using a similar method for the roadway condition assessment.

The City's current sidewalk and trail network is generally in good condition. All surfaces were split into four grading categories: Grade A (Excellent), Grade B (Good), Grade C (Moderate) and Grade D (Failure/Poor)—using the same design criteria as roadways (see **Section 3.1.6**).

Table 6 summarizes the total kilometres sidewalks/trails by condition rating. Over 115km of sidewalks/trails are in excellent to good condition and 3km in moderate condition. **Figure 21** illustrates the existing sidewalk and trail conditions. There is a small section of sidewalk, approximately 60m, that is in poor condition.

Table 6: Total Length of Sidewalk/Trail Surfaces by Condition

Condition Rating	Total Length	Percentage
Excellent	11.7 km	10.1%
Good	100.7 km	87.3%
Moderate	3.0 km	2.6%
Failure/Poor	0.06 km	0.0%
Total	115.3 km	100%



GRADE A EXCELLENT

This surface has recently been replaced. There is little to no cracking and no significant cracking at all. No evidence of base course or subgrade failing and little to no crack sealing has been previously performed. No evidence of potholes.



GRADE B GOOD

Surface has some longitudinal/lateral cracking however cracking is not of significant concern. Some crack sealing on major cracks. No major potholes forming.



GRADE C MODERATE

Surface has significant longitudinal/lateral cracking. Some alligator cracking is developing and potholes are forming. Crack sealing has been performed on some cracks. Evidence of some base course or subgrade failure.



GRADE D FAILURE / POOR

Surface is nearing or has reached failure. Significant potholes have formed and cracks are propagating across surface. Evidence of base course or subgrade failure. Roadways is within City limits and is gravel.

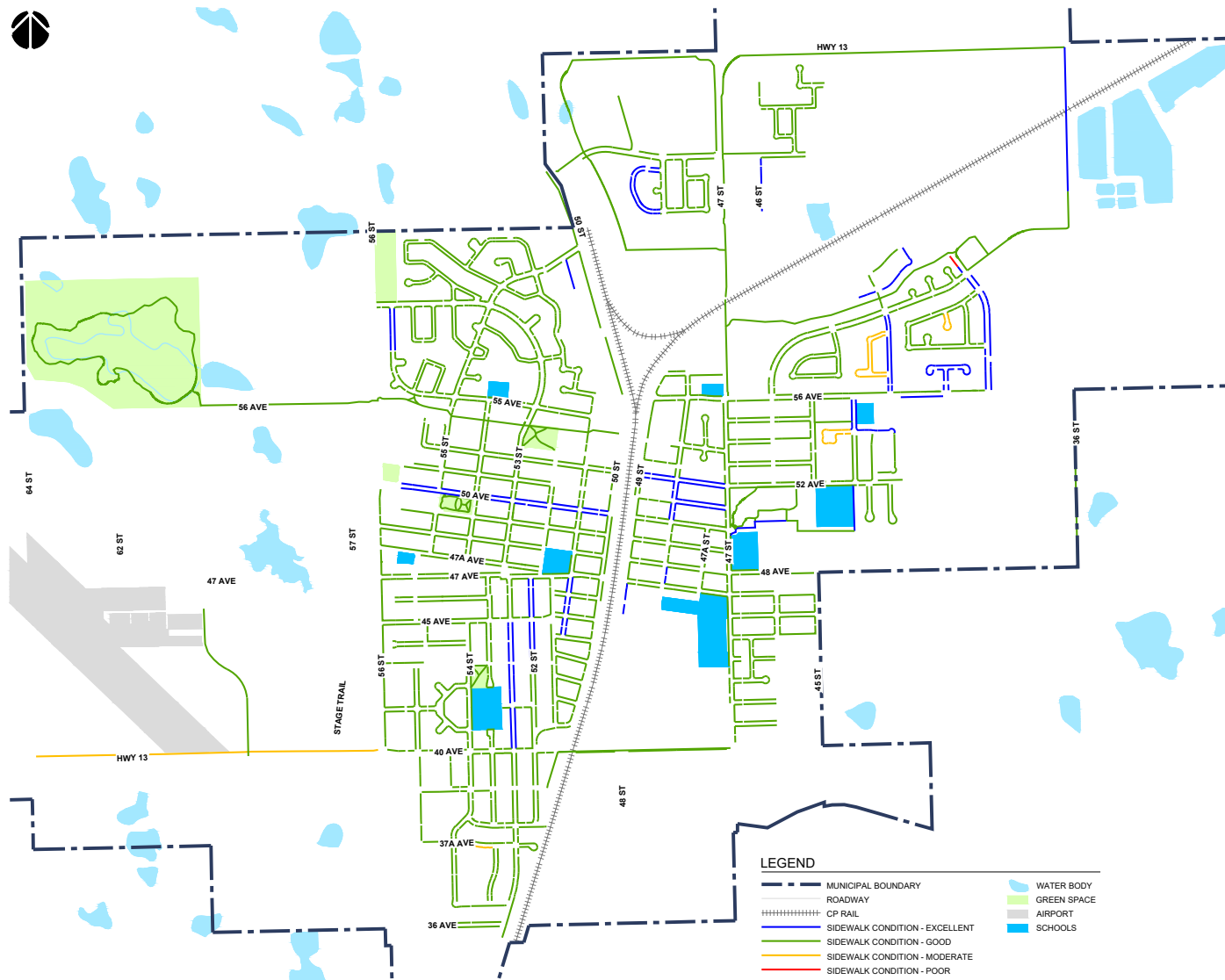


Figure 21: Existing Sidewalk and Trail Surface Condition

3.3.3 Issues and Opportunities

Based on information obtained through the engagement and assessment process, several key issues and opportunities for the sidewalk and trail network have been identified as follows:

ISSUES

- Limited Active Transportation (Trails/Sidewalks) opportunities within the current transportation (rights of way), parks and open space network.
- Issues of quality, type, and year-round operations and maintenance of Active Transportation routes.
- Issues of Active Transportation accessibility and inclusivity (for all ages and abilities).
- Active Transportation network gaps within the City and to surrounding key destinations and communities.
- Safety and accessibility concerns at key road and railway intersections, and along vehicular routes.
- Active Transportation network construction standards – cost, durability, operations and maintenance.

OPPORTUNITIES

- Establish an integrated Transportation/Active Transportation network strategy and classification system.
- Establish Active Transportation Standards based on an integrated network strategy.
- Establish a safe, accessible, inclusive and year-round Active Transportation network.
- Address Active Transportation gaps and connection to the region.
- Incorporate Active Transportation innovations and sustainability, conditions assessment index and monitoring, operations and maintenance.
- Establish Active Transportation approaches that aesthetically enhance the City Transportation network and promote community use, options, choices and quality of life.

3.4 TRANSIT

3.4.1 Service and Coverage

The City of Wetaskiwin does not currently have a public transit system, rather, bus service is provided on an as-needed basis by the City for seniors and clients with mobility issues. The City currently operates four airporter-style buses and two vans (currently out of service) that accommodate both in-town and out-of-town trips during the weekday (Monday to Friday). One of the four airporter-style buses are used for out-of-town trips, while the remaining buses are used in-town. The in-town buses are equipped with tablets that reflect daily schedules. Further information on the process for transit bookings and scheduling, as well as current ridership is provided below.

Bookings & Scheduling

Service requires advanced booking and is completed through a third-party booking system – Teleconnect, except for out-of-town trips requests, where they are referred back to the City. Teleconnect does daily dispatching to the drivers, take calls and updates the schedule. For out-of-town trips, a form is filled out by City Staff, which the drivers take with them the day of the trip and includes the client's contact information, name of riders, time for pick up as well as the pickup and return destinations. Group bookings are also accepted. Typical scenarios for transit bookings include:

- **Local:** A customer wants to go to a local store. They call the dispatch number and get booked in for the date and time requested (within reason).
- **One-time Commute:** A customer wants to go to Edmonton for an appointment a month away. They call dispatch and are directed to City staff. Details of the trip is provided to the City – who is going, where is the pickup location and where they are going, contact information, pickup time, return time. City staff then schedules the drivers and contacts customer to confirm trip.

- **Regular Daily:** Day-to-day services is offered for clients within Wetaskiwin. This means certain clients are picked up on a regular basis – some are daily regulars and some ride on specific days of the week on a regular basis.
- **On Demand:** While the City requires 24 hours for pickup requests in town, the City will take pickup requests on the day of.

There are no geographic boundaries for the out-of-town trips within Alberta, however, the vast majority of out-of-town trips are made to Edmonton or to other major centres surrounding Wetaskiwin.

Ridership

Average monthly ridership is approximately 1,750 trips/month, with most trips occurring during the weekday. Out-of-town trips make up a small percentage of the requests, with over half of the trips made to Edmonton, followed by Red Deer and Camrose. There are currently 175 people that uses the service – whether regularly or occasionally for both in-town and out-of-town trips.





Fares

The City offers a range of flexible fare options to fit the needs of transit users, including punch passes, jump-on fares and membership for unlimited rides. **Table 7** outlines the current transit fare schedule.

Fare Type	Price
2 Punch Pass	\$14.00
5 Punch Pass	\$35.00
10 Punch Pass	\$70.00
Month Membership (Unlimited)	\$250.00
Authorized Membership	As needed, billed monthly
Single Ride	\$7.00
Jump On	\$10.00
Out of Town Trips	\$0.48/km \$40.00/hr including wait time

Table 7: Transit Fare Schedule

3.4.2 Issues and Opportunities

Feedback from City staff involved in operating the bus service identified the following issues and opportunities:





4

ROAD SAFETY STRATEGY

Since the adoption of the 2012 Transportation Master Plan, the City has invested in a number of road improvements to address safety, operational and maintenance concerns. Building on these successes and recognizing the need for continued improvements to support growth and development as well as through feedback received from stakeholders, the Road Safety strategies include:

1. Enhance the roadway network through **safety and operational improvements** to provide a safer and efficient network for all users and to support goods movement.
2. Reduce barriers in the road network through **enhanced rail crossing treatments** to provide a crossing environment that is more comfortable and convenient for all users
3. Develop **support programs and initiatives** that promote and educate safe travel on roads.

4.1 STRATEGIC SAFETY IMPROVEMENTS

Safety was identified as a primary concern through public engagement and stakeholder consultation. While a comprehensive safety study is outside the defined scope of the Transportation Master Plan, the list of the top intersections which have sustained the highest number of collisions in 2017 were compiled. To address road safety in the future, the following strategic improvements are recommended.

- **Data Collection and Monitoring.** Compile and update database of collision records from the RCMP for all city and provincial roads within the municipal limits. The database could be supplemented with insurance claims data, if these records are available. Claims data would provide a more comprehensive list of collisions, although the integrity of the data is limited by the accuracy of the claim records. The City can also continue monitoring traffic safety concerns brought forward by the public and identify any problematic areas that require further observation.
- **Conduct “Network Screening”.** Conduct a “Network Screening” to identify the Top 10 to 20 collision-prone locations from the most recent three to five years of collision data. The locations could be initially screened by collision frequency and then further ranked by the combination of collision rates, collision severities and the Critical Collision Rate Index. This can be completed once the data collection and monitoring is up and running.
- **Conduct Safety Studies.** For each of the top locations, conduct a formal safety study including site visit(s) and collision analysis to identify trends, evaluate causal factors, and recommend potential countermeasures to address the safety issues.
- **Enforcement and Education.** The City can work with local authorities to increase enforcement presence on the roads to increase compliance with speed limits and reduce unsafe driving practices. In addition, raise public awareness

and knowledge of road safety through educational programs and initiatives such as Safe Journeys to School, as well as through public communication initiatives such as ad campaigns and social media.

- **Capital Program.** Incorporate road safety improvements into the City's Capital Program, as project scope and budget permits. The City is currently in the process of becoming a member of the Capital Region Intersection Safety Partnership (CRISP).



4.2 SPEED LIMIT REDUCTION MEASURES

In addition to the strategic solutions to address traffic safety concerns, a larger scale safety improvement measure that can be explored in the moderate to long-term horizon is speed limit reduction measures. Within residential areas, municipalities throughout western Canada are exploring the opportunity to reduce speed limits from 50km/h to 40km/h. Specifically the City of Edmonton has moved from piloting the reduced speed limit to 40km/h in test communities (noting years later, they remain in place), to considering a blanket 40km/h for all residential and collector roads as well as 30km/h in “core neighborhoods”. Calgary is currently engaging the public on reduced speed limits of 40km/h and 30km/h on residential and collector roads. Both Cities are expected to bring bylaw amendments forward in 2020. Airdrie switched to 30km/h in the early 1980’s for residential roads. The Town of Blackfalds implemented 40km/h on most residential streets, effective June 15, 2019, and St. Albert has reduced the speed limit to 40km/h in several neighborhoods in 2019, with the likelihood that more will follow.

While the effectiveness of reduced speed limits is being researched with local case studies, the sampling of data is currently limited. However, it is intuitive that reduced speeds not only reduce the severity of collisions, slower speeds also provide the ability for drivers to brake in shorter distances, ultimately improving survivability rates. This however does assume that drivers follow posted speed limits, with enforcement being an important tool with the implementation. When speed limit reduction measures are utilized as a safety tool along with other traffic calming measures, the effectiveness for both can be even greater.



4.3 RAILWAY CROSSING IMPROVEMENTS

The CP railway has been identified as a barrier to mobility to both vehicles and pedestrians. The only grade-separated crossing is on Highway 13, north of the City. The following mitigation strategies have been identified to enhance crossing of the railway.

- **Advanced Warning Signals.** Use advanced warning signals or vehicle information system to alert drivers of the presence and direction on trains traversing through the City to better plan trip.
- **Improve Traffic Operations.** Consider adaptive or coordinated signal timing plans to serve vehicles in queue to reduce congestion after a train crossing.
- **Mobile Technology.** Use of mobile applications to provide drivers advanced warning of trains traversing through the City.
- **Grade Separation for Active Modes.** Consider grade-separated and/or improved accessible rail crossings along Active Transportation corridors.
- **Grade Separation at Major Crossings.** Consider grade-separated crossings at key intersections to minimize impacts of train crossings and allow improved mobility and accessibility for pedestrians, goods movement and emergency vehicles. A potential location for grade separation would be at 40th Avenue.

STRATEGIC ACTIONS - ROAD SAFETY

- Compile updated database of collision records from RCMP for all City and Provincial roads within municipal limits
- Conduct a Network Screening Study (if collision data available)
- Include Safe Journeys Program in Capital Budget
- Conduct Speed Limit Reduction feasibility study
- Review signal timing plans around rail crossings and identify opportunities for ITS improvements
- Conduct feasibility study for potential grade separation at 55th Avenue (pedestrian) and 40th Avenue (vehicles)
- Include rail crossing guidelines/standards for Active Transportation routes.





5

ROAD NETWORK STRATEGY

The Traffic Network Strategy takes aim to improve traffic operations and network connections in Wetaskiwin. While the City's network is expected to operate under acceptable level of service over the next 20 years, it is important that the City is proactive in taking measures to maintaining and managing a transportation network that is efficient and safe for all users. Recommendations have been identified to address potential traffic operational issues and to sustain an efficient network over the next 20 years and are further described in the following section.

5.1 STRATEGIC OPERATIONAL IMPROVEMENTS

As outlined in Section 3.0, key intersections in Wetaskiwin are currently operating under good conditions (LOS D or better) during the peak hours. A majority of these intersections will experience moderate increases in delays as traffic demand increases, however, the City's roadway network is expected to operate under good conditions with minimal traffic congestion over the next 25 years. However, traffic concerns may arise as the City continues to grow or through redevelopment. To address potential traffic operations issues, the following is recommended:

- **Data Collection and Monitoring.** Develop a traffic data and monitoring program to understand changing network demands. The count program will include traffic counts to supplement highway counts collected by Alberta Transportation. This includes undertaking traffic count of vehicles, trucks, pedestrians and other modes at key intersections and corridors. These counts can be conducted during the spring time and collected on a bi-annual basis as well as an on-needed basis. Counts can be done with new technology like MioVision Scout Cameras, which are widely used in the industry and are portable, reliable and can collect data unattended for days at a time.
- **Warrant Analysis.** Operational analysis to confirm warrants and scope of improvements – including control upgrades, implementation of turn lanes, change in signal timing plans and pedestrian crossings. The City recently implemented dedicated left-turn signal phasing at the intersection of 56 Street and Highway 13 (40 Avenue) to improve intersection safety and performance. The same measures can be implemented at intersections with higher turning volumes such as the intersections of 50 Street/50 Avenue and Highway 2A (56 Street)/37A Avenue. It is recommended that the City continues to monitor traffic and safety on a regular basis, particularly in the higher growth areas to determine whether warrant analysis is required.

- **Signal Timing Optimization & Coordination.** Optimizing and coordinating signal timing plans at key intersections and along key corridors can enhance overall traffic flow, reduce vehicle delays and improve traffic safety. The City could undertake a review of signal timing plans along higher-volume corridors such as the Highway 2A (56 Street) corridor to find opportunities to improve traffic performance through signal optimization and coordination.





5.2 FUTURE CONNECTIONS

While no new arterials have been identified for future developments, multiple new collectors are identified in **Figure 22**. Based on the growth outlined in the Airport Area Structure Plan, there will be new collector and local roads north of 47 Avenue to enhance access to the Airport, as well as continued growth in the Airport area. As illustrated in **Figure 22**, these new connections include extending 60 Street (collector) to connect 47 Avenue to 56 Avenue and a new connection (50 Avenue) between the extended 60 Street and 64 Street.

STRATEGIC ACTIONS - TRAFFIC NETWORK STRATEGY

- Develop a traffic data collection program to be conducted bi-annually
- Conduct left-turn lane warrant analysis for intersections with higher turn volumes such as 50 Street/50 Avenue and Highway 2A (56 Street)/37A Avenue intersections
- Conduct Highway 2A Signal Timing Review
- Integrate Active Transportation recommendations and initiatives as part of future roadway improvements and development



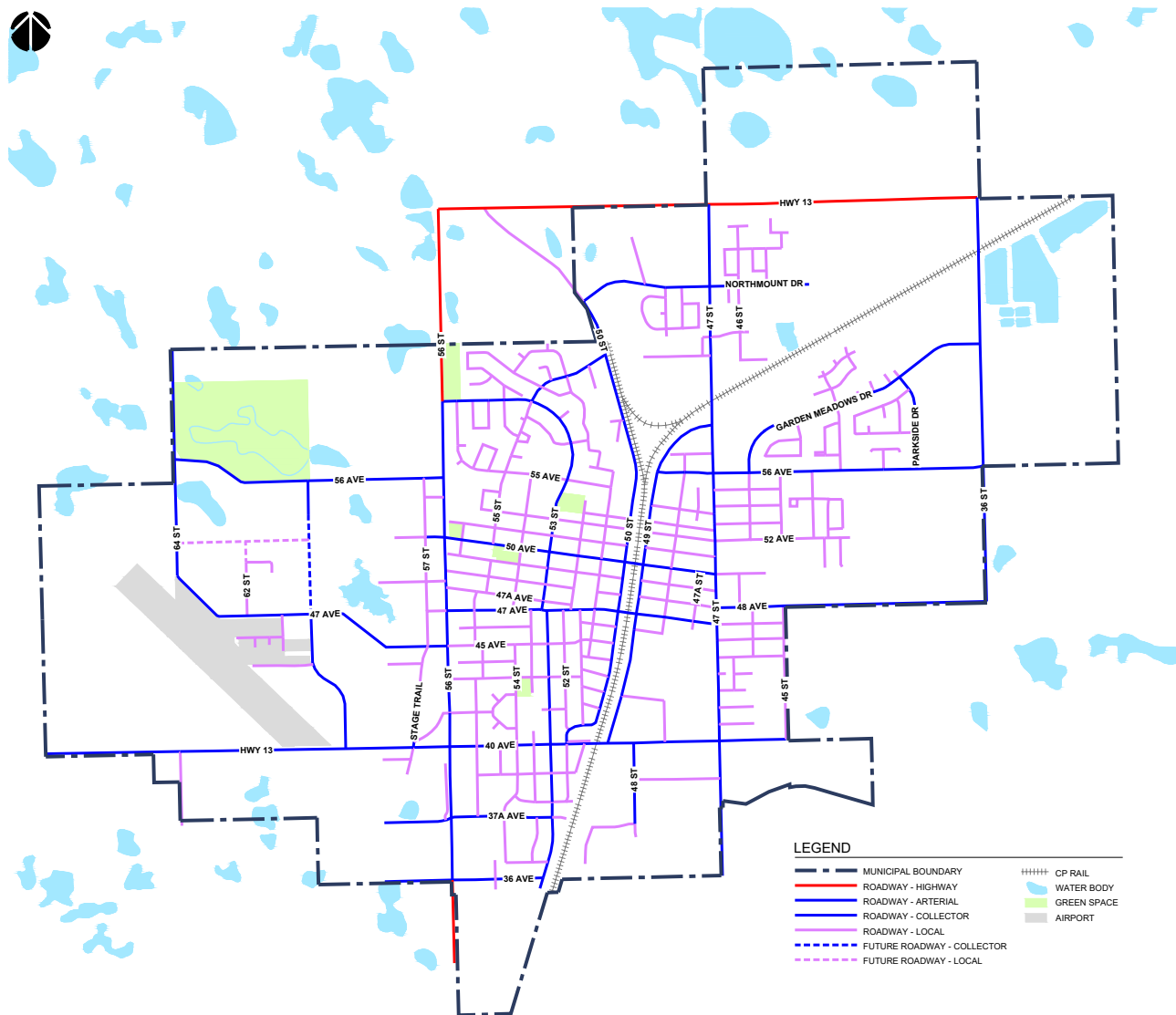


Figure 22: Proposed Future Road Network



6

ALTERNATIVE MODES STRATEGY

Active transportation and transit are integral alternative modes of travel through Wetaskiwin and are vital in building community sustainability with respect to health, social exchange, the environment and the economy. While active transportation and transit services are improving to better serve a wider cross-section of the community and promote increased use, there continues to be areas in need of improvement. This section of the Transportation Master Plan identifies strategies to improve and promote the use of alternative modes in Wetaskiwin.

6.1 ACTIVE TRANSPORTATION

The City of Wetaskiwin already has an extensive network of sidewalks and trails that have been well developed through natural areas, parks and open space areas, and along key traffic routes. To build on these successes and address barriers and gaps, the following strategies have been identified to provide safer, accessible and convenient walking environment throughout Wetaskiwin. These strategies were developed based on feedback received from the public survey and Council workshop.

1. Promote increased walking around the City through the **expansion of the sidewalk and trail network** to reduce barriers and improve connections between trails.
2. Enhance walkability through **safety and accessibility improvements** that make walking more enjoyable and convenient.
3. Create a more vibrant space for pedestrians through **enhanced treatments** that provide an attractive walking environment along key corridors and destinations.
4. Provide a safe and reliable environment for all users through the **regular rehabilitation and maintenance** of the sidewalk and trail network.
5. Develop **support programs and initiatives** that encourage the use of active modes and highlight the benefits of walking.

6.1.1 Creating an Active Transportation Network

Wetaskiwin's active transportation network is relatively well-connected. However, as defined through the engagement and assessment process, there are several areas of improvement that should be considered in establishing a well-integrated and shared transportation network. The following provides an overview of proposed active transportation strategies to address key areas of improvement.

Transportation/Active Transportation Network Strategy and Classification System

To establish an integrated transportation/active transportation network, it is important to establish an integrated framework. The character and physical qualities of a City is determined and influenced by various components. The visual quality or legibility of these components dictates the organization and recognition of a coherent City through a distinct framework development. Legibility is a crucial concept in the structuring of a coherent City framework.

A legible City is one where districts (areas exhibiting a recognizable and common character), landmarks (reference points), nodes (focal points), edges (natural and built boundaries) and connectors (urban channels – roads, walkways, trails, etc.) are easily identified and grouped into an overall pattern. These framework elements structure and harmonize the City, establishing and clarifying points of entry, movement, visual reference, ambient character, and social space – in short, they create a sense of place.

To create a distinctive sense of place for the City's Transportation network, it is important to establish comprehensive and implementable planning and design directions that identify and respond to the potential interactions between framework components. A sense of place is physically and cognitively created through these framework components. Establishing a framework approach for municipal and regional active transportation/transportation routes (highways, arterial, collector and local roads) would support the development an overall integrated Transportation network.

Key framework components that should be considered for the City of Wetaskiwin Integrated Transportation Network include, yet are not limited to:

Essence & Character: Creating a distinct and unique sense of place involves not only understanding the values and aspirations of Wetaskiwin, it also includes determining the base elements or essences of the community -- the predominant colours, textures, patterns, materials, forms, sounds and activities that occur in the surrounding natural, regional and local built environment. If these essences are distilled and drawn upon during the planning process, they can be used to inform the design, creating a better 'fit' with reflecting a specific image and the concept of 'place'. Good design should acknowledge and celebrate the essences and contextual elements of the region and community.

The concept of essences can also include the psychological 'state of mind/body' of a place – for those working or living in the area, and for visitors alike. All transportation related development should define and represent the regional landscape and the pride, economic vitality and rich heritage of the community. Consideration must be given to how this message or the use of essences can be relayed through community enhancements, future development and specific component selection and use.

The base elements or essences can be coalesced into a central or series of coherent character to establish a distinct and positive 'sense of place'. This character (or characteristics) can provide inspiration and direction to the design process and, more importantly, relevance, meaning, originality and vitality to the final design. The utilization of a character in good design is not a direct, literal translation of forms or ideas, but an indirect reference which may not be immediately—or ever—apparent to the onlooker, but which subtly informs and crystallizes the design.

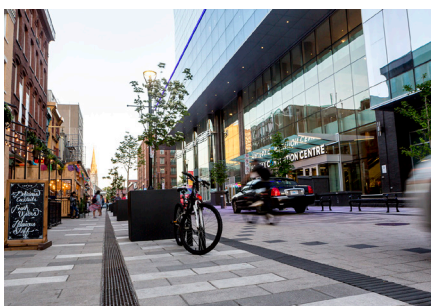
The design process and the relationship between essence and character are not strictly linear; rather, they are an integrated web of relationships that create a multitude of meanings, impressions, forms, and possibilities for effective design. Introducing essence and character into the transportation network will support a unified approach and address current issues of corridor aesthetics, community identity, and sustainability (environmental, social and economic). With respect to Wetaskiwin's transportation network, essence and character development could be incorporated into branding, wayfinding (vehicular/pedestrian), community gateway/entrances, specific corridor cross-sections and intersection (nodes/hubs) design components (e.g., landscape/hardscape materials, site furnishings and features).



Transportation Network Classification System

Establishing an integrated and legible transportation network requires the development of a classification system that incorporates: districts (e.g., historical downtown, parks and open space, industrial/agricultural, residential neighbourhoods, urban service/commercial, key City destinations, and surrounding areas of interest/natural areas/communities); landmarks (e.g., key City reference points/destinations); nodes (e.g., road/sidewalk/trail/rail intersections, parks, trail hubs); edges (natural and built boundaries, including road rights-of-way); corridors (e.g., roadway network (Provincial highways, arterial roads, collector roads, local roads, alleys/service roads), sidewalks and trails).

The assessment and development of Transportation Network Classification System using these key components will support a unified approach to defining key design guidelines and standards for both transportation and active transportation. This would incorporate the assessment, integration and/or modification of the existing roadway network classification system, roadway design standards and guidelines and other related City plans, bylaws, policies and guidelines. It would also address current gaps identified in the transportation and **active transportation network**; provide well-defined design responses; and a unified implementation strategy for



planned upgrading, development and long-term operations and maintenance.

Ultimately, the intent of incorporating active transportation into the overall transportation network will reduce the number of short vehicular trips within the City and encourage all residents to use active transportation routes to work; the downtown; parks and open space; municipal facilities; shopping areas; regional links; and other key destination areas.

Figure 23 provides a conceptual example of how mapping combined primary transportation/active corridors can support integrated community connectivity. This framework can be further developed to include a hierarchy of landmarks, nodes, edges and corridors to support a further refined and defined range of community connectivity and the key classification components that support their use for both vehicular and pedestrian traffic.



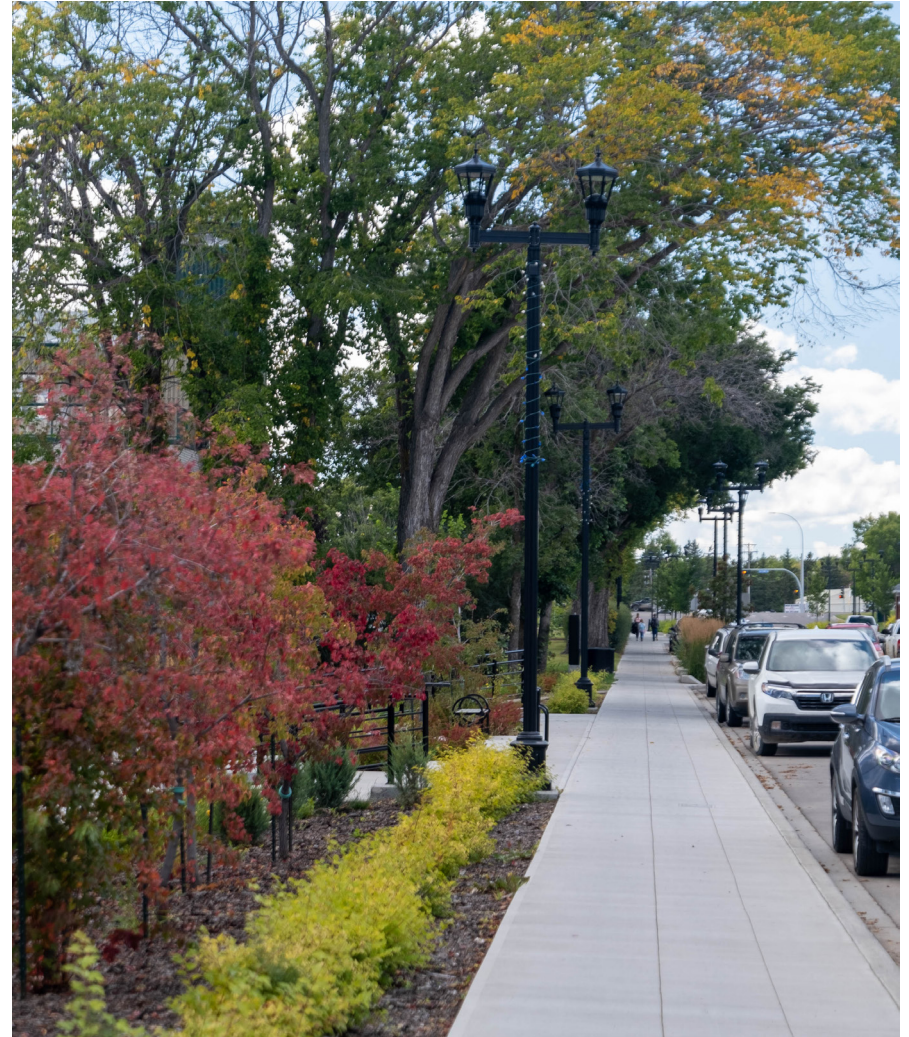
Active Transportation Standards and Guidelines

The social, environmental and economic benefits of establishing active transportation within communities is well documented. Active transportation routes should be integrated to provide a shared network of use for those on foot or using non-motorized modes. Based on the assessment of project resource information; the engagement sessions and on-line survey responses, active transportation connectivity is currently provided in Wetaskiwin through sidewalks and trails. To continue and improve upon these existing connections, in conjunction with establishing an integrated transportation network classification system, it is important that specific standards and guidelines be developed for active transportation corridors. Key components to be addressed in the development of active transportation standards and guidelines include, yet are not limited to:

- Developing a toolbox of active transportation design criteria and components based on an integrated transportation network classification system. These could include road, sidewalk and trail design variations; wayfinding; landscape treatments; infrastructure/LID modifications; pedestrian amenities (e.g., rest nodes, site furnishings, scaled lighting, etc); public art additions; Winter City applications and microclimate improvements).
- Addressing improved connectivity between and within each district (e.g., neighbourhood to neighbourhood; key destinations; private development (commercial, industrial, and other destination facilities); school zones (e.g., implementing a Safe Journey's program); parks, open space and other greenways (e.g., MR's, PUL's); and surrounding areas of interest/communities). These district connectivity improvements may require adjustments to current City plans, bylaws, policies and standards.



- Developing specific design responses for a variety of transportation network intersections, nodes and hubs.
- Assessing the application of Complete and Green Street design components in the development of the transportation network classification system, that support active transportation standards and guidelines.
- Establishing a safe, accessible, inclusive and year-round transportation/active transportation network.
- Establishing a consistent and well-defined transportation network communications system (e.g., wayfinding, directories, gateway/entrances, signing, interpretive/educational signing) to promote use; enhance user experience; provide education/interpretation/incentive information (e.g., history, culture, natural, health and wellness); and support community placemaking.
- Defining and establishing active transportation innovations and sustainability (e.g., Low Impact Development applications), conditions assessment index and monitoring, operations and maintenance. Active transportation rehabilitation and maintenance should be managed in conjunction with roadway operations and maintenance.
- Introducing Winter City design components (e.g., aesthetics, microclimate control, separation, safety, security; amenity components (seating nodes, hubs, lighting); and operations and maintenance program) to support and promote year-round use.
- Enhancing community sustainability with respect to health, social exchange, the environment and the economy.



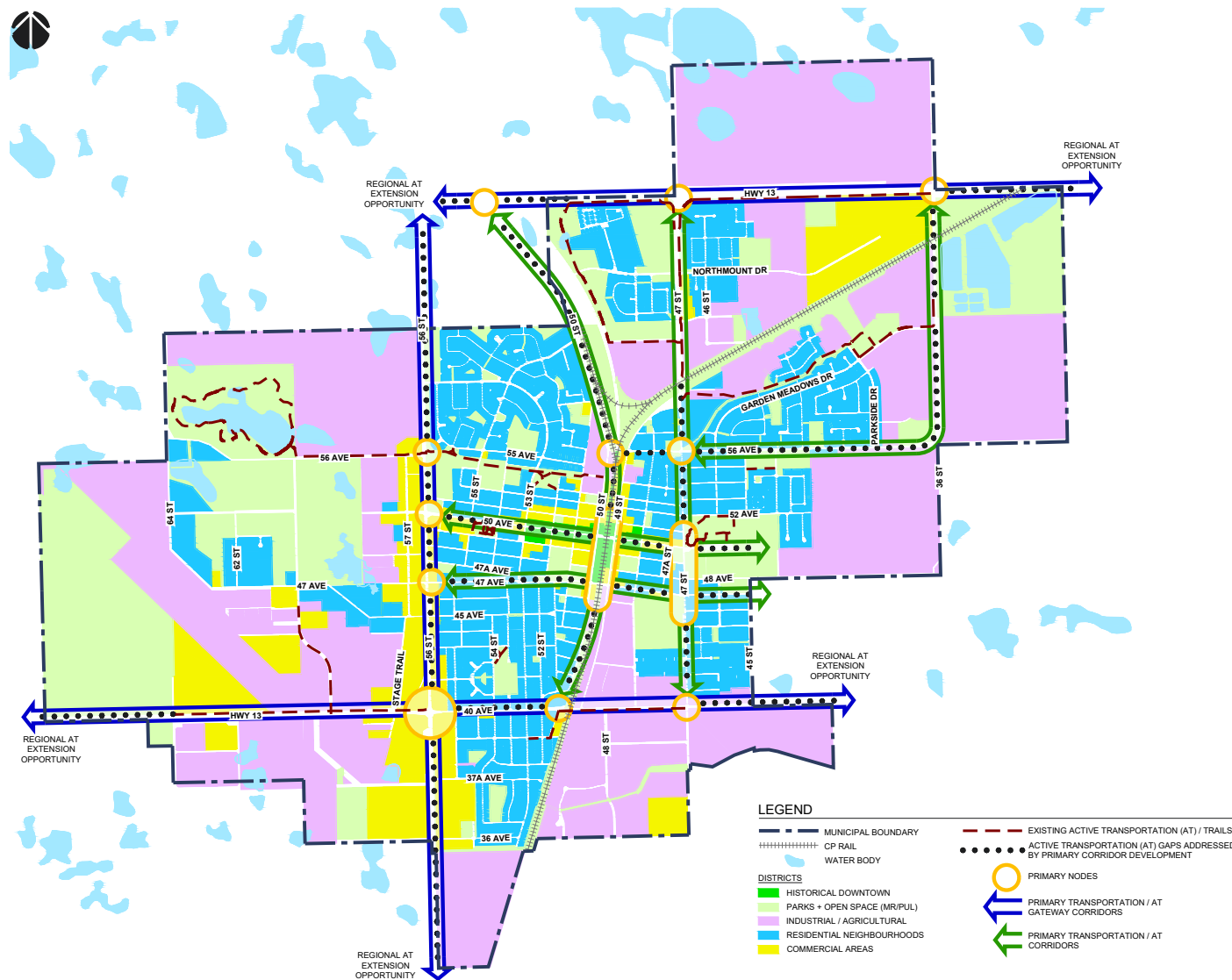


Figure 23: Primary Transportation/Active Transportation Framework Concept

6.2 TRANSIT

Currently within Wetaskiwin, public transit is limited to airport-shuttle style transit services; school/student bussing. Through feedback received from the public survey and council workshop, the following strategies have been considered to enhance transit service and accessibility in Wetaskiwin.

1. Promote use of transit around the City through **enhancing transit coverage** that makes transit more accessible and convenient.
2. Improve transit service and fleet by exploring **provincial and federal programs and initiatives** for partnering and funding opportunities.

Several future public transit initiatives to enhance transit service and accessibility could include:



On-Demand Transit Service - A “no-cash service” with fares paid electronically providing trips within City boundary or potentially regionally to other communities, this however has a high operating cost and does not effectively manage peak usage times.

City-Initiated Ride-Share Program - There are several on-line and social media sites that currently provide travelers the opportunity to post ride offered and wanted opportunities. This type of on-line ride share could be established through a safe/secure City Ride-Share program. This type of program functions with little or no cost to the City and has proven effective in smaller Alberta communities for travel between towns and communities.

Alberta Community Transit Fund - The Alberta Community Transit Fund is established through the Climate Leadership Plan, with 40% to 50% of eligible costs covered for low-emission busses, zero emission busses, and transit centre retrofits. Future potential City public transit development and related costs could be reduced through this type of fund, should demand warrant it, however there are no existing facilities or equipment that would qualify for this funding for Wetaskiwin.

Rural Transportation Pilot Program - Based on the demise of Greyhound service within Alberta, the Rural Transportation Pilot Program was established in 2018, incorporating several regions in a two-year program that provides more transportation options between rural communities. One of the regions included in the pilot program is Red Deer County and the provision of a new bus route connecting the City of Red Deer with Springbrook, Penhold and Innisfail. This service connects more than 200,000 people to the mid-sized urban center of Red Deer to surrounding communities. Based on results, this may become an option for Wetaskiwin in the future.

Public Transit Infrastructure Fund - The Public Transit Infrastructure Fund is a joint Federal/Provincial program providing short-term funding to aid municipal investments that support the rehabilitation of transit systems, new capital projects, and planning and studies for future transit expansion to foster long-term transit plans. With respect to Wetaskiwin, this funding may only be limited to system expansion projects, such as active transportation replacement or enhancement. Based on a review of the program, specific public transit support is only eligible to the rehabilitation, optimization, modernization, expansion and improvements to existing public transit systems.

GreenTRIP Funding - Although funding for GreenTRIP initiatives was completed in 2016, future opportunities similar programs may come available to fund municipal public transit projects.

The future integration of public transit in redevelopment and future new developments within the City should assess and incorporate design standards that, in the future, are transit-supportive and integrate active transportation routes, nodes, hubs and year-round amenities with possible transit stops and hubs.

STRATEGIC ACTIONS - ALTERNATE MODES STRATEGY

- Prepare and identify key community Essence and Character
- Develop an integrated Transportation Network Classification System
- Develop Active Transportation Standards and Guidelines
- Conduct study to explore the cost, benefits and implementation feasibility of a Ride-Share Program to enhance transit service





7

GOODS MOVEMENT STRATEGY

It is essential that truck traffic is properly directed through the City to ensure goods are delivered safely and residents are not put at risk. The Goods Movement Strategy identifies recommendations to address issues around road hierarchy, truck routing and goods movement in and around industrial areas.

7.1 ROAD CLASSIFICATION

The City's road classification system categorizes roads according to their traffic capacity and access function. While there are no recommendations to change the classification of the City's current roads in this Transportation Master Plan, a few new collector and local roads are recommended as outlined in **Section 6.2** and should adhere to the City's roadway design standards.

The City's current roadway design standards follow the 1999 Transportation Association of Canada (TAC) standards, which do not reflect current best practices. It is recommended that the City review the *City's Design Guidelines and Construction Standards for Developments* and update these standards to reflect industry best practices per guidance from TAC, the American Association of State Highway and Transportation Officials (AASHTO) and Institute of Transportation Engineers (ITE). Per these standards, functional considerations can be applied for each class of roadway, including design speed, travel lanes, right-of-way width, pedestrian and cycling facilities, parking and traffic volumes.

Additionally, it is recommended the City develop a new road classification system that integrates mobility with placemaking and essence and character to support an integrated transportation network (as outlined in **Section 6.1.1**). This new classification system would address specifically the hierarchy of primary, secondary and tertiary corridors and their level of importance within the urban framework and their role in placemaking. Any future roadway upgrades and new roadway development should be conducted with the new classification system and transportation network framework in place, along with new or revised design standards and guidelines to

ensure that any upgrading/development can be completed with all components applied. The purpose is to establish a specific classification approach for each type of transportation network corridor. The City should also consider developing other transportation policies/guidelines that provide guidance regarding acceptable levels of service, access locations and configurations for each class of roadway.



7.2 TRUCK ROUTING

Designated truck routes within Wetaskiwin are currently served by 13 corridors, with seven of these roadways classified as a collector. Land uses adjacent to these collectors are generally a mix of industrial and commercial uses. Based on the 2017 TAC guidelines, it is appropriate for large and heavy vehicles to travel on collectors that serve industrial/commercial uses. The effective movement of goods in Wetaskiwin helps to reduce truck travel time, increase safety and traffic operations at intersections and preserve infrastructure that can deteriorate more rapidly by heavy vehicles.

There are several key industrial areas in Wetaskiwin including:

- West of Highway 2A (56 Street) near the Wetaskiwin Airport
- North of the Downtown Core near, on the west side of 50 Street and the CP Rail
- South of Highway 13, adjacent to 36 Street
- West of the CP Rail, north and south of 40 Avenue, including the Southeast Industrial Park



The City should provide the necessary infrastructure to enhance access to these areas as development occurs to promote economic growth. It is recommended that the City continue to maintain its current truck network and to take a strategic approach on future development approvals adjacent to the current truck routes.

Figure 24 illustrates the proposed changes to the City's truck route network to serve future industrial and commercial development, including:

- Extend the existing truck route on Highway 13 to City Limits
- Designate 47 Avenue between 56 Street and 64 Street as a truck route
- Designate 48 Street, south of 40 Avenue as a truck route

It is recommended that the City updates its Traffic Bylaw to include these routes as part of the Designated Truck Routes.

7.2.1 Truck Routing Restrictions

50 Street currently serves as a collector in Wetaskiwin, as well as a truck route along the northern section between the municipal boundary and 53 Avenue, which provides access to the industrial area located on the west side of 50 Street. It is recommended to place "No Truck Traffic" signage along 53 Avenue, 51 Street and 50 Street, to prevent heavy truck traffic from circulating through the neighbourhood and into the Downtown Core.

STRATEGIC ACTIONS - GOODS MOVEMENT STRATEGY

- Review and update current road design standards and classification system to reflect current best practices and that supports an integrated transportation network
- Conduct a feasibility study to determine if the proposed truck routes can be accommodated as Designated Truck Routes and to identify potential impacts to the community
- Review the need for truck restriction signage along corridors that connect to a truck route

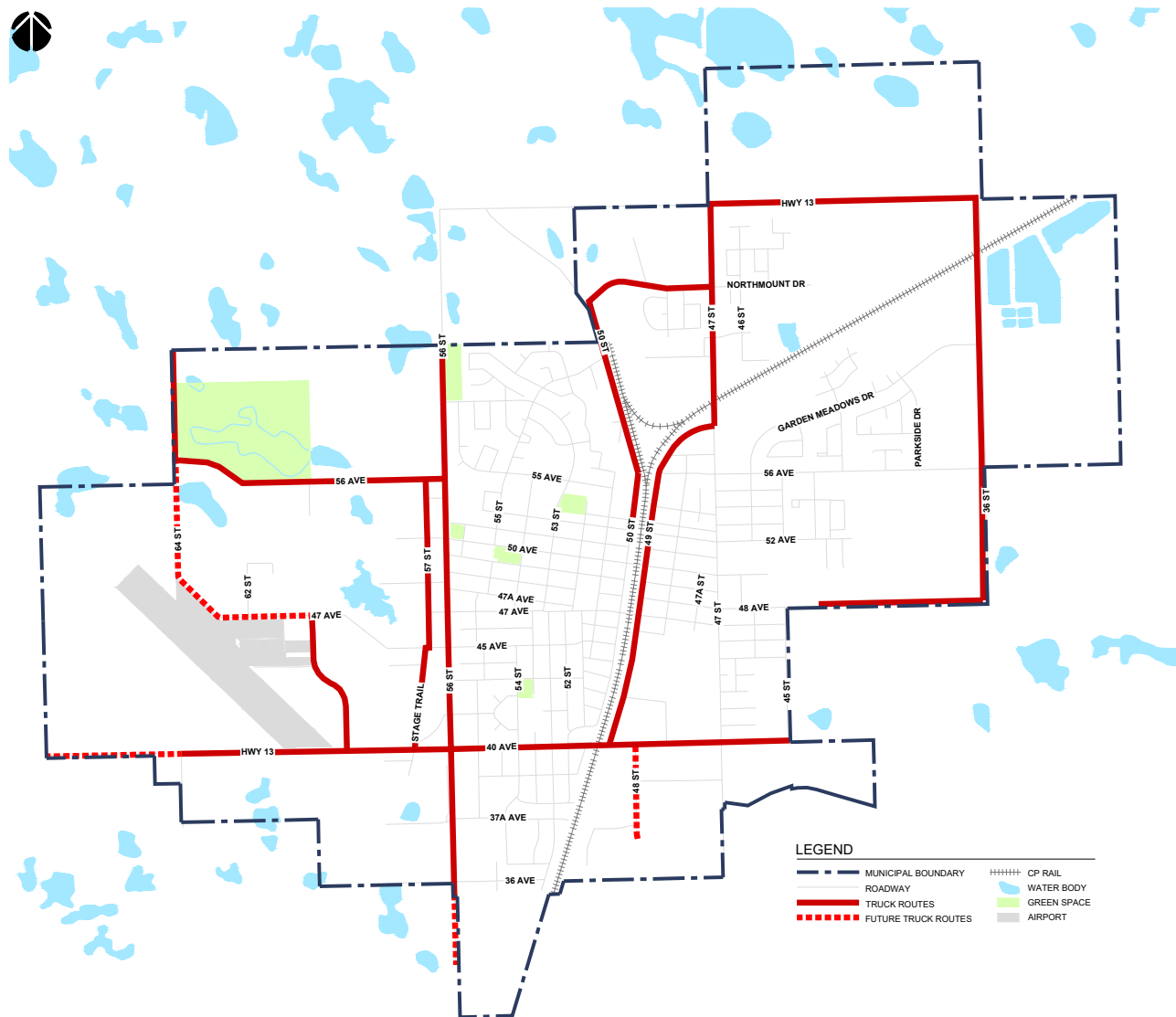


Figure 24: Proposed Truck Routes



8

TRANSPORTATION INFRASTRUCTURE STRATEGY



Maintenance of the existing transportation infrastructure remains an important aspect of the transportation network, and re-investment and repairing infrastructure does compete with capital projects for funding. To support mobility and economic growth, there is a need to provide a safe and reliable environment for all users through regular rehabilitation and maintenance of the transportation network and improved roadway delineation and signage. This section of the Transportation Master Plan outlines the strategies to preserve Wetaskiwin's transportation assets.

8.1 REHABILITATION AND MAINTENANCE

The majority of the road and sidewalk surface in Wetaskiwin is currently in good to excellent condition. However, without investment in maintenance, the City's network will deteriorate with growth over the next 25 years. The following strategies can be considered to maintain the City's transportation infrastructure and should be integrated in the overall transportation network:

- **Annual Assessment Reports.** For transportation infrastructure, a best practice is to utilize annual condition reports to prioritize rehabilitation and use as a quantitative tool to assign rehabilitation funding. It is also a tool that should be updated on a regular five- or ten-year cycle based on work completed and changes in the road network.
- **Regular Maintenance & Rehabilitation.** The City should aim to have at least 80% of the road and sidewalk network in good to excellent condition through regular maintenance and rehabilitation. Regular expected maintenance (such as snow clearing) is a function of the weather and should remain accounted for in operating budgets. There is not a high demand for investment into new roadways and transportation infrastructure in Wetaskiwin to respond to growth pressures and capacity issues. With that perspective, a larger portion of available funding should be allocated to regular annual maintenance and rehabilitation programs based on the need, including funding for winter maintenance such as snow clearing and surface paving. Sidewalk and trail maintenance should fall into the same operations approach as roadway maintenance, where operations respond to existing conditions (snow, heaves, etc.), and renewal is planned based on the overall condition of the infrastructure, ideally in coordination with road and utility works.

- **Sidewalk Maintenance.** Sidewalk and trail maintenance should fall into the same operations approach as roadway maintenance, where operations respond to existing conditions (snow, heaves, etc.), and renewal is planned based on the overall condition of the infrastructure, ideally in coordination with road and utility works. The City should aim to have at least 80% of the sidewalk network in good to excellent condition.
- **Coordination with Capital Projects.** It is also a best practice within industry to plan and coordinate capital construction amongst all infrastructure, for example if a roadway requires rehabilitation, and the servicing under the right-of-way is also in need of rehabilitation, these should be combined into single capital improvement projects and identified for year of construction. This approach will allow for budget planning as well as more effective investment as there is less potential throw-away construction and with timing. This approach provides Administration the ability to better respond to condition inquiries and to be less reactive when managing citizen expectations



8.2 ROAD MARKINGS, GUARDRAILS AND LIGHTING

Similar to pavement condition, road markings, guardrails and lighting require regular maintenance and renewal. It is recommended that these roadway elements be coordinated with paving and rehabilitation and that a regular annual program continue to address these elements that may not be serving their required function. Review of conditions can also be connected to roadway surveys and included in rehabilitation programs.

8.3 SIGNAGE

Traffic signage generally evolves over time through roadway corridors, where it can become less consistent through a community. One area where signage can be very important is in school areas, especially elementary school areas; sign materials, locations and the signs themselves need to be consistent through every school area. It is recommended that a signing assessment be completed, and signs updated through school areas for consistency and ultimately safety.

Wayfinding through a community is also important to convey messages and locations to motorists and active transportation users. Wayfinding can also add to the look and feel of a community and is discussed further in **Section 6.0**.

STRATEGIC ACTIONS - TRANSPORTATION INFRASTRUCTURE STRATEGY

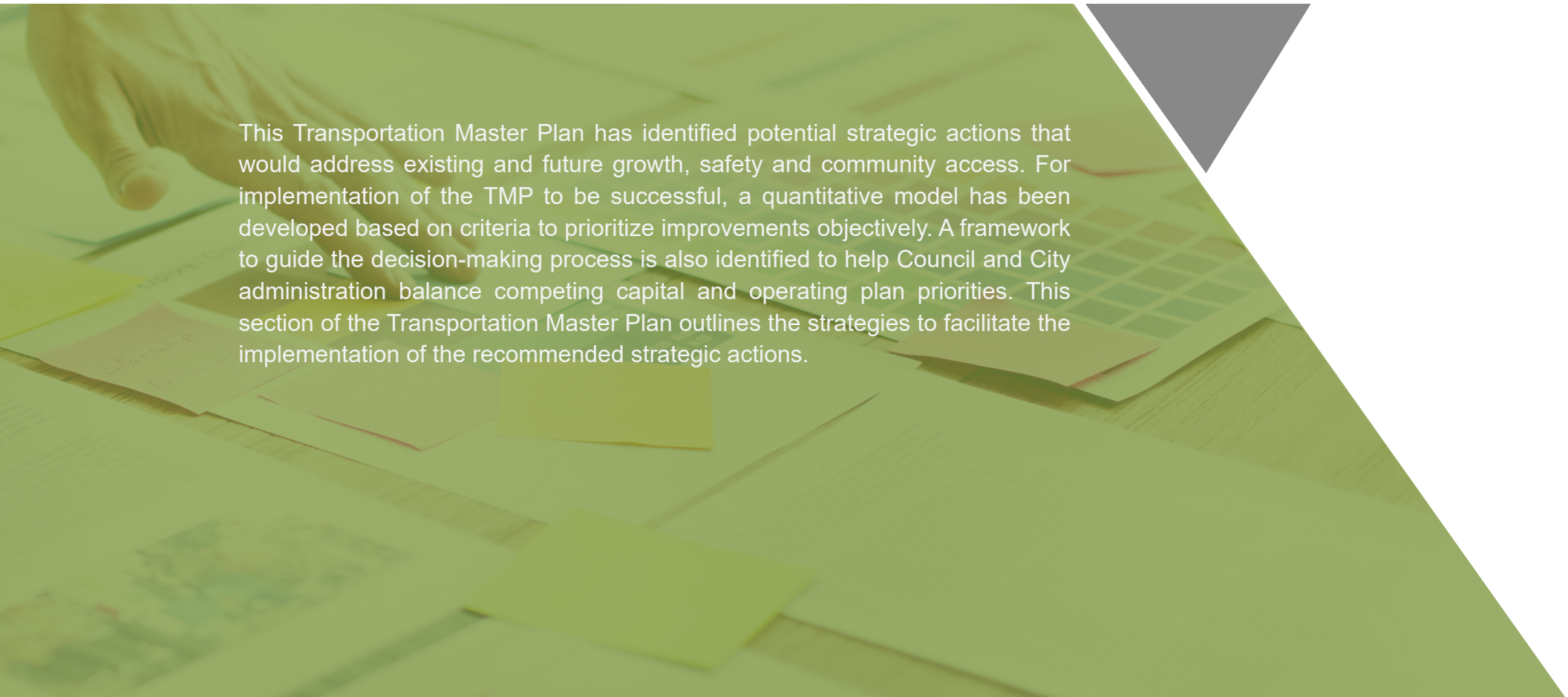
- Conduct Annual Condition Assessments
- Prioritize roads and sidewalks to be rehabilitated in the next 3 to 5 years to achieve 80% of the network to be in good to excellent condition





9

IMPLEMENTATION STRATEGY

A background image showing a hand pointing at a document with several yellow sticky notes and a calculator, suggesting a planning or implementation process.

This Transportation Master Plan has identified potential strategic actions that would address existing and future growth, safety and community access. For implementation of the TMP to be successful, a quantitative model has been developed based on criteria to prioritize improvements objectively. A framework to guide the decision-making process is also identified to help Council and City administration balance competing capital and operating plan priorities. This section of the Transportation Master Plan outlines the strategies to facilitate the implementation of the recommended strategic actions.

9.1 PRIORITIZATION

An important part of managing the development of a community is the active prioritization of maintenance and improvements as capital projects and operating plans (including maintenance and renewals) are often conflicting priorities. Many factors affect the priority of a project, and criteria have been developed to reflect the objectives of the TMP and how the proposed strategies responds to the TMP criteria. **Table 8** summarizes the evaluation using a scoring system to identify the priority level of each strategic action outlined in this TMP. Each potential project is compared as to how they respond to each criterion on a scale of 1 to 3, with 3 being the most responsive (highest) score. The evaluated criteria are as follows:

- **Timelines** – how effective will the improvement be today, when will it be needed (immediately or long term). The higher the score the sooner the need for the improvement. A low score indicates that the project is more long-term in consideration.
- **Safety** – How will the project improve safety. As safety was identified as a one of the key objectives of the TMP, many of these improvements have been developed to consider and address identified safety concerns. The higher the score, the better the improvement from a safety perspective.
- **Operational** – This is a measure of how the proposed project will improve traffic operations, including delays and travel times. The higher the score, the better the operational improvement.
- **Costing** – The capital cost of the project, the higher the score, the lower the cost. This criterion helps raise the overall score of potential “quick win” improvements which can be completed for low cost, similar to a cost-benefit comparison.

- **Active Modes** – How the proposed improvement incorporates or includes active modes. The higher the score, the better the improvement from the perspective of a cyclist, pedestrian, runner, and other active mode user.
- **Community Amenity** – This criterion to incorporate how the improvement fits into the context of Wetaskiwin, which includes a perceived value citizens would place on the improvement and how the improvement would be publicly received.



Table 8: Proposed Improvements Priority Ranking

Strategic Action	Timelines	Safety	Operational	Active Modes	Community	Costing	Total Score
Road Safety Strategy							
Compile updated database of collision records from RCMP for all City and Provincial roads within municipal limits	3	3	1	2	3	3	15
Conduct a Network Screening Study (if collision data available)	2	3	2	2	3	3	15
Include Safe Journeys Program in Capital Budget	3	3	2	3	3	2	16
Conduct Speed Limit Reduction feasibility study	1	2	1	2	2	3	11
Review signal timing plans around rail crossings and identify opportunities for ITS improvements	3	2	3	3	3	2	16
Conduct feasibility study for potential grade separation at 50th Avenue (pedestrian)	3	2	3	3	3	2	16
Conduct feasibility study for potential grade separation at 40th Avenue (vehicles)	3	3	3	3	3	2	17
Include rail crossing guidelines/standards for Active Transportation routes.	3	2	2	3	2	2	14
Traffic Network Strategy							
Develop a traffic data collection program to be conducted bi-annually	2	1	3	3	2	2	13
Conduct left-turn lane warrant analysis for intersections with higher turn volumes such as 50 Street/50 Avenue and Highway 2A (56 Street)/37A Avenue intersections.	2	3	3	2	3	3	16
Conduct Highway 2A Signal Timing Review	3	3	3	2	3	2	16
Integrate Active Transportation recommendations and initiatives as part of future roadway improvements and development.	2	2	2	3	3	2	14

Less than 13: Low Priority

13 - 15: Medium Priority

16 or More: High Priority

Table 8: Proposed Improvements Priority Ranking - Continued

Strategic Action	Timelines	Safety	Operational	Active Modes	Community	Costing	Total Score
Alternate Modes Strategy							
Prepare and identify key community Essence and Character	3	1	1	3	3	2	13
Develop an integrated Transportation Network Classification System	3	2	2	3	2	2	14
Develop Active Transportation Standards and Guidelines	3	3	2	3	2	2	15
Conduct study to explore the cost, benefits and implementation feasibility of a Ride-Share Program to enhance transit service	1	1	1	3	2	2	10
Goods Movement Strategy							
Review and update current road design standards and classification system to reflect current best practices and that supports an integrated transportation network	3	3	2	2	2	2	14
Conduct a feasibility study to determine if the proposed truck routes can be accommodated as Designated Truck Routes and to identify potential impacts to the community	2	2	2	1	2	2	11
Review the need for truck restriction signage along corridors that connect to a truck route	2	2	1	2	2	3	12
Transportation Infrastructure Strategy							
Conduct Annual Condition Assessments	3	3	2	3	3	1	15
Prioritize roads and sidewalks to be rehabilitated in the next 3 to 5 years to achieve 80% of the network to be in good to excellent condition	3	3	2	3	3	1	15

Less than 13: Low Priority

13 - 15: Medium Priority

16 or More: High Priority

9.2 IMPLEMENTATION STRATEGY

Based on the prioritization established in **Section 9.1**, strategic actions to be addressed in the short-term (1-5 years), medium-term (6-10 years) and long-term (beyond 10 years) horizon were identified and relative magnitude of costs were also estimated for budgetary purposes. **Table 9** highlights the proposed implementation strategy.

Short-Term Strategy

Short-term strategies are recommended to be addressed in 1 to 5 years. 17 strategic actions are recommended to be addressed in the short-term, with six of these actions to be implemented, reviewed, or updated on a regular (i.e annual, bi-annual, 5-year etc.) basis. These include:

- Compile updated database of collision records from RCMP for all City and Provincial roads within municipal limits
- Include Safe Journeys Program in Capital Budget
- Develop a traffic data collection program to be conducted bi-annually
- Review and update current road design standards and classification system to reflect current best practices and that supports an integrated transportation network
- Develop Active Transportation Standards and Guidelines
- Conduct Annual Condition Assessments
- The strategic actions considered of highest priority in the short-term include:
- Include Safe Journeys Program in Capital Budget

- Review signal timing plans around rail crossings and identify opportunities for ITS improvements
- Conduct feasibility study for potential grade separation at 50th Avenue (pedestrian)
- Conduct feasibility study for potential grade separation at 40th Avenue (vehicles)
- Conduct left-turn lane warrant analysis for intersections with higher turn volumes such as 50 Street/50 Avenue and Highway 2A (56 Street)/37A Avenue intersections.
- Conduct Highway 2A Signal Timing Review
- Conduct Annual Condition Assessments

Short-term strategies that are considered low to medium priority is outlined below. These strategies will depend on availability of City resources, including funding to complete and should be reviewed on an annual basis to ensure they are addressed appropriately.

- Conduct a Network Screening Study (if collision data available)
- Include rail crossing guidelines/standards for Active Transportation routes
- Prepare and identify key community Essence and Character
- Develop an integrated Transportation Network Classification System
- Conduct a feasibility study to determine if the proposed truck routes can be accommodated as Designated Truck Routes and to identify potential impacts to the community

Medium-Term & Long-Term Strategy

Medium-term strategies should be addressed in 6 to 10 years, while long-term strategies should be considered beyond 10 years, or on an as-required basis. Depending on availability of funding, the long-term strategies should be re-evaluated on an on-going basis to ensure they are addressed appropriately. These strategies will provide improvements to the City but are not of immediate need.

Four strategic actions have been recommended to be addressed in the medium-term to long-term horizon, including:

- Conduct Speed Limit Reduction feasibility study (Medium to Long-term)
- Integrate Active Transportation recommendations and initiatives as part of future roadway improvements and development (Medium-term)
- Conduct study to explore the cost, benefits and implementation feasibility of a Ride-Share Program to enhance transit service (Medium-term)
- Review the need for truck restriction signage along corridors that connect to a truck route (Medium-term)

There may be funding or partnership opportunities for enhancing transit service in Wetaskiwin, including the development of a ride-share program and the City should continue to stay informed for these opportunities.



Table 9: Proposed Implementation Strategy

Strategic Action	Short-Term (1-5 yrs)	Med-Term (6-10 yrs)	Long-Term (10+ yrs)	Cost
Road Safety Strategy				
Compile updated database of collision records from RCMP for all City and Provincial roads within municipal limits	✓	✓	✓	\$
Conduct a Network Screening Study (if collision data available)	✓			\$
Include Safe Journeys Program in Capital Budget	✓	✓	✓	\$\$
Conduct Speed Limit Reduction feasibility study		✓	✓	\$
Review signal timing plans around rail crossings and identify opportunities for ITS improvements	✓			\$\$
Conduct feasibility study for potential grade separation at 50th Avenue (pedestrian)	✓			\$\$
Conduct feasibility study for potential grade separation at 40th Avenue (vehicles)	✓			\$\$
Include rail crossing guidelines/standards for Active Transportation routes.	✓			\$\$
Traffic Network Strategy				
Develop a traffic data collection program to be conducted bi-annually	✓	✓	✓	\$\$
Conduct left-turn lane warrant analysis for intersections with higher turn volumes such as 50 Street/50 Avenue and Highway 2A (56 Street)/37A Avenue intersections.	✓			\$
Conduct Highway 2A Signal Timing Review	✓			\$\$
Integrate Active Transportation recommendations and initiatives as part of future roadway improvements and development.		✓	✓	\$

\$ = Less than \$25,000

\$\$ = \$25,000 to \$50,000

\$\$\$ = \$50,000 to \$75,000

\$\$\$\$ = \$75,000+

Table 9: Proposed Implementation Strategy - Continued

Strategic Action	Short-Term (1-5 yrs)	Med-Term (6-10 yrs)	Long-Term (10+ yrs)	Cost
Alternate Modes Strategy				
Prepare and identify key community Essence and Character	✓			\$\$
Develop an integrated Transportation Network Classification System	✓			\$\$
Develop Active Transportation Standards and Guidelines	✓	✓	✓	\$\$
Conduct study to explore the cost, benefits and implementation feasibility of a Ride-Share Program to enhance transit service		✓		\$\$
Goods Movement Strategy				
Review and update current road design standards and classification system to reflect current best practices and that supports an integrated transportation network	✓	✓	✓	\$\$
Conduct a feasibility study to determine if the proposed truck routes can be accommodated as Designated Truck Routes and to identify potential impacts to the community	✓			\$\$
Conduct Annual Condition Assessments		✓		\$
Goods Movement Strategy				
Prepare and identify key community Essence and Character	✓	✓	✓	\$\$\$
Prioritize roads and sidewalks to be rehabilitated in the next 3 to 5 years to achieve 80% of the network to be in good to excellent condition	✓			\$\$\$

\$ = Less than \$25,000

\$\$ = \$25,000 to \$50,000

\$\$\$ = \$50,000 to \$75,000

\$\$\$\$ = \$75,000+

