TOWN OF PONOKA

TRANSPORTATION MASTER PLAN

FINAL PLAN SUBMISSION
(ADOPTED BY COUNCIL: JANUARY 21, 2020)

Ponoka

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EXECUTIVE SUMMARY

The Town of Ponoka has developed a new Transportation Master Plan that will address the transportation needs of the Town as it grows from over 7,000 residents today to over 10,000 residents over the next 20 years.

This Transportation Master Plan (TMP) presents a framework that prioritizes recommended initiatives to address how people and goods move around and within Ponoka. This will ensure Town Administration makes the right investments to provide safe, attractive, effective and accessible transportation options to meet all mobility needs in the future.

PURPOSE OF THE TRANSPORTATION MASTER PLAN

As the Town of Ponoka continues to grow and evolve, Town Administration will be faced with numerous infrastructure enhancement studies and initiatives that will 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 align with 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. The TMP will identify the recommended investments and policies necessary to manage the expected community growth. The recommendations from the TMP will be for the short term (0-3 years), medium-term (3-10 years) and long-term (10+ years) time horizons.

ALIGNMENT WITH OTHER POLICIES & PLANS

Town of Ponoka Urban Framework Master Plan (2019)

The Urban Framework Master Plan (UFMP) was developed jointly with this Transportation Master Plan. The UFMP establishes a framework for a shared vision for place-making, to foster community interest and pride and to develop consensus for specific place-making planning and design directions. Strategies developed in the TMP will align with those outlined in the UFMP.

Municipal Development Plan (2013)

The Municipal Development Plan set out by the Town of Ponoka outlines several key goals pertinent to this Transportation Master Plan, including:

Establish a defined Dangerous Goods Route.

Develop healthy, walkable and safe neighborhoods.

Integrate and connect the multi-use trail system by linking residential with municipal, school, environmental reserves, public utility lots and planned pathways.

Town of Ponoka Growth Study (2010)

The Growth Study completed in 2010 outlines the expected growth of the Town of Ponoka from 2009-2059. The study includes projections for Stormwater Management, Sanitary Sewer System and Transportation. While all aspects were considered in the development of the Transportation Master Plan, the Growth Study outlined details that relate specifically to transportation.

Population Growth Rate is expected to be in between 1% and 2% for the next 50 years.

Land use, to accommodate growth, is expected to be primarily to the West of the current Town Limits. Secondary growth is likely to occur in the Southeast quadrant of the Town.

The West Area development is likely to be largely commercial development while other areas of growth are likely to be mixed-use or residential.

West Area Structure Plan (2018)

A plan to address future development in the lands west of the main center of Ponoka (within Town limits), including land use and land use compatibility, servicing, environmental and topography. The plan provides a comprehensive framework for development in an orderly and economical manor that does not hinder or impact future urban expansion. This area is a major expansion area, contributing to traffic growth on the Highways and within the town.

Area Structure Plans

Additional Area Structure Plans were reviewed, including Hudson's Green, Caledera, and Lucas Heights. These plans were utilized to develop future forecasts for traffic growth.

Master Servicing Study (2018)

This study completed an inventory of the Town's existing water, sanitary and stormwater infrastructure, then reviewed, modeled and analyzed the systems under existing and future loading conditions based on current and expected populations. The study then identified areas for improvement as well as future investment (costing) to meet the needs of the Town within a short, medium, and long-term horizon.

TRANSPORTATION MASTER PLAN APPROACH

This Transportation Master Plan has been developed through a 3-phase approach to create a staged plan that will help guide the Town's future and investments.

1 PHASE 1 – WHERE ARE WE NOW?

This phase focused on developing the foundational understanding of current issues, needs and opportunities in Ponoka.

Key activities included: measuring, observing and listening.

2 PHASE 2 – WHERE DO WE WANT TO GO?

This phase focused on establishing a common vision for how Ponoka's resources and assets will evolve alongside growth.

Key activities included: assessing, forecasting and exploring.

3 PHASE 3 – HOW DO WE GET THERE?

This final phase focuses on creating a prioritized and stage plan that aligns with related programs to help the Town guide growth-related initiatives, efforts and investments.

Key activities included: planning, testing and prioritizing.

TRANSPORTATION MASTER PLAN OBJECTIVES

The Transportation Master Plan process weaves 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 Communities 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 Concerns

Through public engagement and consultation, Ponoka residents identified safety as a primary concern. In response to these concerns, the Transportation Master Plan identified key strategies to improve intersection safety and operations, pedestrian crossings and speed limits. These strategies include:

- Geometric improvements, such as channelization at intersections and along key corridors to provide safer movements for both vehicles and pedestrians.
- Access management improvements along key corridors such as Highway 53 and 57 Avenue to improve traffic flow and accessibility for all users.
- Traffic calming treatments to provide safer crossing areas and improved visibility for pedestrians.
- Speed limit reduction measures within residential areas.

Objective 2: Develop a Goods Movement Strategy

Regional commerce and industry depend on safe and efficient transportation within Ponoka. 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 identify strategies that support the movement of goods in a safe and efficient manner, including:

- Maintaining a road hierarchy consisting of arterials, collectors and local road that support varying levels of traffic and provide varying degrees of property access.
- Establishing truck travel restrictions on routes through residential areas to improve safety.
- Establishing Dangerous Goods Routes to ensure dangerous goods to moved through Town in a safe and responsible manner.

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's travelling to school, work or other activities, safe and desirable options are needed so people of all ages and ability may move around the Town. Within Ponoka, it has been identified that pedestrian traffic is a key priority in the Town. This Transportation Master Plan identify strategies to achieve more pedestrian-friendly streets and create community connections through.

- Establishing Active Transportation Zones that serve a more inclusive cross-section of the community through specific planning and design guidelines as well as improved aesthetics and amenities.
- Implementing Active Transportation Component Development to improve and promote active transportation through Active Transportation Hubs and Nodes, Active Transportation Communications System, Winter Community Guidelines, Sustainability and Low-Impact Development and Integrated Planning and Development
- Promoting use of public transit through exploring future public transit initiatives and integrating design standard to support public transit in future redevelopment or new developments.
- Establishing Safe Journeys program to improve traffic and pedestrian safety in neighbourhoods and around schools.

Objective 4: Improve Traffic Operations

This Transportation Master Plan focuses on developing a Town-wide transportation model that captures transportation demands—current and future—to assess network needs and assist the Town with ongoing transportation decision-making. The Transportation Master Plan identify strategies to address the future network constraints and the need to maintain and rehabilitate the Town's existing network. These strategies include:

- Geometric and operational improvements, to address intersections operating near or under failing levels of service in the future.
- Strategies to maintain key corridors such as Highway 53, Highway 2A, 53 Avenue, 48 Avenue and 67 Street, 39 Avenue to improve traffic flow and local and highway connections.
- New links through additional collectors to support continued growth and improve network connections in Ponoka.

IMPLEMENTATION STRATEGY

This Transportation Master Plan have identified potential solutions and concepts 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 for implementation as budgets and funding provides. It is also noted that capital projects and operating plans (including maintenance and renewals) are often conflicting as priorities, and this implementation is not planned to determine a priority between the two, but rather provide a relative comparison of capital projects for consideration. It is also not a comprehensive list of capital projects for Ponoka, rather a collection of projects that have been developed in response to the TMP objectives.

An evaluation process was developed using a scoring system to identify the priority level of each project 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. The higher the score the sooner the need for the improvement

Costing – The capital cost of the project, the higher the score, the lower the cost.

Safety – How will the project improve safety. The higher the score, the better the improvement from a safety perspective.

Active Modes – How the proposed improvement incorporates or includes active modes. The higher the score, the better the improvement from the perspective of an active mode user.

Operational – This is a measure of how the proposed project will improve traffic operations, The higher the score, the better the operational improvement.

Community Amenity – This criterion incorporates how the improvement fits into the context of Ponoka.

Each project was identified as a short (1 to 3 years) , moderate (3 to 10 years) or long-term (10+ years) priority based on the total score of the evaluation.

Four projects were identified as the highest priority based on the evaluation and is recommended to be addressed over the next 1 to 3 years. These projects include:

- Highway 53 & 46A St – Intersection realignment (and ultimate signalization)
- 48 Avenue Corridor – Safety improvements, including school drop off and multi-use trail
- Battle River Valley Trail System – including completion of missing links
- 40 km/h Speed Limit – Reducing speed limit throughout residential areas

The level of investment required for the short-term improvements is in the range of $1.8M (in 2019 dollars).

Five projects are recommended to be addressed over the next 3 to 10 years, including:

- 53 Avenue & 50 Street – Safety improvements, intersection improvements
- 53 Avenue & 51 Street – Landscape management, signage improvements
- Highway 53 and Highway 2A – Intersection channelization and additional turning lane
- 60 Street Corridor – Safety improvements, traffic calming measures, active modes improvements
- Battle River Valley Trail System – Full build out including genera improvements and significant increase in trail system town-wide.

The level of investment required for the moderate-term improvements is in the range of $3.7M (in 2019 dollars). There may be partnership opportunities for cost sharing with Alberta Transportation for highway improvements, however that would be determined by Alberta Transportation based on their available funding and priority for improvements.

The remaining recommended projects are considered low priority and it is recommended that these projects undergo ongoing evaluation to address growth and changing needs.

CLOSURE

The Transportation Master Plan for the Town of Ponoka sets the strategic direction for transportation investments over the next 10 years and beyond to address safety, goods movement, active transportation and traffic operations. The plan will be integrated with other Town initiatives and align with the vision and goals set out in the Municipal Development Plan and the various Area Structure Plans.

Community engagement and public consultation played an integral role in the development of the Transportation Master Plan. Overall, the public is keen to see projects move towards implementation to provide the connection of goods and people in a safe and efficient manner.

The short-term and moderate-term investments identified in Transportation Master Plan should be incorporated into the Town's Capital Program. The Town should continue to pursue available sources of funding for transportation infrastructure and programs, with a review of the Transportation Master Plan recommendations every 5 years.

AUTHORIZATION & SIGNATORY PAGE

This Transportation Master Plan has been prepared by McElhanney Ltd. for the benefit of the Town of Ponoka. The information and data contained herein represent our best professional judgement based on knowledge and information available at the time of preparation. Any use of this information in a manner not intended, or with knowledge that situations have changed, shall not be the responsibility of McElhanney Ltd. or the undersigned.

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1.0 INTRODUCTION

Transportation is a key element of the fabric of any community, providing for the movement of people and goods through, and within, a community. Ponoka is a community that while it relies heavily on highway connections (Highway 53, Highway 2A) for external access within central Alberta, it has a robust internal transportation network. Ponoka has a current population of just over 7,000 citizens, and over the last decade has had an average annual growth rate of 1% (based on data provided by Alberta Municipal Affairs).

As the Town of Ponoka continues to grow and evolve, Town Administration will be faced with numerous infrastructure enhancement studies and initiatives that will 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 align with existing and promised physical, cultural and social community investments.

This Transportation Master Plan (TMP) presents a plan that prioritizes recommended initiatives to address how people and goods move around and within Ponoka. 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. Mobility plays a role in everyday activities such as transporting goods, commuting to work, travelling to and from school or appointments, or connecting with social and recreational activities. The transportation network provides the foundational links that support the Town of Ponoka.

Ultimately, Ponoka's transportation network of facilities and opportunities correlates directly to the social and economic success of the Town and the satisfaction of its' Citizens.

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. The TMP will identify the recommended investments and policies necessary to manage the expected community growth. The recommendations from the TMP will be for the short term (0-3 years), medium-term (3-10 years) and long-term (10+ years) time horizons.

1.1. RELEVANT BACKGROUND LITERATURE

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

Town of Ponoka Urban Framework Master Plan (2019)

The Urban Framework Master Plan (UFMP) was developed concurrently with this Transportation Master Plan. The UFMP establishes a framework for a shared vision for place-making, to foster community interest and pride and to develop consensus for specific place-making planning and design directions. Strategies developed in the TMP will align with those outlined in the UFMP.

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The Municipal Development Plan set out by the Town of Ponoka outlines several key goals pertinent to this Transportation Master Plan, including:

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Integrate and connect the multi-use trail system by linking residential with municipal, school, environmental reserves, public utility lots and planned pathways.

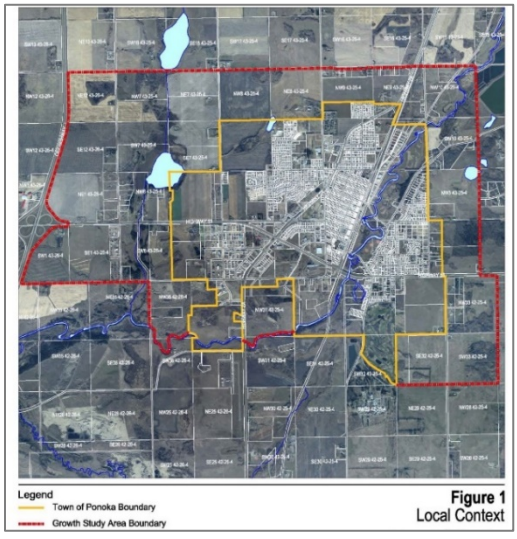
Town of Ponoka Growth Study (2010)

The Growth Study completed in 2010 outlines the expected growth of the Town of Ponoka from 2009-2059. The study includes projections for Stormwater Management, Sanitary Sewer System and Transportation. While all aspects were considered in the development of the Transportation Master Plan, outlined below are the main points from the study that relate specifically to transportation.

Population Growth Rate is expected to be in between 1% and 2% for the next 50 years.

Land use, to accommodate growth, is expected to be primarily to the West of the current Town Limits. Secondary growth is likely to occur in the Southeast quadrant of the Town.

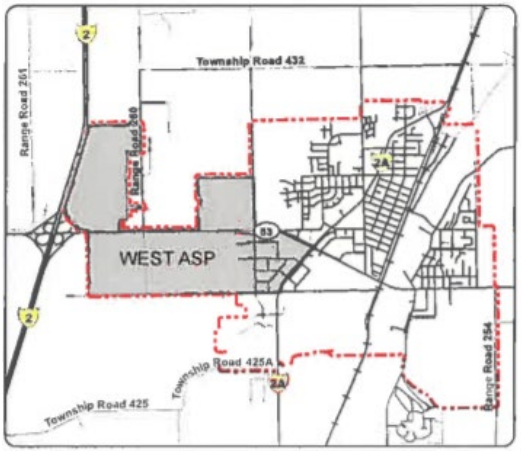
The West Area development is likely to be largely commercial development while other areas of growth are likely to be mixed-use or residential.



Source: Town of Ponoka Growth Study 2009 – 2059, August 2010

West Area Structure Plan (2018)

A plan to address future development in the lands west of the main center of Ponoka (within Town limits), including land use and land use compatibility, servicing, environmental and topography. The plan provides a comprehensive framework for development in an orderly and economical manor that does not hinder or impact future urban expansion. This area is a major expansion area, contributing to traffic growth on the Highways and within the town.



Source: West Ponoka Area Structure Plan Background Report

Area Structure Plans

Additional Area Structure Plans were reviewed, including Hudson's Green, Caledera, and Lucas Heights. These plans were utilized to develop future forecasts for traffic growth.

Master Servicing Study (2018)

This study completed an inventory of the Town's existing water, sanitary and stormwater infrastructure, then reviewed, modeled and analyzed the systems under existing and future loading conditions based on current and expected populations. The study then identified areas for improvement as well as future investment (costing) to meet the needs of the Town within a short, medium, and long-term horizon.

1.2. APPROACH

This Transportation Master Plan has been developed through a 3-phase approach to create a staged plan that will help guide the Town's future and Investments.

PHASE 1 – WHERE ARE WE NOW?

This phase focused on developing the foundational understanding of current issues, needs and opportunities in Ponoka.

Key activities included: measuring, observing and listening.

PHASE 2 – WHERE DO WE WANT TO GO?

This phase focused on establishing a common vision for how Ponoka's resources and assets will evolve alongside growth.

Key activities included: assessing, forecasting and exploring.

PHASE 3 – HOW DO WE GET THERE?

This final phase focuses on creating a prioritized and stage plan that aligns with related programs to help the Town guide growth-related initiatives, efforts and investments.

Key activities included: planning, testing and prioritizing.

1.3. TRANSPORTATION MASTER PLAN OBJECTIVES

The Transportation Master Plan process weaves 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 Communities transportation needs, the following key project objectives were identified and became foundational to the development of this project:

Objective 1: Address Identified Safety Concerns

Through public engagement and consultation, Ponoka residents identified safety as a primary concern. As a result, a key objective of the Transportation Master Plan will be to improve identified safety concerns, from intersection safety and operations, to pedestrian crossings and speed limits. The Transportation Master Plan provides recommendations on traffic safety, including traffic safety reviews and new technologies.

Objective 2: Develop a Goods Movement Strategy

Regional commerce and industry depend on safe and efficient transportation within Ponoka. 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 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 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's travelling to school, work or other activities, safe and desirable options are needed so people of all ages and ability may move around the Town. Within Ponoka, it has been identified that pedestrian traffic is a key priority in the Town. This Transportation Master Plan will strive to achieve more pedestrian-friendly streets and create community connections through trail development.

Objective 4: Improve Traffic Operations

This Transportation Master Plan focuses on developing a Town-wide transportation model that captures transportation demands—current and future—to assess network needs and assist the Town with ongoing transportation decision-making. 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 Town with a sustainable and transparent approach. Primary focuses will be Intersection Performance and Improvements as well as Network Connections and Links.

1.4. TRANSPORTATION MASTER PLAN OUTLINE

This Transportation Master Plan includes 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: Traffic Analysis** outlines the outcome of traffic count program and the traffic analysis and forecasting. A summary of the current and forecast traffic operations and constraints are also provided.
- **Section 3.0: Community Engagement** outlines the goals and objectives of this TMP 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 around the Town's transportation network.
- **Section 4.0: Objective 1: Road Safety** outlines the current and future road safety issues identified through technical analysis and public feedback and the recommended strategies to address these issues.
- **Section 5.0: Objective 2: Goods Movement** identifies the Goods Movement strategy to address issues around road hierarchy, truck routing, dangerous goods movement, as well as goods movement in and around industrial areas.
- **Section 6.0: Objective 3: Active Transportation** outlines the strategies to encourage use of Active Transportation within Ponoka, including cycling, walking and transit.
- **Section 7.0: Objective 4: Traffic Operations** provide recommendations on the road network to improve intersection performances at key locations, network connections and other traffic improvements to address current and future network capacity and operational issues.
- **Section 8.0: Implementation Strategy** outlines the strategy to prioritize the recommended network improvements and the associated costs over the short, medium and long-term horizons.

2.0 TRAFFIC ANALYSIS

This section of the document outlines the traffic count program developed as part of this TMP to assess existing traffic patterns within Ponoka. The results of the future traffic forecasts and the traffic analysis are also provided to highlight the current and future traffic operations within the Town. Operational constraints and issues are also identified in this section.

2.1. TRAFFIC VOLUMES

2.1.1. Traffic Counts

The operations of traffic (vehicles) within the Town is a key indicator of the performance of the roadway network. The performance is often judged by the user, based on their expectations versus actual and perceived delays. To identify traffic operational constraints and issues, Ponoka's network is analyzed at the intersection level to quantitatively determine where actual delays, congestion and other impediments to traffic are located.

To assess the existing traffic characteristics within the Town, McElhanney conducted traffic counts at key intersections within Ponoka. The majority of the counts were 24-hour counts conducted on June 13, 2018 to represent a typical weekday during the summer season. The remaining counts were 12-hour counts conducted on April 18-20, 2017 and March 8, 2018. The traffic counts were summarized in spreadsheets and tallied movement of vehicles, bicycles and pedestrians in 15-minute intervals. Peak AM/PM hours at each intersection are generally defined as the hours between 7 – 9 AM and 4 – 6 PM with the highest volume of movements during four consecutive 15-minute intervals. The location of counts conducted on June 13, 2018 (or otherwise noted) are listed below:

- Highway 2A & 57 Avenue
- Highway 2A & 53 Avenue / 54 Street (March 08, 2018)
- Highway 2A & 51 Street
- Highway 2A & 50 Street
- Highway 2A & 44 Avenue
- Highway 53 & 54 Street
- Highway 53 & 38 Street
- 60 Street & 57 Avenue
- 60 Street & 48 Avenue
- 59 Street & 57 Avenue
- 54 Street & 57 Avenue
- 54 Street & 48 Avenue
- 50 Street & 48 Avenue
- 50 Street & 53 Avenue (April 20, 2017)
- 50 Street & 57 Avenue (April 19, 2017)
- 49 Street & 60 Avenue (April 18, 2017)
- 46 Street & 50 Avenue
- 38 Street & 48 Avenue

Additional intersection traffic counts were sourced from Alberta Transportation's website to supplement the counts conducted by McElhanney in 2017 and 2018. The counts were conducted on various dates between 2014 and 2016 and are used to generate estimated traffic volumes in 2017. The traffic volumes were summarized in diagrams and shows the estimated vehicle turning movements in the 100th highest AM/PM hours of the year. The location of counts conducted as well as the initial date of the count are listed as follows:

- Highway 53 & 67 Street (May 11, 2015)
- Highway 53 & Highway 2A (August 6, 2015)
- Highway 53 & 45 Avenue Crescent (May 5, 2014)
- Highway 53 & 50 Street (July 22, 2016)
- Highway 53 & 46A Street Close (May 6, 2014)
- Highway 2A & 48 Avenue (June 15, 2016)
- Highway 2A & 39 Avenue (May 6, 2015)

2.1.2. Volume Balancing

Traffic volumes at select intersections were then adjusted upwards during analysis to achieve consistency with the upstream and downstream volumes of adjacent intersections. This also creates more conservative analysis scenarios with higher volumes that simulate the worst-case performance of intersections. The following rules were applied to achieve uniformity when balancing volumes:

Intersections located along Highway 2A, Highway 53 and 50 Street

- Where there are neither major intersections nor several accesses in between: balanced to higher volume intersection, with a margin of error of 10 vehicles.
- Where there is at least one major intersection and/or several accesses in between: up to a 10% volume deficit between adjacent intersections

Intersections not located along Highway 53, Highway 2A, 50 Street

- Where there are neither major intersections nor several accesses in between: balanced to higher volume intersection, with a margin of error of 10 vehicles.
- Where there is at least one major intersection and/or several accesses in between: up to a 30% volume deficit between two adjacent intersections

2.1.3. Growth Rates

For analysis of future scenarios in 2028, a 2% annual linear growth rate (typical growth rate for Alberta Transportation) was applied to all intersections except for Highway 2A & 44 Avenue, Highway 2A & 39 Avenue and Highway 53 & 67 Street. Traffic growth in these three intersections were determined separately using a process of trip generation and trip distribution, based from future land use projections (Area Structure Plans).

The annual population growth rates as determined from census data from 2007 to 2017 is 1%. However, a 2% annual growth rate would account for the local population growth and the additional traffic related to the approved ASP development in the west quadrant of Ponoka (based on the West Area Structure Plan) as well as other developing areas (Southwest Industrial, residential). The 2% annual growth rate was not applied to pedestrian, cyclists and parking volumes due to the negligible impact they had on the intersection operating conditions. Traffic volume growth on Highway 2A and Highway 53 outside of Ponoka ranged from 1% to 1.5% in recent years, which is less than the 2% growth rate used for intersections in Ponoka. Of note, for Highway operations, Alberta Transportation will typically apply a linear growth rate of 2% per year on highways when evaluating traffic changes proposed by development within highway corridors.

2.1.4. Additional Development Growth

Traffic growth for the intersections of Highway 2A & 44 Avenue, Highway 2A & 39 Avenue and Highway 53 & 67 Street were determined using a process of trip generation, trip distribution and trip assignment. Planned developments in the west side of Ponoka—which consist of industrial and commercial developments across six quarter sections—will generate additional traffic that will ultimately access the site using these three intersections. Information regarding future development and land use amendments in Ponoka were referenced from the *West Ponoka Area Structure Plan Background Report (2017)* and the *Municipal Development Plan (2013)*.

Trip Generation

The existing traffic characteristics of the quarter section south of Highway 53 and west of Highway 2A (SW 5-43-25-4) was used to extrapolate the additional traffic generated for other quarter sections. Section SW 5-43-25-4 (Southwest Industrial) has experienced significant build-out and is currently zoned for commercial and industrial use. The existing AM Peak Hour inbound volume into the quarter section is 399 vehicles, while the outbound volume is 220 vehicles. The existing PM Peak Hour inbound volume into the quarter section is 304 vehicles, while the outbound volume is 414 vehicles.

Developments in three other sections (SE 12-43-26-4, NE 1-43-26-4, SE 1-43-26-4) are expected to start in 2026 with significant or full build-out being achieved by 2036. Similar developments may be expected in the remaining sections (SW 6-43-25-4, SE 6-43-25-4, NE 6-43-25-4) but are assumed to be delayed relative to sections closer to Highway 2. A 20% build-out by 2028 was assumed for sections where development is expected to start in 2026. A 10% build-out by 2028 was assumed for the remaining sections. At the same stages of build-out, each quarter section is assumed to generate the same amount of traffic accessing the highway, regardless of the size of each quarter section. This assumption was made due to the lack of information regarding the intensity and location of development in each section.

The estimated trips generated by each quarter section in the AM and PM peak hour future scenarios are provided in **Table 2-1**..

TABLE 2-1: TRIPS GENERATED DURING THE AM AND PM PEAK HOUR FUTURE SCENARIOS (2028)

Quarter Section	Build-Out Percentage	AM Peak Hour Inbound	AM Peak Hour Outbound	PM Peak Hour Inbound	PM Peak Hour Outbound
SE 12-43-26-4	20%	80	44	61	83
NE 1-43-26-4	20%	80	44	61	83
SE 1-43-26-4	20%	80	44	61	83
SW 6-43-25-4	10%	40	22	30	41
SE 6-43-25-4	10%	40	22	30	41
NE 6-43-25-4	10%	40	22	30	41
Total	N/A	**360**	**198**	**273**	**372**

Additionally, no annual growth factors were applied to the volumes generated. These volumes were generated under the assumption that they will not be re-routed or “stolen” from the traffic stream elsewhere in Ponoka. This is a conservative assumption that is likely to more than offset the effects of annual traffic growth.

Trip Distribution

Owing to the commercial and industrial nature of the developments, where almost all generated traffic is expected to come from outside of the quarter sections, traffic was distributed using three routes which are summarized in **Table 2-2**.

TABLE 2-2: TRIP DISTRIBUTION PERCENTAGES FOR AM AND PM PEAK HOUR FUTURE SCENARIOS (2028)

Routes	AM Inbound	AM Outbound	PM Inbound	PM Outbound
West of Ponoka (Through Highway 53)	21%	26%	13%	17%
South of Ponoka (Through Highway 2A)	12%	16%	22%	20%
East and North Areas of Ponoka (Through Highway 53 and Highway 2A)	65%	54%	61%	60%

The existing trip distribution patterns of quarter section SW 5-43-25-4 was applied to the other quarter sections since they all share similar land uses. The distribution of generated traffic to the three origins/destinations is summarized in **Table 2-3**.

TABLE 2-3: TRIP DISTRIBUTION DURING THE AM AND PM PEAK HOUR FUTURE SCENARIOS (2028)

Hour	Trips Inbound From			Trips Outbound To		
	South of Ponoka	West of Ponoka	East and North Areas of Ponoka	South of Ponoka	West of Ponoka	East and North Areas of Ponoka
AM Peak	48 (12%)	82 (21%)	259 (65%)	35 (16%)	57 (26%)	118 (54%)
PM Peak	67 (22%)	41 (13%)	186 (61%)	82 (20%)	69 (17%)	250 (60%)

Note: The cumulative percentage of inbound/outbound traffic above is less than 100% due to a small amount of traffic not accounted for by the three origins/destinations.

For all quarter sections, trips generated to and from West of Ponoka was considered not applicable for trip assignment. Due to the planned provision of new accesses abutting the quarter sections, it is assumed that a negligible number of trips attributed to West of Ponoka will access the existing analyzed intersections.

Trip Assignment

The distributed trips in **Table 2-3** were assigned to the intersections of Highway 2A & 44 Avenue, Highway 2A & 39 Avenue and Highway 53 & 67 Street. The trip assignment process assumes that traffic will generally utilize the nearest intersection when accessing a quarter section, while recognizing that other nearby intersections may still be utilized due to other human factors. The trip assignment percentages used to further divide these trips amongst the intersections is given in **Table 2-4**.

TABLE 2-4: TRIP ASSIGNMENT PERCENTAGES FOR THE AM AND PM PEAK HOUR FUTURE SCENARIOS (2028)

	Percentage of Distributed Trips Accessing an Intersection		
	Highway 2A & 44 Avenue	Highway 2A & 39 Avenue	Highway 53 & 67 Street
SE 12-43-26-4	0%	0%	100%
NE 1-43-26-4	0%	0%	100%
SE 1-43-26-4	0%	0%	100%
SW 6-43-25-4	10%	10%	80%
SE 6-43-25-4	10%	10%	80%
NE 6-43-25-4	0%	0%	100%

2.2. TRAFFIC ANALYSIS

2.2.1. Synchro Parameters & Level of Service

Intersection geometry in Ponoka were referenced from Google Maps as well as the project team's knowledge of the Town's road network. On-street parking volumes were assumed to be 2 vehicles per hour per direction on local roads where on-street parking is allowed. Where pedestrian and cyclist volumes were not collected at an intersection, nominal values of up to 10 conflicting pedestrians per hour and 1 conflicting cyclist per hour was assigned to applicable approaches. The intersection geometry, parking volumes, pedestrian and cyclist volumes were applied to both existing and future scenarios.

Peak hour factors between 0.7 – 0.95 were assigned to intersections to account for the relative intensity of the highest 15-minute period within the individual peak hours. Intersection timings were assumed to be pretimed. Cycle lengths and splits were optimized using the Synchro 9 software to give a reasonable approximation of the most optimal timings that may be used.

The Level of Service (LOS) is a performance metric used to assess operating conditions of intersections and their respective approaches. LOS reported in the analysis scenarios are based on the methodology outlined in the 2010 Highway Capacity Manual.

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, as well as 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 HCM are also shown in **Table 2-5**.

TABLE 2-5: 2010 HIGHWAY CAPACITY MANUAL LEVEL OF SERVICE CRITERIA

Level of Service	Description	Unsignalized Intersections Delay (s)	Signalized Intersections Delay (s)
A	Represents free flow. Individual users are virtually 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 inconveniencing.	> 15 to 25	> 20 to 35
D	Represents high-density, but stable flow. Delay is noticeable and irritating.	> 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

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 (see **APPENDIX A**) for each intersection were input into Synchro 9 to evaluate AM and PM peak hour operating conditions. The Synchro 9 software used for the analysis is based on the methodology outlined in the 2010 Highway Capacity Manual.

2.2.2. Existing Operating Conditions

Existing AM and PM peak hour traffic conditions within Ponoka are generally good (LOS D or better) with a few exceptions along Highway 53 and Highway 2A. Summaries of the operating conditions at each intersection is illustrated in **Figure 2-1** and **Figure 2-2**.

Table 2-6 highlights intersections experiencing LOS D or worse operating conditions in the existing AM peak hour scenario, noting that LOS F is where significant delays and congestion are present.

TABLE 2-6: INTERSECTIONS EXPERIENCING LOS D OR WORSE OPERATING CONDITIONS IN THE AM PEAK HOUR EXISTING SCENARIO (2018)

Intersection	Level of Service (LOS)				
	Overall Intersection	Eastbound	Westbound	Northbound	Southbound
Highway 53 & 50 Street	C	A	A	N/A	F
Highway 53 & 46A Street Close	A	A	A	E	C

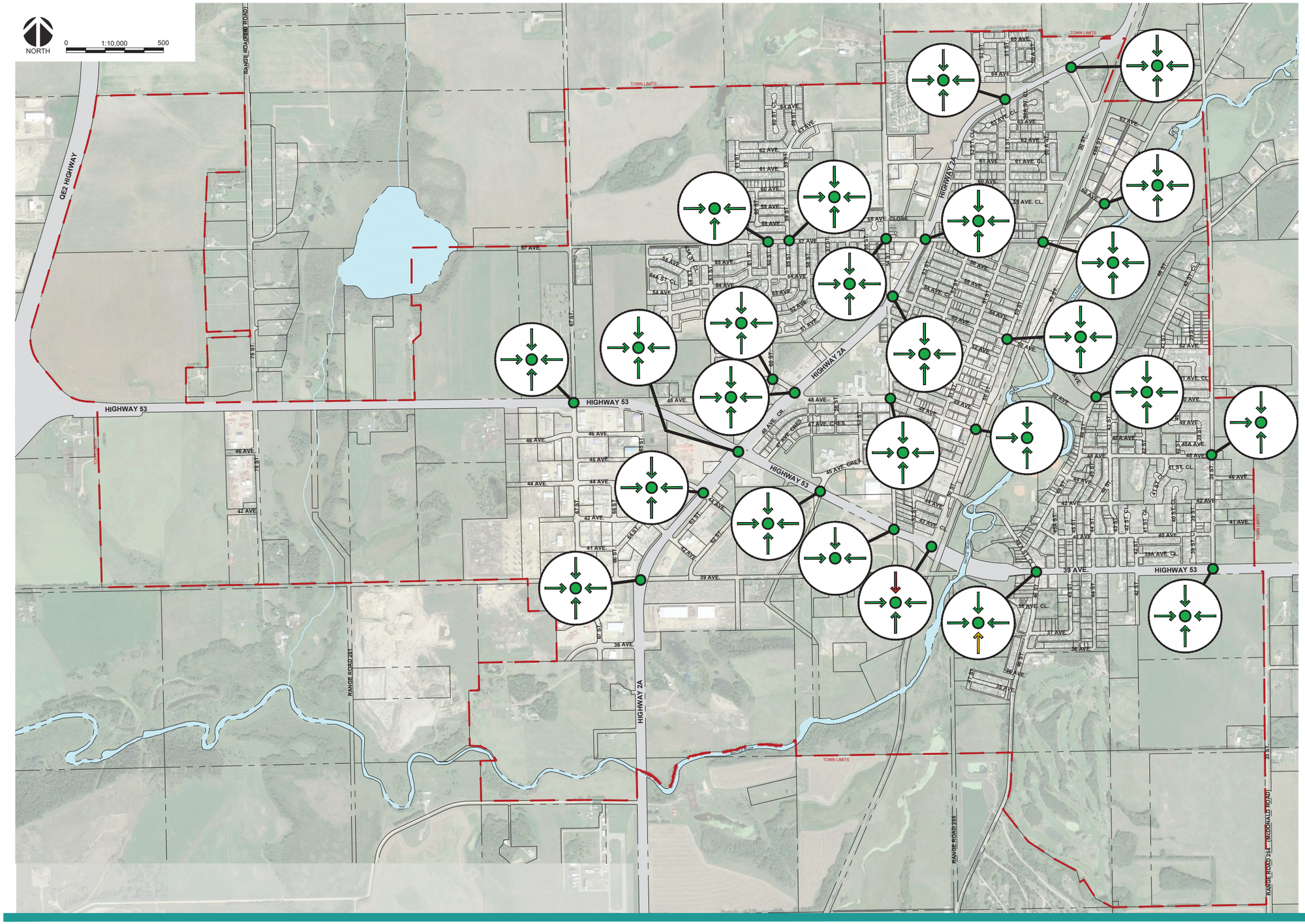
Both intersections above can be considered isolated cases where the overall intersection and highway approaches operate at reasonable conditions while the side streets experience noticeable congestion. All other intersections and their respective approaches analyzed in the AM peak hour operate at LOS C or better conditions.

Table 2-7 lists intersections experiencing LOS D or worse operating conditions in the PM peak hour scenario. It is noted that the identified AM intersections are also identified in the PM Peak as well.

TABLE 2-7: INTERSECTIONS EXPERIENCING LOS D OR WORSE OPERATING CONDITIONS IN THE PM PEAK HOUR EXISTING SCENARIO (2018)

Intersection	Level of Service (LOS)				
	Overall Intersection	Eastbound	Westbound	Northbound	Southbound
Highway 53 & 50 Street	E	A	A	N/A	F
Highway 53 & 46A Street Close	E	A	A	F	B
Highway 2A & 44 Avenue	A	D	C	A	A

Similar to the AM peak hour, these three intersections can be considered isolated cases where the overall intersection and highway approaches operate at reasonable conditions while the side streets experience noticeable congestion. All other intersections and their respective approaches analyzed in the PM peak hour operate at LOS C or better conditions.



2018 AM PEAK HOUR LEVEL OF SERVICE

Town of Ponoka

FIGURE 2-1: 2018 AM PEAK HOUR INTERSECTION LEVEL OF SERVICE

Prepared by: McElhanney

Prepared for: Ponoka

NORTH

0 1:10,000 500

LEGEND - LEVEL OF SERVICE

- LEVEL OF SERVICE A - C
- LEVEL OF SERVICE D - E
- LEVEL OF SERVICE F
- INTERSECTION LEVEL OF SERVICE
- APPROACH LEVEL OF SERVICE

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY

2018 PM PEAK HOUR LEVEL OF SERVICE

Town of Ponoka

FIGURE 2-2: 2018 PM PEAK HOUR INTERSECTION LEVEL OF SERVICE

Prepared by: McElhanney

Prepared for: Ponoka

2.3. FUTURE OPERATING CONDITIONS

Forecasted 2028 AM and PM peak hour traffic analysis identified several intersections along Highway 53 and Highway 2A operating near or at failing conditions. Summary of the operating conditions at each intersection is included in **Figure 2-3** and **Figure 2-4**.

Table 2-8 lists intersections experiencing LOS D or worse operating conditions in the AM peak hour scenario.

TABLE 2-8: INTERSECTIONS EXPERIENCING LOS D OR WORSE OPERATING CONDITIONS IN THE AM PEAK HOUR FUTURE SCENARIO (2028)

Intersection	Level of Service				
	Overall Intersection	Eastbound	Westbound	Northbound	Southbound
Highway 53 & 50 Street	F	A	A	N/A	F
Highway 53 & 46A Street Close	D	A	A	F	E
50 Street & 48 Avenue	A	D	N/A	A	A
50 Street & 53 Avenue	B	C	D	A	A
54 Street & 48 Avenue	A	A	A	E	B
60 Street & 48 Avenue	D	C	F	A	A
Highway 2A & Highway 53	C	C	D	C	D
Highway 53 & 45 Avenue Crescent	A	A	A	E	C
Highway 53 & 67 Street	B	A	A	F	E
Highway 2A & 44 Avenue	A	F	F	A	A
Highway 2A & 39 Avenue	A	D	N/A	A	A

The intersections of Highway 53 & 50 Street and Highway 53 & 46 experiences LOS F and possess relatively high volumes of traffic. The delays and queuing experienced by these two intersections are severe enough that they are expected to spill onto adjacent intersections. At other intersections, approaches experiencing LOS F have low volumes and are expected to generate moderate queues and delays. Intersections experiencing LOS E are also expected to generate moderate delays and queuing. All other intersections and their respective approaches analyzed in the AM peak hour operate at LOS C or better conditions.

Table 2-9 lists intersections experiencing LOS D or worse operating conditions in the PM peak hour scenario.

TABLE 2-9: INTERSECTIONS EXPERIENCING LOS D OR WORSE OPERATING CONDITIONS IN THE PM PEAK HOUR FUTURE SCENARIO (2028)

Intersection	Level of Service				
	Overall Intersection	Eastbound	Westbound	Northbound	Southbound
Highway 53 & 50 Street	F	A	A	N/A	F
Highway 53 & 46A Street Close	F	A	A	F	C
50 Street & 48 Avenue	D	F	NA	A	A
50 Street & 53 Avenue	C	C	E	A	A
54 Street & 48 Avenue	A	A	A	D	C
60 Street & 48 Avenue	C	C	D	A	A
Highway 53 & 67 Street	C	A	A	F	F
Highway 2A & 44 Avenue	A	E	D	A	A
Highway 2A & 39 Avenue	A	E	N/A	A	A

The intersections of Highway 53 & 50 Street and Highway 53 & 46 experiences LOS F and possess relatively high volumes of traffic. The delays and queuing experienced by these two intersections are severe enough that they are expected to spill onto adjacent intersections. At other intersections, approaches experiencing LOS F have low volumes and are expected to generate moderate queues and delays. Intersections experiencing LOS E are also expected to generate moderate delays and queues. All other intersections and their respective approaches analyzed in the PM peak hour operate at LOS C or better conditions.

NORTH

0 1:10,000 500

LEGEND - LEVEL OF SERVICE

- LEVEL OF SERVICE A - C
- LEVEL OF SERVICE D - E
- LEVEL OF SERVICE F
- INTERSECTION LEVEL OF SERVICE
- APPROACH LEVEL OF SERVICE

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY

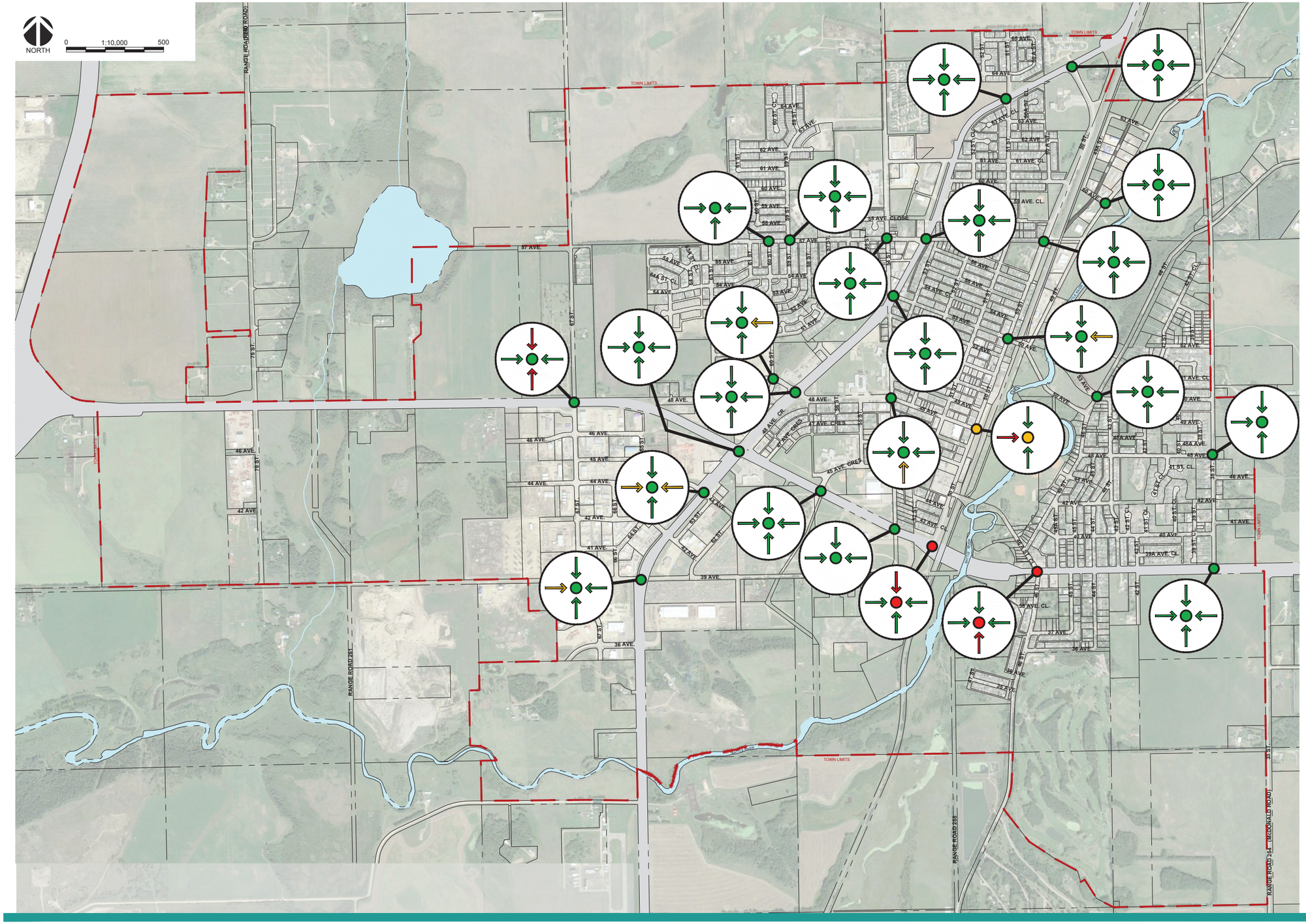
2028 AM PEAK HOUR LEVEL OF SERVICE

Town of Ponoka

FIGURE 2-3: 2028 AM PEAK HOUR INTERSECTION LEVEL OF SERVICE

Prepared by: McElhanney

Prepared for: Ponoka



2028 PM PEAK HOUR LEVEL OF SERVICE

Town of Ponoka

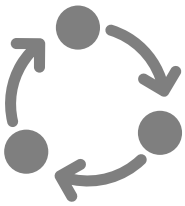
FIGURE 2-4: 2028 PM PEAK HOUR INTERSECTION LEVEL OF SERVICE

Prepared by: McElhanney

Prepared for: Ponoka

3.0 COMMUNITY ENGAGEMENT

3.1. ENGAGEMENT GOALS AND OBJECTIVES



The main goal of community engagement is to facilitate development of a new Transportation Master Plan that aligns with the community's vision and priorities for mobility and infrastructure investment over the next 10 years and potentially beyond.

Engagement should foster meaningful discussion so input is valuable to technical analysis, and the resulting technical recommendations should be checked against how well they meet the community's input. Finally, the feedback loop should be clear, so stakeholders understand how their input will be used, if it was used, and why / why not.

To achieve these goals, project information must be easily accessible to the population at large, using plain language, in an engaging format and a variety of avenues to deliver the information. The project webpage is a key touchpoint for delivering information, providing links to content, surveys and contact information, alongside a clear explanation of what to expect next. Other avenues will support this key touchpoint, including in-person engagement activities, such as "pop-up" booths and open houses.

Engagement is broad and diverse, reflecting a range of stakeholder groups. It also ensures that highly-impacted stakeholders are involved personally. Lines of flexible communication will continue to be opened to key stakeholder groups, such as Alberta Transportation, outside communities and others, so that all stakeholders have ample opportunity to participate. Whether stakeholders want to passively or actively engage, opportunities will be presented that meet a variety of desired participation levels.

Engagement is responsive to evolving stakeholder needs as the project unfolds, adapting approaches as per ongoing feedback. To that extent, engagement success has been measured to gauge what works and what needs adjusting. Measurements will continue to be qualitative and quantitative, building upon various forms of stakeholder and project team feedback to ensure engagement hears, acknowledges and responds to evolving needs.

3.2. STAKEHOLDER ASSESSMENT

This assessment identified key stakeholder groups, how they may be affected by project decision, how they may affect project decisions and how they may participate. Stakeholders (see **Table 3-1** and **Table 3-2**) have been categorized as part of Town Administration (**Internal**) and separate from Town Administration (**External**).

TABLE 3-1: INTERNAL STAKEHOLDER NEEDS ASSESSMENT SUMMARY

Stakeholder	Internal Stakeholder Needs Assessment
Project Steering Committee	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations will impact how they do business by setting priorities for the next 10 - 20 years that may supplement or disrupt current work. Specifically, recommendations will impact capital planning, development review and approvals, and levy structures. **Ability of Stakeholder to Affect Project Decisions**: Responsible for key decisions driving project progress from kick-off in Fall 2018 to Council review of recommendations in Early 2019. **Likely Stakeholder Engagement Expectations**: High degree of involvement in identifying project direction and in project outcomes. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain. Project Steering Committee will have highest level of involvement in the project, reviewing, approving and directing major project decisions at key milestones.
Other Departments	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations will set priorities and initiatives that may directly affect ongoing projects, planning and workloads. Existing policies and processes may also be impacted, such as prioritization of sidewalk rehabilitation projects, neighbourhood renewal, emergency response times, parks & recreation plan integration, snow clearing or crosswalk control warranting. **Ability of Stakeholder to Affect Project Decisions**: Provide input into and feedback on ideas and project recommendations. **Likely Stakeholder Engagement Expectations**: Desire for involvement may vary depending on how they are impacted by the project. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain. A variety of engagement opportunities will be provided to this stakeholder group, ranging from informing (internal updates and webpage) to collaborate (workshop).
Council	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations will impact their future decisions and the wards they represent. Council will need to decide whether they adopt the project recommendations, then will need to decide whether they approve resulting capital planning and regulatory changes (i.e. levy structure). **Ability of Stakeholder to Affect Project Decisions**: Ultimately responsible for approving and adopting project recommendations. **Likely Stakeholder Engagement Expectations**: Desire for involvement may vary depending on the Councillor. **Ability of the Project to Meet Stakeholder Engagement Expectations:** It may be difficult to meet expectations for a high level of involvement. Council will be informed, but not involved until they are asked to approve/adopt project recommendations. Councillors seeking more involvement will need to work with their wards during engagement.

TABLE 3-2: EXTERNAL STAKEHOLDER NEEDS ASSESSMENT SUMMARY

Stakeholder	External Stakeholder Needs Assessment (Table 1 of 2)
Public (General Public Interested citizens of Ponoka and Ponoka County, Others)	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations will impact how people move around Ponoka, how they access Ponoka, ands how their civic funds are allocated to shape their community. **Ability of Stakeholder to Affect Project Decisions**: Provide input into and feedback on ideas and recommendations. **Likely Stakeholder Engagement Expectations**: Desire for involvement may range from low to high. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain for those expecting Inform to Involve level of engagement, but it will be difficult to meet expectations of those seeking a Collaborate or higher degree of involvement since the greatest opportunity for meaningful and impactful involvement will be during implementation of the recommended priorities from the TMP.
Alberta Transportation (AT)	**Possible Impacts of Project Decisions on Stakeholder**: Recommendations may impact how AT prioritizes future funding in Ponoka. **Ability of Stakeholder to Affect Project Decisions**: Responsible for Highway 2A and 53 configuration and accesses, as well as future funding and projects impacting highway network operation through Ponoka. **Likely Stakeholder Engagement Expectations**: Desire for involvement likely to be low except for provincial highway-related issues. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain. Given the importance of highways to Ponoka's transportation network, a very high level of involvement would be desirable to bring AT into discussions regarding desire for greater community access to Highway 2A and 53. However, it is likely that AT will prefer a lower level of involvement, providing basic information regarding the bypass corridor and accesses that should be incorporated into the TMP.
Chamber of Commerce	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations may impact how they conduct business, such as customer and employee parking and/or access, as well as goods movement and deliveries for business operation. **Ability of Stakeholder to Affect Project Decisions**: Provide input into and feedback on ideas and recommendations. **Likely Stakeholder Engagement Expectations**: Likely desire moderate to high degree of involvement in decisions that impact them, such as truck route modifications, access requirements, etc. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain for expectations of Inform to Involve level of engagement, but it may be difficult to meet expectations of those seeking a higher degree of involvement.

Stakeholder	External Stakeholder Needs Assessments (Table 2 of 2)
School Board	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations may impact how students and employees travel to and from schools. **Ability of Stakeholder to Affect Project Decisions**: Provide input into and feedback on ideas and recommendations. **Likely Stakeholder Engagement Expectations**: Moderate desire for involvement. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain for low-moderate expectations, but it may be difficult to meet expectations of those seeking a high degree of involvement.
Accessibility Committee	**Possible Impacts of Project Decisions on Stakeholder**: Project recommendations will impact investment in transportation network accessibility, including but not limited to requirements for accessible design, infrastructure retrofit and community infrastructure and connectivity planning. **Ability of Stakeholder to Affect Project Decisions**: Provide input into and feedback on ideas and recommendations. **Likely Stakeholder Engagement Expectations**: Moderate to high degree of involvement. **Ability of the Project to Meet Stakeholder Engagement Expectations:** Certain for low-moderate expectations, but it may be difficult to meet expectations of those seeking a high degree of involvement.

Table 3-3 highlights the recommended appropriate levels of engagement based on anticipated stakeholder needs and project ability to meet those needs. This table builds upon the International Association of Public Participation (IAP2) spectrum of participation and the Town of Ponoka's Public Participation Policy. Per the Public Participation Policy, the following commitments are made for each level of engagement:

- **Inform:** We will keep you informed.
- **Consult:** We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.
- **Involve:** We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.
- **Collaborate:** We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.
- **Empower:** We will implement what you decide.

TABLE 3-3: LEVEL OF ENGAGEMENT

Stakeholder Group	Inform	Consult	Involve	Collaborate	Empower	Comments
Project Steering Committee				✓		Ongoing discussion & Collaboration
Other Departments	✓	✓	✓	✓		A variety of opportunities will be provided to facilitate various degrees of input and feedback loops throughout the process ranging from Inform (i.e. webpage information) to Collaborate (i.e. internal workshop).
Council	✓	✓	✓	✓		Noting that there will be opportunity during Council updates, for Council to provide input. There is also a workshop planned for Council input early in the project.
Public & Public Agencies	✓	✓	✓			A variety of opportunities will be provided to facilitate various degrees of input and feedback loops throughout the process ranging from inform (i.e. webpage information) to involve (i.e. public event). Agencies ranging from school boards to the Chamber of Commerce, and others will also be provided an opportunity at these events to provide comment representing their agency.
Alberta Transportation				✓		Ongoing discussion & Collaboration
Outside Communities	✓					A variety of opportunities will be provided to facilitate various degrees of input and feedback loops throughout the process ranging from inform (i.e. webpage information) to involve (i.e. public event).

3.3. KEY MESSAGES

The following key messages provide a basic overview of the project to communicate what is happening, why it is happening and how it will happen. These messages may need to evolve as the project unfolds and more clarity is developed regarding specific technical directions.

What is the project?

This project will develop a Transportation Master Plan to support Ponoka's transportation needs today, tomorrow and into the future. This project is about more than just roads, it's about guiding transportation investments to provide safe, attractive and efficient options for moving people and goods around the town.

The Transportation Master Plan will:

- Assess what is currently happening with Ponoka'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?

Ponoka is growing, and the transportation needs of the community are evolving alongside that growth. Town needs a direction to reflect how evolving economic activities, development planning and community dynamics are changing transportation needs.

Why is this project important?

Recommendations from the Transportation Master Plan will impact how Ponoka invests in transportation infrastructure and manages growth. Some recommendations will impact how the Town 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 the Town, whether it's 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 will be involved?

Involvement from the entire community is needed so recommendations from the Transportation Master Plan incorporate and reflect the needs and priorities of residents, visitors, developers and businesses.

How will the community be involved?

The following three rounds of engagement will occur at critical points in the project.

1. The first round of engagement will initiate the project by seeking input on the key issues to be addressed in the Transportation Master Plan, as well as the key principles to guide the development of the Transportation Master Plan. Discussions will focus on the following questions:
    - What principles should drive transportation investments as Ponoka grows?
    - How do people currently move around Ponoka?
    - What is working well and what could be improved?
    - What would the community like to see more of / less of?

2. The second round of engagement will test and prioritize the ideas that were developed per input from the first round of engagement. The discussion will likely focus on the following questions:
    - These are the key guiding principles heard at the beginning of the project. Is anything missing?
    - Do these ideas and options meet the key guiding principles identified at the beginning of the project?
    - Are there other ideas and options that meet the key guiding principles and should be explored?
    - How should these options be prioritized, and why?

3. The third, and last, round of engagement will not seek community input, but rather will present a Transportation Master Plan that is built upon the prioritized and refined options identified during the last round of engagement, outline how community input was (or wasn't) used and why, then let the community know what to expect next as the Town moves towards implementation of the Transportation Master Plan.

How long will this project take?

Figure 3-1 highlights the timeline of the engagement process throughout the course of developing the Transportation Master Plan.

FIGURE 3-1: ENGAGEMENT TIMELINE

3.4. ENGAGEMENT ACTIVITIES, RESOURCES AND TIMELINES

Engagement activities, resources and timelines for each round of engagement are identified herein. Discussions, timelines, tools and activities evolved as the project progressed to ensure that the right stakeholder groups were addressed in the most appropriate manner. Further, in addition to the planned engagement activities led by McElhanney, it was assumed that the Town's Project Steering Committee will utilize engagement materials for other engagement activities as opportunity arises, including but not limited to the following:

- Project presentations and roundtable discussions at planned stakeholder group meetings (i.e. Chamber of Commerce, UDI, Trucking association, etc.).
- Informal "pop-up" booths at community events.
- Information tables at other town engagement events.

Ongoing meetings, phone and email communications with key stakeholders' groups identified by the Town (AT, Chamber of Commerce, School Board) were conducted throughout the life of this project..

3.4.1. Engagement Process

The following three rounds of engagement were developed to support development of the Transportation Master Plan:

1

This round of engagement will seek for input regarding *Where are we now and where do we want to go?* Input from the round of engagement will inform the key issues that are addressed in the Transportation Master Plan and will develop the key principles that guide development of alternatives to address how the community will invest in mobility as it grows. Input will be captured in a *What We Heard* report that is made available on the project webpage

2

This round of engagement will seek input regarding *How do we get there?* Engagement will commence 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. Feedback received during this round of engagement will be used to refine and prioritize recommendations for the Transportation Master Plan, and the final recommendations will be weighed against how well they align with the key guiding principles developed with community

3

The third round of engagement will not seek community input, but rather will present a Transportation Master Plan that is built upon the prioritized and refined options identified during the last round of engagement, outline how community input was (or wasn't) used and why, then let the community know what to expect as the Town moves towards implementation of the Transportation Master Plan.

The proposed feedback loop, illustrated in **Figure 3-2**, was used to respond to the community engagement needs as the project progressed and was modified throughout the project accordingly.

FIGURE 3-2: FEEDBACK LOOP

3.4.2. Round 1 – Where are we now and where do we want to go?

Engagement Overview

The public component of the first round of project engagement occurred on October 29,2018 with a Council Workshop meeting. This round of engagement sought input on the key issues to be addressed in the Transportation Master Plan, as well as the key principles to guide the development of the Transportation Master Plan.

Engagement discussions focused on the following questions:

- What principles should drive transportation investments as Ponoka grows?
- How do people currently move around Ponoka?
- What is working well and what could be improved?
- What would you like to see more of/less of?

The public component of this round of engagement included:

- Vertisee, an interactive map, was launched on October 5, 2018 on the Town's webpage.

How will feedback be used?

Feedback from this round of engagement influenced the technical work completed in Phases 1 and 2 of the TMP. Input from this round of engagement informed the key issues that are addressed in the Transportation Master Plan and used to develop the key principles that guide development of alternatives to address how the community will invest in mobility as it grows. Input was captured in a *What We Heard* report that was made available on the project webpage and reviewed at the beginning of the next round of engagement, so people understood what happened with their feedback.

What is the timeline?

Engagement planning and activities began in August 2018 with submission of draft engagement outline and ended in February 2019, including the following sequence of events:

- **August 2018 - Early September 2018**: Engagement Planning
- **September 2018 – November 2018**: Public engagement activity to identify current issues, needs and aspirations that should be addressed by the project.
- **January 2019**: Incorporate public feedback into traffic model.

What activities and tools were used?

Activities:

- Webpage update, including Vertisee.
- Internal & Council workshop.

Tools:

- Advertising: Social media, radio, etc.
- In-person activities.
- Webpage update with engagement content and information.
- Online Survey.
- *What We Heard* summary

TABLE 3-4: ROUND 1 ENGAGEMENT ACTIVIES AND TIMELINES

Round 1 Activities	Description and Responsibility	Timeline (2018)
Engagement Materials	**McElhanney** developed/submitted engagement content (public activity plan, workbook outline, ad/webpage/survey content).	August 22
	The Town reviewed and provided feedback to McElhanney.	September 4
	McElhanney finalize plan and submitted to Town.	September 11
Engagement Planning	**The Town** booked public engagement venue / address logistics.	Late September
	The Town distributed public engagement ads through desired platforms.	Late September
	The Town identified representatives for internal workshop, book venue/address logistics and extend invitations.	As Required
Engagement Facilitation	**The Town** updated project webpage or link	Launch: Late September
	McElhanney facilitated and documented public event (as required)	October 2018
	McElhanney monitored and collated online survey feedback.	September - November
	McElhanney facilitated and documented internal workshop.	As Required
Engagement Feedback Loop	**McElhanney** developed/submitted draft *What We Heard* engagement summary alongside *Tech Memo #1 (Existing Conditions, Issues, Aspirations and Next Steps)*	November 2018
	The Town reviewed and provided feedback at Steering Committee Meeting.	As Required
	McElhanney developed/submitted *Tech Memo #2 (Future Needs, Opportunities and Next Steps)* incorporating internal workshop input.	January 2019
	The Town reviewed and provided feedback at Steering Committee Meeting.	January/February 2019

What We Heard

A summary of the feedback from this round of engagement are highlighted in **Figure 3-3** through **Figure 3-5** and was used to drive technical analysis of issues and identification of opportunities to be explored during the Transportation Master Plan development. More detailed comments received from Council as well as panels developed for the workshops is provided in **APPENDIX B**.

FIGURE 3-3: DOTMOCRACY RESULTS

The following is the results of the Vertisee engagement that was featured on the Town's website https://vertisee.mcelhanney.com/ponoka/:

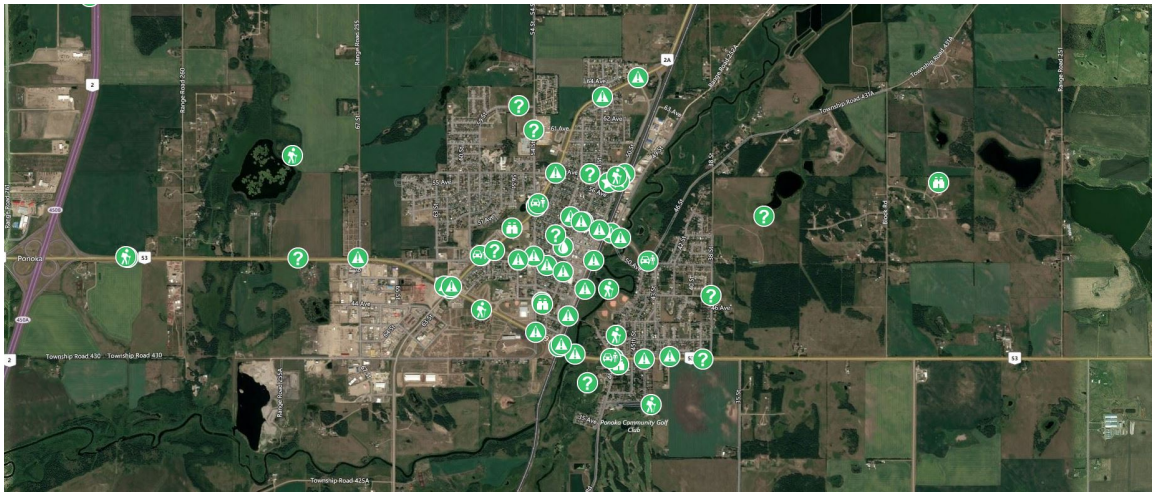


FIGURE 3-4: VERTISEE INTERACTIVE MAP

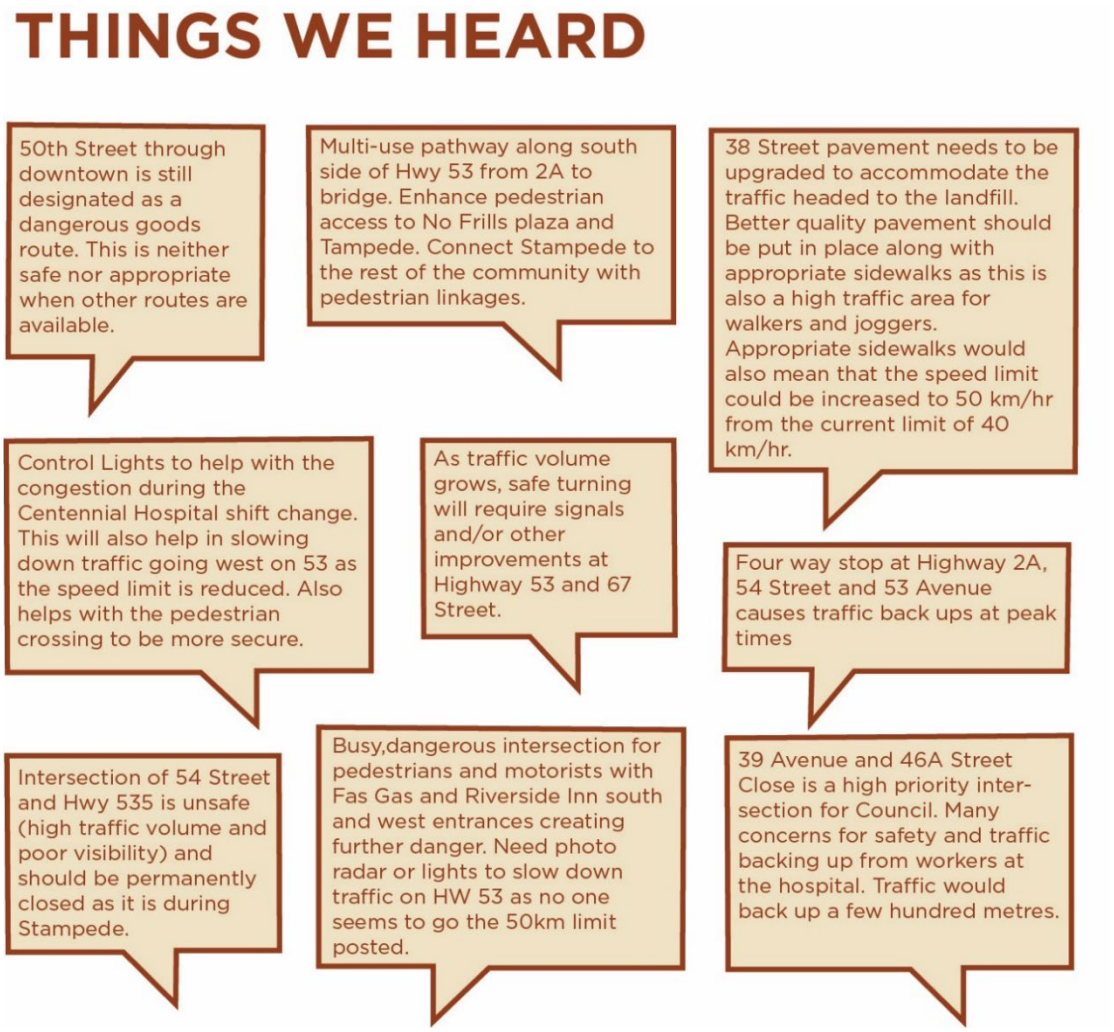


FIGURE 3-5: THINGS WE HEARD

3.4.3. Round 2 – How do we get there?

Discussions, timelines, tools and activities identified for this round of engagement evolved around transforming needs as the project unfolded and community expectations become clear.

What was asked?

- These are the key guiding principles we heard at the beginning of the project. Is anything missing?
- Do these ideas and options meet the key guiding principles identified at the beginning of the project?
- Are there other ideas and options that meet the key guiding principles and should be explored?
- How would you prioritize these options and why?

How was feedback be 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 the community 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 was the timeline?

Round 2 engagement planning and activities began at the end of January 2019 (with submission of draft engagement outline) and end at the beginning of July 2019, including the following sequence of events:

- **May to Mid-June:** Engagement Planning
- **Mid-June:** Public engagement activity, pop-up booth at GPRC or Municipal Government Day (June 13) and online survey to test and prioritize ideas.
- **Early-July:** Review feedback and identify key directions for project recommendations.

What activities and tools were used?

Activities:

- Webpage update, including online survey and Vertisee.
- Public Open House

Tools:

- Advertising: Social media and other avenues at discretion of town.
- In-person activities.
- Webpage update with engagement content.
- Online survey.
- *What We Heard* summary

TABLE 3-5: ROUND 2 ENGAGEMENT ACTIVITIES AND TIMELINES

Round 2 Activities	Description and Responsibility	Timeline (2019)
Engagement Materials	**McElhanney** developed/submitted engagement content (public activity plan, workbook outline, ad/webpage/survey content).	May 11
	The Town reviewed and provided feedback to McElhanney	May 23
	McElhanney finalized materials and submit to town.	June 6
Engagement Planning	**The Town** booked public engagement venue / address logistics.	May
	The Town distributed public engagement ads through desired platforms.	Late-May / Early-June
	The Town managed public engagement social media campaign.	Late-May / Early-June
Engagement Facilitation	**The Town** updated project webpage.	Launch June 13
	McElhanney facilitated and documented public event.	Week of June 18
	McElhanney monitored and collated online survey feedback.	June 13 - 27
	The Town facilitated and documented pop-up booth (GPRC and/or Municipal Government Day).	June 13
Engagement Feedback Loop	**McElhanney** developed/submitted draft *What We Heard* engagement summary.	1st week of July
	Project Team reviewed feedback and direction for project recommendations.	2nd week of July

Public Engagement Feedback

Feedback from this round of public engagement was used to guide technical analysis of issues and confirm opportunities to be explored for the Transportation Master Plan Development. Below are the items that the public felt the Transportation Master Plan addressed:

- Road congestion and capacity
- Safety
- Sidewalk and trail connections
- Traffic control and signal coordination

The areas that the public thought the Transportation Master Plan was lacking:

- Cycling facilities and connections
- Trucking Corridors

The top areas that the public would like funding to go towards (1 being highest priority, 5 being lowest):

1. Improving road (or system safety)
2. Constructing more sidewalk and path connections to key destinations
3. Constructing more cycling facilities and lanes to key destinations
4. Reducing road congestion and adding more capacity for vehicles
5. Improving system accessibility for those with mobility issues

3.4.4. Round 3 – Transportation Master Plan

What will be asked?

The third, and last, round of engagement was not to seek community input, but rather to present the prioritized options identified during the last round of engagement, refined into a strategic Transportation Master Plan, outline how input was (or wasn't) used and let the community know what to expect next as the Town moves towards implementing the Plan.

What is the timeline?

Round 3 engagement planning and activities began in August 2019 with submission of draft engagement outline and end in mid-September when the recommended Transportation Master Plan is presented to Council. The following sequence of events is expected:

- **Early August:** Engagement Planning
- **Mid-September:** Council presentation and public information campaign to let the community know what happens next.

What activities and tools will be used?

Activities:

- Webpage update.
- Council Presentation.

Tools:

- Advertising: Social media and other avenues at discretion of Town.
- Council Presentation, public agenda.
- Webpage update

TABLE 3-6: ROUND 3 ENGAGEMENT ACTIVITIES AND TIMELINES

Round 3 Activities	Description and Responsibility	Timeline (2019)
Engagement Materials	**McElhanney** developed/submitted engagement content (webpage update content, presentation outline).	September
	The Town reviewed and provided feedback to McElhanney.	Late September
	McElhanney finalized materials and submit to Town.	1st week of October
Engagement Planning	**The Town** scheduled Council presentation.	October
	The Town managed public engagement social media campaign.	Late October
Engagement Facilitation	**The Town** updated project webpage.	Launch Early November
	McElhanney presented to Council.	January 2020

3.4.6. Lessons-Learned and Potential Risks

Through Ponoka's *Public Participation Policy*, the Town has promised to ensure processes are well designed, open, inclusive and respectful. Delivering on that promise requires learning from previous engagement processes and identifying potential risks so the communication and engagement strategy may anticipate and mitigate them.

Lessons-Learned

Per the project kick-off meeting, the items listed below were identified by the Town's Project Steering Committee as lessons-learned from past projects that may be applied to the Transportation Master Plan. Resolutions have been developed to address each of the identified issues and ensure lessons-learned are incorporated into the Project Engagement Plan. Resolutions and actions will need to be sufficiently flexible to evolve alongside stakeholder feedback as the project unfolds.

TABLE 3-7: SUMMARY OF IDENTIFIED ENGAGEMENT CONCERNS AND RESOLUTION

Concern	Resolution
Storm Water Management Study was very dry, pertained to only one area and only one person showed up to the open house. In the past, all engagement has been driven by engineers who can't communicate in a way that engages the public"	Ensure content is in plain English and engaging, focusing on how information or options will impact the audience
We expect key stakeholders to come to us all at the same time. This doesn't work because they won't speak freely with each other around. Planning tried a dual meeting format where same day meetings occurred with agencies, AT, business, affected landowners, etc.	Provide a variety of opportunities and formats for key stakeholders to participate, including email, phone conversation and in-person meetings as opportunity arises. The Town's Project Team may also follow-up with key stakeholder groups, particularly in-person, to ensure communication remains open and accessible
If engagement activities are held during the day, people work and may not show up. Activities and activity times need to be more flexible	A variety of participation opportunities will be provided to address varying involvement needs, ranging from informing (passive), online engagement and in-person engagement. Opportunities will be responsive to feedback from the Pre-Engagement Survey to build upon the engagement avenues identified as preferred. Further engagement opportunities will be responsive to ongoing community feedback as the project progresses.
Stakeholders can feel like the Town has already made the decision before seeking input	Project engagement will begin early to ensure that community input drives technical analysis. Input from each round of engagement will be documented and what was (or wasn't) used will be explained alongside an explanation why. Further, each round of engagement will begin by explaining what was heard earlier, how it was (or wasn't) used and why so there is clarity regarding the use and value of feedback

Concern	Resolution
People need to buy into the vision for the future of Ponoka… and this is what can happen if we maintain our current trajectory. But if we propose change that is too radical, it will scare people away (developers, etc.). Overall, people need to be aware of our options.	Changes will be founded in Key Guiding Principles developed by and with the community at the beginning of the project. Recommendations will be checked against how well they meet the Key Guiding Principles to ensure they reflect and meet the community's input. Implementation of Complete Streets (downtown) was not embraced by the community even though they had input into it.
Some people were upset by reducing lane widths from 4m to 3.5m in the downtown. Though roads remained wide enough for two vehicles to pass, people would drive down the middle of the road and complain that they could not make turns.	Effort will be made to clearly and visually explain how actions and recommendations will impact people's everyday lives, so the context and change is understood. This builds upon the earlier resolution to ensure all communications and content are in plain English and focus on how the information (or recommendations) will impact the audience.
People need to buy into the vision for the future of Ponoka and this is what can happen if we maintain our current trajectory. But if we propose change that is too radical, it will scare people away (developers, etc.). Overall, people need to be aware of our options.	Changes will be founded in Project Principles developed by and with the community at the beginning of the project. Recommendations will be checked against how well they meet the Principles to ensure they reflect and meet the community's input. Implementation of Complete Streets (downtown) was not embraced by the community even though they had input into it.

Potential Risks

Per the project kick-off meeting, the items listed in **Table 3-8** were identified by the Project Steering Committee as risks that may impact this project. Resolutions have been developed to address each of the risks. Risks and resolutions will need to be sufficiently flexible to evolve alongside stakeholder feedback as the project unfolds.

TABLE 3-8: SUMMARY OF ENGAGEMENT RISKS AND RESOLUTION

Potential Risks	Resolution
Apathetic but critical public (especially keyboard warriors)	Engagement materials will try to emphasize why the discussion matters to the community, how the project affects them, and how they may affect the project (if they choose). Opportunities for input are easy to reach and project information is presented in an appealing way that facilitates a positive dialogue.
History / issues with change	Change is difficult and it is important to be honest about it. Engagement content will strive to ensure that potential changes are clearly explained so the community understands what is involved and how they will be impacted. Establishing understanding will facilitate appropriate expectations when it is time to implement recommendations
Internal issues amongst Town Administration (change resistance, suspicious, insular)	The internal workshop with Council will aim to bring different groups together to discuss needs and try to develop and understanding of trade-offs associated with different options. As with public engagement, consensus will not be the goal, but rather identifying solutions with clear reasoning and compromise that is understood
New council with unknown agendas and/or inexperience / lack of understanding / desire to micromanage	Council will be kept informed of what is happening at each stage of the project with a Project Briefing Note. They may participate in engagement activities alongside the community and will be kept informed of what the community is saying with the *What We Heard* summaries.
Timeline (capital budget and offsite levy reliant on TMP deliverables).	Capital Budget and offsite levy milestones will be incorporated into the project schedule to ensure that recommendations are sufficiently developed to inform these other processes, as needed.
Public endorsement of recommendations required	Engagement will not focus on building consensus, but rather on building awareness of what is happening and what that means for the community, such that the reasons for recommendations or specific actions are clearly understood. Further, input will be transparently incorporated into recommendations to allow people to see how their feedback was (or wasn't) used and why (or why not).

3.4.7. Measures of Success

The following measures of success will be monitored and updated as the project progresses to adapt to evolving community and project needs.

TABLE 3-9: ENGAGEMENT MEASURES OF SUCCESS

Measures of Success	
What are key indicators of success for the project engagement process?	• Integrity of the feedback loop is maintained. • Recommendations meet the key guiding principles developed with the community. • Engagement participants report that engagement events were useful and they felt heard. • Engagement feedback is diverse and reflects a range of stakeholder groups. • Community is generally aware of the Transportation Master Plan project.
What will be measured or evaluated about the project engagement process?	**Exit surveys at events:** • At least 80 percent of event participants report being satisfied with the session. • At least 80 percent of event participants report that they felt their input was heard. **Engagement participation:** • At least 100 people will participate in each round of engagement, including in-person and online activities. • Participation is broad and captures feedback from identified stakeholder groups. **Project team feedback:** • The project team feels that engagement feedback was representative of community interests / differing perspectives and provided the information needed to further the project.
When and how will these elements be measured?	After each round of engagement.
What will be done with the results of the evaluation?	Apply lessons-learned to improve the next round of engagement.

4.0 OBJECTIVE 1: ROAD SAFETY

The first objective of this Transportation Master Plan is to address some common safety concerns that have been identified through traffic analysis, previous collision history, Town consultation and public input. This section summarizes the common road safety themes and presents strategies to reduce the risk of collisions and to improve safety.

4.1. WHAT WE HEARD

4.1.1. Collision Data

Historic collision data is an important tool to identify areas with significant safety issues. Although not all collisions are reported, serious incidents are reported and have been summarized into the key areas of concern. **Figure 4-1** shows 7 key areas of concern, primarily along Highway 2A and in the downtown area. The full collision summary diagram is also presented in **APPENDIX C**.

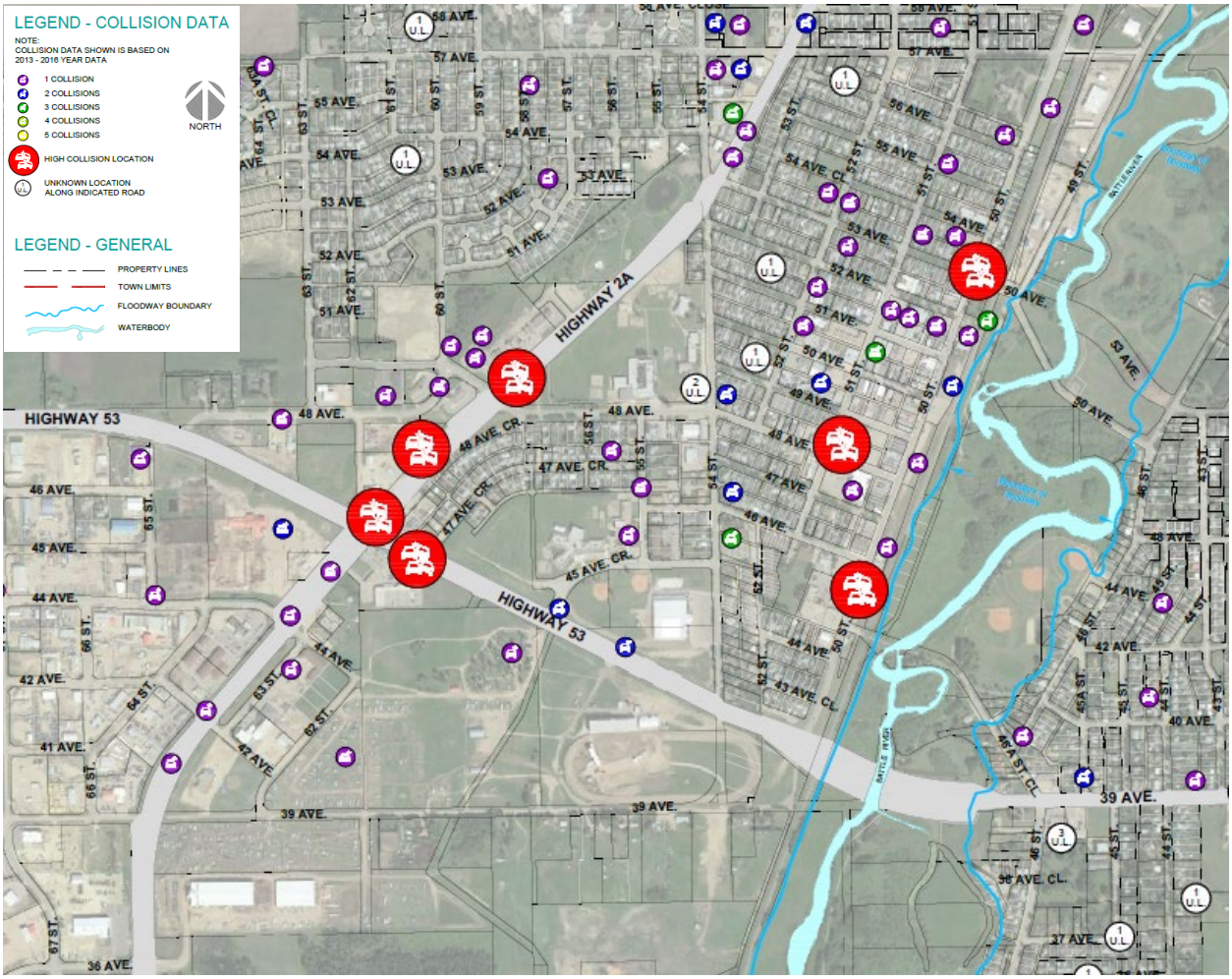


FIGURE 4-1: SUMMARY OF HISTORIC COLLISION DATA IN PONOKA – 2013 TO 2018

4.1.2. Intersection Safety Concerns

The main safety issues that relate to many intersections identified as safety concerns in Ponoka are **improper alignment, poor sightlines, lack of direction / channelization, poorly defined pedestrian crossings and inconsistent access management**. As volume increases at main intersections, it is imperative that the various legs of the intersection align properly to ensure safe traffic movements. With proper alignment and channelization, drivers will know where to look and be able to make safe decisions on whether to proceed. With proper alignment, pedestrian crossings can be identified more clearly as well. Keeping pedestrian crossings at the corners of the intersections ensure vehicle traffic can identify pedestrians in a safe and timely manner. Finally, to improve intersection safety it is important to limit uncontrolled accesses in close proximity to an intersection, especially if there are high volumes or increased speeds. Access management is addressed in Section 4.1.4.

4.1.3. Corridor Safety Concerns (Traffic Calming)

Some areas throughout the Town have been identified as corridors of concern. A corridor is defined as a series of intersections along a roadway (Street/Avenue). The main concerns along the identified corridors are related to speed and pedestrian interaction with vehicle traffic. Speed often becomes a concern when there is a long, straight section of road (often collectors) where there is no traffic control. This TMP analyzes these corridors and identifies traffic calming measures that can be put in place to ensure vehicle traffic must slow down. In addition, traffic calming measures will ensure important pedestrian crossings are prominent and obvious to drivers so that all ages of pedestrians can cross safely.

4.1.4. Access Management

Throughout the Town of Ponoka, Access Management has been identified as a large concern, particularly along the two major highways as many uncontrolled and poorly defined accesses result in dangerous road conditions and poor operating conditions. Some accesses that are causing safety concerns are a result of their proximity to intersections. The accesses are so close to some intersections, that traffic movements onto that leg are not able to see approaching traffic from the accesses which causes collisions. Several accesses have been identified as a concern in the next section. Some accesses may only need improvement, some need moving to other areas and some are recommended for closure.

4.1.5. Areas of Concerns

Using various sets of input such as traffic collision data, Town Council feedback, traffic analysis and public engagement, the below areas have been perceived as safety concerns. The areas and intersections are as follows:

- 53 Avenue & 50 Street
- 53 Avenue & 51 Street
- 53 Avenue & Highway 2A
- 48 Avenue & Highway 2A
- 48 Avenue & 51 Street
- Highway 53 & Highway 2A (including nearby accesses)
- Highway 53 & 46A Street
- Highway 53 & 54 Street
- 48 Avenue Corridor (48 Avenue Crescent – 54 Street)
- 60 Street Corridor (51 Avenue – 54 Avenue)
- 50 Street Corridor (50 Avenue – 52 Avenue)
- Highway 53 Access Management
- 57 Avenue Access Management

4.2. STRATEGIC SAFETY IMPROVEMENTS

These strategic safety improvements have been developed to improve traffic safety for both motorists as well as vulnerable road users, including pedestrians and active users. One of the federal strategies adopted by Canada in 2017 is "Vision Zero" which is a commitment to reduce traffic fatalities to zero, utilizing Engineering, Education, Enforcement, Engagement and Evaluation to make roads safer. Recommendations for improvements fall within this strategy, primarily as the first step in the safe roads system: Engineering. As illustrated in **Figure 4-2**, the following locations have been identified as areas for improvements to address identified and perceived safety concerns. Detailed concept drawings of the improvements can be found in APPENDIX C.

1. 53 Avenue & 50 Street

Safety Issues

- The east and west legs of 53 Avenue do not align, resulting in poor sightlines and some driver confusion.
- Pedestrian Crossings are not exactly on the corners due to poor alignment, resulting in confusion and dangerous pedestrian conditions. Due to a nearby park, pedestrian traffic is significant.

Possible Solution Strategy

- Intersection reconstruction to align 53 Avenue
- Potential for roundabout, including proper pedestrian crossings and landscape features.

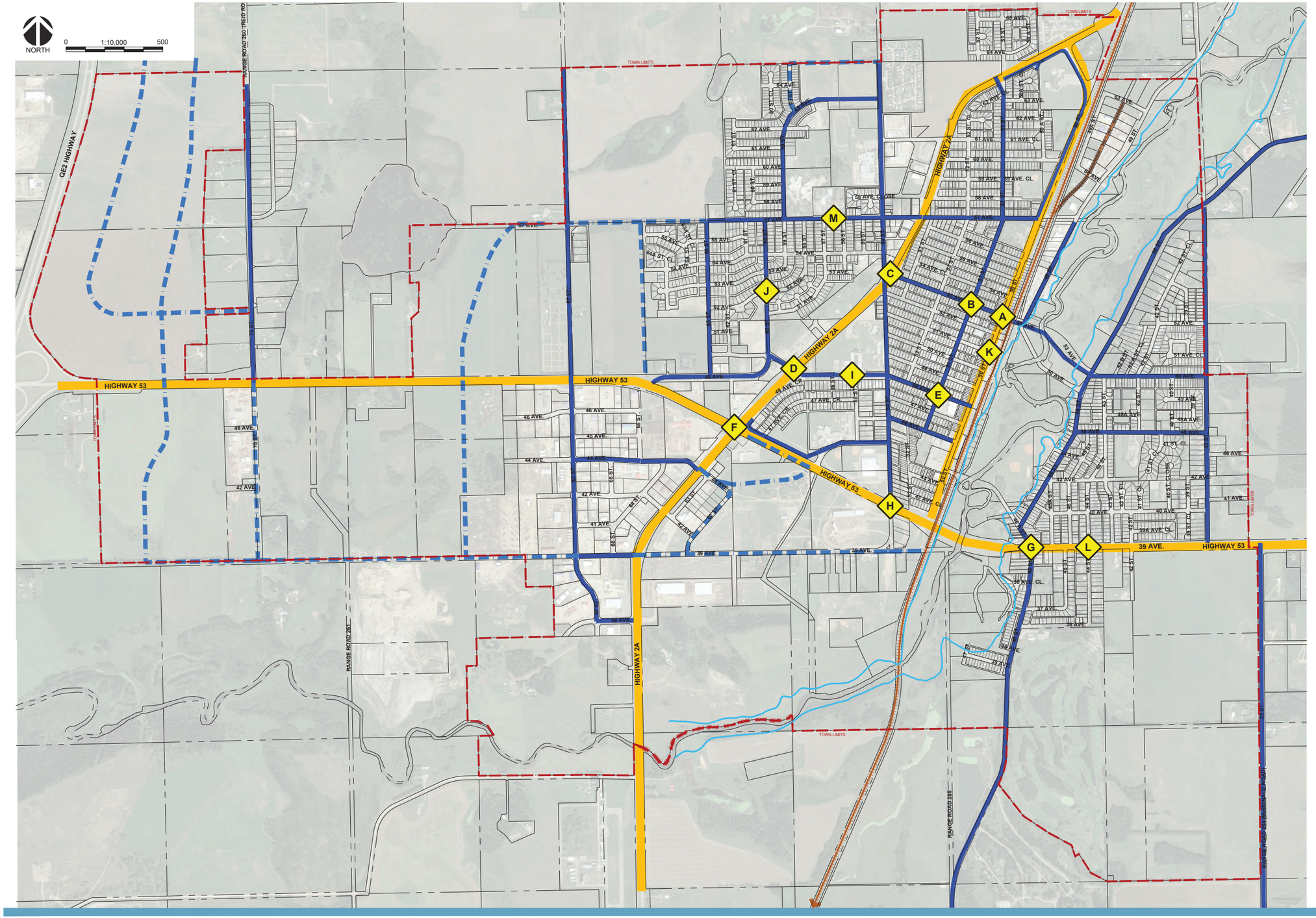
2. 53 Avenue & 51 Street

Safety Issues

- High collision area due to visibility issues from corner houses and vegetation.

Possible Solution Strategy

- Improved warning signage and possibility for 4-way stop.
- Removal of vegetation



LEGEND - ROADS & SAFETY IMPROVEMENTS

- COLLECTOR ROAD
- FUTURE COLLECTOR ROAD
- HIGHWAY / ARTERIAL ROAD

- A — 53 AVENUE & 50 STREET
- B — 53 AVENUE & 51 STREET
- C — HIGHWAY 2A & 53 AVENUE
- D — 48 AVENUE & HIGHWAY 2A
- E — 48 AVENUE & 51 STREET
- F — HIGHWAY 53 & HIGHWAY 2A
- G — HIGHWAY 53 (39 AVENUE) & 46A STREET
- H — HIGHWAY 53 & 54 STREET
- I — 48 AVENUE CORRIDOR (48 AVENUE CRESCENT - 54 STREET)
- J — 60 STREET CORRIDOR (51 AVENUE - 54 AVENUE)
- K — 50 STREET CORRIDOR (50 AVENUE - 52 AVENUE)
- L — HIGHWAY 53 ACCESS MANAGEMENT (46A STREET - 42 STREET)
- M — 57 AVENUE ACCESS MANAGEMENT (56 STREET - 57 STREET)

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY
- EXISTING RAIL LINE

SAFETY IMPROVEMENTS

Town of Ponoka

FIGURE 4-2: LOCATION OF SAFETY IMPROVEMENTS

Prepared by: McElhanney

Prepared for: Ponoka

3. Highway 2A & 53 Avenue

Safety Issues

- Traffic queues from adjacent intersections causing dangerous conditions and sightlines.
- Narrow road and poor access management create driver confusion.

Possible Solution Strategy

- Addition of channelized turn lanes, including concrete islands, to ensure proper use and understanding of lanes.

Figure 4-3 illustrates the concept sketch of the possible intersection reconstruction.

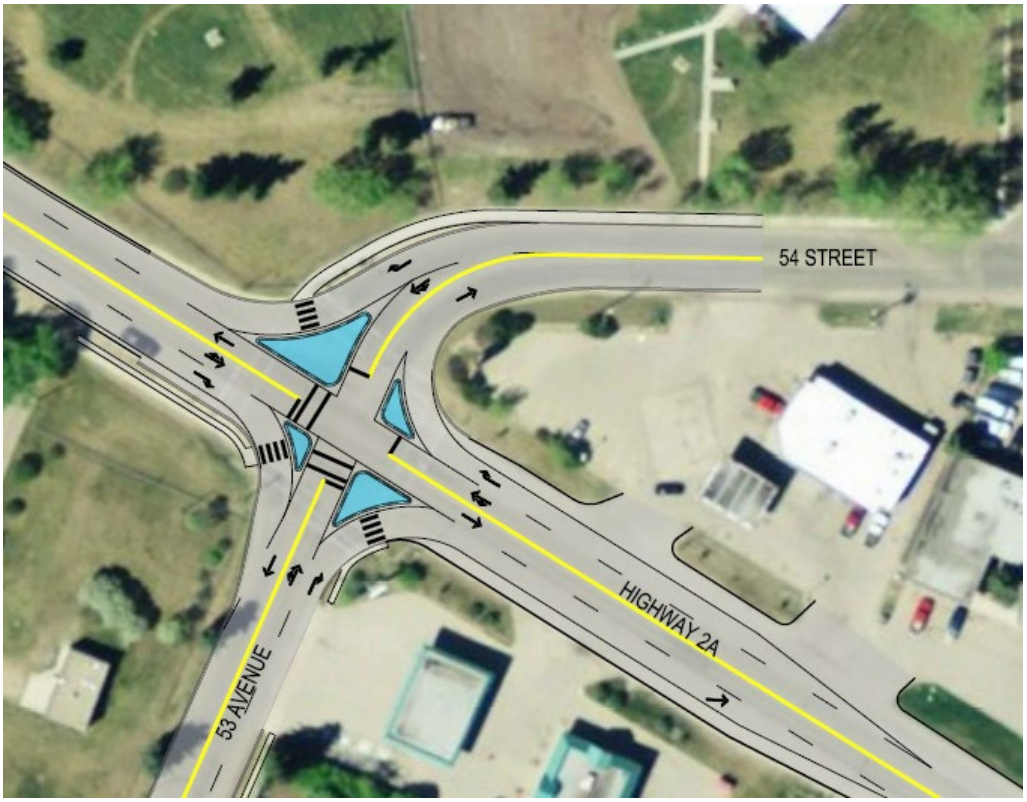


FIGURE 4-3: HIGHWAY 2A & 53 AVENUE PROPOSED CONCEPT IMPROVEMENTS

4. 48 Avenue & Highway 2A

Safety Issues

- Intersection geometry, high traffic volume and poor lane definition causes driver confusion and, as a result, many collisions.

Possible Solution Strategy

- The addition of channelized right-turn bays on all 4 corners of the intersection will both align the intersection properly and create safer driving conditions

Figure 4-4 illustrates the proposed improvements

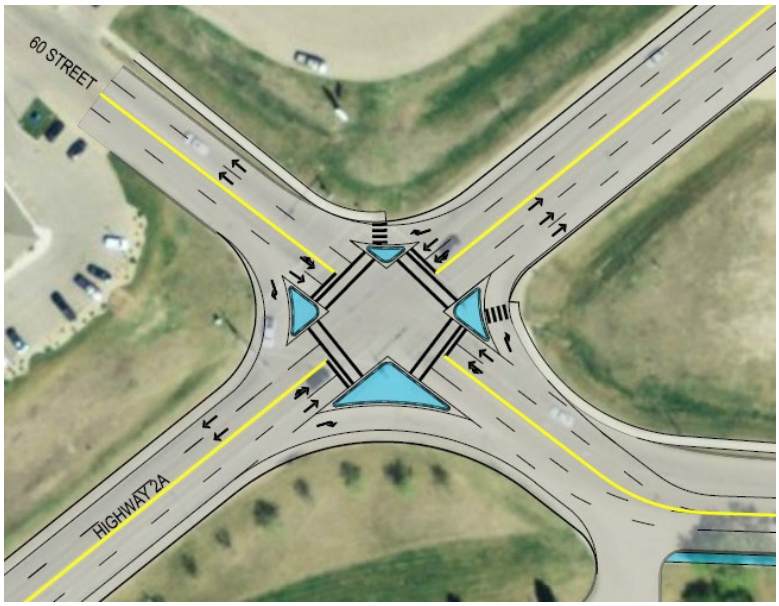


FIGURE 4-4: 48 AVENUE & HIGHWAY 2A PROPOSED CONCEPT IMPROVEMENTS

5. 48 Avenue & 51 Street

Safety Issues

- Several uncontrolled accesses near the intersection result in dangerous traffic movements. The "Mini Mall" accesses on the SW corner of the intersection are the most significant area of concern as cars leaving the parking lot are often backing directly into traffic.

Possible Solution Strategy

- Potential closing of "Mini Mall" accesses and provided parallel parking instead of angle or perpendicular parking.

6. Highway 53 & Highway 2A

Safety Issues

- Some uncontrolled accesses close to the intersection cause dangerous traffic movements. With significant volumes, as this is an intersection of two highways, backups create visibility issues at these accesses.

Possible Solution Strategy

- Close Shell's north access and upgrade the south access and properly align with
- Highway 2A to ensure safe travel flow for all sizes of vehicles.
- Two concept plans have been completed to present intersection reconstruction options. One option presents a modern roundabout with some channelized turn lanes. The second option shows the addition of channelized turn lanes and triangular (pork chop) concrete islands.

Figure 4-5 and **Figure 4-6** illustrates the concept sketch for Option 1 and Option 2.

FIGURE 4-5: HIGHWAY 53 & HIGHWAY 2A PROPOSED CONCEPT IMPROVEMENTS – OPTION 1

FIGURE 4-6: HIGHWAY 53 & HIGHWAY 2A PROPOSED CONCEPT IMPROVEMENTS – OPTION 2

7. Highway 53 (39 Avenue) & 46A Street

Safety Issues

- Poor alignment of the north and south legs of 46A Street causes driver confusion and poor visibility.
- Speed on Highway 53 causes potential for high speed collisions.
- Landscape features close to the NW and SW corners create visibility issues.
- Pedestrian crossings are not clear on all but the west leg.
- The Fas Gas west access is very close to intersection causing dangerous traffic movements.

Possible Solution Strategy

- Full Intersection realignment to ensure proper pedestrian movements and traffic movements.
- Removal or significant reduction of landscape features.
- Provide barriers on south side of west Fas Gas access. This will ensure there's ample time for vehicles to turn onto north leg before having to look for traffic at the access.

Figure 4-7 illustrates the concept sketch the proposed safety improvements.

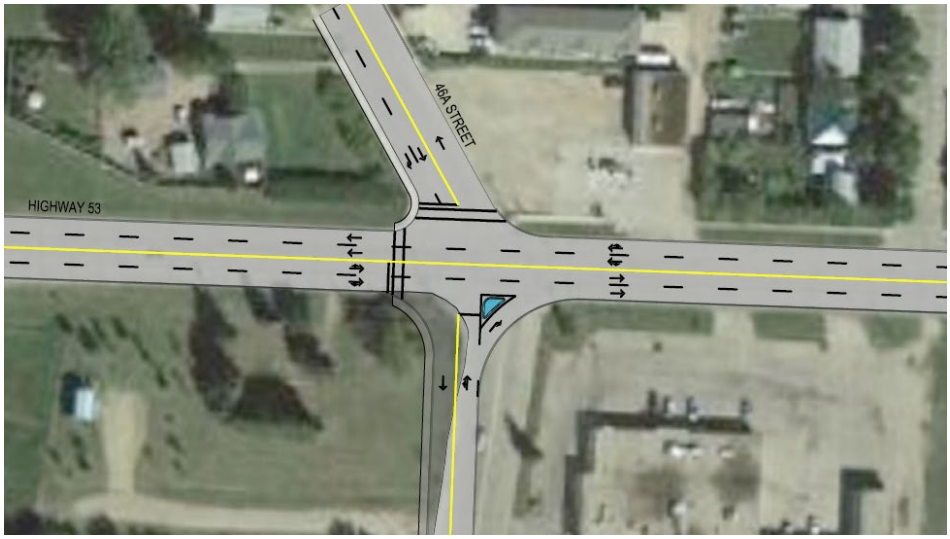


FIGURE 4-7: HIGHWAY 52 (39 AVENUE) & 46A STREET PROPOSED CONCEPT IMPROVEMENTS

8. Highway 53 & 54 Street

Safety Concerns

- The combination of high traffic volume (which is increasing) and significant foliage on the NE corner of the intersection creates dangerous driving conditions. In addition, this intersection is used as a bypass route resulting in increased speeds along 54 Street, creating more safety concerns as it is a residential area.

Possible Solution Strategy

- It is recommended that this intersection be either fully or partially closed. Full closure would prevent any traffic from 54 street to access Highway 53 directly. Partial closure would involve the addition of a rectangular island to prevent southbound traffic from 54 Street to turn left onto Highway 53 and Eastbound traffic on Highway 53 to turn left onto 54 Street. Southbound traffic would still be able to turn right onto Highway 53 and Westbound traffic would be able to turn right onto 54 street.

9. 48 Avenue Corridor (48 Avenue Crescent – 54 Street)

Safety Issues

- The 48 Avenue Corridor presents a unique challenge. With the School, Park and Fire Hall; vehicle and pedestrian traffic are both significant.
- The area has some well-established trees that cast large shadows on the road.
- Due to the well maintained and wide roadway, speed has become an issue resulting in both dangerous vehicle and pedestrian movements.
- The school drop off zone is poorly defined, and crosswalks are unclear.

Possible Solution Strategy

A traffic calming concept plan has been completed to address the various concerns. The plan involves "bulb outs" that clearly indicate cross walks and narrow the road at these areas to reduce speed, as well as a better-defined median separating the drop off zone and the roadway. The concept also includes an addition of a multi-use trail on the southside. In addition, improved paint markings and signage will help to reduce driver confusion. Figure 4-8 illustrates the possible intersection reconstruction.

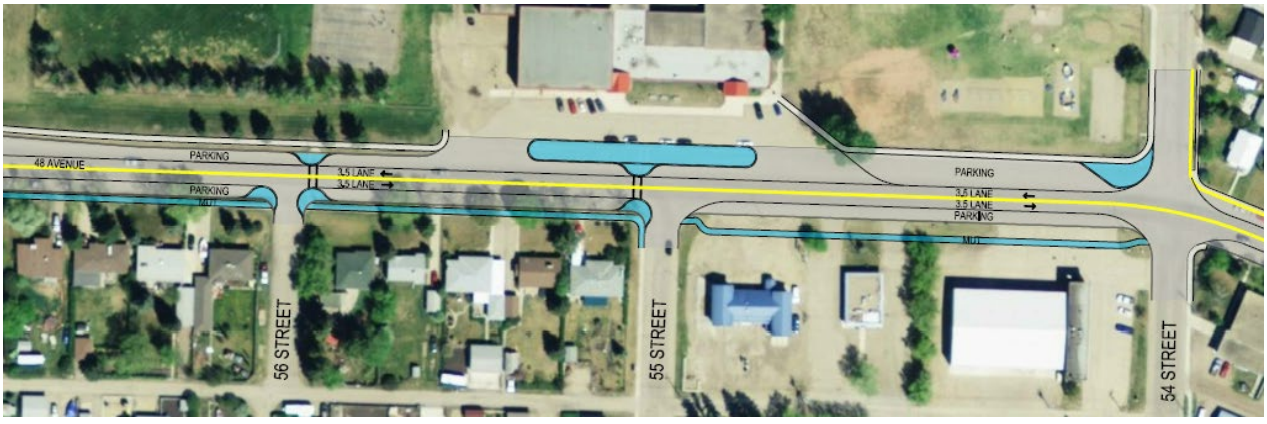


FIGURE 4-8: 48 AVENUE CORRIDOR PROPOSED CONCEPT IMPROVEMENTS

10. 60 Street Corridor (51 Avenue – 54 Avenue)

Safety Concerns

- The main safety concern along this corridor is speed. With the green space adjacent to 60 Street, significant children and other pedestrian traffic creates dangerous interaction between traffic and pedestrians.

Possible Solution Strategy

Traffic calming measures are recommended to be put in place. These will include "bulb outs" at 52 Avenue and 51 Avenue to ensure pedestrian traffic can safely cross as well as the addition of a triangular concrete island on the northwest corner of 53 Avenue to channelize the right turn lane. **Figure 4-9** illustrates the possible intersection reconstruction along 60 Street.

FIGURE 4-9: 60 STREET CORRIDOR PROPOSED CONCEPT IMPROVEMENTS

11. 50 Street Corridor (50 Avenue – 52 Avenue)

Safety Concerns

- Angle parking on the east side of 50 Street causes collisions because parked vehicles are backing up onto a busy street without being able to see if traffic is coming.
- Significant Pedestrian traffic can be hard to see due to parked cars and unclear crossings.

Possible Solution Strategy

- Change all angle parking to parallel parking, creating wider sidewalks on the east side.
- Add "bulb outs" on the east side of 51 street at 50 Avenue and on all corners of 51 Avenue to create a visible crossing area to reduce speed, allowing for safer parking conditions.

Figure 4-10 illustrates the possible intersection reconstruction along 60 Street.

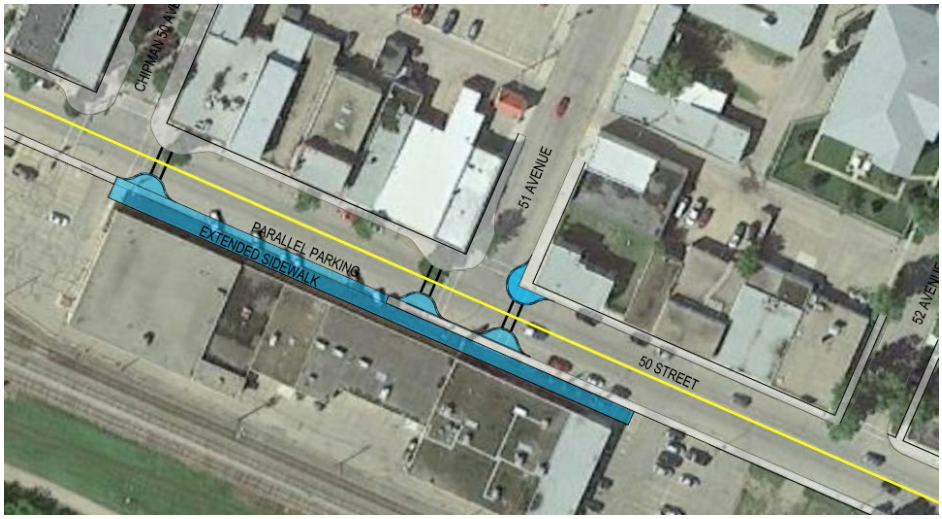


FIGURE 4-10: 50 STREET CORRIDOR PROPOSED CONCEPT IMPROVEMENTS

12. Highway 53 Access Management (46A Street – 42 Street)

Safety Concerns

- Uncontrolled accesses along this highway create dangerous turning movements
- Often speed is still elevated entering the Town
- Business accesses to the east of 46A Street create unnecessary traffic and hazardous conditions

Possible Solution Strategy

There is an existing Functional Planning Study completed by Alberta Transportation that includes twinning of Highway 53, as well as access management, however that plan is likely out of date and should be updated based on actual growth. An alternative concept plan has been completed for this TMP as shown in **Figure 4-11**. Some key features involve limiting left turn movements with concrete islands along the corridor, the addition of service roads to allow access where necessary and allowing pedestrian traffic to proceed safely along Highway 53 through the use of sidewalks and multi-use trails.

FIGURE 4-11: HIGHWAY 53 PROPOSED CONCEPT IMPROVEMENTS

13. 57 Avenue Access Management (56 Street – 57 Street)

Safety Concerns

- Multiple access that do not align with intersections creating driver confusion and collisions

Possible Solutions Strategy

A concept plan below outlines proper access management for this area. The key features include closing the smaller accesses and creating two major accesses that align with the intersection of 56 Street and 57 Street, as wells as "bulb outs" at 57 Avenue and 57 Street to ensure safe pedestrian travel.

Figure 4-12 highlights the conceptual access management on 57 Avenue between 56 Street and 57 Street.

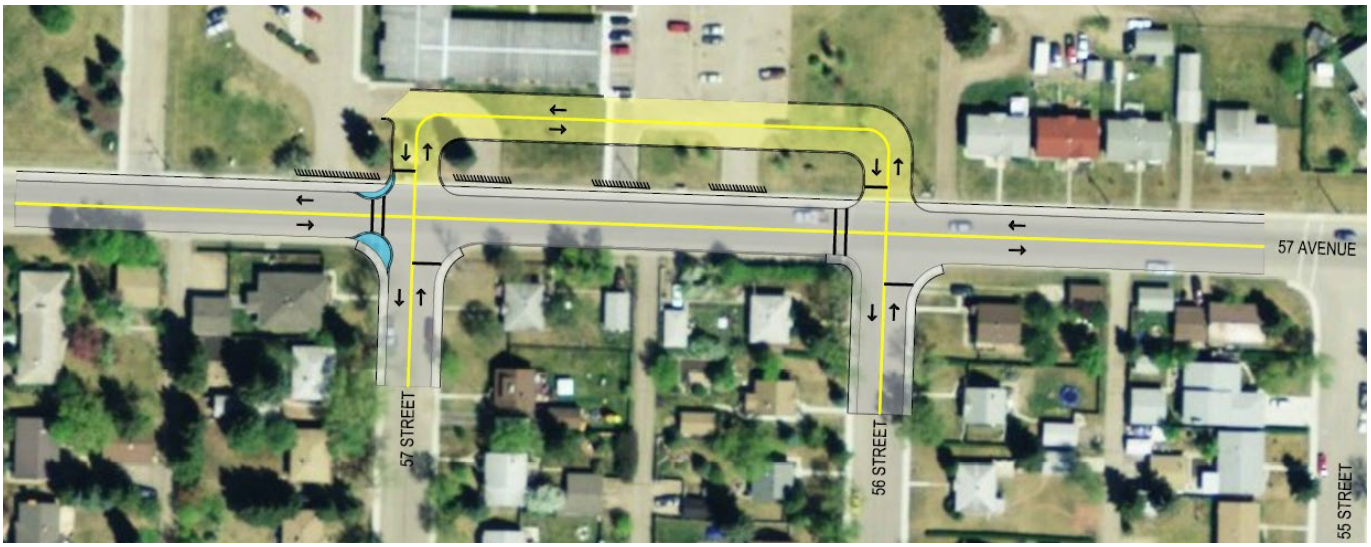


FIGURE 4-12: 57 AVENUE PROPOSED CONCEPT IMPROVEMENTS

4.3. 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 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.

At minimal cost, reducing the speed limit to 40km/h unless otherwise posted presents significant safety advantages, utmost being the potential for reduced collisions and reduced injury. Additionally, when utilized as a safety tool along with other traffic calming measures, the effectiveness for both can be even greater.

Implementation (through Bylaw) can be Town-wide (all current 50km/h, become 40km/h as a default speed limit) or it can be specific to a neighborhood initially as a pilot program, such as Lucas Heights, to not only test effectiveness, but driver adherence as well as citizen reaction.

5.0 OBJECTIVE 2: GOODS MOVEMENT

The second objective of this Transportation Plan is to develop a Goods Movement Strategy. The strategy will take into consideration Town consultation and address the main points of concern to ensure the movement of goods are done in a safe and efficient manner.

5.1. ROAD HIERARCHY

The Road Hierarchy can be split into **three** categories: Arterials, Collectors and Local Roads.

- **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.
- **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.
- **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.

Table 5-1 provides a summary of the traffic and access function by the three road types and **Figure 5-1** illustrates Ponoka's current road hierarchy.

TABLE 5-1: TRAFFIC AND ACCESS FUNCTION BY CORRIDOR TYPE

Corridor Type	Traffic Function	Access Function
Arterial	Traffic movement is the primary consideration.	Access is restricted to promote optimal traffic movement.
Collector	Traffic movement is important, but not the only consideration.	Access is equally as important as traffic movement.
Local	Traffic movement is a secondary consideration to access.	Access is the primary function of local roads.

NORTH

0 1:10,000 500

LEGEND - ROAD CLASSIFICATION

- COLLECTOR ROAD
- HIGHWAY / ARTERIAL ROAD
- FORMAL EXISTING TRAIL

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY
- EXISTING RAIL LINE

ROAD HIERARCHY

Town of Ponoka - Transportation Master Plan

FIGURE 5-1: TOWN OF PONOKA ROAD HIERARCHY

Prepared by: McElhanney

Prepared for: Ponoka

5.2. TRUCK ROUTING

Through public consultation it has been identified that Truck Routing is a significant concern for both residents and Town Council. Since the Town contains two high volume highways, it is essential that truck traffic is properly directed through Town as to ensure goods are delivered safely and residents are not put at risk.

5.2.1. Identified Issues and Solution Strategies

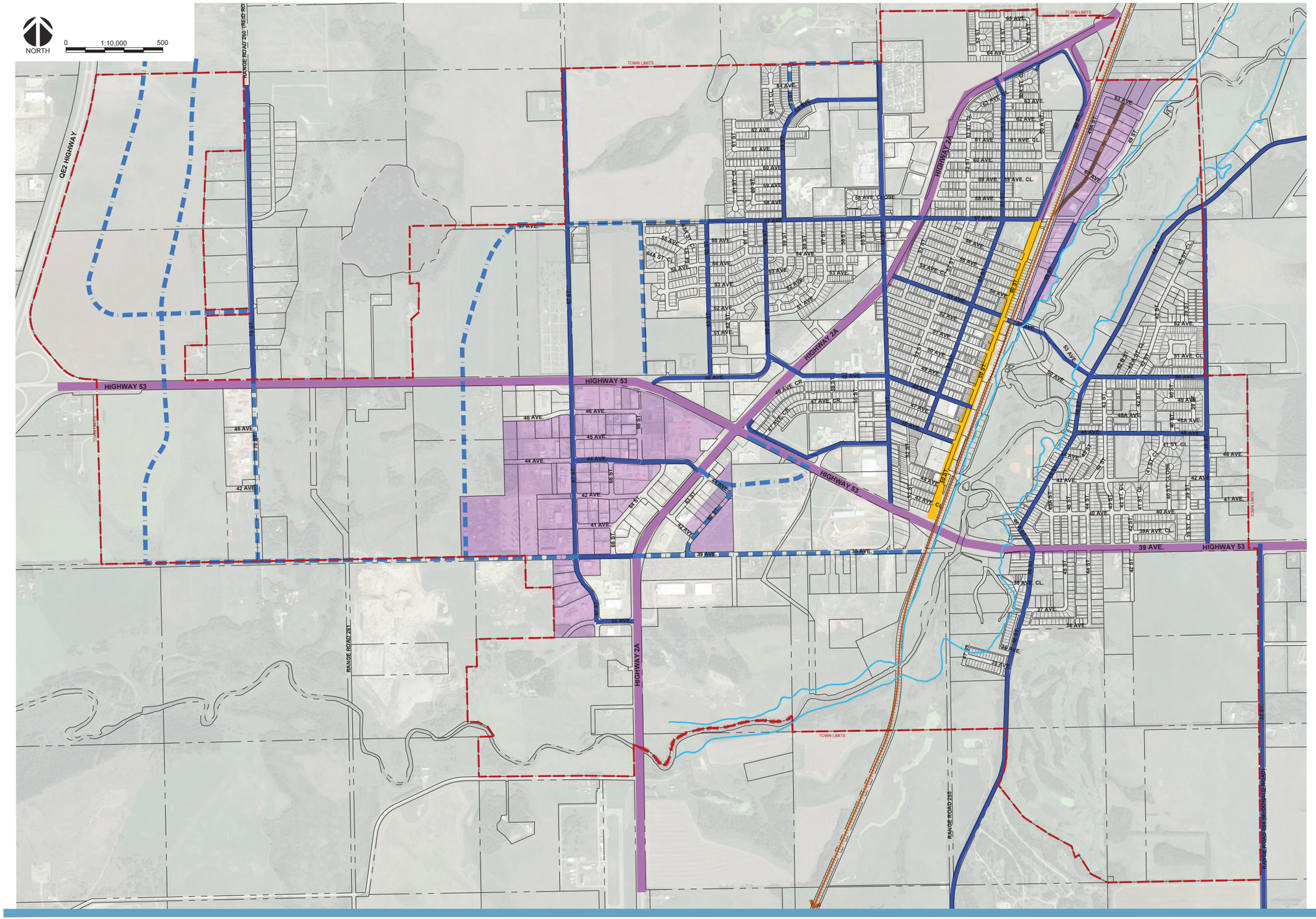
53 Avenue currently serves as an arterial in Ponoka, allowing some truck traffic to travel through. As an arterial, the main consideration is traffic movement. This is a cause for some concern as there are several resident accesses along this corridor. This may cause safety concerns if volumes continue to increase on 53 Avenue.

It is recommended to place “No Truck Traffic” signage along 53 Avenue and 57 Avenue. All truck and large vehicle traffic should utilize 50 Street and the Provincial highways to access Ponoka’s center. Should truck traffic become an issue on 53 Avenue and/or 57 Avenue various other truck deterrence measures can be taken such as roundabouts and various other traffic calming measures.

5.3. DANGEROUS GOODS MOVEMENT

It is essential that Dangerous Goods only move through the town approved routes to ensure the safety of all residents. Should Dangerous Goods be required to move through town, they should remain on Highway 2A and 53. The only exception that should be allowed is along 50 Street if the destination of the goods is Downtown or the NE Industrial area. 50 Street is in close proximity to the CN Railway which is also a Dangerous Goods corridor. Allowing some travel on 50 Street rather than elsewhere in town will prevent the need for an additional Dangerous Goods route.

Figure 5-2 highlights the suggested acceptable Dangerous Goods Routes.



LEGEND - ROADS

- COLLECTOR ROAD
- FUTURE COLLECTOR ROAD
- HIGHWAY / ARTERIAL ROAD / TRUCK ROUTE
- DANGEROUS GOODS ROUTE

LEGEND - LAND USE

- INDUSTRIAL

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY
- EXISTING RAIL LINE

DANGEROUS GOODS ROUTE

Town of Ponoka

FIGURE 5-2: PROPOSED DANGEROUS GOODS ROUTES

Prepared by: McElhanney

Prepared for: Ponoka

5.4. INDUSTRIAL AREAS

The Town of Ponoka has two distinct industrial areas, one located on the southwest side, and the other on northeast side of Ponoka.

The more significant industrial area is in the SW corner of Ponoka. This industrial park is well serviced for its transportation needs, due to its close proximity to both Highway 53 and Highway 2A. As the area grows, it may be required to close down some of the minor accesses or upgrade the intersections to accommodate the increased traffic volume. The serviceability of these intersections and address the time at which action must be taken are addressed in Section 7.0.

The smaller of the two industrial areas is in the north east. This industrial park presents a little more difficulty as it is several blocks away from the nearest highway. As mentioned previously, the appropriate route to service this section is along 50 Street either from the north intersection with Highway 2A or the south intersection with Highway 53.

6.0 OBJECTIVE 3: ACTIVE TRANSPORTATION

Active Transportation is an integral component of the Town-wide transportation network and building community sustainability with respect to health, social exchange, the environment and the economy. Currently, the Town of Ponoka supports active transportation through its residential sidewalk and green space/Battle River Valley trails network. In moving forward, it is recommended that this existing network be enhanced by:

- Serving a more inclusive cross-section of the community;
- Incorporating universal/barrier-free accessibility;
- Establishing design guidelines that support year-round use, safety and security, way-finding and comfort;
- Assessing current Land Use Bylaw requirements with the intent of extending and integrating active transportation links to private development (e.g. commercial, industrial, and other destination facilities);
- Introducing sustainable planning and design components; and
- Promoting and increasing active transportation use within the community.

These active transportation network enhancements should also be cross referenced and defined with the implementation of community placemaking initiatives that have been outlined in the *Town of Ponoka – Urban Framework Master Plan.*

6.1. ACTIVE TRANSPORTATION

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 public and key stakeholder engagement sessions and on-line survey responses, active transportation connectivity is currently provided in Ponoka through neighbourhood sidewalks, parks and open space (green space) trails, and trail portions within the Battle River Valley. To continue and improve upon these existing connections, several key active transportation recommendations have been identified as follows.

6.1.1. Active Transportation Zones

By establishing zones of active transportation, the Town can:

- Establish specific planning and design guidelines/typologies to create a balance between vehicles and pedestrians corridor use;
- Enhance (actual or perceived) route safety and security;
- Support inclusivity and universal/barrier-free accessibility;
- Promote year-round use through the application of Winter City design components and a well-structured operations and maintenance program;
- Improve aesthetics through landscape and amenity feature (e.g., seating nodes, hubs, and other components) applications; and
- Establish municipal and regional connectivity.

Ultimately, the challenge is to provide an active transportation system that reduces the number of short vehicular trips within the Town and encourages all residents to use active transportation routes to destinations including: work, the downtown, the Battle River Valley, municipal facilities, shopping areas, park and open space, regional links, and other key destination areas.

Specific active transportation zones and planning and development considerations are highlighted in **Figure 6-1** and should include the following zones.

Greenway Zones

All arterial or primary roadways (Highway 2A, Highway 53, and other defined primary roads) should be developed with dedicated greenways (trail, nodes, landscape and amenity features) to support safe, secure and barrier-free community and regional network connections.

Neighbourhoods/School Zones

Walkable Neighbourhoods/Safe Journeys applications (e.g., neighbourhood-based multi-use routes/standards, neighbourhood and major arterial route crossings, discouraging driving to schools, school bus/parent drop-off standards, traffic control device requirements), integration and improved connectivity with other land use zones should be incorporated along key neighbourhood and secondary transportation routes. While implementing Safe Journey applications within all existing and future neighbourhood areas would be preferable, implementing the proposed illustrated Safe Journey corridors (refer to **Figure 6-1**) would provide improved safety and security for those travelling to school or crossing Highway 53, Highway 2A and the Battle River to various areas of the community.

Battle River, Natural Areas, Parks, Open Space Zones

The Town of Ponoka currently has eleven park spaces, five trail systems, and a continuous natural area that surrounds the Town of Ponoka. The eleven parks within Ponoka include: The Battle River Valley Park, Lion's Centennial Park, Westview Park, Hamilton Skate Park, Firefighter's Riverside Park, Central Park, Kinsmen/Kinette Park, Lucas Heights Park, Tri-Services Park, Tractor Park, and Rotary Park. Many of these parks have amenities such as multi-use trails, playgrounds, sports fields, site furnishings, and tree/shrub plantings.

The existing natural areas contain the Battle River and Diamond Willow Trail which runs alongside the Battle River. These trail systems feature 10 interpretive signs; however, do not provide any way-finding or connections throughout the Town of Ponoka. The other three trail systems are in Lions, Centennial Park, Tri- Services Park, and the Ponoka Community Golf Club (Note: groomed cross-country trails provided at the Golf Club). Existing green spaces are generally well maintained; however, many are outdated and require upgrading. Key active transportation opportunities to be considered for existing and future parks, open space and natural areas include, yet are not limited to:

- Extending Ponoka's trail network through existing and future green spaces and natural areas, with opportunities for future connection to the surrounding region.
- Introduce park signs/entrances, directories, community notice boards and identification, additional interpretive signage, and way-finding.
- Enhancing community gathering opportunities by incorporating seating nodes, unique activity areas (games, music, adventure and nature play, community gardens), park shelters and/or facilities (prefabricated/ modular architecture).
- Introducing opportunities for public art and/or community feature installations.
- Enhancing park sustainability, public perception and education, and reduce operations and maintenance through park naturalization program, that includes the integration and interactions between geology, topology, hydrology (LID), soils, plants, animals, the land and human use.
- Assess and identify natural areas and associated greenway corridors as unique features within the Town of Ponoka, incorporating natural conservation approaches to grassland, woodlands, river/tributary systems, and creating a recreational (trails, boardwalks, trail head/node areas, etc.) and educational resource (watchable wildlife, interpretive features, School/ program sites, etc.) for the community and visitors.

The Battle River Valley and its tributaries create the opportunity to establish a "green spine" that connects Ponoka through a continuous green space/trail system and provides year-round, safe, secure, aesthetic, and barrier-free connectivity for all modes of active transportation. All future active transportation development within this zone should reference the Battle River Water Management Plan, which guides proposed development within the river valley with respect to wetland, flood plain, environmental reserve policies and reclamation and restoration compensation measures.

Commercial Zones

Commercial Zone improvements (e.g. edge conditions, character, landscape, Winter (City) Community components, etc.) and dedicated pedestrian barrier-free connectivity to commercial areas/development should be assessed and addressed within the Town Land Use Bylaws to support barrier-free extension of Town developed active transportation to key commercial zone areas.

Industrial Zones

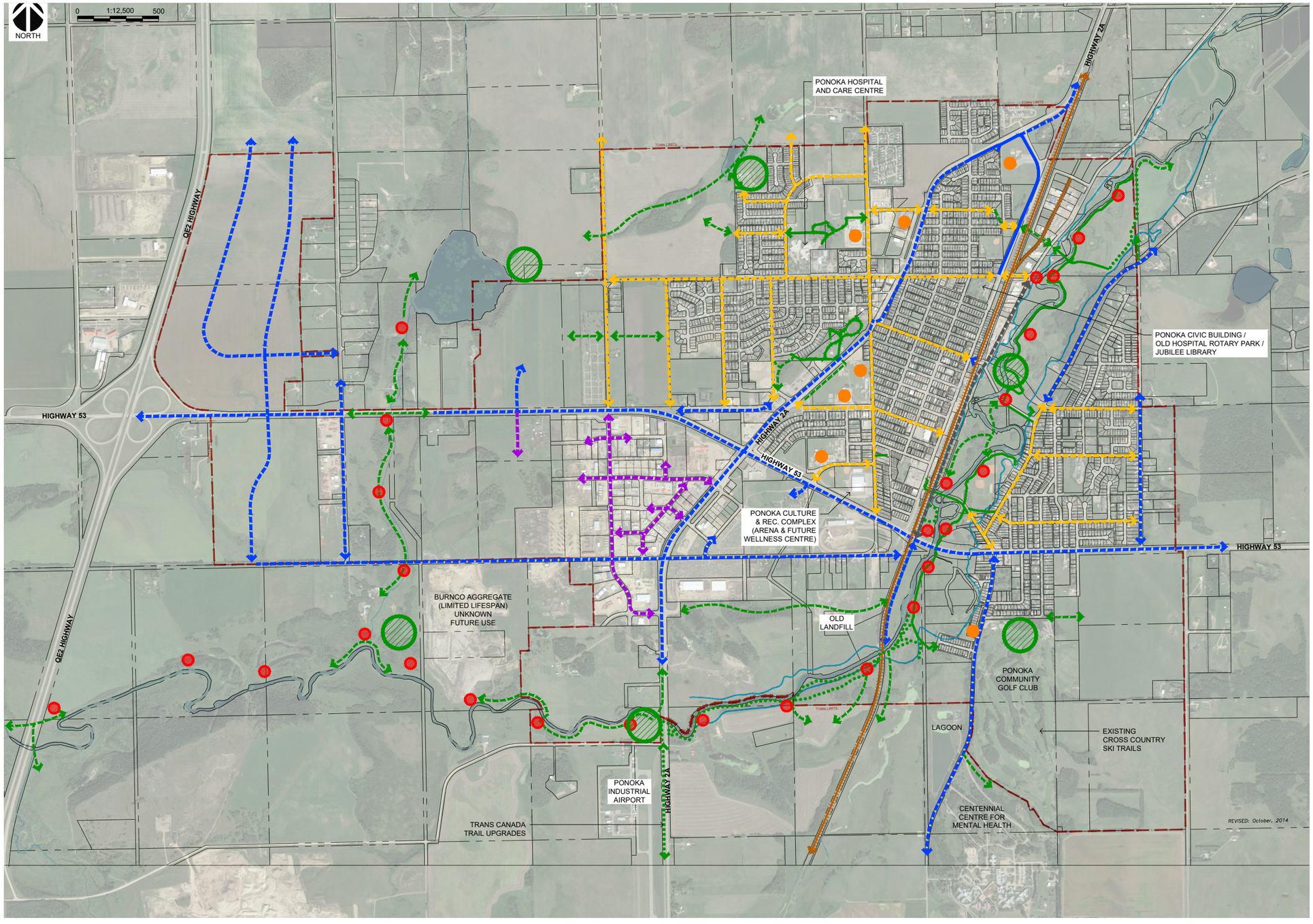
Industrial Zone improvements (e.g., landscape and Winter (City) Community components) and dedicated pedestrian barrier-free connectivity to industrial businesses should be addressed to provide residents alternate safe and secure active transportation routes from home to work, and back.

Downtown Zone

As identified in the recently completed *Downtown Plan*, Complete and Green Street design applications should be introduced in the downtown to enhance the pedestrian realm and promote sustainability, safety and security, dedicated bicycle lane routes and a pedestrian barrier-free connectivity. As shown in **Figure 6-1**, a Riverfront Promenade has been recommended to provide an improved connection between the Downtown and Battle River Valley. The Riverfront Promenade would establish a formal walk along the valley edge and provide opportunities for site furnishings; public art and features; lighting; and interpretive signing and way-finding.

Regional Connector Zones

Future active transportation development should also consider connectivity and extension to surrounding regional communities, natural areas, and areas of interest.



LEGEND — ACTIVE TRANSPORTATION CLASSIFICATION

- ACTIVE TRANSPORTATION HUBS
- ACTIVE TRANSPORTATION NODES
- SCHOOLS
- RIVER PROMENADE
- EXISTING BATTLE RIVER / GREEN SPACE ACTIVE TRANSPORTATION / TRAIL UPGRADES
- EXISTING BATTLE RIVER / GREEN SPACE FORMAL ACTIVE TRANSPORTATION / TRAILS
- PROPOSED BATTLE RIVER / GREEN SPACE FORMAL ACTIVE TRANSPORTATION / TRAILS
- EXISTING ACTIVE TRANSPORTATION / GREENWAY DEVELOPMENT
- PROPOSED ACTIVE TRANSPORTATION / GREENWAY DEVELOPMENT
- PROPOSED ACTIVE TRANSPORTATION / NEIGHBOURHOOD DEVELOPMENT (SAFE JOURNEYS)
- PROPOSED ACTIVE TRANSPORTATION / INDUSTRIAL DEVELOPMENT
- EXISTING RAIL LINE

NOTE: SEVERAL BATTLE RIVER / GREEN SPACE TRAILS MAY EXIST AS INFORMAL (NOT PAVED) LINKS

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY

ACTIVE TRANSPORTATION

Town of Ponoka

FIGURE 6-1: ACTIVE TRANSPORTATION ZONES

Prepared by: McElhanney

Prepared for: Ponoka

6.1.2. Active Transportation Component Development

The following are specific active transportation component development recommendations to improve and promote active transportation use in the Town of Ponoka:

Active Transportation Hubs and Nodes

As part of the active transportation network, it is important to provide a series of hubs and nodes for resident and visitor use. Six (6) active transportation hubs have been proposed within the community to serve as 'Trail Heads' for the Battle River Valley and tributary system. These hubs would include features such as park and ride, amenities/services, directory/way-finding systems; and positioned to connect the Town of Ponoka, Battle River Valley system, and future extension opportunities into the surrounding region. Smaller nodes should be established along existing and future active transportation routes (based on a suggested minimum 500 meter spacing between nodes) and include way-finding and rest stop components (benches, receptacles, and other site amenities and features).

Active Transportation Communications System

Establishing a consistent and well-defined active transportation communications system is important in promoting use, enhancing user experience and supporting community placemaking. Features such as **wayfinding** (indicating routes/commuter times/etc.), **directories** (at key destinations and hubs, complete with wi-fi/on-line applications), and **education/interpretation/incentive ideas** (history, culture, health, wellness, environmental monitoring) are key communication system components that support navigation through the community. They provide direct access to the various zones and key destinations within the Town and to mitigate frustration, apprehension or disorientation. Active transportation and vehicular transportation routes are integrally linked with respect to way-finding and should be positioned to establish a seamless transition; provide a consistency in messaging; and developed with an integrated design approach.

Winter Community

All active transportation routes should be planned and developed with Winter (City) Community guidelines that support and promote year-round use. These guidelines should incorporate **landscape** (aesthetics, microclimate control, separation, safety, security); **amenity components** (seating nodes, hubs, lighting); and **operations and maintenance program enhancements**, especially in assessed and defined high traffic areas.

Sustainability and Low-Impact Development

All transportation routes, including active transportation, should consider sustainability and low impact development applications to preserve the natural aspect of the Town and region; to establish an ecologically-grounded approach that supports a healthier and more walkable and vibrant community; and address a balance in environmental, social and economic sustainability.

Integrated Planning and Development

A key issue with respect to active transportation in many communities is the disconnect between publicly provided routes and the barrier-free extension into private development areas. This disconnect is especially evident in commercial, industrial and downtown areas. Further Land Use Bylaw requirements and guidelines should be applied to new or redeveloped private businesses to provide safe, secure and barrier-free connections to buildings; enhance site/landscape requirements to support these connections; and establish amenities (e.g., secure exterior/interior bicycle parking and facilities (changeroom/shower)) that support active transportation use.

6.2. PUBLIC TRANSIT

Currently within Ponoka, public transit is limited to cab services, school/student bussing and Ponoka Wheelchair Van (a Ponoka Family & Community Support Services (F.C.S.S.) program). While retaining these existing public transit services, other future public transit initiatives could include:

6.2.1. Transit Alternatives

On-Demand Transit Service

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

Town-Initiated Ride-Share Program

There are several online and social media sites that currently provide travelers the opportunity to post ride offered and wanted opportunities. This type of online ride share could be established through a safe/secure Town Ride-Share program. This type of program functions with little or no cost to the Town 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 Town 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 the Town of Ponoka.

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 Ponoka 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 Ponoka, 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.

6.2.2. Future Public Transit Planning

The future integration of public transit in proposed town redevelopment and future new developments 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.

6.3. SAFE JOURNEYS PROGRAM

Safe Journeys is a program established to review traffic safety for the Town's schools, to minimize the risk of collisions and injuries involving students by identifying specific strategies and programs through a holistic 4-E approach (Engineering-Education-Encouragement-Enforcement) and to improve general neighbourhood conditions that provide safe and accessible connections from neighbourhood to neighbourhood and other surrounding local and regional destinations.

The **five** main transportation modes within the program are:

- Vehicles
- School Buses
- Pedestrian
- Bicycles
- Public Transit

Some strategies to minimize potential dangerous situations for are:

- On street and dedicated parking for vehicle traffic
- Pick-up/Drop-off areas with proper design and enforced compliance
- Speed limit reduction measures and enforcement
- Intersections and crosswalk safety improvements (design, accessibility/inclusivity, signing, markers/ markings/ beacons, integrated routing and defined crossing locations, surface materials, lighting, automated pedestrian detection, speed detection signing, and other consistent standards).
- Routing and route design guidelines (promoting safe and accessible modes of active transportation).
- Integrative Planning and Development of Land Uses (vehicular and pedestrian access/egress, parking, building siting, sight lines, etc.).
- Education programs
- Promoting busing and public transit
- Operations and maintenance approach/policy
- Visual Framework and Design Guidelines

7.0 OBJECTIVE 4: TRAFFIC OPERATIONS

The fourth objective of this Transportation Plan is to present strategies to improve traffic operations. The strategy will take into consideration both Town consultation and collected traffic data to address the main areas of concern and ensure traffic operations are functional in all areas of Town.

7.1. CURRENT AND FUTURE NETWORK PERFORMANCE

Level of Service (LOS) is a performance metric used to assess operating conditions of intersections and their respective approaches and is a function of the average vehicle control delay (seconds per vehicle). In general, LOS 'A' represents minimal delays for users and LOS 'F' indicates significant delays and movements are heavily constrained.

As outlined in **Section 2.0**, key intersections in Ponoka are currently operating under good conditions (LOS D or better) during the peak hours with only a few intersections approaching near failing conditions (LOS D and LOS E) during the afternoon peak hour. By 2028, the level of service at several intersections will deteriorate significantly and operate at or near failing conditions (LOS E and LOS F) during the peak hours. Recommendations through operational and geometric improvements have been identified to address delays at these intersections. For some intersections, failing approaches did not warrant improvements due to the relatively low volume of traffic and the relatively high cost of improvements needed. Other intersections may experience LOS E on one or more of its approaches, however the expected delay is minimal while the queue length is considered still manageable.

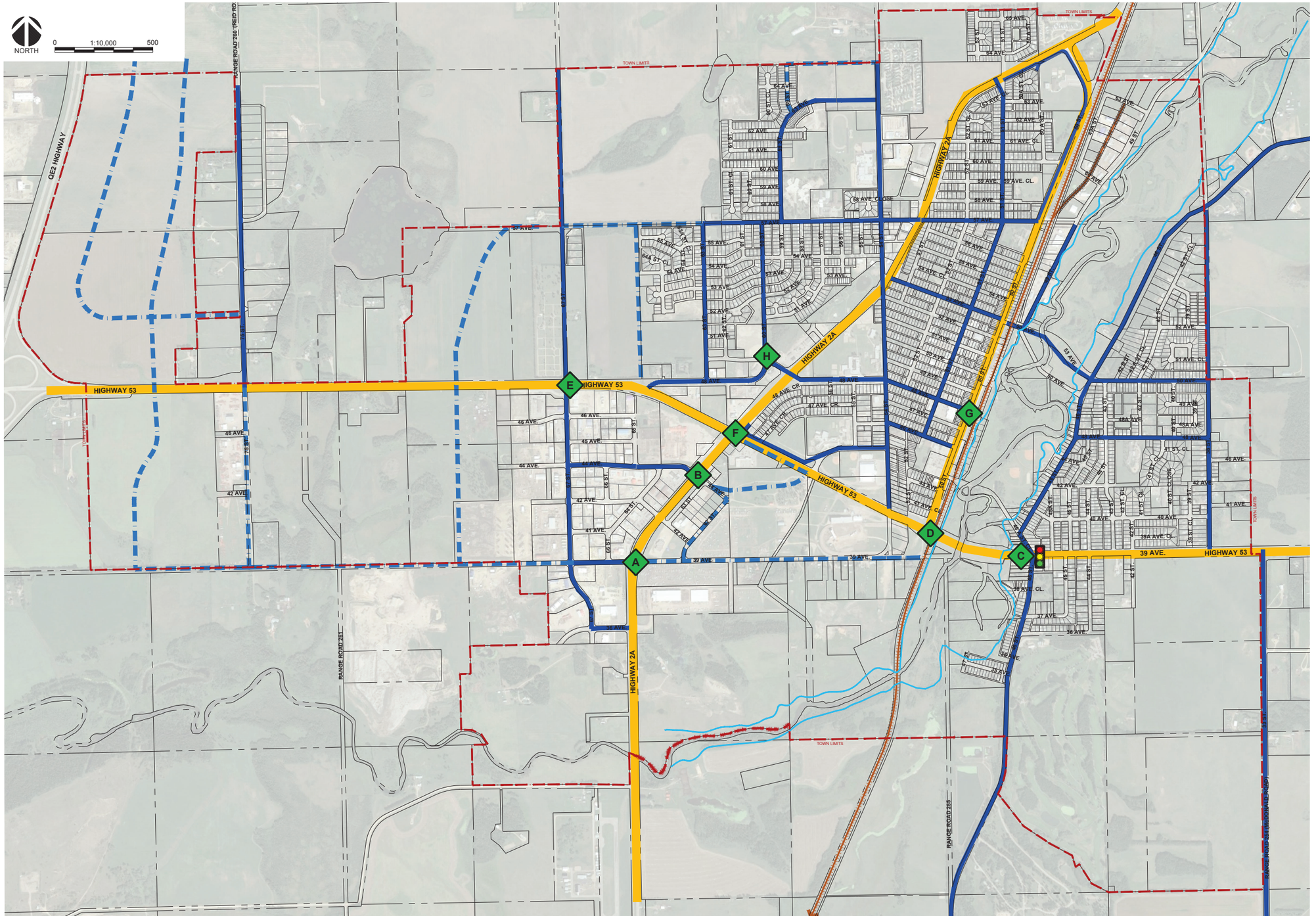
Recommendations to improve intersection operating conditions include the signalization of Highway 53 & 50 Street and Highway 53 & 46A Street Close. Planned geometric improvements to several highway intersections were noted, which may require further consultation with Alberta Transportation. The recommendations are further described in the next section.

7.2. PROPOSED IMPROVEMENTS

Several roadway improvements have been identified based on the traffic analysis results to address future operational constraints on the Town's roadway network. These include geometric and operational improvement at key locations across Ponoka (see **Figure 7-1**), including:

- Highway 53 & 50 Street
- Highway 53 & 46A Street
- Highway 2A & Highway 53
- 50 Street & 48 Avenue
- 60 Street & 48 Avenue (at 50 Avenue)
- Highway 53 & 67 Street
- Highway 2A & 44 Avenue/ Highway 2A & 39 Avenue

Detailed concept drawings of the proposed improvements are provided in **APPENDIX D.**



LEGEND - ROADS

- COLLECTOR ROAD
- FUTURE COLLECTOR ROAD
- HIGHWAY / ARTERIAL ROAD

LEGEND - IMPROVEMENTS

- GEOMETRIC IMPROVEMENT
- SIGNALIZATION

- A — HIGHWAY 2A & 39 AVENUE
- B — HIGHWAY 2A & 44 AVENUE
- C — HIGHWAY 53 & 46A STREET
- D — HIGHWAY 53 & 50 STREET
- E — HIGHWAY 53 & 67 STREET
- F — HIGHWAY 53 & HIGHWAY 2A
- G — 50 STREET & 48 AVENUE
- H — 60 STREET & 50 AVENUE

LEGEND - GENERAL

- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY
- EXISTING RAIL LINE

TRAFFIC IMPROVEMENTS

Town of Ponoka

FIGURE 7-1: LOCATIONS FOR ROADWAY IMPROVEMENTS

Prepared by: McElhanney

Prepared for: Ponoka

1. Highway 53 & 50 Street

This intersection is currently operating at LOS C in the morning peak and LOS E in the afternoon peak. Future analysis shows the intersection operating at LOS F in the morning and afternoon peak. Due to significant traffic volumes, this intersection is considered a high priority.

Short Term Improvement

To address the near failing level of service in the afternoon peak today, it is recommended that channelized right turn lanes are added on all legs both to address safety concerns and improve flow. **Figure 7-2** illustrates the proposed improvements.

FIGURE 7-2: HIGHWAY 53 & 50 STREET PROPOSED SHORT TERM IMPROVEMENTS

Long Term Improvement

Signalization is recommended to address the failing level of service in 2028. **Table 7-1** compares the performance of the intersection before and after signalization in 2028. The overall intersection level of service is improved from a LOS F to LOS B in the afternoon peak. The level of service in the southbound direction is also improved significantly. It is recommended that signalization is actively analyzed, in conjunction with Alberta Transportation, over the coming years to choose an implementation date.

TABLE 7-1: COMPARISON OF LEVEL OF SERVICE BEFORE AND AFTER SIGNALIZATION – HIGHWAY 53 & 50 STREET

Scenario	Level of Service After Signalization (AM / PM)				
	Overall Intersection	Eastbound	Westbound	Northbound	Southbound
2028 Without Signal	F / F	A / A	A / A	N/A	F / F
2028 With Signal	C / B	C / C	B / B	N/A	B / B

2. Highway 53 & 46A Street

This intersection is currently operating at LOS A in the morning peak and LOS E in the afternoon peak. Future analysis shows the intersection operating at LOS D in the morning peak and LOS F in the afternoon peak. Due to significant traffic volumes, this intersection is considered a high priority.

Short Term Improvements

The geometry of this intersection is to be addressed in the near future. **Figure 7-3** illustrates a possible realignment of the intersection. Using this design, both safety and operational concerns will be improved. The realignment will help to improve sightlines and pedestrian flow, while the slight widening of the road and the addition of channelized turn lanes will improve traffic flow.

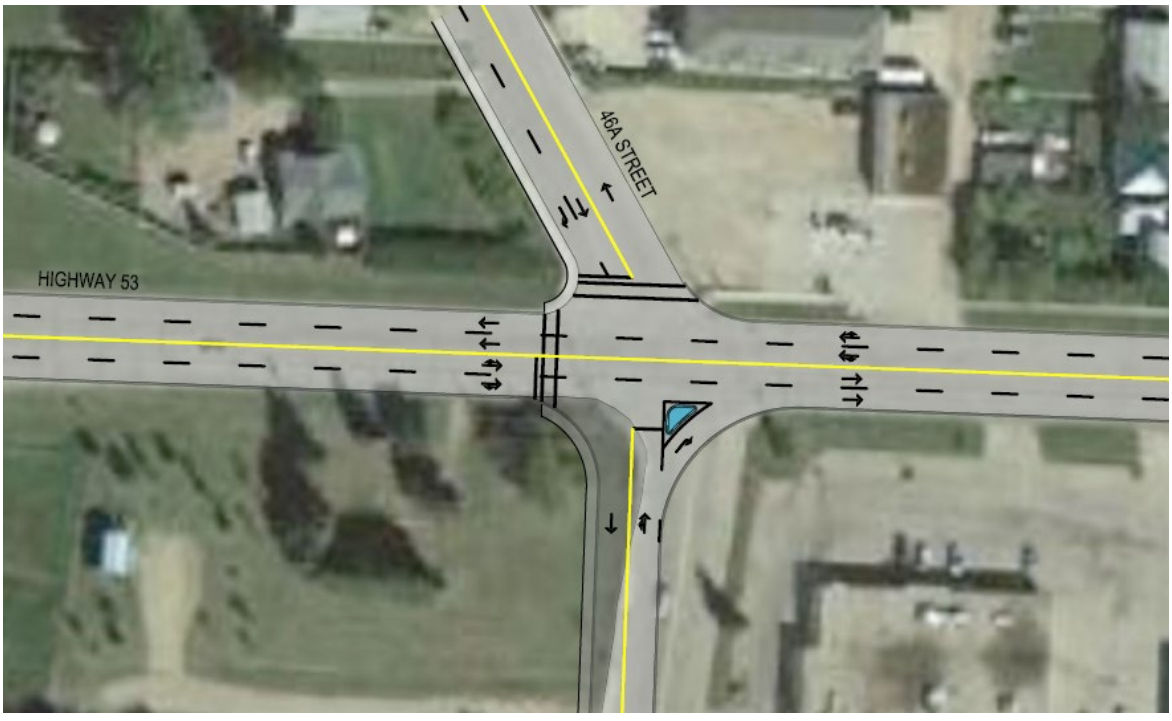


FIGURE 7-3: HIGHWAY 53 & 46A STREET PROPOSED SHORT TERM IMPROVEMENTS

Long Term Improvements

It is recommended that signalization be used in the long term to address the future traffic volume concerns. **Table 7-2** compares the performance of the intersection before and after signalization in 2028. The implementation of a signal significantly improves the overall intersection level of service and the northbound movement in the afternoon peak. Similar to the 50th Street intersection, further analysis should be coordinated with AT to ensure compliance with Alberta Highway regulations. In addition, it should be noted that the below analysis was completed using the current orientation of the intersection and if realignment is completed, it may affect future traffic flow.

TABLE 7-2: COMPARISON OF LEVEL OF SERVICE BEFORE AND AFTER SIGNALIZATION – HIGHWAY 53 & 46A STREET CLOSE

Scenario	Level of Service After Signalization (AM / PM)				
	Overall Intersection	Eastbound	Westbound	Northbound	Southbound
2028 Without Signal	D / F	A / A	A / A	F / F	E / C
2028 With Signal	B / B	B / C	B / B	B / C	A / A

3. Highway 2A & Highway 53

This intersection is currently operating at LOS A during the peak hours. Future analysis shows a LOS C in the morning peak and LOS A in the afternoon peak. While the intersection LOS is considered acceptable in the future, this intersection experiences high traffic volumes and opportunities for operational and safety improvements have been identified.

Two different concepts for improvements to this intersection:

Concept 1 - Channelization

As illustrated in **Figure 7-4**, this concept plan adds four "pork chop" islands on each corner of the intersection, that channelize all right turn lanes. This will ensure a safer turning movement for all legs of the intersection. In addition, the intersection is slightly expanded to allow separated lanes for every movement (i.e. right turn lane, thru lane, left turn lane).

FIGURE 7-4: HIGHWAY 2A & 53 STREET PROPOSED IMPROVEMENTS – CHANNELIZATION

Concept 2 - Roundabout

Concept 2 includes the use of a modern roundabout and is illustrated in **Figure 7-5**. The roundabout will eliminate the current signalization, while maintaining the level of service. The roundabout will allow for all sizes of vehicle to pass while ensuring speed is still reduced. The roundabout is shown as a concept for the purpose of this TMP, however future planning work with Alberta Transportation would be required to determine the most appropriate future intersection treatment.

FIGURE 7-5: HIGHWAY 2A & 53 STREET PROPOSED IMPROVEMENTS – ROUNDABOUT

4. 50 Street & 48 Avenue

This intersection is currently operating at LOS A during the peak hour and future analysis shows a LOS D in the afternoon peak. While this intersection experiences moderate traffic volumes in the future, there are opportunities to provide operational and safety improvements.

A right-turn storage lane for the eastbound approach of 50 Street & 48 Avenue should be installed. The existing shared left-thru-right lane will then be repurposed as a left-turn lane. Ideally, the storage lane should have a length of 20m or longer to accommodate right-turning vehicles. The addition of the right-turn storage lane will mitigate delays and queues experienced by the eastbound approach. These additions are of moderate priority.

5. 60 Street & 48 Avenue (at 50 Avenue)

This intersection is currently operating at LOS A during the peak hour and will operate at LOS D in the morning peak and LOS C in the afternoon peak by 2028. While this intersection experiences moderate traffic volumes in the future, there are opportunities to provide operational and safety improvements.

There is an opportunity at this intersection to install a modern roundabout. With the planned development of the west side of the Town, it should be noted that this intersection will experience increase in traffic volume. Ongoing observation and analysis should be completed to ensure this intersection continues to operate at an acceptable LOS. **Figure 7-6** highlights the concept of a possible orientation of a modern roundabout. In addition to addressing LOS concerns, a roundabout will also address safety concerns by controlling the speed along this corridor.

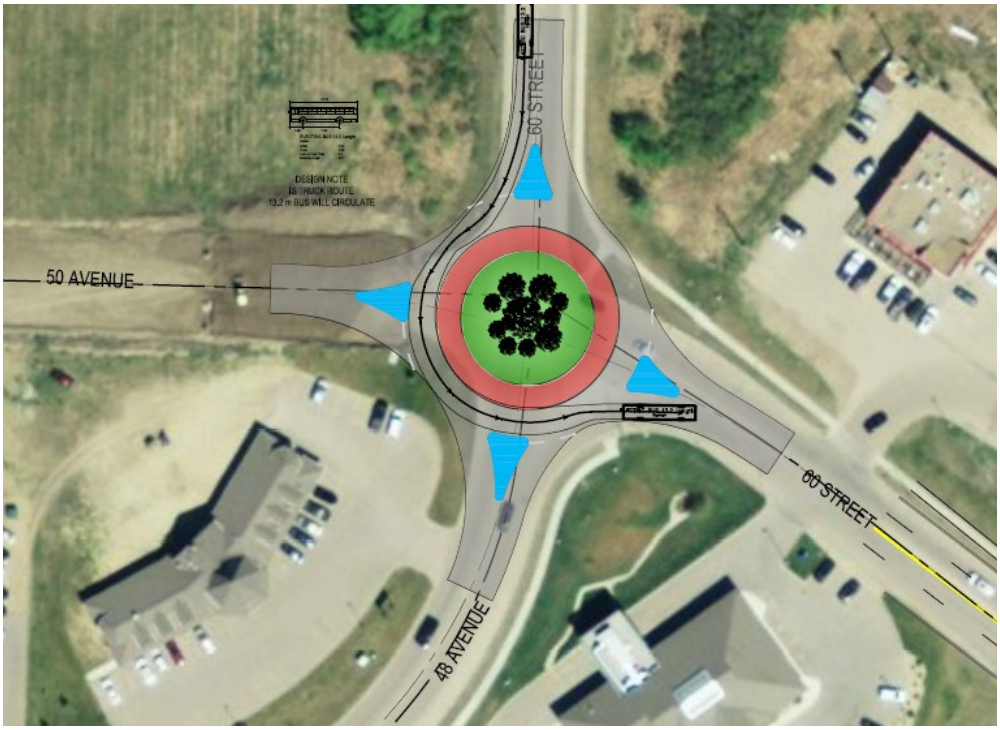


FIGURE 7-6: 60 STREET & 48 AVENUE PROPOSED IMPROVEMENTS – ROUNDABOUT

6. Highway 53 & 67 Street

This intersection is currently operating at LOS A during the peak hours. Future analysis (2028) indicates a LOS B in the morning peak and LOS C in the afternoon peak. This intersection experiences relatively high traffic volumes and opportunities to improve future intersection operations and safety have been identified.

Figure 7-7 illustrates the conceptual improvement for this intersection. Although the improvements outlined are not large in scale, realignment of lanes and the addition of separated turn lanes will improve safety and traffic flow. It should also be noted that this intersection is planned to be improved under the *West Ponoka Area Structure Plan.*

FIGURE 7-7: HIGHWAY 53 & 67 STREET PROPOSED IMPROVEMENTS

7. Highway 2A & 44 Avenue / Highway 2A & 39 Avenue

These intersections are currently operating at LOS A during the peak hours and will continue to operate at a LOS A in the future. Based on current or future LOS analysis, these intersections do not warrant improvements, however, been identified for future improvements under the *West Ponoka Area Structure Plan*. Should safety concerns cause the intersection to become unsafe or significant growth result in the failure of this intersection, improvements can be made. Some suggested improvements should mostly consist of geometric modifications. Should any concerns arise, further consultation with Alberta Transportation should be made.

7.3. NETWORK CONNECTIONS AND LINKS

7.3.1. Current Connections

Highway 53 & Highway 2A

The provincial highways are important for traffic operations in the Town. It is important to actively monitor the accesses along the highways to ensure they are safe and functional. These highways are identified as arterial within town limits ensuring that traffic flow is the most important consideration when making decisions regarding these routes.

53 Avenue

53 Avenue is currently the main connection between downtown and Highway 2A. This TMP identifies 53 Avenue as an arterial roadway. As growth occurs in the Town, traffic volume on this road will increase. It is recommended that collector traffic to downtown be limited on 53 Avenue and encouraged to take 50 Street via the Main Highways.

48 Avenue

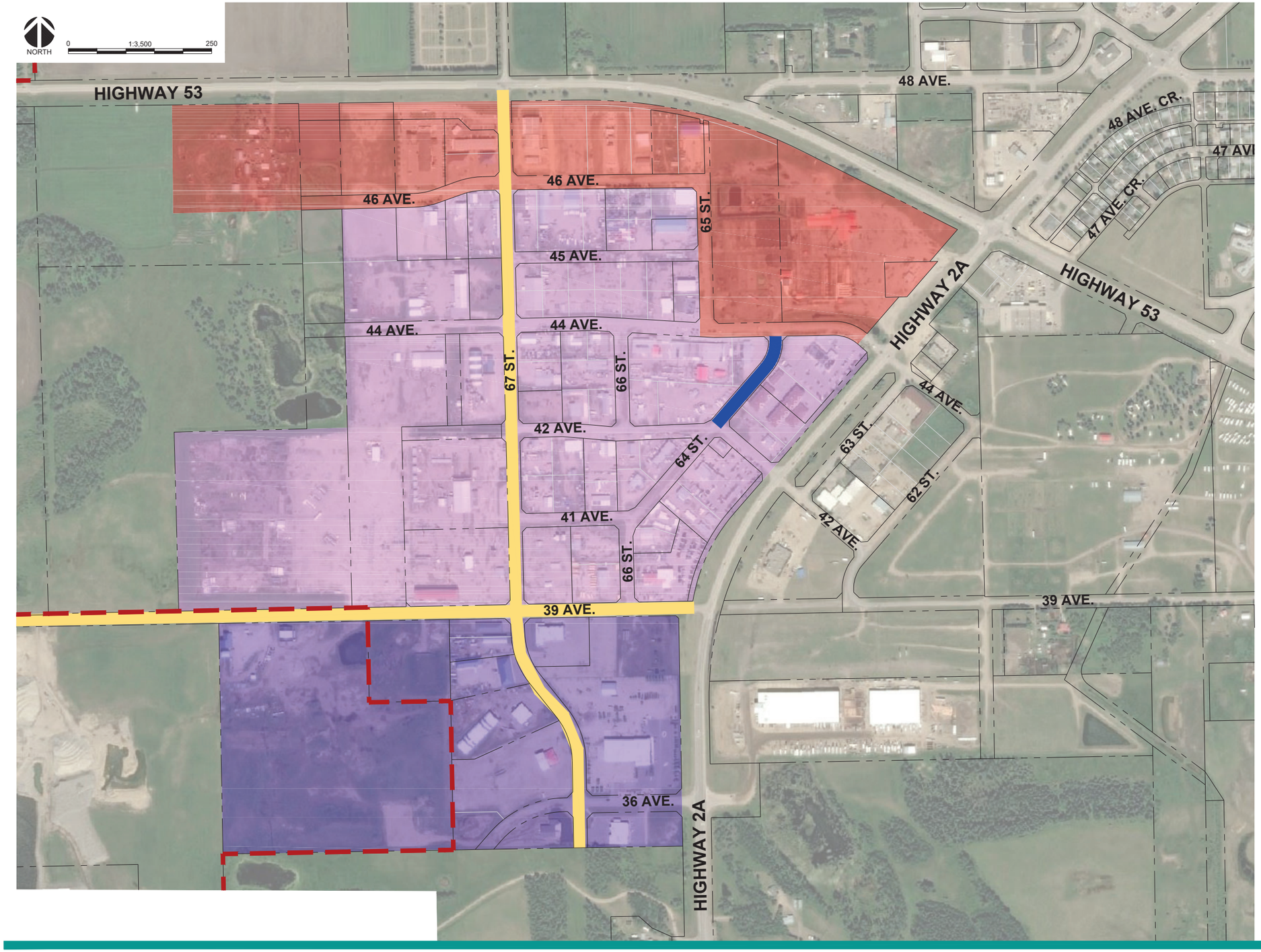
48 Avenue is currently a main connection between downtown and Highway 2A. This TMP identifies 48 Avenue as a collector and not an arterial. As a result, it is encouraged that this corridor maintain a balance between active modes of transportation, resident access and traffic flow.

67 Street & 39 Avenue (Southwest Industrial Area)

The southwest industrial has been growing in size, and with that an increase in traffic. 67 Street from Highway 53 to 39 Avenue and 39 Avenue from 67 Street to Highway 2A has been identified as arterial roadways. It is imperative that these roadways are maintained and upgraded as necessary to ensure all traffic can flow well through this industrial hot bed. **Figure 7-8** outlines the important aspects of the South Industrial Area.

7.3.2. Future Connections

While no new arterials have been identified for future developments, multiple new collectors are identified in **Figure 7-9**. Based on the growth outlined in the *West Ponoka Area Structure Plan*, there will be several new collectors on the west end of the Town of Ponoka Limits to connect the proposed new West Area to the centre of Town, as well as continued growth road expansion in the SW Industrial area and residential areas.



LEGEND

HIGHWAY 53 COMMERCIAL ZONE
- URBAN STANDARD ROADWAYS (WITH DEVELOPMENT);
- UPGRADED LANDSCAPING AND PAVEMENT;
- IMPROVED WITH COMMERCIAL DEVELOPMENT;
- PARKING ON ROADWAYS, PAVED SITE DEVELOPMENT; AND
- STREETLIGHTING (UPGRADES).

INDUSTRIAL ZONE
- RURAL STANDARD ROADWAYS, BASIC PAVEMENT / GRAVEL;
- DITCH STORMWATER CONVEYANCE;
- LARGE PARCEL AND HEAVY INDUSTRIAL USE;
- MINIMAL LANDSCAPING;
- MINIMAL ON-STREET PARKING; AND
- BASIC STREETLIGHTING.

INDUSTRIAL ZONE 2
- URBAN STANDARD ROADWAYS;
- UPGRADED LANDSCAPING AND PAVEMENT;
- UPGRADED STREETLIGHTING;
- ON-STREET PARKING; AND
- LIGHT INDUSTRIAL, COMMERCIAL OPERATORS.

ARTERIAL ROADS
- URBAN STANDARD; AND
- UPGRADED PAVEMENT.

2019 - 2021 PROPOSED RENEWAL

PROPERTY LINES

TOWN LIMITS

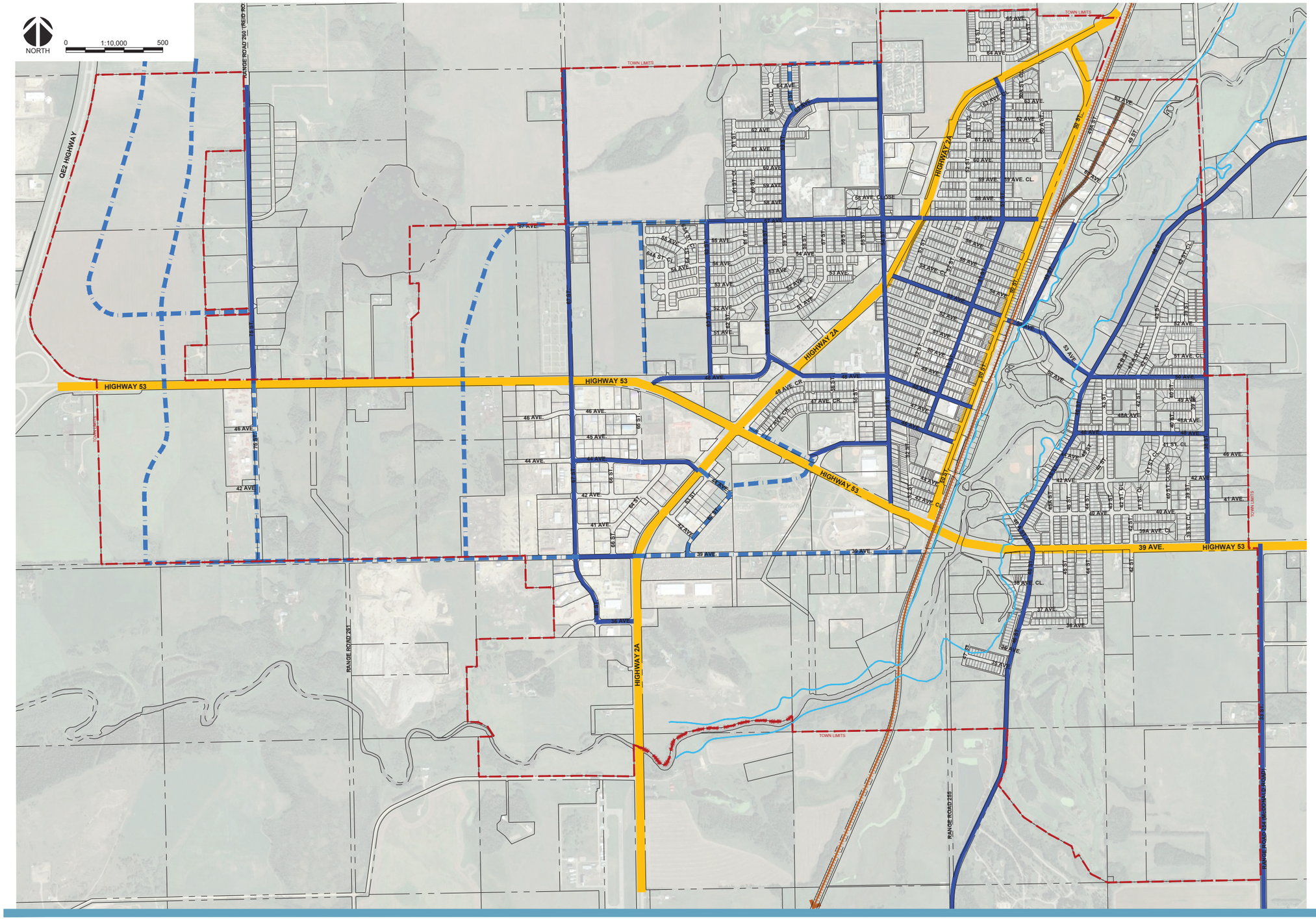
SOUTHWEST INDUSTRIAL PLAN

Town of Ponoka

FIGURE 7-8: SOUTHWEST INDUSTRIAL AREA PLAN

Prepared by: McElhanney

Prepared for: Ponoka



FUTURE ROAD NETWORK

Town of Ponoka

FIGURE 7-9: FUTURE ROAD NETWORK

Prepared by: McElhanney

Prepared for: Ponoka

7.4. OTHER TRAFFIC IMPROVEMENTS

7.4.1. Roadway Maintenance & Renewal

Maintenance of the existing transportation infrastructure remains an important aspect of the transportation network, and re-investment and repairing infrastructure does complete with capital projects for funding. For transportation infrastructure, a best practice is to utilize annual condition reports to prioritize rehabilitation, of which Ponoka does have (*2012 Road Assessment Report*) and should continue to 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 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 Ponoka to respond to growth pressures and capacity issues. With that perspective, a larger portion of available funding should be allocated to regular annual maintenance programs based on the need. Based on the recommendations from the 2012 DCL Siemens Road Condition Report, $8M over ten years (or $800,000 annually) would be required to maintain the roadways at the 2012 base condition. While Ponoka has not met those funding targets, it is noted that regular funding has been provided to an annual paving program and that this should continue for rehabilitation 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 inquires and to be less reactive when managing citizen expectations.

7.4.2. 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.

7.4.3. 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 *Ponoka's Urban Framework Master Plan*.

7.5. 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.

8.0 IMPLEMENTATION STRATEGY

This Transportation Master Plan have identified potential solutions and concepts 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 for implementation as budgets and funding provides. It is also noted that capital projects and operating plans (including maintenance and renewals) are often conflicting as priorities, and this implementation is not planned to determine a priority between the two, but rather provide a relative comparison of capital projects for consideration. It is also not a comprehensive list of capital projects for Ponoka, rather a collection of projects that have been developed in response to the TMP objectives (see **Figure 8-1**).

8.1. PRIORITIZATION

An important part of managing the development of a town is the active prioritization of maintenance and improvements. Many factors affect the priority of a project, and criteria have been developed to reflect the objectives of the TMP and how the proposed improvement responds to the TMP criteria. **Table 8-1** summarizes the evaluation using a scoring system to identify the priority level of each project 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 incorporates how the improvement fits into the context of Ponoka, which includes a perceived value citizens would place on the improvement and haw the improvement would be publicly received.

TABLE 8-1: PROPOSED IMPROVEMENTS PRIORITY RANKING

Project	Timelines	Safety	Operational	Costing	Active Modes	Community Amenity	Total
53 Ave & 50 St -Roundabout	2	3	1	1	1	3	**11**
53 Ave & 51 St – Landscape and signage improvements	3	3	1	3	1	1	**12**
Hwy 2A & 53 Ave – 4 Way Stop	2	2	2	2	1	1	**10**
48 Ave & Hwy 2A – Intersection Improvements	1	2	1	2	2	1	**9**
48 Ave & 51 St – Access Management/ Parking improvements	2	3	1	2	1	1	**10**
Hwy 53 & Hwy 2A - Additional Lanes/Channelization	2	2	3	1	1	2	**11**
Hwy 53 & 46A St - Realignment	3	3	3	1	1	2	**13**
Hwy 53 & 50 St - Channelization	1	2	1	3	1	1	**9**
Hwy 53 & 54 St - Channelization	1	2	1	3	1	1	**9**
Hwy 53 & 67 St - Lane channelization	1	2	2	3	1	1	**10**
48 Ave – 54 St to Hwy 2A - Traffic Calming and MUT	3	3	1	2	3	2	**14**
60 St Corridor – Traffic Calming	3	2	1	3	2	1	**12**
50 St Corridor – Traffic Calming	1	2	1	2	2	2	**10**
Hwy 53 - Access Management	1	3	2	1	1	1	**9**
57 Ave - Access Management (Seniors Center)	3	1	2	2	1	1	**10**
60 St & 48/50 Ave - Roundabout	1	2	2	1	1	3	**10**
Battle River Valley Trail System – Missing Links	3	1	1	2	3	3	**13**
Battle River Valley Trail System – Full Build Out	2	1	1	1	3	3	**11**
40 km/h Speed Limit	3	2	1	3	1	3	**13**

10 or less: Low Priority 11 – 12: Medium Priority 13 or more: High Priority

8.2. COSTING

High-level cost estimates have been developed for the proposed improvements, which are summarized below. It is noted that the costs are based on current dollars (2019$) and basic concepts and are used for budgetary purposes only.

TABLE 8-2: PROPOSED IMPROVEMENTS HIGH-LEVEL COST ESTIMATES (2019$)

Project	Cost Rating	Total Construction Cost
53 Ave & 50 St	1	$ 810,000
53 Ave & 51 St	3	$ 10,000
Hwy 2A & 53 Ave	2	$ 182,000
48 Ave & Hwy 2A	2	$ 200,000
48 Ave & 51 St	2	$ 117,000
Hwy 53 & Hwy 2A Option 1	1	$ 1,027,000
Hwy 53 & Hwy 2A Option 2	1	$ 1,980,000
Hwy 53 & 46A St	1	$ 1,187,100
Hwy 53 & 50 St	3	$ 27,000
Hwy 53 & 54 St	3	$ 10,000
Hwy 53 & 67 St	3	$ 101,000
48 Ave Corridor	2	$ 372,000
60 St Corridor	3	$ 69,000
50 St Corridor	2	$ 254,000
Hwy 53 Access Management	1	$ 7,500,000
57 Ave Access Management	2	$ 283,000
60 St & 50 Ave	1	$ 691,000
Battle River Valley Trail System – Missing Links	2	$ 248,000
Battle River Valley Trail System – Full Build Out	1	$ 1,860,000
40 km/h Speed Limit	3	$ 35,000

8.3. SHORT-TERM IMPROVEMENTS

Using the prioritization table in **Section 8.1**, projects that need to be addressed in the short-term (1-3 Years) were identified. The **four** projects of highest priority based on the evaluation are:

- Highway 53 & 46A St – Intersection realignment (and ultimate signalization)
- 48 Avenue Corridor – Safety improvements, including school drop off and multi-use trail
- Battle River Valley Trail System – including completion of missing links
- 40 km/h Speed Limit – Reducing speed limit throughout residential areas

Based on cost estimates, this would be a 3-year program of **$1.8M**.

8.4. MODERATE-TERM & LONG-TERM IMPROVEMENTS

Moderate-term projects should be addressed in 3-10 years while long-term improvements should be considered on an as-required or funding is available in the future and should be re-evaluated on an on-going basis to ensure they are addressed appropriately. These projects will provide improvements to the Town but are not of immediate need.

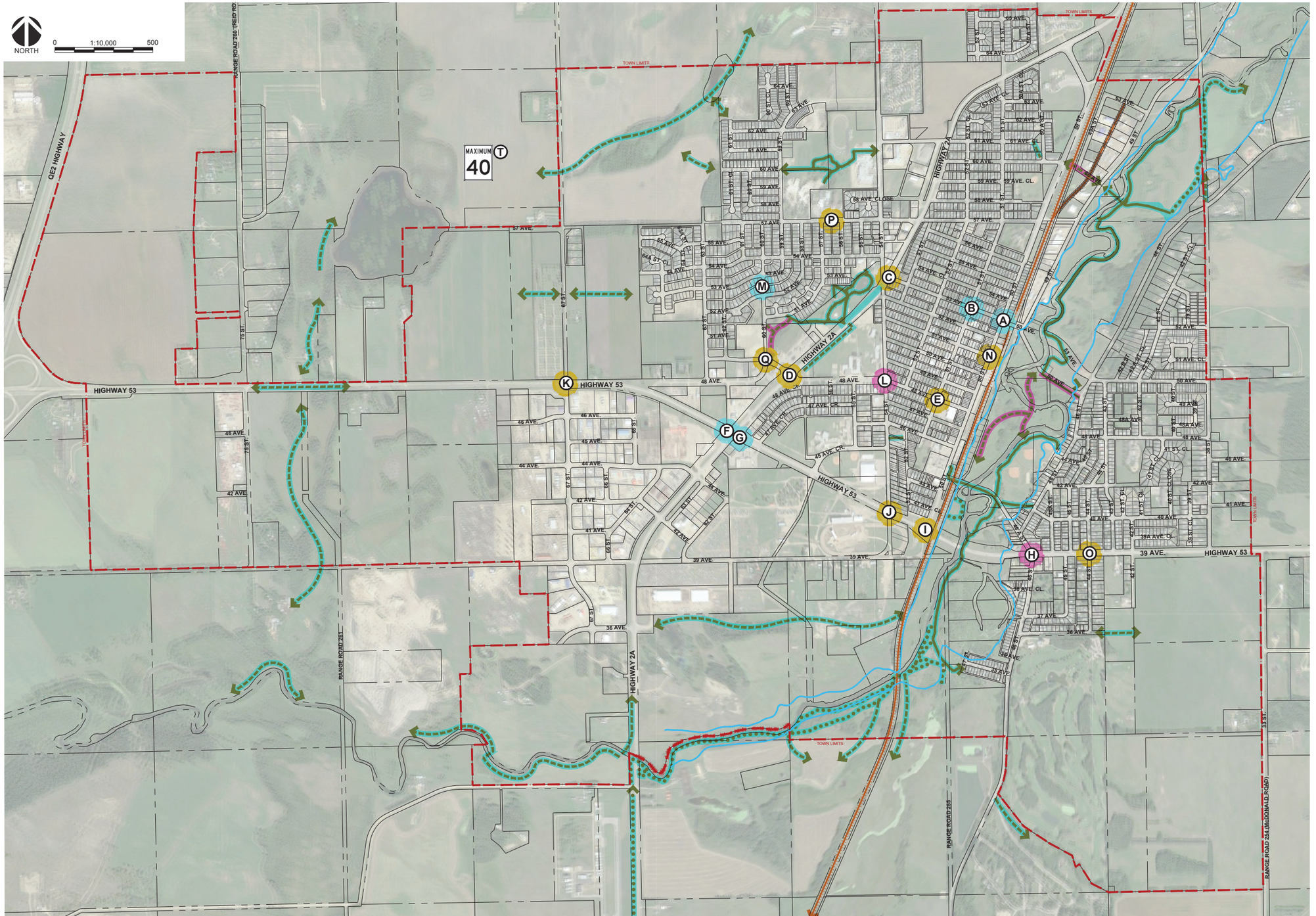
Medium priority projects can be identified in the prioritization table as projects with a score of 11-12, which include:

- 53 Avenue & 50 Street – Safety improvements, intersection improvements
- 53 Avenue & 51 Street – Landscape management, signage improvements
- Highway 53 and Highway 2A – Intersection channelization and additional turning lane
- 60 Street Corridor – Safety improvements, traffic calming measures, active modes improvements
- Battle River Valley Trail System – Full build out including genera improvements and significant increase in trail system town-wide.

It is further noted that locations on Highway 53 and Highway 2A will require support and approval from Alberta Transportation for implementation, as the highways remain within the jurisdiction of Alberta Transportation. There may be partnership opportunities for cost sharing with Alberta Transportation for highway improvements, however that would be determined by Alberta Transportation based on their available funding and priority for improvements.

Based on cost estimates, this would be a basic program of **$3.7M**.

Low priority projects make up the remainder of the identified areas of concern. The prioritization criteria for the low priority improvement projects should undergo ongoing evaluation.



LEGEND

- LOW PRIORITY
- MEDIUM PRIORITY
- HIGH PRIORITY
- FORMAL EXISTING TRAIL
- INFORMAL EXISTING TRAIL
- FUTURE TRAIL
- PROPERTY LINES
- TOWN LIMITS
- FLOODWAY BOUNDARY
- WATERBODY
- EXISTING RAIL LINE

PROJECT SUMMARY

	PROJECT	PRIORITY	TYPE OF IMPROVEMENT
A	53 AVE & 50 ST		$$$ ◆
B	53 AVE & 51 ST		$ ◆
C	HWY 2A & 53 AVE		$$ ◆
D	48 AVE & HWY 2A		$$ ◆
E	48 AVE & 51 ST		$$ ◆
F	HWY 53 & HWY 2A OPTION 1		$$$ ◆◆
G	HWY 53 & HWY 2A OPTION 2		$$$ ◆◆
H	HWY 53 & 46A ST		$$$ ◆◆
I	HWY 53 & 50 ST		$ ◆
J	HWY 53 & 54 ST		$ ◆
K	HWY 53 & 67 ST		$ ◆
L	48 AVE CORRIDOR		$$ ◆
M	60 ST CORRIDOR		$ ◆
N	50 ST CORRIDOR		$$ ◆
O	HWY 53 ACCESS MANAGEMENT		$$$ ◆
P	57 AVE ACCESS MANAGEMENT		$$ ◆
Q	60 ST & 50 AVE		$$$ ◆
R	BATTLE RIVER VALLEY TRAIL SYSTEM - MISSING LINKS		$$
S	BATTLE RIVER VALLEY TRAIL SYSTEM - FULL BUILD OUT		$$$
T	40 KM/HR SPEED LIMIT		$ ◆

IMPLEMENTATION

Town of Ponoka

FIGURE 8-1: IMPLEMENTATION STRATEGY

Prepared by: McElhanney

Prepared for: Ponoka

APPENDIX A

Traffic Volumes & Analysis Results

APPENDIX B

Stakeholder Engagement

APPENDIX C

Road Safety Summary & Concept Drawings

APPENDIX D

Proposed Traffic Improvements Concept Drawings