ATTACHMENT 1

Transportation 2015 Master Plan

City of St. Albert
Cultivate Life

ACKNOWLEDGEMENTS

This Transportation Master Plan was developed with support from various staff within St. Albert, supporting agencies and a diverse consultant team, who are recognized here.

City of St. Albert

Tracy Allen
Sudip Barua
Darrel Bliss
Margo Brennis
Patrick Draper
Jim Dinwoodie
Adryan Slaght
Bernd Gretzinger
Leanne MacMillan
Kelly McConnell
Bob McDonald
Sean McRitchie
Mike Mellross
Lenore Mitchell
Meghan Myers
Emilee Neilson
Marci Ng
Gilles Prefontaine
Travis Peter
Kalen Pilkington
Kate Polkovsky
Dean Schick
Eduardo Sosa
Will Styblek

Consultant Team

Associated Engineering
Kent Eklund
Monique Kealey
Keenan Kitasaka
Bryan Petzold
Kathy Porter
Dean Reidt
Carolyn Sherstone
Stephanie Tilk

MMM Group Ltd.
Patrick Deoux
Mausam Duggal
Dave McLaughlin
Mark Merlo
Sean Rathwell
Shree Shinde
Selby Thannikary
Karl Tracksdorf

David Kriger, David Kriger Consultants Inc.

MetroQuest

RA Malatest & Associates Ltd.

Additional Stakeholders

Leah Arnason, Alberta Parks
David Becker, Sturgeon County
Niki Borden, RCMP
Carolyn Cameron, RCMP
Conor Coney, Sturgeon County
Tanya Doran, EAC
Paul Fujishige, Transitions
Hawaida Hassan, City of Edmonton
Bob Lane, EAC
Robert Lema, St. Albert and District Historical Society
Bill Marsh, EAC
Judy Mathon, Heritage Lakes Community Association
Lynda Moffat, St. Albert and District Chamber of Commerce
Debbie Oyarzun, Town of Morinville
Heather Richards, Transitions
Dragan Sikanja, Alberta Health Services

Supporting Documents

Cultivating our Future – St. Albert's Community Vision, 2015
http://stalbert.ca/uploads/PDF-reports/2015-June-22-Community_Sustainability_Frameworkweb.pdf

Safe Journeys to School, 2015
http://stalbert.ca/uploads/PDF-reports/Safe_Journeys_to_School_-_Report_without_Appendix.pdf

St. Albert LRT Planning Study (Phases 1 and 2), 2015
http://stalbert.ca/global/images/uploads/Attach_1-2014_11_05_St._Albert_LRT_Planning_-_Corridor_Selection_Reportweb_1.pdf
http://stalbert.ca/global/images/uploads/Attach_1-2014_11_05_St._Albert_LRT_Planning_-_Corridor_Selection_Reportweb_2.pdf

St. Albert 2014 Census
http://stalbert.ca/uploads/2014/census/2014-Census-StAlbert.pdf

St. Albert Environmental Master Plan, 2014
http://stalbert.ca/global/images/uploads/EnvironmentalMasterPlan_2014.pdf

St. Albert Social Master Plan, 2013
http://stalbert.ca/global/images/uploads/SocialMasterPlan_2013.pdf

Transit Long Term Department Plan, 2013 to 2027
http://stalbert.ca/uploads/PDF-reports/Long_Term_Dept_Plan_APPROVED.pdf

Capital Region Board Integrated Regional Transportation Master Plan, 2011
http://capitalregionboard.ab.ca/-/reports/irtmp-approvedsept8-2011.pdf

Downtown Area Redevelopment Plan, 2010
http://stalbert.ca/uploads/PDF-reports/Downtown-Area-Redevelopment-Plan.pdf

St. Albert Transportation Master Plan, 2009
http://stalbert.ca/uploads/PDF-reports/ENG_TransportationMasterPlan-2009.pdf

St. Albert Municipal Development Plan, 2007
http://stalbert.ca/uploads/PDF-reports/Complete-MDP.pdf

St. Albert Economic Development Master Plan, 2004
http://stalbert.ca/global/images/uploads/EconomicDevelopmentMasterPlan_2004.pdf

EXECUTIVE SUMMARY

St. Albert is a vibrant community with a rich heritage and unique identity that is cherished by its residents, who hold true to past small town values, while also embracing growth into a prosperous and forward thinking city. For any community, including St. Albert, to flourish and thrive with long term sustainability and environmental consciousness; it requires resident input, leadership, visioning and planning.

A cornerstone of the community's vitality is its transportation network, which addresses such priorities as mobility (choices of how we are able to move and the ease which to do so) and accessibility (alignment to local and regional connectivity for access to home, work, recreation, goods, services and overall community needs). The Transportation Master Plan conveys current community priorities and needs while placing focus on being future-orientated to ensure there is the continued support of the city to grow and our residents to be on the go.

A Transportation Master Plan (TMP) is a strategic planning document that will help the community to best prepare for future growth and the challenges faced by that growth pressure over the next 27 years. The TMP is about connecting and moving people, goods and services throughout St. Albert in a safe, efficient and effective manner. This plan is transformative, and lays down the foundation and vision for the future transportation network. The direction of the TMP, with a focus on alternative modes of transportation for St. Albert, was supported by the community and aligns with the community's long term goals and strategies.

The TMP was developed with the St. Albert Community Vision and Five Pillars of Sustainability in mind. Input from the community was provided through the use of site visits, stakeholder meetings, public open houses, online engagement tools, a household travel survey and an intercept travel survey. Considering the public input and aligning with the policy framework from St. Albert's other

major plans, a vision and guiding principles were developed which capture the aspirations and direction for the transportation network.

2009 TMP

This Transportation Master Plan builds upon the recommendations identified in the 2009 TMP, with a greater focus on alternative modes of transportation and a policy driven focus to prioritize active transportation, transit development and changing the way we see our roadways.

2015 TMP Vision and Guiding Principles

"St. Albert's vision for transportation considers the diverse needs of our population with many ways to move around in a safe, efficient, affordable, and accessible manner which fosters economic prosperity, sustains the beauty of our environment and culture, and provides all residents with the sense that St. Albert is truly a livable community"

Guiding Principle 1:

St. Albert is a livable community with safe access to amenities and employment, where we prioritize accommodation for accessible and affordable transit and active transportation.

Guiding Principle 2:

St. Albert has a strategic approach to sustainable transportation to serve our diverse population.

Guiding Principle 3:

St. Albert protects environmental health by creating opportunities for alternative transportation to maintain the beauty of surrounding nature.

Guiding Principle 4:

St. Albert's transportation system supports economic prosperity

Existing and Future Conditions

St. Albert is a growing community; the population is expected to almost double within the next 27 years. The majority of future growth is expected to occur as greenfield development in the northwest and west areas of the City.

The existing road network is largely built out, with limited opportunities to add significant capacity to this network. St. Albert Trail is a busy regional road that carries significant regional traffic from Sturgeon County into and out of the remainder of the Capital Region. The only other major north-south connection in the community is Ray Gibbon Drive, a potential future provincial freeway that could support higher regional traffic volumes within the greater Edmonton area.

Active transportation facilities are primarily recreational; St. Albert prides itself in its vast park network, however there are current gaps in the connectivity and accessibility to key commercial corridor sites and regional connections.

There is a local bus route that serves all neighbourhoods, and a commuter network that provides more direct connections into key destinations in the City of Edmonton. The majority of transit ridership occurs on those commuter routes.

Recommended Road Network

The existing road network in St. Albert faces significant pressure from regional traffic (that is traffic that has both an origin and destination outside of St. Albert). Future conditions, including community and regional growth combined with existing limited road right-of-way area and minimum capability for construction new internal arterial road segments, will require that the existing road network is utilized as efficiently as possible.

They key strategies for the St. Albert Road network are to use intelligent transportation systems to maximize existing infrastructure, improve neighbourhood roads through traffic calming, implement a Complete Streets Policy to protect roads for differing purposes, envision a new future for St. Albert Trail, prioritize supporting new regional road connections, and maintain an up to date travel demand model for ongoing project evaluation. The development of regional roads, like the expansion of Ray Gibbon Drive and developing 127 Street will be important to allow St. Albert to mitigate regional traffic on St. Albert roads.

Adding capacity to strategic locations within the community will help ease congestion where possible; continued data collection and updates to the travel demand model will help support ongoing evaluation of where these upgrades should be prioritized.

Recommended Active Transportation Network

Developing a long-term active transportation network is an important goal of this TMP. Providing additional opportunities for St. Albert residents to choose to walk or cycle on their shorter trips will help achieve a desirable mode shift, support a healthier community and provide opportunities to help St. Albert achieve a reduction in greenhouse gas emissions.

The recommended active transportation network proposed to build upon the existing off-road network, therefore catering to the widest range of users with a wide range of abilities. The network was developed by considering the existing Red Willow Trail system, developing new off road links wherever possible and identifying potential on-road connections when necessary to complete the system.

Recommended Public Transportation Network

The TMP supports the comprehensive long-term transit planning document, the Transit Long Term Department Plan. In addition to supporting and building upon the goals in that plan, the TMP supports the development of the LRT, as well as land use planning (like transit oriented development) to improve future ridership on the LRT, both through densification near proposed stations and park and ride for regional traffic. As public transportation will start to take new forms in the future, through the shared economy and ridesharing, the City needs to prepare for that future paradigm shift. The ongoing Local Transit Route Restructure program also provides an opportunity to investigate how transit route planning can support the goals of increased ridership and mode shift.

Recommended Goods Movement Network

The primary goals of the recommended goods movement network are to provide connections between the existing industrial areas within the City of St. Albert, as well as to the region including Sturgeon County and the City of Edmonton. The TMP introduces a reduction in approved Truck Routes to reduce heavy vehicle traffic on certain arterial road segments and fall in alignment with a functional classification of the road network. The future development of Ray Gibbon Drive and Fowler Way will assist in reducing heavy vehicle traffic from St. Albert Trail and Villeneuve Road, allowing those roads to be reclaimed for the community as multi-modal facilities.

Intelligent Transportation Systems

Emerging technologies have the capability to improve the overall implementation of the TMP, and support many of the strategies identified for the specific modes already identified. Intelligent Transportation Systems (ITS) use technology to improve the efficiency, safety and security of the existing and proposed road network. Traveller

information, traffic signal coordination, transit signal priorities, electronic payment efficiencies, commercial vehicle operations, emergency management and data management are examples of ITS systems that are important for the future road, transit and goods and services network management in St. Albert. Specific implementation of ITS solutions identified through a future ITS policy will help support the goals and principles of the TMP.

The recommendations identified in the TMP should align with the forthcoming Smart City Centre of Excellence Master Plan objectives. ITS will also allow opportunities to collaborate with other industries and institutions, including knowledge sharing through the Smart City Alliance.

Implementation

Implementation and ongoing evaluation of the TMP will be measured through two key methods; ongoing review of the recommended initiatives outlined in the action plan developed with the public and stakeholders, and implementation of the recommended projects and initiatives in the identified 10 year plans.

ITS implementation and improved data collection will allow future iterations of the TMP to be measured and evaluated in more quantifiable manners. Adaptation of future mode split targets between auto trips and transit and active transportation trips will be a way to monitor the goals of the TMP, as well as benchmark greenhouse gas emissions and introduce a continual improvement process. Future land use plans will support the goals and principles of this plan as well.

Table of Contents

List of Commonly Used Acronyms

AADT – Average Annual Daily Traffic
ACP – Alberta Community Partnership
ATIS – Traveller Information System
CGGR – Canadian Guides for Greener Roads
CMHC – Canadian Mortgage and Housing Commission
CRB – Capital Region Board
DARP – Downtown Area Redevelopment Plan
EMP – Environmental Master Plan
EMS – Emergency Medical Services
GHG – Greenhouse Gas
HTS – Household Travel Survey
ICM – Integrated Corridor Management
IRTMP – Integrated Regional Transportation Master Plan
ITS – Intelligent Transportation Systems
LPR – Licence Plate Recognition
LRT – Light Rail Transit
MDP – Municipal Development Plan
MF – Metropolitan Funding
MGA – Municipal Government ACT
MSI – Municipal Sustainability Initiative
NAIT – Northern Alberta Institute of Technology
PIC – Partners in Compliance program
StAT – St. Albert Transit
TAC – Transportation Association of Canada
TLTDP – Transit Long Term Department Plan
TMC – Traffic Management Centre
TMP – Transportation Master Plan
TOD – Transit Oriented Development
TSP – Transit Signal Priority
V/C – Volume to Capacity Ratio
VMS – Variable Message Signs
VPH – Vehicles per Hour

1 | Introduction

The 2015 Transportation Master Plan (TMP) is a comprehensive planning document that will help the City of St. Albert prepare for growth and change over the next 27 years. This plan considers the city's strategic, environmental, transit and land use planning goals, as well as considers the important role that St. Albert plays in the greater Edmonton Capital Region.

This plan is an important part of a regulatory framework in St. Albert that guides land use planning, transit planning, environmental, utility and social goals. Transportation impacts many aspects of our lives, from our commute, to our recreation, to how we experience our community. The intent of the TMP is to recognize the importance of those experiences and develop a unified vision for the future.

The "Community Vision of St. Albert", as established through the St. Albert "Cultivating our Future" process is:

A vibrant, innovative and thriving city that we all call home, that sustains and cherishes its unique identity and small town values. We are the Botanical Arts City.

The Five Pillars of Sustainability, identified through the Community Vision, are always at the forefront of planning and this transportation plan considers the priorities of the community. The Five Pillars of Sustainability and how transportation can impact them are summarized as follows:

Social – An inclusive community ensures that transportation options exist for users of all ages and abilities, and are accessible and affordable for everyone.

Economic – Transportation is a crucial piece to an economically successful community through providing opportunities for commerce. Managing the infrastructure in an economically sustainable manner protects our investments.

Built Environment – The built transportation network will connect everyone in a "safe, effective and accessible" manner. The built environment will support multiple-modes and will utilize innovative technology through an intelligent transportation system.

Natural Environment – Our transportation choices, and options we have available to us to make those choices have an impact on our health and environment.

Culture – Our transportation network provides access to culture and supports active lives.

The status quo of building increased auto capacity in our communities to meet rising demands is generally accepted as no longer being sustainable. Furthermore, St. Albert exists in a unique state where, though the road network is largely completed, the community is forecasted to nearly double its population over the next 27 years. This TMP recognizes that future accommodation of that growth will mean a need to maintain and efficiently maximize the use of existing infrastructure, but also look to other modes of transportation to help accommodate changing populations and demands.

This is a transformative plan that recognizes the private automobile will continue to play an important role for St. Albertans for the foreseeable future. The intent of the TMP is to identify priorities and goals that will lay the foundation for developing a multi-modal transportation system that meets the needs of all users for years to come.

The planning horizon for the TMP is 2042, to match the planning horizon of other infrastructure and planning documents within the city and create a consistent vision for the future.

1.1 DOCUMENT OUTLINE

This document identifies the TMP development processes and outcomes. Detailed background for certain sections are included as comprehensive appendices.

Section 2: Policy Framework

The policy framework that directs the TMP was developed with input from the public and key stakeholders. The TMP is a piece of a larger municipal and corporate framework. Section 2 of the report will identify this framework and identify the TMP guidelines and policies. Additional plans that influenced the TMP are also identified.

Section 3: Existing and Future Conditions

The transportation network is heavily influenced by land use and demographic inputs. Understanding the existing land use and population data for St. Albert and the Region, and the expected future conditions will frame the decision making that went into key recommendations. Other future conditions that cannot fully be predicted (such as future technological innovation) will also be discussed.

Section 4: Transportation Master Plan

The Transportation Master Plan consists of five key elements: roads, active transportation, public transportation, goods movement and intelligent transportation systems. Each of these sections considers the existing and future conditions discussed, and all recommendations identified consider the established vision and policy framework that direct St. Albert's transportation future.

Section 5: Implementation

The success of this document can be measured. The final section of the TMP will outline the short term goals as well as introduce a framework for ongoing evaluation of the future transformation of St. Albert.

1.2 TMP DEVELOPMENT PROCESS

The TMP development consisted of seven phases:

Phase 1 - Project initiation: Working with the City of St. Albert administration, the project team established the goals, timelines and desired outcomes for the project. A steering committee of city staff representing various disciplines was established.

Phase 2 - Needs Assessment and Vision: Using site visits, stakeholder engagement and best practice information, the steering committee and project team developed an initial vision and project plan.

Phase 3 - Data Collection: Data collection through a variety of sources and methods was the most important part of plan development, to ensure that all recommendations are based on the existing and expected demands in the community.

Phase 4 - Model Development: As part of the TMP development, a transportation demand model for the City of St. Albert was developed. The model will provide an ongoing tool for the transportation department to make informed decisions about future transportation infrastructure as it relates to level of service and driver and transit rider behaviour. Results from the travel demand model inform recommendations identified in the TMP.

Phase 5 - Options and Evaluation: Using the various data sources, public and stakeholder consultation and information developed through the needs assessment and steering committee, a number of transportation options were considered and presented to the public for feedback and input. These options were evaluated through best practice, transportation modeling, and to fit in with the established policies and vision cast for the document.

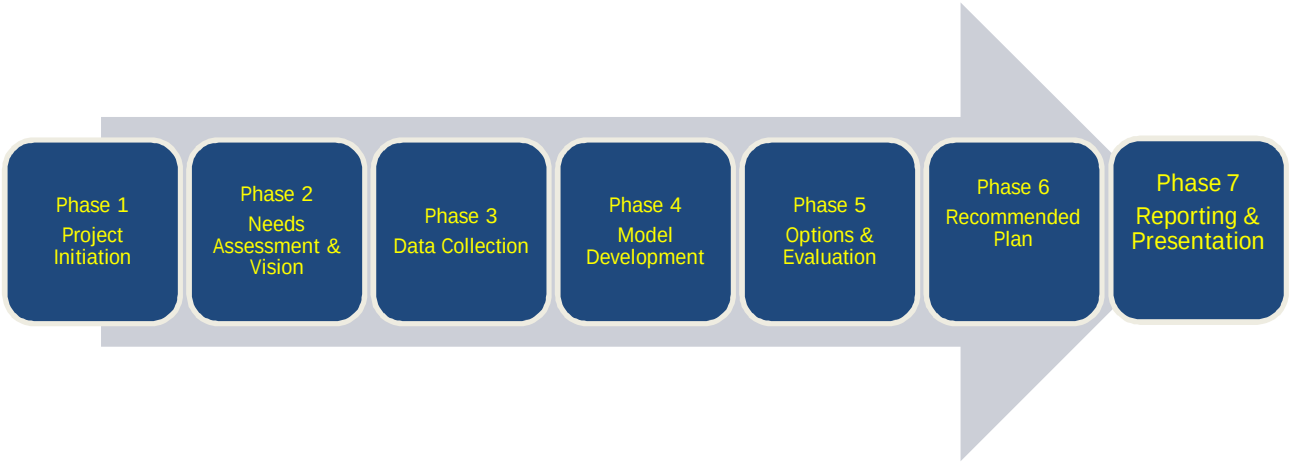
Phase 6 - Recommended Plan: The final TMP document summarizes the findings and recommendations and serves as a living tool for the city to prioritize transportation investment and decisions making over the next 27 years.

Phase 7 - Reporting and Presentation: The final report will be presented to City Council for approval in April, 2016, with the intent to then utilize the approved document within an updated Transportation Systems Bylaw.

1.2.1 Data Collection

Site Visits

To understand the existing conditions in St. Albert, the TMP team spent time observing traffic on major roadways within St. Albert. The team also evaluated neighbourhood streets, cycling, and walking facilities within the community.



Steering Committee Meetings

A steering committee was formed to guide the direction of the TMP from the outset of the project. The committee consisted of members of the consulting team and a cross section of City of St. Albert staff, including representatives from transportation, engineering, planning, transit, environment and sustainability. The steering committee supported the development of consultation material, project strategy and provided input on related ongoing and recently completed City of St. Albert initiatives that could impact the transportation master plan.

Household Travel Survey

The Household Travel Survey was conducted in the fall of 2014, and involved the collection of daily household travel data (all trips made over the course of a 24-hour working weekday) from a sample of residents of the City of St. Albert. Each trip captured in the survey consisted of travel for a particular purpose between origin and destination, and may have involved more than one mode of transportation. A total of 856 valid surveys were obtained, representing 3.7% of all households in St. Albert. The results of the household travel survey provide useful details on travel habits of St. Albert residents.

Intercept Travel Survey

The Highway 2 Intercept Survey was conducted on September 23, 2014, and involved surveying drivers intercepted at a location on Highway 2 north of Neil Ross Road about their travel origin and destinations. The focus was on capturing information about Highway 2 travellers. Southbound traffic was surveyed during the morning peak period, and northbound traffic was surveyed in the afternoon peak period. Survey data collect included information on trip origins, destinations, whether the trip involved stops in St. Albert, routes used and general frequency of trips. A total of 519 valid surveys were obtained, representing 9.5% of the average weekday traffic for the surveyed segment, hour and direction of traffic on Highway 2.

1.2.2 Travel Demand Model

Using data assembled in the data collection phase of the project, a travel demand model was built for use within the development of this TMP and for future use by the city. The City of St. Albert has purchased the modelling software, and will become the owner and operator of the travel demand model. The tool has been developed so it will be easily updated and customized by the city. As the city grows, and changes are made to land use,

population, employment and retail assumptions, the city will be able to update the model and identify the impacts of these changes on the road and transit network. The model also provides a tool to analyze the impacts of new transportation infrastructure on the overall St. Albert road network and for traffic impact assessments.

The travel demand model was developed using EMME software, a travel demand modeling software that has been well used in Canada and internationally for several decades. Importantly for the St. Albert context, EMME software is also used by the City of Edmonton and Alberta Transportation, allowing for future collaboration and data sharing between the agencies.

The model was developed using 2014 data, and includes two future planning horizons, 2024 for the ten year plan, and 2042 as the full planning horizon currently used by the City of St. Albert. Modelling projections are based on population, forecasted land development, and employment growth projections for the City of St. Albert, as well as the City of Edmonton and Sturgeon County.

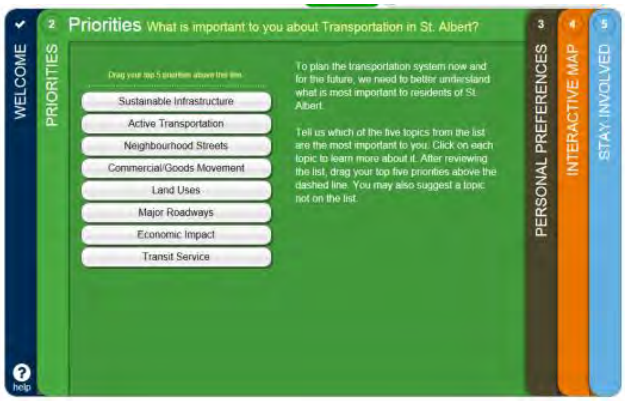
The model was developed to represent weekday travel during a typical one-hour PM peak period using an average hour in the three-hour afternoon peak. This timeframe was selected as it represents a diverse mixture of trip types, as well as the most heavily travelled time on the network. PM Peak periods are typically selected as a design period for transportation planning to reflect a “worse-case” scenario within the network.

Certain results are identified in the TMP, as they pertain to the impact on the transportation network for future road and transit recommendations.

1.2.3 Stakeholder and Public Consultation

MetroQuest Online Engagement Tool

MetroQuest is an online engagement tool that was used to engage a broader section of the residents of St. Albert at an early stage in the project. With support from the Steering Committee, a list of project priority areas and questions related to those areas were developed.



In addition to gauging public viewpoints on issues as diverse as neighbourhood traffic calming, truck routes and cycling infrastructure, the public also had the opportunity to identify specific locations in need of review related to cycling/pedestrian movements, transit, driving, parking, traffic control and traffic calming. The results from this survey assisted in providing direction for policies within the TMP and identify project priorities. The MetroQuest tool also provided a means of informing the public about the TMP development process. The survey was available online for three months, and the site had a total of 784 visitors, with 463 responses to the survey.

Public Open Houses

The TMP team used the traditional format of two public open houses to allow the residents of St. Albert to meet with key members of the team, see the plan under development, ask questions and provide feedback. The recommended network plans, guiding principles, vision and action plan were all developed with feedback from the public open houses. The public open houses were held in the spring and fall of 2015.

Stakeholder Workshops

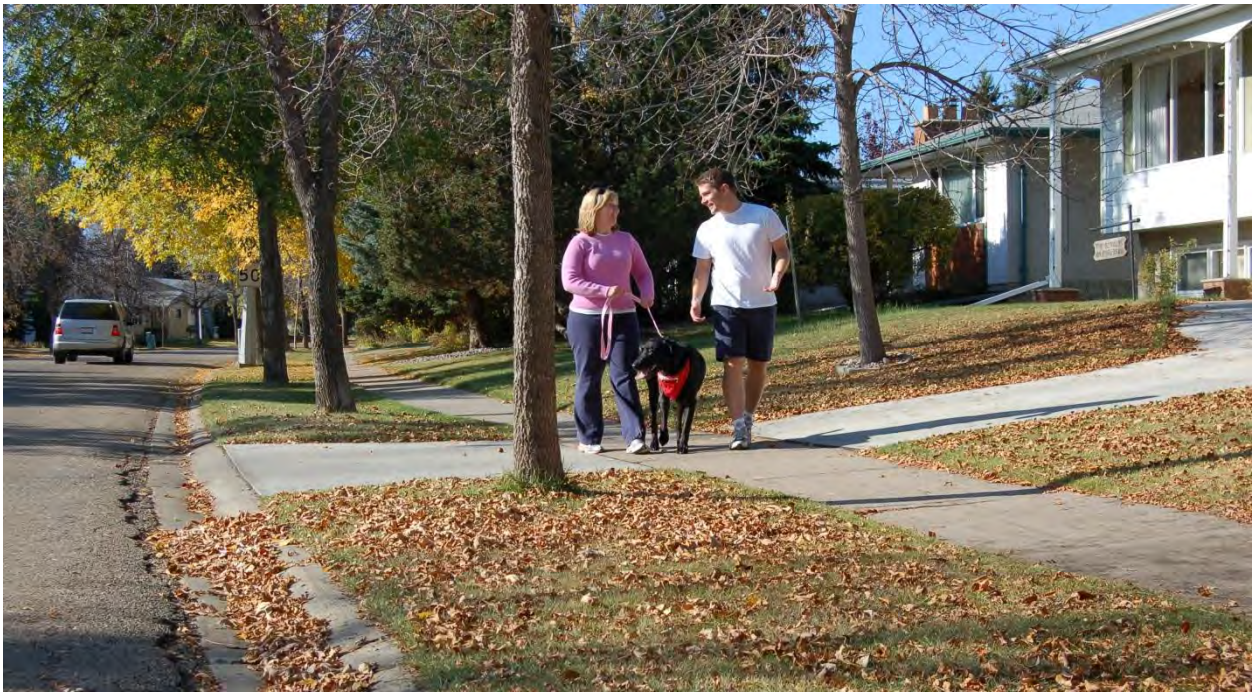
A total of three day-long stakeholder workshops were held at different phases in the project. The stakeholder group was identified with support from the project steering committee and consisted of steering committee representation along with additional department representation from Family and Community Support Services, Parks and Recreation, St. Albert RCMP, St. Albert Fire Services. Other stakeholders present were the St. Albert Environmental Advisory Committee, St. Albert and District Historical Society, and St. Albert Transitions (representing people with disabilities and developmental delays). The workshops covered project visioning, developing integrated land use and transportation planning scenarios, and selection of final TMP elements.

Council Presentation

The final TMP will be presented to City of St. Albert Council on February 1, 2016.

1.3 FUTURE STEPS

This TMP provides a number of tools to ensure it is a dynamic document that will strive to achieve the community vision through completion of identified recommendations. As with other municipal long term plans, the TMP shall be updated at five year intervals. Updates will provide the opportunity to update data, to identify new and emerging issues and shift priorities as required. In the short term, the TMP recommendations, the 10 year plan, and the travel demand model may all be used for evaluation purposes and to make important decisions for the City.



2 | Stategic Framework

The City of St. Albert Strategic Framework includes the following components:

The TMP is a Community Long Term Plan that aligns with other St. Albert plans, but also considers the recommendations and impacts on the strategic directions, community visions, and values. Beyond St. Albert's boundaries, major capital region plans are an important piece of the policy and plan framework. The highlights from major plans are outlined in this section. Corporate action plans, related neighbourhood plans and other municipal planning documents are also discussed.

2.1 ALIGNMENT WITH STRATEGIC FRAMEWORK

The 2015 St. Albert Community Vision and Pillars of Sustainability (Cultivating our Future) present a single, shared vision for the community of St. Albert, developed and approved through extensive consultation with the people it represents. The intentions of all major plans in the community should align with and support these pillars of sustainability.

The five pillars of sustainability are:

1. *Social*
2. *Economic*
3. *Built Environment*
4. *Natural Environment*
5. *Cultural*

Transportation impacts all elements of life, and supports all five of the pillars, through providing access to our social and cultural connections, making decisions that minimize impact and protect the natural environment and supporting economic growth and development through goods movement and access to employment, retail and education. Specifically, the transportation network is a key element of the built environment, and the TMP supports specific statements identified in the Community Sustainability Framework including:

- Providing a safe, effective and accessible transportation network that supports public and active modes of movement.
- Making a community where neighbourhoods make it easier to connect people to parks, trails, public transportation and community spaces.
- Planning growth to future generations inherit a strong, vibrant community.
- Building innovative, long lasting infrastructure that minimizes environmental impact

Capital Region Board Integrated Regional Transportation Master Plan

The Government of Alberta created the Capital Region Board (CRB) in April 2008 with the mandate to prepare and support the implementation of a Capital Region Growth Plan. The CRB has 24 member municipalities representing the Capital Region. Through development of the Capital Region Growth Plan, the CRB initiated the Integrated Regional Transportation System Study in 2009. The outcomes of that study are summarized in the Integrated Regional Transportation Master Plan (IRTMP).

The IRTMP designates St. Albert as a 'Priority Growth Area', with the intention of focussing new and more integrated and sustainable urban growth into these areas. The IRTMP identifies a number of new and upgraded major roadways and transit facilities in St. Albert within the plan horizon.

Currently, the CRB is updating the existing suite of regional plans into one comprehensive Integrated Growth Plan. The development of the Growth Plan Update is to occur in five phases, and the CRB intends to have the new plan in place by September 2016.

IRTMP Policy Framework

The policy framework for the IRTMP is based on the policy themes developed in the Capital Region's Growth Plan. The framework is summarized below:

Integrate with the Capital Region Growth Plan

- Preserve the integrity of the priority growth areas.
- Maximize use of existing infrastructure.
- Develop a transportation system that supports the Region's economy.

Increased Transportation Choices

- Develop and strengthen transit facilities and services to provide a viable alternative to the private automobile.
- Support Active Transportation.
- Support Multi-Modal Transportation Facilities.

Reduction of Environmental Degradation

- Minimize Impacts Associated with the Transportation Network.

Effective Coordination of Infrastructure Between all Jurisdictions

- All member municipalities and the provincial government must strive to cooperate and coordinate their activities to benefit the region.

Figure 2-1 shows main recommended infrastructure elements in the Integrated Regional Transportation Master Plan. The regional transportation connections were considerations within the TMP.

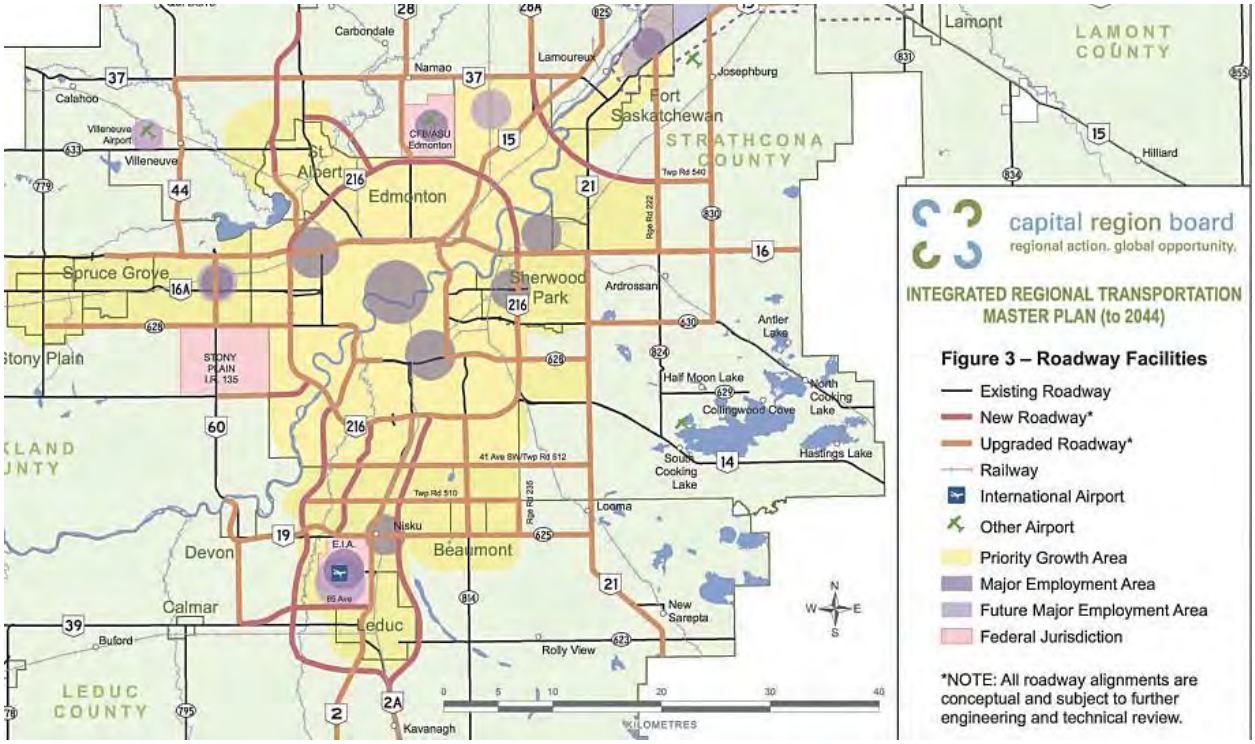
Important roadways for St. Albert include:

- Ray Gibbon Drive: identified as a future freeway from Anthony Henday Drive to Highway 2 south of Morinville. Ray Gibbon Drive may be designated as a Provincial Highway through St. Albert, which would replace St. Albert Trail as the provincial highway, with twinning to Villeneuve Road identified as a 10 year investment priority in the IRTMP.
- 127 Street as a future arterial from Anthony Henday Drive to Highway 2 north of St. Albert city limits at Township Road 544.
- Anthony Henday Drive north leg completed from Highway 16 east to Highway 16 west.

Highway 2 is designated as a long combination vehicle route north of St. Albert city limits. There are no regional High Load Corridors through St. Albert; the closest high load corridor is Highway 37.

St. Albert is identified as a part of the future LRT network for the Capital region. There is a proposed LRT extension identified in the IRTMP to north St. Albert city limits, supported with a regional bus corridor to Morinville. The IRTMP also identifies development of a Park and Ride lot at St. Albert Trail/Anthony Henday Drive as a 10 year investment priority.

FIGURE 2-1: IRTMP Road Facilities



The IRTMP identifies that regional active transportation facilitation and infrastructure development should focus on increasing access for active transportation as a mode choice on short trips, connecting complementary land uses. Priority growth areas (of which St. Albert is one) are encouraged to include active transportation facilities in their plans.

St. Albert Municipal Development Plan

The Municipal Government Act requires that each municipality prepare a long term land use plan called a Municipal Development Plan (MDP). The most recent update to the City of St. Albert's MDP was completed in 2007, with a number of bylaw updates being incorporated over the past eight years, the most recent in 2015. MDP's set out the goals and policies for all aspects of the municipalities development. The planning horizon for the recent MDP is 2029. The objectives for the transportation network, as established in the MDP are:

- Plan and implement roadway improvements to accommodate the growing population.
- Plan a transportation network that accommodates all modes, including transit and potential LRT, cyclists and pedestrians.
- Mitigate community, social, environmental and noise impacts of transportation facilities
- Facilitate maintenance and extension of infrastructure.
- Encourage use of public transit through improvements to the service in a low cost manner.
- Promote transit-supportive land use planning
- Provide appropriate transit and road links for the region.
- Coordinate truck and dangerous goods linkages to minimize impacts on residential areas.
- Use transportation demand management and transportation system management.
- Ensure additional road capacity across the Sturgeon River.

The goals for this TMP remain in line with the objectives of the 2007 MDP, and will continue to push for improvements to the transportation network for users of all modes, ages, abilities and socioeconomic statuses. This TMP is a significant update to both the previous TMP (2009), and will serve to provide input the future update of the MDP.

Environmental Master Plan

The Environmental Master Plan (EMP) was approved by St. Albert City Council in May 2014. The EMP identifies goals and targets for key environmental issues. The TMP is directed through this plan to support a number of environmental goals that are directly impacted by decisions made around transportation including:

- Managing air quality
- Reducing energy consumption and greenhouse gas emissions
- Promotion of sustainable neighbourhoods and transportation choices
- Fostering community environmental stewardship

The EMP reinforces the target set by Council in 2012 through the greenhouse gas (GHG) Local Action Plan of a six per cent reduction in total community greenhouse gas emissions from 2008 levels by 2020. This goal includes emissions from transportation.

The TMP aligns with this plan by identifying a number of lower emission transportation choices with the potential to promote a shift away from the private automobile to transit, cycling, and walking, and laying the founding for a long-term transportation plan that supports that shift. A review of the Transportation Association of Canada's 2015 document "Canadian Guide to Green Roads" will also support these goals.

St Albert LRT Planning Study (Phases 1 and 2)

In November 2015 Council approved the second phase of a long term Light Rail Transit (LRT) Study that investigated the technical feasibility of constructing an LRT in St Albert. If constructed, the LRT is expected to bring major changes to transportation and land use patterns in St Albert. The first phase of the LRT Study reviewed potential corridors. The second phase considered the potential alignment and station locations of the LRT. Following an extensive consultation process, Council has now endorsed the alignment as shown in Figures 4-11 along the east side of St. Albert Trail and the locations of the four stations at Hebert Road/Gervais Road, at the Sturgeon River, at Boudreau Road/Giroux Road, and north of Jensen Lakes Boulevard and west of St. Albert Trail.

With the LRT alignment approved by St. Albert Council, this TMP recommends that the alignment be subject to appropriate planning overlays, so that the future urban development plans take the LRT into consideration. The adoption of such an overlay serves as an instrument to support transportation and land use plan integration.

Downtown Area Redevelopment Plan

The Downtown Area Redevelopment Plan was approved by the City of St. Albert Council on August 16, 2010, and the implementation plan was initiated in May 2011. This plan included land use bylaw amendments, and a revised land use plan and transportation network for the downtown core of the community. The proposed road network in the TMP reflects these recommendations and uses the updated road types as a guide for the rest of the community.

Economic Development Master Plan

The 2004 Economic Development Master Plan has five objectives related to supporting and increasing business opportunities and economic growth in the community. Providing transportation access, through road expansions where necessary and improved transit access to key commercial, industrial and future employment areas is an important consideration of the TMP. The location and future access to the Employment Lands area west of Ray Gibbon Drive is a priority for this TMP, both for future transit and recognition of the importance of alternative modes, including active transportation access.

2.2 ALIGNMENT WITH OTHER PLANS

Safe Journeys to School

The TMP identifies the implementation of the Safe Journeys to School Final Consultant's Report as a top priority. The Safe Journeys to School was approved by City Council on March 2, 2015. The report identifies a number of strategies to enhance student travel safety throughout the city and administration has completed a specific six year action plan (2016 – 2021) with necessary funding requests for implementation of recommendations for all existing and two new school sites in St. Albert.

Transit Long Term Department Plan

The Transit Long Term Department Plan is a strategic policy and planning document, providing the framework for transit service development from 2013 to 2027. The intent of the TMP is to support the goals, objectives and recommendations identified within the Transit Long Term Department Plan while considering the impact of these goals on the transportation system as a whole.

Area Structure Plans

The TMP considers all approved area structure plans to identify where future infrastructure and connections will be required. Relevant Area Structure Plans include:

- Jensen Lakes
- Erin Ridge North
- South Riel
- Riverside
- Range Road 260

The Employment Land Concept Plan, though not yet an approved ASP, was also reviewed, and estimated population and employment impacts are included in the TMP recommendations.

2009 St. Albert Transportation Master Plan

The previous update to the TMP, in 2009, focused primarily on identifying necessary upgrades to the arterial and collector road network. Transit updates over the planning horizons within the TMP were also identified. This TMP update considers many of the recommendations identified in the 2009 TMP, and contains more robust policy and action plan recommendations to continue to push St. Albert towards sustainable, safe and efficient transportation choices.

Smart City Centre of Excellence Master Plan (forthcoming)

A forthcoming Smart City Master Plan has three overall objectives:

- Identify innovative technologies that could improve infrastructure/asset management and maintain the quality of local program and service delivery.
- Support economic development efforts to grow existing businesses and attract new investments.
- Provide opportunities for improvement organization efficiencies over time.

This TMP identifies a number of intelligent transportation initiatives that will support the objectives of the Smart City Master Plan, and the two documents will work in tandem to create a future friendly city.

Social Master Plan

The 2013 Social Master Plan contains goals related to access to housing, affordable and well-coordinated transportation systems, and access to resources and services. The TMP supports this master plan through prioritizing access to transit and active transportation and supporting safety and mobility.

2.3 VISION AND GUIDING PRINCIPLES

Considering the existing transportation, population and land use conditions and policy framework identified in the relevant major and minor plans, a vision for this TMP and supporting Guiding Principles was developed. This framework was developed with input from the steering committee, the key stakeholders and through public input via MetroQuest online engagement and the public open houses. The vision for St. Albert's TMP captures the aspirations and direction for St. Albert's transportation network over the next 27 years.

St. Albert's vision for transportation considers the diverse needs of our population with many ways to move around in a safe, efficient, affordable, and accessible manner which fosters economic prosperity, sustains the beauty of our environment and culture, and provides all residents with the sense that St. Albert is truly a livable community.

There are four Guiding Principles, and each guiding principle has three or four supporting strategies. The sum of these principles and strategies serve as the policy framework for all recommendations within the TMP. Under each guiding principle, the team has identified which Pillar of Sustainability from the Community Sustainability Framework is impacted and supported.

Principle 1:
St. Albert is a livable community with safe access to amenities and employment, where we prioritize accommodation for accessible and affordable transit and active transportation.

Related Pillars of Sustainability:
Social, Cultural and *Built Environment*

1. St. Albert's transportation system supports appropriate land uses with access to employment and amenities via cycling, walking and transit in addition to vehicle access.
2. St. Albert streets are identified for levels of service that protect the right road for the right purpose in the community.
3. St. Albert's transportation network supports accessible and affordable transit.

Principle 2:
St. Albert has a strategic approach to sustainable transportation to serve our diverse population.

Related Pillars of Sustainability:
Built Environment

1. St. Albert's transportation system infrastructure shall maximize use of existing infrastructure and focus new capital construction to support and prioritize transit services and facilities.
2. St. Albert supports multi-modal transportation facilities.
3. St. Albert will use appropriate level of service criteria to identify and prioritize upgrades to the road network.

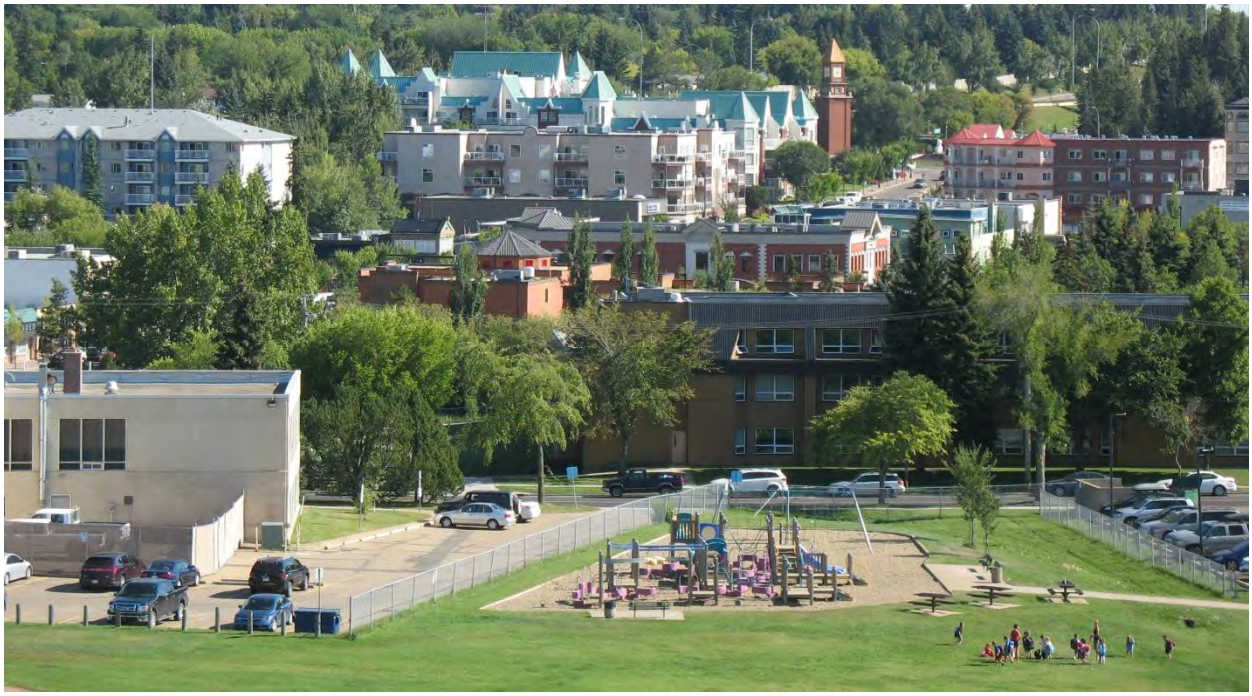
Principle 3:
St. Albert protects environmental health by creating opportunities for alternative transportation to maintain the beauty of surrounding nature.

Related Pillars of Sustainability:
Social, Built Environment and *Natural Environment*

1. St Albert minimizes transportation and construction impacts to green spaces and environmental reserves, including the Sturgeon River watershed.
2. St. Albert achieves its targets to reduce harmful emissions including greenhouse gases and local air pollutants.
3. St Albert prioritizes actions that will enhance alternative forms of transportation to increase transit ridership and pedestrian and cycling travel over private vehicle mode choice.
4. St. Albert uses sustainable practices when upgrading, maintaining and constructing new transportation infrastructure.

Principle 4:
St. Albert's transportation system supports economic prosperity
Related Pillars of Sustainability:
Economic and *Built Environment*

1. St. Albert's transportation network is integrated with the regional transportation network for roads, transit and active transportation.
2. St. Albert clearly identifies truck routes to ensure accessibility to commercial and employment areas; while protecting the intended functionality of neighbourhoods and vulnerable road user priority network segments.
3. St. Albert develops new roads and intersections that prioritize safety for all users in balance with efficiency and accessibility and goods movement.



3 | Existing and Future Conditions

3.1 POPULATION

St. Albert is a growing community, and much like the rest of the Edmonton capital region, has been impacted by the relatively strong regional and provincial economy over the past decade. St. Albert is planning for growth, and has developed a forecasted growth scenario that accounts for a continued rise in population at an annual growth rate of 2.8% over the next 27 years. The annual growth rate between 2012 and 2014 was 1.85%, more than double the growth over the previous two years. The population in 2014 was 63,000 people. This population is estimated to nearly double by 2042, with a predicted population of 87,700 by 2024 and 113,000 by 2042. Figure 3-1 illustrates the recent population growth and projected future growth in the community.

Demographics

St. Albert is an older community with many long-term residents who initially moved to this suburb to raise families remaining in the community. The most populous age category is older adults ages 50-64. There is currently a relatively small proportion of the population age 20-29, though this cohort is expected to grow relative to the rest of the population by 2042. Over the next 27 years there is significant growth expected in the 70 and up age group. The growth for the 5 year cohorts are illustrated in Figure 3-2. St. Albert must plan for an aging community, but also for a family friendly community with more children and seniors in the coming decades.

FIGURE 3-1: Recent Population Growth and Projected Future Growth (Source: City of St. Albert)

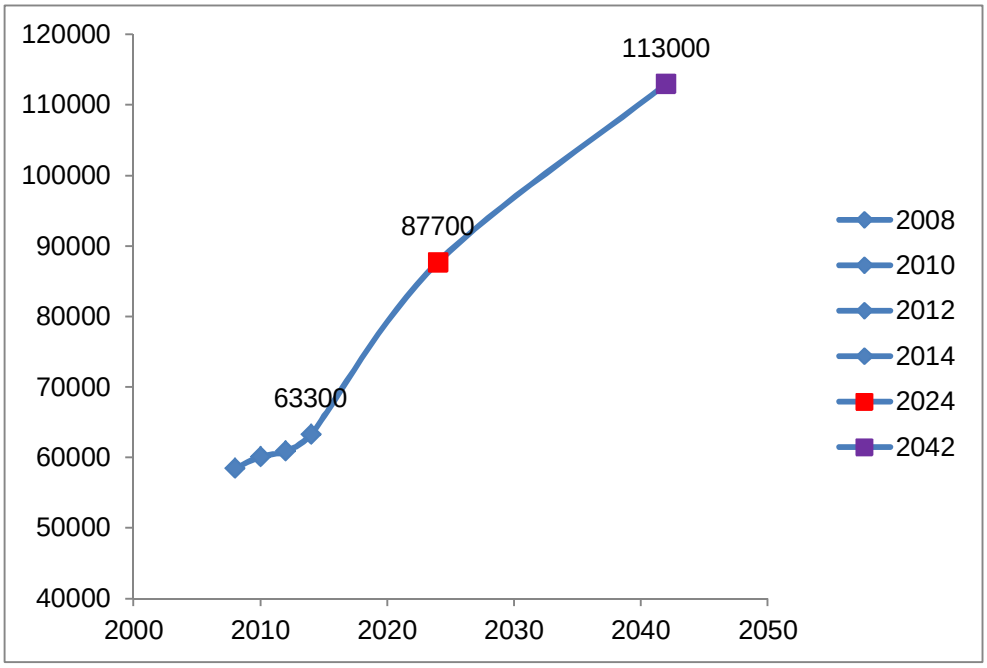
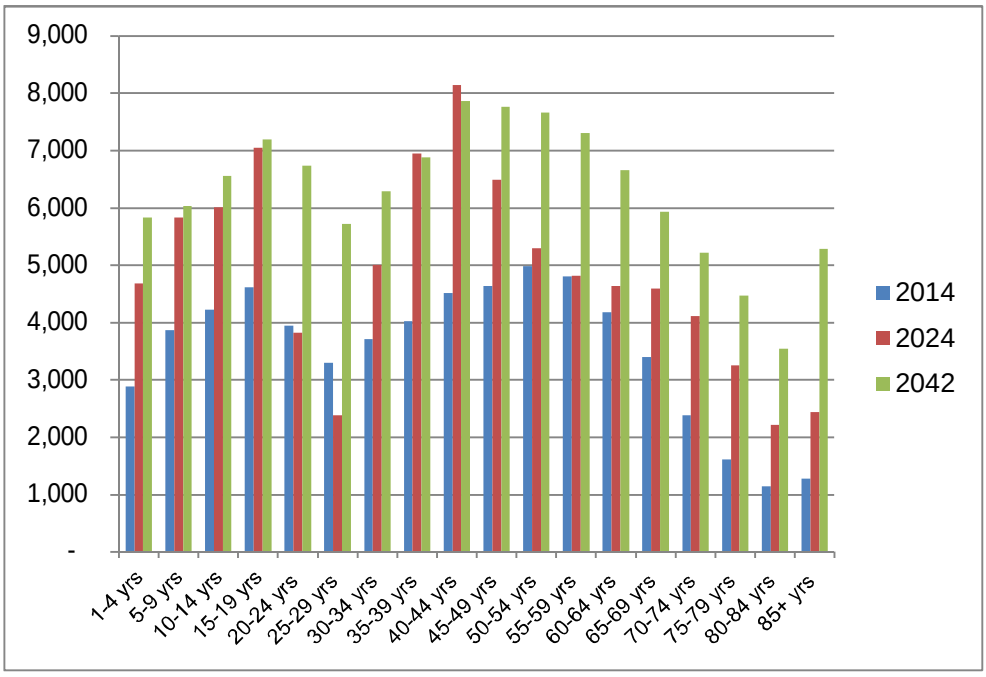


FIGURE 3-2: Population Cohorts Growth (Source: City of St. Albert)



3.2 LAND USE

The current and future land use in St. Albert is shown in Figure 3-4. St. Albert is primarily a residential community, with a significant amount of single detached housing.

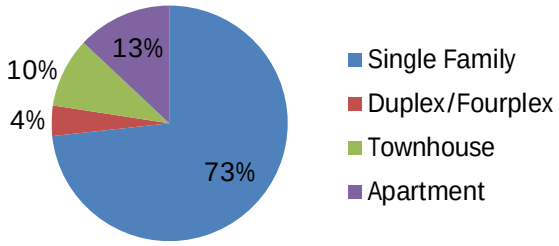
Housing

Eighty-one percent (81%) of total dwelling units are owned in St. Albert and 73% of all housing is single-detached family homes, making St. Albert a relatively low density community. As a comparison, in the City of Edmonton, 50% of all housing is Single Detached Housing, and only 55% of units are owned as opposed to rented.

Between 2012 and 2014, more than 50% of new units built in St. Albert were apartments, showing a possible trend towards higher density development.

Figure 3-3 shows the housing type breakdown in St. Albert in 2014.

Figure 3-3: 2014 Housing Types
(Source City of St. Albert)



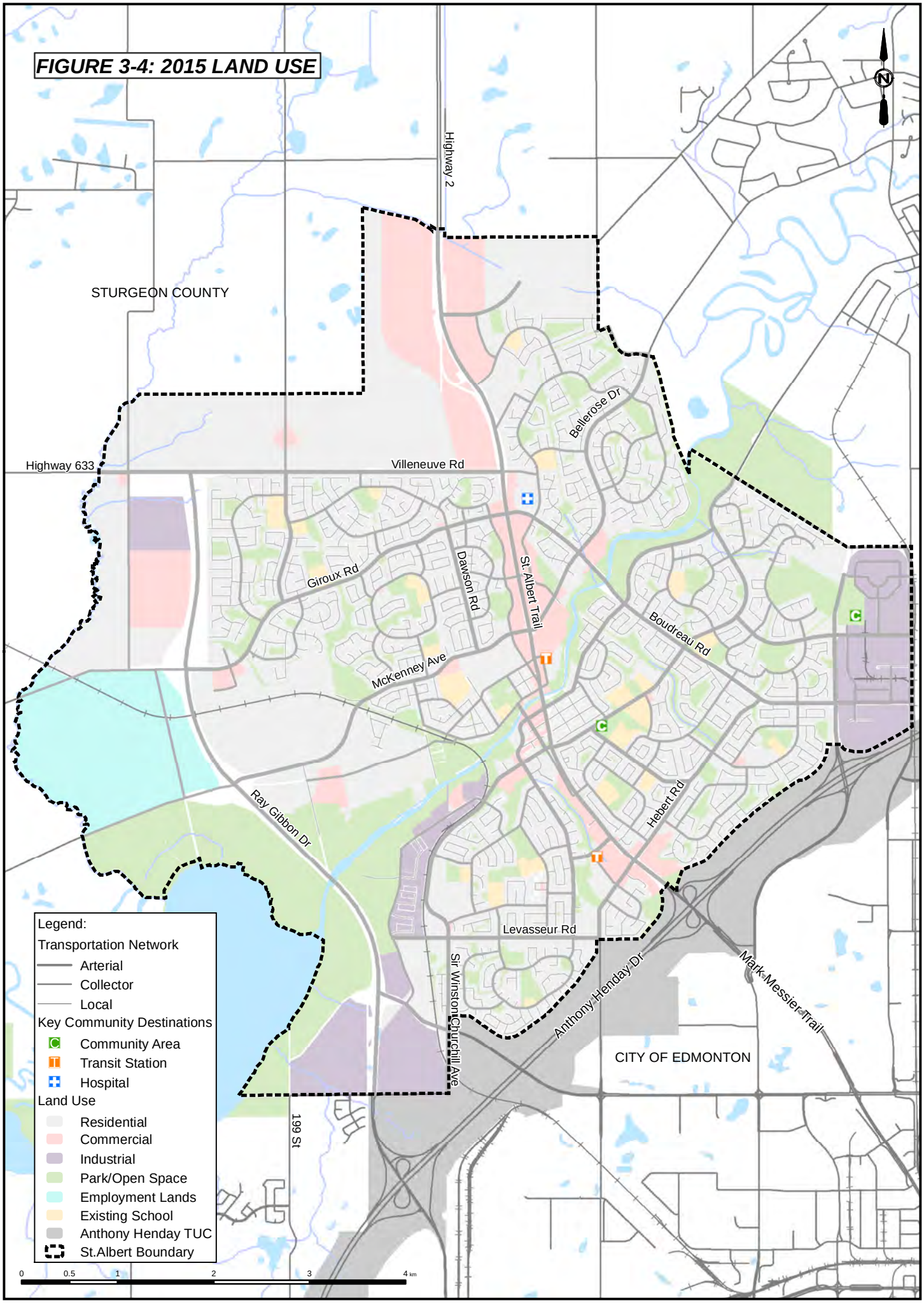


FIGURE 3-4: 2015 LAND USE
STURGEON COUNTY
Highway 2
Highway 633
Villeneuve Rd
Bellerose Dr
Giroux Rd
Dawson Rd
St. Albert Trail
McKenney Ave
Boudreau Rd
Ray Gibbon Dr
Hebert Rd
Levasseur Rd
Sir Winston Churchill Ave
Anthony Henday Dr
Mark Messier Trail
CITY OF EDMONTON
199 St
Legend:
Transportation Network
Arterial
Collector
Local
Key Community Destinations
Community Area
Transit Station
Hospital
Land Use
Residential
Commercial
Industrial
Park/Open Space
Employment Lands
Existing School
Anthony Henday TUC
St.Albert Boundary
0
0.5
1
2
3
4 km
P:\2014\31139\00_Trans_MP\Working_Dwgs\010_GIS\SA_BASEMAPS\ArcMap\November2015\FutureLandUse_8.5x11.mxd

Commercial/Industrial

St. Albert is a regional shopping center that serves northwest Edmonton, Sturgeon County and local residents. There is a big box centre at the north end of the city with significant retail space. Retail is spread along St. Albert Trail and within the downtown core.

There are two industrial areas, Campbell Business Park in the south-east and Riel Business Park in the south-west. These business parks contain a mixture of office space, small manufacturing, warehousing, light industrial and automotive serving.

Of the 3,300 acres of land St. Albert has available to accommodate future growth, 700 acres are designated for commercial and industrial uses.

Park Space

There are currently 1,100 acres of green space in St. Albert, and some 80,000 trees. There is a long linear park along the Sturgeon River running through the city and neighbourhood parks disbursed through the residential neighbourhoods. The people of St. Albert value park space and prioritize the protection of the natural environment. Importantly, the park space includes both recreational trails and active transportation routes that have been incorporated into the long term active transportation network in Section 4.2.

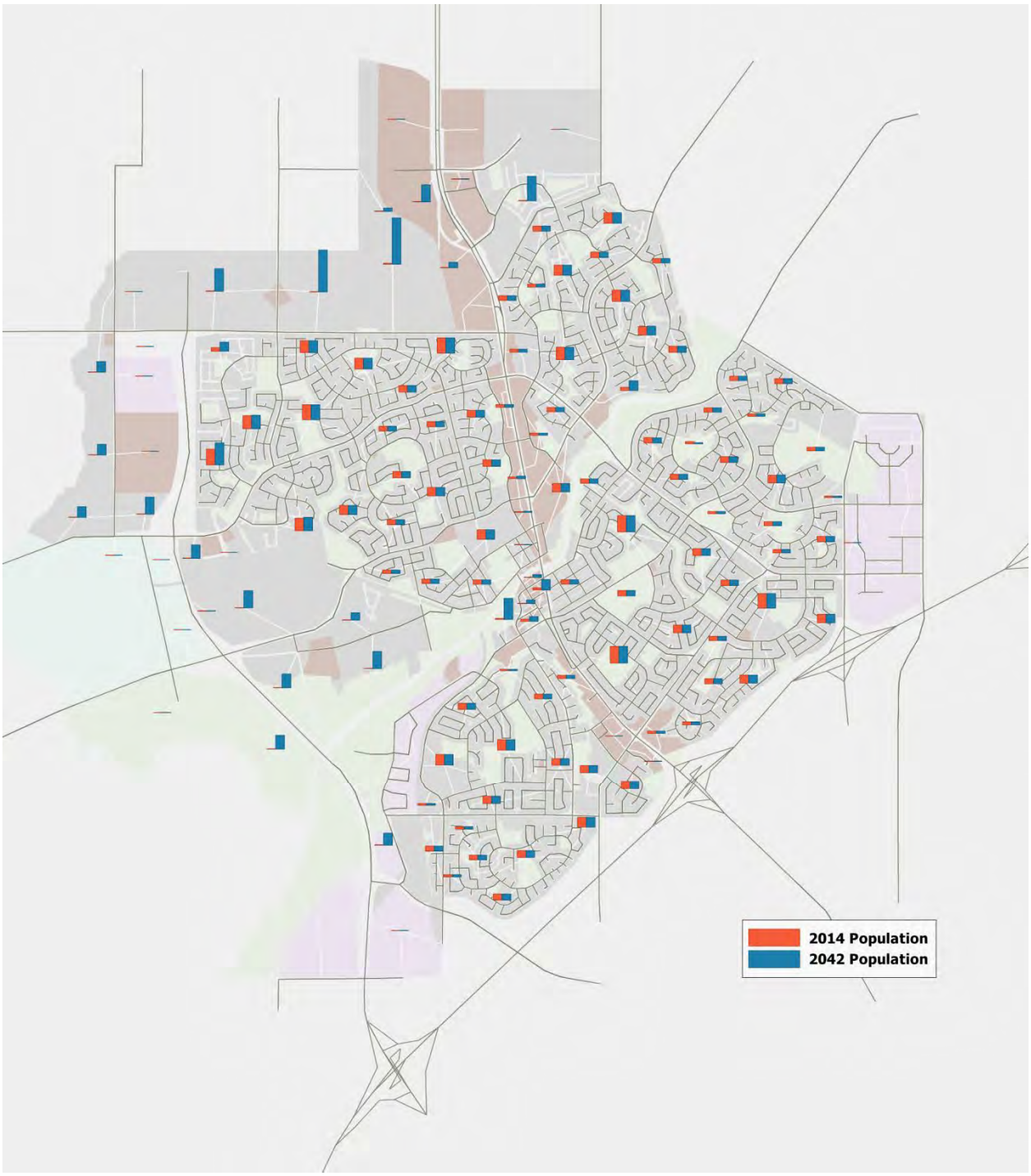
Future Land Use

The future land use plan for St. Albert, last updated for the 2007 Municipal Development Plan, shows development trends remain somewhat similar to current conditions in St. Albert. Figure 3-4 on page 3-4 includes the future land use for St. Albert.

Greenfield development is limited to the north-west and west side of St. Albert. The area west of Ray Gibbon Drive will include industrial and commercial space, as well as the employment lands, for which the design concept remains to be finalized. Access to these lands is key for economic development.

The majority of residential growth is anticipated to occur at the north end of the city. Figure 3-5 shows the population by area for 2014 and 2042. For much of the built environment, the population will remain unchanged over the horizon of this study. While the majority of population growth is in currently undeveloped areas, there is also growth anticipated via densification in the downtown core. With the potential implementation of future LRT, there will be demand for increased densification along St. Albert Trail near proposed LRT stations; however this is not evaluated within this document.

Figure 3-5: Residential Growth in St. Albert
(Source: City of St. Albert)



3.3 TRANSPORTATION

St. Albert residents have access to a local and regional road network, along with a local and regional transit network of bus connections. There is active transportation infrastructure that provides pedestrian and extensive recreational cycling access throughout the community. Recreational cycling facilities have been the priority for development historically, and parks areas within St. Albert are well serviced with recreational paths. Urban cycling facilities are less prevalent. Regional transit is currently focused into Edmonton, with a commuter bus system that connects St. Albert residents to downtown Edmonton, MacEwan University, NAIT, the Royal Alexandra Hospital, the University of Alberta and West Edmonton Mall.

3.3.1 Roads

The existing road network map for St. Albert is shown in Figure 3-6. St. Albert Trail is the main north-south connection through St. Albert. This roadway varies between four lanes and six lanes within the community, and the majority of intersections with it are signalized. St. Albert Trail is primarily fronted by commercial uses and is a key connection to the City of Edmonton and Sturgeon County.

Ray Gibbon Drive is a two lane roadway, and a potential future provincial highway that runs from the Anthony Henday Drive at its south end to Villeneuve Road at the north end. The long term plans for this roadway include six lanes for traffic and interchanges at all major intersections, ultimately continuing north to connect to Highway 2 south of Morinville.

There are several major arterials crossing St. Albert Trail. These arterials provide regularly spaced east-west access across St. Albert, and most of these roadways are four lane divided roads, providing good capacity for cross-wise city movement.

- Boudreau Road is a divided four lane road that runs north-south on the east side of St. Albert Trail, ultimately realigning east-west as Giroux Road west of St. Albert Trail. Boudreau Road connects to Campbell Road, which connects to Anthony Henday Drive via an interchange.

- McKenney Avenue is an east-west arterial that diverts northward as Bellerose Drive and connects to Sturgeon County east of St. Albert Trail. McKenney Ave and Bellerose Drive are mostly divided four lane arterials, with sections of two lanes at either terminus.

- Sir Winston Churchill Avenue is also a divided four lane arterial for the majority of its segments, with the exception of the north-east section which is an undivided two lane cross section, which does not directly connect to St. Albert Trail and instead runs as an underpass in the vicinity of the downtown area

- Gervais Road and Hebert Road are the southernmost east-west arterials in St. Albert, and are also four lane roads. Gervais Road shifts south towards Anthony Henday Drive, crossing over the Anthony Henday and becoming 170 Street into Edmonton.

The road designs of St. Albert are curvilinear in nature and neighbourhoods connect to these arterials through a network of local and collector roadways.

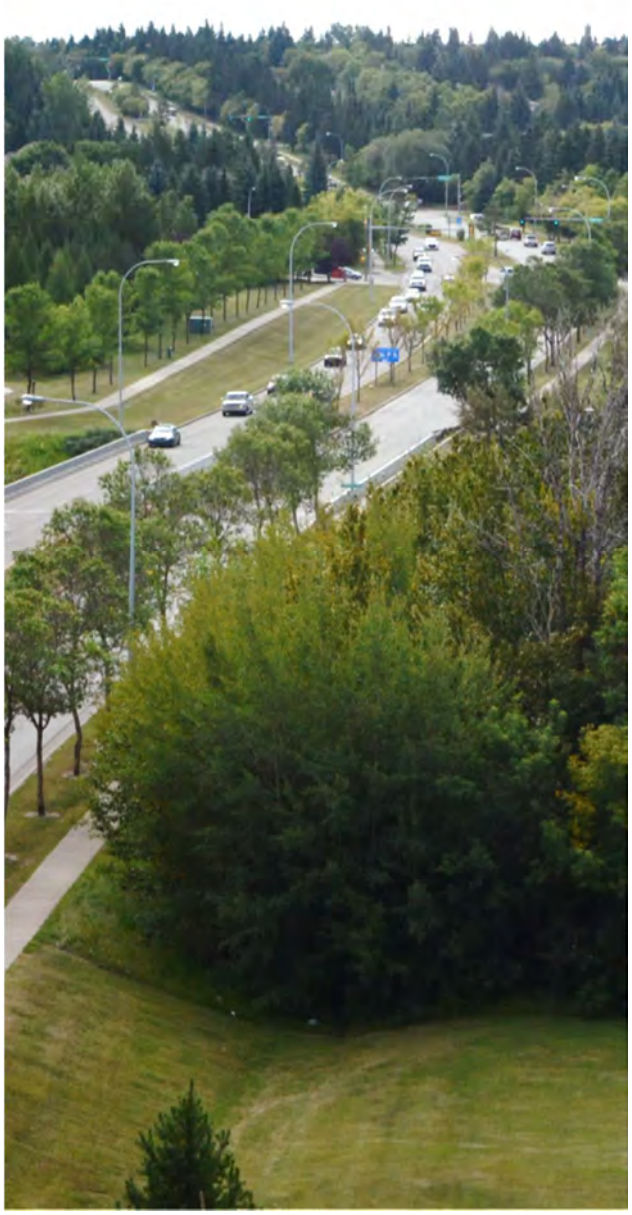
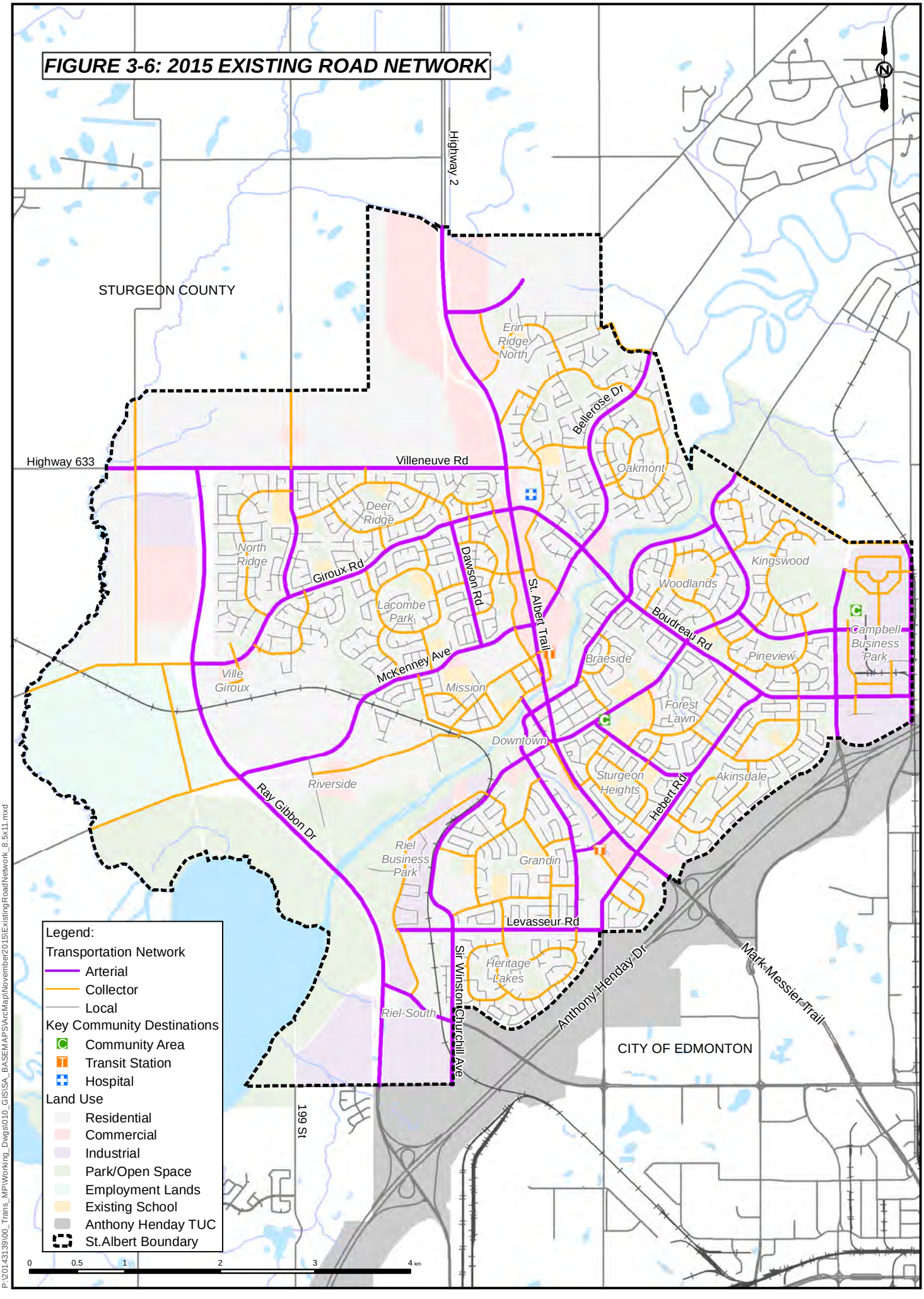


FIGURE 3-6: 2015 EXISTING ROAD NETWORK



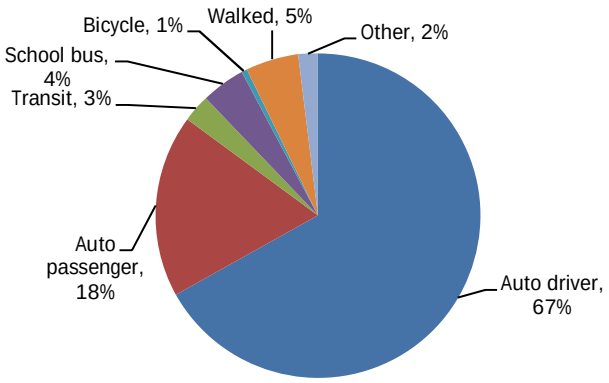
3.3.2 Travel Patterns

The household travel survey, as described in Section 1.2.1, provided a range of information about existing travel patterns in the City of St. Albert, including typical mode of travel, trip type and key origins and destinations. This information came from residents of St. Albert, and as such reflects the patterns of residents of the community.

Mode of Travel

The mode split for all trips in St. Albert reflects the expected split for this commuter community. Currently 85% of all trips are taken by residents of St. Albert are as either auto driver or passenger. Less than 1% of all trips by St. Albert residents are taken by bicycle and 3% are taken via transit.

Figure 3-7: Mode Split



While internal community transit ridership is low overall, 15% of trips taken into and out of the City of Edmonton using St. Albert Trail daily are taken via transit.

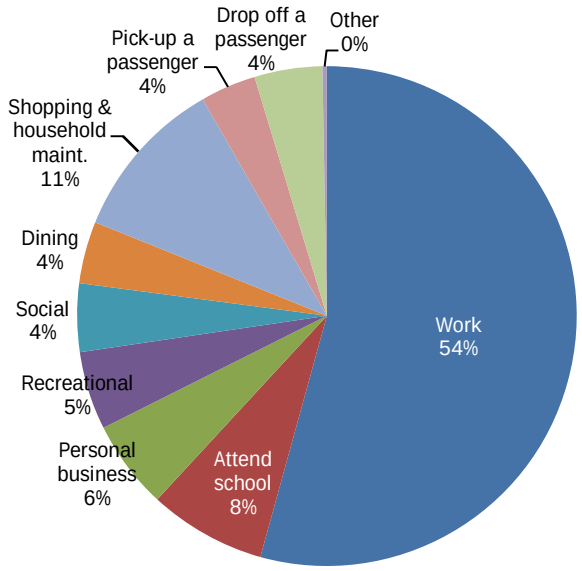
Very few trips identified within this study period were taken via bicycle. Cycling in St. Albert is popular primarily for recreational purposes.

Trips designated as mode “other” include primarily taxis and shuttles.

Purpose of Travel

The 2014 Household Survey provided information on where residents of St. Albert are going, in addition to how they get there. Mode split information showed that most trips are being taken in a private automobile. The household survey also looked at trip purpose. Residents in the survey were asked to identify the purpose of their trip. The travel data reveals that the most common trip type was to travel to and from work, then shopping trips, followed by attending school. These results are summarized in Figure 3-8.

Figure 3-8: Purpose of Travel

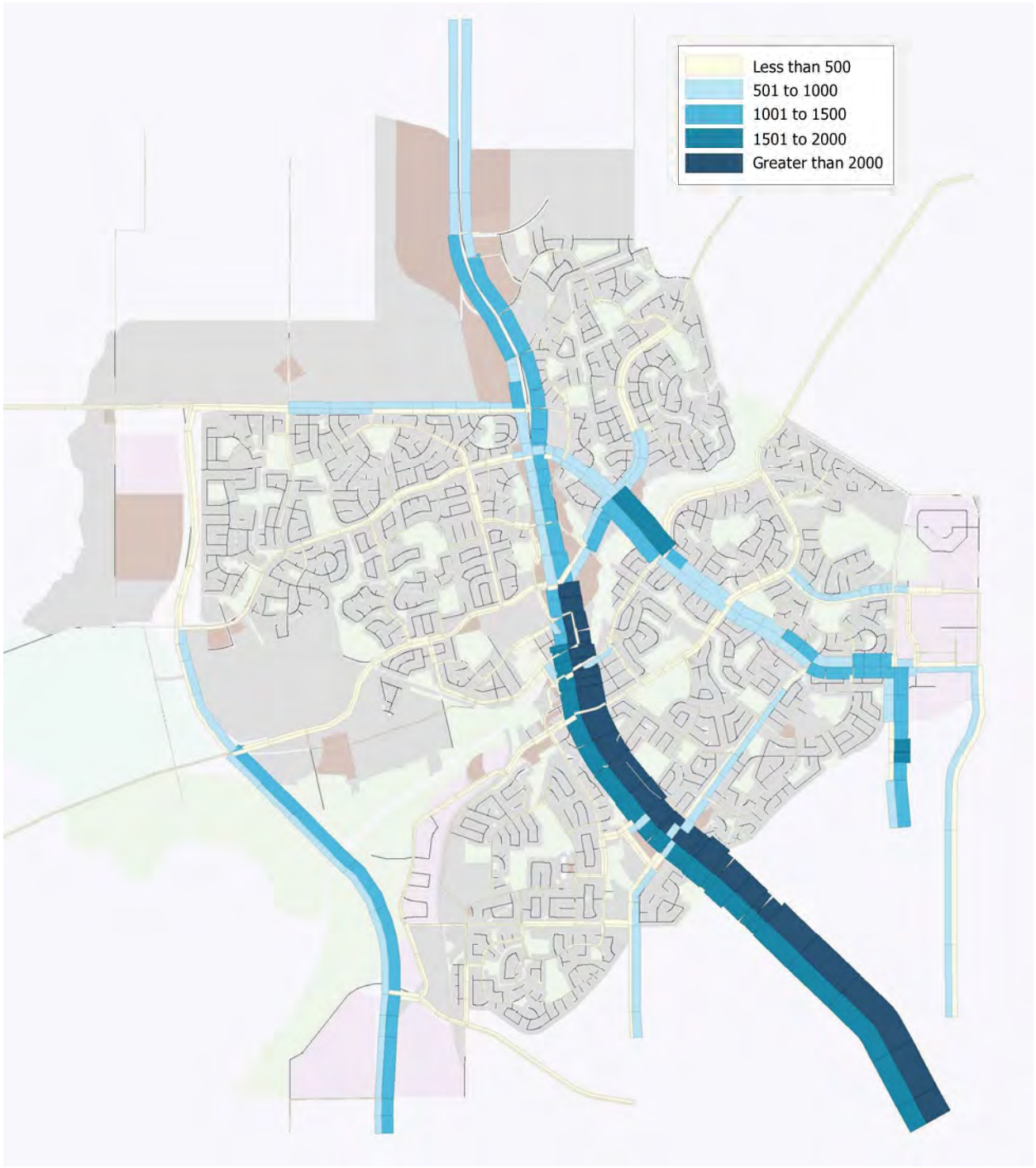


50% of St. Albert residents work in Edmonton, and another 13% work outside of St. Albert other than Edmonton.

Work, school and shopping are the most common trip purposes for St. Albert residents, and therefore it is expected that the roads serving these uses are generally busier. Because so many of St. Albert residents work in Edmonton, St. Albert Trail at the south end of the city is the busiest road in St. Albert.

Figure 3-9 shows the total traffic volumes in vehicle per hour (vph) on St. Albert roads during the afternoon peak hour period.

Figure 3-9: 2014 Auto Trips PM Peak Period



Regional Traffic

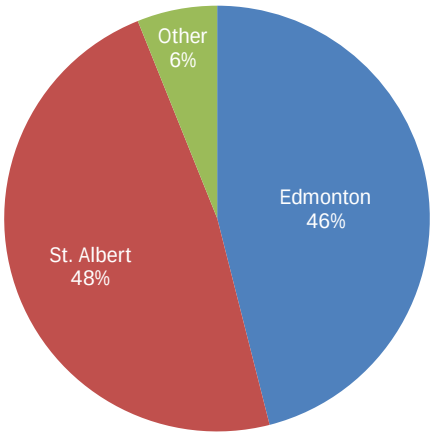
Regional traffic has a strong influence on the traffic within St. Albert.

What is Regional Traffic?

This TMP will refer frequently to the impacts of regional traffic on St. Albert's roads. This study identifies regional traffic as traffic that is passing through St. Albert without having St. Albert as its final origin and destination. This can include Sturgeon County traffic destined for Edmonton or Edmonton traffic destined for northern Alberta, as two examples. Regional traffic impacts residents of St. Albert as certain roads in the community experience periods of congestion that are caused by those who are just passing through the community, not making use of specific goods or services located in St. Albert.

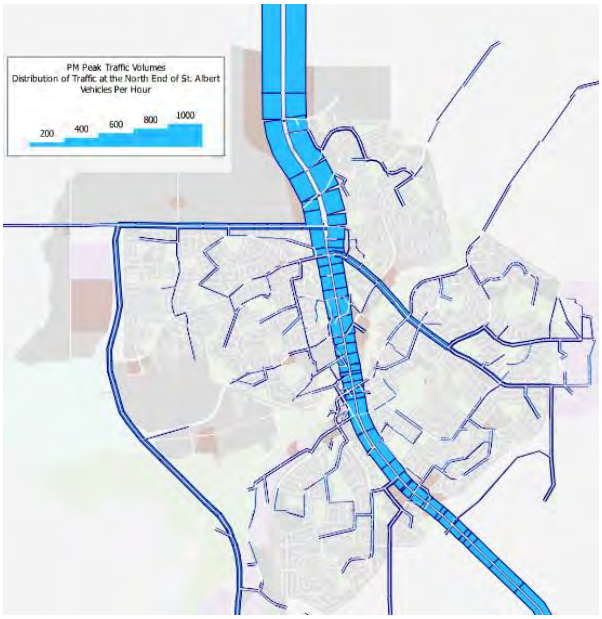
St. Albert Trail and Ray Gibbon Drive are important connections for residents of Sturgeon County and Morinville to travel to the city of Edmonton and into St. Albert , as well as other nearby municipalities. The intercept survey conducted at the north end of the city on St. Albert Trail revealed that 48% of vehicles are originating south of St. Albert and commuting through the city without making stops, as shown in Figure 3-10.

Figure 3-10 PM Peak Trip Origins for Northbound Traffic on St. Albert Trail



Travel distribution for traffic, as shown in Figure 3-11, identifies that the majority of vehicles entering the city on St. Albert Trail will remain on St. Albert Trail for the duration of the commute through the city. Analysis in Section 4 of the TMP will investigate the impact on the road network by improving the alternative regional connections for traffic bypassing St. Albert.

Figure 3-11: North Intercept Survey Travel Distribution (2014 PM Peak)



Some of St. Albert's regional connector and arterial roadways are now serving dual function as both internal and regional roads, which results in regional traffic passing near or even through local neighbourhoods. To illustrate the potential impact, the average annual daily traffic (AADT) on several key regional roads just outside St. Albert's limits is summarized in the table below.

Table 3-1: Regional Traffic

Road Name	2014 AADT
Hwy 2 north of St. Albert (St. Albert Trail)	16,900
Bellerose Drive	2,200
Sturgeon Road (Sir Winston Churchill Drive)	4,000
Villeneuve Road	3,600

Road Impacts

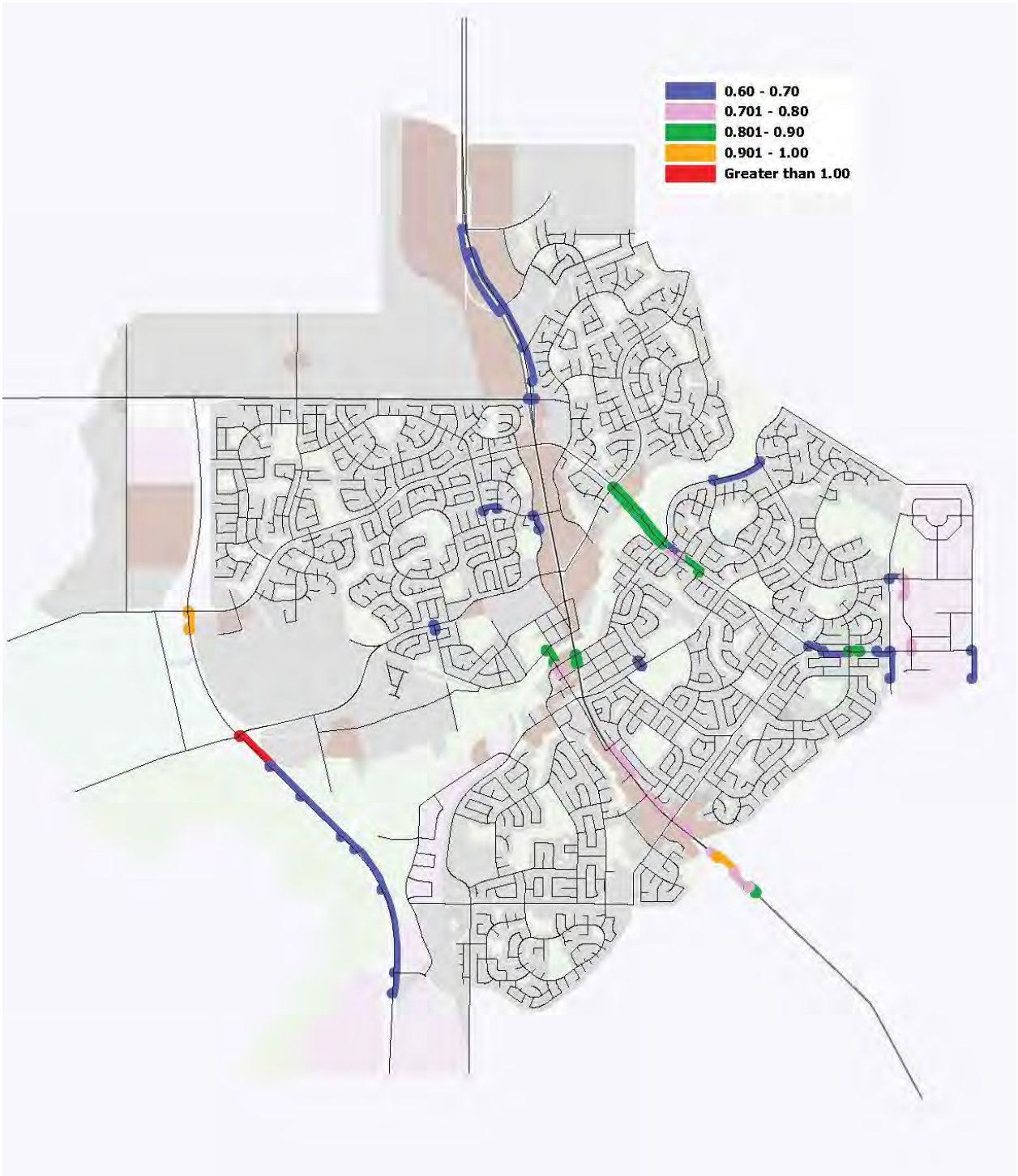
As expected from these identified travel patterns, the most congested roadways in St. Albert are generally the larger thoroughfares that support the movement of both local and regional traffic. Figure 3-12 is a map of the volume to capacity ratio on St. Albert's roads using 2014 PM Peak traffic volumes.

What is Volume to Capacity (v/c)?

Volume to capacity ratio (v/c) is a way of comparing the theoretical capacity of a roadway to the actual volumes on the road. In theory, a road with a volume to capacity ratio of 1.0 or greater is operating beyond its designed capacity and users would experience significant delays on this road. A v/c of greater than 0.9 is usually undesirable, though can be acceptable depending on the priority of the road. For example a downtown roadway that is an important shopping and pedestrian corridor may tolerate a v/c higher than 0.9 because the priority is not about moving traffic, but local user experience.

In the PM Peak period, the most congested location in St. Albert is Ray Gibbon Drive northbound. There is also congestion along Boudreau Road and at the southern and northern ends of St. Albert Trail. The most congestion location on St. Albert Trail within St. Albert is near downtown, where the v/c ratio is between 0.8 and 0.9.

Figure 3-12: Existing Conditions Volume to Capacity Ratio (2014 PM Peak)



3.3.3 Public Transportation

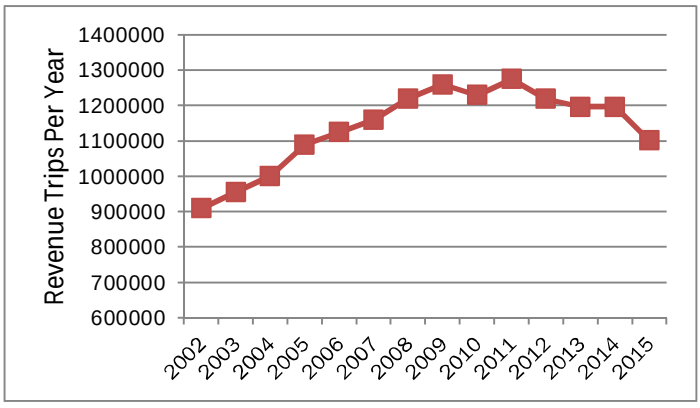
Scope of Current Services

Public transportation refers to transportation services that are publicly available to the St. Albert community and do not rely on private vehicle ownership. This includes conventional forms such as publicly-funded transit networks, generally servicing fixed or semi-flexible routes such as those provided by St. Albert Transit (StAT), as well as new services that are based on emerging technologies (also known as 'disruptive technologies').

These new services are generally provided through private organizations such as car and ride sharing (see section 3.4) for a profit. New technologies have significant scope to improve the breadth and range of public transportation services available to St. Albert residents, however it is recognized that new regulatory frameworks are required to protect consumer interests and road safety. The potential impact of these new technologies and services for St. Albert are discussed here.

Transit ridership has grown at an average of 3.7% per annum between 2002 and 2011, with growth declining in recent years.. Total annual transit ridership is illustrated in the Figure 3-13. Approximately 70% of all weekday trips are on commuter routes.

Figure 3-13: Transit Ridership Per Year
Source: p. 20 of Transit Long Term Department Plan



Current statutory basis for provision of services

The current policy basis for transit services is governed by the following statutory documents and plans:

1. Bylaw 34/87 'Bylaw to operate a Public Transportation System
2. City Council Policy C95-2006 'Transit Services'
3. Transit Long Term Department Plan 2013-2027.

The Bylaw is concerned with rules and responsibilities of StAT staff and passengers. The Council Policy is focussed on universal service standards, while the Department Plan contains strategic directions and investments for StAT for the next 15 years.

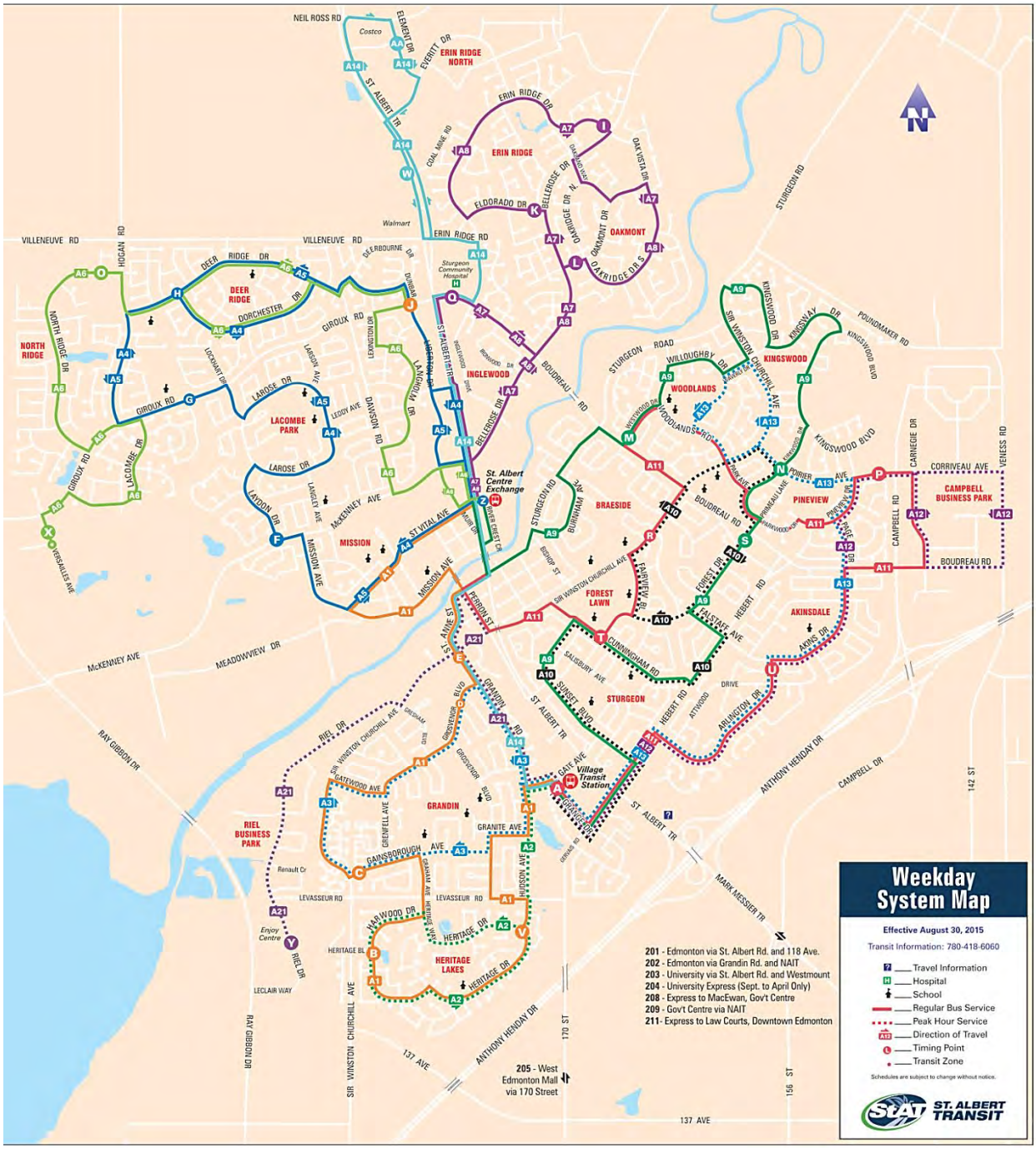
Existing Network

St. Albert operates a bus network with two types of service; 15 local routes that provide coverage for all neighbourhoods, and seven commuter routes that provide more direct connections to key destinations in Edmonton. The local transit network is illustrated in Figure 3-14. There are two transit centres within St. Albert; St. Albert Center Exchange located north of the Sturgeon River and Village Transit Centre, located off of Gate Avenue and St. Albert Trail. Both transit centres are hubs for the local bus routes, and provide park and ride spaces.

With limited available parking at the St. Albert Centre Exchange; the Village Transit Centre operates as the main park and ride location with a current allotment of approximately 350 parking stalls. 190 of those spaces have a daily fee of $4.00, the rest have no fee (prices provided by St. Albert Transit).

For local routes, a monthly bus pass for an adult is $71; a single fare is $3.25. Commuter route passes are $112. University students who attend NAIT, MacEwan University and the University of Alberta are part of a U-Pass system which provides a transit pass to all post-secondary students in the capital region at a cost of $162.50 for a four month semester as part of annual tuition.

Figure 3-14: Local Transit Route Map



Long Term Goals

In early 2013, StAT embarked on a Transit Long Term Department Plan for the next 15 years, with goals that aim to be consistent with the long term goals of Council. These long term goals were developed with reference to the 2012 Council budget priorities and existing local (Council) and regional (CRB) long term planning documents, including the 2009 St. Albert TMP.

The Plan includes patronage forecasts for the 15 years to 2027 based on population growth and 0.5% modal shift, as well as a select number of recommendations for service improvements.

Transit Patterns

Transit patterns are similar to the auto trip patterns; the majority of transit rides take place on the commuter routes which travel between the two transit centres in St. Albert and Downtown Edmonton/University of Albert. PM peak hour transit trips are illustrated in Figure 3-15.

Figure 3-15: 2014 PM Peak Transit Trips

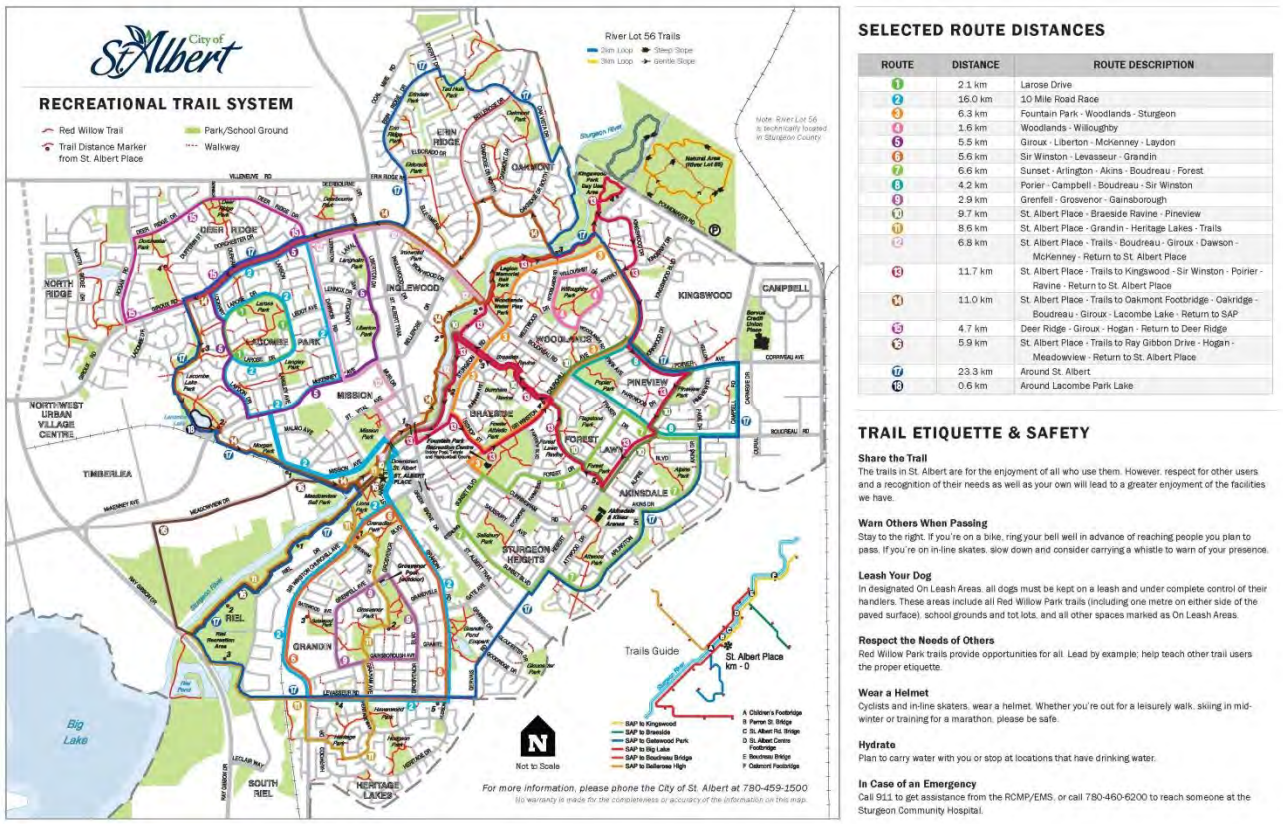
3.3.4 Active Transportation

Active transportation encompasses human powered modes of transportation, including walking and cycling. The existing active transportation network in St. Albert is currently aimed primarily at recreational users. Pedestrian and cycling connections to major destinations are currently limited.

The key recreational trail system is called the Red Willow Trail network, which provides a number of trails through local parks. Additional active transportation links exist on collector roads and arterial roads, which generally have sidewalks on at least one side of the street. Key pedestrian crossing locations are marked and in some cases signalized or utilize warning flashers. The existing recreational trail system is illustrated in Figure 3-16.
The Founders Walk is an example of an active transportation facility that provides a signed walking route that supports community heritage through identifying important historical landmarks within St. Albert.

The intent of the TMP is to identify key active transportation routes and provide recommendations for developing versatile infrastructure that will facilitate an increase in mode share towards cycling and walking, particularly for localized journeys within St. Albert that could be completed on foot or bicycle, but for which there are currently incomplete or substandard connections. There is also significant scope for the expansion of multi-modal travel in St. Albert (particularly cycling and transit). These improvements have the potential to make the transportation system safer, more environmentally friendly and more accessible for all users, within the community and regionally.

Figure 3-16: Recreation Trail System



3.4 FUTURE CONSIDERATIONS

Population growth and regional transportation infrastructure will have a significant impact on St. Albert's transportation network over the next 27 years. As the population in St. Albert and surrounding region grows, additional infrastructure will be necessary to help accommodate this growth. Section 4 of this document will discuss the impact of these conditions including:

- St. Albert LRT development,
- Ray Gibbon Drive widening and extension,
- 127 Street extension, and
- Mode shift.

3.4.1 Emerging Future Technologies

Transportation technology on a large scale like driverless cars, but also on a much smaller scale through the sharing economy (car sharing and Uber for example) is already impacting the way people get around, especially in major metropolitan areas. The impact of these technologies is in some cases still difficult to predict. While experts agree that automated vehicles are on their way, there is yet be consensus on when these technologies will become commonplace enough to have an impact on St. Albert.

Automated Vehicles

The Province of Ontario recently became the first Canadian province to allow companies to test driverless technologies on its roadways. While privately owned wide-spread automated technology may still be a few years in the future, this technology could have widespread impacts including:

- Efficiencies and cost savings in the shipping industry.
- Large reduction in traffic collisions and roadway injuries and fatalities.
- Potential increase in roadway capacity.
- Additional mobility options for seniors and youth.
- Increase total kilometers traveled on roads by making driving more accessible for the very young and very old.
- Increasing appeal of mass transit through integration with local automated car shares.
- Reduced parking demand in current high demand areas changing land use paradigm.
- Increased travel demand.

There is little doubt that this coming technology will have an impact within the lifespan of this TMP, though time will tell exactly what that impact will be. Future updates to the TMP will need to have clear visions for the progress and impact of these technologies, and it will be important for St. Albert to look for opportunity of industry involvement with regards to technology advancements and ensure its transportation infrastructure is up to date and compatible with forthcoming technologies.

Rideshare Companies

Though currently illegal under Canada's insurance laws, ride sharing companies such as Uber are beginning to make a presence in Canada, and are currently operating in the Capital Region. While rideshare companies have the potential to help reduce the need for a private automobile, safety and legislative concerns continue to make it controversial in many jurisdictions. The City of St. Albert should prepare for the introduction of rideshare companies through appropriate revisions to local bylaws and consider the impacts on the community and legal issues that may arise.

Transportation Bylaw Reform

The current traffic bylaw for St Albert was first enacted in 1987 and is confined to StAT. Conventional taxis are currently unregulated. The emergence and convergence of the new technologies outlined here means that St Albert should consider a new traffic bylaw that provides additional safeguards for users of these services so that they can be successful in the long term.