TRI-ROADS FORWARD
ECONOMIC DEVELOPMENT BACKGROUNDER

Prepared for: The Tri-Roads Planning District | Prepared by: Richard Wintrup

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Tri-Roads forward

Planning for progress and prosperity


RURAL MUNICIPALITY
RIDING MOUNTAIN WEST


municipality of
RussellBinscarth

EXECUTIVE SUMMARY

The Backgrounder is the basis for the Development Plan. It is a compilation of both qualitative and quantitative data analysis on the following areas: Citizens; Community; Environment; and Commerce.

The Backgrounder suggests the following:

- The world is a different place. Even in the last ten years, the position of rural communities has changed dramatically. Emerging markets such as China, along with supportive trade efforts, creates new, unparalleled opportunities in agri-business and other sectors such as mining. The District is uniquely positioned to capitalize on emerging opportunities given its location and logistical capabilities.
- Society is restructuring now! Communities that take aging in place seriously will receive benefits, which include new investment, while those that don't will continue to decline as older residents leave the community.
- Municipalities must be proactive and prepared to compete with their neighbours on a regional basis. Regional service hubs are emerging to service larger trade areas. Municipalities need to band together to build a District level service hub that can attract private commercial and service opportunities (i.e. healthcare).

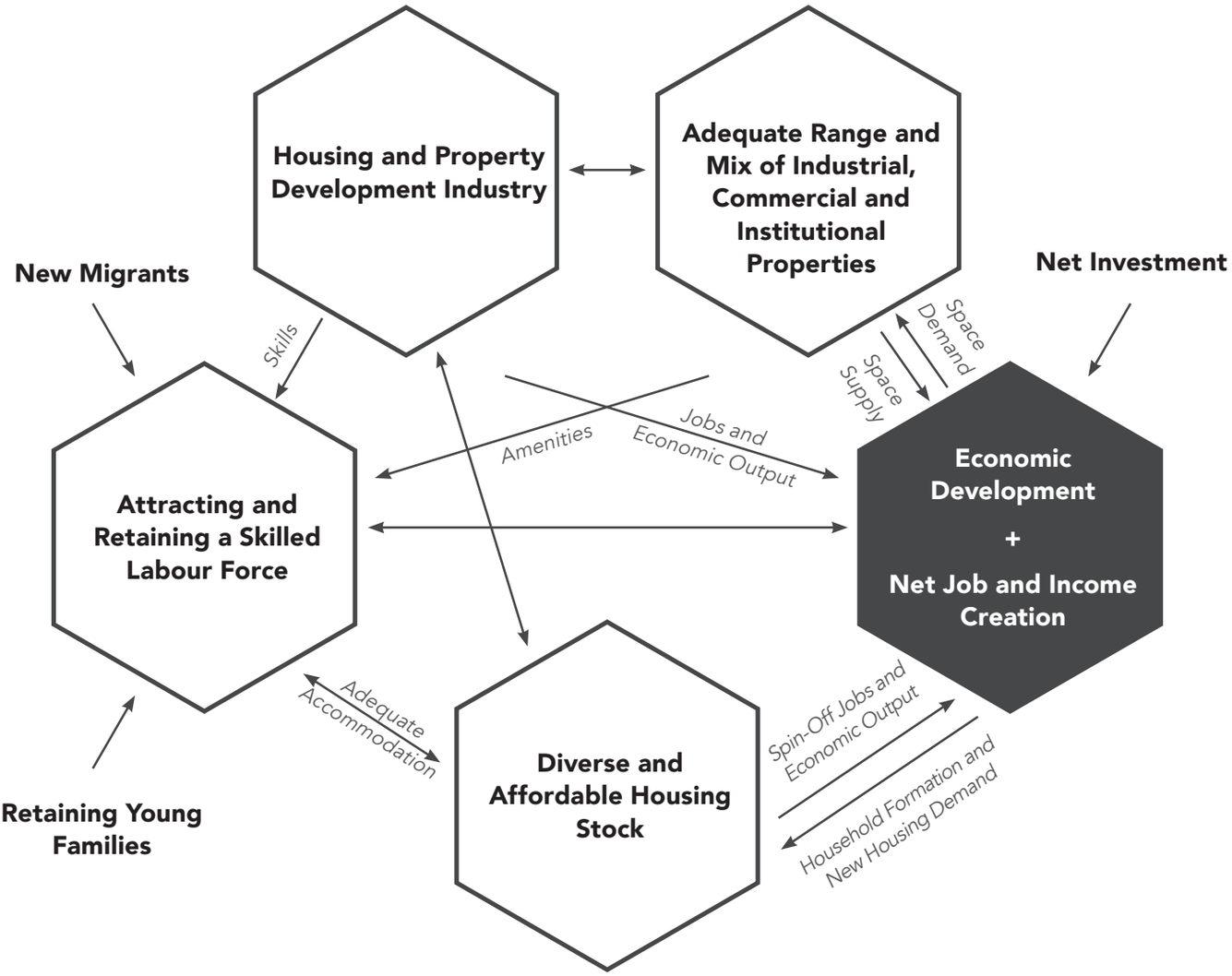
The District is poised to attract economic development and create jobs by:

- Building from the current economy – Agriculture, Agri-Business, and tourism.
- Mobilizing and demonstrating 'readiness' to embrace new economic sectors – mining, information and communication technologies.
- Acknowledging regional edge through creating a regional hub for services, healthcare and aging in place.
- Ensuring the District can offer a high quality of life including a broad spectrum of housing choices, rich inventory of amenities and community assets, strong community identity, and shopping choice and opportunity.
- Creating a culture of sustainability from a fiscal, economic, social, and environmental perspective, recognizing that the future success of the District depends on careful stewardship.

Together this information provides us with a very clear understanding of opportunities for growth and change in the District and how best to capitalize on the opportunities and manage constraints.

The Backgrounder and Development Plan articulate to potential investors the following:

- There is the capacity to accommodate new investment by ensuring an adequate land supply and aligning infrastructure to attract and accommodate that investment.
- There is a range and mix of lands to meet economic development requirements.
- There is certainty. Perhaps the most critical message of the development plan is that the District has thoroughly thought through its priorities and understands investment expectations related to quality of life. Investment decisions are now based on a myriad of considerations including available housing, amenities, and overall ability to provide a labour force with a high quality of life.
- The District thinks and acts like a region.



Economic Development 'Virtuous Cycle' (source: Altus Consulting Ltd.)

The above chart represents how critical the development plan becomes to meeting economic development objectives. It was created by Altus Consulting Ltd (Toronto, Canada) and is used to illustrate the connection between effective District land use planning, economic development, and creating jobs and income.

It best describes the relationship between ensuring that the District has properly planned for residential, commercial, and industrial lands and how that draws in investors and new residents (i.e. labour force).

TABLE OF CONTENTS

Introduction 1
Purpose 5
Methodology 6
Project Governance 9
Guiding Principles 10

Citizens 11
Population & Demographics 11
Housing 17
Amenities 21
Public Issues 27

Community 31
Land 31
Transportation 39
Water & Wastewater 44
Land Drainage and Storm Water Management 48
Solid Waste Management 50

Environment 54
Land Features 54
Soil Characteristics 56
Agricultural Capabilities 58
Livestock 60
Natural Land Drainage 63
Mineral Resources 68

Commerce 72
Income Analysis 72
Education 73
Labour Force 73
Places To Work 74

List of Figures

Figure 1: Tri-Roads District Aerial Map 2
Figure 2: Manitoba Planning Districts Map 3
Figure 3: Manitoba Treaty Map 4
Figure 4: Iterative Approach Diagram 6
Figure 5: 2011 Census Boundaries 8
Figure 6: 2016 Census Boundaries 8
Figure 7: Governance Diagram 9
Figure 8: Tri-Roads Population Trend 11
Figure 9: Tri-Roads Population Pyramid 13
Figure 10: Migration Status Details 14
Figure 11: Tri-Roads Population Growth Projection 16
Figure 12: Housing Stock Distribution 17
Figure 13: Russell-Binscarth House Construction History 18
Figure 14: Household Size by Person 19
Figure 15: Seasonal Lot Key Map 33
Figure 16: Bodnaruk Hill 34
Figure 17: Prairie Lake Lodge 34
Figure 18: Fry and Speiss Terrace (Dropmore North and South) 34
Figure 19: Killman 34
Figure 20: RB and RMW Land Assessment Change 35
Figure 21: Tri-Roads Transportation Map 42
Figure 22: Tri-Roads Regional Water System Map 46
Figure 23: Russell Waste Disposal Grounds and Buffer Area 51
Figure 24: Binscarth Waste Disposal Grounds and Buffer Area 52
Figure 25: Inglis Waste Disposal Grounds and Buffer Area 53
Figure 26: Tri-Roads Natural Land Features Map 55
Figure 27: R.M. of Shellmouth Soil Characteristics Map 57
Figure 28: R.M. of Boulton Soil Characteristics Map 57
Figure 29: Russell-Binscarth Soil Characteristics Map 57
Figure 30: R.M. of Silver Creek Soil Characteristics Map 57
Figure 31: Tri-Roads Agricultural Capabilities Map 58
Figure 32: Farm Quantity and Size 62

Figure 33: Watershed Map with Lake of the Prairies Conservation District 64
Figure 34: R.M. of Shellmouth Drainage Class Map 67
Figure 35: R.M. of Boulton Drainage Class Map 67
Figure 36: Russell-Binscarth Drainage Class Map 67
Figure 37: R.M. of Silver Creek Drainage Class Map 67
Figure 38: Mineral Resources Map 69
Figure 39: Manitoba Carbon Emissions (Kt CO_2 eq.), 2014 70
Figure 40: Manitoba Emissions Forecast 71
Figure 41: Total Annual Individual Income, 2016 72
Figure 42: Industry Employment Market Share 74
Figure 43: Beef Exports, 2015 78
Figure 44: Average Number of Head Per Farm, January 2016 79
Figure 45: Share of Beef Cows by Province 80

List of Tables

Table 1: Population Change 12
Table 2: Migration Status, 2006 14
Table 3: Housing Ownership Comparison 18
Table 4: Housing Price Comparison 19
Table 5: School Enrollment 22
Table 6: List of Healthcare Programming in Russell 23
Table 7: List of Seniors Housing Options 24
Table 8: Community Engagement Summary 28
Table 9: Vacant Residential Lands 32
Table 10: Vacant Commercial Lands 32
Table 11: Vacant Industrial Lands 33
Table 12: Seasonal Lot Availability 33
Table 13: Average Persons Per Household 36
Table 14: Population and Dwelling Unit Demand Projections 36
Table 15: Residential Area Demand Projections 37
Table 16: Commercial and Industrial Area Demand Projections 37
Table 17: Consolidated Land Features Distribution 54
Table 18: Consolidated Soil Characteristics Distribution 56
Table 19: Tri-Roads Soil Classification 58
Table 20: Livestock Production by Animal 60
Table 21: Consolidated Drainage Class Distribution 66
Table 22: Median Annual Income Per Household After-Tax, 2016 72
Table 23: Education Status Summary 73
Table 24: Employment Status Summary 73
Table 25: Farm Capital and Receipts Per Farm 75
Table 26: Agriculture Industry Summary, 2011 75

INTRODUCTION

The Tri-Roads Planning District is comprised of the Municipality of Russell-Binscarth and the Rural Municipality of Riding Mountain West. The District was established in 2001 and at that time included:

- Rural Municipality of Russell;
- Town of Russell;
- Village of Binscarth;
- Rural Municipality of Shellmouth-Boulton; and
- Rural Municipality of Silver Creek.

The District's respective municipalities are known for their proactive leadership and together ushered through major municipal amalgamations in 2015, creating two new municipalities:

- Municipality of Russell-Binscarth – an amalgamation of the R.M. of Russell, Town of Russell and Village of Binscarth.
- Rural Municipality of Riding Mountain West - an amalgamation of the R.M. of Shellmouth-Boulton and the R.M. of Silver Creek.

These new municipalities are part of the Midwestern Municipality District (section of Parkland Region), the Lake of the Prairies Conservation District, Treaty 2 and Treaty 4 territory located in southwestern Manitoba along the Saskatchewan border (see Figures 1 and 2). They are surrounded by five municipalities (Ellice-Archie, Prairie View, Rossburn, Grandview, and Roblin), two First Nation reserves (Gamblers and Waywayseecappo), and Riding Mountain National Park.

Apart from municipal and provincial roads comprising most of the Tri-Roads transportation system, the Trans Canada Trail meanders through the area and Major Interprovincial Highway #16 passes through Binscarth and Russell.

This document is the first in a series of three. It serves as the repository of information on who we are as a District. It lays out where we want to go and how we want to get there. Ultimately, it informs the Tri-Roads Forward Development Plan and Operations Manual. It was developed in 2017/18 and included extensive community dialogue and analysis.

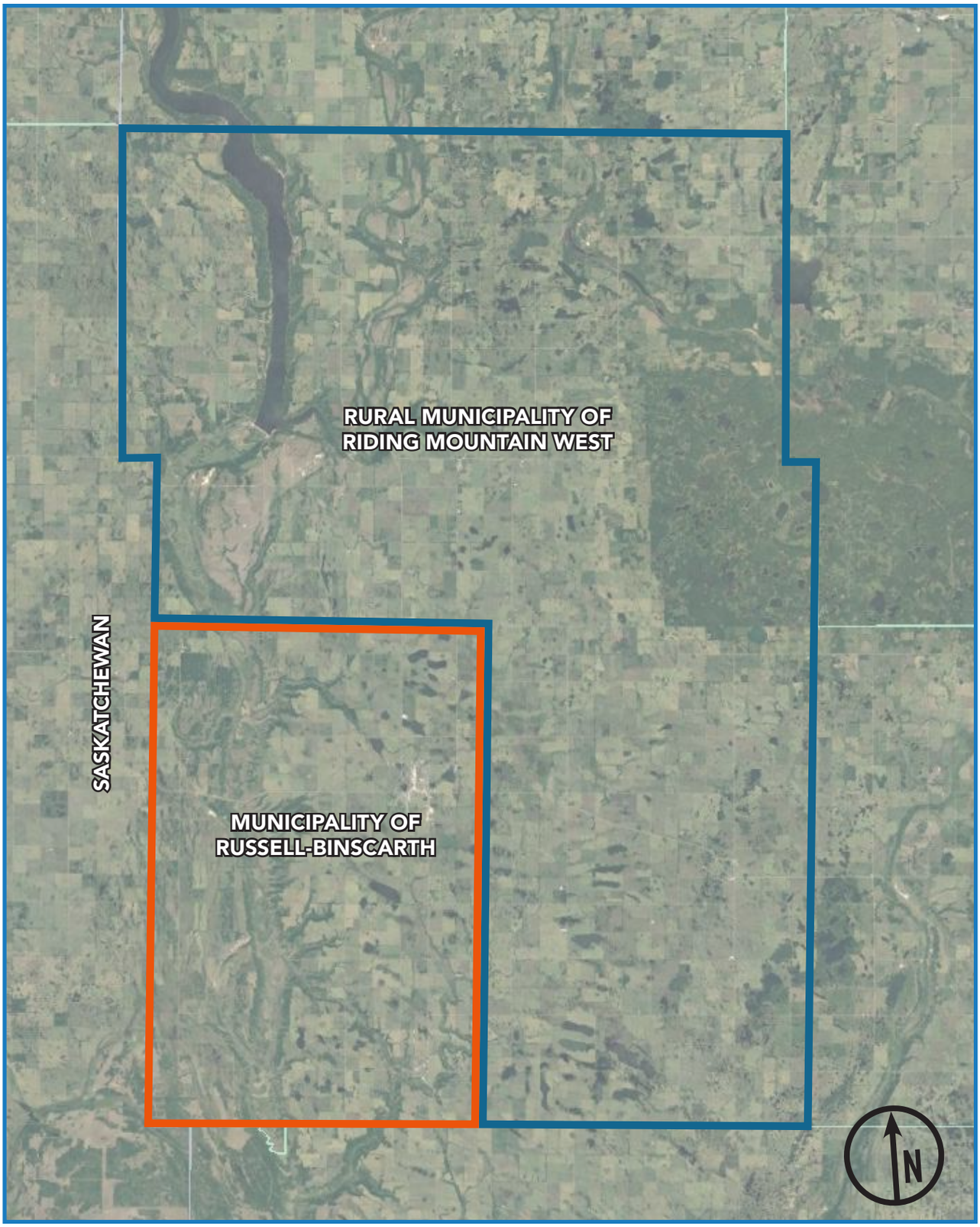


Figure 1: Tri-Roads District Aerial Map
Source: Google Earth

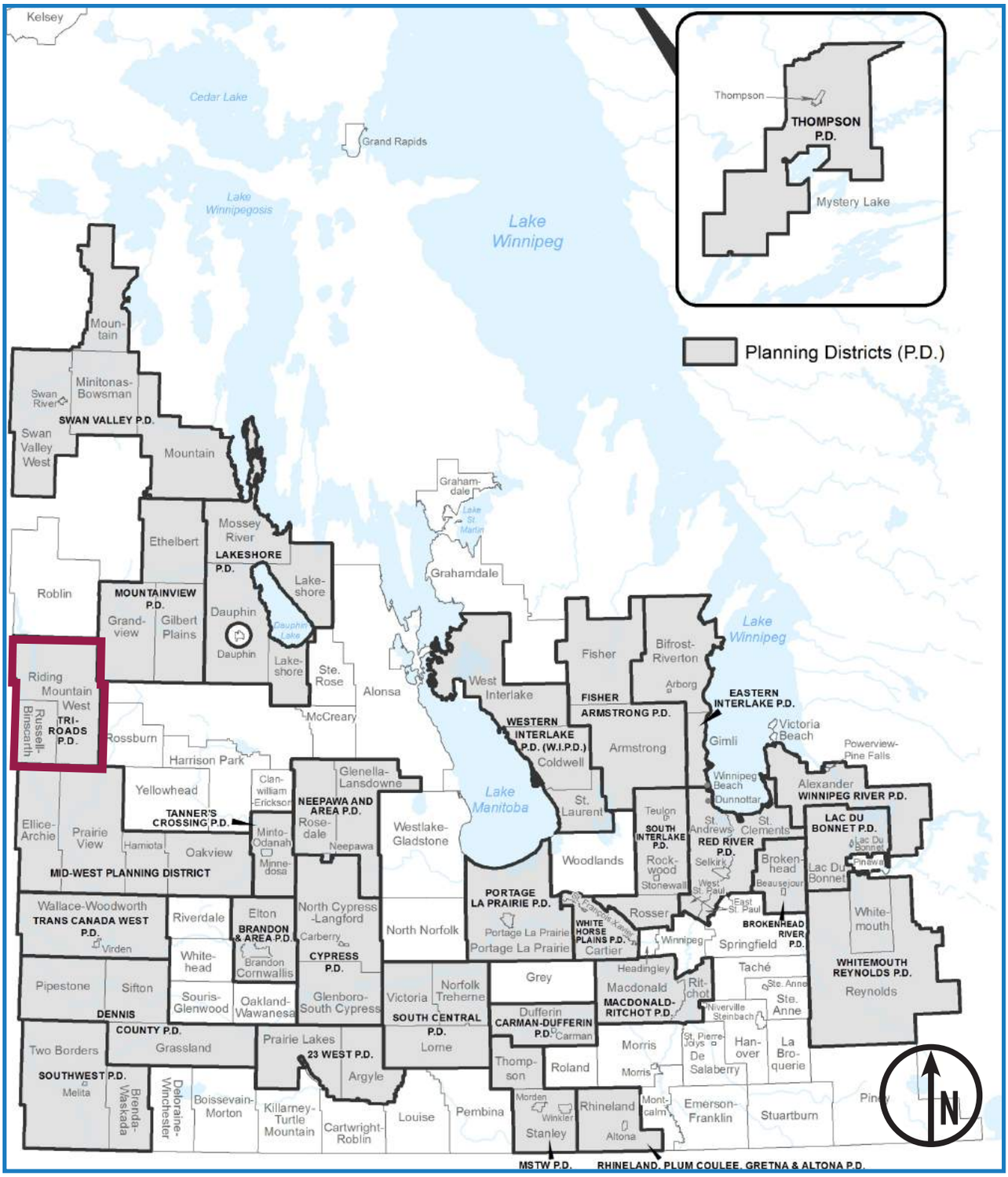


Figure 2: Manitoba Planning Districts Map

Source: Province of Manitoba

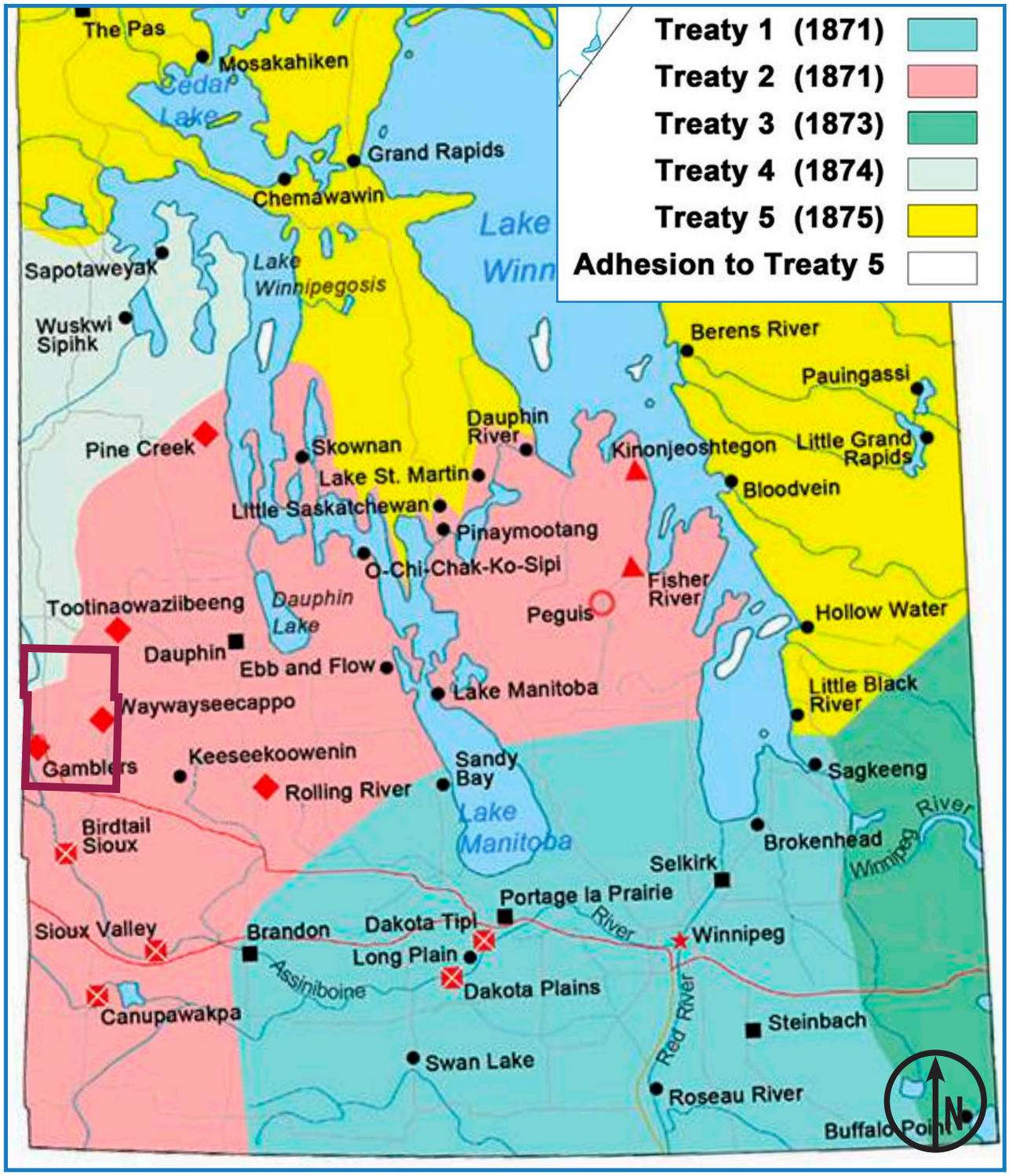


Figure 3: Manitoba Treaty Map

Source: Indigenous and Northern Affairs Canada

Purpose

The purpose of the Economic Development Backgrounder is as follows:

1. It provides a current snapshot of the District:
    - How are the communities and people living in these communities doing?
    - What is the current state of commerce and the economy?
    - How is the environment changing?
    - How have the existing land uses performed?
    - What is the current state of critical systems that serve your communities including water, wastewater, land drainage, transportation, and utility (including digital)? How have they served people and the economy?

2. It sets out a preferred future state for the District:
    - Do the guiding principles and initial vision measure up? If so, how?
    - How can we expect our communities to change and grow?
    - What is the anticipated state of commerce and the economy? How do we ensure we are ready for opportunities?
    - How can the District use its Development Plan to maximize economic opportunities? This includes employment and business development and the consideration of infrastructure and transportation costs along with housing.
    - How do we move forward sustainably, considering climate change impacts?

3. It sets out issues identified by the District as important. The lead up to this Study included an extensive community engagement program. The program identified a set of common and consistent issues that citizens, stakeholders, and elected officials have identified as important to meet the preferred future state.

4. It informs the Tri-Roads Forward Development Plan.

Methodology

The Tri-Roads Forward planning process was an iterative approach that was employed based on the decision to be as transparent and accessible as possible. Community dialogue is an important factor to achieving these goals, and is therefore the focus of this methodology. Therefore, the process took a different approach. It is not linear. Rather, it is 'iterative', meaning that it approaches the plan process as follows:

- **Community Dialogue** – an iterative planning process approach starts with community dialogue. This dialogue is left purposely open ended (as opposed to a linear approach that presents 'facts' for community verification). At the same time, and often behind the scenes, important data is being collected.
- **Draft Vision and Guiding Principles** – a unique aspect of the Tri-Roads Forward planning process was the drafting of a Vision and Guiding Principles at the start of the process. The Vision and Guiding Principles were drafted by the Tri-Roads Forward Steering Committee and used as the basis of all community dialogue. Citizens, stakeholders, organizations, and elected officials were invited to provide input on the draft vision and guiding principles.
- **Framing** – Quantitative (hard facts, stats, and data) and Qualitative (community dialogue: what you told us) are assessed together. An iterative process assumes both 'streams' of information are equal and valuable. During this stage, the 'hard facts' are weighed against the community dialogue. Do community ideas, issues and opportunities 'fit' with the hard data? This Backgrounder is the outcome of the 'framing' component.
- **Drafting and Looping Back** – The next step in the process is to draft the plan and loop back with the community to present the outcomes of the process. The looping back is an opportunity to set out the refined Vision and Guiding Principles and associated plan policies.

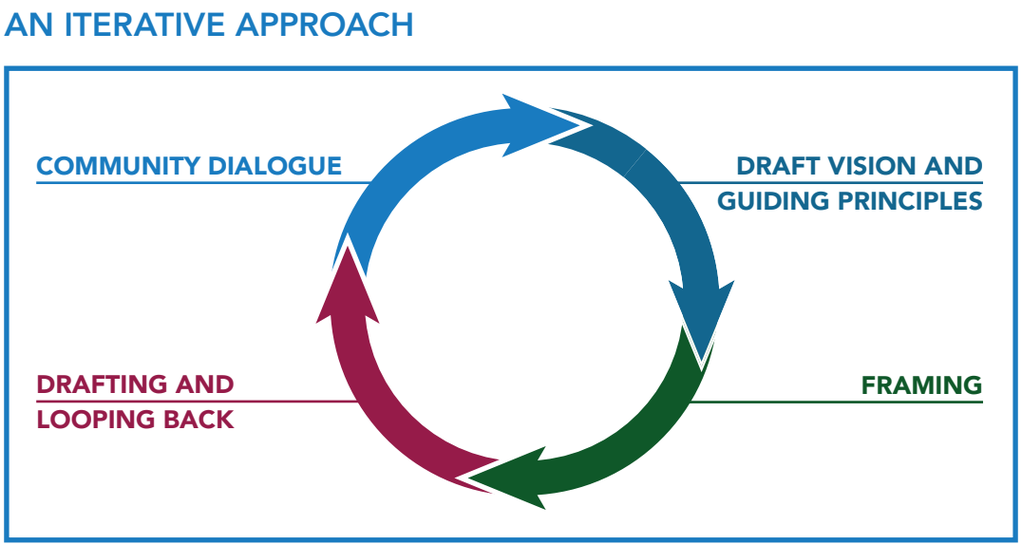


Figure 4: Iterative Approach Diagram

Community Dialogue

Everyone with a potential stake in planning outcomes – the community, stakeholders, property owners, developers, community administrators, planning board members, and elected officials – was invited to participate in the following ways:

- **One-on-One Discussions** – these meetings were discrete opportunities for one-on-one conversation. To date, 16 one-on-one meetings have been held with various interested community members, organization representatives, and vested stakeholders.
- **Web Based Input** – a Development Plan portal went live early-on in the process. It is a communication tool, outlining various aspects of the process and inviting participation.
- **Elected Official Seminar** – an early on session was held to invite all municipal leadership to the table. The objective of the seminar was to set out the planning process and discuss their early on issues that they felt was an important input into the planning process.
- **Community Input Sessions** – a total of four Community Input Sessions were held in June 2017 in Russell, Binscarth, Inglis, and Angusville. The objective was to invite the community to provide input into the plan. A total of 25 people attended the sessions over two days.

Binscarth Community Input Session

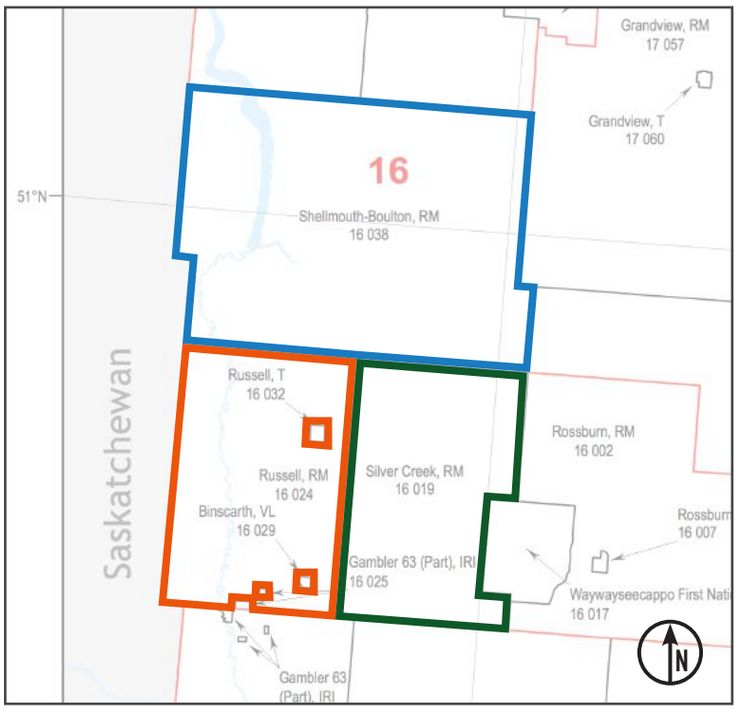


Figure 5: 2011 Census Boundaries

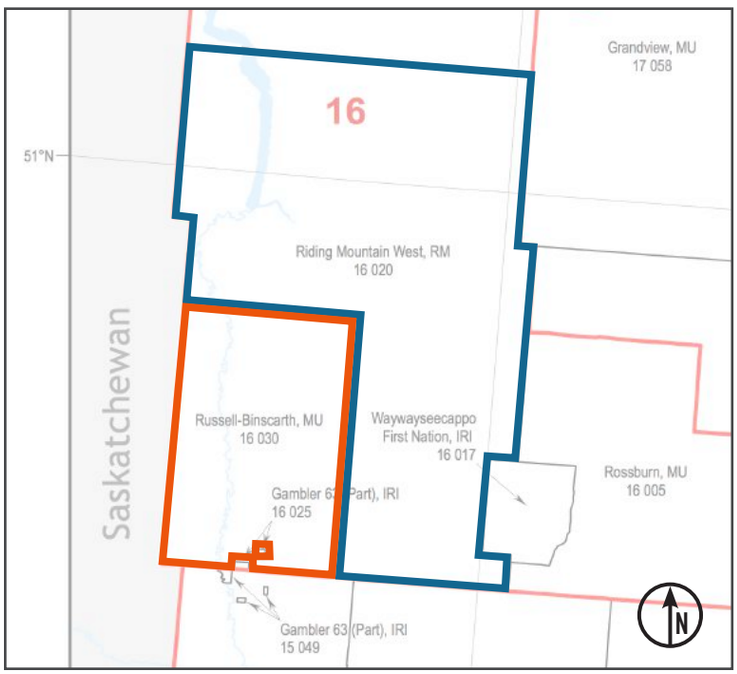


Figure 6: 2016 Census Boundaries

Information Gathering and Analysis

While the community dialogue was underway, important information was being gathered to inform the process and ultimately, the Plan.

Sources included:

- Statistics Canada;
- CMHC;
- Manitoba Bureau of Statistics;
- Province of Manitoba; and
- Participating municipalities.

Data collected includes population/ socio-demographics, jobs and economy, environmental, community amenities and their condition, taxation/assessment, natural conditions (soils, topography), agricultural, housing, land use, infrastructure and transportation.

The outcomes of this information gathering and analysis are presented in this study and include statistical information and spatial mapping information (GIS).

Census boundaries for the Tri-Roads area have changed due to the 2015 municipal amalgamations (shown in Figures 5 & 6). Along with the 2011 National Housing Survey (NHS), which contains different statistical categories, sources for comparison of trends and projections will require clarification to account for this change. However, since the R.M. of Riding Mountain West did not meet sample size requirements for the NHS and the 2016 census program has only released a portion of the statistics thus far, 2006 data will provide more accurate comparisons in several areas.

Project Governance

A comprehensive governance structure was developed to ensure complete oversight throughout the process including a community input committee.

Figure 7: Governance Diagram

Tri-Roads Planning District

Comprised of members of the District, it is the overall decision making body for the planning process.

Project Steering Committee

Comprised of the Mayor/Reeve, elected officials and Administrators from Russell-Binscarth and Riding Mountain West. In addition, members of the community were appointed to the Steering Committee. The Steering Committee makes recommendations to the Planning District.

Community input Committee

Members of the community were appointed to act as a sounding board to the process. They included representatives from education, youth, business, property owners, health, and community organizations.

Project Management Committee`

Smaller committee comprised of the Mayors and Administrators, and the consulting team. It is a hands-on committee that provides on-going direction to the consulting team.

Guiding Principles

Unlike many development plan review processes, a Vision and Guiding Principles were developed early in the process. Through the community dialogue process, they have been verified and confirmed. They form the basis of the Development Plan.

Principle 1: Plan for Progressive, Sustainable District Economy

The Plan will demonstrate Tri-Roads is mobilized, ready, and willing to accommodate growth and change. Tri-Roads Planning District and its member municipalities will use the Plan to respond to new economic opportunity with sufficient land supply that is serviceable to accommodate business and residential requirements.

Principle 2: Plan for a Connected District

The Plan will be major step in demonstrating that the Tri-Roads District is a regional player that 'thinks and acts' like a region. The plan will set the stage for district collaboration on many ideas and projects. The Plan will clearly demonstrate how your region can quickly and efficiently accommodate growth and change on a regional scale. It will be used to promote individual community aspirations and identity and at the same time, show how the region can be strengthened through transportation improvements and regional servicing.

Principle 3: Plan for People

The Plan will be used to create great, complete communities where people can spend their entire lives without leaving. Quality of life matters and the plan will demonstrate that by: creating opportunities for housing regardless of age; creating opportunities for new commercial/retail businesses; and attracting places to work. It should also be a tool to improve access to services and facilities. The Plan will be used to create active and connected communities. It will plan for important community needs such as recreation, wellness, education, and healthcare.

Principle 4: Plan for Sustainability

The Plan will be sustainable. It will address the natural environment looking at threats such as flooding and erosion. It will look at social issues, environmental concerns, socio-economic development opportunities such as aging in place, fiscal responsibility, and servicing/transportation issues.

CITIZENS

The Backgrounder starts with a look at Citizens of the District. Specifically, it looks at: Population & Demographics; Housing; Amenities; and Public Issues. Each section includes a summary overview on how this information affects growth and change, and how it might influence the Development Plan.

Population & Demographics

Examination of population 'dimensions' such as size, structure, growth, and spatial distribution plays an important role in formulating development plans. They inform demand for goods and services, labour supply to the market, housing, and infrastructure requirements (The Geography of Manitoba).

The District is home to one of the most stable population bases in Manitoba. This is a firm foundation from which to plan for growth and change. This Backgrounder provides a snapshot of the District's citizens: how many people live in the District? Where do they live? How old are they? How the population changes compare to surrounding municipalities and First Nations?

It also explores 'Drivers of Change and Growth' as the basis for future population changes in the District. The Study promotes the concept that a robust development plan along with other economic tools can create the conditions to successfully address drivers of change and growth.

For this reason, the Backgrounder presents population projection scenarios. We use Population Projection Scenarios to help position the District to visualize what growth and change to their District might mean for development, land use, infrastructure, and transportation.

We believe that the Development Plan must be a future-forward document that sets out coherent strategies in advance of growth and change. It is a tool to demonstrate to potential investors that the District can mobilize to meet opportunity in a timely and efficient manner.

The Plan must also be able to anticipate demographic changes and opportunities to ensure that there are no missed opportunities, such as attracting families to the District or accommodating aging in place.

Population Change

The rate of population change in and around the Tri-Roads District varies considerably, as shown below. Specifically, in the Municipality of Russell-Binscarth, the Town of Russell has experienced an influx of residents while the population in the Village of Binscarth and other rural communities has decreased. The communities in R.M. of Riding Mountain West are not large enough to measure population change, however the entire area is experiencing steady growth.

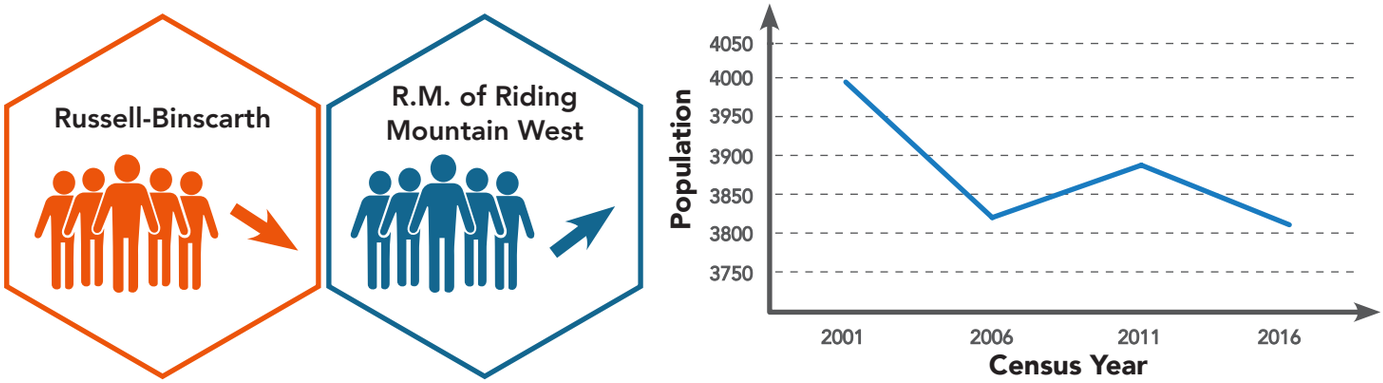


Figure 8: Tri-Roads Population Trend

Location	Rate of Change
Russell-Binscarth	-4.3%
R.M. of Riding Mountain West	2.2%
Grandview	-1.7%
Roblin	-5.3%
Rossburn	-6.7%
R.M. of Dauphin	8.5%
Waywayseecappo	12.0%
Gambler	8.3%

Location	Rate of Change
Russell-Binscarth	-4.3%
Town of Russell	2.2%
Village of Binscarth	-1.7%

First Nations Communities, Waywayseecappo and Gambler, have experienced significant growth from 2011 to 2016. These communities should be playing a fundamental role in shaping the economy and communities in and around the area.

Table 1: Population Change

DRIVERS OF CHANGE AND GROWTH

Economic Diversification

The District and its member municipalities have been actively working to diversify their local economies for several years, if not decades. As recognized, economic diversification efforts of substance take at least one generation to be fully initiated and two to have any meaningful impact.

Careful efforts by the District and its municipalities have paid off with an increase in value added agricultural business and tourism. Significant potential lies in the ability to position and capture growth through potash resource development and agri-business opportunities. Additionally, proximity to provincial and national parks helps promote a steady growth of cottage development.

Evolving Agricultural Economic Base in the District

Like most rural areas in Manitoba, the District has been experiencing incremental shifts from rural to urban and has been experiencing population decline in rural areas and population gains in urban areas.

Consistent with the rest of Manitoba, the move towards “larger farms; less farms” coupled with technology and transportation improvements have impacted the population of the District to some degree.

Aging Population

As society ages, structural changes in how we live and work follow. The District follows consistent aging patterns. The District will continue to experience impacts related to an aging population including: migration to service hubs for healthcare and housing; decline in traditional farm structure and increase in 'retirement' quality of life expectations, such as migration to recreational areas.

The population pyramid belows displays the age representation in the two Tri-Roads municipalities based on the 2016 census data. A large portion of the overall population is over 50 years old, and in Russell-Binscarth, there is a relatively high representation of citizens over the age of 85. This demonstrates the current aging demographic and the need to plan for this population.

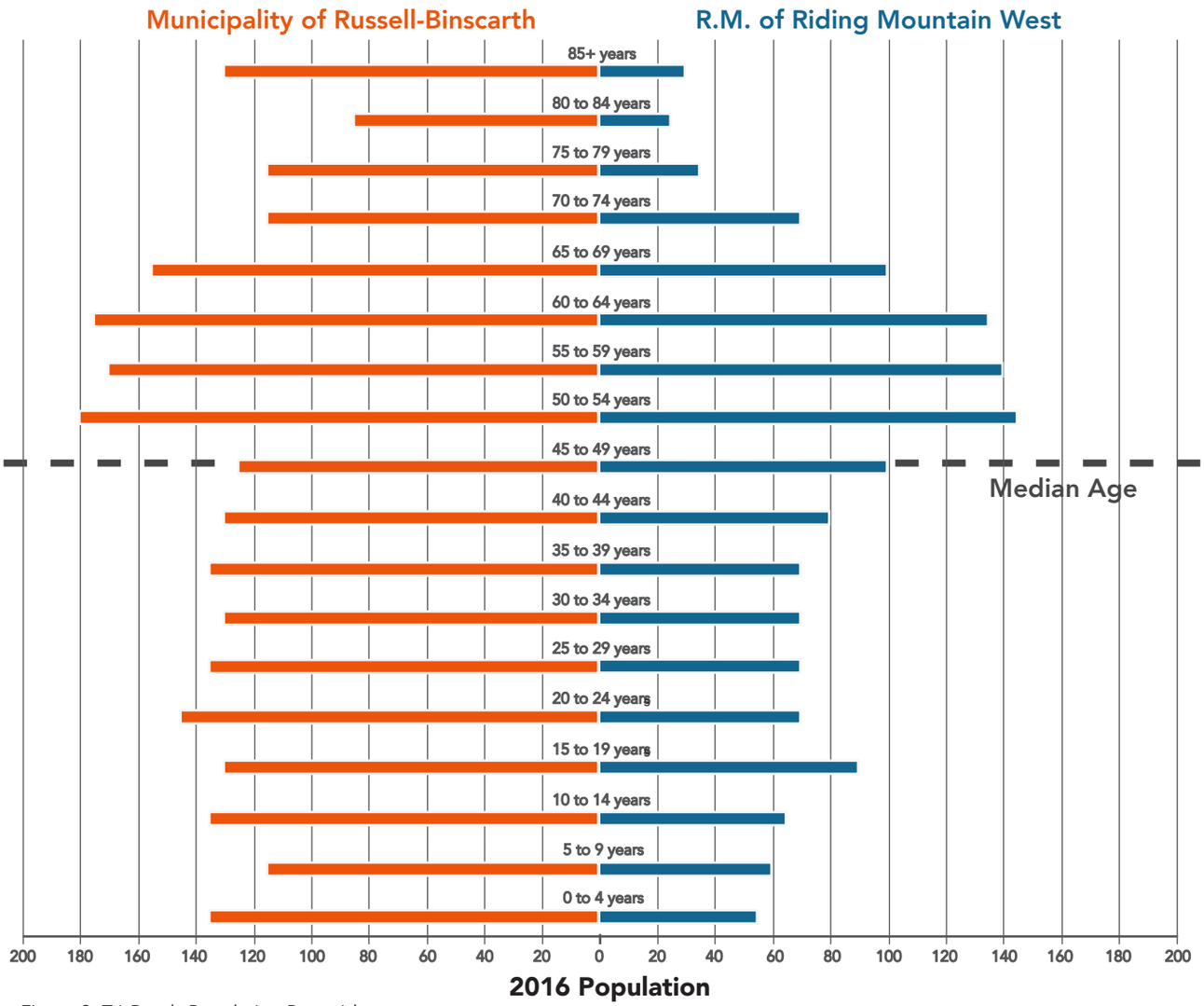


Figure 9: Tri-Roads Population Pyramid

International Migration and Investment

The geo-political framework that has governed the world for close to a century is in transition. International migration and investment are key priorities of the Provincial Government.

Through the Provincial Labour Market Strategy for Immigration and the Provincial Nominee Programs, there is a stronger emphasis on candidates with high potential to meet the Province's projected labour market needs and who can establish higher investment businesses that create jobs for Manitobans.

There is also a desire to attract legal foreign investment in Manitoba to support and enable economic diversification. Through partnership, rural Manitoba is positioned to capitalize on foreign investment in agri-business.

The migration status in the District is primarily non-Migrant, however, this percentage has begun shifting more in recent years. Data from the 2011 National Housing Survey has shown an Immigrant increase from 2% (shown in Table 2) to 5% in Russell-Binscarth. In particular, there has been a notable increase in the Tagalog-speaking population, denoting an increase in Filipino citizens. It is important that new residents are able to receive adequate training and job opportunities to contribute to the area.

Migration Status	Russell-Binscarth	R.M. of Riding Mountain West
Immigrant	2%	6%
Non-Migrant	98%	94%

Table 2: Migration Status, 2006

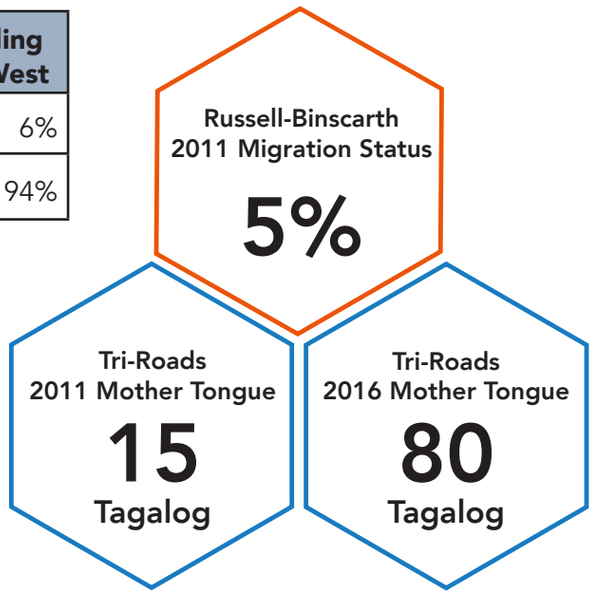


Figure 10: Migration Status Details

Each of the Drivers of Change and Growth suggest a shift in where people will live but more so, they suggest the possibility of growth. In order to capture the impact of potential growth, three possible growth scenarios are now considered in the study.

Future Population Growth

The following population projection scenarios consider what is occurring within the District in comparison with the broader region, and in comparison with the Province. These projections have not been solely based on past growth within the community, as this would neglect current trends, but consideration is given to external forces and regional opportunities. The projection scenarios are used to help position the District into thinking about its place within the region, comparing with other jurisdictions and considering potential targeted growth and what that may happen in the District over the next 25 years.

The population projection scenarios include the following, and are represented in Figure 11:

Scenario 1

Assumes the Tri-Roads Planning District continues to grow at their past 15-year average annual growth rate. Given growth has been negative 2.06% from 2011 to 2016 Census data, and 0.04% from 2001-2011, it is reasonable to assume that the rate of growth would be 0.00% or possibly negative if a do-nothing, "hands-off" approach was taken. The District will not grow and would likely lose more people if this approach is taken. The population would remain the same at approximately 3,862 people.

Scenario 2

Assumes the District will grow at the projected average annual rate for the Province. The Manitoba Bureau of Statistics (MBS) estimates Manitoba's population is projected to increase by an average of 1.3% per year between 2013 and 2020. These projections are based on the following: a Manitoba fertility rate of 1.87; a net international migration increase of 10,800 people per year until 2021; a loss of 3800 people per year to other parts of Canada by 2020; and a projected increase of life expectancy at birth to 0.9 years for females and 1.8 years for males. At the provincial projected rate of growth, the District will grow by 153 people by 2020 and by 1336 people by 2040.

Scenario 3

Assumes that the District will attract a major jobs-creator industry. For this scenario, the projection is based on the development of a potash mine, which is similar to the massive influx of workers in a concentrated area, which occurred in Saskatchewan over a decade ago. Even further in history, something similar that could be compared to is the Atomic Energy of Canada Limited in Pinawa in 1963, where a significant number of jobs resulted in an entire community being developed. In each of these scenarios, at least 2500 jobs were created. One potash mine near Saskatoon for example, employs 2780 people (2017). This level of growth, could it occur in the District would result in a growth of population to 4548 by 2020 (an increase of 1336) and to 13,523 by 2040 (an increase of 9661). It is possible that such a significant influx of people could occur given the number of workers that would be required, their spouses and families. This scenario would require an aggressive and comprehensive growth strategy to ensure demand for amenities could be achieved.

Scenario Implications

The average annual growth in Manitoba (shown by Scenario #2 in Figure 11) demonstrates a manageable increase in residents for the District. Planning for this growth would require meeting the housing demands of the aforementioned aging population and providing employment opportunities to attract skilled workers and young families. The economic sustainability of the area would rely on preparing for and acting upon smaller development opportunities as they arise.

However, the growth predicted in Scenario #3 is more than triple the current District population, which would result in broad changes to many of the existing communities. In the event of major industry development, areas for higher density residential development will need to be available and located strategically to guide the overall development of the District communities. Large increases in population will also attract new commercial investments that require a framework to assist new businesses while supporting existing business owners. Well-planned development within this scenario will help with efficient infrastructure improvements and establish a diversity of amenities that allow sustainable growth throughout the District.

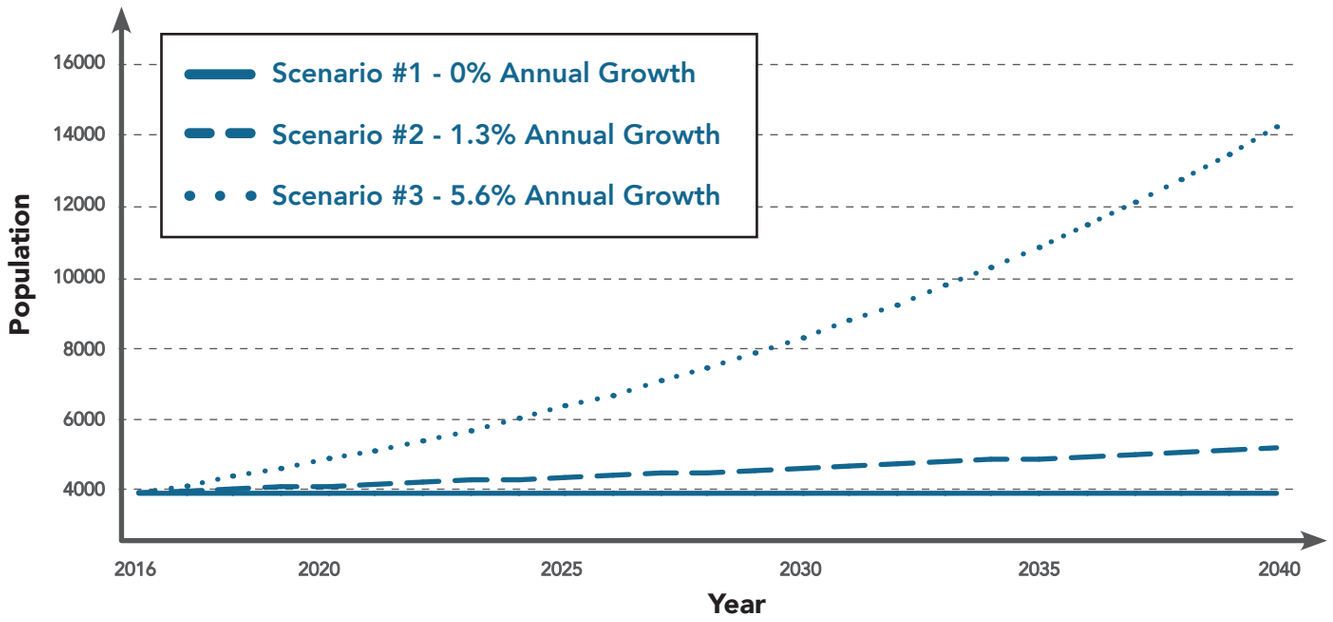


Figure 11: Tri-Roads Population Growth Projection

Economic Development Influencers

- The objective is to attract new residents and to keep existing residents.
- The District, through its Development Plan, has set aside an adequate land supply to accommodate growth and change with focus on attracting private investment.
- The Planning Package serves as the basis for an accelerated growth strategy. The District is ready to mobilize upon announcement of a major industry (i.e. land ready to develop and service for residential; commercial and industrial; approach to temporary workers).
- A Regional Service and Healthcare Hub will be developed in Russell.
- There are plans for a broad spectrum of housing options in District communities, including multi-family to support seniors wanting to stay in the District and young families entering the housing market for the first time.
- The District wants to attract young families to offset aging population.
- The District is ready to collaborate on an increasing basis to ensure that existing facilities, such as schools, can be maintained.
- Efforts will be expanded to attract newcomers including new Canadians, recognizing that there will need to be policies to help people settle. Key to this will be an understanding that the majority of residents in the District are at a minimum '3rd Generation' families.
- The District is ready to 'think and act like a District' as opposed to individual communities.
- This Backgrounder and the Development Plan acknowledge 'competitors' (i.e. not communities in the District, but regional economic hubs such as Langenburg, Saskatchewan) and work aggressively to capture growth on a District level.

Housing

A profile of the current housing stock is critical to the formation of policy for the official Development Plan. It also informs the important supply/demand analysis and optimal location for housing that is presented in this Study.

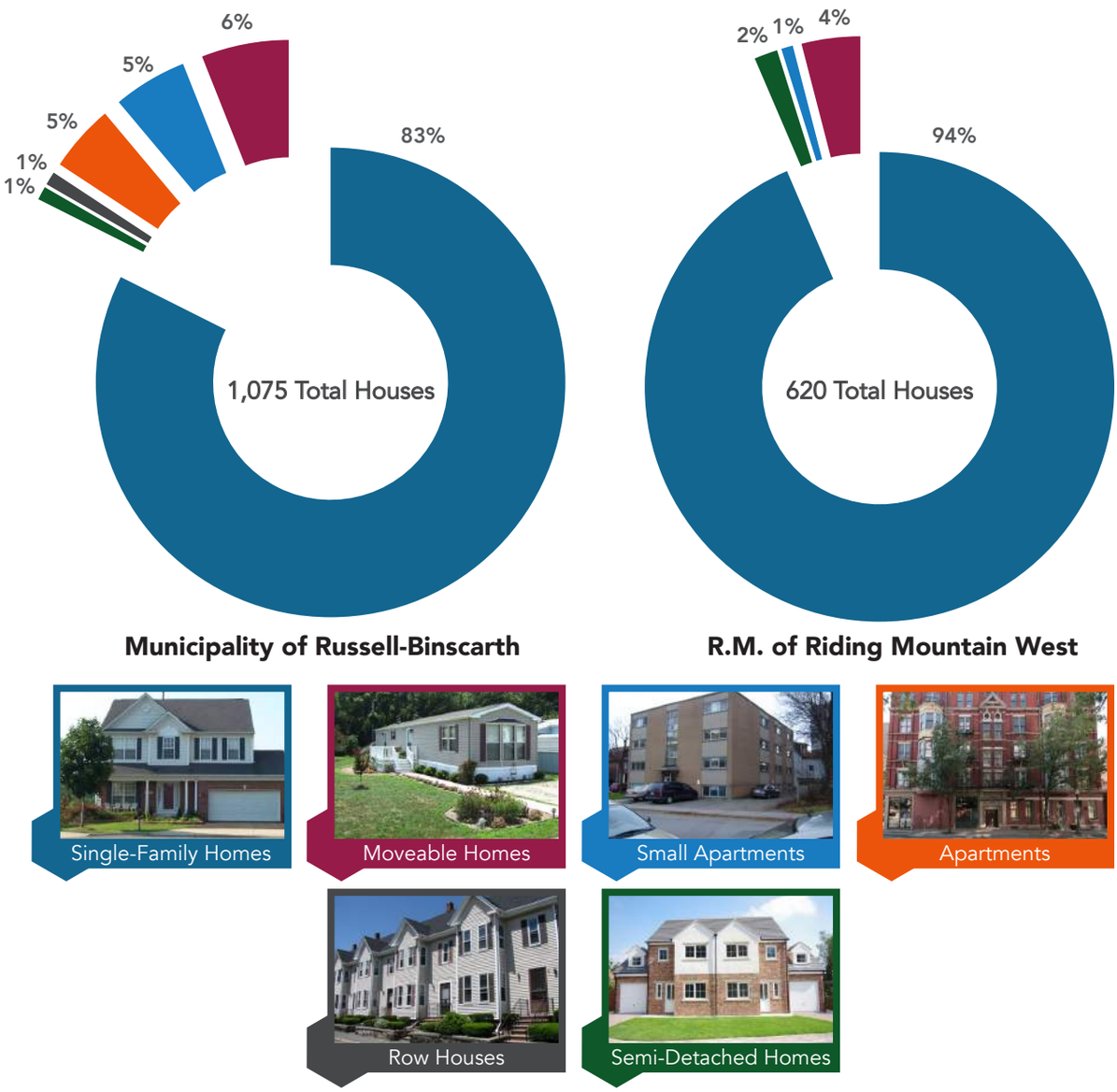


Figure 12: Housing Stock Distribution

The Tri-Roads Planning District housing is predominately single family, 3-bedroom houses. This is a comparable distribution with most smaller urban, rural, and northern areas in Manitoba. While at the time of construction (1960 to 1980, see Figure 13), this type of housing fit the needs of families moving into the area.

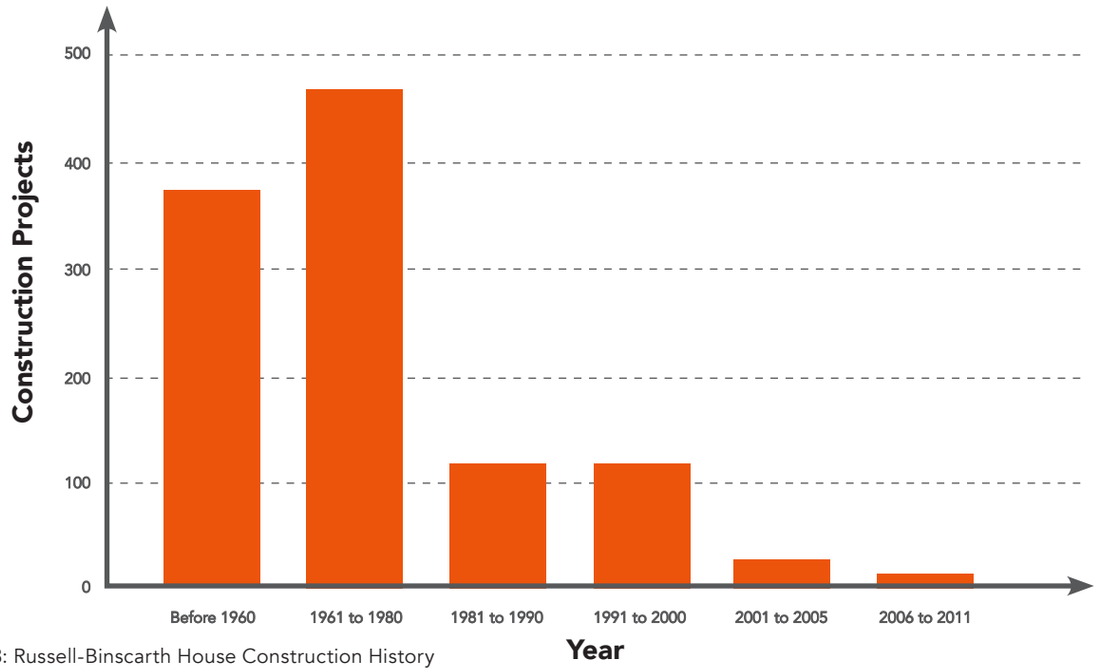


Figure 13: Russell-Binscarth House Construction History

**Note: Although there is no recorded housing construction data for the R.M. of Riding Mountain West, the figure above can be assumed to represent the entire District.*

Ownership vs Rental

On average, the Tri-Roads District has significantly more owner-occupied dwellings than the rest of Manitoba. Rental units provide affordable housing options to residents and the flexibility in choice that more people are seeking out currently.

Housing ownership data for both Russell-Binscarth and the R.M. of Riding Mountain West was calculated using the 2016 census.

Dwelling Type	Manitoba	Russell-Binscarth	R.M. of Riding Mountain West
Owner-Occupied	70%	81.4%	85.5%
Rental	30%	18.6%	14.5%

Table 3: Housing Ownership Comparison

Household Size

The figure below shows the number of dwellings by household size. Most of the dwellings in the District contain either 1 or 2 people - the average household size is 2.2 people per dwelling.

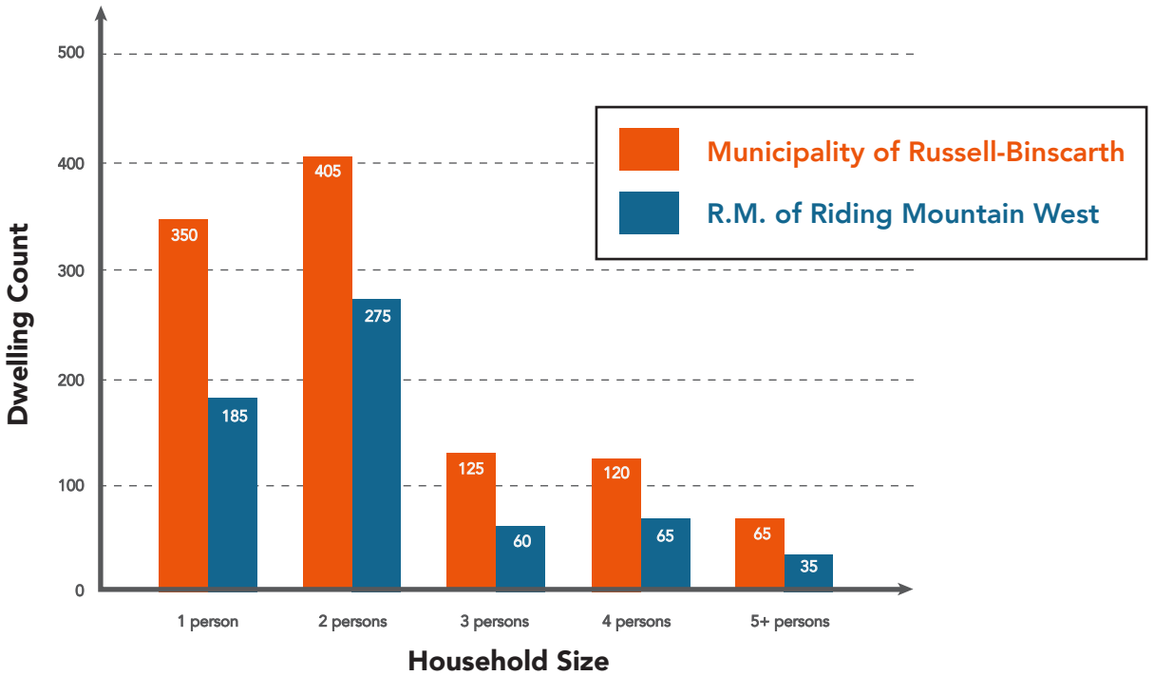


Figure 14: Household Size by Person

Household Cost

Housing prices throughout the Tri-Roads District vary significantly in each of the communities. Based on the 2016 Census, the average household value in Russell-Binscarth and the R.M. of Riding Mountain West were $184,516 and $219,493 respectively. It is important to note the median value for Riding Mountain West is $160,569, significantly lower than it's average. This would indicate there are households - likely within Lake of the Prairies - with higher values skewing the calculations.

Canadian Real Estate Wealth measured the following median prices in 2016 (*prices may include development in nearby seasonal areas):

Location	Median Price
Manitoba	$264,900
Russell	$214,500
Binscarth	$144,950
Angusville	$92,200
Inglis*	$296,950
Shellmouth*	$159,900

Table 4: Housing Price Comparison

DRIVERS OF CHANGE AND GROWTH

Most municipalities, of all sizes, are now considering impacts to a predominately single-family housing stock from the following perspectives: Choice; Ability to Age in Place; and Affordability.

Choice

Municipal-based economic development often depends on the ability of the municipality to demonstrate it takes quality of life seriously. A key component to quality of life is being able to access amenities and housing that fits preferences.

More frequently people are choosing to live in smaller, more convenient housing, either in condo communities, duplexes, row housing, or apartments. Larger single-family homes are able to support families and to some degree, specialized housing such as lake-front year-round homes. Housing options become critical in attracting new people and industry to the area.

Ability to Age in Place

As demonstrated in the population and demographic section of this report, the Tri-Roads District is aging. This presents a very real and specific need to accommodate an aging population through a spectrum of options from independent senior housing to long-term care housing.

Affordability

Most housing sizes in the Tri-Roads District are 3-bedroom houses, averaging from as low as approximately $90,000 to $200,000 based on the respective community. This presents a challenge for young families, single individuals and single parents to enter into the housing market with a house that meets their income threshold. Larger urban areas have been responding to this issue by introducing housing options that are more affordable including apartments, duplexes, and row housing. They are also incentivizing affordable, rental housing.

Economic Development Influencers

- The Development Plan sets out how preferred residential lands will be brought to the market.
- The objective is to respond efficiently, effectively and in an timely manner to capitalize on economic development opportunities.
- Mixed-use residential areas have been identified to support development of multi-family housing.
- All future residential development to areas are to be serviceable to ensure efficient and contiguous use of municipal infrastructure and land.
- Infill development will be supported through zoning regulation and incentives.
- An aging in place campus will be created to address growing seniors population.
- Opportunities are identified in each urban community to accommodate a broad spectrum of housing options, such as secondary suites, through concept planning, zoning and incentives.
- Unique housing opportunities such as housing development along lakes or other features will be explored and planned for.

Amenities

Is an area able to offer a high quality of life and is it rich with amenities? This is one of the most important questions potential investors will ask when considering investing in your District. More and more investment decisions are focused on the ability to attract and maintain an adequate labour force. It is also a key consideration for young families or single people considering a move for a job. Does the area offer daycare? Are there parks? What kind of fitness facilities are available? Are there coffee shops?

The ability to offer community amenities also becomes very important to retain existing population, especially one that is aging. What kind of senior's supports are in the community? Are there opportunities for socializing? This Backgrounder provides an inventory of the District's amenities with the objective of identifying potential gaps and areas for consideration.

Natural Amenities

One of the largest and most prominent natural amenities is Asessippi Provincial Park, located at the south end of Lake of the Prairies. This Provincial Park, designated in 1968, is 23.2 km^2 and includes facilities for camping, trails for hiking and snowmobiling, boating, swimming and water sports on the lake, bird watching on shores, as well as fishing. The Ancient Valley Interpretive Trail is ranked in the top 10 trails in Manitoba for providing breathtaking panoramas of steep prairie river valleys and wide open blue skies.

Asessippi Ski Area & Resort is one of the Canadian Prairies' premier winter playgrounds providing facilities for skiing, snowboarding, and tubing enthusiasts. The Assiniboine and Shell Rivers, Lake of the Prairies, and Silver Beach provide canoe, kayak and boating during the summer months; and snowmobiling during the winter months. Lake of the Prairies has recorded an annual walleye catch per square kilometre that is five times greater than the provincial average. Notable outdoor sports and recreation opportunities in the District include:

- **Golfing** - Binscarth Golf Course, Prairie Lake Lodge, and Russell Golf Club
- **Fishing** - Spear Lake, Assiniboine River, Shell River, and Silver Beach
- **Horseback riding** - Parkland Ranch
- **Snowmobiling** - Snowtraxx Snowmobile Club
- **Hiking** - Rossburn Subdivision Trail, Crocus Trail, Frank Skinner Arboretum Trail, Trans Canada Trail route, and Russell Trail

Frank Skinner Arboretum Trail

Community Assets
The community of Russell (a 4 Bloom community) is home to Millennium Park, which has an international flavour with flags of the world, a wooden bridge, floral gardens, and a campground.

Tri-Roads has a number of public facilities to provide recreational sporting opportunities for all ages with the Russell Regional Multiplex being a key facility. It provides a wide variety of year-round uses for recreation and sports; concerts and entertainment, trade shows and conventions, community gatherings and multiple fitness related activities. Additionally, Riding Mountain West is home to privately-owned amenities that attract both tourists and local residents.

There are also a number of other facilities within Tri-Roads that enable active lifestyles for hockey, curling, baseball, soccer, bowling, volleyball, basketball, and dance enthusiasts to engage in their sports.

Cultural Amenities
Cultural amenities include visual and performing arts programming, which is available through Yachminka Ukrainian Dance Club, Wade School of Dance, Prairie Arts cARTel, and the Binscarth Vagabond Theatre. The George P. Buleziuk Community Centre's Joan Robert Auditorium (Main Hall) can seat up to 600 people and has dressing rooms, a stage, and has a modern sound system and stage lights suitable for concerts, choirs, dance or theater groups.

Religious amenities include United, Anglican, Lutheran, Ukrainian Catholic, Ukrainian Greek Orthodox, Romanian Orthodox, Roman Catholic, and Baptist churches. Noted church buildings include St. Elijah Romanian Orthodox Church and Romanian Folk House just west of Inglis – the only church of its kind in North America (a provincially designated heritage site), built in 1908 as a replica of the Romanian Orthodox churches in Bukovyna. Trembowla Cross of Freedom Historic Site and St. Michael's Ukrainian Catholic Church (site of the first Ukrainian Catholic mass to be held in Canada [1897]) are also notable religious amenities.

Education amenities include Russell Library, Binscarth Library, Assiniboine Community College [Russell], Park West School Division schools [Binscarth School (K-8), Inglis School (K-8), Major Pratt School - Russell (K-12)], L.E.A.R.N. (Lifelong Education for Adults: Reading & Numeracy Inc.), Binscarth Nursery School, Binscarth Little Bloomer's Learning Patch Inc., Kids First Early Learning Centre Inc., and Russell's Lots-A-Tots Day Care Inc.

Enrollment Information
The school division for the District is the Park West School Division. According to Province of Manitoba Enrollment Statistics, the District's enrollment is declining moderately.

School	2012	2016
Major Pratt School	505	499
Binscarth Elementary	79	74
Inglis Elementary	61	52

Table 5: School Enrollment

Healthcare Amenities include (located in Russell):

Type of Healthcare	Available Programming
Acute Care	• High Care Needs • Inpatient beds • Palliative Care
Outpatient Services	• Emergency Services • Day Treatment • Hemodialysis • Community Cancer Program • Chemotherapy • Rehabilitation Services
Diagnostic Services	• Lab • X-ray • EKG • Ultrasound
Emergency Medical Services	• Ambulance Station
Community Rehabilitation Services	• Occupational Therapy
Home Care Services	• Adult Day Program • Facility Respite • Services to Seniors • Meals on Wheels • In Home Services
Community Mental Health Services	• Long Term Care Facility – 40 bed
Primary Health Care	• Family Physician Services/Clinics
Public Heath Services	• MB Telehealth

Table 6: List of Healthcare Programming in Russell

Current Seniors Housing Seniors Amenities include:

Community	Available Housing
Russell	• Park Manor - 24 units, Life Lease/affordable component • Elks Legion Court - 10 units, affordable component • MB Housing - 40 units, affordable • Lions Manor - 12 units, Life Lease
Binscarth	• Sunset Haven - 4 units, affordable
Inglis	• Manitoba Housing - 10 suites, affordable
Angusville	• Manitoba Housing - 6 suites - affordable

Table 7: List of Seniors Housing Options

Heritage Amenities

There are a total of 8 heritage sites within the Tri-Roads District. Ukrainian settlers built several churches in the early 20th century once they arrived in the areas that now make up Riding Mountain West. These churches still remain today. One of the more recognizable prairie icons is the Inglis Grain Elevator Row. The five internally-functioning grain elevators represent Manitoba agricultural history and are the last intact row in the province. Large Canadian and American-backed companies, to small farmer co-operatives had a share in these elevators. The site was declared a National Historic Site in 2000 and Provincial Historic Site in 2002.

Inglis Grain Elevators

Shellmouth United Church

. Peter and Paul Ukrainian United Church

The North American Lumber Company Building in Binscarth and the Smellie Bros. Co. Store in Russell are the two municipal heritage sites located in Russell-Binscarth. These buildings were home to much of the commercial development early in the municipality's history. Many of the vital amenities that transformed pioneer life around the turn of the twentieth century were due to these businesses.

North American Lumber Company Building

Smellie Bros. Co.

Beyond the handful of heritage sites in the District, there are 46 registered historic sites in Russell-Binscarth and 87 historic sites in the R.M. of Riding Mountain West. These sites include schools, churches, monuments, cemeteries, and grain elevators that are spread across the entire Tri-Roads area.

HISTORY

The District has a rich history, forming the physical bones of each respective municipality. While the area was home to First Nations people for thousands of years, the first settlers arrived in the late 1870s as part of efforts to populate the west, called Homesteading. The area was a natural choice for settlement because of its proximity to existing trails: the Pelly Trail and Fort Ellice-Edmonton Trail. The addition of a transcontinental railway fully established the area with its western extension in the late 1880s.

It was during this time that settlements were established and incorporated, including Russell, Binscarth, Shellmouth, and Silver Creek. The area was fueled by an agricultural economy and associated industries, such as milling.

The municipalities continued to establish their structures around key highways such as Highway #16 (the Yellowhead), and their respective economies have since remained predominately agricultural based. Russell has emerged as a trade centre in the District.

DRIVERS OF CHANGE AND GROWTH

Savvy Labour Force

The District is able to handle new industry and to meet quality of life expectations of potential workers (i.e. new residents). There are available housing choices to meet preferences along with the ability to provide social, community, educational, and health assets.

Aging Population

The District is positioned to support seniors. In addition to providing housing opportunities, the provision of and access to healthcare is key to keeping long-term residents 'in place'.

Sustainability

The ability to develop and sustain amenities is an issue facing communities across Canada. Deferred maintenance issues have accentuated concerns related to municipalities, school districts, or health care districts supporting new facility development.

At the same time, expectations for quality of life amenities are growing, not only for current residents but for future residents who will make their decision to move to the District on what is available in it to support their quality of life expectations.

Economic Development Influencers

- An aging in place campus that includes housing and amenities, including wellness and healthcare will be developed in Russell.
- Community-based urban design strategies for each urban community in the district, celebrating their uniqueness and individual identities will be developed.
- Multi-use opportunities with existing assets such as schools will be explored.
- The District will work together to develop new assets as opposed to competing for them.
- Innovative ways to develop new District amenities such as Private Public Partnerships or Social Action Bonds will be embraced.

Public Issues

A large component of the Tri-Roads Forward planning process was community engagement. Thus far, the project management team has completed three of the four engagement events:

1. **Questionnaire:** Council In-service and Community Input Survey.
2. **Stakeholder Engagement Meetings:** 16 one-on-one interviews with District stakeholders.
3. **Community Input Sessions:** 4 open house events in the Town of Russell, Village of Binscarth, Village of Inglis and Community of Angusville.
4. **Community Open Houses (to be completed):** Events to provide the public with the results of the review process.

In general, feedback received from the input sessions matched the aspects brought forward in the first two engagement events. In the R.M. of Riding Mountain West, there is a strong desire for enhanced municipal communication and infrastructure improvements, specifically cleaner water and better internet service. Citizens in Russell-Binscarth would like to see more job opportunities and better training in the area to attract and retain skilled workers. The entire Tri-Roads District wants a more diverse housing market to support both aging citizens and young families. Two important environmental concerns moving forward are: the water levels and shore erosion on the Lake of the Prairies, and access to sustainable waste management systems.

Community Input Sessions

Area of Interest	Important Aspects
Business	• A strategy for creating more commercial/retail development and entrepreneurial growth • Better promotion and support to businesses • Better streams of communication • Greater development of agriculture industries • Focus on new economies such as technology innovation and food security • Small scale commercial opportunities around cottage developments • Better broadband and cellular coverage • Job generation through new businesses and industries
Policy	• A quicker subdivision process and better guidance for development applications • Better taxation assessment for both commercial and residential, based on location and services • Explore local investment fund for innovation and incentives • Zoning regulations that increase development opportunities • Better communication among municipalities and their communities
Housing	• Better market diversity for renting and leasing, using tools like rent-to-own • More affordable housing stock to allow for enhanced "middle housing" • A need to plan for an aging population through personal care homes and seniors housing • Better planning and support of cottage development • Attracting and retaining young families
Public Services	• Promote existing recreational facilities with more programming and collaboration • Improvements to transportation infrastructure • Improvements to water quality • Better health care programs, and incentives to attract and retain health care professionals • New amenities to attract and retain families (e.g. daycares)
Environment	• Sustainable growth and conservation • Management of lake levels and drainage • Protection of farm land

Table 8: Community Engagement Summary

DRIVERS OF CHANGE AND GROWTH

Working and Thinking Like a Region

Engagement participants identified that there was room for more collaboration on a District level. Participants stressed that municipal amalgamations resulted in a perception that the amalgamated municipalities were not 'working and thinking as a united front'. They referenced that there was competition among former municipal entities.

Participants felt that there was an enormous amount of opportunity to work together more effectively and posed several concepts and ideas including better coordination and use of existing community amenities such as schools and recreational facilities; better coordination of marketing the District with a focus on capitalizing on the assets of the area; more transparent approach to communication on civic issues.

Population Retention and Attraction

Engagement participants cited a need to identify strategies and actions to keep existing residents in the communities and to attract new residents. The following major population retention and attraction issues were identified:

- There needs to be a broader spectrum of suitable, affordable housing options and community supports/amenities to retain and attract young families.
- There needs to be options for people to stay in the district as they age, including seniors housing and long-term care facilities.
- There needs to be employment opportunities to attract and retain younger families.
- The District must catch up with new economy opportunities and to do so, must have world class digital capacity.

Impacts on Agriculture

Engagement participants strongly emphasized the need to keep agriculture as a priority in the District. Participants identified several impediments to the agricultural industry, such as:

- Lack of coordination or sensitivity at senior government levels as it relates to water level controls of the Shellmouth Dam and flooding of agricultural lands located downstream from the dam. This issue was identified as a very serious and systemic issue that has been the focus of lobbying efforts by producers for many years.
- Concerns that economic diversification efforts and possible new industry will erode agricultural lands.

Participants also identified opportunities including:

- Intensive Livestock operations that are appropriately sited.
- Agri-business including animal processing facilities.
- Marketing the area's agricultural capacity on an international scale.

BUNGE Agriculture Facility

Focus on Economic Diversification

Engagement participants strongly felt that the District's sustainability lies in the ability to create and maintain a strong, diversified economy. Participants suggested that a key priority for the District should be attracting new business and that there needed to be a better, holistic understanding of the relationship between tools, such as the Development Plan and zoning for and attracting business. Participants also felt that the District must address gaps in critical areas such as fibre optic/cell phone coverage.

Aging in Place

Engagement participants voiced concerns over the lack of aging in place planning. Most felt that there was a critical need to immediately address housing issues including more senior's housing but also a new long-term care facility to serve the region.

Participants identified that in addition to housing, there should be emphasis placed on making sure the communities had access to healthcare, services, and recreation opportunities.

COMMUNITY

The Backgrounder looks at the current ability of the District to accommodate growth and change, including residential, commercial, and industrial. The Study looks at the current supply of designated land and future demand, using the population projections explored in the Citizens section.

This section then looks at how the District is serviced with water, wastewater, solid waste, and transportation infrastructure. It looks at the current servicing capacity and where the services are located. This information and analysis becomes a critical input into the Development Plan. In order to be an effective tool for managing growth and change, land supply must be aligned with economic development objectives.

Most municipalities or planning districts keep a rolling supply of designated lands that can be efficiently 'brought on' in a timely and sustainable manner. It is for this reason that most development plans designate land supply based on anticipated development horizons (i.e. where growth is anticipated to go and when it can be serviced).

Land

Land Supply

To assess the availability of land within the Tri-Roads Planning District for future residential, commercial and industrial development, an analysis of current and available land was undertaken.

Current land use designations were analyzed in the Town of Russell, the Village of Binscarth, and the unincorporated villages of Angusville, Dropmore, Inglis, Silverton and Shellmouth, as well as designated Urban Fringe Areas of Russell and Binscarth, currently included in the Tri-Roads Planning District Development Plan By-law No. 02/01/02. This analysis was conducted using orthographic imagery as well as 2017 property tax assessment information from the Province of Manitoba. This information was used to identify areas for new growth in the Tri-Roads Forward Development Plan.

Town of Russell Streetscape (source: Russell-Binscarth Community Profile)

Residential (2017)

The following table outlines the amount of vacant land intended for residential use within the Tri-Roads Planning District. This analysis does not include other land designations which may permit the development of residential uses. Development constraints, including other land use designations, physical constraints and land required for public uses have been factored into this analysis.

Location	Acres		Number of Lots
	Rural Residential	Urban Residential	
Town of Russell	0	133.8	70
Village of Binscarth	0	5.6	13
Angusville	11.6	0	15
Dropmore	0	0	0
Inglis	11.8	0	10
Silverton	0.9	0	3
Shellmouth	24.8	0	26
Sub-Totals	**49.1**	**139.4**	**137**
Total	**188.5**		**137**

Table 9: Vacant Residential Lands

Commercial (2017)

The following table outlines the amount of vacant land intended for commercial use. This analysis includes both Commercial and Commercial Highway Designations. Note that Table 10 and 11 only includes vacant commercial lands within the Town of Russell and the Village of Binscarth, and does not include land that in the Unincorporated Villages designated as General Development which also permits limited development of commercial land uses. Where necessary, constraints to development have been factored into this analysis.

Location	Acres	Number of Lots
Town of Russell	219.8	28
Village of Binscarth	28.2	2
Total	**248**	**30**

Table 10: Vacant Commercial Lands

Industrial (2017)

The following table outlines the amount of vacant industrial land intended for industrial use. This analysis includes only lands designated as Commercial Highway/Industrial and does not include other land uses that may permit limited industrial development.

Location	Acres	Number of Lots
Town of Russell**	119.0	15
Village of Binscarth**	28.2	2
Total	**147.2**	**17**

Table 11: Vacant Industrial Lands

***Note: Land available for industrial development in the Town of Russell and the Village of Binscarth is designated as "CHI" - Commercial Highway/Industrial, and therefor may also be developed as commercial highway uses.*

Seasonal (2017)

There are currently several cottage developments along the Lake of the Prairies in the R.M. of Riding Mountain West. Table 12 outlines the amount of vacant lots in each cottage subdivision, including maps for context.

Location	Number of Lots
Bodnaruk Hill	6/44
Prairie Lake Lodge	86/229
Dropmore North	25/72
Dropmore South	Full
Killman	Full
Silver Beach Resort	20*

Table 12: Seasonal Lot Availability

**Note: Silver Beach Resort is not designated as Seasonal but does advertise seasonal lots available for rent annually. It is located south of Riding Mountain National Park, separated from other seasonal lot locations.*

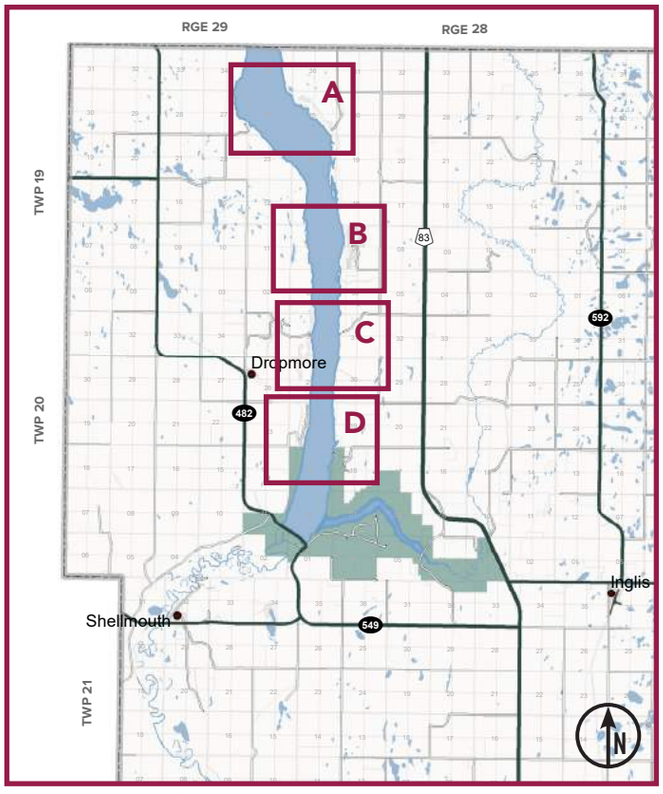


Figure 15: Seasonal Lot Key Map

Figure 16: Bodnaruk Hill

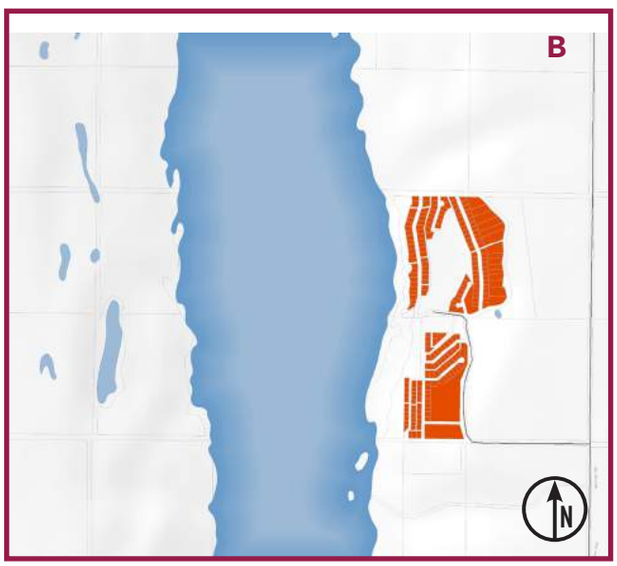


Figure 17: Prairie Lake Lodge

Figure 18: Fry and Speiss Terrace (Dropmore North and South)

Figure 19: Killman

Land Value

The statistical information provided by the Manitoba Finance and Advisory Services Office provides a overview of audited financial statements of all municipalities in Manitoba and provides a comprehensive view of each municipality's financial position. This information includes the assessment of land, buildings, personal property, and values subject to grants. The information presented in the following tables indicates the total taxable amounts for both the Municipality of Russell-Binscarth and Riding Mountain West* and charts the changes over a 5 year period from 2009 to 2014.

The Municipality of Russell-Binscarth saw a 67% increase between 2009 an 2014, growing from a total taxable assessment of $66.7M to $111.4M. Total changes show large increases in 2010, 2012 and 2014 of 24%, 10% and 19% respectively. The RM of Riding Mountain West saw a increase of 113% over the same 5 year period growing from $56.4M in 2009 to just over $120M in 2014. Similarly, large increase were seen in 2010, 2012 and 2014 of 36%, 22% and 24% respectively.

In comparison, the total growth for the Province of Manitoba over the same period (for rural municipalities with populations up to 5,000) was 95%.

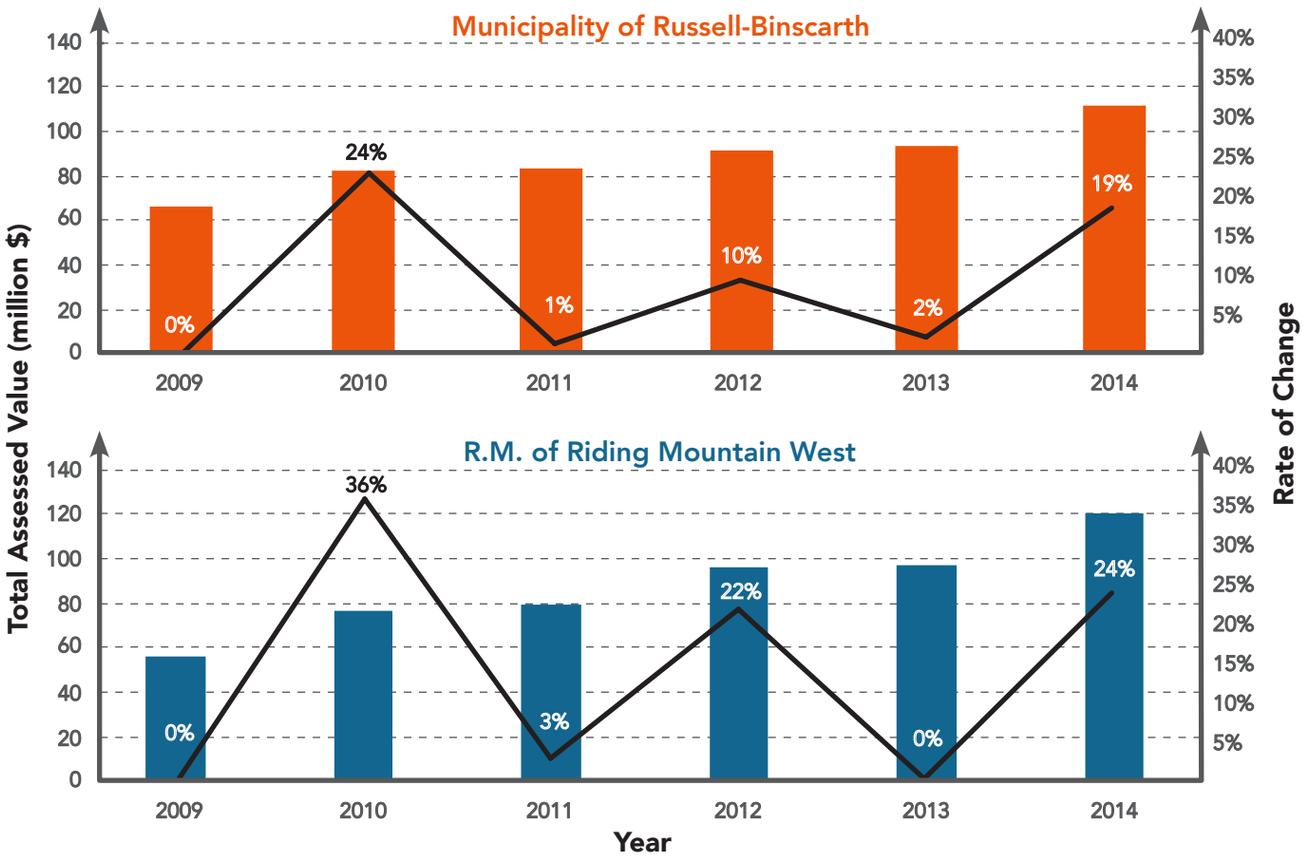


Figure 20: RB and RMW Land Assessment Change

**Note: The information presented in this section was collected prior to the Municipal Amalgamations of January 1st 2015. The assessment figures have been combined to reflect the new municipal boundaries. Data collected for the RM of Russell, the Town of Russell and the Village of Binscarth is presented as the Municipality of Russell-Binscarth and the data collected from the RM of Shellmouth-Boulton and the RM of Silver Creek is presented as the RM of Riding Mountain West.*

Demand

The following demand analysis estimates the amount of residential, commercial and industrial land required as per the Planning District's projected population growth to the year 2040.

In order to complete this analysis, several assumptions have been made which were informed by Statistics Canada census data, population growth projections outlined in this document, and feedback heard from members of the community.

The table below illustrates the number of persons per household within the Municipality of Russell-Binscarth and the Riding Mountain West.

Year	Russell-Binscarth	R.M. of Riding Mountain West
2016	2.0	1.6
Average	**1.8**	

Table 13: Average Persons Per Household

For the purposes of this analysis, the total number of persons for the Planning District was averaged between the two. This figure will be used to determine how many new dwelling units are required based on the population projections to the year 2040.

Growth Rate	New Population	Change	New Dwelling Units
1.3%	5198	1336	742
5.6%	13523	9661	5367

Table 14: Population and Dwelling Unit Demand Projections

The table below illustrates the estimated number of households for two development scenarios based on 1.8 persons per household in the Planning District and the two projected population rates.

In order to determine the amount of land required to calculate the projected amount of new dwelling units, the requirements of the existing urban zoning by-laws were used. For the purposes of this analysis, only the urban zoning requirements have been included to reflect the desire to see guide development toward existing communities where servicing and amenities are readily available.

Town of Russell

- Single family – 5000 sq ft minimum (1 dwelling unit per 0.11 acres/9 dwellings per acre)
- Multi-Family – 9000 sq ft minimum (1 dwelling unit per 0.07 acres/14 dwellings per acre)

Binscarth

- Single Family – 6500 sq ft minimum (1 dwelling unit per 0.15 acres/7 dwellings per acre)
- Multi-Family – 9000 sq ft minimum (1 dwelling unit per 0.07 acres/14 dwellings per acre)

This analysis assumes two scenarios in order to capture differing variations of single family and multi-family housing typologies:

- a 90/10 split; and
- a 75/25 split.

Residential

In order to complete the residential demand analysis, the following series of density and general locational assumptions were made to determine an approximate amount of land that will be required to support residential growth to the year 2040.

- Each new dwelling unit in the Planning District will contain 1.8 people.
- At a growth rate of 1.3% the total number of dwellings required is 742
- At a growth rate of 5.6%, the total number of dwellings required is 5,367
- 0.13 acres of land is required for one single family dwelling unit parcel
- 0.07 acres of land is required for one multi-family dwelling unit

Scenario #1	1.3% (742 units required)	Acres required	5.6% (5,367 units required)	Acres required
Single Family (90%)	668	87	4830	628
Multi-Family (10%)	74	5	537	38
Total	**742**	**92**	**5,367**	**666**

Scenario #2	1.3% (742 units required)	Acres required	5.6% (5,367 units required)	Acres required
Single Family (75%)	557	73	4025	523
Multi-Family (25%)	185	13	1342	94
Total	**742**	**86**	**5,367**	**617**

Table 15: Residential Area Demand Projections

Summary:

- The Tri-Roads Planning District currently has 189.5 acres of vacant residential land.
- The land required to accommodate additional residential needs assuming a growth rate of 1.3% is roughly 92 acres (for a 90/10 split between single family and multi-family) or 86 acres (for a 75/25 split).
- The land required to accommodate additional residential needs assuming a growth rate of 5.6% is roughly 666 acres (for a 90/10 split) or 617 acres (for a 75/25 split).

Commercial and Industrial Lands

Commercial and industrial land demands are based on residential densities and demand statistics.

To calculate the appropriate level of demand, several assumptions have been made concerning this data.

- 50% of required residential lands should be set aside for commercial use
- Twice the number of required residential land should be set aside for industrial use

Scenario #1	Acres Required 1.3%	Acres Required 5.6%
Commercial	46	333
Industrial	184	1332

Scenario #2	Acres Required 1.3%	Acres Required 5.6%
Commercial	43	309
Industrial	172	1234

Table 16: Commercial and Industrial Area Demand Projections

Summary:

- The Tri-Roads Planning District currently contains roughly 248 acres of vacant commercial land and 147.2 acres of vacant industrial land.
- At a growth rate of 1.3%, based on the 1st residential demand scenario, the Planning District will require 46 acres of commercial lands and 184 acres of industrial land. Based on the 2nd scenario, the Planning District will require 43 acres of commercial land and 172 acres of industrial land.
- At a growth rate of 5.6%, based on the 1st residential demand scenario, the Planning District will require 333 acres of commercial land and 1332 acres of industrial land. Based on the 2nd scenario, the Planning District will require 309 acres of commercial land and 1234 acres of industrial land.

Economic Development Influencers

- There is an adequate supply of land to meet growth scenarios by structuring and designating land on a development horizon – i.e. immediate, serviceable, and future supply.
- Existing designated supply has been adjusted in the Development Plan to best align to economic development objectives.
- Development is directed to urban communities that can best service development with a full range of municipal services.
- Sufficient land has been set aside to accommodate a planned commercial node that can be marketed to potential private investors (i.e. location and node size will be important to potential investors).
- Infill development is highly encouraged to reduce new infrastructure requirements.
- Implementation tools, such as secondary plans, zoning, demonstration projects, incentives, partnerships, will be used to achieve desired development objectives.

Transportation

The transportation networks of a community form the circulatory system for moving goods and people to and through the area. The linkages of Tri-Roads to the places beyond its borders are critical to the commerce of the community for sustaining and growing the local economy as the ability to bring in tourists, procure supplies, and distribute products rely on a sturdy transportation system. The transportation linkages are also essential to the citizens and their quality of life as vital connections for amenities, employment, and emergency services.

The Tri-Roads Planning District has a dependable transportation network of roads, rails, trails, and air connections to enable the citizens of the municipalities to grow and enjoy their local communities. The essential elements of this transportation system are maintained and implemented by interests outside of Tri-Roads, thus improvements and changes will be dependent on external parties. However, direction by local decision makers on land-use developments can influence and impact this transportation network. The following is a summary of the existing transportation linkages that criss-cross the Planning District that are considered in the development plan.

Provincial Trunk Highways and Provincial Roads

The Tri-Roads Planning District is directly connected to the Pacific Coast in Western Canada, Eastern Canada and the Gulf of Mexico at the United States/Mexican Border via three (3) Provincial Highways: Provincial Trunk Highway No. 16, Provincial Trunk Highway No. 83, and Provincial Trunk Highway No. 45.

Provincial Trunk Highways and Roads are declared under *Manitoba's Highway and Transportation Act*; and are constructed and maintained by the Provincial Government. The Provincial Highways and Roads within the Tri-Roads district are under various states of surface conditions.

Provincial Trunk Highway (PTH) No. 16 is the primary arterial highway linking areas within Tri-Roads to the major Canadian Cities beyond the district's boundaries. Constructed in the late-1950's and known as the 'Yellowhead Route', it is part of the National Highway System linking across +2,900 kilometres of the Western Canadian Provinces, from Winnipeg to the Pacific Coast going through Saskatoon, SK and Edmonton, AB. In Tri-Roads, PTH 16 is a black asphalt ribbon that runs through waves of cropland from the southeast corner of the District north past the Village of Binscarth and then swings west to go past the Town of Russell as a four lane divided highway, and going due west through the Village of Harrowby before crossing the Assiniboine River and past the Manitoba/Saskatchewan border. Three Provincial Trunk Highways (PTH 83, 41 and 45) and two Provincial Roads (PR 478, and PR 579) connect with the Yellowhead. PTH 16 connects and shares the same pavement with the Trans-Canada Highway just west of Portage La Prairie.

PTH No. 83 is a major north-south highway that connects Western Manitoba, including Tri-Roads, directly with the United States and Mexico via US 83, the longest north-south US Highway in the United States at 3,034 kilometres. US 83 southern terminus is Brownsville, Texas on the Gulf of Mexico at the Veterans International Bridge on the Mexico-United States border. Its northern terminus is Westhope, North Dakota where it crosses the Canadian/USA border at the Westhope-Coulter Border Crossing just south of the Town of Melita as PTH 83 to be part of the longest continuously numbered north-south highway in North America with a combined distance of 3,450 kilometres.

In Tri-Roads, PTH 83 shares the same roadway with PTH 16 from the southeast corner of the District until the Town of Russell where PTH 16 swings west and PTH 83 continues northward as a two lane undivided asphalt roadway going past the west side of the Village of Inglis, the east side of Asessippi Provincial Park; and the east side of the Lake of the Prairies before continuing northwards for +50 kilometres and terminating at Swan River, MB. Five Provincial Roads (PR 359, PR 478 , PR 579, PR 482, and PR 366); two Provincial Trunk Highways (PTH 41 and 45) and the Yellowhead connect to PTH 83 in the Tri-Roads District making this highway a major connector within Tri-Roads. It is the second PTH in the District to connect south to the Trans-Canada Highway just west of Virden.

PTH 45 is the third leg of the 'Tri-Roads' moniker that runs 100 kms west/east from PTH 16 and PTH 83 in the Town of Russell for five (5) kilometres to PTH 10 passing though the Villages of Silverton and Angusville before crossing into the RM of Rossburn. PR 478 and 476 cross PTH 45 in the Tri-Roads District. This highway is a narrow two lane band of asphalt, winding in nature that resembles the winding bush paths commonly found on Prairie farms though it is a much faster route for traversing from Saskatchewan to Riding Mountain National Park as opposed to the Yellowhead.

PTH 41 is a short, but important, provincial highway of approximately 69 kilometres with a southern terminus in the hamlet of Kirkella on the Trans-Canada Highway near the Saskatchewan border and northern terminus is south of Binscarth. PTH 41 crosses the CNR Rail line in St Lazare and crosses the CPR Rail line just south of Binscarth before entering the south end of the Tri-Roads Planning District and continuing north to Russell. PTH 41 shares the same road pavement as PTH 83 just east of St. Lazare and then shares the same road pavement with PTH 16 & PTH 83 between Binscarth and Russell. PTH 41 connects Tri-Roads to both CN and CPR main rail lines, and is the third connection for the District with the Trans-Canada Highway just east of the Manitoba/Saskatchewan border.

Provincial Roads (PR) serving the Tri-Roads district are all two lanes with almost all being gravel though some have asphalt sections. The main north-south PRs linking the community are 482, 592 and 478; and the main east-west routes are 366, 478, 482, 579, and 264. PR 482 is asphalt from PTH 83 through Asessippi Provincial Park and across the Assiniboine River on the Shellmouth Dam to the Village of Dropmore on the west side of Lake of the Prairies before terminating at Highway 5 just west of Roblin. PR 478 is asphalt from the Village of Binscarth to Hwy 22 in Saskatchewan. And PR 366 is asphalt from PTH 83 east to the Village of Inglis.

Service levels

All Manitoba roads are grouped into one of the following three levels for winter operations:

- Level 1 Major Routes - travel lanes plowed within four hours after end of storm.
- Level 2 Regional Highway Network – surfaced, travel lanes plowed such that surface is predominantly visible within eight hours after plowing on level 2 roads begin.
- Level 3 Regional Highway Network - gravel, access, and service roads plowed only after all other higher priority roads have been done, typically within 48 hours after the end of the storm during normal working hours.

Tri-Roads Level 1 Major Routes – PTH 16 and PTH 83.

Tri-Roads Level 2 Major Routes – PTH 41, PTH 45, PR 478, PR 482, and PR 366 (west of Inglis).

Tri-Roads Level 3 Major Routes – PR 359, 476, 478, 579 264, 366, 592, 583, and 549.

Municipal Roads
There are a number of roads maintained by the municipal levels of government that include gravel and concrete roads within the rural and the settlement areas, which connect residential, business, and commercial areas with the large Provincial Highway and Road network.

Railroads
CNR Mainline is a Class 1 railroad with a track weight limit of 286 tons that falls just south of the Village of Binscarth and outside of the Tri-Roads Planning District, crossing Western Manitoba in the Village of St. Lazare before entering Saskatchewan. PTH 41 connects the Tr-Roads Planning District to the rail lines and facilities in St. Lazare.

CPR Bredenbury Subdivision is a Class 1 railroad that goes through the Villages of Harrowby, Millwood and Binscarth (Station 5840) in the south west half of the Tri-Roads Planning District. Connects Winnipeg to Saskatoon and Edmonton. A branch line running north and parallel with PTH 16/83/41 for approximately 3 kilometres serves Viterra's 56 train car grain elevator that has a storage capacity of 8,200 metric tonnes. Patterson Grain's grain elevator in Binscarth is serviced by CPR Bredenbury and has a 54 car capacity and a storage capacity of 21,060 metric tonnes. PTH 16/83/41 and PR 478 connect with Binscarth. Bunge Canada Harrowby Plant with canola crushing and oilseed refinery in the Village of Harrowby connects the CPR rail line with PTH 16.

Trails
The Trans-Canada Trail links the Tri-Roads Planning District with neighbouring municipalities and runs through the District via the Rossburn Subdivision Trail and the Crocus Trail.

The Rossburn Subdivision Trail is 172 km of grass, gravel, dirt and pavement from Russell to Neepawa. The Trail runs east/west, parallel to PTH 45 following the abandoned rail line passing through Silverton and Angusville in the Tri-Roads Planning District to connect with communities of Birdtail, Waywayseecappo, Rossburn, Vista, Oakburn, Menzie, Elphinstone, Sandy Lake, Rackham, Erickson, Clanwilliam, and Bethany.

The Crocus Trail is 136 kilometres of grass, gravel, dirt and pavement and runs from the Town of Russell to the Village of Inglis, and westward through Asessippi Provincial Park and along the east side of Lake of the Prairies to Village of Roblin and Duck Mountain Provincial Forest.

Pedestrian sidewalks and walkways of various standards and sizes are incorporated within the existing settlement areas.

Air
Russell Airport [TC LID: CJW5] is publicly owned and operated by the Russell Flying Club. The Airport is located southwest of the Town of Russell, south of the Yellowhead Highway with two runways: Runway 14/32 is 579 metres and is turf/snow; and Runway 17/35 is 1,220 metres and is asphalt. Air side services include fuel [AVGAS JET] oil, Storage, Minor & Major Repairs, Extended Parking, Tie Downs, and Plug-in.

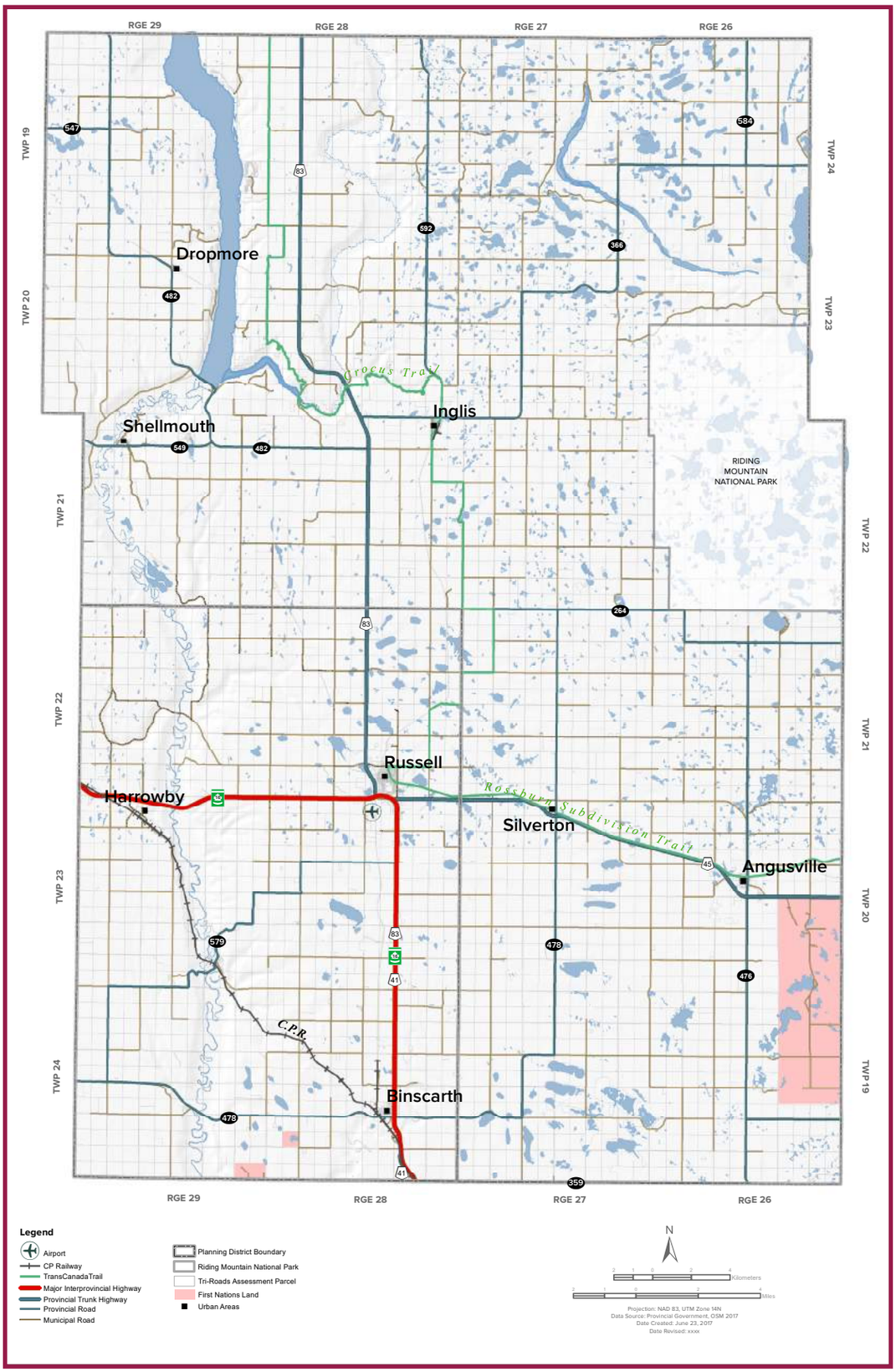


Figure 21: Tri-Roads Transportation Map

DRIVERS OF CHANGE AND GROWTH

Transportation is a major component for nurturing the District's economic prosperity. The key is to maximize public investments made to improve transportation movements by locating growth on the existing transportation routes. The second point is to ensure the appropriate development is located next to the appropriate transportation infrastructure – the right size road with the right size land use. The third point is to provide complete, safe, and accessible transportation routes for all residents and visitors of all abilities from young to old, to enable alternative modes of transportation. And the final point is to protect the major transportation corridors existing configurations and planned future expansions from being adversely effected by incompatible and/or negatively impacting land-use developments.

Economic Development Influencers

- The District acknowledges the importance of an efficient transportation system to support future residential, industrial, commercial, and agri-business.
- The District will use community based initiatives to draw visitors into all the District's communities through continued urban design, community theming, and place making (creating community places that people want to be in) along transportation routes often traveled by visitors.
- Emphasis is placed on existing and traditional commercial spines (i.e. Main Streets) in existing settlement areas to ensure they are universally accessible.
- Effective and sustainable goods movement network is a priority in the District and includes key trade corridors and truck routes is part of the balanced, multi-modal transportation system.
- Sustainable transportation linkages are supported within the District between existing settlement areas, recreational areas, high intensity employment areas, and the adjacent municipalities to enable alternative modes of transportation.

Water & Wastewater

The potable water and wastewater distribution systems of a community are critical components for sustaining residents. People within the Tri-Roads Planning District obtain potable water from the ground water: the bedrock aquifers and the sand & gravel aquifers below the surface. Many have independent services for delivering potable water such as wells, cisterns, or intake pipes. Independent services such as disposal fields, sewage ejectors, or septic tanks are also commonly used in the network for conveying wastewater back into the environment. Community water services comprised of water treatment plants with underground pipe networks also exist for some of the urban settlement areas as does wastewater treatment facilities with lagoons that accept trucked-in deliveries from septic tanks for treatment prior to release back into the watershed. These systems and networks for potable water and wastewater distribution are maintained by local decision makers but are constructed with funds from senior levels of government who set the regulations for the operations and treatment of water and wastewater.

Drinking Water

A regional water system including an upgraded water treatment plant in the Town of Russell with pipelines to surrounding communities and existing piped distribution systems is currently under construction. Anticipated completion of the project is set for the summer of 2018.

The new Regional Water Treatment Plant (WTP) on the west side of the Town of Russell will provide a safe and reliable potable water supply to the region, including neighbouring municipalities. The new WTP will initially service the Town or Russell, the Village of Binscarth, the Village of Rossburn, and the Gambler First Nation. Other communities such as Angusville, Inglis, and Waywayseecappo may also connect in the future.

The Russell WTP receives raw water from wells connecting to a sand-and-gravel aquifer located approximately 8 km east of the Town that goes through a 250 mm pipeline to the WTP in Russell. Reject water from the treatment process is discharged though a 200 mm pipe into nearby Spear Lake. A network of water pipelines extends underground across the Town of Russell and due south along the Yellowhead Highway to Binscarth, and easterly along PTH 45 to connect to Rossburn. A 200 mm or 250 mm HDPE diameter pipeline of High Density Polyethylene (HDPE) or Poly Vinyl Chloride (PVC) will be installed to Rossburn; a 100 mm or 150 mm pipeline to Inglis; a 150 mm pipeline to Binscarth; and a 100 mm pipeline from Binscarth to Gambler FN.

Raw water usage for the new water supply system is estimated to be up to 421 dam^3/year. The water treatment plant will have a treated water capacity of 26 litres per second, and will reject approximately six litres per second of the raw water entering the plant.

The Russell WTP supplies the Town of Russell with treated water via 805 service connections with an additional 125 connections anticipated in the next 20 years.

The Binscarth WTP supplies the Village with treated water via 225 service connections with an additional 40 connections anticipated in the next 20 years.

Inglis and Angusville both currently use treated groundwater and are serviced by piped distribution systems that will continued to be utilized when the new regional water pipeline connection is finalized. Inglis supplies the Asessippi Ski Area and Winter Park Chalet with a water pipeline. Residents living outside the urban areas use wells or truck water in from the municipal truck fill stations.

Wastewater Management

There are four (4) wastewater treatment lagoons in the Tri-Roads District:

The Russell Wastewater Treatment Lagoon (WLT) is located in the northeast and southeast quarters of Section 4-21-28W, approximately 500 metres west of PTH 83 and the Town of Russell. A series of underground pipes in the Town of Russell transport waste waters to the WLT for treatment with discharge of the treated wastewater effluent south of the lagoon into a slough, which drains into a tributary drain of the Silver Creek channel. Silver Creek channel empties into the Assiniboine River. Treated wastewater from the wastewater treatment lagoon will be discharged between June 15th and November 1st of any year.

In 2006/2007 the Russell Lagoon expansion and remediation of the existing secondary cells was expected to have a net positive environmental effect due to an extended storage period, seepage mitigation and no significant wildlife habitat loss.

The Inglis Wastewater Treatment Lagoon is located in the SE of Section 1-23-28 WPM in the Rural Municipality of Riding Mountain West, approximately 480 metres northwest PR 366 and Inglis. Village of Inglis has a system of underground pipes to connect to the lagoon. Treated wastewater from the lagoon is discharged between June 16th and October 31st of any year to the adjacent creek to the south. This creek drains west to a first order drain, approximately 1 km north to Bear Creek, 3 km to the Shell River, and 5 km to the Shellmouth Reservoir.

In 2008/2009 the Inglis Wastewater Treatment Lagoon underwent an expansion for the construction of an additional secondary cell.

Binscarth Wastewater Treatment Lagoon is located on Section 10-19-28 WPM, approximately 500 metres southwest of PR 428 and Binscarth. The urban area has a system of underground pipes to connect to the lagoon.

Angusville Wastewater Treatment Lagoon is located on 21-20-26 WPM, approximately 500 metres west of PTH 45, and northwest of Angusville. The urban area has a system of underground pipes to connect to the lagoon.

Holding tanks are commonly used for wastewater collection in cottage country or in areas where disposal fields are not permitted (on environmentally sensitive land as per the Nutrient Management Regulation). Holding tanks are normally single compartment tanks that need to be regularly pumped out by a registered sewage hauler with the loads transported for discharged at wastewater treatment lagoon. The Asessippi Ski Area and Winter Park Chalet collects wastewater in holding tanks and trucks to the Inglis Wastewater Treatment Lagoon for disposal.

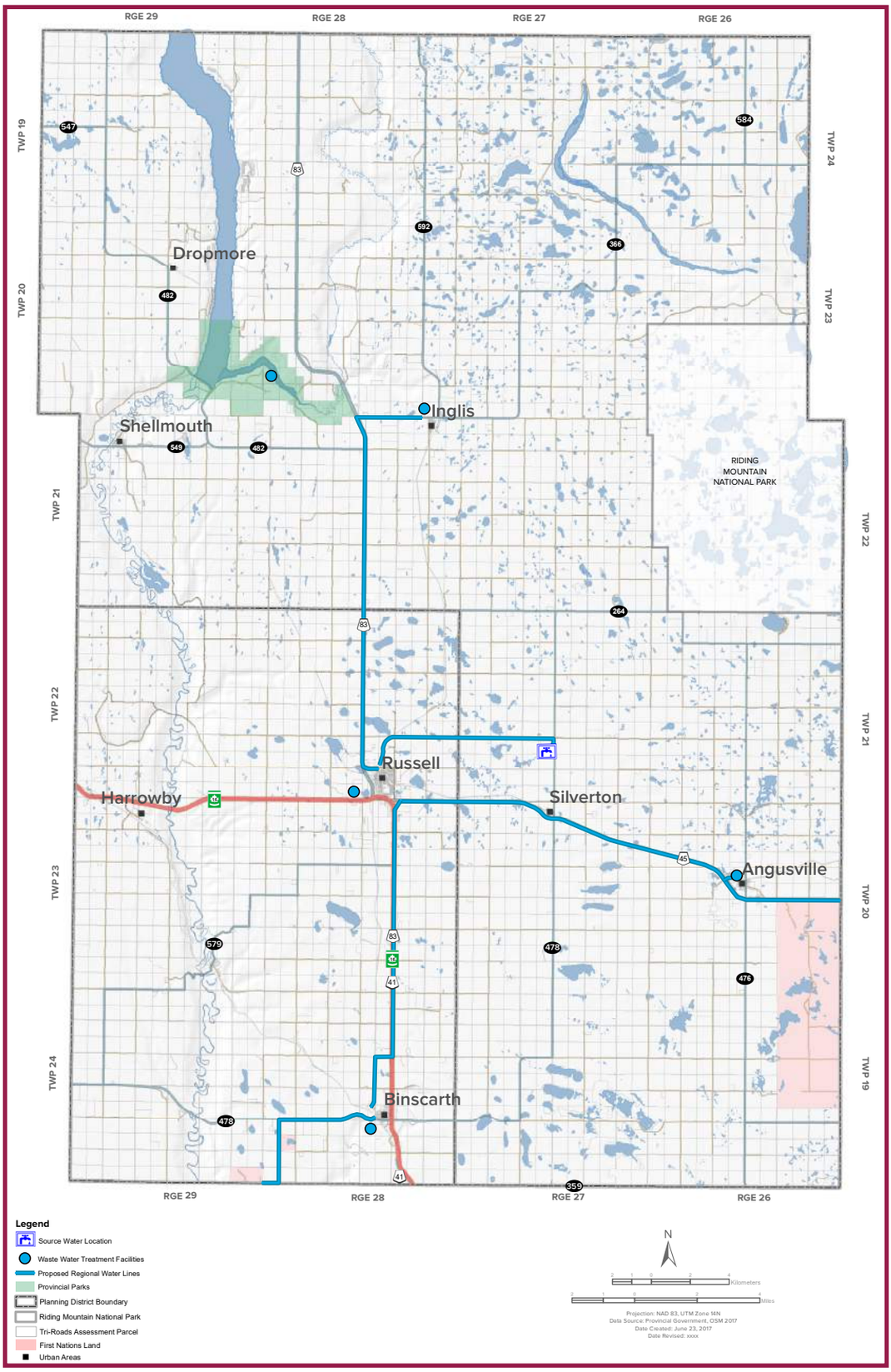


Figure 22: Tri-Roads Regional Water System Map

DRIVERS OF CHANGE AND GROWTH

Public Investment

Significant public investment has been made into the critical components of the drinking water and the wastewater systems to protect public health and safety, ensure the purity and reliability of the water supply, and maintain or enhance the quality of the built and natural environments.

Sustainable Infrastructure

Upgrading the drinking water and the wastewater treatment systems also supports long-term future growth and development for the community by providing additional capacity into the systems. An importance is placed upon ensuring the drinking water and the wastewater systems are sustainable – that these systems protect the environment without sacrificing the community's economic well-being to accommodate growth or the municipalities' ability to deliver these services efficiently and effectively.

Economic Development Influencers

- The Development Plan locates future residential, industrial, commercial, and agri-business with the appropriate drinking water and wastewater connections.
- Existing infrastructure such as the drinking water and the wastewater systems will be built upon to ensure these municipal services are being optimized.
- Lands are aligned to support the development next to the appropriate potable water and wastewater infrastructure.
- An adequate drinking water supply is available from water sources for the regional water system, and its long-term protection is considered in order to not negatively affect water users.

Land Drainage and Storm Water Management

A series of natural and engineered water control works within the Tri-Roads Planning District have created a network for directing surface waters away from the built and natural environments that humans use, and towards the built and natural environments set aside for water usage.

The surface water management for land drainage of water has largely been managed at the farm or individual field scale in the rural areas, and administered by the municipalities for settlement areas. The network of road side ditches next to PTHs and PRs that are used in the network for directing water from developed lands and infrastructure into the natural watershed are controlled by the Provincial Government. Pot lakes, marshes, bogs, swamps, fens, and sloughs, and other natural wetland areas across the Prairie landscape, store water and prevent runoff from reaching the main streams in an average year of runoff. Open ditches, culverts, dams, and other engineered water control works are used to manage surface waters into the Shell River, Conjuring Creek, Thundering Creek, Silver Creek, Lake of the Prairies, and the Assiniboine River. There are a number of Provincial and Federal agencies that establish and have input into drainage standards and requirements as a result of their individual mandates and control over natural and engineered drainage structures.

Shellmouth Reservoir and Dam

The most dominant and prominent engineered water control works in the Tri-Roads Planning District is the Shellmouth Reservoir (commonly referred to as 'Lake of the Prairies') and Dam. Lake of the Prairies is the dominant water body in the watershed and is approximately 56 km in length straddling on a north-south axis across the Saskatchewan-Manitoba border within the Assiniboine River Valley. Most of the inflow is derived from the upper Assiniboine River basin in Saskatchewan and from the Big Boggy Creek and the Shell River basins in Manitoba.

The Shellmouth Dam is located approximately 35 km downstream of the provincial boundary. The dam was constructed between 1964 and 1972 by the Prairie Farm Rehabilitation Administration (PFRA) to control downstream flooding. The earthen fill dam is 425 m in length and 21 m in height with PR 482 traversing east-west across the top of the Dam and the Assiniboine River. The Shellmouth Dam is managed by the Province of Manitoba, with input from the Shellmouth Dam Liaison Committee, based on operating guidelines for the dam that have been adopted for the various seasons of the year. Outflows are controlled by a gated conduit and a 210-foot (64 m) wide concrete chute spillway. The reservoir is used to supplement flows on the Assiniboine when conditions are dry ensuring water supply for downstream users. And the dam is part of the strategy to reduce flooding along the Assiniboine River as it meanders its way to the Red River. Asessippi Provincial Park is established around the southern end of the Shellmouth Reservoir and Dam.

Shellmouth Dam

DRIVERS OF CHANGE AND GROWTH

The 2011 Manitoba Flood was of a scope and severity never before experienced in recorded provincial history. High soil moisture at freeze-up, above normal winter snow, additional snow and rain during the spring, heavy summer rains, and several severe wind events all combined to form a flood unprecedented in geographic scope across western and southwestern Manitoba.

The economic impacts on the agricultural industry caused three million acres of cultivated farmland left unseeded in 2011, and tens of thousands of cattle needing to be relocated. The impact from the flood on 154 provincial roads and highways, and 500 municipal roads restricted the movement of goods & services, and caused many businesses unable to reach their clients, which delayed planting crops, spraying and other issues. Governments at the Provincial and Municipal level were faced with repair bills for the damage to 73 provincial highway structures and 500 municipal bridges. Costs associated with flood preparation, flood fighting, repair to infrastructure, and disaster payments has been +$1.2 billion.

The 2011 Manitoba Flood also demonstrated that a number of water control structures and features in the natural environment are integral to the water management and flood control strategies in the province. An integrated network and system across a wide geographical area comprising both natural and human made elements are essential to making sure water drainage is managed to safeguard human security.

Economic Development Influencers

- The Development Plan locates future residential, industrial, commercial, and agri-business outside flood prone areas.
- Water control works' efficiency will not compromised or jeopardized by new land developments.
- Drainage systems are to be designed on a watershed basis, without consideration of administrative boundaries.
- Ecological functions of wetlands are protected.

Solid Waste Management

The Town of Russell and Village of Binscarth have a front door garbage pick-up program and an intermittent recycling pick-up program. A weekly garbage pick-up is also scheduled in locations throughout the R.M. of Riding Mountain West (Inglis, Angusville, Silverton, Dropmore, and Seasonal Lot Areas). This waste is transported to 1 of 4 Waste Disposal Grounds within the District.

"Waste Disposal Ground" means a parcel of land that is used for the disposal of solid or industrial waste, also referred to as a landfill. The Province of Manitoba regulates, though the Environment Act License (EAL) and waste management regulations, landfills that are owned and operated by municipalities. The basic siting, design, operation, monitoring, planning, closure, and post closure activities for new and existing landfills are all aspects of solid waste management that are implemented by municipalities and regulated by the Province of Manitoba.

Class 3 Waste Disposal Grounds

- Inglis Waste Disposal Ground, RM Riding Mountain West, 28-23-1 NE

Class 2 Waste Disposal Grounds

- Russell Waste Disposal Ground, Russell, 28-20-27 NW
- Binscarth Waste Disposal Ground, Russell, 28-19-15 SW

DRIVERS OF CHANGE AND GROWTH

Solid waste management is a necessary public good that is implemented by local decision makers in such a manner as to protect other critical components of the community such as public health, drinking water, and the natural and built environment. Any upgrading of solid waste management facilities also supports long-term future growth and development for the community by providing additional capacity into the systems. The ability of the municipality to deliver this needed service efficiently and effectively in an economically manner is important to ensuring the financial sustainability of the local community.

Economic Development Influencers

- The Development Plan locates future residential, industrial, commercial and agri-business outside the setback buffer zones for landfills and transfer stations.
- Recycling efforts in community through community education campaign.

Figure 23: Russell Waste Disposal Grounds and Buffer Area

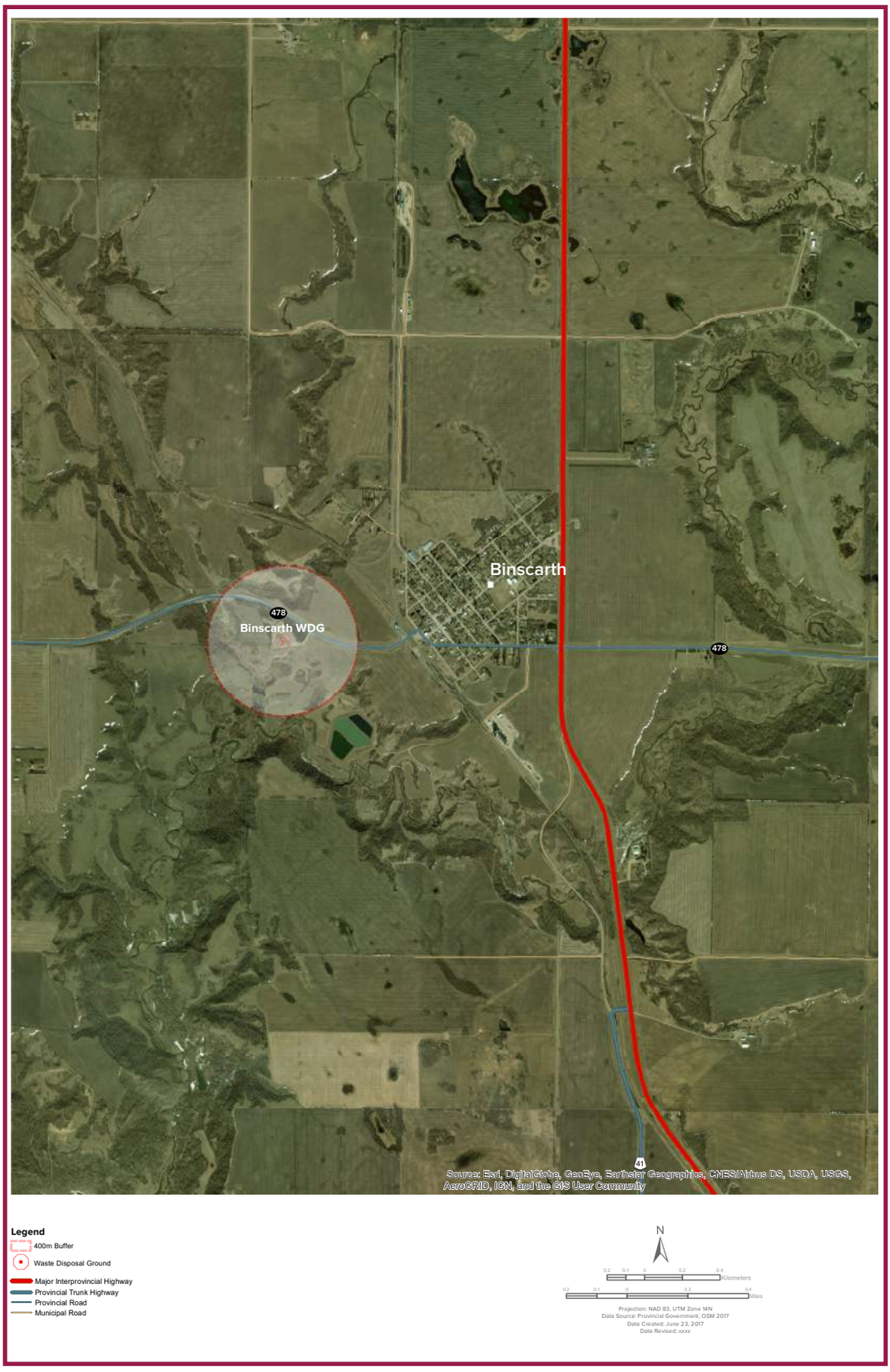


Figure 24: Binscarth Waste Disposal Grounds and Buffer Area

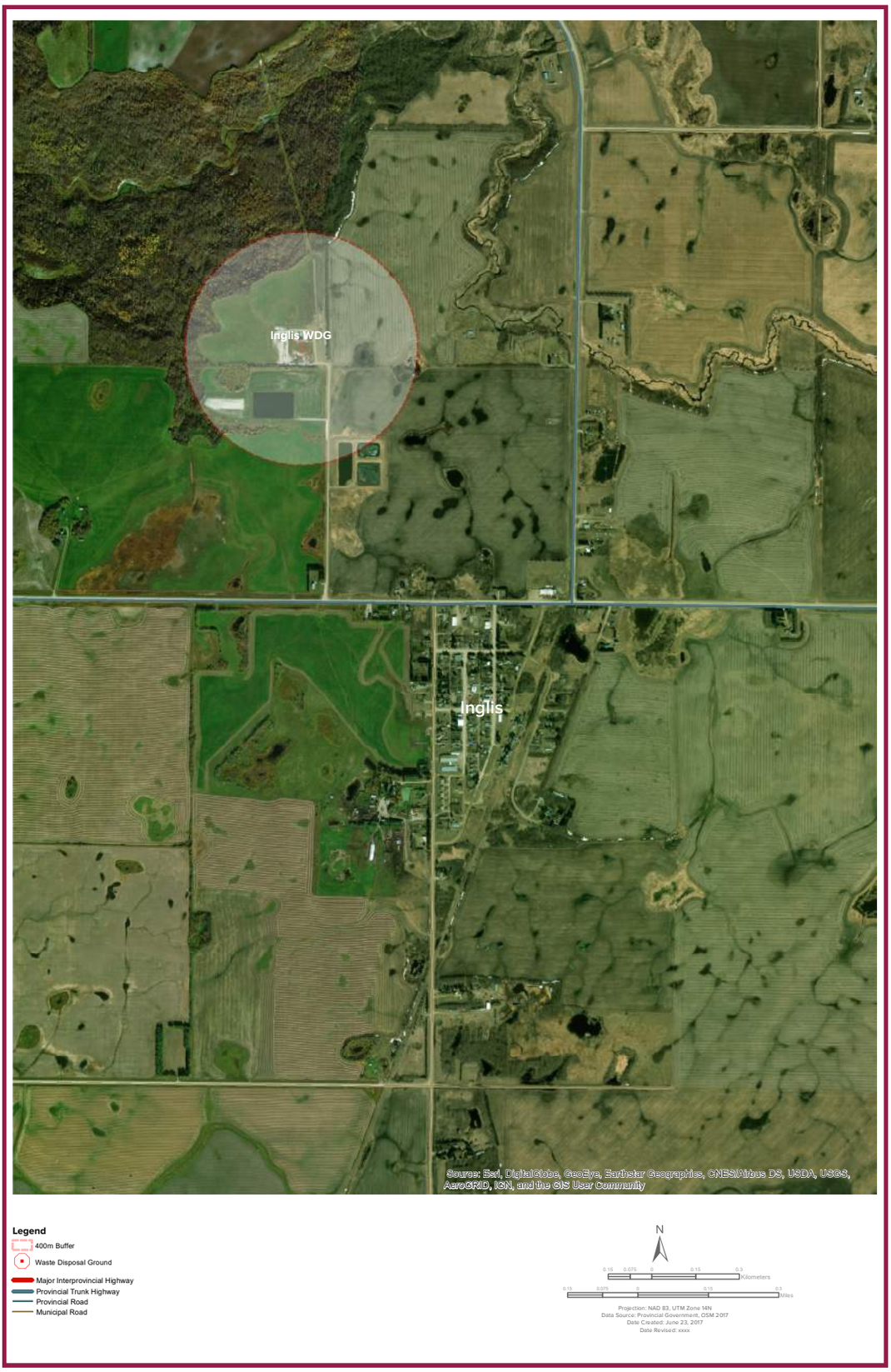


Figure 25: Inglis Waste Disposal Grounds and Buffer Area

ENVIRONMENT

The Tri-Roads Planning District is located in the heart of the Canadian prairies. The District depends on the stewardship of natural features in the environment for its economy. This section explores the natural environment from the perspective of the economy. The section seeks to strike an understanding that the sustainability of the District's agricultural base (crops and livestock) needs to take into consideration impacts to the environment as it relates to climate change. The section also looks at opportunities yet to be realized through natural resources including mining potential.

Note: Soil Characteristics surveys were completed prior to municipal amalgamations. There are slight colour variations in each map due to the source quality. Significant variations are represented in the legend.

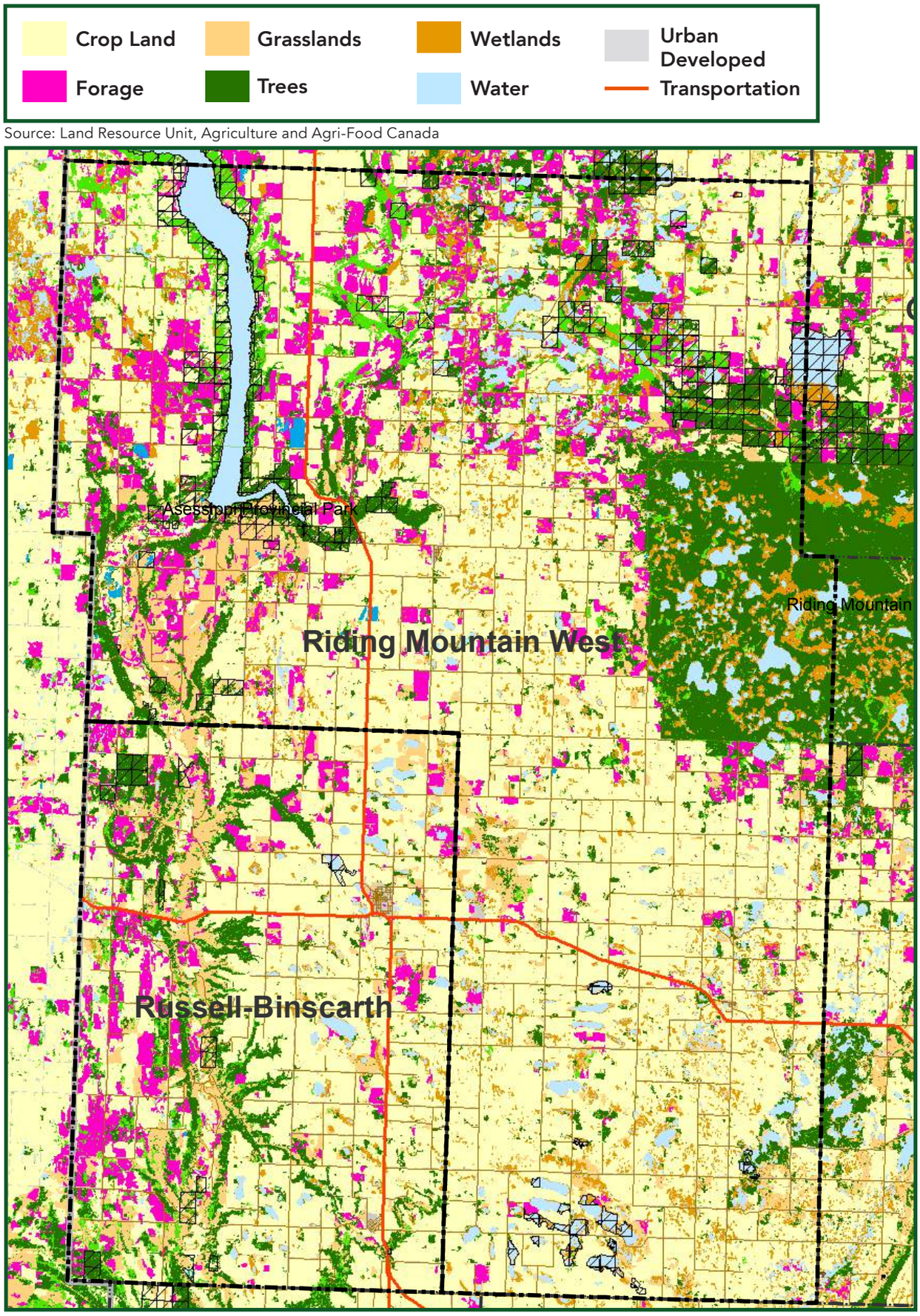
Land Features

Crop land (for annual cultivation) makes up almost half of the Tri-Roads District's land use. This high percentage further demonstrates the importance of agriculture in the District. Grassland and Trees also represent a significant portion of land use, with Riding Mountain National Park containing a majority of the Tree land.

Land Feature	Russell-Binscarth		R.M. of Riding Mountain West	
	Area (Ha)	Percent	Area (Ha)	Percent
Crop Land	28588	48.7%	81430	46.2%
Forage	2165	3.7%	4838	2.7%
Grasslands	17063	29.1%	44083	25.0%
Trees	7136	12.2%	29926	17.0%
Wetlands	1122	1.9%	4376	2.5%
Water	820	1.4%	7459	4.2%
Urban and Transportation	1760	3.0%	4167	2.4%
Total	**58654**	**100%**	**176279**	**100.0%**

Table 17: Consolidated Land Features Distribution

Crop Land *- land that is normally cultivated on an annual basis.*
Forage *- perennial forages, generally alfalfa or clover with blends of tame grasses.*
Grasslands *- areas of native or tame grasses, may contain scattered stands of shrubs.*
Trees *- lands that are primarily in tree cover.*
Wetlands *- areas that are wet, often with sedges, cattails, and rushes.*
Water *- open water: lakes, rivers streams, ponds, and lagoons.*
Urban and Transportation *- towns, roads, railways, quarries.*



Source: Land Resource Unit, Agriculture and Agri-Food Canada

Figure 26: Tri-Roads Natural Land Features Map

Soil Characteristics

The two primary soil characteristics in the District are Medium Texture and Topography. Soil with medium texture usually consist of loams to clay loams, and good water and nutrient retention properties. They do not require special management practices but overall good management and cropping minimize leaching and the risk of erosion. The topography characteristic is defined as a soil landscape with slopes greater than 5%. This grade is steep enough to require special management practices to minimize the risk of erosion. One concern for the area of Silver Creek (Figure 34) is the amount of Wetness area, which is considered poorly drained soil requiring special management practices to sustain crop production during periods of high rainfall or flooding.

Soil Characteristic	Russell-Binscarth		R.M. of Riding Mountain West	
	Area (Ha)	Percent	Area (Ha)	Percent
Fine Texture	0	0.0%	969	0.6%
Medium Texture	23592	40.6%	70199	40.2%
Coarse Texture	2462	4.2%	4455	2.6%
Topography	26294	45.2%	61968	35.5%
Bedrock	1075	1.8%	0	0.0%
Wetness	3871	6.7%	14362	8.2%
Organic	0	0.0%	3457	2.0%
Marsh	0	0.0%	0	0.0%
Unclassified	209	0.4%	12037	6.9%
Water	673	1.2%	6973	4.0%
Total	**58176**	**100.0%**	**174420**	**100.0%**

Table 18: Consolidated Soil Characteristics Distribution

Fine Texture *- low infiltration and internal permeability rates.*
Medium Texture *- good water and nutrient retention properties.*
Coarse Texture *- high permeability throughout the profile.*
Topography *- soil landscapes with slopes greater than 5%.*
Bedrock *- soil landscapes that have shallow depth to bedrock (< 50 cm) and/or exposed bedrock.*
Wetness *- soil landscapes that have poorly drained soils and/or >50% wetlands.*
Organic *- soil landscapes with organic soils.*

Source: Land Resource Unit, Agriculture and Agri-Food Canada

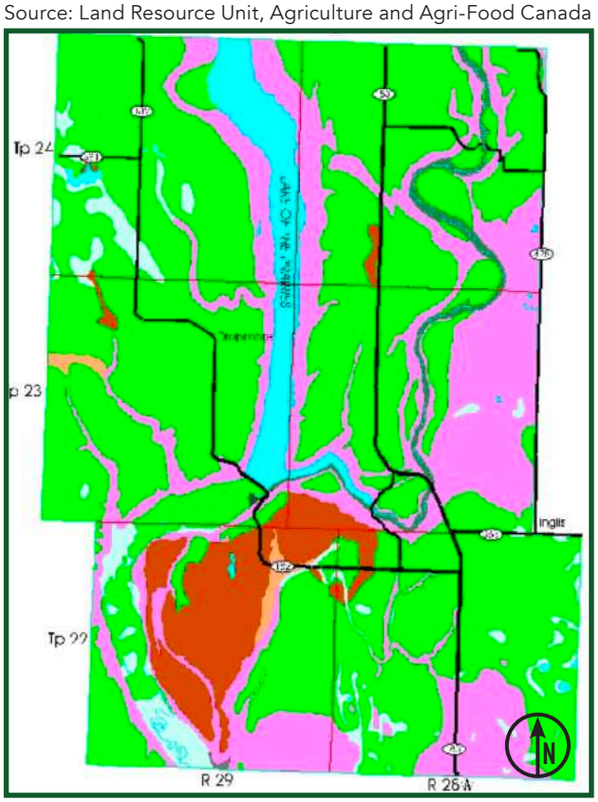


Figure 27: R.M. of Shellmouth Soil Characteristics Map

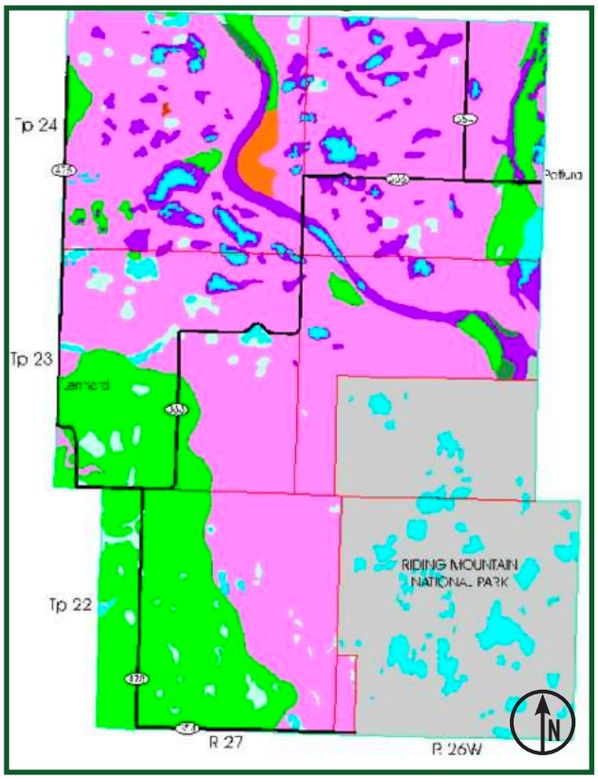


Figure 28: R.M. of Boulton Soil Characteristics Map

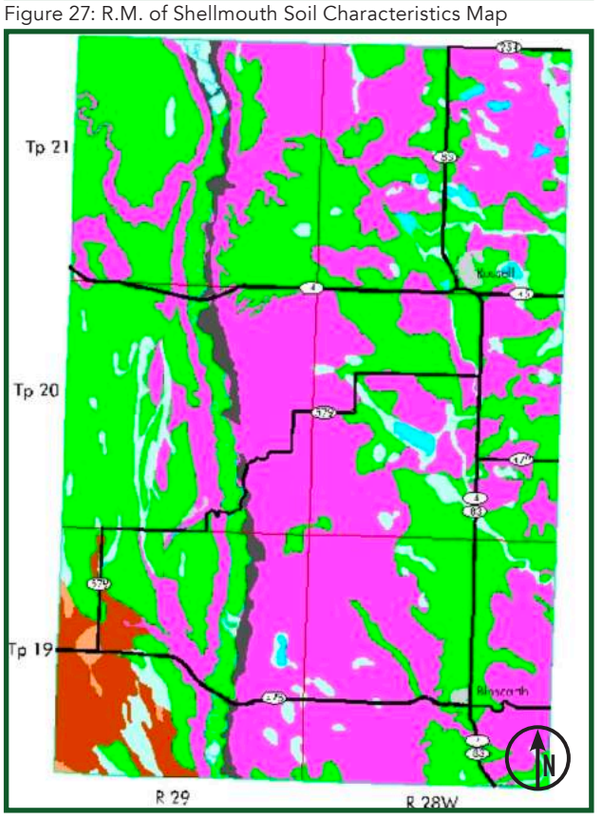


Figure 29: Russell-Binscarth Soil Characteristics Map

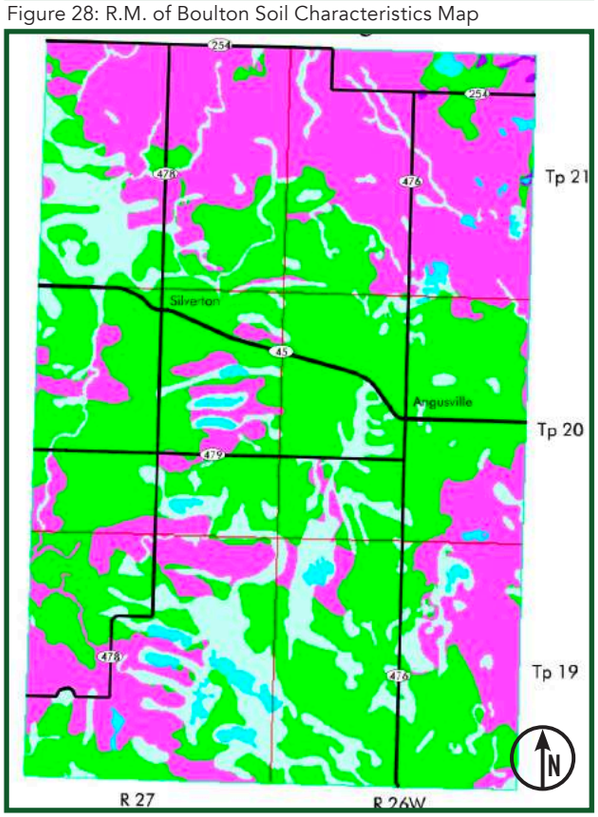


Figure 30: R.M. of Silver Creek Soil Characteristics Map

Agricultural Capabilities

The Canada Land Inventory developed a 7 class evaluation system for agricultural capabilities. This refers to the production potential for crops in the area. Classes 1 to 3 represent the prime agricultural land, class 4 land is marginal for sustained cultivation, class 5 land is capable of perennial forages and improvement is feasible, class 6 land is capable of producing native forages and pasture but improvement is not feasible, and class 7 land is considered unsuitable for dry-land agriculture (Land Resources Unit, 1998).

A total of 68% of the Tri-Roads District is considered prime agricultural land. These are observed in wide continuous areas of land across the entire District. Comparing Figure 35 below to the soil characteristics section, Class 5 land is located primarily on coarse texture soil and Class 6 and 7 land are most prevalent on topography soil. Only a small portion (8%) of the total area is not capable of agricultural improvement.

Class	Area (sq. m.)	%
2	670,892,837.9	29%
3	917,517,273.4	39%
4	70,561,696.4	3%
5	246,549,802.7	11%
6	169,049,331.3	7%
7	19,887,833.8	1%
Organic	99,170,289.3	4%
No Data	134,529,062.8	6%
Total	**2,325,506,008**	**100%**

Table 19: Tri-Roads Soil Classification

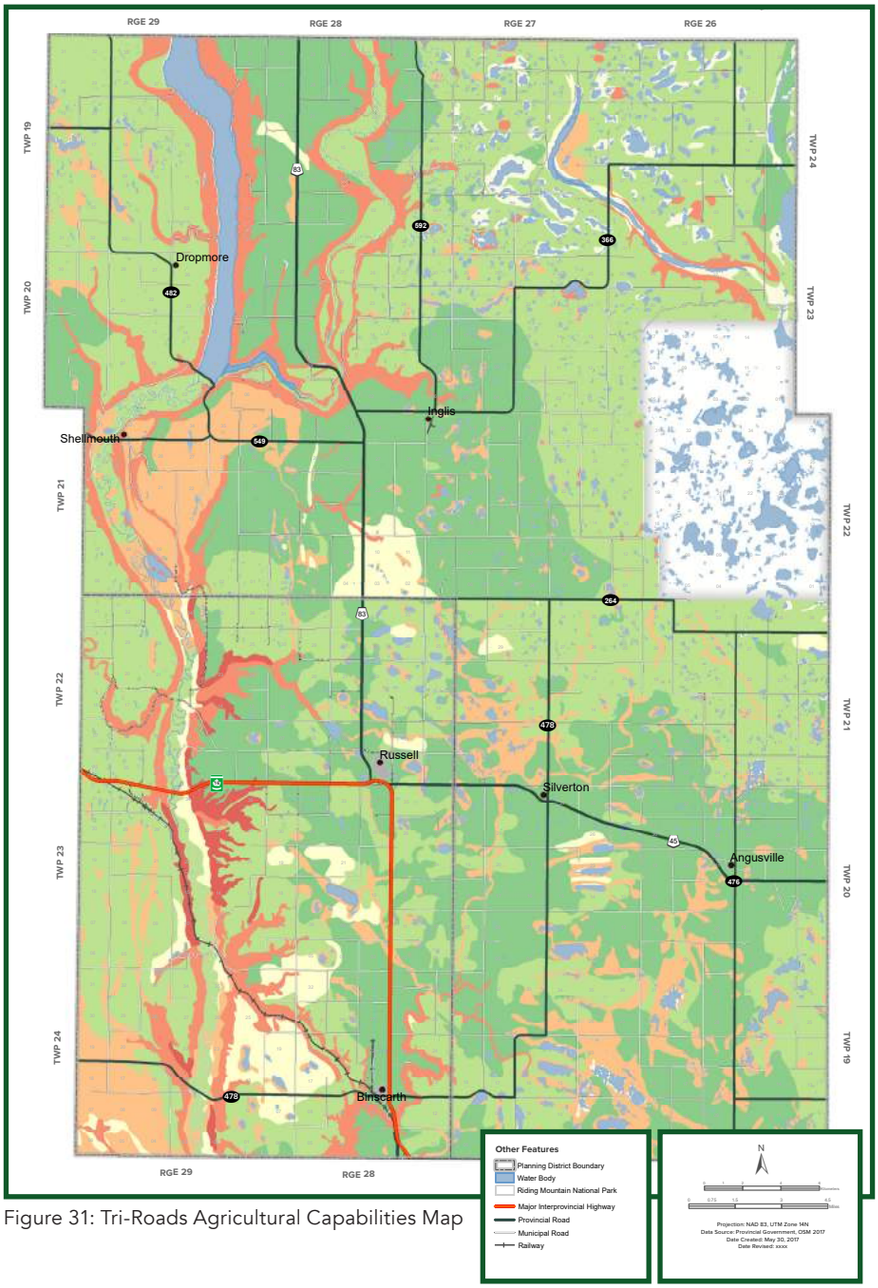


Figure 31: Tri-Roads Agricultural Capabilities Map

DRIVERS OF CHANGE AND GROWTH

International Markets and Investment – Food Security

The District is positioned to meet accelerated demand for food from growing countries unable to meet their own requirements. The ability of the District to efficiently and cost effectively meet demand should not be overlooked.

Key to the ability of the District to meet this opportunity will be to continue its excellence in land stewardship and address potential detracting issues such as land drainage on a pan-district or even pan-provincial basis (i.e. land drainage issues cross provincial boundaries). The District's location and access to multiple modes of transportation are a strategic advantage when compared to other areas.

Technical Innovation and Logistics Improvement

The size of farms is expected to continue to increase while the number of farms decreases. A key factor in this overall trend is increased efficiency in crop production. While impacting the District including changes in where people live, technical innovation presents an opportunity to maximize production efforts.

Research suggests that over time, the Canadian Prairies will become more efficient at growing grains, at the expense of southern climates. Statistics for the 2016-2017 crop year shows Canada continues to improve on the massive logistical hurdle of moving prairie grain to global markets through strengthening logistic capabilities.

Anticipated Changes to Crop Production as a Result of Climate Change

According to recent research done through the University of Manitoba (2014 - Bruce Burnett, CWB Market Research), by 2050 the Prairies will experience major changes:

- Growing degree days expected to increase by 25 to 50% from 1961-1990 levels
- Hot spells hotter by 1 to 2°C; cold spells colder by 2 to >4°C
- Growing season increases from 15 to 50 days
- Precipitation extremes increase (wet and dry)
- Amount of precipitation little or no change, but annual moisture deficits increase due to increased evaporation and transpiration.

This will continue to impact crop selection and rotation moving into the future.

Economic Development Influencers

- The Development Plan establishes policies and mechanisms to protect and sustain agricultural capability.
- The subdivision of prime agricultural land for other purposes such as residential or commercial is discouraged unless confirmed through supporting background studies and analysis.
- Drainage issues are addressed in the Development Plan in a systemic and integrated way, recognizing that drainage issues span multiple jurisdictions.
- The District will work with Conservation District to ensure overall sustainability objectives are being met.
- Logistical capabilities should be strengthened through comprehensive logistics plan converging pan-national north south road, pan-provincial east-west road, rail, and air.

Livestock

The examination of the natural environment includes a look at the current livestock operations in the district. While the opportunities related to livestock diversification is explored in detail in the Commerce section, it is important that the Development Plan captures how livestock currently and into the future fits into future growth and change.

As described throughout this study, the District has seen shifts to the agricultural economy that has resulted in challenges but also opportunities. The number of farms in the District continue to decline. This Study takes the position that the District will encourage diversification and sustainment of the agricultural economy in the District. It will also need to strike a balance related to potential impacts. This, in fact, is a key provincial priority stated in the Provincial Land Use Policies which require

Year	Municipality	Dairy		Beef Cows		Total Cattle and Calves		Pigs
		# of Farms	# of Animals	# of Farms	# of Animals	# of Farms	# of Animals	# of Farms
1996	Manitoba	1,596	59,404	10,859	510,197	12,807	1,355,162	2,064
	Boulton	3	54	86	3827	92	8473	3
	Shellmouth*	8	266	80	3811	92	9490	6
	Silver Creek	7	216	49	2508	57	6033	0
	Russell	4	228	64	3019	70	8065	2
2001	Manitoba	853	42,407	10,089	563,300	11,333	1,424,427	1,668
	Boulton	*	*	*	*	*	*	*
	Shellmouth*	1	-	142	-	145	20, 402	7
	Silver Creek	3	-	47	-	51	5,787	0
	Russell	0	0	56	2,936	58	6,303	2
2006	Manitoba	622	44,019	9,216	655,587	10,217	1,573,097	1,188
	Boulton	*	*	*	*	*	*	*
	Shellmouth*	0	0	117	10,105	122	24,956	4
	Silver Creek	2	-	38	-	43	5,889	0
	Russell	0	0	52	4726	54	10,478	3
2011	Manitoba	483	41,848	6,668	484,727	7,588	1,210,568	590
	Boulton	*	*	*	*	*	*	*
	Shellmouth*	1	-	98	-	104	18,564	2
	Silver Creek	1	-	31	-	32	4,658	-
	Russell	0	0	43	3,600	42	7,262	0

Table 20: Livestock Production by Animal

**Note: Shellmouth and Boulton amalgamated to become Shellmouth-Boulton as of the 2001 Census. Shellmouth represents the R.M. of Shellmouth-Boulton for years 2001, 2006, and 2011.*

"-" Denotes data suppressed to meet the confidentiality requirements of the Statistics Act

statements that set out the areas where livestock operations may be allowed; limited to a specified number of animal units or will not be allowed and minimum setbacks for siting livestock operations. Municipalities will be able to exceed these requirements, but cannot fall below them. This detail will be generally set out in the new zoning bylaws.

We believe that significant emerging opportunity lies with livestock production in the District. As explored earlier in the study, international markets and investment create opportunity that has not been present for several years, if not decades. Changes in trade rules with countries that are motivated to secure stable food sources such as China may have a tremendous impact on areas that are poised to meet opportunities.

The following illustrates the historical livestock industry in the District:

Pigs	Sheep & Lambs		Hens & Chickens		Horses & Ponies		Goats	
# of Animals	# of Farms	# of Animals	# of Farms	# of Animals	# of Farms	# of Animals	# of Farms	# of Animals
1,777,352	526	38,152	1,904	6,403,908	4,155	68,783	515	7,213
-	2	-	5	149	22	481	2	-
-	1	-	15	892	27	327	1	-
0	3	-	4	525	24	800	1	-
-	1	-	8	24,364	37	2,086	0	0
2,540,220	733	84,798	1,628	7,985,741	3,730	62,791	507	12,637
*	*	*	*	*	*	*	*	*
185	16	1,286	13	819	49	830	5	26
0	6	1,315	6	840	20	778	3	8
-	5	126	9	10,683	29	1,302	3	-
2,932,548	644	68,096	1,391	7,891,068	3,646	46,580	470	13,159
*	*	*	*	*	*	*	*	*
-	8	494	8	-	40	334	4	-
0	4	1598	3	-	24	423	3	21
-	3	-	5	4354	28	666	0	0
2,850,581	521	63,162	1,173	8,061,629	2,894	33,752	387	12,818
*	*	*	*	*	*	*	*	*
-	5	309	12	-	41	541	4	8
-	3	723	3	-	20	312	0	0
0	1	-	6	-	16	135	1	-

DRIVERS OF CHANGE AND GROWTH

Evolving Agricultural Economic Base in the District

As stated several times in the Study, like most rural areas, the District has seen a decline in the number of farms over the past several years. At the same time, farm sizes have been increasing.

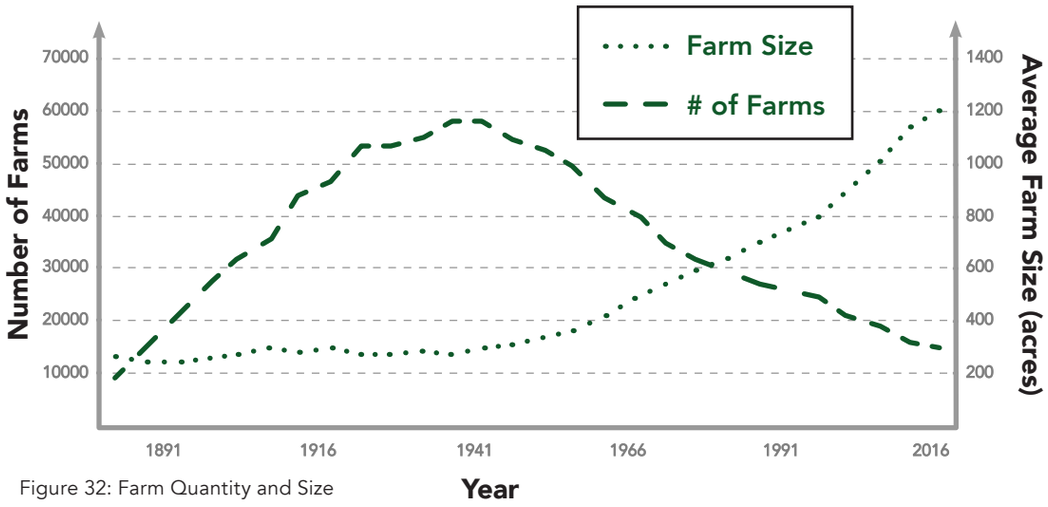


Figure 32: Farm Quantity and Size

International Markets and Investment

The District is historically home to several beef operations and is positioned to capitalize on expectations that demand for Canadian livestock will be increasing as trade rules become flexible. For example, in 2016, the federal and provincial governments ratified agreements related to China that will accept additional frozen, boneless beef cuts. However, the next step in the trade pact is expected to include fresh, chilled beef. This market is, of course, in addition to the hog production market.

As this emerging market is explored, it is expected that the intensity of livestock operations will increase including towards larger, more commercial sized enterprises. While this is a desirable trend from an overall economic perspective, impacts need to be managed and mitigated such as manure storage, air quality (odours) and long-term protection of environmental resources, such as water.

Economic Development Influencers

- The Development Plan communicates that increasing livestock operations is desirable in the District.
- The Development Plan provides appropriately located land supply to accommodate increases in demand.
- The Development Plan identifies where operations may be allowed, the size of operations, where operations will not be permitted, and separation distances.

Natural Land Drainage

The Tri-Roads Planning District is generally in T19 to 24 and R26 to 29W, and slopes from T19/R26 Riding Mountain down to the Assiniboine River Valley. The land surface varies from relatively flat prairie upland areas with numerous sloughs and potholes to the steep slopes and incised gullies on the flanks of the Assiniboine River Valley, Shell River Valley, and the Conjuring Creek Valley.

The ground elevation in the uplands near Riding Mountain National Park and the Manitoba Escarpment in the northeastern portion is 780 metres above sea level (masl) with the uplands near Russell on the order of 560 masl. The base of the Assiniboine River Valley is at an elevation on the order of 410 masl. The greatest local relief is found in the glacial melt water channels associated with the Assiniboine and associated tributaries. Valley bottoms can be up to 60m below the surrounding land surface.

Bedrock in the area occurs at depths ranging from 3 metres in the immediate area of the Town of Russell to in excess of 100 meters to the east and north east. The bedrock in the upland areas consist primarily of shales of the Odanah Member of the Riding Mountain Formation, underlain by the shales of the Millwood Member. Locally, the Odanah Member shales are fractured and domestic scale volumes of groundwater can be obtained from the bedrock. The Millwood Member shales are rarely fractured and are considered to be an aquitard.

Overall, the natural water drainage for surface and ground water is towards the Assiniboine River Valley.

Watersheds

The northern portions of the Tri-Roads Planning District fall within the 'Shell River Watershed', and the southern portions fall within the 'Birdtail Assiniboine Watershed'. Both watersheds straddle the Manitoba-Saskatchewan border and form part of the much larger Assiniboine River Basin, which has headwaters that originate in Saskatchewan.

The Lake of the Prairies Conservation District [LPCD] (see Figure 33) is the designated Water Planning Authority covering the Tri-Roads Planning District, and is designated to cover the Shell River Watershed portion in Manitoba. The Upper Assiniboine River Conservation District [UACD] is the designated Water Planning Authority for the Birdtail-Assiniboine Watershed, south of Tri-Roads Planning District. The Birdtail/Assiniboine West Water Planning Authority (BAWWPA) of the LPCD and UACD share the 'Birdtail Assiniboine Watershed' within the Tri-Roads Planning District. Both the Shell River Watershed and Birdtail Assiniboine Watershed have Integrated Watershed Management Plans.

Surface Water

The majority of the surface water runoff occurs during the months of March to May, and there is very little flow in the fall and winter months. Stream flow on the prairies varies considerably over the months and years. Prairie streams are often intermittent, in that they flow very briefly in the springtime and only after exceptional rainfalls only in most years. On the major watercourses, spring flooding is more significant than flooding from summer precipitation events. Smaller drainage areas (less than 10 mi^2) are sensitive to rainfall events, and localized flooding.

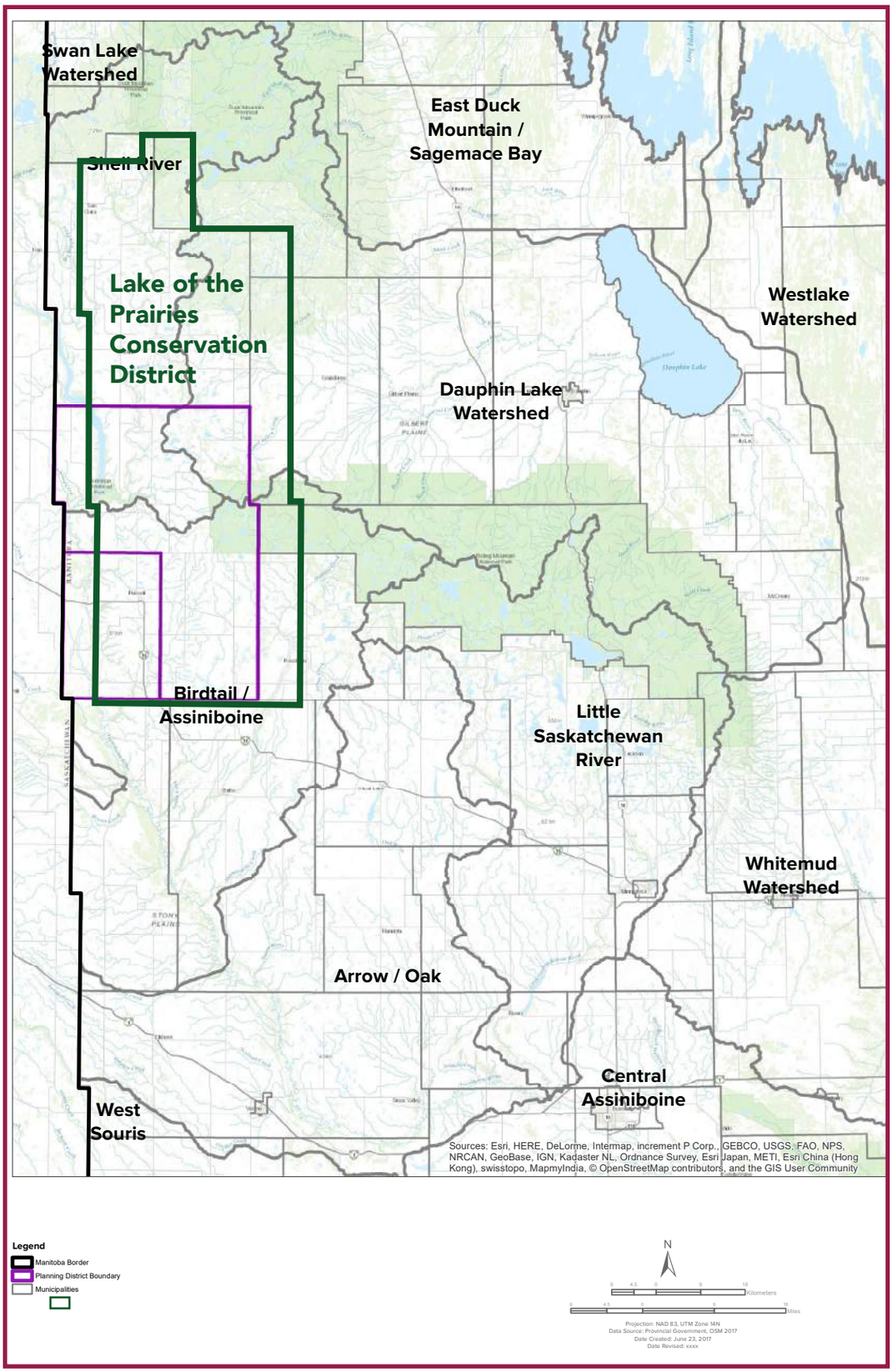


Figure 33: Watershed Map with Lake of the Prairies Conservation District

Ground Water

Groundwater is water that fills the pores and fractures in the ground. At some point as water recharges the soil and moves down through the profile all of the pore space will be saturated. The surface where this occurs is called the water table. Not only must sediment or rock be saturated to recover groundwater, it must also be permeable enough to allow the water to move at a reasonable rate. Because these properties are largely controlled by the material the water is moving through, the geology of the formations are important in understanding water movement. Additionally, the natural water quality, which the water acquires, is highly dependent upon the materials it flows through.

A geologic formation from which economically significant quantities of water flows to a spring or can be pumped for domestic, municipal, agricultural, or other uses is called an aquifer. Aquifers can be separated vertically by less permeable layers that do not readily allow water flow or act as barriers to flow. These confining layers are called aquitards. In an unconfined aquifer the water table and consequently the amount of water in storage, changes over the seasons or longer climatic periods as water levels fluctuate in response to recharge or discharge from the aquifer (from the Birdtail-Assiniboine Watershed State of the Watershed report June 2008).

Bedrock Aquifers

The Odanah member of the Pierre Shale Formation consists of brittle layers of rock separated by softer clay layers, commonly Bentonite. Fractures can form within the brittle layers which store and transmit water. The Odanah forms the uppermost bedrock unit beneath most of the watershed. The soft Millwood shale aquitard underlies the Odanah and forms the uppermost bedrock unit in areas where the Odanah has been eroded. These areas lie along the Assiniboine and Birdtail and associated valleys. The top of the Millwood shale should adequately define the base of potable groundwater exploration throughout most of the watershed. Water supply from wells completed in the Odanah shale is less than adequate to adequate for most domestic needs.

Sand & Gravel Aquifers

Most sand and gravel aquifers within the watershed consist of buried lenses of sand and or gravel. These occur throughout the central and much of the northern areas of the watershed Sand and gravel aquifers range from a few metres below ground up to 150 metres depth. Thicker till units will restrict the recharge rate but will provide a greater amount of protection to the underlying aquifers. Well yield from sand and gravel aquifer is variable, but generally adequate for individual domestic uses.

To the east of the Town of Russell, the available evidence indicates that a deep buried valley has been eroded into the bedrock surface that generally follows the current orientation of Silver Creek. This buried valley has been subsequently infilled with sediments that include the sands and gravels which form the aquifer for the Towns current water supply.

Soil Drainage Class

Drainage is described on the basis of actual moisture content in excess of field capacity, and the length of the saturation period within the plant root zone. The majority (between 69%-75%) of the District falls within an optimal drainage class ('Well'), which is beneficial for readily draining excess flooding or irrigation. Organic soils and wetland areas are least conducive to optimal drainage.

Drainage Class	Russell-Binscarth		R.M. of Riding Mountain West	
	Area (Ha)	Percent	Area (Ha)	Percent
Very Poor	0	0.0%	4230	2.4%
Poor	4164	7.2%	13953	8.0%
Imperfect	1948	3.3%	2280	1.3%
Well	43398	74.6%	120732	69.2%
Rapid	7784	13.4%	14238	8.2%
Marsh	0	0.0%	0	0.0%
Unclassified	209	0.4%	12037	6.9%
Water	673	1.2%	6973	4.0%
Total	**58176**	**100.0%**	**174443**	**100.0%**

Table 21: Consolidated Drainage Class Distribution

Very Poor *- Water is removed from the soil so slowly that the water table remains at or on the soil surface when unfrozen.*
Poor *- Water is removed so slowly in relation to supply that the soil remains wet for when unfrozen.*
Imperfect *- Water is removed from the soil at a relatively slow pace to keep the soil wet for a significant part of the growing season.*
Well *- Water is removed from the soil readily but not rapidly.*
Rapid *- Water is removed from the soil rapidly in relation to supply.*

DRIVERS OF CHANGE AND GROWTH

Stewardship of natural water drainages protects the aquatic ecosystem health to ensure drinking water is safe for human consumption. It also contributes to managing the water-related risks for human security.

Economic Development Influencers

- The Development Plan considers the vision, goals, and objectives of the Shell River Integrated Watershed Management Plan and the Birdtail-Watershed Integrated Watershed Management Plan.
- The Development Plan addresses key policy requirements related to flooding and erosion as described in the Provincial Land Use Policies Regulation.

Source: Land Resource Unit, Agriculture and Agri-Food Canada

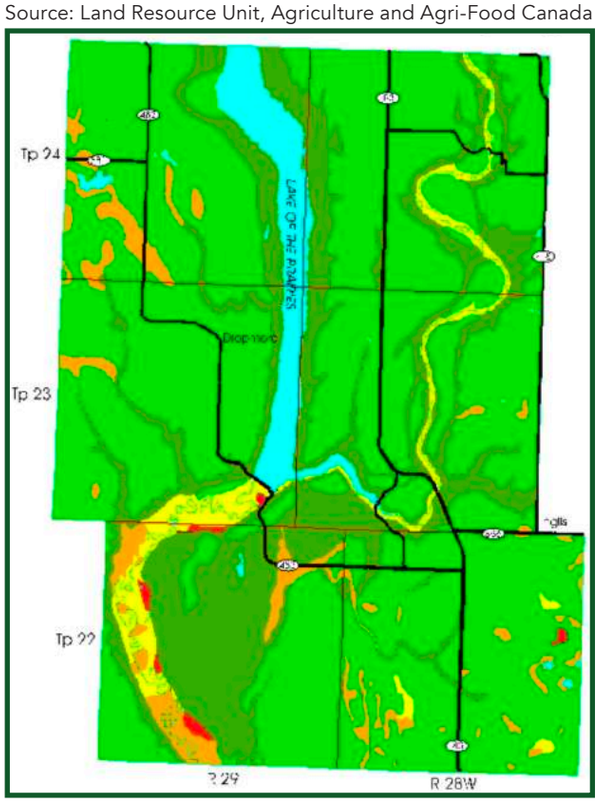


Figure 34: R.M. of Shellmouth Drainage Class Map

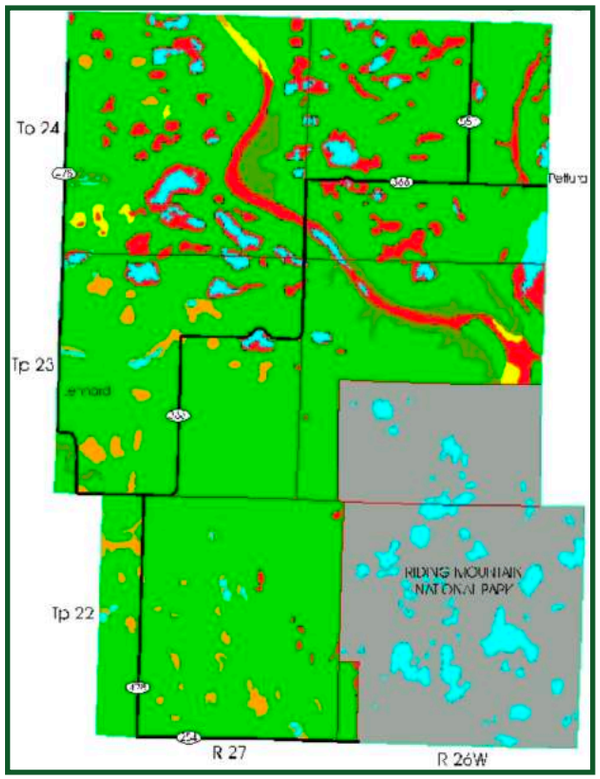


Figure 35: R.M. of Boulton Drainage Class Map

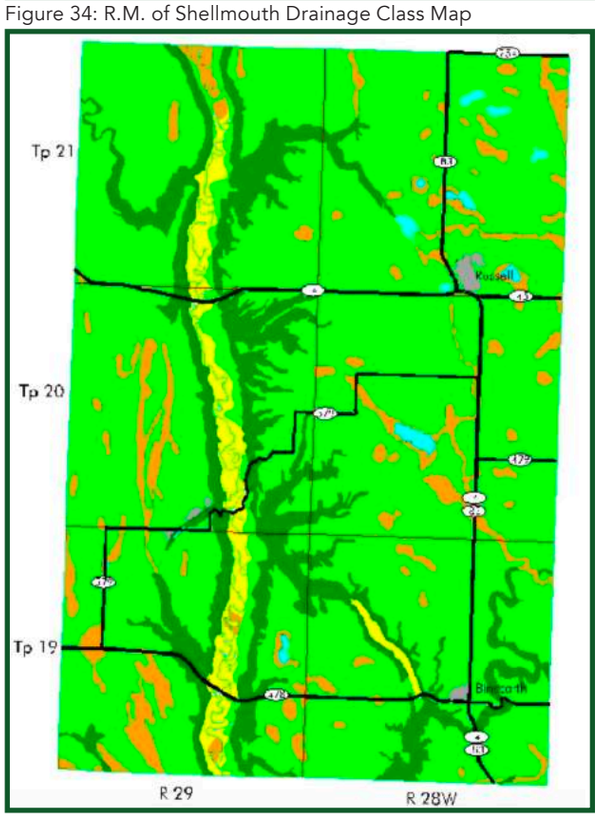


Figure 36: Russell-Binscarth Drainage Class Map

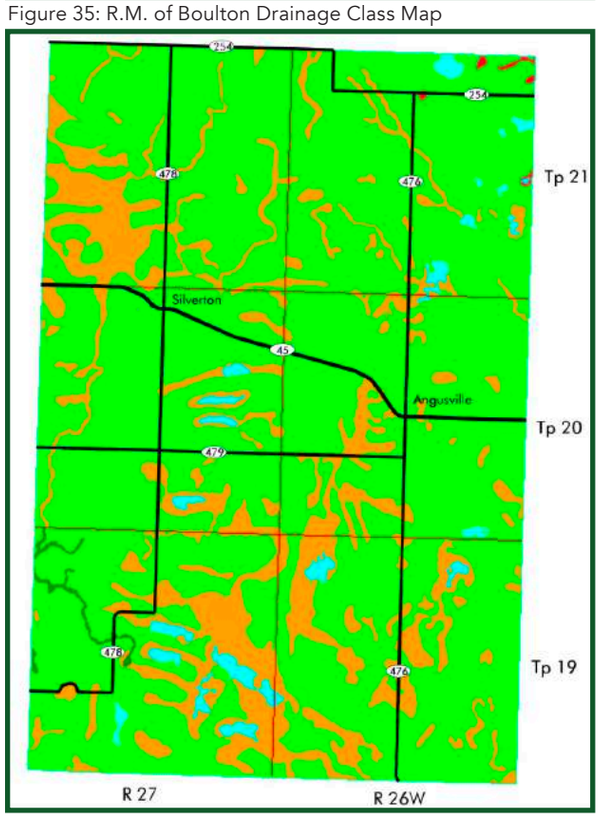


Figure 37: R.M. of Silver Creek Drainage Class Map

Mineral Resources

The examination of the natural environment includes a look at the mineral features in the District. As described in the study, a major potash deposit is located in the District.

The deposit, called the "Russell – McAuley Potash Deposit" which runs along the western border of Manitoba. In Figure 38, this area is denoted by the darker yellow colouring in the Southwest corner of the District. The potash beds occur within the Devonian Prairie Evaporite that extends across Saskatchewan and into Manitoba as far east as Assiniboine River in the St. Lazare-Russell area.

DRIVERS OF CHANGE AND GROWTH

Provincial support for Potash mine development

The exploration of development of a potash mine in the District has been underway for several years and most recently, the Province of Manitoba issued a Letter of Interest to targeted companies that may be interested in developing their rights.

The Potash Mine Overview from the Province of Manitoba provides a substantive overview of the deposit and the approach required to develop and mine it. As described in the Commerce section, the development and operation of the deposit will be a game changer for the District.

Mineral Commodity Prices and Demand for Potash

For over a decade, demand for potash has been tempered and the industry was characterized as in a state of 'oversupply'. According to industry economic forecasts, the industry is now bullish with China emerging as the largest market.

Economic Development Influencers

- The Development Plan establishes future surface mineable area to address conflicting surface land uses that could interfere with access to this resource.
- The Development Plan communicates 'readiness' upon mine development proceeding related to the mine development itself but also infrastructure improvements and labour force capacity (i.e. housing and amenities).
- The Development Plan honours existing mineral access rights associated with a valid mining claim or lease as well as other existing land and development rights and encourage environmentally sound mineral exploration, extraction and development.
- A comprehensive regional infrastructure strategy will be required in anticipation of mine development to address regional transportation, water, waste water and land drainage infrastructure requirements.
- Logistical capabilities should be strengthened through comprehensive logistics plan converging pan-national north south road, pan-provincial east-west road, rail and air.

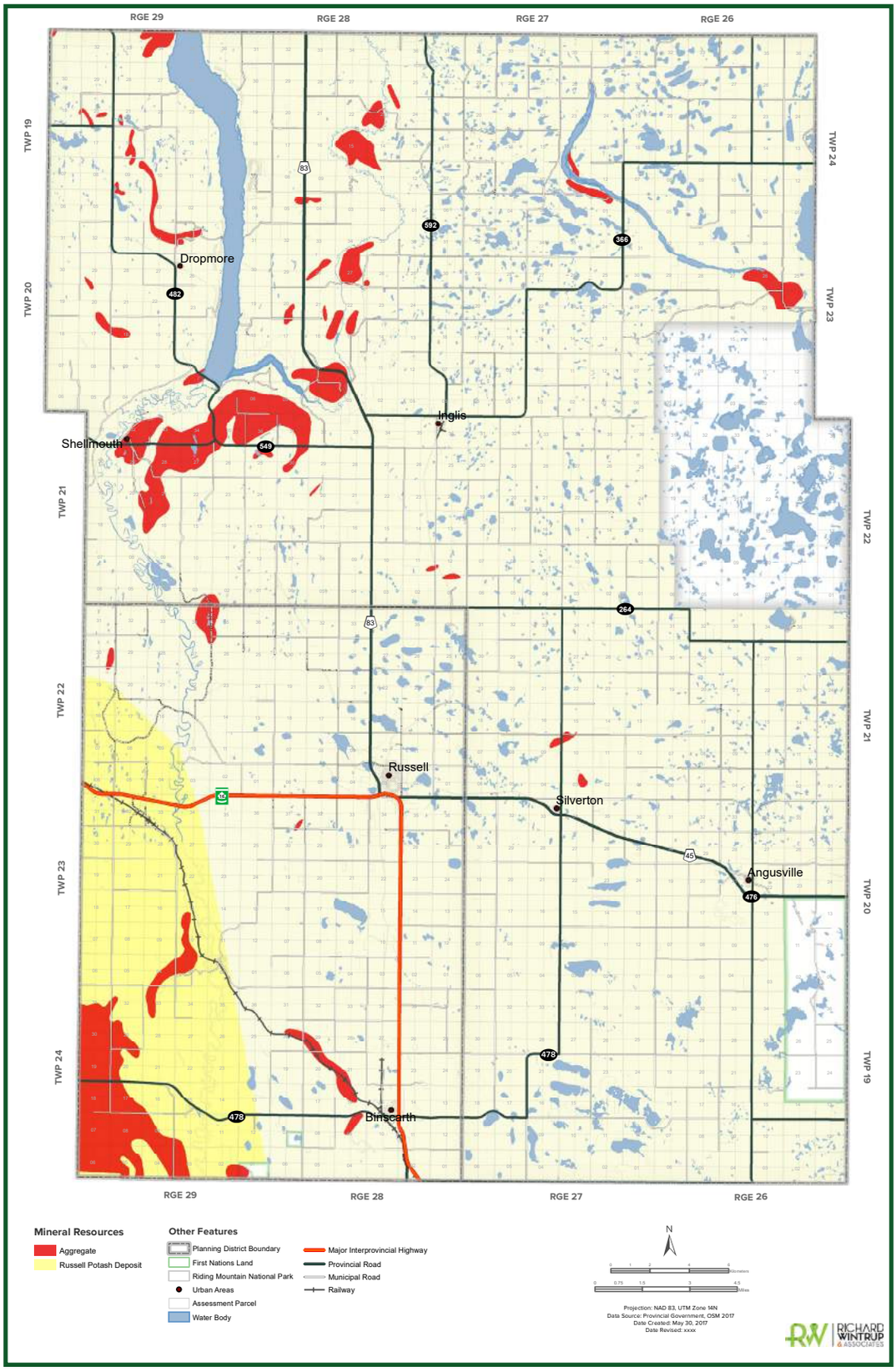


Figure 38: Mineral Resources Map

Climate change

Carbon dioxide (CO^2) is an important player in the natural greenhouse system and with human action using large amounts of fossil fuels, CO^2 is released into the atmosphere causing a warming effect of our environment.

The Province of Manitoba has identified that acting on climate change is 'an economic and environmental imperative for Manitoba. The case for reducing our greenhouse gas (GHG) emissions and preparing for the impact of climate change becomes increasingly evident as the negative repercussions of the status quo become evident locally.' (Provincial Climate Change Green Economy Action Plan)

In fact, the Province of Manitoba will reduce its GHG emissions by one-third over 2005 levels by 2030, by one-half over 2005 levels by 2050 and will become carbon neutral by 2080.

The potential effects are best summarized by the Provincial Climate Change Green Economy Action Plan:

"In Manitoba, climate change has already been affecting our environment, our communities, and key sectors of the economy. Average temperatures in parts of Manitoba have increased by 1°C to 2°C in the past 60 years. By 2050, without reductions to our GHG emissions, Manitoba's temperatures could increase significantly across all seasons.

The warming we have seen to date is projected to continue if no action is taken. Precipitation patterns are also expected to change, with warmer and drier summers and more precipitation in winter and spring. There may be increased risk of water scarcity and more frequent and intense droughts, floods, and other extreme events. For the Prairies, this may lead to lower summer stream flows and notable shift in stream flow timing earlier in the year; falling lake levels; decreased ice cover periods; and decreased spring snow cover extents and soil moisture. Increased risk of flooding may cause public safety hazards, amplified soil erosion, increased infrastructure deterioration and decreased water quality."

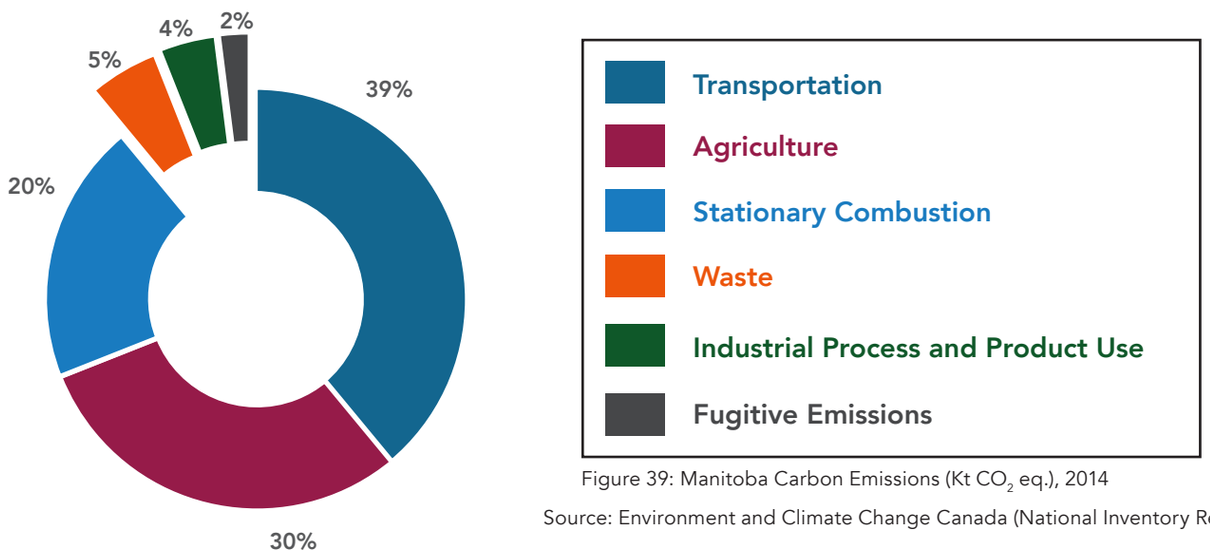


Figure 39: Manitoba Carbon Emissions (Kt CO_2 eq.), 2014

Source: Environment and Climate Change Canada (National Inventory Report)

GHG Emissions

Planning for land use and development needs to consider the impacts to GHG. Key areas addressed in the Development Plan from a GHG Emissions perspective include:

- **Transportation** – policies include measures to shift modes of transportation from personal automobile to alternative choices. Goods movements should also be addressed to identify ways for cleaner and more efficient energy choices and alternatives.
- **Land Drainage** – policies include identification of climate change on land drainage and associated impacts. Policies should also include measures to address issue related to land drainage such as flooding.
- **Energy Needs at the Community Level** – policies include linking development choices to energy needs. For example, the Development Plan has infill policies directing, where appropriate, new residential growth to areas that are already built up and have available infrastructure.
- **Waste Reduction** – policies include strategies around reducing waste going to landfills. Strategies might include recycling and composting.
- **Heating and Cooling of Buildings** – policies address how energy is used in buildings and encouraging more efficient energy options.

Key economic development sectors are also addressed in the Development Plan:

- **Agriculture** – Emissions related to agriculture production are rising. Policies should include referencing tools and supports to assist with reduction in GHG Emissions related to agriculture production.
- **Tourism** – Policies should identify how climate change and GHG Emissions are or will impact the tourism business. In particular, how climate change can impact tourism activities dependent on predictable weather patterns.

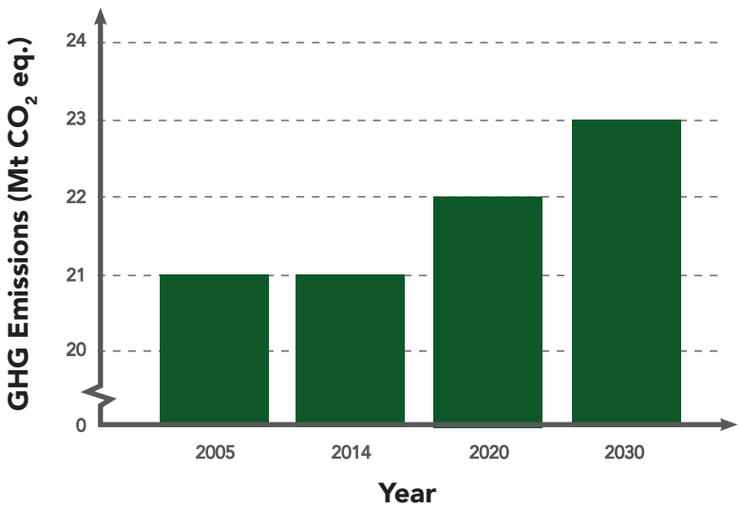


Figure 40: Manitoba Emissions Forecast

Source: Canada's 2016 Green House Gas Emissions Reference Case

Development Plan Influencers

- Policies address climate change and measures to contribute to sustainability – economic, environmental, and social.
- Tools and actions are identified to mitigate climate change impact.
- The Development Plan is used as a foundation for several actions including a community sustainability plan.
- The Development Plan is used to champion and lobby government to address issues in their jurisdiction such as multi-district/provincial water stewardship issues.

COMMERCE

Income Analysis

Household Income is the sum of the total incomes of all members of the household, 15 year of age and older, whether related or not. It includes income from all sources and is often used to assess standard of living.

Median household incomes in the District performed above the Provincial median in the recently released 2016 Census. There are several variables to consider when accounting for income calculations, however, they offer a glimpse into the District and can relate to the age of the District (older) and other factors such as self employment, education level and reporting. For example, there is a direct correlation between education level attained and household income. The higher the education level, the higher the incomes.

2016 Census data (see Figure 41) also shows that a large portion of the population in the District has an income between $10,000 and $40,000 a year. This is an important area to monitor as the job market develops in the future.

Location	Median
Manitoba	$46,793
Russell-Binscarth	$59,264
R.M. of Riding Mountain West	$56,128

Table 22: Median Annual Income Per Household After-Tax, 2016

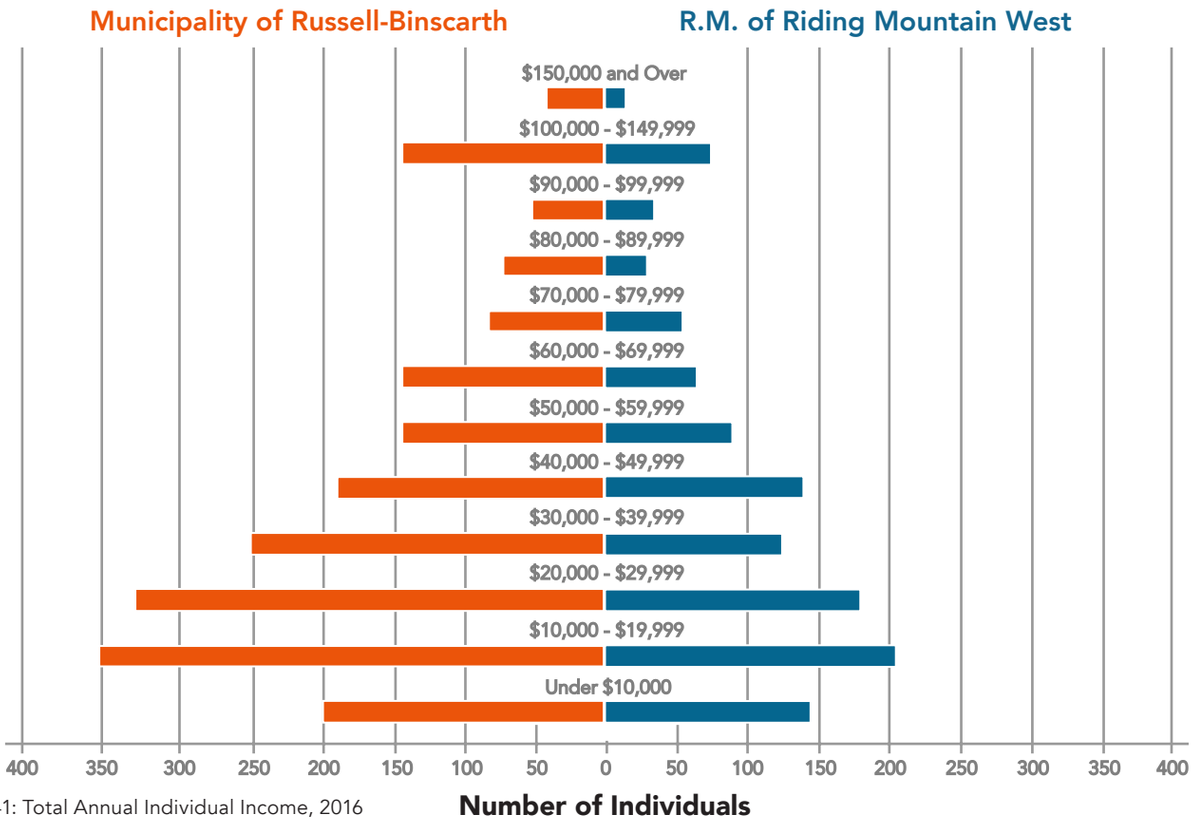


Figure 41: Total Annual Individual Income, 2016

Education

There is a diverse representation of education status throughout the District. This diversity is important to meet the market requirements, since it demonstrates a variety of skills and experience. It will be important to continue to attract and retain citizens with higher educational attainment for future growth.

Education Status	Russell-Binscarth		R.M. of Riding Mountain West	
	2006	2011	2006	2011
No Certificate; Diploma or Degree	725	750	445	N/A
High School Certificate or Equivalent	505	540	280	N/A
Apprenticeship/Trades Cert./Diploma	230	200	105	N/A
College; CEGEP or other Cert./Diploma	340	345	175	N/A
University Cert.; Diploma or Degree	245	295	130	N/A

Table 23: Education Status Summary

Labour Force

It is important to note that the region's unemployment is far below the Provincial rate of 5.5% (and 63.6%) and the national rate of 7.5% for 2011. While the rate is not known for the R.M. of Riding Mountain West for 2011, it is fair to state that the rate averages between the two regions between 1.2 and 2.7% for 2011 (the most recent comparable period).

Labour force participation rates are important considerations. A rising Labour Force Participation Rate combined with a declining unemployment rate is most desirable. This means local jobs are being created and local residents are filling those new positions.

This information is important because changes in the labour force are the result of changes in population and economic opportunities. The trends illustrated by comparing unemployment and labour participation rates over time reveal clues about the causes of change in the local labour market. This provides a foundation for planning and economic development promotion.

Employment Status	Manitoba		Russell-Binscarth		R.M. of Riding Mountain West	
	2006	2011	2006	2011	2006	2011
Employment	63.6%	63.1%	58.3%	58.8%	68.8%	N/A
Unemployment	5.5%	6.2%	2.9%	1.2%	2.7%	N/A

Table 24: Employment Status Summary

Places To Work

Based on data, the two major economic sectors of the Tri-Roads District are tourism and agriculture or agricultural related industry. Current major sector employers include: Asessippi Ski Area & Resort and Bunge Canada, Canola Crushing Plant and Refinery, along with continued farm production.

Other areas of employment include mining, with District residents being employed in the potash mining sector in Esterhazy and Rocanville, Saskatchewan (commute time approximately 50 minutes to an hour); healthcare and service based employment.

The current employer landscape provides a solid sense on potential market trends, recognizing that economic growth will likely decant out of existing economic sectors that are performing well and have ability to accommodate growth.

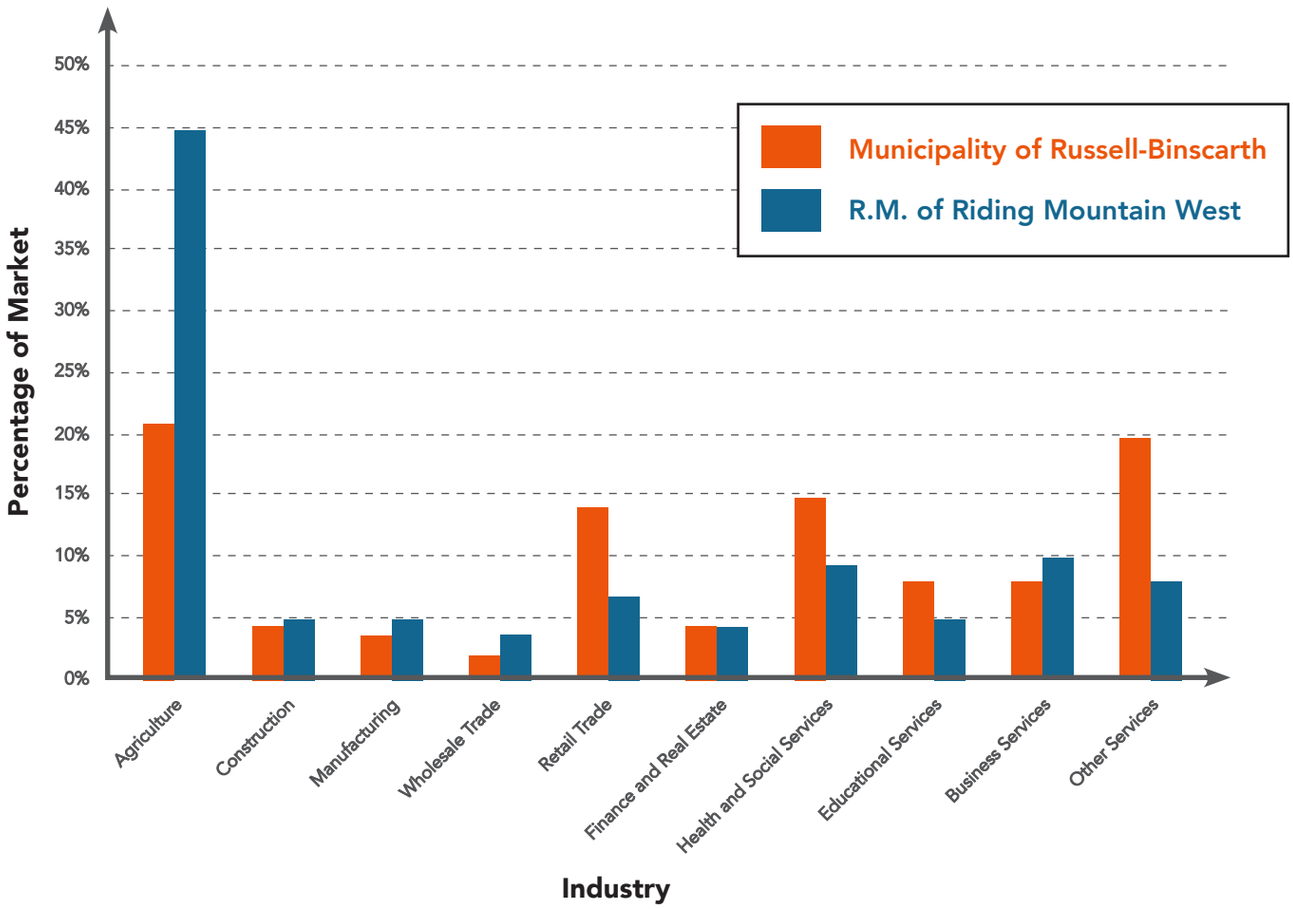


Figure 42: Industry Employment Market Share

Agriculture Industry

The following tables summarize the state of agriculture industry in the District. There has been a significant increase in the total farm capital in recent years, which is on par with the rest of the province. However, the value of farm land and total gross receipts per farm are below the provincial average. It is also important to note that throughout the District, the number of farms is decreasing, while on average farm sizes are increasing.

Location	Total Farm Capital ($)		Total Gross Farm Receipts ($) per Farm	
	2006	2011	2006	2011
Manitoba	17,929,893,083	24,266,120,954	213,809	333,164
Shellmouth-Boulton	134,434,387	185,845,820	123,518	203,297
Silver Creek	81,455,017	120,396,656	178,631	353,760
Russell	87,957,380	116,428,065	236,235	258,956

Table 25: Farm Capital and Receipts Per Farm

Location	# of Farms	Acres Farmed	Average Farm Size (Acres)	$ Value/Acre
Manitoba	15,877	18,023,472	1,135	1,035
Shellmouth-Boulton	168	199,121	1185	667
Silver Creek	79	127,542	1614	664
Russell	89	117,251	1317	732

Table 26: Agriculture Industry Summary, 2011

DRIVERS OF CHANGE AND GROWTH

Mining

The mining and petroleum industries in Manitoba make up the second-largest primary resource industry of Manitoba's economy. The 2016 value of mining and petroleum production totaled $2.1 billion. (Province of Manitoba)

In 2015, capital expenditures on mining and petroleum development totaled an estimated $877 million, and the industries accounted for approximately 3.5% of the province's economy and 6.3% of total exports. Manitoba's mining and petroleum industries directly employed approximately 5,200 people in 2016 (Province of Manitoba).

According to the Province of Manitoba, mineral resources with potential for future economic development include platinum-group elements (platinum, palladium and rhodium), rare earth elements, uranium, titanium, vanadium, chromite, silica, diamonds and potash.

The Province of Manitoba has identified that supporting mining and petroleum exploration and development is a priority and makes effort to identify itself as a partner to provide information and support including: a comprehensive geoscience knowledge base, financial incentives, a transparent land tenure system, competitive business costs, well-educated, productive, multilingual and skilled labour force, and environmental stewardship.

In 2014, the Potash Corporation of Manitoba issued Letters of Interest to targeted companies to gauge interest in developing its rights to the "Russell – McAuley Potash Deposit". The Deposit is approximately 69,249 hectares of high quality, mineable potash.

If developed, the deposit is projected to yield approximately 2 tonnes a year; employ 600 people with a projected $60 million annual payroll.

Economic Development Influencers

- The Development Plan sets out the criteria to respond quickly to advancement on mine development.
- A future mine development zone is identified in the Development Plan with the objective of supporting and enabling efforts related to land access; certainty and land use planning for major industry.
- The Development Plan provides a common level of understanding and certainty as to how future development and planning will proceed.
- A coherent growth plan is set out in the Development Plan to accommodate accelerated growth (scenario 3) and ensure development-ready residential, commercial and industrial lands.

Tourism

The area's abundance of rich natural assets has resulted in tourism emerging as a solid economic sector in the District. The District's location in proximity or including Lake of the Prairies, Asessippi Provincial Park and Riding Mountain National Park along with well advanced tourism offerings such as Asessippi skiing and cottage area development has resulted in a very successful economic sector.

Visitation in the Parkland region accounts for 4% of Manitoba's visitors, or 467,000 visitors who travel to and through the region (Note: including Riding Mountain National Park). They spend over $53 million, or 4% of all tourism spending in Manitoba.

Tourism transactions in the Parkland region are linked to the people in the industry who interact with visitors. These interactions result in the creation of 424 direct tourism jobs, including entry-level jobs for those entering the workforce, management level and self-employment opportunities across many sectors, including hospitality, arts and culture, and parks and recreation.

Tourists currently spend their money on:

1. Food and Beverage
2. Transportation
3. Retail

Three of the four 'Star Attractions' identified by Tourism Manitoba in the Parkland Region are in the District:

- Asessippi Ski Area & Resort
- Inglis Grain Elevators National Historic Site
- Riding Mountain National Park of Canada

The majority of visitors are from: Manitoba, Saskatchewan and Alberta. They come for the natural environment (Tourism Manitoba) and most stay with friends or relatives (72%).

Tourism economic sector in Manitoba is growing and the District (a major part of the Parklands area) is positioned to increase its tourism sector in various ways:

- Value-added tourism activities and destinations
- Attracting visitors to communities, in addition to the natural environment
- Increasing retail and accommodation opportunities.

Economic Development Influencers

- The Development Plan advances tourism related economic development through policy and action.
- There is an adequate and aligning land supply identified in the Development Plan to meet tourist expectations, including lands to accommodate development targeted as tourists (accommodations, restaurants, etc…).
- The Development Plan supports community based initiatives to draw visitors into all the District communities through continued urban design, community theming and place making (creating communities places that people want to be in) recommendations.
- The Development Plan reconfirms Lake of the Prairie assets and areas to be protected and where development activity is allowed, such as the Seasonal Recreation Area.
- The Development Plan supports the continued development of existing cottage areas; and set out mechanisms to encourage development of a mix of developments and to introduce efforts to create opportunities for the cottage areas to evolve into more complete communities.

Agri-Business (Agriculture and Agricultural Food Processing)

In Manitoba, the value-added food processing industry is the largest manufacturing sector in Manitoba representing 26% of Manitoba total manufacturing revenue ($4.9 billion in 2012). The sector represents about 15% of Manitoba exports and employs over 12,000 people in more than 450 facilities. Manitoba's contribution to Canada's food processing industry is approximately 5% and it has been growing faster than the Canadian average over the past 10 years.

According to the Province of Manitoba, strong agronomic environment supported by a large and diverse range of crops and livestock are suitable for food processing companies. Other key factors are:

- Central geographic location, hence a key part of the Mid-Continent Trade corridor, connecting Canada to central North America and to Pacific and Atlantic gateways;
- Access to affordable energy; and
- Abundant and high quality supply of water.

Cattle herd sizes have been increasing and hold potential to support future food processing in the province.

Agri-business, especially food processing, is a significant opportunity for the District as it meets several of the key criteria identified by the Province of Manitoba including: central location serviced well by roads and rail; access to affordable energy and access to immediate or proximal infrastructure.

A key opportunity lies in cattle food processing. Manitoba has an extensive cattle industry, with the third largest breeding stock in the country. There is, however, very limited beef processing capacity, resulting in the majority of cattle being exported live to other provinces or the U.S. for processing. (Province of Manitoba)

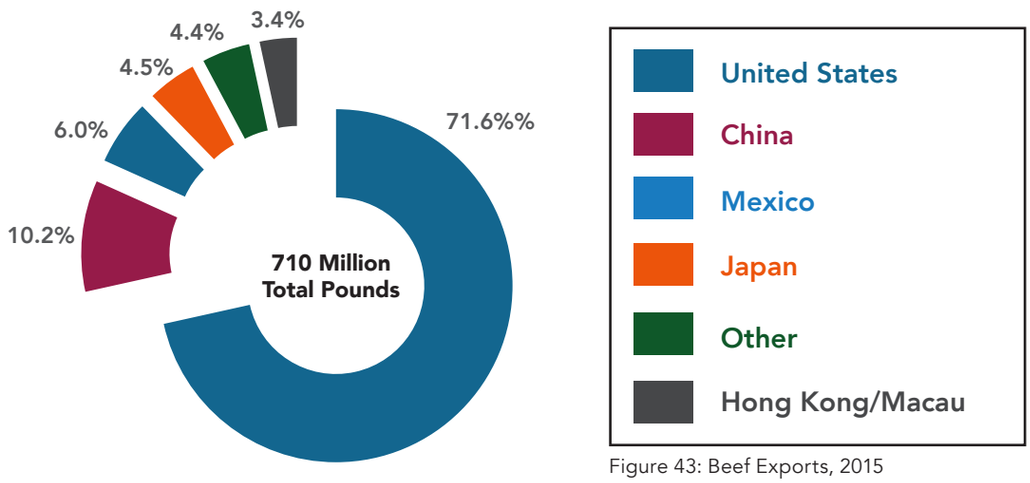


Figure 43: Beef Exports, 2015

Source: Statistics Canada

Meat packing as an industry is characterized by high capital costs and low margins, making economies of scale extremely important. Operating challenges include labour and waste management. Wastewater treatment systems can add in excess of $2 million to capital costs.

According to the Province of Manitoba's 2004 statistics, the industry is characterized by a high degree of employee turnover, often among a limited labour pool. Capital requirements for a plant with capacity to slaughter and process 50,000 head are estimated at approximately $15 million. Based on current market conditions, break even for a plant handling fed cattle would be achieved at approximately 26,000 head. This is based on a margin of approximately $275 per head on the animal itself and $160 in direct processing costs.

Both the federal and provincial governments have identified international markets for cattle as an opportunity. In 2016, the federal government signed a new trade pact with China that will accept additional frozen, boneless beef cuts. However, the next step in the trade pact is expected to include fresh, chilled beef.

There is opportunity in the District to meet growing international demand but will require extensive efforts to move Manitoba ahead in herd size and ability to process. Currently, the average herd size is 63 head.

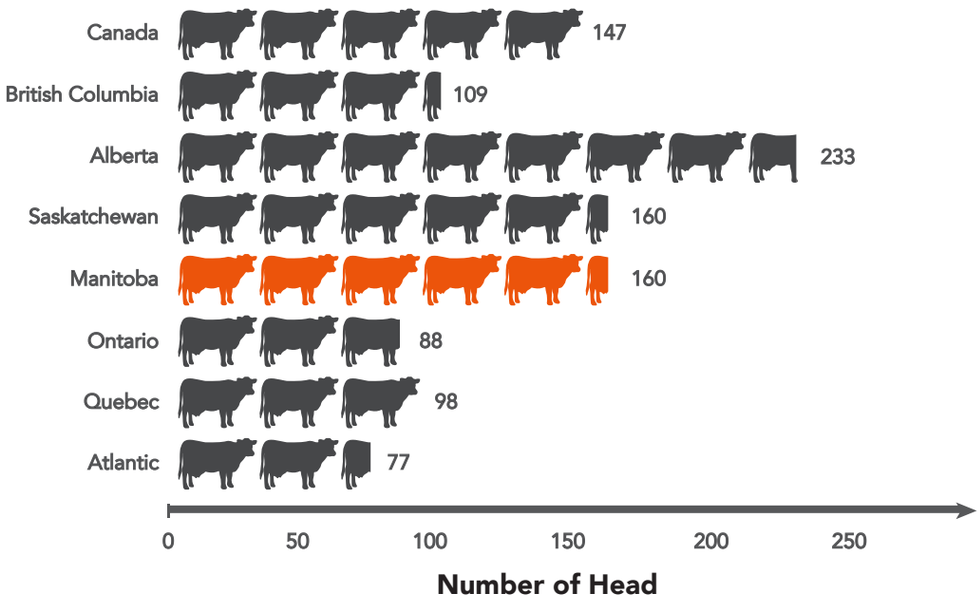


Figure 44: Average Number of Head Per Farm, January 2016

Source: Statistics Canada

It is here that the District can position itself best. As evident from the Beef Export Chart, Alberta currently holds the market share on beef cows by province. A corollary explanation for its market share can be attributed to its market share on cattle processing facilities.

To date, the major cow slaughterers in Canada have been in Alberta (primarily) or Ontario. Other opportunities remain related to livestock such as poultry and swine production.

Overall, the key to both livestock and food processing is the ability to site and locate livestock activity in the District. The regulation related to siting all livestock operations lies in the Provincial Land Use Regulation.

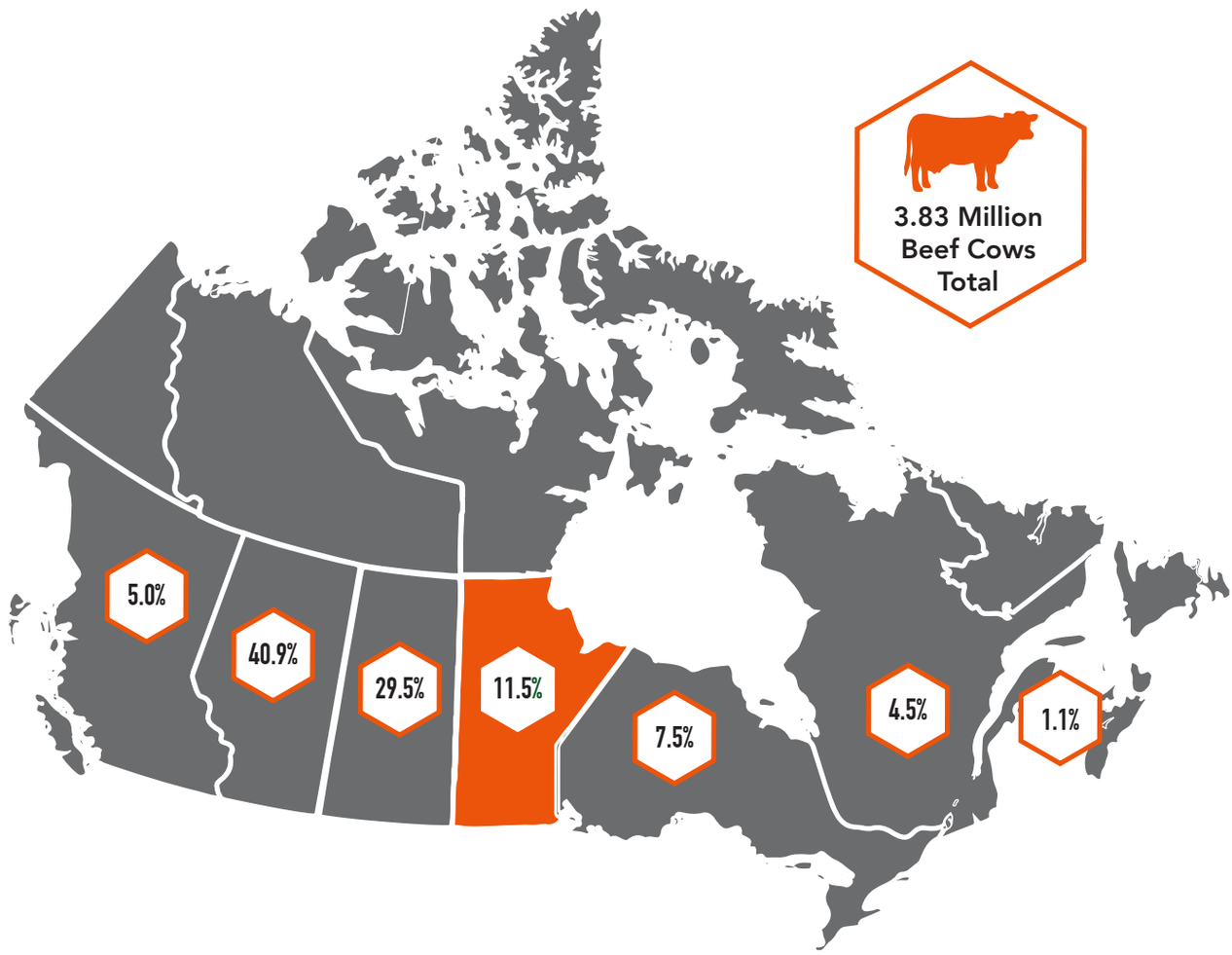


Figure 45: Share of Beef Cows by Province

Source: Statistics Canada

Economic Development Influencers

- The Development Plan encourages expansion of livestock operations in a sustainable way (aligning to the Provincial Land Use Policy Regulation).
- The Development Plan supports economic development in including value added agriculture activities.
- The Development Plan sets out an efficient and timely process to bring opportunity to reality including identifying any additional, future planning (sector plans) to address land issues and infrastructure (water, wastewater, land drainage and energy) requirements.
- The Development Plan protects farm land identified as important to the agriculture sector.

Regional Hub (Service & Healthcare)

The District's population demographic and population breakdown suggests that the district has a stable demographic and population base. While stable, population, and jobs – related growth are necessary to increase desirable amenities such as a more diversified commercial-retail base.

The District's urban hubs are poised to become a regional draw because of its location and proximity for commercial/retail and aging in place. If we reflect on the demographic and population breakdown set out in this Study, we see two trends that should inform service and healthcare development:

- The District population is aging and will be migrating to housing set up for aging (seniors housing, supportive care and long-term care. An aging population will also require access to a full spectrum of healthcare and quality of life amenities.
- The District is adjacent to growing First Nation communities. While growth rates are stable and somewhat stagnant in the District, First Nation communities are experiencing explosive growth (12%). This growth presents opportunities that should not be overlooked including services, commercial/retail development that is marketed towards First Nations in the District.

Prairie Mountain Regional Health Authority (PMRHA)acknowledges that the District needs aging in place facilities and is supportive of District efforts to create such facilities. At issue, the Province of Manitoba is not ready to support a provincially led capital investment in a long term care facility.

PMRHA has confirmed that the District's existing long term care facilities are no longer suitable from a maintenance and service perspective and it is on this basis that they have identified support for a facility.

Economic Development Influencers

- The Development Plan sets aside lands to expand current commercial/retail inventory.
- The Development Plan supports community based initiatives to draw visitors into all the District communities through continued urban design, community theming and place making (creating communities - places that people want to be in).
- The Development Plan applies emphasis to existing and traditional commercial spines (i.e. Main Streets).
- The Development Plan creates policy and strategy for an aging in place hub in Russell that co-locates (in proximity/not adjacent) a broad spectrum of seniors housing (independent to long term care); amenities targeting seniors (drop-in centre, wellness centre, etc.) and aging in place services.
- The Development Plan is a mobilizing tool to introduce innovative capital concepts including community based funding and private investment.
- The Development Plan introduces tools and incentives to support the regional hub concept including municipally based incentives (land and servicing).

Information & Communication Technologies

Manitoba is home to a thriving Information and Communication Technologies sector that serves the world. Manitoba has over 1,500 companies with approximately 80% of these firms located in Winnipeg. Given that location is not a factor, there is little reason that this sector cannot advance in less urbanized locations.

A game changing element that was not considered in the 2002 Development Plan was the ability to conduct 'as usual business' virtually.

In 2016, the national average download speed was 18.64 Mbps. Urban centres tested at an average download speed of 19.8 Mbps, compared with the rural average of 14.81. Many of Canada's largest and most populated cities, perhaps not surprisingly, ranked at the top. But there was a distinct difference between users in rural areas.

The District can and will benefit from embracing the digital economy. Opportunities include:

- **Virtual stores** – catering to on-line shopping
- **Virtual offices** – offering services that don't require in-person interaction.

Economic Development Influencers

- The Development Plan introduces information and communication technologies as an infrastructure system, no different than water, wastewater, solid waste and land drainage.
- An Information & Communication Technologies strategy should be developed to attract and maintain new digital economy endeavors.
- Regulatory tools are aligned to support home based digital businesses.


Tri-Roads
forward
Planning for progress and prosperity