
Parkland County



Future of Agriculture Study

Final Report

June 30, 2016



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Executive Summary

Introduction

In 2015, Parkland County committed to undertake a study entitled ***The Future of Agriculture*** in response to an increasing range of growth and development pressures facing the municipality. Several of these forces compete for the same land and resources required by the agricultural sector. At the same time, agriculture has undergone and continues to experience rapid change in the face of changing markets, dynamic economic conditions and the structure of farm ownership. Three central questions are addressed:

1. What is the future for agriculture in Parkland County and what types of agriculture have a long term sustainable future in the County?
2. What is the vision for agriculture within Parkland County?
3. What policies and tools facilitate, or at the very least support, the types of agriculture that have the best future fit for Parkland County?

The Planning Context

An extensive statistical analysis, consultation and review process confirmed strong support for agriculture and its future in Parkland County. The process also identified several opportunities for sustainable agriculture initiatives within Parkland County. In view of its proximity to a large and growing metropolitan area, these include:

1. The continuation of crop/large field agriculture (including dairy farms).
2. Increasing the beef cow-calf sector and other grazing livestock particularly in the western part of Parkland County where there is ideal grassland conditions/pasture for grazing.
3. Specialty operations—potatoes, vegetable production, fruit, market gardens, specialized livestock (sheep, goats, pasture poultry, bees, etc.) to respond to the growing demand for local food. Parkland County is considered to be ideally located.
4. Agri-tourism including equine enterprises and attractions—destinations for day visits, stables, events, and a dedicated park for equine activities. Again, location is ideal.
5. Value added enterprises—the opportunity to attract companies in primary processing, food processing, beverage, and bio-products industries; professional and/or technical service companies operating in the food and agriculture sector as well as growing local businesses.

The study also identified several issues and constraints facing agriculture. These include:

1. **A questionable future**—there is a growing sense with many individuals both directly and indirectly involved with farming, that agriculture has a limited future in Parkland County due to development pressures arising from urban and subdivision expansion. These pressures are resulting in increased in land fragmentation which means the loss of lands for farming. Many farmers contributing to this study expressed views that agriculture appears to have a low priority within Parkland County compared to industrial and residential growth. Stronger and clearer long-term land use policies that preserve agricultural land are seen to be key.
2. **Lack of awareness and appreciation**—many contributors to this study expressed the view that agriculture is not well known understood, respected or even considered in the normal course of municipal life. Thus, non-farm residents have little knowledge or appreciation for the role of agriculture in Parkland County even though it is the major land user and a major industry sector. An increase in the number of non-farm residents has also resulted in increasing conflict with agricultural operations. Farmers are experiencing nuisance

complaints specific to noise, dust and traffic safety concerns associated with moving farm equipment; there are also growing concerns with vandalism and break-ins. Education and increasing public awareness about agriculture and its importance to Parkland County are thought to be a key.

3. **Loss of Local Dealers, Support Services and Markets**—some contributors have experienced the effects of a declining agricultural community (fewer farm neighbours, loss of local dealers and fewer local markets such as auctions and elevators). Maintaining an agricultural community as well as more opportunities for the local sale of agricultural products is seen to be key.
4. **Lack of Knowledge regarding new or emerging opportunities including the Equine Sector**—for example, equine operators in the County voiced concerns that their sector which is sizeable, is not well known by the County. Creating business opportunities including value added enterprises and destination attractions (e.g. dedicated public arena/facility) are seen to be key.

A Vision for Agriculture in Parkland County

The preceding analysis was used as the basis to develop the following vision for agriculture:

A vibrant agriculture and food community characterized by its diversity, creativity and entrepreneurship, focused on sustainability as well as new opportunities.

This vision gives purpose and substantiates Parkland County's overall vision presented in the Strategic Plan 2016 – 2020. It also affirms the central role of agriculture.

Principles and Policy Directions to Guide the Plan

Four principles will guide the development of policies and programs to achieve the Vision:

- Principle 1:** **Integrated approach**—the recognition that a viable agriculture and food sector requires an integrated and supportive set of policies including land use, economic development and infrastructure investment and not one policy alone. The principle is supported by sixteen policy directions in four areas: the integrated approach (4); affirming the commitment to agriculture (4); communications, education and public relations (7); and public safety (1).
- Principle 2:** **Supportive land use policies**—the design and implementation of land use policies that assure the long term future of agriculture. Further, these policies need to respond to the context of different areas. The principle is supported by twenty policy directions in four areas: growth management (5); fragmentation and conversion (9); other tools and approaches (4); and mapping (2).
- Principle 3:** **Entrepreneurial culture**—building and supporting an entrepreneurial business culture for the development and attraction of diversified progressive agribusinesses, emerging enterprises and agri-tourism opportunities. This principle is supported by nine policy directions in two areas: an integrated approach (6); and organizational requirements (3).

Principle 4: ***Fostering local leadership***—the creation of new momentum for a range of potential new directions and initiatives requires strong committed local leadership both within the community and politically. Eight policy directions are provided: leadership development (6) communications and public relations (2).

Conclusions

Agriculture is and historically has been an integral part of Parkland County's economic and community life. Three major change dynamics are at play: (1) the continuing growth of large scale commercial farms in response to global forces which demand cost competitiveness and the ability to compete with world prices – this means fewer larger farms that need large contiguous agricultural land areas; (2) the emergence of specialty enterprises in response to the growing demand for local food as well as 'country' experiences – this means a relatively new and somewhat vulnerable sector that needs support if it is to be viable; and (3) the non-agricultural pressures on the agricultural land base resulting in land fragmentation and more conflicts with non-agricultural residents – this means increasing uncertainty with respect to the future of agriculture itself within Parkland County if these trends continue.

A lack of commitment and supporting actions will result in the declining presence of agriculture within Parkland County. More subdivision and conversion of agricultural land will take place; the larger scale commercial farms will continue to migrate to other agricultural municipalities; the growth of local food, value added and agri-tourism operations will likely be modest.

In summary, Parkland County has the opportunity to assure a future for both the large scale commercial as well as the emerging agricultural sectors. This will however, require a clear commitment to agriculture; a re-energized vision; a more nuanced land use policy that provides long term certainty for agriculture in priority areas; economic development to facilitate and support emerging enterprises; and a process (and resources) to foster leadership.

Respectfully submitted,



Jerry Bouma
Project Manager
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1.0 Introduction

1.1 The Questions

In 2015 Parkland County committed to undertake a study of the present and future potential of agriculture within its own jurisdiction. Entitled ***The Future of Agriculture***, the study will be used to inform the Municipal Development Plan (MDP) and other regulatory documents that are being reviewed and updated.

Located to the west of Edmonton and as part of the Capital Region, one of the fastest growing metropolitan areas in Canada, Parkland County faces an increasing range of growth and development pressures. Many of these forces compete for the same land and resources used by agriculture, making decisions within a municipality such as Parkland County both complex and challenging. At the same time, agriculture has undergone and continues to experience rapid change in the face of changing markets, dynamic economic conditions and the structure of farm ownership.

The Future of Agriculture project addresses three central questions:

1. What is the future for agriculture in Parkland County and what types of agriculture have a long term sustainable future in the County?
2. What is the vision for agriculture within Parkland County? In other words, what does Council, with the support of citizens and landowners want to accomplish with respect to the presence and ‘look and feel’ of agriculture in Parkland County enabling it to grow and develop?
4. What policies and tools facilitate, or at the very least support, the types of agriculture that have the best future fit for Parkland County?

In summary The **Future of Agriculture** study will provide Parkland County a basis upon which to plan for one of its priority sectors.

1.2 Objectives

The objectives of the **Future of Agriculture** study are stated¹ as follows:

1. Clarify current and future agricultural characteristics, practices and resources in Parkland County.
2. Provide a vision and develop principles for a healthy agricultural system.
3. Provide direction on diverse agricultural opportunities Parkland County should pursue currently and into the future.
4. Develop scenarios and recommendations for the enhancement, diversification and security of agricultural land and practices in Parkland County.
5. Provide policies and procedures for the implementation of the chosen recommendations for the on-going security, enhancement and diversification of agricultural activities in Parkland County.



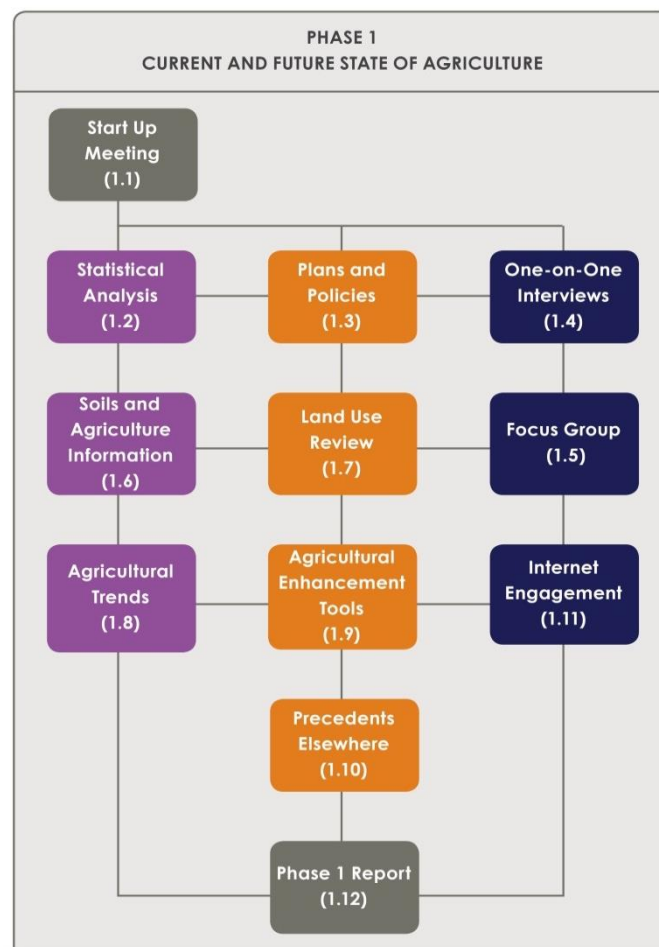
¹ Parkland County Request for Proposal #P150224PD, April 1, 2015.

1.3 Work Plan

The work plan comprised two phases of activities and reports:

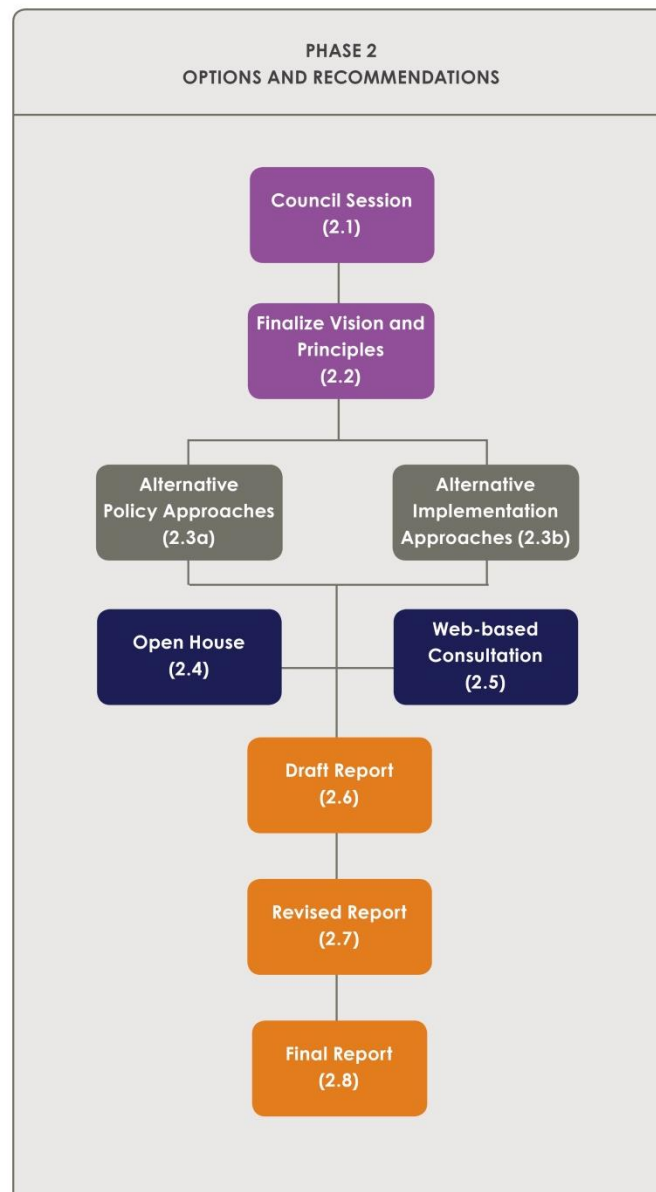
Phase 1: Current and Future State of Agriculture—this involved an extensive review of the state of agriculture in Parkland County; an analysis of trends; a statistical review; a series of twenty personal interviews; a series of focus group meetings with four stakeholder groups (Tomahawk area farmers, Stony Plain area farmers, the equine sector, and the market garden/value added sector); a review of relevant policies and plans; a review of historical soils and agriculture information; review of precedents and relevant policies or planning tools used in other jurisdictions; and public input via a dedicated internet site.

Chart 1.1: Phase 1 Tasks



Phase 2: Options and Recommendations—this phase involved the preparation of a draft plan which outlined a vision, a set of principles and implementation considerations. Two rounds of public consultation each comprising three public meetings were held (October 2015; April 2016) to receive input on the proposed plan. In addition, the public was able to provide input through a dedicated web site set up for the project.

Chart 1.2: Phase 2 Tasks



1.4 Definitions of Agriculture

Planning for agriculture requires an agreement on what is meant by the term ‘agriculture.’ As we all know, the industry has changed and continues to change dramatically. We also know that ‘agriculture’ means different things to different people. Further, the various components comprising ‘agriculture’ will vary given their relative importance in different communities.

What follows are a range of definitions to be considered:

- **Merriam Webster:** The science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products.
- **Oxford Dictionary:** The science or practice of farming including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool and other products.
- **Strathcona County:** The production of food and fibre, motivated either by profit or lifestyle. (Future of Agriculture, Strathcona County, 2003)
- **Rocky View County:** The business of growing, raising, managing and sale of: livestock, crops and directly related value added products and services on farms within Rocky View County. (Rocky View County Agriculture Master Plan, 2013)
- **Strathcona County:** The growing, raising, managing and/or sale of livestock, crops, foods, horticulture and agri-food related value added enterprises including education motivated either by profit or lifestyle. (Strathcona Agriculture Master Plan, 2015)
- **Extensive agriculture development** means a system of tillage including the associated clearing of land for agricultural production purposes, which depends upon large areas of land for the raising of crops. Extensive agricultural uses include buildings and other structures incidental to farming as well as farm related uses. Extensive Agriculture Development does include the off-site removal and export of logs or trees. (Parkland County Land Use Bylaw)
- **Agricultural support services** means development providing products or services directly related to the agricultural industry. Without restricting the generality of the foregoing, this shall include such facilities as: grain elevators, feed mills, farm implement dealerships (not including Automotive, Equipment and Vehicle Services) or crop spraying. (Parkland County Land Use Bylaw)
- **Aquaculture** means land devoted to the hatching, raising and breeding of fish or other aquatic plants or animals. (Parkland County Land Use Bylaw)

There are various components to ‘agriculture’ that contribute to a complete definition including:

- It’s an **activity**: business, practice, production, managing, raising, cultivation, etc.
- It’s **based on knowledge**: skill, expertise the science, the art, management, etc.
- It includes a variety of **products**: food, fibre, crops, livestock, wool, horticulture, etc.
- It has **supplementary activities or services**: marketing, value added production, tourism, recreation, education, etc.
- It has various **motivations**: mostly driven by profit, but also lifestyle and personal values, etc.
- **Other**: it is dynamic and evolving.

In summary, agriculture should be defined as broadly as possible to be inclusive and to maximize

opportunities as agriculture continues to evolve. While the objectives of farmers historically have been to produce food for human consumption and to do so profitably over the long term, agriculture should not be limited to these activities alone. It should be broad enough to include activities that are motivated by personal interests (hobby) or recreational purposes. Furthermore, agriculture can occur in both urban and rural settings.

Furthermore, since Parkland County is part of the Capital Region, there is a desire for consistency on a regional basis. The following provides a suitable scope to define agriculture for Parkland County:

The growing, raising, managing and/or sale of livestock², crops, foods, horticulture and agri-food related value added enterprises including education, motivated either by profit or lifestyle.

1.5 Structure of the Report

This report is structured as follows:

- **The Main Report**—the major findings, implications and recommendations. The report also includes the Vision, a Set of Principles and Policy Requirements. It represents the work and the consultations done in Phase 2 of the project and comprises Chapters 1 to 6.
- **The Appendices**—the background to the Main Report including the detailed consultation highlights, analysis, reviews, findings and statistics which are all part of Phase 1 of this project. A total of six appendices are attached.

² Livestock is defined to include poultry, horses as well as other less common species such as llamas and alpaca.



2.0 Background to the Study

2.1 Introduction

The ***Future of Agriculture Study*** is developed within the context of macroeconomic trends, trends within Parkland County itself, extensive consultation within the County as well as the planning environment specific to relevant municipal, regional and provincial plans. All of these components are addressed in detail in the Appendices 1, 2 and 3. Several key trends based on our review of the Census of Agriculture, Statistics Canada (see Appendix 5) as well as a summary of the consultation highlights are presented in this chapter.

2.2 Review of Statistics

The most significant development in agriculture is the pace of change with regards to the structure of the industry itself. Most notable is the trend to fewer larger farms. Furthermore, this trend is accentuated by the degree of specialization that has taken place and how a relatively few number of farming operations account for a sizeable proportion of the economic activity taking place within the agriculture sector. Like all areas of Alberta, Parkland County has been dramatically impacted by this structural change.

This trend is best illustrated by the following summary table (see Table 2.1). The data illustrates that the number of farmers over the 10 year period had declined by over 30%. However, the number of large farms (more than \$500,000 in annual gross receipts) has grown by a factor of 80%. Furthermore in 2011, this large farm group represented by 47 farms accounts for an estimated 60% of the total gross receipts for the entire county³.

³ In January 2016, we conducted an analysis of the Alberta farm financial structure for AFSC. Across Alberta, the \$500,000 plus sector accounts for 70% of all gross farm receipts but represents only 10% of the number of farms. Relatively speaking Parkland County has fewer large farms, hence our estimate of 60%

Table 2.1 Changes in the Structure of Agriculture, Parkland County

Gross Receipts by Category	2001 # of farms	2011 # of farms	% Change	Implications
Less than \$500,000	1,118	735	-34.3%	Many smaller farms remain but fewer in number. Note: in 2011, 539 farms had annual gross receipts of less than \$50,000
More than \$500,000	26	47	+80.7%	Small number of large farmers but this group has almost doubled
Total	1,118	782	-31.7%	Fewer number of farmers overall but a bi-modal distribution. Avoid the term 'average' farmer
Total Gross Receipts for Agriculture	\$82,064,000	\$97,975,000	+19.4%	

Source: Census of Agriculture

A summary of positive and negative changes between 2001 and 2011, are presented in the following two tables (see Tables 2.3 & 2.3). All data is from the Census of Agriculture, Statistics Canada (see Appendix 5).

Table 2.2 Positive Changes in Parkland County: 2001 to 2011

Measure	2001	2011	% Change	Implication
Average Farm Size (acres)	416	514	+23.6%	Trend to larger farms
Average Gross Receipts/Farm	\$72,000	\$125,000	+73.7%	Trend to larger farms
Farms with more than \$1 million in capital	223	374	+67.7%	Trend to larger farms and the increased value of land
Farms over 1,120 acres	85	89	+4.7%	Large farm sector is growing as smaller farms decline in number
Average Age of Farmers	50.4	56.0	+11%	Trend to older farmers – concerns with succession
Canola Acres	19,738	36,667	+85.7%	Shift to higher value crops. Trend across province
Potato Acres	1,576	2,642	+67.6%	Favourable location for seed and specialty potatoes
Vegetables Acres	37	47	+27.0%	Modest growth and scale. An estimated 15 growers
Area of Nursery Products	271	376	+38.7%	Reasonable growth—a reflection of local demand
Greenhouse area (Sq. Ft.)	169,797	197,465	+16.3%	Modest growth. However since 2011 several operations have closed

Measure	2001	2011	% Change	Implication
Sheep & Lambs (hd)	5,531	10,422	+88.4%	Overall a small livestock sector in Alberta but favourable growth in Parkland County
Horses (hd)	3,840	3,923	+2.1%	Sizeable and stable horse population—the largest in the Capital Region

Source: Census of Agriculture

Summary: Overall Parkland County has experienced growth in farm size, average gross farm receipts, capital invested per farm and the average age of farmers—much like the rest of Alberta. Canola acreage has also grown substantially which is the case for all of Alberta where this crop has more than doubled (128%) in the 10-year period.

One change unique to Parkland County is the growth of the number of sheep and lambs in contrast to the overall decline in the Alberta sheep population (down 50%). It is also significant to note that growth in the nursery, vegetable and greenhouse production areas has been modest. For example, total vegetable acreage only increased by 10 acres; greenhouse square footage has increased by 30,000 square feet but we are aware of four operations that have closed since 2011. The horse population has remained steady and is significant in size, also being the largest population of horses for an individual municipality in the Capital Region.

Table 2.3 Negative Change (Decreases) in Parkland County: 2001-2011

Measure	2001	2011	% Change	Implication
Number of Farms	1,144	782	-31.7%	Trend to larger farms
Total Area Farmed	475,926	401,863	-15.6%	Loss of substantial land area —mostly due to mining but also subdivisions
Number of Farms with less than 400 acres	807	533	-48.6%	Rapid decline of small farms
Number of Farms with Gross Receipts below \$50K	797	539	-32.4%	Rapid decline of small farms
Total Crop Area	227,729	180,512	-20.7%	Loss of cropping area – same reasons as for loss of total area farmed
Wheat Acres	25,547	20,976	-17.8%	Shift to canola
Barley Acres	39,851	28,335	-28.9%	Shift to canola
Oat Acres	15,698	12,106	-15.2%	Shift to canola
Mixed Grain Acres	3,675	1,317	-64.2%	Shift to canola
Alfalfa Acres	77,454	52,070	-32.8%	Loss of hay and grazing land due to mining. Also a major decline in cattle numbers
Tame Hay Acres	39,303	20,802	-47.1%	Loss of hay and grazing land
Cattle Numbers (hd)	79,084	45,353	-42.6%	Due to post BSE crisis, low prices
Beef Cow Numbers (hd)	31,471	17,601	-44.1%	As above
Dairy Cow Numbers (hd)	1,781	1,661	-6.8%	On fewer farms (10 farms in 2011 vs. 21 in 2001)
Poultry numbers (hd)	188,461	n/a	-n/a	Sector consolidating in other Alberta counties
Total Fruit, Berries & Nuts (acres)	127	104	-18.2%	Reflection of risk, labour shortages

Source: Census of Agriculture

Summary: Parkland County agriculture has experienced a decline in several agricultural sectors over the past 10 years. The statistics clearly reflect the overall trend to fewer larger farms and a shift to growing canola as an alternative to wheat, barley, oats and mixed grains. The most significant decrease is the loss of overall crop area that has declined nearly 21% (or nearly 50,000 acres). Natural resource extraction could be a contributing factor to this loss and would need to be examined more closely. In addition, the 2016 Census of Agriculture data which is yet to be released should be reviewed in detail to determine whether in fact the 2011 data is an anomaly. The crop loss is in two areas: tame hay and pasture (together these are down nearly 40% or 40,000 acres). Significantly overall cattle numbers (including beef cow numbers) have declined more than 43%.

The decreases in the Parkland County beef herd can be explained in part by the overall provincial reduction in beef cows (down 27%). The decade in question (2001 to 2011) has been difficult for the beef industry starting with the BSE crisis in 2003, followed by years of low prices and low returns. Hence, many producers reduced or liquidated their herds. However, the rate of decline in Parkland County is significantly greater than the overall decline. It is also noted that the overall acreage of fruit, berries and nuts declined by 18% (a loss of 23 acres).

2.3 Stakeholder Input

Our consultation process included input from a number of groups and stakeholders throughout the project and is summarized below (See Table 2.4). Detailed input for entire consultation process which included input from approximately 150 individuals can be found in Appendix 3.

Table 2.4 Summary of Consultation Highlights

Stakeholder Group	Summary of Challenges
One on one Interviews	<ul style="list-style-type: none"> Concerns with the future of agriculture in Parkland County Loss of agricultural land/number of subdivisions seen as the biggest issue Major concerns with moving equipment safely, nuisance complaints and vandalism. Agriculture is not known, understood or appreciated by the general public. Also seen as a low priority for County Council Two sides to the land use issue: those who want to farm and have access to un-subdivided land; those who want to retire and be able to sell subdivisions. Is a plan for agriculture too late?
Agricultural & Rural Life Advisory Committee	<ul style="list-style-type: none"> Very concerned about development pressures, the impacts of subdivisions, land fragmentation and the loss of farm land Concerns with cost of land, aging farmers and where the next generation of farmers will be coming from Need for continuing education and support How do you build community when farmers are leaving?
Focus Group – West Parkland	<ul style="list-style-type: none"> See fewer larger farms in the future Agriculture community in decline: fewer full time farmers; lack of local markets; fewer dealers and services Increased number of subdivisions results in more traffic, difficulties in moving equipment, higher land prices. Also significant level of vandalism taking place
Focus Group – East Parkland	<ul style="list-style-type: none"> The end of farming is seen as inevitable due to urban growth (Edmonton, Spruce Grove, Stony Plain) Growth of subdivisions restricts ability to farm: more traffic; nuisance complaints; dangerous to move equipment Lack of understanding and appreciation for agriculture within the community and from the County
Equine Focus Group	<ul style="list-style-type: none"> Horse sector is not well known or appreciated but there are many horses and operations in the County Lack of a unified voice Lack of event facilities or trail system(s) – are there opportunities that could be developed?
Specialty Sector	<ul style="list-style-type: none"> Parkland County is ideally located to respond to opportunities associated with a large urban population Excellent land for specialty production County seen as supportive Concerns about the future of agriculture- what is the plan?

Stakeholder Group cont'd	Summary of Challenges
Public Consultation Round 1	<ul style="list-style-type: none"> ▪ Affirmation that full time commercial farms will continue to grow – needing more land, large parcels and the ability to operate ▪ The long term availability of land for farming is considered the number one issue ▪ Awareness that changes in land use policy will be controversial – farmers are on both sides of this issue ▪ Parkland County needs to take a stronger stand to support agriculture including communication and education
Public Consultation Round 2	<ul style="list-style-type: none"> ▪ Similar views expressed as in Round 1. ▪ Agriculture is more than just big farms and needs to recognize a range of sizes and different enterprises ▪ Land use policy is the most important issue – need a more nuanced approach by directing development to areas of poorer soils and keeping the best soils for agriculture

Source: Stakeholder Input and Public Meetings



2.4 Parkland County Planning Policy

The 1956 General Plan for what was then the MD of Stony Plain (prepared by the Edmonton District Planning Commission) presents an interesting starting point from which to consider the impacts of planning in Parkland County and how agriculture has fit into the mosaic of the County. The plan acknowledged, correctly, that the metropolitan impact will create ‘an ever increasing demand for land’ for urban purposes. This included industrial development (starting in the area, such as Inland Cement and Calgary Power at Wabamun), small holdings (for small agricultural uses and country residential near Edmonton and in scenic areas), and highway commercial development. Although the plan recommended zoning as ‘there is, in fact, no unlimited resource of productive farm land—no margin for waste,’ the plan started a relatively consistent trend to where Parkland County now finds itself.

Development, driven by the metropolitan forces, continued. The 1978 General Municipal Plan for Parkland County stated that ‘it has been the policy of the County to welcome growth of all types.’ This plan designated large areas for industrial expansion and very extensive areas designated as potential for rural residential development, with agriculture, to some degree, being the left over land. It proposed a balanced development strategy to ensure that ‘*where feasible*,’ the best agricultural lands will be protected. Coal mining areas are designated. Agricultural policies of the 1978 plan called for limiting subdivision to one additional parcel for ‘each farming unit,’ allowing resource extraction and non-agricultural uses if no other alternative location is *practicable*. The Land Use Concept provides for an agricultural area, but primarily focusing on preventing the premature subdivision of agricultural lands with development to be staged later ‘in order to delay intrusions into productive agricultural areas and the conversion of agricultural land to other uses.’

While the 1998 General Municipal Plan appeared to have more favourable agriculture policies, this is within a context that promoted both industrial and rural residential expansion. For example, additional country residential subdivisions in designated agricultural areas “will be permitted where an area structure plan provides for a transition of an area from agriculture to country residential.”

The 2007 Municipal Development Plan continues with the previous general policy trends and land use patterns such as continued support for country residential and industrial development. Significantly it includes a strategy that ‘allows for greater flexibility for subdivision in the Agricultural District and provision for small 40 acre agricultural holding parcels. While the MDP has a policy objective to ‘conserve agricultural lands for agriculture and related uses,’ the MDP now allows for the subdivision of each quarter section into four parcels—ranging from 4x40-acre parcels, to up to three 10-acre parcels and the remnant larger parcel. This was enshrined in the 2009 Land Use Bylaw. As the 2015 Community Scan and Analysis report noted that MDP policy and we quote: “encourages the consumption of lands designated as Agriculture for residential uses. It establishes that where multi-lot residential subdivisions have been approved, that these serve as a precedent when considering additional residential subdivisions. Even though the policy provides a threshold for soil quality when considering residential subdivisions, the policy does not result in the conservation of agricultural lands or support agricultural uses.”

From 1975 to 2013, approximately 10,300 parcels containing over 26,700 ha (66,000 ac) with an average size of 2.6 ha (6.4 ha) have been subdivided in Parkland County (as shown on Table A2.1 in the Appendix 2).

The Community Scan and Analysis report also makes a series of recommendations about agricultural land use planning, as follows:

- Consider adding new classifications so that the mining activity can be determined and differentiated.

- Consider re-designating those unabsorbed country residential lands of Class 1 and 2 soils back to agriculture.
- Consider amending the protection of agriculture lands to include Class 3 soils
- Consider reducing the number of residential parcels that can be subdivided out of a quarter section
- Convert its Digital FAR (Farmland Assessment Rating) into a GIS ready format.

These recommendations are consistent with the findings and recommendations of *The Future of Agriculture* study. They are intended to reverse the long term general trend of Parkland County's policies that have fostered fragmentation and conversion of agricultural land.



3.0 Implications for the Future of Agriculture

3.1 Understanding the Current State

Based on the review of trends, statistics, consultation input and the planning environment, we present the following conclusions:

1. The global demand for agriculture and food products is strong. There are two central drivers: (a) a growing world population projected to grow 30% over the next 35 years; and (b) an expanding middle class particularly in China and India demanding protein rich higher quality foods. Furthermore, within the next 10 to 15 years, Canada is forecasted to be only one of six countries in the world that will be a net food and agricultural products exporter. At the same time, there is a very strong interest among consumers to source local food and deal locally. In response, major retailers and food service companies are actively seeking local suppliers subject to quality, volume, price and logistical requirements.

By implication, the demand for food and agricultural products for the next 20 to 50 years will be strong while the agricultural (land) base diminishes. Parkland County should have little concern that the products it is able to produce will find a market either locally or globally.

2. Agriculture within Parkland County is experiencing rapid change. The most significant changes pertain to the structure of the farming sector itself—namely the overriding emergence of fewer but larger farms. This is particularly the case within the crop sector as farmers adopt larger equipment, automation as well as scalable management and marketing systems. A relatively small number of full time commercial farmers have emerged and are able to cultivate large acreages.

While consumer interest in sourcing local food is evident and several smaller vegetable and fruit (berry) operations are located in Parkland County, it is not yet clear how significantly this local food sector will develop. The statistics illustrate that little if any growth within these sectors has taken place. It is generally agreed that the limiting factors include intense competition from large retailers and food service operations as well as the ability to attract labour. The local food sector will require scale up and market development support if it is to thrive.

3. The consultation process identified several opportunities as being well suited for Parkland County:
 - Large scale field crop agriculture—the production of canola, wheat, barley, alfalfa as well as other crops such as peas, lentils and the recent emergence of corn. Note: we also include dairy production which still has a significant presence in the eastern part of Parkland County.
 - Grazing, hay and accordingly the beef cow-calf and bison sector.
 - Specialty crops including potatoes, vegetables and fruits combined with a growing interest in local foods.
 - Agri-tourism including day-visit destinations and events including the equine sector.
 - Other enterprises including value added enterprises such as food and agricultural processing.
4. Many of the interviewees felt strongly that Parkland County has been focused on attracting industry and non-farm country residents with the objective to expand the tax base and that agriculture has not been a priority. However, several interviewees also indicated that the current Council appears more amenable to agriculture and is looking for ways to support it commenting that the **Future of Agriculture** study is a testament to that commitment.
5. Most groups and stakeholders value and support the continued presence of agriculture, within Parkland County and speak of the great soils, climate, location and opportunities to respond to the growing interest in local food. However, many full time commercial farmers are resigned to the view that large scale agriculture in its present form has a limited future in the County. In response, some of these farmers, particularly those in the eastern part of Parkland County, have already begun extending their operations by acquiring land beyond Parkland County's borders. Farmers in the western part of Parkland County, also question the future of agriculture even though they are experiencing less urban development pressure. We heard for example, that there are relatively few remaining full time farmers. Many farmers have supplemented their incomes with off farm employment.
6. Subdivisions and the related impacts are the foremost issues raised throughout the consultation and input process. The major impacts are identified as:
 - increased non-farm residents in the countryside leading to more rural traffic and conflicts between farmers and non-farm neighbours.
 - increasing land prices due to the demand for properties in the country as well as the opportunity to subdivide an additional three parcels from a quarter section of land.
 - increased land fragmentation creating smaller and/or odd-shaped field which stands in contrast to the demand for large fields and contiguous areas of agricultural land desired by commercial livestock and crop producers.

Perhaps the greater concern is the signals being sent by these policies that agriculture is a secondary consideration in Parkland County.
7. Parkland County has been losing farmland at a relatively rapid rate—a loss of almost 75,000

acres between 2001 and 2011 according to the Canada Census of Agriculture. For the same period, this 16% decrease is slightly larger than that of Strathcona at a 14% loss or Sturgeon at a 4% loss. Parkland County has been losing land faster than the other rural counties in the Capital Region—the result of several factors including subdivisions for commercial, industrial, and country residential as well as lands that have been expropriated for natural resource extraction. The current land policy will lead to the continued loss of agricultural land, primarily to future non-farm residents.

8. The major issue impacting the future of agriculture under Parkland County's control is land use policy. Specific to agriculture, the current policy (which allows each quarter to be subdivided into four parcels) has a set of impacts that inherently conflict:
 - On one hand, it provides the opportunity for many farmers to capitalize on the value of their land for development—an opportunity that is strongly supported by those who are considering or approaching retirement.
 - On the other hand, it creates a situation whereby agriculture is seen as secondary in importance to development interests making it more difficult for those wishing to farm and expand their farming operations. In effect, the policy creates smaller parcels, higher land costs, increased traffic and difficulties moving equipment, more nuisance complaints—all factors that are seen as limiting to commercial farmers.

Nevertheless, changes to the current land use policy, whether it is to the numbers of subdivisions allowed on agricultural land or a change to the areas that are allowed to convert to residential, will be controversial since the majority of agricultural landowners have now built in a set of price expectations that includes development potential. Thus, any change in policy that impacts this ability to subdivide, may not be well received and is likely to have significant opposition.

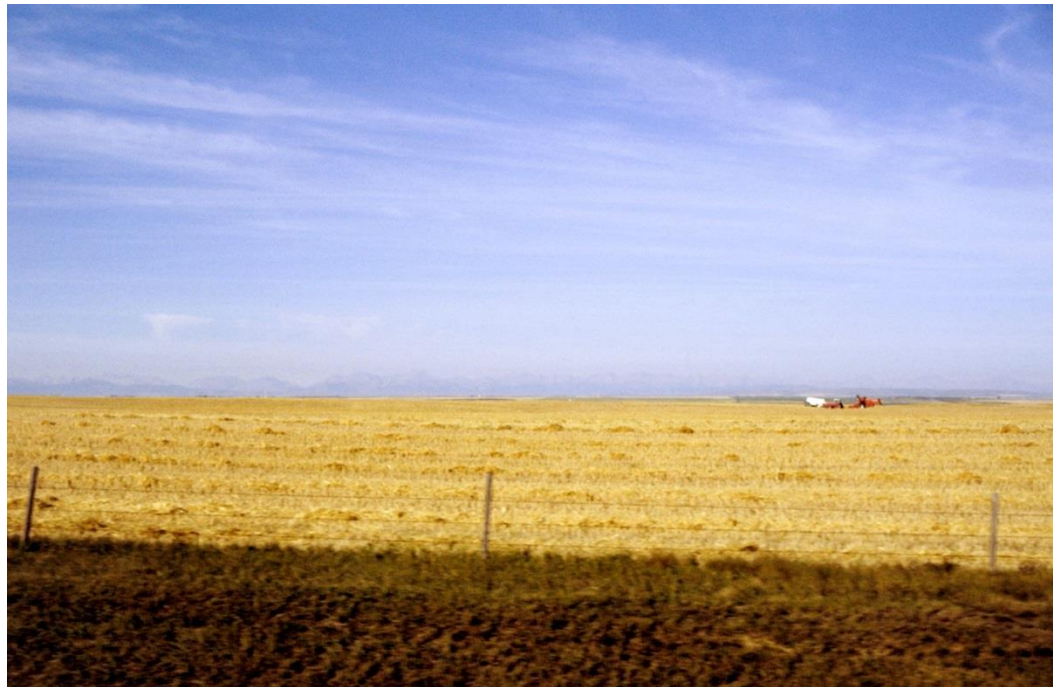
9. The consultation process (two rounds of public meetings and input via the dedicated website) illustrates strong support for a stronger land use policy which protects agricultural land. This view although not unanimous was expressed by a majority of participants in both rounds of public consultation. Several suggestions were provided with respect to how this could be done: a) preserving large parcels of Class 1 and 2 land (also referred to as prime) agricultural land; b) minimizing the impact of subdivisions by limiting their size and location to reduce the impact on agriculture; c) reducing the number of parcels out; d) eliminating the 'four forties' option; e) establishing priority areas that protect large farm/field areas; and f) establishing small holding zones where smaller agricultural operations could be located.
10. Another major factor expressed by many farmers that impacts agriculture in Parkland County, is the future of the lands that have been mined and are yet to be reclaimed. The impact of the mining/power sector on the agricultural sector has already been profound—large areas of land have been lost; many farmers have been displaced; and to quote one interviewee, 'communities have been killed.' The recent announcement to close the Keepphills School is the latest reverberation of this negative dynamic impacting the Parkland Country agricultural community.

Many interviewees expressed strong views about the potential for this area toward such uses as the grazing of livestock, recreational areas with extensive trails for horses, or even a site for a large scale greenhouse enterprise. At the same time, they vented frustrations with the power companies specific to how available farm lands are being managed and the slow speed at which mined lands are being reclaimed.

11. While non-traditional agricultural enterprises such as equine operations, market gardens, horticultural, specialty crops or agri-tourism offer potential in view of Parkland County's

location within the Capital Region, these enterprises have exhibited little if any growth. Considerable economic and market development (both public and private) will be required before sustainable business models emerge and are assured.

12. Parkland County's *Community Scan and Analysis Report* states, 'To date, only 4% of the County's Suitable Agricultural Land has been consumed by non-agricultural development.' Of the 4% consumed, 3.3% was for residential. However, it is important to note that the Community Scan and Analysis Report only included Classes 1 and 2, but not Class 3, as lands being Suitable Agricultural Land. The rationale put forward is that 'Parkland County's current MDP has an agricultural policy that states multi-lot country residential subdivisions may occur on lands with a FAR (Farmland Assessment Rating) of 57% or less. This rating translates to Class 1 and Class 2 within the CLI agricultural soil suitability classification system. It should also be noted that the FAR rating is a point in time measure of what activities (crops, bush, wetlands, etc.) taking place on a particular piece of property—they may be out of date or may not reflect that actual agricultural potential of that property. The definition of better 'agricultural land' needs to be clarified.



13. In August 2014, the Alberta Government wrote a letter to the Capital Region Board, stating the Province's position that 'municipalities are now expected, rather than encouraged, to follow the direction provided through the Provincial Land Use Policies (PLUP) on this important issue. These policies are undergoing a review and are anticipated to be included in the upcoming North Saskatchewan Regional Plan. These policies need to address issues like agricultural land fragmentation and conservation. In addition, Parkland County has started a process to prepare a new MDP. As a result, it is opportune for Parkland County to ensure that any new agriculture directions are included in its own upcoming MDP. It is also opportune for Parkland County to take steps to have its agricultural policies addressed at the CRB and incorporated across the Capital Region so there is a comprehensive policy that addresses agriculture in the context of metropolitan growth and works toward the establishment of 'a level playing field' across the region.

14. It's generally been accepted, for decades, in the context of the Edmonton region that better agricultural land is generally (a) land that has been designated by the Canada Land Inventory as Classes 1, 2, and 3 and (b) land with potential of producing specialty or other crops, or of supporting land-intensive agricultural operations, none of which are considered in the CLI agricultural capability classification scheme. Preliminary work on concepts for Parkland County's new Municipal Development Plan speaks to the criteria to provide areas for agricultural land preservation by referring to the best classed soils (CLI classes 1-3) for agricultural related purposes. Ultimately however, agricultural land will only be preserved if there is a strong political will supported by clear land use policies.
15. Parkland County identifies agriculture as strategic priority in its Strategic Plan 2016-2020. There is however a disconnect between the stated goals of Parkland County's Strategic Plan 2016-2020 and the trends currently in motion within the agriculture sector. The Strategic Plan identifies agriculture as a strategic area. To this end, it aspires to achieve two strategic goals: (a) engage with the agricultural community and post secondary institutions to create opportunities for diversity, innovation and entrepreneurship; and (b) support the agricultural sector to create a strong, diverse and resilient industry. The first goal remains aspirational; the second goal stands in sharp contrast to the current situation. Many farmers see a limited future for agriculture in Parkland County: we heard from several large field crop or livestock operators who are in the process of transitioning their operations to other rural municipalities; we also heard from others who are planning retirement with the hope that their land can be subdivided for development. Furthermore, there are few agri-business and/or value added operations located in the County and fewer (if any) start-ups.

3.2 Opportunity Areas and Implications for Planning

The analysis of the major agricultural and the emerging enterprises in combination with the consultation input identified several areas of agriculture that are well suited and a best fit for Parkland County. These are:

1. **Large field scale agriculture:** large scale cropping operations producing canola, wheat, barley, and oats. These crops are already the predominant form of agriculture in the eastern areas of Parkland County. Dairy farms are also included in this category.
2. **Grazing/beef cow-calf operations as well as bison:** well suited for the western part of Parkland County with the location of grey wooded soils.
3. **Specialty crops and operations:** Parkland County is suitably located for a variety of specialty production operations including potatoes, seed potatoes, vegetables, fruits, greenhouses, bedding plants, horticulture as well as small livestock enterprises (sheep, goats, poultry, bees, etc.).
4. **Agri-tourism featuring destinations and events including the equine sector:** Parkland County's proximity to a large urban area, large horse population combined with a growing demand for 'experience' present opportunities in these sectors.
5. **Value Added Enterprises:** includes value added agriculture including food, beverage and agricultural processing. Parkland County is well situated relative to a large population base and has access to excellent transportation services. Currently however, there are very few value added businesses operating in Parkland County.

These are discussed further in the following sub-sections.

Large Scale Field Agriculture

Premise: There are approximately 180,000 acres suitable for cropping in all of Parkland County. Large contiguous cropping areas are located particularly in the south central areas. Thus large scale crop agriculture should be able to continue for the foreseeable future particularly in those areas that are not under immediate development pressure. Large scale field agriculture requires:

- Long term (stable) agricultural land use policy to assure the availability of large land parcels. This is critical not only to minimize speculative land holdings but also to provide the necessary conditions for farmers themselves to invest in their farm businesses including the long term care of land. Dairy operations require large areas for the production of forages as well as for the spreading of manure.
- New tools - transfer of development credits including the designation of defined sending and receiving areas wherein development is concentrated. This mechanism would reduce development pressure on agricultural lands and mitigate the loss of 'opportunity' to current agricultural land owners and maintain contiguous areas of cropland.
- Attention to roads (width and height) - consideration to designating specific rural roads to accommodate large scale slow moving farm equipment. The decision 'not to pave' selected rural roads is also important. Safety is a primary concern both to farmers and users. Many farmers prefer to see rural roads left unpaved.
- Ensure field access and minimum nuisance measures (buffers and right to farm) - farmers need to be assured that they can easily enter fields that they own or rent with large equipment as well as perform necessary operations (cultivation, seeding, herbicide applications and harvesting) without fear of nuisance complaints from nearby residents.

Grazing/Beef Cow-Calf Operations as well as Bison

Premise: Parkland County has traditionally been a major cattle producing region. The western part of Parkland County is particularly well suited for pasture and grazing with the location of grey wooded soils. Grazing operations require:

- Large contiguous areas of pasture suitable for grazing cattle/bison. These areas need to be fenced and have access to good sources of water as well as shelterbelts to provide protection from severe weather (wind, cold).
- Crop land and pasture for the production of forages (hay and/or silage) for winter feeding.
- Supportive efforts focused on improving and/or increasing the grazing practices and overall capacity and productivity. Also requires the attraction of a new generation of beef/bison producers—many current producers are approaching retirement with no succession plan.
- A positive long term outlook for cattle—this is perhaps the most critical factor. Note: this has not been the case for the 2003 to 2013 period and the major reason for the decline in cattle numbers. However, the convergence of several factors such as drought in the western USA, the growth in demand for beef in the Pacific Rim, the overall reduced beef cows numbers both in Canada and the USA, has created a very robust

market. Prices have recently been at historical highs and are forecasted to be strong for the next 10 years.



Specialty Operations

Premise: Generally the specialty food production sector is in the early stage of development but represents an opportunity. There is considerable interest in local food, food related businesses and food experiences. Parkland County is well positioned to explore and facilitate opportunities within this sector as market signals strengthen and successful business models emerge. This sector requires:

- Emphasis by Parkland County that local food production is a priority including designated areas where this will occur. Parkland County would need to take a leadership role with respect to local food initiatives within the Capital Region.
- Economic and market development support to overcome some of the logistical, volume and quality requirements by the larger retailers and wholesalers.
- Advocacy and expertise within administration to work with interested parties and proponents to facilitate opportunities and overcome perceived barriers such as regulatory requirements would also be required.
- Continual, ongoing substantive promotions and communications, as well as education to create local awareness and demand.

Agri-tourism including the Equine Sector

Premise: Agri-tourism represents an opportunity in view of several already established destinations, proximity to a large urban market as well as a large equine sector. The market for ‘experience’ is growing. Parkland County lies within 30 minutes of 1 million people.

Parkland County has the opportunity to work with other partners (specialty operations within Parkland County, Spruce Grove, Stony Plain, University of Alberta—the Devonian Garden, and the Province of Alberta (Ministries of Agriculture and Forestry as well as Alberta Tourism and Community Development) to develop tour packages and events. Particular attention could be directed toward families and targeted cultural groups within the Capital Region who are seeking opportunities to experience the ‘country.’ Parkland County has a significant horse population and is home to several horse organizations and associations. It is noted that many current horse owners are currently attending events in other areas of the province and western Canada.

The development of agri-tourism opportunities requires:

- Commitment to develop Parkland County as an agri-tourism destination with an array of offerings and dedicated to developing opportunities within the equine sector.
- Building and promoting a Parkland County Agri-tourism tour.
- Facilities able to produce and/or host a wide range of equine centered events to serve as a ‘centre’ or stage for the Parkland County equine community.
- A developed trail riding system to attract multi-day rides, outdoor events and camping could be a consideration.

Other Enterprises including Value Added Agriculture

Premise: Parkland County is well located to attract and support new business growth. Further there may be opportunities to attract and/or develop new businesses targeted to supply interest in local food as well as align with the Province of Alberta’s goal to grow the food processing sector. This would require:

- Emphasis by Parkland County on value added agriculture as a priority area for economic development.
- Targeted economic and market development support as well as the development of a business development and attraction strategy.
- Alignment with several key institutions and development agencies such as Alberta Agriculture and Forestry the Faculty of Agricultural, Life and Environmental Sciences (University of Alberta) the Food Product Development Centre located in Leduc, the Alberta Food Processors Association and TEC Edmonton should be a consideration for the development of this sector.

3.3 Implementation Issues

The identified areas of opportunity (best fit) will require clear direction from Council to actualize and implement. Currently, many of the individuals interviewed for this study expressed the view that agriculture has been a low priority for Parkland County. To offset these perceptions, Parkland County will need to:

- Strongly assert its commitment to agriculture and that agriculture will continue to be an integral part of Parkland County—both economically as well as the major land user. This will require a clear political strategy supported with a strong business development, communications and land use plan.
- Deal with owners of agricultural land who are expecting these lands to be used for non-agricultural purposes at some time in the future. Accordingly their expectations with respect to the value of these lands vastly exceed their agricultural value. This is a major challenge
- Consider the adoption of new tools to deal with the issue of value (or lost opportunity). One such tool is the Transfer of Development Credits. This requires the clear designation of the ‘Sending’ Area (land to be protected) and a ‘Receiving’ Area (land to be developed). Such a program would require that development credits be purchased and transferred from the sending area to the receiving area. In effect, an owner of agricultural land would be able to sell their development rights as defined by the number credits allocated to the property. In turn, a developer who has purchased land for development but without the required zoning would be required to purchase the zoning rights in the form of development credits for the County to consider the rezoning. This tool has been enabled by the *Alberta Land Stewardship Act (ALSA)*.

Note: Potential agriculture enhancement tools are discussed in Appendix 4. While Parkland County is limited to the tools available to it under the Municipal Government Act, which is primarily strong local policy, this could be reinforced with stronger tools at the regional and provincial level. In any event, the County’s overall land use pattern must be cognizant of the multiple economic, environmental (natural capital), and community values that come from agriculture. There is significant non-market value associated with it and that this needs to be formally recognized in any land use decision process. For example, several US states are using an effective tool called the Land Evaluation and Site Assessment (LESA) program (see Appendix 6 to see the factors and scoring system used by the Lancaster Farmland Trust in Lancaster County, Pennsylvania). This process systematically evaluates farmland based both on technical merit (land quality) as well as suitability for development (proximity to services, other development, access to infrastructure, etc.). Effectively the LESA program identifies those areas that are most suitable for agricultural land preservation and those areas best suited for development. For example, there will be areas where some aspects of agriculture, such as intensive livestock operations, will not be suitable because of conflicts with other priority uses in that area.

Another implementation challenge revolves around the interest in local food and the nurturing of local food businesses and related services. Currently there is no clear blue print for success in this emerging sector. Nevertheless, Parkland County is well positioned to develop this opportunity, particularly in view of its proximity to a large population.

Finally, agriculture continues to be the major user of land within Parkland County. While the nature of agriculture is changing, nevertheless it continues to create jobs and economic wealth; it may offer local food security; it provides an alternative lifestyle; it helps establish community character; and it contributes a set of environmental goods and services.

It is also important to understand that ‘agriculture’ is more than just land and the subject of agricultural land. Given the multiple pressures that are characteristic of communities that are located near to a metropolitan area, they need to assert their commitment to agriculture with a clear political strategy supported by viable governance structures, strong economic development, communications, land use plans, and infrastructure policies.



4.0 The Future of Agriculture: Parkland County

4.1 Parkland County Vision and Strategic Intentions

Parkland County Council adopted its Strategic Plan 2016-2020 that aspires to the following bold vision:

Creative Communities

Dynamic Connections

Cherished Ecosystems

Resilient Economies

The plan identified agriculture as one of five strategic priorities which states:

Parkland County strives to be a vibrant agriculture and food community characterized by its diversity, creativity and entrepreneurship, focused on sustainability as well as new opportunities⁴.

The plan identifies two strategic goals:

1. Engage with our agricultural community and post-secondary institutions to create opportunities for diversity, innovation and entrepreneurship.
2. Support the agricultural sector to create a strong, diverse and resilient industry.

⁴ This vision, dated April 2016, is a revision of an earlier version and is taken from the proposed vision presented by the *Future of Agriculture* study in October 2015.

4.2 A Vision for Agriculture in Parkland County

Parkland County's location presents both opportunities and challenges. The opportunities pertain to its history as a rural municipality, its considerable agricultural land base, proximity to a large urban market and its ability to supply a range of agricultural and foods products and/or services that are in demand.

The challenges also pertain to proximity to a major metropolitan region and the competition for land for non-agricultural purposes: residential, commercial and industrial growth. Given this inherent tension, the Vision must strive to provide agriculture a clear and prominent role within Parkland County. A Vision for Agriculture in Parkland County stated earlier and now part of the Strategic Plan reads:

A vibrant agriculture and food community characterized by its diversity, creativity and entrepreneurship focused on sustainability as well as new opportunities.

This vision gives purpose and substantiates the broader vision expressed in Parkland County's Strategic Plan 2016 - 2020. It affirms that agriculture will be central to Parkland County's role in the Capital Region.

Further, it recognizes that Parkland County is uniquely located within a dynamic metropolitan region which presents both opportunities and challenges. As such, agriculture in the 'shadow' of a large urban area has different characteristics than agriculture in a more traditional rural county that is distant to a major and/or rapidly growing population centre.

4.3 Principles

Four principles will guide the development of policies and programs to achieve the Vision for Agriculture. These are:

- Principle 1:** *Integrated approach*—the recognition that a viable agriculture and food sector will require an integrated and supportive set of policies including land use, economic development and infrastructure investment.
- Principle 2:** *Supportive land use policies*—the design and implementation of land use policies that assure the long term future of agriculture. These policies need to respond to the context of different areas.
- Principle 3:** *Entrepreneurial culture*—building and supporting an entrepreneurial business culture for the development and attraction of diversified progressive agribusinesses, emerging enterprises and agri-tourism opportunities.
- Principle 4:** *Fostering local leadership*—the creation of new momentum for a range of potential new directions and initiatives requires strong committed local leadership both within the community and politically.

The alignment of the opportunities for Parkland County identified in Section 3.2 with these four principles is illustrated in Table 4.1. For example Principle 1 – Integrated approach, applies to all the opportunity areas. Principle 2 – Supportive land use policies applies to those opportunities that are land based namely large field agriculture, grazing and specialty operations. Both Principles 3 and 4 apply equally to specialty operations, agri-tourism and value added enterprises.

Table 4.1 Alignment of Planning Principles with Parkland County Opportunities and Requirements

Opportunity	Requirements	Principle 1: Integrated Approach	Principle 2: Supportive Land Use Policies	Principle 3: Entrepreneurial Culture	Principle 4: Fostering Local Leadership
Large Scale Field Agriculture including Dairy	Large contiguous areas of agricultural land; Long term stable land policies; minimum nuisances	Addresses land use	Recommends changes to land use policies (agricultural priority areas)		
Grassland/pasture for Grazing	Large contiguous areas of agricultural land; Long term stable land policies; minimum nuisances	Addresses land use	Recommends changes to land use policies (agricultural priority areas)		
Specialty Operations	Small holdings area; Economic, business and market development; Supporting infrastructure & promotions	Addresses land use & economic development	Recommends changes to land use policies (small holding areas)	Establishes this as a priority with supporting development and promotion programs	Identifies leaders and facilitates leadership training and development
Agri-tourism	Economic, business and market development; Supporting infrastructure & promotions	Addresses economic development & leadership		Establishes this as a priority with supporting development and promotion programs	Identifies leaders and facilitates leadership training and development
Value-Added Enterprises	Economic, business and market development; Supporting infrastructure & promotions	Addresses economic development & leadership		Clear priority with supporting strategies and resources	Establishes Parkland County as a leader in rural entrepreneurship

4.4 Policy Requirements

The alignment of the opportunities for Parkland County by the principles sets the stage to identify the policy requirements to move each opportunity forward. To this end, each principle is presented and discussed followed by a specific set of recommended actions.

Principle 1: **Integrated approach—the recognition that a viable agriculture and food sector is a priority for Parkland County and will require an integrated and supportive set of actions including land use policy, economic development and infrastructure investment.**

Discussion:

It is critical to emphasize that agriculture as an industry continues to experience rapid change. There is much uncertainty—no one knows when the next major global crisis such as drought or a livestock disease outbreak will occur and how such eventualities will impact global demand including agriculture in Alberta. At the same time, the rise of the local food economy is in its nascent stage. Much depends upon the security of current supply chains, the competitiveness of local food supplies in terms of volume, quality and price, and the logistical structures required to facilitate the production and marketing of these supplies.

Parkland County identifies agriculture as a strategic priority in its Strategic Plan 2016-2020. There is however a disconnect between the stated goals of Parkland County's Strategic Plan 2016-2020 and the trends currently in motion within the agriculture sector. The Strategic Plan identifies agriculture as a strategic area and affirms the vision presented by this study. It aspires to achieve two strategic goals: (a) engage with the agricultural community and post secondary institutions to create opportunities for diversity, innovation and entrepreneurship; and (b) support the agricultural sector to create a strong, diverse and resilient industry.

The first goal remains aspirational and will become a future outcome; the second goal stands in contrast to the current situation to the extent that the findings of this study concludes that agriculture faces an uncertain future. Ensuring a long term viable future for agriculture requires Parkland County to evaluate all current and future policies and programs through a lense which asks the question: how will these impact agriculture both in the short term and the long term? This process of critical evaluation is essential to support on-going leadership both within Parkland County Council and Administration.

A critical first step is the land use question which is foundational. If Council does not take steps in this direction (and is seen to be serious about these steps), agriculture as an industry and the use of land for agriculture will decline into the future. In our view, the best course of action for Parkland County is to protect and enhance its capacity as an agricultural jurisdiction with respect to these supply/demand dynamics and continually evaluate how to best respond.

In summary, land use policy is critical to the future of agriculture and Parkland County's capacity to respond to future opportunities. However, any proposed plan for agriculture cannot simply focus on the land question alone. It also requires investments in economic development and infrastructure. The nature of these investments requires up-front assessments by dedicated personnel with expertise in the agri-food sector and the selection of targeted initiatives that present the best opportunities.

In addition to strong support from Council, the future of agriculture in Parkland County will require strong support from Senior Administration to lead, implement, communicate and coordinate strategies across Departments and with the other stakeholders. The initial onus will be on Parkland County Council to clearly demonstrate its commitment to agriculture and to support development using an integrated set of policies. Recommendations are as follows, along with their rationale:

Recommendation	Rationale
An Integrated Approach	
1. Ensure that the new MDP is aligned with the directions set by Parkland County policy (Strategic Plan) and the recommendations forthcoming from the <i>Future of Agriculture</i> study that are approved by Council.	It is essential that future plans (new MDP) align with approved plans (Strategic Plan) and plans that are under consideration (Future of Agriculture)
2. Recognize that contextual factors vary over Parkland County; therefore policies should be fine-tuned to the specific needs of differing geographic areas.	See soil map (Map A1.1) and the FAR (Map A1.2) in Appendix 1.
3. Elevate food and agricultural activities as a priority area for economic development.	Input from the consultations indicate that agriculture appears to be a low priority within Parkland County (Stakeholder input – see Appendix 3) Total acreages of vegetable and fruit crops have shown little change over the period of 2001 to 2011. We are aware of only one new start up that has been established recently (see Tables 2.2 and 2.3)
4. Monitor the state of agriculture as it evolves, be forward looking, and respond to changing markets and circumstances.	Agriculture continues to change rapidly. Also the success of specific economic and market development activities need to be monitored to evaluate both the effectiveness of supporting policy and programs
Affirming the Commitment to Agriculture	
5. Ensure that changes in the current land use policy are the necessary first step to assure the future for agriculture. The land use plan will minimize land use conflicts and maximizes diversity of agricultural opportunities.	Consultations including the Agricultural & Rural Life Advisory Committee, the one on interviews, focus groups and public meetings, stated that current land use policies, are the foremost issue impacting the future of agriculture (Stakeholder input - see Appendix 3)

6. Hold annual county wide meetings attended by Council to establish an on-going dialogue to listen to rural and agricultural people—plan to hold three meetings throughout Parkland. The primary objective would be present highlights from the new agriculture plan and to listen.	In response to concerns that agriculture appears to be a low priority for Parkland County Council (Stakeholder input - see Appendix 3)
7. Establish three Ad Hoc Agricultural Advisory Panels that are arm's length from Council: a) one with full time farmers (6 in total – 2 dairy; 2 crop producers from east; 2 crop/livestock producers from west); the second committee from the Specialty Value Added Sector (6 in total comprising a mix of greenhouse, market garden U-Pick and agri-tourist operators); and c) a third committee (also 6 members) with representation from the equine sector. Initial mandate: review the <i>Future of Agriculture</i> study and provide further input and direction. Future mandate: to be determined once action plans relevant to each sector are agreed to.	In response to concerns that agriculture is a low priority for Parkland County Council (as above) Follows from the conclusion that distinct agricultural sectors operate in Parkland County—each with unique challenges and issues Enables direct input from key sectors—both in response to the direction of the <i>Future of Agriculture</i> study and identify areas for specific focus and support
8. Ensure that specific initiatives for the agriculture and food sector that are approved will be supported with capital and infrastructure investment, and operating budgets.	Commitments must be supported with resources as part of an integrated approach
Communications and Public Relations	
9. Develop and implement a comprehensive public education and communications program to increase public awareness of agriculture and its importance to the Parkland County. Also provide background and details as to what the integrated support program will look like and why it is needed.	All communications and public relations recommendations are in response to a consistent message that the agriculture is not well known, understood or appreciated within the general public. Furthermore, farmers themselves are a minority and are easily overlooked.
10. Conduct an annual Parkland County Agriculture/Agri-Business summit to discuss issues concerning the balance of growth and supporting agriculture.	As above
11. Create an annual Parkland County Food and Agriculture resource guide such as a map/fold out brochure – special events that feature locations and events throughout the year.	As above
12. Create and distribute a new resident welcome packet to new non-farm rural residents with annual updates/reminders.	As above
13. Create an Ag Directory – lists all food, agriculture agri-tourist related businesses/agencies/groups that operate in Parkland County.	As above

14. Provide opportunities for public education, profile and awareness via local stores, schools, restaurants – posters, flyers that promote Parkland County local grown food and agriculture.	As above
15. Coordinate a farm-nonfarm exchange program – connect people who want to spend a ‘day on the farm’ with farmers willing to host non-farm visitors.	As above
Public Safety	
16. Address growing concerns with public safety in rural Parkland County. Vandalism, break-ins, theft of property and concerns for the public safety among rural residents, particularly farmers, is a major and growing concern. While these issues are beyond the jurisdiction of Parkland County, we recommend that these concerns be further quantified and qualified, and response measures through discussions with the local RCMP are explored.	Multiple concerns were raised at focus group meetings, individual interviews and public meetings (Stakeholder input - see Appendix 3)

Principle 2: **Supportive land use policies—the design and implementation of land use policies that assure the long term future of agriculture. These policies need to respond to the context of different areas.**

Discussion:

The consultation process illustrated that there is considerable support for a more defined land use policy that delineates large contiguous priority agricultural areas with land use policies that reduce land fragmentation and conversion to non-agricultural uses. Where there is subdivision and conversion, policies should ensure appropriate design and transitional boundary conditions to reduce negative impacts on farming. In terms of equity, subdivision approval could be managed using a system of transfer of development credits.

The recognition of differing agricultural areas or regions within Parkland County suggests that two priority agricultural areas be established. The two areas were delineated based on factors such as soil quality and contextual factors. One area, in the eastern portion, has the best soils in Parkland County and is the location of the most significant area of cropping. The western priority area has a mixture of both cropping and livestock operations. Both areas require large contiguous areas of agricultural land with minimal fragmentation and the presence of non-agricultural residents.

Directions on how this could be done were discussed throughout the consultation process. Options include: (a) preserving large parcels of prime agricultural land; (b) minimizing the impact of subdivisions by limiting their size and location to reduce their impact on agriculture; (c) reducing the number of parcels out; (d) eliminating the ‘four forties’ option; (e) establishing priority areas that protect large farm/field areas; and (f) establishing small holding zones where smaller agricultural operations could be located.

Even within a priority agriculture area, there is a diversity of land suitability for agriculture. There may be areas that are less suitable and any conversion and development on these ‘exceptions’ will have to be decided on a systematic basis—considering a whole range of factors. This can be accomplished through an evaluation and priority setting system like Land Evaluation Site Assessment (LESA), as previously discussed in this report, or through the use of Agriculture Impact Assessment (AIA). An agricultural impact assessment is intended to determine if a development proposal will adversely affect existing and future agricultural activities on-site and in the surrounding area. The assessment describes the proposed development, the on-site and surrounding land uses, and the physical and socio-economic components of the agricultural resource base; identifies the direct and indirect impacts of the proposed development on existing agricultural operations and on the flexibility of the area to support different types of agriculture; considers methods of reducing any adverse impacts; considers compensation such as the provision of agricultural protection easements; and makes recommendations in that regard. It has consideration for the cumulative effects of other potential development.

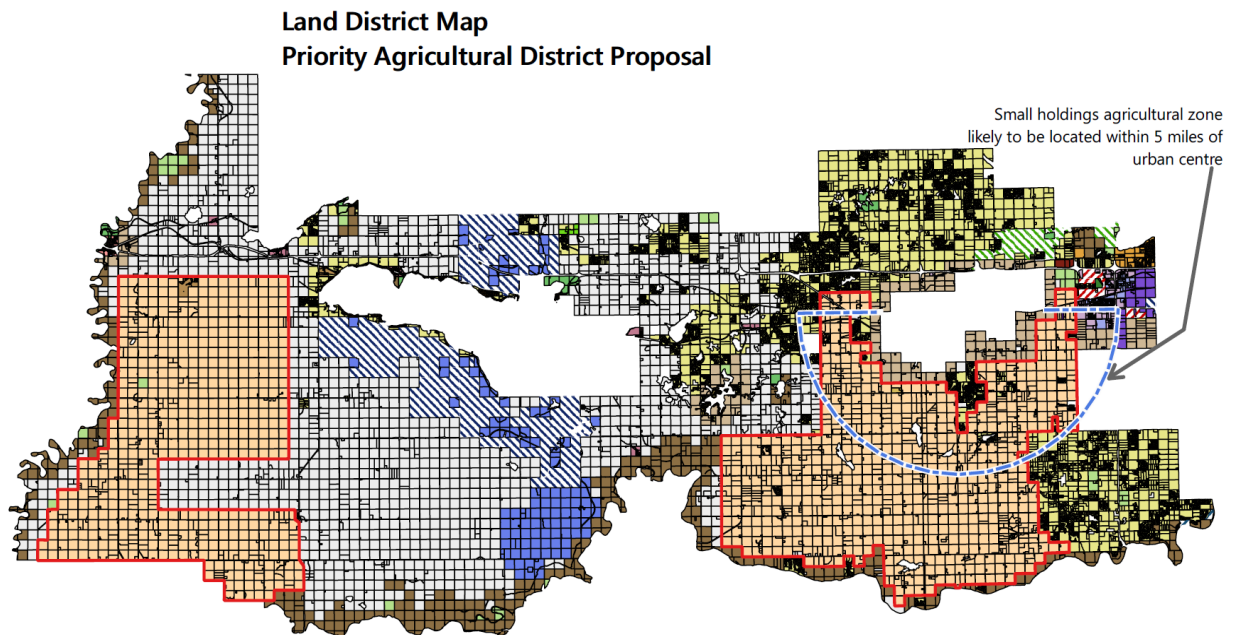
Recommendation	Rationale
Growth Management	
17. Manage growth, particularly through MDP policies, to acknowledge the needs of agriculture and minimize the non-agricultural development footprint.	Reducing the frequency, location and impact of subdivisions on agricultural land—the number one issue raised in the consultation process (Stakeholder input - see Appendix 3)
18. Identify the permanent long term agricultural land base in the MDP through the adoption of priority agricultural areas as shown on Map 4.1 along with supportive MDP policies.	As above
19. Reassess the areas currently designated for future country residential development with a consideration to reduce these areas.	As above. Current supply is considerable and estimated to last until 2082 (Community Scan and Analysis, Parkland County-Report)
20. Work closely with the Capital Region Board to develop a harmonized agricultural land use policy for the Capital Region.	A harmonized land use policy across the region moves toward creating a level playing field for agricultural land in the Capital Region
21. Encourage other regulatory agencies to ensure the timely and effective reclamation of mined lands back to productive agricultural lands.	Concerns were raised at focus groups, one on one interviews and public consultations. (Stakeholder input - see Appendix 3)
Fragmentation and Conversion	
22. Any proposal for conversion to non-agriculture uses in the priority agriculture areas, except for the first parcel out, would require an Agricultural Impact Assessment (AIA).	Reduce the frequency, location and impact of subdivisions on agricultural land—the number one issue raised in the consultation process. (Stakeholder input - see Appendix 3)

23. Develop terms of reference for two land use planning tools: the Agricultural Impact Assessment (AIA) and the Land Evaluation Site Assessment (LESA)	As above. Also see an example of the LESA scoring system in Appendix 6
24. Allow three parcels on quarters that are either unsuitable or less suitable for agriculture to allow for residential clusters, subject to the evaluations conducted by AIA and LESA	As above
25. In the next rewrite of the Land Use Bylaw, undertake to reduce the number of non-agricultural land uses permitted in agriculture districts.	As above
26. Undertake to review bylaws etc. related to the establishment of agribusiness opportunities (e.g. food processing, urban/acreage agriculture) and make them more supportive to equine and local food development/initiatives.	Ensure that agri-related value added opportunities are not unduly hindered
27. Introduce a new land use zone for small holdings agricultural (minimum size of 10 acres). This should be concentrated in one area and not be used as a back door for large country residential parcels. One regulation that might be applied is to ensure that any dwelling be located close to the road to ensure the parcel maintains maximum usability for agriculture. This would require setback requirements in the Land Use Bylaw. The small holdings area would be designated within the eastern priority agriculture area. It would be comprised of an area of good soils for market gardening and berry production and be in an area where small parcels (10 to 40 acres) are already prevalent as well as relative proximity to urban populations and road access.	<p>Sends a clear message that specialty production is a priority</p> <p>Reduce the frequency, location and impact of subdivisions on agricultural land—the number one issue raised in the consultation process</p> <p>(Stakeholder input - see Appendix 3)</p>
28. Require that any applications for multi-subdivisions (more than four parcels), undertake a detailed soil survey to update Canada Land Inventory Soil Class information using an accredited third party. (Note: this updated information will be used to update the Farmland Assessment Rating or FAR score).	<p>The current and the 57% or less requirement, may be out of date or inaccurate</p> <p>FAR ratings are based on visually assessed crop productivity and not soil capability</p> <p>Note: In the case of an application for multi-subdivisions, we would recommend the use of CLI Land Class information over FAR because of the potential inaccuracy of the FAR.</p>
29. Any applications for multi-subdivisions will be required to undertake an AIA in addition to several additional criteria that need to be met.	As above

30. Revise the Land Use Bylaw to include regulations for buffering of non-agriculture parcels from agriculture parcels (both Rocky view County and the BC Agriculture Land Commission have models that can be adapted for use in Parkland County). These would include fencing, berms, municipal reserves, setbacks, etc.	Considerable work that is transferrable to Parkland County is available and can be directly applied See Agriculture Boundary Design Guidelines, Rocky View County as an example
Other Tools and Approaches	
31. Finalize the Transfer of Development Credits pilot project. This should be based on 'one parcel out'—either a small farmstead or an 80-acre split on Priority Agricultural Land. Any additional subdivision, up to two additional clustered parcels could be considered, but would require the obtaining of subdivision credits from other land parcels. The sending and receiving areas would occur within the same priority agriculture areas.	A credit transfer system would enable subdivisions to be directed to areas that are less suited for agriculture Reduce the frequency, location and impact of subdivisions on agricultural land – the number one issue raised in the consultation process
32. Establish a mechanism for the purchase of agricultural protection easements by Parkland County through different sources. There are options for funding, such as a special levy, a land conversion fee, or donations, etc.	As above
33. Support best practices on agricultural lands (through education, continuation of the ALUS program, and subdivision conditions) that ensure an environmental fit and less conflict with other uses.	Reinforces the importance of sound environmental practices
34. Develop processes for educating rural and/or agricultural land owners regarding permit and regulatory requirements specific to agricultural related initiatives that are either new or an expansion of a current enterprise.	Need for information and education identified in the consultation process (Stakeholder input - see Appendix 3)
Mapping	
35. Parkland County currently has a data gap between the weighted FAR rating for a land parcel and the specific FAR ratings for individual polygons within that land parcel. Establishing a comprehensive GIS mapping systems with data for each polygon may be prohibitively expensive but should be examined. We recommend that FAR polygons be updated on a case by case basis in response to multi-development applications and agricultural impact assessments on agricultural land.	Analysis of current maps, data bases and discussions with Parkland County Planning Department and Development, GIS and Tax Assessment Departments
36. Use the Crop Inventory Maps based on satellite surveillance from Agriculture & Agri-food Canada as source of information to annually monitor land areas being farmed and cropping trends. This will provide another measure of the level of	Current levels of accuracy are in the range of 90% as per advice received from Agriculture & Agri-food Canada. These will improve over time

agricultural activity taking place within the Parkland County.	
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Map 4.1 Proposed Agricultural Priority Areas



Legend

Agricultural General District	Bareland Recreational Resort District	Resource Extraction District
Agricultural Restricted District	Rural Centre District	Conservation District
Agricultural/Nature Conservation District	Entwistle Urban Village District	Recreation District
Country Residential District	Local Commercial District	Public Service District
Country Residential Restricted District	Highway Commercial District	Atim Creek/Big Lake
Country Residential Estate District	Business Industrial District	Acheson Industrial Commercial
Lakeshore Residential District	Medium Industrial District	Direct Control District
Residential Row Housing District	Industrial Reserve District	Restricted Development Area
	Rural Industrial/Commercial District	Agricultural Priority District

Notes:

1. The proposed Agricultural Priority Districts in East Parkland generally include Class 1, 2 and 3 soils; in West Parkland the district includes Class 4 lands used for grazing.
2. The proposed Small Holdings Agricultural Area would be contained within the East Parkland Agricultural Priority District and likely be located within 5 miles of Stony Plain and/or Spruce Grove. To determine the optimal location for the Small Holdings Area would require a further on-the-ground assessment to evaluate the location of specialty production areas, soil quality, accessibility to markets and potential sources of water for irrigation.

Principle 3: Entrepreneurial culture—building and supporting an entrepreneurial business culture for the development and attraction of diversified progressive agri-businesses and agri-tourism opportunities.

Discussion:

The consultation process affirmed the interest in and the need for economic and market development. There are two general opportunities:

1. **Primary /commodity processing**—such as oil seed crushing, milling, malting, feed manufacturing and meat processing. Decisions with respect to the need for and location of these enterprises are made within the context of provincial, national or international requirements. Furthermore, these investment decisions are largely made by management teams that are not located locally or in many cases, provincially. This requires a focused business attraction strategy that works closely with provincial counterparts and multi-national corporate executives. The attraction of business operations within the primary processing sector requires expertise in the agri-business sector. Parkland County will need to carefully assess the opportunities in these areas in light of the players, the investment decisions that have made throughout the province, capacity and growth requirements and the competitiveness of the County with respect to investment attraction. Close liaison with industry associations (such as the Alberta Canola Commission, the Alberta Barley Commission, the Alberta Wheat Growers, and development officers with Alberta Agriculture & Forestry) is recommended.
2. **Local/regional opportunities**—such as local food (fresh and processed), U-Pick, horticulture, agri-tourism and value added/processing. These operations are typically smaller scale, serve local markets and require a focused business development strategy.

Overall large scale field and livestock agriculture is able to source information and technical support from industry suppliers. However, this is not the case for new and/or emerging agricultural enterprises or value added operations.

It should also be recognized that the Government of Alberta has pursued a strategy for the economic diversification of the agri-food sector for the past 20 years. Overall, the results have been modest. For example the level of value added to the raw material base in 2015 is similar to the situation in 1995. To be sure, much activity and investment has taken place over the past 20 years: many initiatives and businesses have either failed or underperformed. But there have also success stories—for example, Little Potato Company, a company that has a grower base in Parkland County is one of these successes.

It is also noted that no jurisdiction in Alberta has distinguished itself as a leader in rural and/or agri-food entrepreneurship. There are many 'pieces' in the form of institutional efforts and government programs. Success in this area requires the convergence of three critical factors: (a) a real and growing market opportunity that is economically viable; (b) the production or processing capacity to respond to the opportunity; and (c) the managerial fortitude to preserve over the many challenges associated with a new and/or growing business.

Parkland County can play a role in facilitating these opportunities. This will require a long term commitment with skilled personnel having expertise in business development as well as the establishment of a dedicated third party agency—an agency that is arm's length politically and governed by an independent

Board that reports directly to Parkland County Council. The Board would represent entrepreneurial and business expertise as well as have in-depth knowledge of Parkland County.

The entrepreneurial agency will require a clear plan, proven leadership, staff with the right skills, and the necessary financial resources to achieve results. This will be a long term commitment: the first five years will effectively lay the groundwork; results can expect to take place during the second five-year period.

Parkland County would be able to further enhance its profile as a leader in agri-food entrepreneurship in two ways: (1) committing to an on-going communications program to inform county residents at large in addition to interested agri-food representatives; and (2) holding a regular (annual or bi-annual) event such as the Agri-Food Entrepreneur Forum. A regular forum could feature the leaders/best in class from across North America. Such an event would build over time and provide considerable learning opportunities for Parkland County entrepreneurs and staff.

Recommendation	Rationale
An Integrated Approach	
37. Elevate the priority of agri-business agri-tourism attraction development	Currently agriculture and related activities are not seen as a priority for Parkland County (Stakeholder input - see Appendix 3) An opportunity for Parkland County to lead—no municipality has yet to distinguish itself in these areas
38. Conduct a detailed assessment of opportunities with a view to identify and narrow the focus to those opportunities best suited to Parkland County's strengths and capabilities. Three general areas are identified: a) local food (fresh and processed); b) equine; and c) agri-tourism.	Investment and capacity is evaluated from a provincial and western-Canadian perspective Little growth in these sectors has taken place between 2001 and 2011. See Tables 2.2 and 2.3
39. Specific to local food opportunities, assess the potential to establish a Parkland grass fed beef program in response to strong local demand for local food products. In addition to a market demand analysis, two key components need to be addressed: a) measures required to re-invigorate the expansion of the beef cow herd; and b) the feasibility of a establishing a local packer dedicated to this program. Note: the grass fed program does not need to be restricted to beef and could include bison, lamb or other livestock.	Parkland County has historically been a major beef raising county with large areas of grassland Growing interest in local food and local 'rural experiences' Parkland County is ideally located within the Capital Region (Stakeholder input - see Appendix 3)
40. Ensure that Parkland County economic development strategies are evaluated in terms	Spruce Grove and Stony Plain are the nearest markets for Parkland County

of synergistic opportunities with neighbouring municipalities notably Spruce Grove and Stony Plain.	produce. It will be important to assess how best to access these markets and not duplicate efforts or at worst be in competition unnecessarily.
41. Facilitate and develop small scale agricultural activities in country residential areas.	Part of an integrated approach
42. Ensure the 'state of progress' specific to the targeted sectors for development, is measured on an ongoing basis. Begin by identifying and tracking progress in several key areas including the operations involved in food local activities such as the number and size of fruit and vegetable operations; the number of greenhouse operations and the total square footage; the number of agri-tourist operations and associated attendance/number of patrons; equine activity including the number of events and the number of equine operations that provide public and private programs.	<p>Agriculture is undergoing continuous change</p> <p>Important to establish indicators that can be measured.</p> <p>Evaluate the application of resources and the opportunity to re-assess commitments</p>
Organizational	
43. Undertake an evaluation of the optimal organizational structure, governance and staffing required to achieve success in the advancement of opportune sector strategies. Also address the financial requirements.	Experience based on a recent review of the Alberta food processing/value added sectors and which growth has stalled ⁵
44. Establish supportive programs for education (training and mentoring) to attract and develop entrepreneurs. Such programs will be enhanced by the formation of strategic partner relations with aligned educational and technical institutions.	As above
45. Commit to establishing Parkland County as a leader in rural entrepreneurship and economic development. Support this commitment by convening regular (annual or biannual forum) by attracting renowned experts and subject matter experts.	Part of an integrated approach

⁵ **"Stimulating Innovation and Growth of the Alberta Food & Beverage Sector"** – a study conducted for Alberta Innovates Bio-Solutions in 2015 by Serecon and Toma & Bouma Management Consultants.

Principle 4: **Fostering Local Leadership – the creation of new momentum for a range of potential new directions and initiatives requires strong committed local leadership both within the community and politically.**

Discussion:

Several factors impact the willingness and capacity of leadership to emerge with respect to the opportunities and challenges facing agriculture in Parkland County. First, the number of people involved in agriculture and particularly in production agriculture as a primary livelihood is small. Second, we heard that these people are busy—many work full time in addition to their farming operation; or they are busy growing and operating their own business which may be in expansion mode. Third, local organizations with the mandate to lead on agri-food or agriculture issues are lacking. As a consequence, people in the sector are disengaged creating a situation where attracting and motivating leadership specific to agricultural opportunities or issues is a significant challenge.

Leadership however, will emerge in response to a plan for agriculture in Parkland County with specific objectives and declared strategic intentions. For example, the commitment to develop a specific area (such as increasing local food production or building an enhanced Parkland County agri-tourism circuit) will attract interested individuals and new leaders. The commitment to entrepreneurship (Principle 3) and this principle are highly inter-related. To address both areas, Parkland County will need skilled staff with relevant experience. In the case of fostering local leadership, skills in community development, facilitation and training are essential.

The fostering of leadership within the agri-food sector is a major challenge. The barriers include: the decline (or diminishing) agri or rural community; industry fragmentation; and increased ‘busy-ness’ on the part of those individuals who work in the sector—thus time and energy are major limiting factors. Furthermore new or emerging opportunities typically do not have clear priorities, critical mass or a sense of what is required to move a new sector forward in a strategic manner (such as agri-tourism, local food or the equine sector).

The best ideas come from industry itself. Parkland County can facilitate the formation of such ideas (or opportunities) by committing to a leadership development process. This will require dedicated personnel who are focussed on working with specific sectors within the agri-food industry to identify individuals and ultimately leaders. These processes will result in the formation of working groups that develop strategies complete with opportunities, constraints, objectives and action plans that delineate what will be done individually, collectively and where or how Parkland County can provide assistance. Also a close working relationship with the entrepreneurial agency (prescribed in Principle 3) would be an important dynamic of this leadership development process as potential entrepreneurs are supported to develop their strategies and business plans.

Recommendation	Rationale
Leadership Development	
46. Create the position of senior leadership development officer to lead the leadership development and facilitation process. Recruit and fill at least one position.	Within the agriculture industry, time is extremely limiting. Thus, the facilitation role is critical (Stakeholder input - see Appendix 3)
47. Facilitate leadership and advocacy capacity within the Parkland County agricultural community to address: <ul style="list-style-type: none"> a. Changes in land use policies—a foundational requirement for the long term future of agriculture in Parkland County. b. A robust local food production capacity to respond to the growing interest and demand within the Capital Region. c. Opportunities within the equine sector for business, recreation and events. d. Agri-tourism—identifying both a range of potential destinations and events that attract interest from residents in the Capital Region and beyond. This will require extensive interaction and facilitation to identify opportunities, needs and identify potential leaders.	Each area is unique with differing opportunities, issues and distinctly different leaders
48. Develop leadership, training and support programs in the agricultural community that fit the needs of differing sectors.	As above
49. Build a network of leadership training and support resources that are aligned with the unique needs of agriculture and the requirements of emerging sectors as well as new issues such as agricultural land use preservation and protection. This will require a detailed level of familiarization with organizations and institutions across Canada and the USA. For example, specific leadership groups by sector and/or issue are emerging in places like Ontario or municipalities in the USA such as Lancaster County, Pennsylvania.	Part of an integrated approach Leverage and network whenever possible
50. Ensure that each of the identified sectors and emerging leadership groups develop annual plans which specifies results to be achieved, key actions, responsibilities and resource requirements.	Each area is unique with differing opportunities, issues and distinctly different leaders
51. Ensure that all leadership development plans are reviewed and evaluated annually.	Need to continuously review effectiveness

Communications	
52. Maintain a close and on-going relationship with the personel and activities taking place under Principle 3. Many of the challenges facing the advancement of specific sectors require leadership and vice versa.	Principle 3 and Principle 4 activities are highly synergistic
53. Commit to regular communications and updates that can dovetail with the communication initiatives outlined under Principle 1.	All communications and public relations recommendations are in response to a consistent message that the agriculture is not well known, understood or appreciated by the general public in Parkland County



5.0 Outcome Scenarios

5.1 Introduction

The analysis presents a comprehensive set of recommendations and policy directions. The reader will ask: what does the future look like if no changes are made? And, what does the future look like if the recommendations as presented are implemented?

While these questions are themselves simple, the answers are far less clear. To provide some insight toward a set of possible outcomes, two scenarios are presented:

Scenario 1: **Status Quo**—no changes in current land use policies or programs.

Scenario 2: **Parkland County Leads**—assumes the complete adoption of all the recommendations. This scenario is comprised of three parts:

Part 1: Supportive Land Use Policies

Part 2: Parkland County as a Leader in Entrepreneurship, Economic and
Market Development

Part 3: Strategic Sector Investment

5.2 Scenario 1: Status Quo

Assumptions

The Status Quo scenario assumes a future that is an extension of current land use policies and the trends that are in motion. More specifically, land owners continue to have the opportunity to subdivide an additional three parcels from a quarter section or one additional parcel from an 80 acre lot. Furthermore, there are no economic and/or market development policies that target the growth of the agri-food or valued added sectors. Additionally, no specific agri-food infrastructure investments are made.

As part of this scenario, we projected the level of fragmentation that would occur by 2030 based on the same pace of subdivision that has been taking place between 2012 and 2015 (see Map 5.1). The locations of these subdivisions are distributed in accordance with the historical pattern meaning that a higher proportion are located in the eastern half of Parkland County versus the western half.

Core Dynamics

1. Global markets and pressures on margins drive farmers to expand—larger farms.
2. More subdivisions and non-farm rural residents in agricultural areas—see Map 5.1.
3. Local food opportunities are limited to niche markets (individual restaurants, local retailers), direct sales and farmers markets.

Anticipated Outcomes

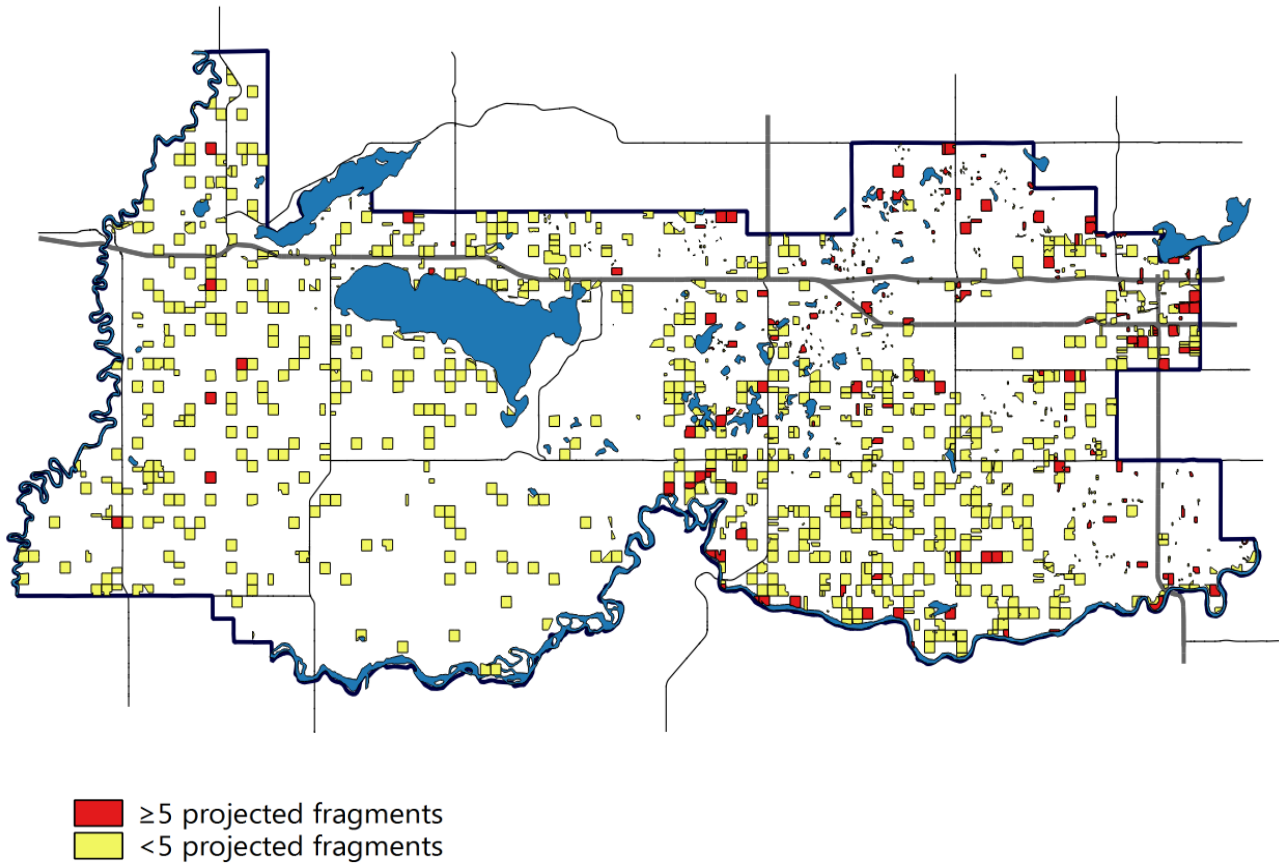
1. Fewer full time commercial farmers in total—estimate that 20 or fewer operations will be farming most of the available land.
2. Very few full time farming operations are left in eastern Parkland County.
3. Field crop farms will be the dominant form of agriculture; expect the dairy sector to consolidate further leaving very few if any operations in Parkland County.
4. Less land is available for farming. The presence of more smaller parcels (40 acres or less) and/or odd shaped lots may not be suitable for farming.
5. Expect more urban-rural conflicts which will further restrict farming operations.
6. Farmers will expand operations outside of Parkland County; will continue to farm in Parkland County until development pressures and/or land values induce them to exit.
7. A modest presence of small specialty operations. Many current operations will not find successors. Expect few new successful start-ups.

Conclusions

Should no change in policies take place, Parkland County will be populated with an increasing number of subdivisions and non-farm residents on agricultural lands. The future of agriculture will be very much in question and its prominence as an industry and as the primary land user will be in decline. Parkland County's days as an agricultural municipality will likely be numbered.

Note: We recently witnessed firsthand the consequences of contrasting choices on a visit to Pennsylvania. Thirty years ago, two counties in close proximity to the greater Philadelphia area chose markedly different directions specific to agriculture: a) Several counties such as Bucks, Chester and Lebanon have taken a more passive approach and consequently agriculture has diminished; b) in contrast, Lancaster County took a very pro-active approach to agriculture by committing to its central importance and embarking on major land preservation programs. Today Lancaster County is one of the largest producing agricultural counties in the eastern USA with more than \$1.3 billion in annual farm gate sales.

Map 5.1 **Fragmentation Forecast 2015-2030 in Parkland County**



Assumptions:

1. The level of additional fragmentation projected by 2030 is based on the same pace of subdivision that has been taking place between 2012 and 2015.
2. The locations of these subdivisions are randomly distributed in accordance with the historical pattern. Thus a higher proportion of subdivisions are located in the eastern half of Parkland County versus the western half.

5.3 Scenario 2: Parkland County Leads (Integrated Approach)

Part 1: Supportive Land Use Policies

Assumptions

The Supportive Land Use Policy is part of an integrated set of policies that are being implemented including a focus on the development of an entrepreneurial culture (which includes economic development and infrastructure investment) and the fostering of local leadership. The major premise for this scenario is the strong commitment by Parkland County to be a leader in agri-food opportunities, entrepreneurship and economic diversity. Land use and the long term assurance of available lands for agricultural and food producing enterprises is the key foundation and starting point.

Core Dynamics

1. Two distinct priority agriculture areas are established—one in the eastern part of the County and one in the western part of the County as shown on Map 4.1. These are primarily for large holdings for field crop and livestock production where subdivisions are limited.
2. A small holdings area is established south of Stony Plain and Spruce that allows for smaller agricultural parcels (2 to 10 acres). It is comprised of an area of good soils for market gardening and berry production and located in an area where small parcels (10 to 40 acres) are already prevalent as well as be in relative proximity to urban populations and road access.
3. There is less scattered country residential development.
4. Non-farm rural residents are concentrated in areas less suited for agriculture.
5. Global markets and pressures on margins drive farmers to expand.
6. Local food opportunities are mainstream—the result of strategic market development and improved logistics.

Anticipated Outcomes

1. Large commercial farmers will continue to expand but less likely to exit Parkland County.
2. Available land in priority agricultural areas will be farmed (lower likelihood of smaller parcels and odd shaped lots).
3. Rural-urban conflicts are kept to a minimum.
4. Focus on entrepreneurship will generate new local food and business opportunities. For example, the development of a Parkland grass-fed beef program would drive the establishment of a local packer supported by a new market for area beef producers.

Part 2: Parkland County as a Leader in Entrepreneurship, Economic & Market Development

Assumptions

Parkland County makes a firm commitment to be a leader in entrepreneurship, economic and market development. It will focus on value added opportunities that are specific to agriculture and food industry which includes production, processing, marketing, recreation and agri-tourism. The commitment will require the development of a recognized 'centre' with dedicated expertise, an extensive network of institutions and experts who will be associated with the 'centre', the provision of on-going programming and a pro-active outreach program that identifies and works with new, emerging or existing entrepreneurs. This commitment must be long term in nature—it will take five years to establish momentum and another five years before results can be expected.

Core Dynamics

1. Economic diversification and business growth is a foremost priority for the Government of Alberta.
2. A desire by existing farmers to find new opportunities to diversify and/or attract the next generation.
3. Young people who have a strong interest in the agriculture and food industry but do not have the knowledge or resources to start.
4. Currently no other municipality in Alberta has a centre of expertise focused in this area.

Anticipated Outcomes

1. Parkland County establishes itself as the leader in agri-food economic development and diversification—attracting entrepreneurs within and to Parkland County.
2. The focus on entrepreneurship creates a cluster effect which in turn generates more interest and activity.
3. Increased private investment and associated business activity.
4. Parkland County is in a position to pro-actively influence the ‘change’ process taking place in the agriculture and food industry rather than being reactive.

Part 3: Strategic Sector Investment

Assumptions

Three general opportunity areas have been identified: (a) local food; (b) agri-tourism; and (c) the equine sector. All currently have a presence in Parkland County but remain relatively modest in terms of their scale and economic impact. The major premise for this scenario is the strong commitment by Parkland County to be a leader in agri-food opportunities, entrepreneurship and economic diversity. Any consideration for strategic sector investment will require the development of a detailed business case that assesses the market opportunities as well as the risks. Most importantly, the business case would identify the specific infrastructure investment required and the rationale to move the particular sector forward. Furthermore, the establishment of an entrepreneurship/business development program that works with new, emerging operators would add additional strength.

Core Dynamics

1. Strong interest in local food and/or ‘experience’ including recreation or tourism.
2. Proximity to a major urban market and to numerous institutional resources and subject matter experts.
3. Emerging capabilities in each identified sector but no apparent critical mass or supporting organizational structures.

Anticipated Outcomes

1. One or more focused areas of economic development each with a defined strategy and supporting infrastructure (see note below).
2. A vibrant sector or sector that is well positioned to grow.
3. Increased private investment and business opportunities.
4. Parkland County establishes itself as the competitive leader within the Capital Region.

Note: We offer three examples of strategic sector investment, one for each of three identified areas: (a) local food—a permanent Parkland County food market/hub that includes the capacity to receive, redistribute and/or the capability for processing; (b) agri-tourism—an ‘Agricultural Tour of Parkland’ with incentives for individual operators to expand or enhance existing attractions; (c) equine—a central exhibition facility that is capable of hosting any number of equine events as well as be the launch point for a trail riding system. These are examples would require detailed assessments to determine scope, cost, economic impacts and feasibility.

Another example of strategic investment would be the provision of irrigation infrastructure to service a dedicated area that is producing specialty foods (vegetables, fruits, medicinal plants etc.). The level of investment required will depend upon the area to be serviced and could range from a small-scale project drawing water from locally available sources to a large-scale irrigation district which requires provincial approval and financial support.

Conclusions

The Parkland County ‘Leads’ scenario represents a focused response to current and future agriculture and food opportunities. Parkland County has clearly demarked areas in which agriculture as the primary land use has a long term assured future. A new generation of operations and businesses will have emerged in response to concerted economic and market development efforts. Parkland County will have a distinct agri-urban character – the visible presence of specialty operations as well as large field scale agriculture as well as a sizeable presence of non-farm/country residents who live in residential clusters or in areas where soils or topography are less suitable for agriculture.



6.0 Concluding Remarks

6.1 The Future of Agriculture

Agriculture is and historically has been an integral part of Parkland County's economic and community life. Three major change dynamics are impacting the future of agriculture in Parkland County:

1. The continuing growth of large scale commercial farms in response to global forces which drives the need for cost competitiveness and the ability to compete with world prices. In response, this sector is actively growing including the acquisition of more land for increased crop and livestock production.
2. The emergence of specialty enterprises in response to the growing demand for local food as well as 'country' experiences. This agricultural sector remains early stage in terms of development. Furthermore, it continues to assess opportunities with respect to how best to respond given the uncertainty of markets, relative competitiveness and land use alternatives.
3. The non-agricultural pressures on the agricultural land base resulting in increased land fragmentation and more conflicts between farmers and non-agricultural residents. These pressures and how they are managed will be a key determinant to the presence of agriculture in Parkland County.

It is our conclusion that a lack of commitment with supporting policies and actions will result in the declining presence of agriculture within Parkland County. More subdivision of agricultural land will take place; the larger scale commercial farms will continue to migrate to other agricultural municipalities; the growth of local food, value added and agri-tourism operations will likely be modest.

Nevertheless, Parkland County has the opportunity to assure a future for both the large scale commercial as well as the emerging agricultural sectors. This will however, require a clear commitment to agriculture; a re-energized vision; a more nuanced land use policy that provides long term certainty for agriculture in priority areas; economic development to facilitate and support emerging enterprises; and a process (and resources) to foster leadership.

6.2 Directions for Parkland County

The fifty three recommendations presented in Chapter 4.0 and the Scenario Outcomes discussed in Chapter 5.0 raise a fundamental question: must Parkland County adopt this full set of recommendations to assure a vibrant future for agriculture or are there options that could be considered?

In response to this question, we offer the following discussion for consideration:

1. **Supportive Land Use Policies:** this is the area over which Parkland County has the greatest influence. If a vibrant long term future for agriculture is a desired outcome, we recommend that changes in land use policy as presented in Section 4.6 are essential and indeed necessary. Should changes not occur or be minimal in nature, the future of agriculture will be diminished and will continue to decline.

2. **Parkland County as a Leader in Rural Entrepreneurship, Economic and Market Development:** this is a major commitment that may seem daunting. As Parkland County considers this initiative, we recommend that it proceed within a framework of establishing three conditions that are necessary for success:
 - a. Making a long term commitment—minimum of 10 years. This time frame will be required before results and the success of this initiative can be fully evaluated;
 - b. Establishing an arm’s length agency that is responsible to Parkland County Council but not directed by it; and
 - c. Ensuring the acquisition of a management and staff with proven leadership and expertise.

If these conditions are met, the actual scope and expenditure of this initiative will vary depending upon chosen areas of focus and available budgets.

3. **Strategic Sector Investment:** the choice of investments and the levels of investment will be highly dependent upon the soundness of individual sector strategies, the specific needs and the strength of the sector leadership that emerges. There will be choices. To this end, we recommend that the actual placement of investments be based on opportunity, need, capacity and the likelihood of success.

One thing is certain—should Parkland County choose not to pursue the path as the leader in rural entrepreneurship or commit to strategic sector investment, little growth in emerging opportunity areas such as local food, the equine sector and agri-tourism can be expected to take place.

6.3 The Next Steps

This is not a policy plan—it is a study that outlines a plan for agriculture for Parkland County. This is not an easy undertaking. It requires finding the right balance within the context of multiple comprehensive planning goals—all competing for the same land and resources in a rapidly growing metropolitan region.

In summary, it is important to understand that ‘agriculture’ is more than just land and a focus on agricultural land conservation. Agriculture has become increasingly broad and diverse. Fifty years ago, it was once relatively straightforward—raising crops and livestock on a family farm, but now ranges from a ‘seasonal corn maize’ for recreational day visits to large scale cropping operations with thousands of acres. As a consequence, Parkland County’s strategy must include a broad range of approaches and policies for agriculture to flourish.

It begins, however, with Parkland County’s assertion of its commitment to agriculture and supported with a political strategy that calls for viable governance structures, strong economic development, communications, land use plans, and infrastructure policies.

Appendix 1

Appendix 1: Agriculture in Parkland County

A1.1 Key Macro Trends

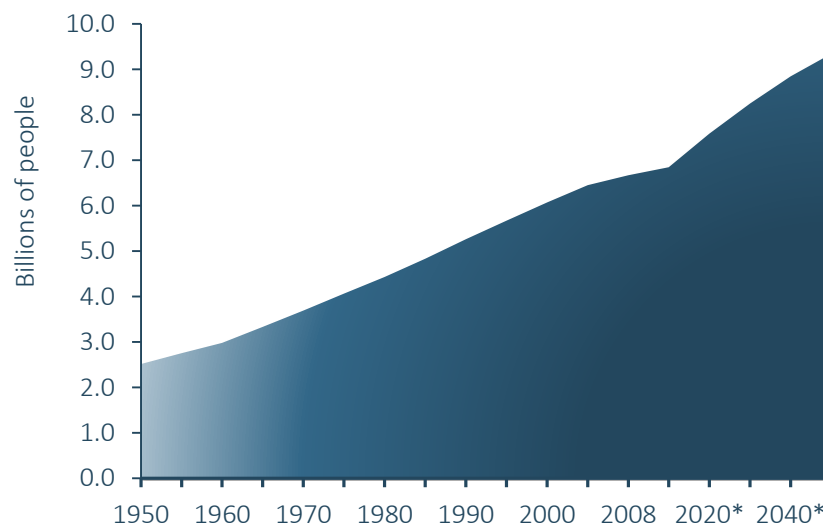
The development of any plan requires a firm understanding of the market conditions and trends that are in motion specific to the industry in question. To this end, several major trends particular to the agri-food sector across North America, Canada and Alberta have been identified. These are based on a review of the literature and our in-depth experience within the sector itself.

The trends listed below are high level in nature but material to the planning process for Parkland County as it considers its future with respect to the agriculture and food industry. Indeed, there are numerous trends specific to technology, agronomy, genomics, information technology, management, product development, marketing and changes in consumer behaviour, to name some. However, many of these are subsets of the major trends listed as follows.

Growing global demand for food and agricultural products

Globally the increased demand for food and agricultural producers is driven by growing populations, particularly in Asia. For example, world population is forecasted to reach 9.6 billion by 2050⁶ – a 30% increase over the current level estimated at 7.4 billion.

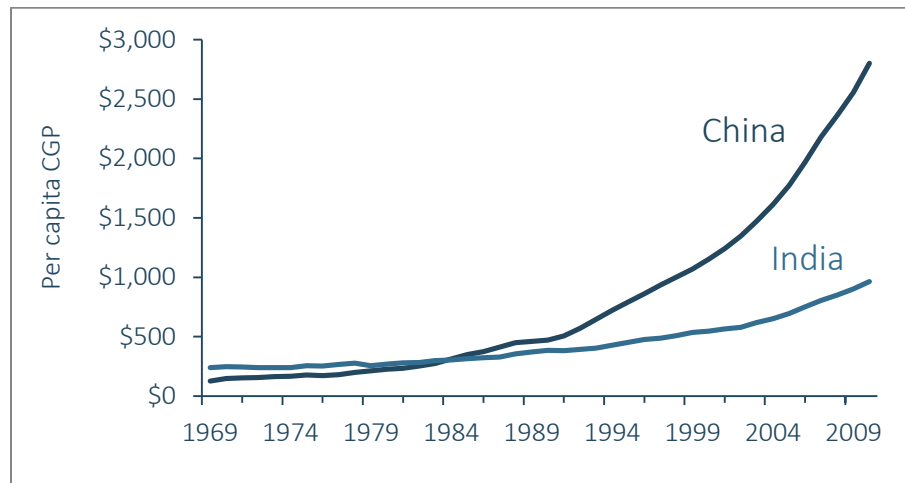
Chart A1.1 Projected Growth in World Population (FAO)



⁶ United Nations, World Population Prospects: the 2012 Revision.

In addition, countries such as India and China are experiencing a rapidly expanding middle class who in turn are demanding protein rich diets including beef and dairy products as well as high quality imported processed food products.

Chart A1.2 Projected Income Growth for China & India (FAO)⁷



To quote Dwight Koops, President of a Kansas-based company called Crop Quest:⁸

If the population does hit 9 billion by 2050, the demand to supply enough food, fiber and energy to supply the world will be a daunting task.

Juxtaposed to the growth in food demand is an increasingly vulnerable (or variable) supply response system due to:

- Variable and/or the increased incidence of extreme weather patterns—drought, heavy rains, tornados etc. and the many ramifications of climate change.
- Urbanization—growing populations in Asia and South America which in turn reduce the available land for food production⁹.

At the same time, there are fewer and fewer countries who will be net food exporters. Recently, the CIA¹⁰ identified six countries to be in this position. Canada is one of these countries. Over the course of the next thirty years, commodity prices, and accordingly food prices, are expected to rise more rapidly than the inflation rate.

The supply side of agriculture and food industry is also experiencing rapid change. For example, much work is taking place to explore the viability of new production systems such as vertical farms (multi-story complexes located within cities); high efficiency greenhouses; hydroponic operations located in abandoned underground spaces; precision agriculture which enables farmers to manage inputs on a square meter basis; and the use of genetically modified organisms (GMO's to improved productivity and quality traits). The perennial question remains: will advances in technology and

⁷Food and Agriculture Organization (FAO)

⁸ Crop Quest is a Dodge City, Kansas based 'innovation-driven leader in crop consulting and agricultural production management and solutions.'

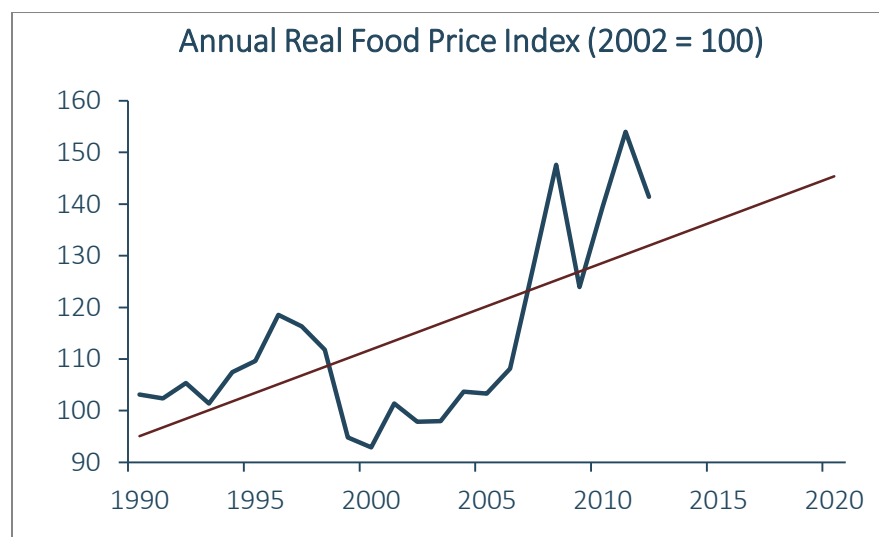
⁹ Arama Kukuti, Managing Director for a major ag-tech investment group estimates that 100 million acres per year are being lost to urbanization and pollution.

¹⁰ Central Intelligence Agency (CIA) Handbook: 2011. Reference in Top Crop Manager, August 2013.

productivity offset land losses due to erosion, changes in weather patterns and urbanization? No clear answer exists and the question will continue to be debated.

Implications for Parkland County: The long term growth in the demand for food suggests that Western Canada, Alberta, and all agricultural jurisdictions within Alberta will be increasingly important sources of supply both domestically and globally. It is anticipated that the outlook for agriculture—particularly the demand for grains, oilseeds, pulses and meat proteins and accordingly, the demand for prime agricultural land for production, will be strong (see Chart A1.3). The loss of land to urbanization combined with increasing temperatures and the incidence of drought may further exacerbate long term food supply shortfalls, hence accentuate demand forces.

Chart A1.3 Forecasted Increases in the Food Price Index to 2020 (FAO)¹¹



Increased Specialization and Scale of Farming Operations

The restructuring (concentration) of the farm production sector and the accompanying processing sector continues at a rapid pace. Simply put, there are and will be fewer but larger farms. At the same time, the processing sector is dominated by a few very large corporations that are typically global in scope. For example, there are two large beef processors in Western Canada, both in Alberta; one large pork processor located in Red Deer; two major dairy processors; and a small number of grain and oilseed buyers/processors.

The drive to specialize has been underway for more than 40 years. It is clear that the standard mixed family farm operation which historically characterized Canadian agriculture is a phenomenon of the past. Instead, the Alberta farm sector is now characterized by highly concentrated segments such as the intensive livestock sector which is comprised of 558 dairy producers, 380 hog producers, 280 poultry producers and approximately 30 major beef feedlots that account for most of the cattle being fed and marketed¹².

The largest numbers of farms in Alberta are beef cow-calf farms approximately 20,000 operations reporting beef cows. There are also approximately 20,000 crop farms that are classified as primary grain, oilseed or 'other' crop farms. However, the crop sector is consolidating rapidly. The 2011

¹¹ Source: Food and Agriculture Organization (FAO)

¹² Farm numbers are provided by industry organizations including Alberta Milk, Alberta Pork, Alberta Chicken, Alberta Egg Producers and the Alberta Cattle Feeders Association.

Census of Agriculture reports that there are 2,800 farmers in Alberta farming more than 3,500 acres. It is not uncommon to find farmers that are rapidly expanding and farming anywhere from 10,000 to 50,000 acres. To quote one interviewee who participated in our discussions:

“If you are not farming 10,000 acres, you are a small farmer.”

The drive for specialization and scale is the result of several factors including:

- **The need to focus and simplify:** each production enterprise requires a unique set of managerial systems, skills, quality control protocols, and equipment and capital requirements. Furthermore, each sector operates in very different markets. Thus in-depth sector knowledge is paramount to success—hence the drive to focus and concentrate on what are inherently complex enterprises in an effort to simplify, build critical mass and to leverage physical, financial and managerial assets.
- **Narrow, uncertain (and variable) margins:** cost pressures coupled with narrow margins in many crop/ livestock sectors drive producers to expand—the only way to achieve revenue objectives since much of agriculture production trades on the basis of world commodity prices.
- **Technology advancement:** farm equipment has expanded dramatically enabling wider passes of the field and more rapid transit. Thus, a single machine (seeder, sprayer or combine) can cover large areas in a single day. There have also been major technological advances in production agriculture in the areas of bio-technology; precision farming; GPS and satellite technologies; surveillance; and most recently the use of drones for measuring and monitoring crop performance. As a consequence, farmers have precise up to the minute information that enables quick response and the ability to manage ever larger acreages.
- **Advanced business management practices:** a new highly skilled class of agricultural producer has emerged—a business class of farmers who are well connected and have adopted sophisticated management systems including information, marketing, custom contracting and financial systems to run large farm businesses.

Implications for Parkland County: The ability for farms, particularly large scale crop farms, to grow and operate with a minimum of obstacles or nuisances is critical. Several conditions are required: (1) access to large parcels (80 acres plus) of productive agricultural land, either owned or leased; (2) the ability to safely move large equipment on roads and into fields; (3) a strong preference for large rectangular fields; and (4) the ability to operate (cultivate, seed, spray and harvest) with a minimum of nuisance complaints from non-farm neighbouring residents. If Parkland County seeks to sustain a thriving crop production sector, a sector that has been an essential part of its agricultural heritage, the provision of these conditions will be critical consideration for future planning.

Growing Demand for ‘Local’ Foods

There is a strong and growing interest in local food and local food production across Canada and the USA. Overall, the ‘local’ factor has become ‘hugely’ important as all retailers and food service companies are striving to feature local product as a core marketing strategy. Significantly, the definition of local varies by organization—some have a very regional focus; others define it as sourcing national (within Canada). There is also clear recognition that local supply offers the opportunity to provide fresher, higher quality produce and thereby reduce wastage and spoiled product. However, it must be clearly stated that cost competitiveness remains a critical factor for retailers and food services alike. We received considerable affirmation that in the case of most consumers, ‘price’ will trump ‘source’ of produce assuming comparable quality¹³.

¹³ Findings based on a 2014 survey conducted by Toma & Bouma with major retailer buyers.

In response to the local food movement, many cities including Edmonton have responded by forming Food Policy Councils with the stated intentions to develop or support a local food economy. Toronto formed a Council in 1991 with an emphasis on a ‘health focused food system.’ The Vancouver Food Policy Council (formerly Organization) came into being in 1995. More recently, the City of Ottawa established a Food Policy Council as a result of the Food for All Project, a collaborative, community-based food research and action project from 2009 to 2012.

Interestingly, an organization in Ottawa called Just Food recently established a ‘local food’ incubator known as the Start-Up Farm Program to support new farmers in the Ottawa region. By offering access to land¹⁴, shared infrastructure/equipment, and training. The program aims to enable more people in this region to start their own successful farm business.

A study¹⁵ conducted in Alberta in 2008 documented that 60% of Alberta households (847,000 households) visited a Farmers Market in that year, spent an average of \$449 per year for a total annual market size of \$380 million—an increase of 63% since 2004 when the survey was first conducted. The report also suggested however, that Farmers’ Markets appear to be in the process of maturing. Since that time, there continues to be growth in local food markets with the opening of several new or expanded markets in the Capital Region (104 Street Market in Edmonton; the addition of new markets in south Edmonton; the addition of a third market in Sherwood Park), as well as a second market in Stony Plain.

The question of whether major changes in the structure and sources of food supply will occur remains unclear. For example:

- The vast majority of foods including fresh produce continue to be supplied by companies that are national or international in scale. These suppliers are capable of providing year round deliveries.
- Major retailers such as Loblaw, Sobey’s and the Overwaitea Group have already shifted to a ‘local’ food emphasis (or organic lines in the case of Wal-Mart).
- Consistency, quality, convenience and price are foremost requirements for the majority of consumers.

It is our conclusion that consumer buying habits would require a major ‘disruption’ before a significant and material shift in buying patterns toward the purchase of local foods takes place. Such intervention (whether this is direct or indirect) could include any or all of the following:

- A major collapse of current food supply chains which are continental or global in nature due to such factors as fuel/energy shortages.
- Massive and persistent food safety ‘breaks’ specific to imported vegetables—resulting in the deaths of large numbers of people.
- Major investment in marketing, storage and distribution infrastructure to provide alternative channels to market that are able to compete with existing market channels such as supermarkets.

Implications for Parkland County: The emergence of a local food economy and the role of Parkland County as a potential supplier presents an opportunity but one that will take time, require on-going evaluation as well as careful planning and support. The viability of such enterprises depends on market demand, new market channels, competitive factors and production economics—all factors must be carefully evaluated in light of current purchasing patterns and the location of the majority

¹⁴Just Food leases 150 acres from the National Capital Commission which owns the land located in the ‘Greenbelt’ approximately 12 km from the centre of Ottawa. It is our understanding that 20 to 30 acres are currently being cultivated as market gardens by several start-up/beginning farmers.

¹⁵ Local Market Expansion Project, Alternative Agricultural Markets in Alberta, 2008 and the Alternative Agricultural Markets in Alberta—An Overview, December 2004

of current suppliers. However the metropolitan Edmonton market¹⁶ is looking for more local supplies and opportunities do exist for those who are able to meet volume and quality requirements. Parkland County is ideally located to meet as well as develop these opportunities.

Rapidly Advancing Quality Control Systems and Traceability

The days of producing agricultural and food products anonymously or as part of ‘bulk’ systems are coming to an end (and in many cases, have come to an end). Farmers as food producers are under immense pressure to provide full tracking and traceability information specific to what is being produced and shipped from the farm. This requirement started in the late 1990’s with several commodity groups (led by the dairy, pork and poultry sectors) who first established On Farm Food Safety Systems which are required for the receipt of product at the processing plant. The beef sector is also making immense strides to provide full traceability to the specific animal and the farm of origin.

Initially these requirements were being driven by disease management concerns—one of the fallouts of the BSE crisis that emerged within Alberta in 2003. Subsequently, there is an increased focus on ‘sustainability’ specific to animal welfare and environmental management (greenhouse gas emissions. For example, McDonalds is currently working with the Canadian Cattlemen’s Association to develop and test a Sustainable Beef Production supply system. More and more companies are marketing their products based on origin and with a specific production protocol.¹⁷

The crop and horticultural sectors are also following suit. It is now possible to track the origins of any grain or oilseed shipment back to the ‘bin’ of origin using an electronic tagging system supported by a bar code marker. In the case of greenhouse production, sophisticated packaging and systems enable the tracking of produce to the actual time of packing and the precise row and location within the greenhouse should this be required.

Food processors are subject to extremely stringent food safety demands as well as full traceability. Indeed, without fully established and verified HACCP systems, a food processor is not eligible to supply any retailer or food service company that is national in scope. Many retailers and food service companies such as Loblaw, Sobeys or Sysco require the implementation of specific corporate protocols as part of the supplier relationship.

Implications for Parkland County: Efforts to develop a value added or food processing sector must recognize the food safety and traceability requirements to be met by suppliers. Currently, Parkland County has a number of small specialty producers (U-picks, berry farms, small scale greenhouses). Most are not certified to supply beyond local Farmers’ Markets or direct sales to consumers. Many current as well as new producers will need to upgrade (or establish) their operational practices to qualify as suppliers to the retail and food service trade.

Agri-tourism as a Growing Opportunity

Agri-tourism is cited as a significant and growing sector in the eco-tourism industry¹⁸. Many countries such as the USA, Australia, the UK, Western Europe and Canada as well as provinces within Canada, feature unique rural offerings and focus promotional efforts and resources. Some of the better known ‘tour packages’ or destinations include wine tours in places such as the Niagara Region in Ontario, the Okanogan in B.C., Napa Valley in California; or Quebec which features maple syrup festivals in the spring and autumn colour tours in the fall. Alberta is known for its Cowboy Trail which runs north south parallel to the Rockies (Mayerthorpe to Waterton); as well as the Dinosaur Trail located along the Red Deer River in the south eastern part of Alberta.

¹⁶ Sobeys has just completed the expansion of a distribution centre; Sunfresh Farms is a major local broker and distributor and is looking to source more local supplies of fresh produce.

¹⁷ Perhaps best known is the recent A&W campaign that markets both its beef and chicken as free from steroids and hormones.

¹⁸ www.eckertagrimarketing.com/articledir/eckert-agritourims-culinaryexperiences.show

The notion of vacationing or planning a day trip in a rural area is not new. Indeed, the prospect to spending time in the country has been part of European and North American culture for centuries¹⁹. Experiences vary from lodging in country inns, spending time on a farm, ranch or some other agriculture-oriented property, sampling the day-to-day lifestyle of the people who tend the crops or livestock there, visiting an orchard or an U-Pick berry operation, dining in a unique country restaurant, attending an event or festival and/or riding holidays, adventure, sport and health tourism.

The more recent re-attention to agri-tourism as a viable economic enterprise is the result of several converging factors: (1) a growing interest in local foods and related culinary experiences; (2) people wanting new experiences and escaping the stresses of urban living; (3) parents wanting their children to know where their food comes from; (4) the appeal and cost-effectiveness of local getaways; and (5) the opportunity for rural residents including farmers to diversify their business interests.

A publication available from Alberta Agriculture and Forestry²⁰ states the following: ‘Rural tourism has many potential benefits including employment growth, an expanded economic base, repopulation, social improvement and revitalization of local crafts... tourism can make an important contribution to rural incomes at the level of the tourism operators and more widely in the local economy.’

Implications for Parkland County: The basis for a Parkland County agri-tourism sector is already in place with several destinations²¹. Parkland County is spatially well positioned to draw from a large and growing population in the Capital Region. It also has numerous natural areas as well as the North Saskatchewan River which runs along its southern border. The river lends itself to a potential trail system that would prove to be very attractive to the large horse owner/rider population. The trends in ‘close to home’ events and a desire by young families to experience the country provides an interesting opportunity for Parkland County to consider.

Commitment to preserve agricultural lands is a ‘hot’ issue in Alberta

In Alberta, although there has been some policy favouring agriculture, there has always been a reluctance to conserve agriculture land in any meaningful way. To date, when push comes to shove, the argument in favour of ‘property rights’ has won out politically. No level of government in Alberta has been keen to take on the issue of conserving agricultural land. For example, the Capital Region Board did not address the issue in its Growth Plan, instead hoping that the Province would provide direction and take responsibility for agricultural land conservation. This is in stark contrast to some jurisdictions, such as the British Columbia Agricultural Land Reserve which was implemented in the 1970s or the more recent greenbelt instituted around the Greater Toronto Region in 2005. In addition, some American jurisdictions have long had programs to conserve significant agricultural areas.

Consequently, there is no provincial legislative framework to preserve agricultural land solely on the basis of soil quality or agricultural use alone, even though there was a commitment to do so in the 2008 Provincial Land Use Framework. However, as will be discussed later, the Province has told the Capital Region Board that it is expected to deal with this issue.

Implications for Parkland County: While Parkland County can set its own policies on what lands to conserve as agriculture and can determine what levels of subdivision and development are appropriate; it is probably easiest to address this within a regional context. With the lack of a provincial policy with respect to agricultural land preservation, the Capital Region will have to forge

¹⁹ A common practice in England during the Victorian period. Also common in eastern Europe. The original tourists to Banff were well-to-do Americans who would ‘summer’ in the Rockies.

²⁰ Rural Tourism – An Overview. Last revised on January 24, 2013

²¹ Includes the Devonian Garden, the Corn Maize, Happy Acres and several U-Pick berry farms.

its own set of policies and land use planning tools. This is timely as the CRB should be addressing this as part of its regional plan update. Strathcona County has recently adopted an Agricultural Master Plan that has policies with respect to advancing agricultural land conservation at the regional level. Leduc County is now embarking on completing a similar agriculture study. Therefore, it seems timely for Parkland County to address these issues, not only locally through the CSDP it is now working on, but also through the CRB's planning initiatives.

A1.2 Statistical Review of Agriculture in Parkland County

The review of the agricultural statistics specific to Parkland County is structured to identify the major changes that have and are taking place. This discussion begins with the positive changes or increases that have occurred since 2001 (see Table A1.1. Also see Appendix 5).

Table A1.1 Parkland County: Measures of Positive Change or Increases

Measure	2001	2011	% Change	Implication
Average Farm Size (acres)	416	514	+23.6%	Trend to larger farms
Average Gross Receipts/Farm	\$72,000	\$125,000	+73.7%	Trend to larger farms
Farms with more than \$1 million in capital	223	374	+67.7%	Trend to larger farms and the increased value of land
Farms over 1120 acres	85	89	+4.7%	Large farm sector is growing as smaller farms decline in number
Average Age of Farmers	50.4	56.0	+11%	Trend to older farmers – a concern with succession
Canola Acres	19,738	36,667	+85.7%	Shift to higher value crops. Trend across province
Potato Acres	1,576	2,642	+67.6%	Favourable location for seed and specialty potatoes
Vegetables Acres	37	47	+27.0%	Modest growth and scale. There are approximately 15 growers
Area of Nursery Products	271	376	+38.7%	Reasonable growth—a reflection of location
Greenhouse area (Sq. Ft.)	169,797	197,465	+16.3%	Modest growth. However since 2011 several operations have closed
Sheep & Lambs (hd)	5,531	10,422	+88.4%	Overall a small livestock enterprise in Alberta but favourable growth in Parkland County
Horses (hd)	3,840	3,923	+2.1%	Sizeable and stable horse population—the largest in the Capital Region

Summary: Overall Parkland County has experienced growth in farm size, average gross farm receipts, capital invested per farm and the average age of farmers—much like the rest of Alberta. Canola acreage has also grown substantially but this is the case for all of Alberta where this crop has more than doubled (128%) in the 10-year period.

One change unique to Parkland County is the growth of the number of sheep & lambs in contrast to the overall decline in the Alberta sheep population (down 50%). To a lesser extent, there is modest growth in the nursery, vegetable and greenhouse production areas. The horse population has remained steady.

Table A1.2 Parkland County: Measures of Negative Change or Decreases

Measure	2001	2011	% Change	Implication
Number of Farms	1,144	782	-31.7%	Trend to larger farms
Total Area Farmed	475,926	401,863	-15.6%	Loss of substantial land area —mostly due to mining but also sub divisions and areas designated as Country Residential
Number of Farms with less than 400 acres	807	533	-48.6%	Rapid decline of small farms
Number of Farms with Gross Receipts below \$50K	797	539	-32.4%	Rapid decline of small farms
Total Crop Area	227,729	180,512	-20.7%	Loss of cropping area – same reasons as for loss of total area farmed
Wheat Acres	25,547	20,976	-17.8%	Shift to canola
Barley Acres	39,851	28,335	-28.9%	Shift to canola
Oat Acres	15,698	12,106	-15.2%	Shift to canola
Mixed Grain Acres	3,675	1,317	-64.2%	Shift to canola
Alfalfa Acres	77,454	52,070	-32.8%	Loss of hay and grazing land due to mining but also a major decline in cattle numbers
Tame Hay Acres	39,303	20,802	-47.1%	Loss of hay and grazing land
Cattle Numbers (hd)	79,084	45,353	-42.6%	Due to post BSE crisis, low prices
Beef Cow Numbers (hd)	31,471	17,601	-44.1%	As above
Dairy Cow Numbers (hd)	1,781	1,661	-6.8%	On fewer farms (10 farms in 2011 vs. 21 in 2001)
Poultry numbers	188,461	n/a	-n/a	Sector consolidating in other Alberta counties
Total Fruit, Berries & Nuts	127	104	-18.2%	Reflection of risk, labour shortages

Summary: Parkland County agriculture has experienced a decline in several agricultural sectors over the past 10 years. The statistics (or measures) clearly reflect the overall trend to fewer larger farms and a shift to growing canola as alternative to wheat, barley, oats and mixed grains. The most significant decrease is the loss of area for crops which has declined nearly 21% (or nearly 50,000 acres). Most of this loss can be attributed to the loss of tame hay and pasture areas (down nearly 40% or 40,000 acres). Significantly overall cattle numbers (and in particular beef cow numbers) have declined more than 43%.

The decreases in the Parkland County beef herd can be explained in part by the overall provincial reduction in beef cows (declining by 27%). The decade in question (2001 to 2011) has been difficult for the beef industry starting with the BSE crisis in 2003, followed by years of low prices and low returns. Hence, many producers reduced or liquidated their herds. However, the rate of decline in Parkland County is significantly greater than the overall decline.

The number of dairy cows has remained stable, although these cows are now on fewer farms. By implication, the average dairy herd in Parkland County has doubled in size.

The poultry sector has also diminished to the extent that there are now too few farms for the Census of Agriculture to report actual numbers. It can also be seen that the Fruit, Berry and Nut sector has become somewhat smaller in terms of total acres.

A1.3 Parkland County in the Capital Region Context

We also conducted a review of Parkland County in comparison to the four counties of Leduc, Lamont, Sturgeon and Strathcona to determine the differences (see Table A1.3). We note the following:

1. **Total Area Farmed/ Crop Acres:** Parkland County lost the most land (16%) relative to the other counties in the Capital Region. Strathcona lost 14% whereas both Leduc and Lamont grew in the areas being farmed (approximately 5%). Similarly, Parkland County experienced the greatest loss of crop acres (21% vs. little change in the other counties).
2. **Number of Farms:** Parkland County had the highest rate of loss—32%; Strathcona lost 27% and the remaining counties lost between 14 and 22%.
3. **Average Farm Size:** Lamont saw the greatest change with a growth rate of 37%. The remaining Counties experienced growth rates in the range of 20%.
4. **Gross Farm Sales per Farm:** Parkland County led the Capital Region with a 75% increase in the average gross farm sales per farm. Lamont followed with 72% growth; Leduc and Strathcona saw increases in the order of 35%.
5. **Total Cattle Numbers:** significant declines have taken place in all counties. Strathcona County cattle numbers are down 55%; Sturgeon is down 47%; Parkland County is down 43%; Leduc is down 38%; and Lamont is down 33%.
6. **Pigs and Poultry:** very few hogs remain in the Capital Region. Sturgeon County is the only county that continues to have a sizable poultry sector.
7. **Vegetables:** acreages for vegetables are small (less than 100 acres per county except for Leduc County). All counties experienced increases (up 30%). In contrast Leduc County saw a decline of 21% but had the largest acreage base overall.
8. **Fruits, Berries and Nuts:** also a small sector in terms of acres but larger than the vegetable sector. Lamont had the greatest growth rate but on a small base. Both Parkland County and Strathcona experienced small declines in the order of 20%.
9. **Area of Nursery Products:** this sector experienced the greatest growth and largest acreage relative to vegetables, fruits, berries and nuts. Both Lamont and Sturgeon more than doubled their production areas, followed by Strathcona (up 59%) and Parkland County (up 39%).
10. **Greenhouse Area:** Parkland County experienced a 16% growth in greenhouse area whereas Strathcona, Leduc and Sturgeon Counties all saw declines. Lamont saw a doubling in area but also had the smallest base. However, it has come to our attention that several greenhouses have closed since 2011²² and we are not aware of any new additions.

²² Three operations have closed recently: Inspired Market Gardens in Carvel; Grove Greenhouse and Valley

Summary: All the counties have experienced significant declines in traditional livestock agriculture with reduced numbers of cattle, poultry and hogs. Crop agriculture remains relatively stable with the exception of two counties, Parkland County and Strathcona County who have lost 21% and 14% of their total cropping areas respectively. Speciality enterprises remain small in terms of actual acreages; for the most part vegetable acreages have increased somewhat; fruit acreages have declined somewhat; greenhouse areas are relatively stable but are showing signs of decline; however, nursery areas have increased across all counties.



Table A1.3 Parkland County: Changes in the Capital Region

Where "n/a" - data are confidential for statistical purposes or unavailable

Selected Indicators	2001	2011	Percentage Change
Total Area of Farms (Acres)			
Parkland	475,926	401,863	-16%
Sturgeon	499,567	481,583	-4%
Lamont	524,636	595,608	14%
Strathcona	256,270	220,184	-14%
Leduc	564,298	589,978	5%
Number of Farms			
Parkland	1,144	782	-32%
Sturgeon	1,055	823	-22%
Lamont	910	753	-17%
Strathcona	896	658	-27%
Leduc	1,464	1,255	-14%
Average Farm Size (Acres)			
Parkland	416	514	24%
Sturgeon	474	585	24%
Lamont	577	791	37%
Strathcona	286	335	17%
Leduc	385	470	22%
Changes in Small Farm numbers (less than \$100,000 in gross proceeds)			
Parkland	954	613	-36%
Sturgeon	774	545	-30%
Lamont	718	523	-27%
Strathcona	746	525	-30%
Leduc	1,137	934	-18%
Changes in Larger Farm Numbers (over \$500,000)			
Parkland	26	47	81%
Sturgeon	60	95	58%
Lamont	26	52	100%
Strathcona	31	33	6%
Leduc	44	82	86%
Total Gross Farms Sales (total County), \$'000			
Parkland	82,064	97,975	19%
Sturgeon	146,696	185,794	27%
Lamont	82,268	116,938	42%
Strathcona	87,871	90,895	3%
Leduc	142,621	162,680	14%
Gross Farm Sales per Farm, \$'000			
Parkland	72	125	75%
Sturgeon	139	226	62%
Lamont	90	155	72%
Strathcona	98	138	41%
Leduc	97	130	33%
Total Crop (Acres, without summerfallow)			
Parkland	227,729	180,512	-21%
Sturgeon	361,288	362,846	0%
Lamont	359,803	371,871	3%
Strathcona	152,850	150,138	-2%
Leduc	359,027	373,077	4%

Table A1.3 cont...

Selected Indicators	2001	2011	Percentage Change
Total Cattle (Number, thsnd)			
Parkland	79	45	-43%
Sturgeon	51	27	-47%
Lamont	53	36	-33%
Strathcona	33	15	-55%
Leduc	97	60	-38%
Total Pigs (Number, thsnd)			
Parkland	3	n/a	
Sturgeon	50	17	-66%
Lamont	10	n/a	
Strathcona	3	n/a	
Leduc	24	16	-31%
Total Poultry (Number, thsnd)			
Parkland	189	n/a	
Sturgeon	1,310	1,419	8%
Lamont	34	24	-29%
Strathcona	560	n/a	
Leduc	279	200	-28%
Total Vegetables (Acres)			
Parkland	37	47	28%
Sturgeon	71	89	25%
Lamont	13	17	33%
Strathcona	n/a	76	n/a
Leduc	200	159	-21%
Total Fruit, Berries, Nuts (Acres)			
Parkland	127	104	-18%
Sturgeon	172	191	11%
Lamont	23	55	137%
Strathcona	72	57	-21%
Leduc	91	163	80%
Area of Nursery Products (Acres)			
Parkland	271	376	39%
Sturgeon	404	909	125%
Lamont	47	146	211%
Strathcona	256	406	59%
Leduc	705	800	13%
Greenhouse Area (Square Feet)			
Parkland	169,797	197,465	16%
Sturgeon	364,118	344,904	-5%
Lamont	59,452	116,230	96%
Strathcona	558,421	500,756	-10%
Leduc	218,562	117,685	-46%

A1.4 Parkland County Soils

The project team examined several potential datasets with a view to determining to what degree soils data or other agricultural datasets could be acquired and used to estimate the suitability of a property for agriculture—and conversely, its suitability for re-zoning. Specifically, we reviewed the following:

1. Soil Landscapes of Canada
2. Detailed Soil Surveys
3. Canada Land Inventory
4. Annual Crop Inventory – this has been available since 2009.

Overall, we conclude that this information provides valuable technical data describing the agricultural capacity of a particular site or property. However, the data alone is not sufficient to determine the suitability of a property currently zoned as agriculture for re-zoning. A more robust analytical system is required to assess any proposed site relative to the contiguous nature of the agricultural activities taking place in the immediate vicinity and its suitability for development relative to available or required services.

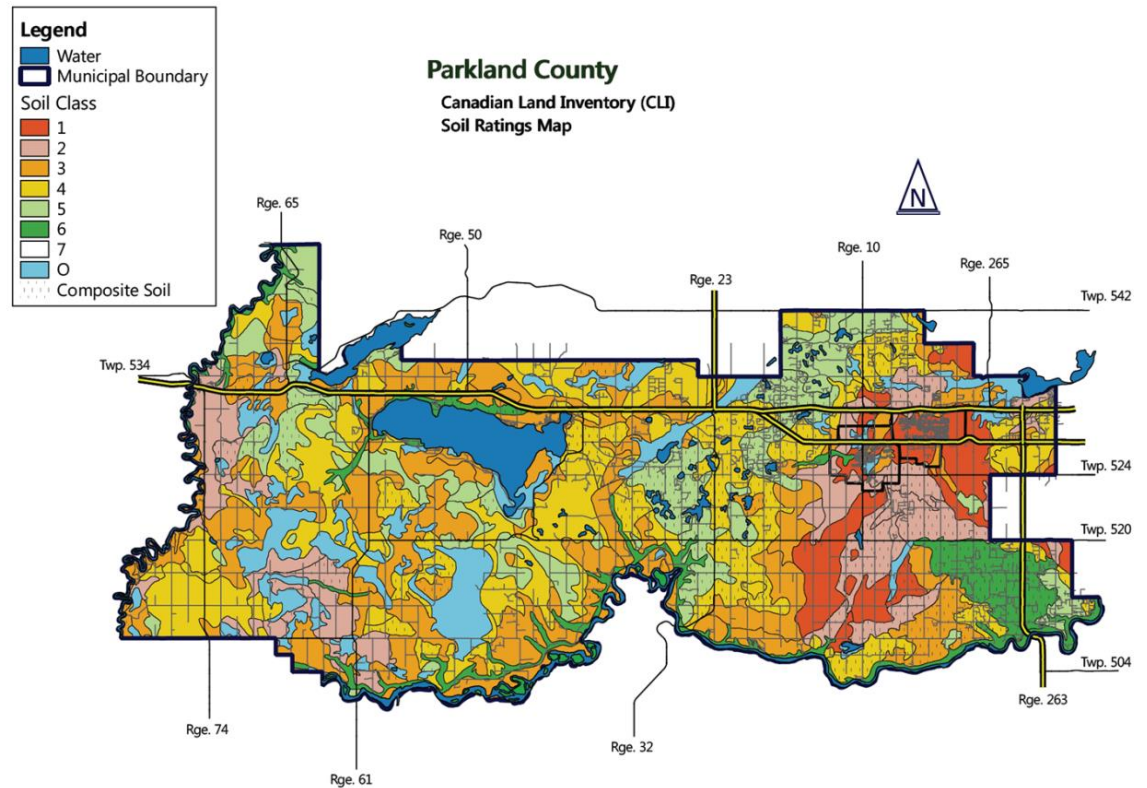
An example of this analytical approach is a system called Land Evaluation and Site Assessment (LESA) developed by the United States Department of Agriculture (USDA) in the late 1970's. The objective of this system is to provide a more robust farmland evaluation assessment using GIS and related economic and location data. For example, Lancaster County, Pennsylvania evaluates an individual farm property by analyzing data in four areas:

1. **Soils:** the actual quality of the soils for farming based on technical data similar to the Canada Land Inventory soil class system. This factor receives 40% of the weighting.
2. **Development Potential:** includes such measures as the presence of intensive development adjacent or in the immediate vicinity; intensive or extensive scattered development with a one-half mile radius as well as the degree of non-agricultural development within 1 mile. This factor receives a 20% weighting.
3. **Farmland Potential:** based on farm size and gross annual receipts. It also includes a land stewardship measure and historic, scenic or environmental measures. This factor also receives a weighting of 20%
4. **Clustering Factor:** a series of measures pertaining to location relative to agricultural lands in the vicinity. Receives a weighing of 20%.

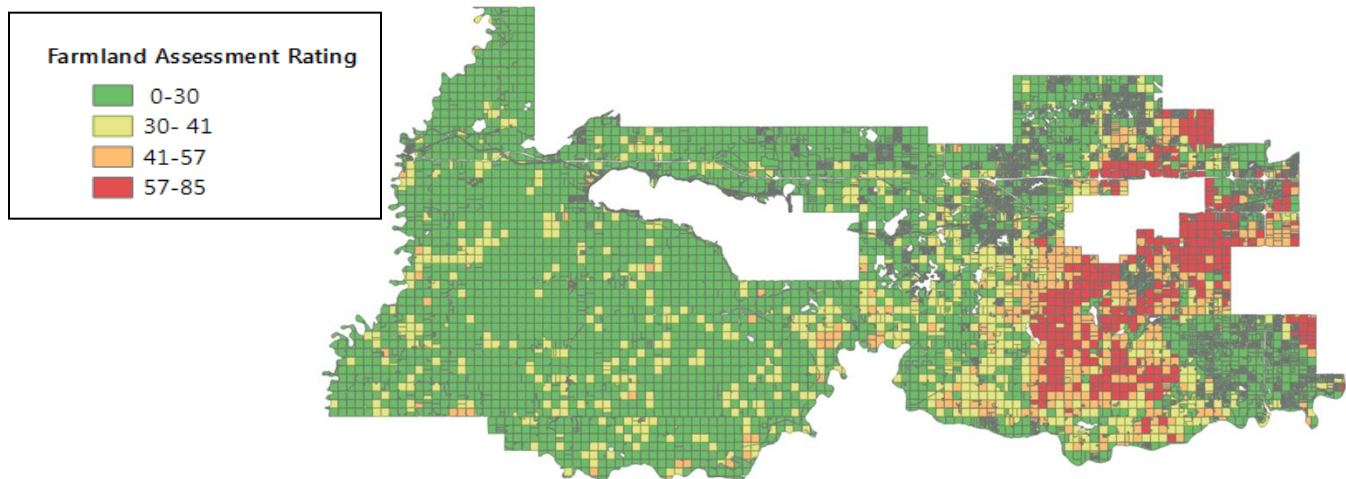
Specific to an individual property, the higher the score, the stronger the case for agriculture preservation. Conversely, the lower the score, the more suitable the property in question may be for development.

It is useful to look at an overall map of the agricultural productivity of soils in Parkland County. The best agricultural lands are located south of Stony Plain and Spruce Grove (see Map A1.1).

Map A1.1: Canada Land Inventory (CLI) Map



Map A1.2 Farmland Assessment Ratings (FAR) Map

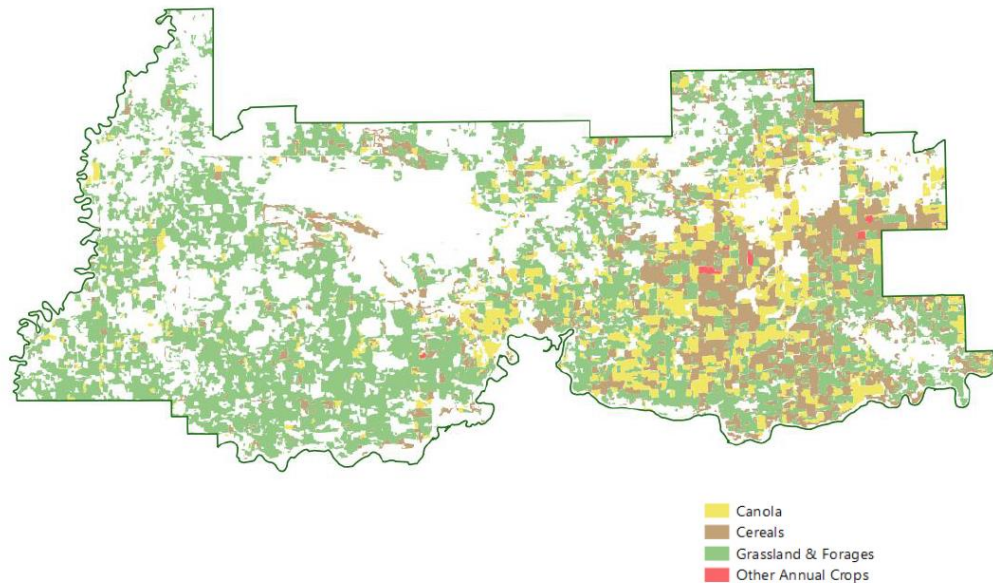


Map A1.1 (CLI) and Map A1.2 (FAR), while are based on different concepts and show different detail, both show the preponderance of the best soils and farmland is generally in the eastern portion of Parkland County.

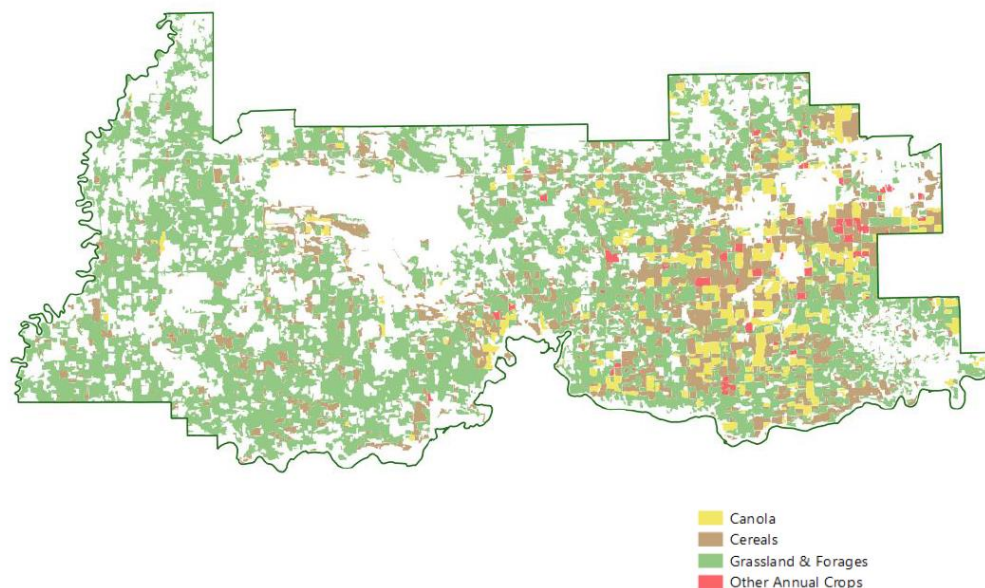
Annual cropping patterns can also now be reviewed and analyzed. Since 2009, Agriculture & Agri-food Canada undertakes the crop inventory map based on satellite imagery (see Maps A1.3 to A1.8).

The maps illustrate that the higher value crops of cereals, canola and other annual crops (mostly potatoes) are situated on the higher quality soils located in the south eastern part of the county. Not surprisingly, the location of the higher value crops corresponds with the distribution of the better soils (Classes 1 to 3) and the higher FAR scores.

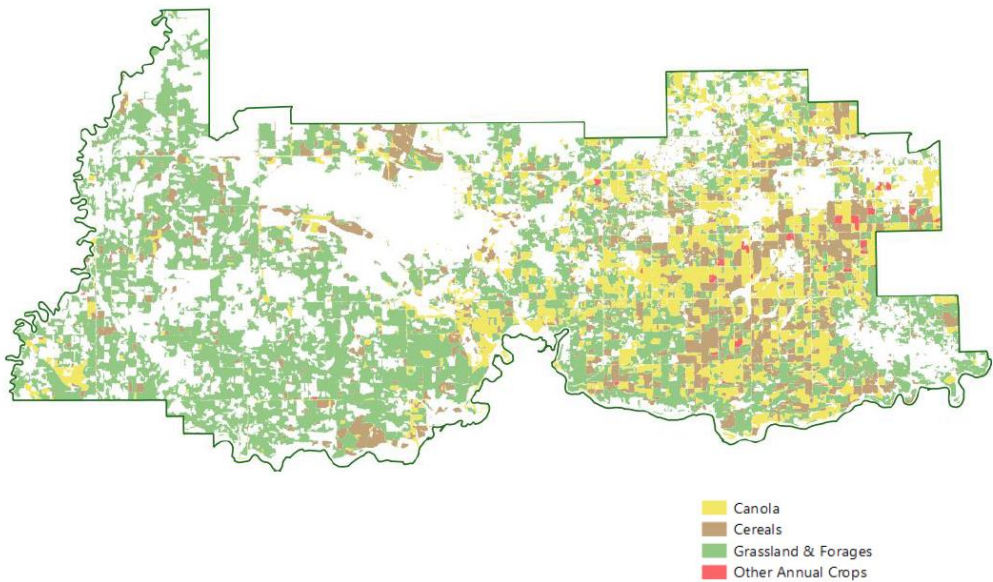
Map A1.3 Crop Inventory Map, 2009



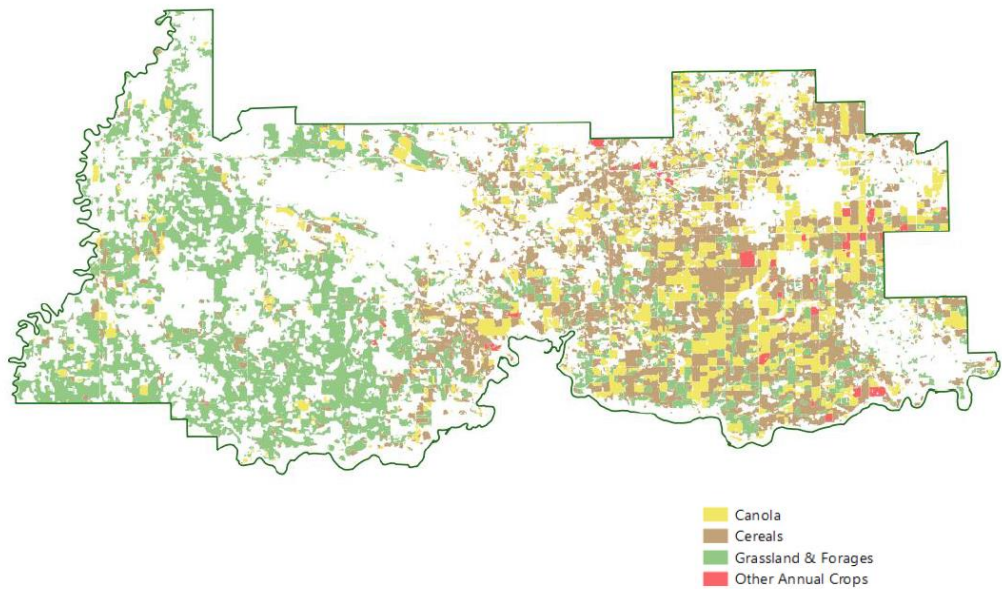
Map A1.4 Crop Inventory Map, 2010



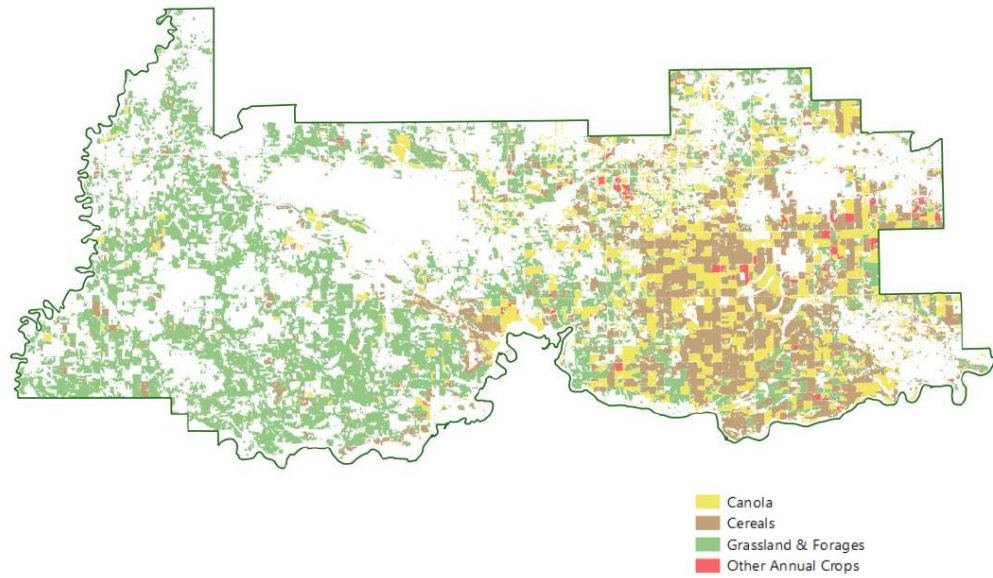
Map A1.5 Crop Inventory Map, 2011



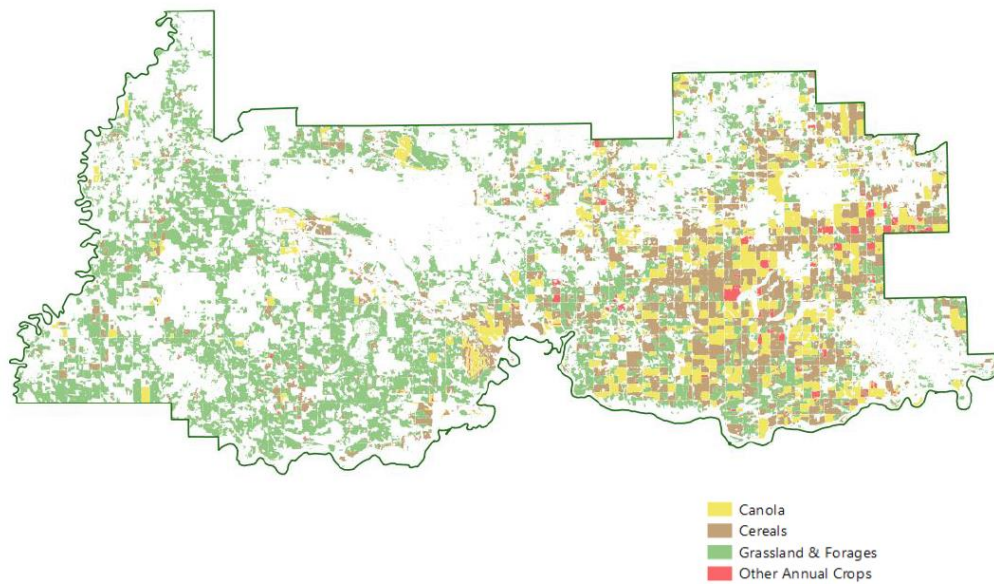
Map A1.6 Crop Inventory Map, 2012



Map A1.7 Crop Inventory Map, 2013



Map A1.8 Crop Inventory Map, 2014



The numeric distribution of crop acres as measured by the crop inventory maps for 2009 to 2014 is summarized in Figure A1.1. Two trends are noted: 1) the acreage of hay/pasture/grassland has clearly declined after peaking in 2010; both canola and grain acreage varies from year to year.

We also compared the satellite data for 2010 with the 2011 Census of Agriculture data for Parkland County (see Table A1.4). This was done since the census is taken in early spring and actually reports on the preceding crop year. It can be seen that the levels of comparison range from 89% in the case of canola to 141.7% for cereals. We followed up with Agriculture & Agri-food Canada and learned two things: 1) accuracy is improving and is now considered over 90% whereas in 2009 it was in the range of 85%; and 2) it is sometimes difficult to distinguish between crops such as cereals and grasses; thus the variability in acreages from year to year.

Figure A1.1 Crop Quantity Trends for Parkland County (Acres)

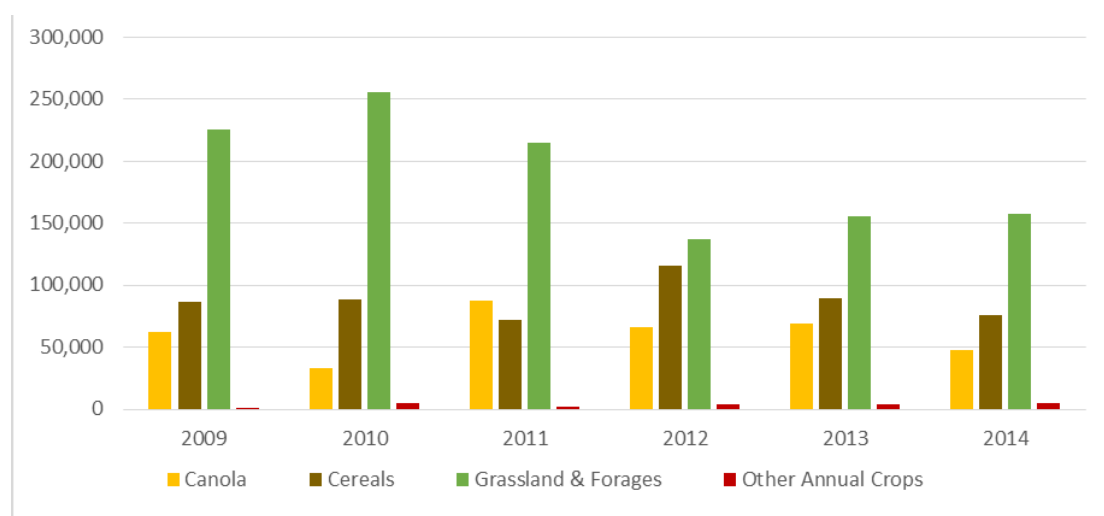


Table A1.4 Comparison Table: Satellite Imagery vs. Census Data

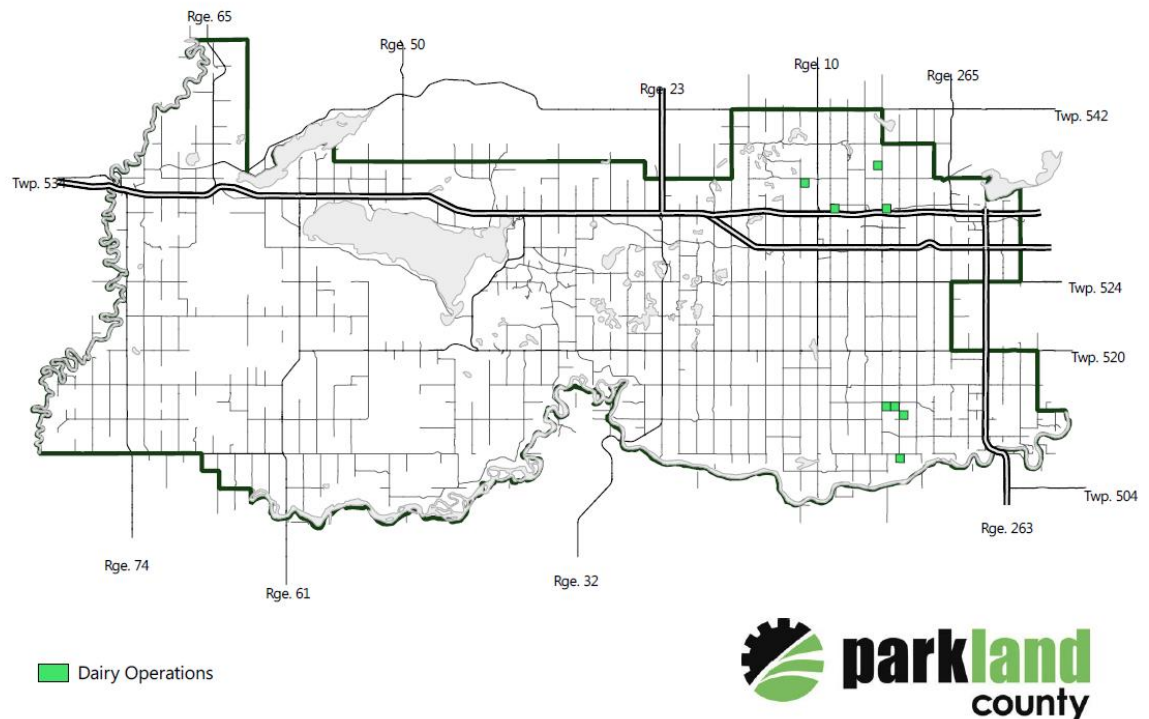
Crop	2010 (Satellite) Acres	2011 Census Acres	Percentage Comparison Satellite (2010) vs. Census
Canola	32,776	36,667	89.%
Cereals	88,952	62,734	141.7%
Grassland/Forages	255,430	246,712	103%
Other Annual	5,488	2,793	90.9%
Summer fallow		3,640	
Total	382,646	352,546	108%

Note: 2011 Census data for Grassland/forages includes: Pasture (173,840) + Alfalfa (52,070) + All Other Hay (20,802) = 246,712

In conclusion, we recommend that Parkland County continue to source Crop Inventory Maps on an annual basis to serve as another source of information. Accuracy will improve over time as resolution technology improves. However, this is not yet a definitive data source.

We also located another data map from Alberta Milk regarding the location of producers (see Map A1.9). It can be seen that the remaining eight dairy operations are in the eastern portion of Parkland County, both north and south of Spruce Grove in two clusters.

Map A1.9 Locations of Dairy Producers (Source: Alberta Milk).



It also came to our attention that the FAR data may be inaccurate or out of date. FAR ratings for each legal property go back 40 years or more and are used for tax assessment purposes. The FAR rating was based on a visual assessment of land capability relative to its ability to produce cereals. Thus a land parcel bearing what is considered to be a 'good' cereal crop would receive a 100% (or top) rating. All parcels were rated in accordance to this visual base. Thus a parcel of land (or polygon) that was (or is) in bush, overgrazed and/or poorly managed would receive a considerably lower FAR rating regardless of soil quality or land class.

Concerns with FAR ratings arise when a landowner applies for multi-lot residential subdivision which is allowed to occur on lands with a FAR (Farmland Assessment Rating) of 57% or less (allowed in Parkland County's current MDP). Applicants with FAR ratings over 57% may argue that their properties are 'overrated'. In these cases, we recommend that a third party soil analysis be requested and that a revised FAR rating be based on the ensuing CLI land classification forthcoming from the soil survey.

Appendix 2

Appendix 2: Existing Policies and Plans

A2.1 Introduction

To understand the current planning framework, and how agriculture fits in, it is important to consider the factors, particularly provincial, regional, and municipal policy, which influenced its evolution over time.

A2.2 Edmonton Metropolitan Regional Planning Commission

The Edmonton Regional District Planning Commission was established in 1950 and first adopted a regional plan for the Metropolitan Section in 1958, which had been based on studies of agricultural land. This plan formed the basis for regional planning in the Edmonton area until 1984. This plan sought to maintain compact communities and industrial areas, prevent unwarranted fragmentation of good agricultural land and established a large open space system along the rivers and ravines. The Commission prepared a position paper on rural land use in 1974 and adopted various objectives and policies as early as 1975, which included the following:

- *The Commission aims to ensure that agriculture will remain a valuable component of the regional economic base.* The Commission shall identify prime agricultural lands and assign such area to be conserved for agricultural use.
- *The Commission opposes the unwarranted fragmentation of prime agricultural land for non-agricultural purposes.* Prime agricultural land was interpreted as CLI Classes 1, 2, or 3 as well as lands with potential of producing specialty or other crops, or of supporting land-intensive agricultural operations, none of which are considered in the CLI agricultural capability classification scheme. However, the policy provided for one subdivided parcel (either into two 80-acre parcels or with one parcel of less than three acres).

In 1979, the Commission prepared policies stating that ‘Prime agricultural land... shall not be subdivided for country residential uses except...’ for farmstead separation parcels, unworkable farms exist, unusual circumstances exist, or a highly unique country residential attraction exists such as proximity to a major river valley.

In 1980, the Commission wrote that ‘the competition for the use of the basic land resource of the region has created major problems for the agricultural community... concerns as to the premature and unwarranted fragmentation of agricultural lands in all of the rural municipalities in the metropolitan area has necessitated a common approach.’

Following decades of regional planning, the Edmonton Metropolitan Regional Planning Commission’s Metropolitan Regional Plan was approved in 1984. The plan reflected a snapshot of conditions, history, policy, and municipal intentions up to that time.

The land use pattern and policies in the 1984 plan were driven by three main factors: (1) Provincial policies in favour of the conservation of ‘better’ agricultural land and other policies such as the first parcel out; (2) development patterns and their potential future expansion based on logical servicing and planning expectations fostered continued growth regardless of soil conditions; and (3) soil quality and the dividing line between Classes 1 & 2 and Class 3 in ‘rural areas’ as a major determinate. Land use policies were to minimize land use conflicts. Since this time, new initiatives have influenced the planning regime in Alberta, the Edmonton Capital Region, and Parkland County.

A2.3 Provincial Land Use Policies

In 1996, the Provincial Government adopted Provincial Land Use Policies (PLUPs) pursuant to the Municipal Government Act. These policies outline provincial interests and the role of municipalities in implementing them—by ensuring municipal statutory plans, land use bylaws, and planning decisions and actions are consistent with the PLUPs.

With respect to land use patterns, PLUPs generally call for an appropriate mix of agricultural and other land uses in an orderly, efficient, and compatible manner; embody sustainable development, and provide for a wide range of food and agricultural sector development opportunities.

With a goal to contribute to the maintenance and diversification of Alberta’s agricultural industry, four policies were adopted:

- Municipalities ‘are encouraged’ to identify areas where extensive and intensive agriculture and associated activities should be a primary land use.
- Municipalities ‘are encouraged’ to limit the fragmentation of agriculture lands and their premature conversion to other uses.
- Municipalities ‘are encouraged’ to direct non-agricultural development to areas where they will not constrain agriculture.
- Municipalities ‘are encouraged’ to minimize conflicts arising from intensive agricultural operations through the use of setbacks and other mitigative measures.

The policies address the issues of identifying and designating agricultural lands, discouraging their fragmentation and premature conversion, and avoiding conflicts between uses. However, they are not regulatory in these regards, only discretionary and non-binding—how do you enforce and encourage? These policies were to be incorporated into Regional Plans as they are developed under the Land Use Framework.

A2.4 Provincial Land Use Framework and ALSA

The Land Use Framework (LUF), released in 2008, outlined a new Provincial approach to managing land and resources. The LUF established seven planning regions and called for the development of a regional plan for each.

The Alberta Land Stewardship Act (ALSA), proclaimed in 2009, established the legal basis for the development of the regional plans. The regional plans are applicable to both private and Crown lands, and contain portions that are enforceable by law, as well as sections that are intended as statements of policy to guide the Crown, decision makers, and local governments.

ALSA enables, not only regional planning, but it also provides tools for the implementation of those plans. These tools include conservation directives by the province, potential programs for conservation easements and transfers of development credits. These schemes may be aimed at the protection, conservation, and enhancement of agricultural lands and lands for agricultural purposes. To date, these new tools have not been utilized to any extent.

A2.5 North Saskatchewan Regional Plan

The Lower Athabasca Regional Plan, the first provincially approved regional plan, merely repeats the PLUPs as its agricultural policies. The second regional plan, that for the South Saskatchewan, includes general policy objectives for agriculture that address region-specific issues and concerns: (1) maintaining an agricultural base by identifying contiguous blocks and smaller areas of agricultural lands and limit their fragmentation and conversion—including the use of conservation easements; (2) supporting a diverse and innovative irrigated agriculture and agri-food sector; (3) maximizing opportunities for value added agriculture; (4) recognizing the local market; (5)

supporting the transition to the next generation of agriculture and food producers; and (6) encouraging the use of voluntary market-based instruments for ecosystem (natural capital) services.

Parkland County is in the area to be covered by the North Saskatchewan Regional Plan. This regional plan area is large, 13% of Alberta, stretching from British Columbia to Saskatchewan. The Region has a wide variety of soil types and almost 60% of the region is used for agricultural production, including crops and tame and native pasture for grazing—about 25% of the total farmland in Alberta. The land surrounding the Capital Region has some of the most fertile soils in western Canada. Livestock is a key component of agricultural production in the region.

The Profile of the Region notes that fragmentation and conversion of agricultural land to non-agricultural land remains an on-going issue throughout Alberta and, although there has been a conversion of higher-value cultivated lands used for annual crop production to non-agricultural uses, these losses have been offset to some degree by increases in the use of more marginal land—lands which often require greater crop inputs such as fertilizers and herbicides to be as productive as those soils lost.

This regional plan is currently under preparation, but the Terms of Reference (TOR) for the planning process state the plan is to ‘provide advice on maintaining a viable agricultural land base to support growth and diversification of the agricultural industry.’ In its discussion of biodiversity, the ToR notes that the trade-off discussion related to the settled area revolves around the value of the land in terms of its agricultural productivity and the ecosystem services that the private land base provides versus the value of the land if used for other purposes (e.g. residential development). The plan is required to address the use of the various conservation tools.

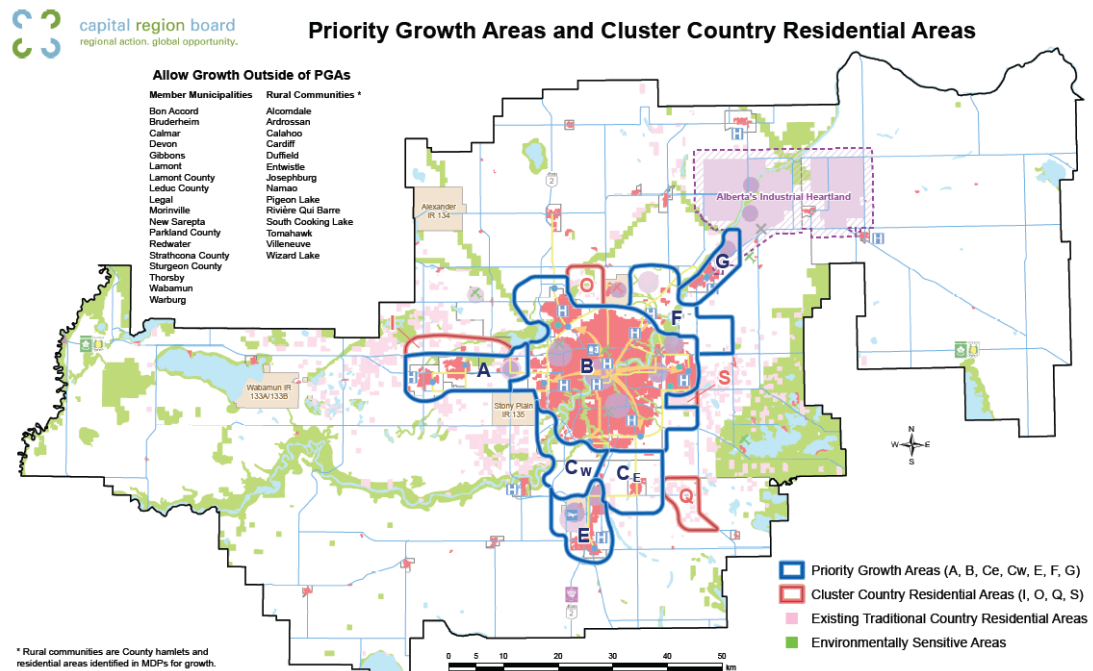
In summary, the language of these Regional Plans to date have moved from the term ‘encouraged’ to ‘expected’ to limit fragmentation and the premature conversion of agricultural lands. Although there is no requirement per se in the first two regional plans, the North Saskatchewan Regional Plan may be more directive in the conservation of agricultural lands if desired by stakeholders and municipalities. The hierarchical nature of Alberta’s system requires the regional planning directions, as they are finally adopted, to be considered in the preparation of plans by both the Edmonton Capital Region Board and Parkland County. However, timing is uncertain.

A2.6 Capital Region Board Growth Plan

The primary purpose of the Capital Region Land Use Plan is to manage sustainable growth in a manner that protects the region’s environment and resources, minimizes the regional development footprint, strengthens communities, increases transportation choice and supports food and agricultural sector development. The Capital Region Growth Plan: Growing Forward was approved by the Government of Alberta in 2010.

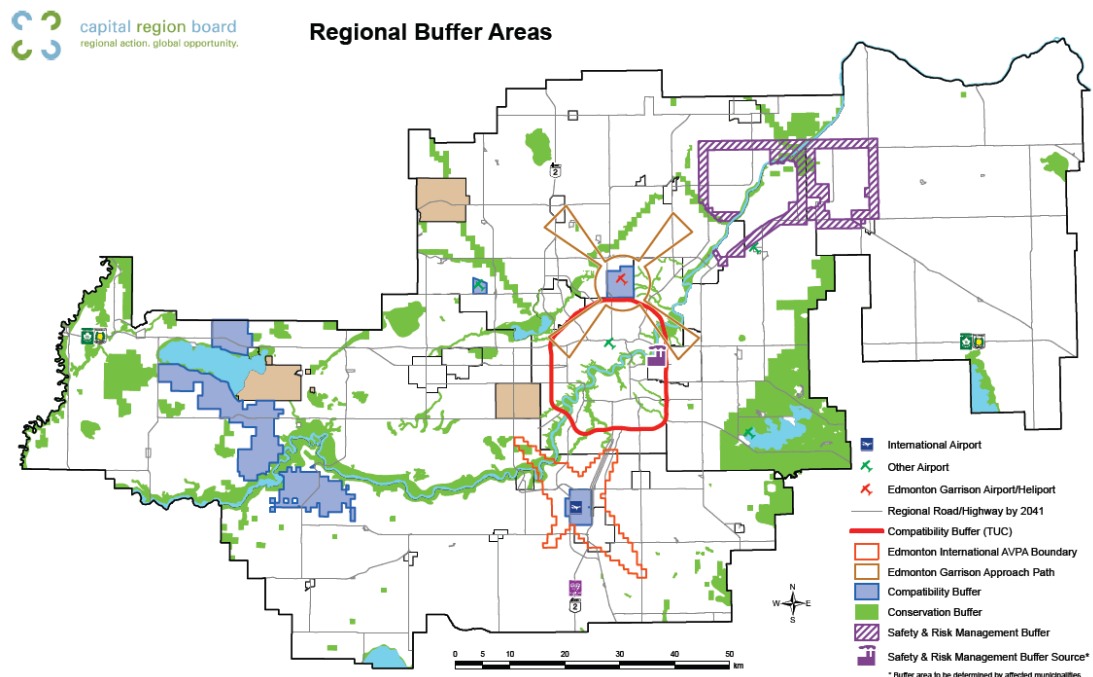
The plan defines Priority Growth Areas (PGAs) and Cluster Country Residential Areas (CCRAs). The PGAs define the areas where most of the urban development is to occur in the region. West of Edmonton, PGA A includes a general area along the Highway 16 corridor, which includes the Acheson Industrial Area as well as Stony Plain and Spruce Grove and surrounding area. CCRA I includes the area north of PGA A. The plan also acknowledges that there will also be growth outside the PGAs including other areas of Parkland County and, in particular, growth in Entwistle (a hamlet), Duffield (a hamlet), and Wabamun (a separate village).

Map A2.1: CRB Priority Growth Areas



The CRB's map of Regional Buffer Areas notes the presence of numerous areas described as requiring conservation buffers: natural areas; river, stream and lake systems, and the Jack Pine Provincial Grazing Reserve. The coal mining areas north and south of Wabamun Lake are noted as having to be addressed from the perspective of compatibility buffers.

Map A2.2: CRB Regional Buffer Areas



The plan has the following acknowledgement about agricultural land:

Agricultural land is a limited, non-renewable resource which is competing with other forms of development. If the land is not protected in the long-term for food production, the land will be converted to another use and lost forever. Agricultural land has significant value, both at the local and regional levels, beyond its pure economic capacity, including green space, aesthetics, community character, lifestyle, air quality, wildlife habitat, as well as a risk management measure in the event of future food shortages. In order to ensure agriculture lands are complementary with policies to reduce the regional footprint, further collaboration on implementing agricultural land policies is required.

Specific to agriculture, the CRB Plan does little else other than to identify those areas that have been designated for agricultural purposes by municipalities. This is not to say it lacked complete support for agricultural conservation as it did have policies that, to a degree, sought to direct growth to priority areas and minimize the regional development footprint. However, the Capital Region Board, as a result of the potential controversy, took the position that it would wait until the Province took further policy decisions relative to agricultural land fragmentation and preservation.

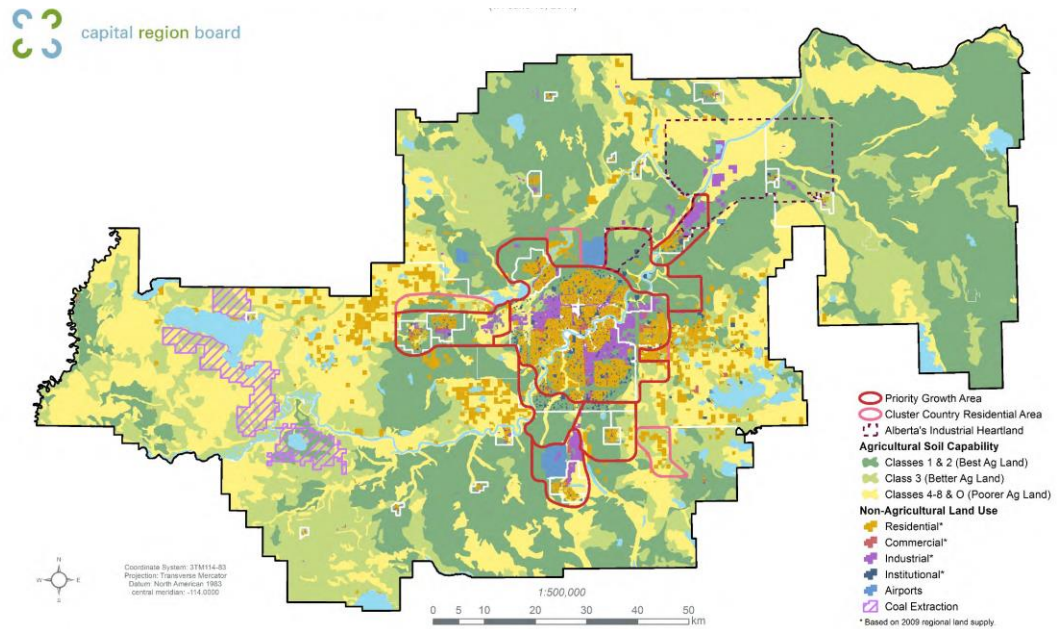
Since that time, the Alberta Government wrote the Capital Region Board in August 2014, stating that the Province ‘determined that the economic, environmental and social evidence did not currently support the need for a provincial-level policy on agricultural fragmentation and conversion, though we recognize the issue as a growing concern throughout Alberta, particularly within the Edmonton-Calgary corridor.’ Most commentators noted that this probably reflected the will of the then ruling party’s political constituency. The letter goes on to state that ‘municipalities are now expected, rather than encouraged, to follow the direction provided through the PLUP on this important issue.’

The plan is now undergoing a review and update. As a result, it is opportune for Parkland County to ensure that its agriculture directions are included in the new plan and incorporated across the Capital Region so there is ‘a level playing field.’

A2.7 Capital Region Board Growth Plan Update

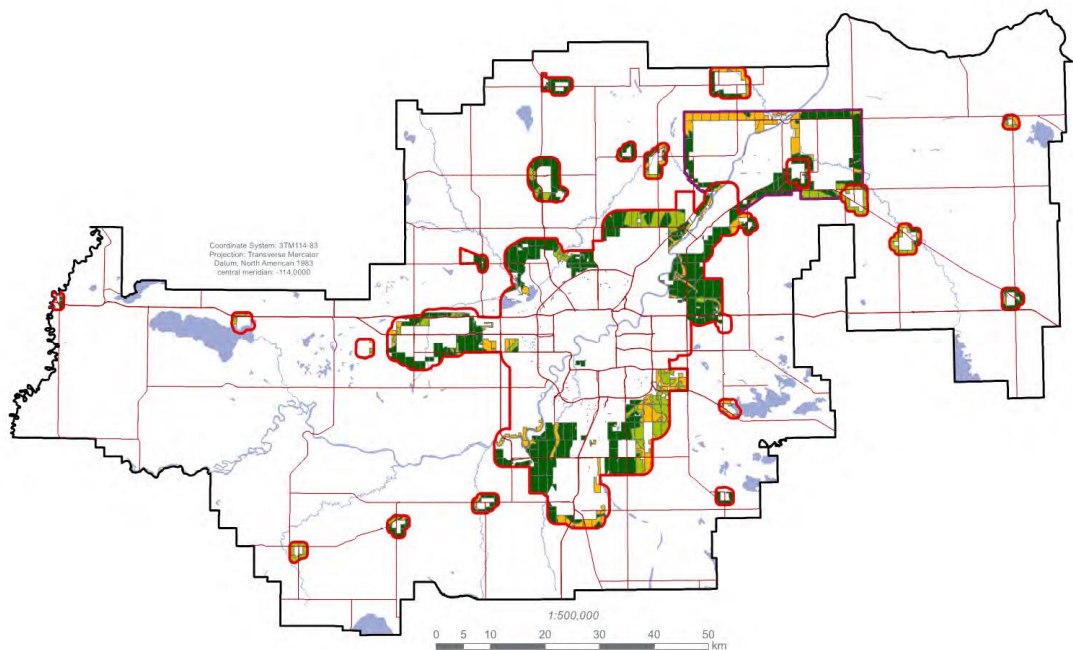
The CRB is currently updating the Growth Plan. In its review, the CRB has acknowledged the pressure on agricultural land. It is noted that 80% of land within the primary growth areas is classified as best or better agricultural land; 56,000 ha of lands would be consumed within the urban growth shadow; the total number of farms and area of farmland in the Capital region is declining; and there is a need to optimize the potential for value-added agriculture. The CRB notes that currently “there is no policy direction concerning the encroachment of urban development on high quality agricultural lands in the region.”

Map A2.3: Agricultural Land and Urban Growth (CRB)



The following map, prepared as part of the CRB's plan update shows areas (only within the 'potential urban growth shadow') as being at risk. This does not include lands for country residential or other non-agricultural conversions in agriculture areas 'outside the urban shadow.'

Map A2.4 Agricultural Land at Risk (CRB)



The ‘Agriculture Working Paper’ for the plan update identified that the Capital Region faces the following policy gaps specific to the preservation of agricultural land:

1. A lack of leadership and direction from the Province.
2. No differentiation with respect to which agricultural lands are more suitable for preservation or development. Currently all agricultural lands are treated as equal.
3. The lack of a robust analytical framework to assist in the assessment and prioritization of specific agricultural areas (or properties) relative to the development pressures.
4. Differing approaches being taken by municipalities within the Capital Region which in turn leads to differing rates of land conversion (agriculture to other uses), fragmentation and impacts to the agricultural industry at large.

The ‘Metropolitan Regional Growth Structure Working Paper’ includes the following:

Agricultural Areas: Protecting land areas for agricultural use can be done in numerous ways. An agricultural layer can be depicted on a metropolitan growth structure or an accompanying map or agricultural lands can be protected simply through policies within the Growth Plan. While the strongest form of protection is a greenbelt that permanently protects the agricultural land base, provincial legislation is generally required to implement a greenbelt. Use of a greenbelt in the Capital Region Growth Plan Update is therefore not recommended. Instead, a suite of other policy tools is recommended to protect prime agricultural land, including the introduction of a LESA system

One of the principles of the plan update addresses agricultural land as follows:

Wisely manage prime agricultural resources. In the context of metropolitan growth, we will ensure the wise management of agricultural resources to continue a thriving agricultural sector.

The first draft of the plan stated the following key strategy:

Growth needs to be carefully managed as region to ensure the long term viability of the agricultural sector. The policies of this Plan are designed to address this issue from multiple standpoints including our cultural heritage, future need for food production and for its contribution to the region’s economic prosperity. Maintaining agricultural viability requires managing growth to protect prime agricultural lands from development, preventing fragmentation of the land base, recognizing the important role of agriculture in the global and regional economy and fostering growth and diversification and the potential for value added products within the agricultural sector.

The plan states that ‘a supply of prime agricultural lands will be identified and preserved.’ This is to be accomplished through the future development of a Regional Agriculture Master Plan using a Land Evaluation and Site Assessment (LESA) analysis and be informed by municipal agriculture master plans. The CRB’s expectation is that “policies will be included to implement the regional agricultural policy directions at the municipal level and identify priority and prime agricultural lands in municipal statutory plans on a map.” Further, the CRB contemplates the following:

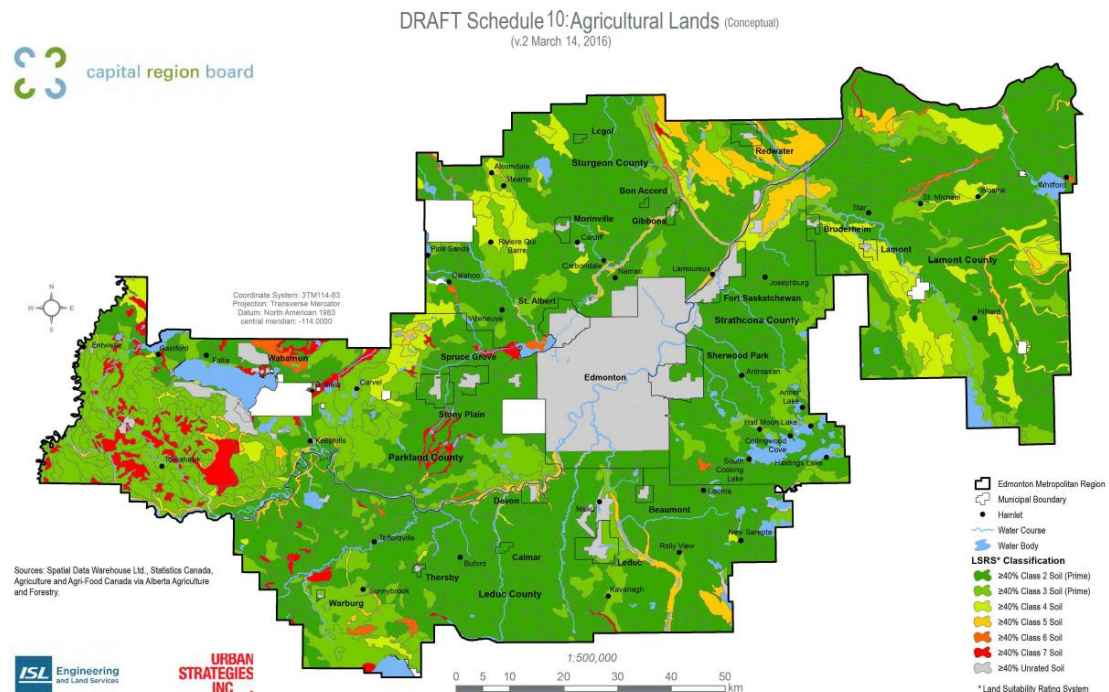
Work with municipalities and the Province on the creation and use of agriculture supportive land use planning and conservation tools to preserve, maintain and monitor the supply of prime agricultural lands in the region. Tools to be considered include, but may not be limited to:

- a. Regional Agriculture Master Plan;
- b. Capital Region Land Evaluation and Site Assessment (LESA) Program;
- c. Regional Agri-Food Diversification and Value Added Strategy;

- d. Agriculture Impact Assessment;
- e. Conservation Easements;
- f. Alternative Land Use Services (ALUS); and
- g. Capital Region Transfer of Development Credits Program.

The first draft of the update includes the following map Schedule 10: Agricultural Lands (Conceptual) as an interim step to use until LESA is complete.

Map A2.5 Agricultural Lands (CRB)



A second draft of the plan is anticipated soon.

A2.8 Parkland County Strategic Plan 2014-2018

The introduction of this document says ‘Parkland County is proud to be a forward-thinking rural community and committed to leading Alberta’s resurgence of rural living. For generations, people in our locale have invested in a legacy of agriculture and environmental stewardship.’

The Strategic Plan describes four-year commitments in pursuit of visionary goals in six areas: agriculture, community, economy, environment, governance, and infrastructure.

With respect to agriculture specifically, the Strategic Plan states:

Parkland County is a deeply rooted agricultural community. We are connected by our land and, by acting purposefully and deliberately, will lead a resurgence of modern rural living that is supported by, and benefits, local agri-business. We will invest in education, innovation and expanded operations and encourage partnerships that connect our local producers with viable markets—from local to global.

The four-year commitments to agriculture are to ‘assess the current state of agriculture to help identify and connect to viable and profitable markets into the future’ and ‘support initiatives that

provide a local food supply to the region.’ This is working towards the 20-year goal described as ‘Parkland County stewards a progressive and viable agri-business community.’

A2.9 Parkland County Strategic Plan 2016-2020

Parkland County updated its Strategic Plan in 2016. The plan identifies five strategic priority areas: agriculture, economic diversification, healthy communities, regional strategy, and environment.

With respect to agriculture, the plan states ‘Parkland County strives to be a vibrant agriculture and food community characterized by its diversity, creativity and entrepreneurship, focused on sustainability as well as new opportunities.’

Two strategic goals are identified: (1) engage with our agricultural community and post-secondary institutions to create opportunities for diversity, innovation and entrepreneurship; and (2) support the agricultural sector to create a strong, diverse and resilient industry.

A2.10 Parkland County Municipal Development Plan

The 1956 General Plan for the MD of Stony Plain (prepared by the Edmonton District Planning Commission) presents an interesting starting point from which to consider planning in Parkland County and how agriculture has fit into the mosaic of the county. It represents a relatively consistent trend to get where we are now.

The introduction to this General Plan states ‘to date this planning board has been mainly concerned with controlling the urban invasion of its territory in an orderly manner, that is, with the location and control of commercial development along highways, and of smallholding and summer cottage settlements. Planning for agricultural land has been negative and protective. A fence has been put up, but we have not yet stepped over the fence to plan for the orderly and economic development of the land within it.’

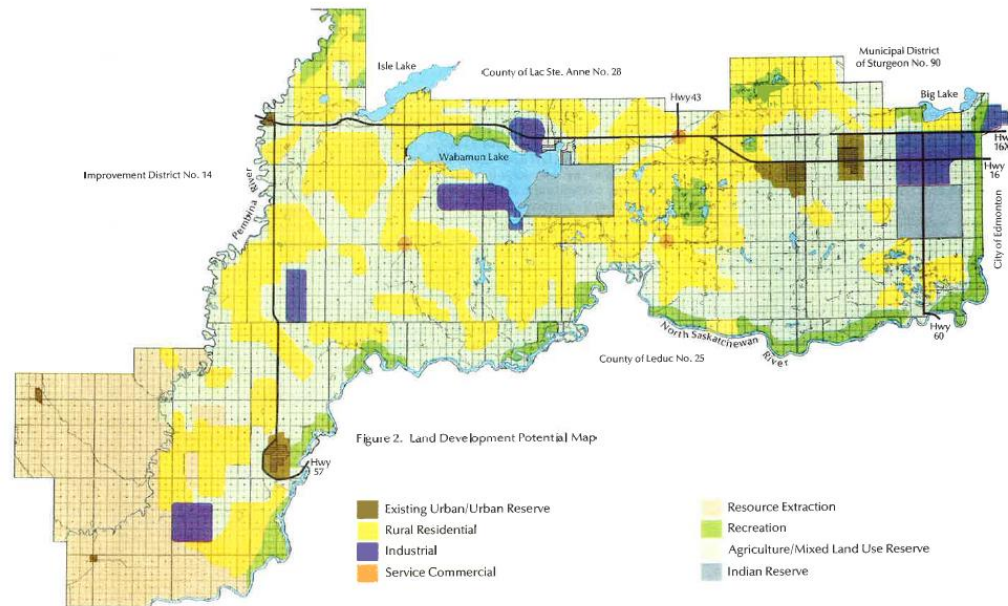
The resulting plan was based on a variety of factors, including soil type and quality that combined with topography greatly influenced the land use pattern and type of agriculture. The plan focused on the appropriate type of agriculture for different areas (mixed-grain, mixed-livestock, livestock-grazing, etc.). The population of the municipality was then about 8,300.

The plan acknowledged, correctly, that the metropolitan impact will create ‘an ever increasing demand for land’ for urban purposes. This included industrial development (starting in the area, such as Inland Cement and Calgary Power at Wabamun), small holdings (for small agricultural uses and country residential near Edmonton and in scenic areas), and highway commercial development. The plan includes the recommendation to ‘critically evaluate applications for non-agricultural development in the municipality—(e.g. industrial, highway commercial, institutional, etc.)—in relation to the Soil Rating map, for the purpose of discovering, before granting approval, whether the requirements of proposed developments can be met on land of lower productivity.’ The plan recommends zoning as ‘there is, in fact, no unlimited resource of productive farm land—no margin for waste.’

The **1978 General Municipal Plan** for Parkland County states that ‘it has been the policy of the County to welcome growth of all types.’ The development strategy acknowledged that ‘the demand for industrial sites, acreages, hobby farms, building lots, weekend retreats and lakeshore lots has grown rapidly to the point where these uses are competing for land with agriculture and wildlife... therefore, all development proposals must be carefully evaluated to ensure that they are beneficial... a balanced development strategy will ensure that, where feasible, the best agricultural lands will be protected.’ ‘Where feasible development should be encouraged to occur on lands of lower quality.’ This plan designated large areas for industrial expansion (Parkland County encourages the creation of major industrial parks) and very extensive areas designated as potential

for rural residential development, with agriculture, to some degree, being the left over land. Coal mining areas are designated.

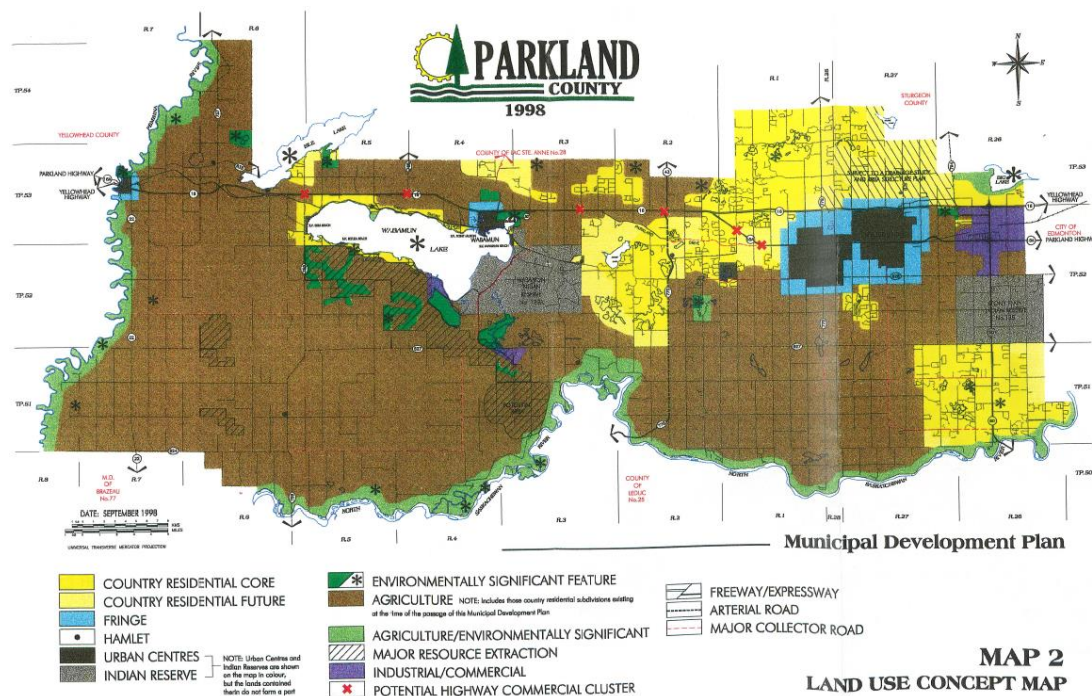
Map A2.6: Parkland County 1978 Plan



Agricultural policies of the 1978 plan called for the evaluation of other land uses on good agricultural land suitable for cereal or forage crops, buffers around hamlets and villages, allowing uses which support agriculture (seed sales, farm machinery repair), and limiting subdivision to one additional parcel for 'each farming unit,' allowing resource extraction and non-agricultural uses if no other alternative location is *practicable*. Country residential uses will be discouraged on lands that have agricultural value—should there be a question as to the value of agricultural land, the developer will be required to demonstrate that the development will not have direct or indirect impact on agricultural operations.

The **1998 General Municipal Plan** included the following strategy with respect to agriculture: 'Parkland County desires to maintain the significance of agriculture to the economy and way of life of Parkland County, and therefore encourages the enhancement of the viability of the agricultural industry through the conservation of agricultural land, especially productive farmlands and the diversification of the agricultural industry. Minimizing rural conflicts will be important through the suitable siting of intensive agricultural activities and the allocation of non-agricultural land uses.' However, this is to occur in a context that promotes both industrial and rural residential expansion.

Map A2.7: Parkland County 1998 Plan



The Land Use Concept provides for an agricultural area, the purpose of which is for extensive agricultural operations with minimal intrusions from non-agricultural activities while preventing the premature subdivision of agricultural lands but with a more restrictive approach to intensive livestock uses. Additional country residential subdivisions in designated agricultural areas will be permitted where an area structure plan provides for a transition of an area from agriculture to country residential. Extensive agriculture and horticultural uses are allowed in lands designated 'agriculture/environmentally significant.'

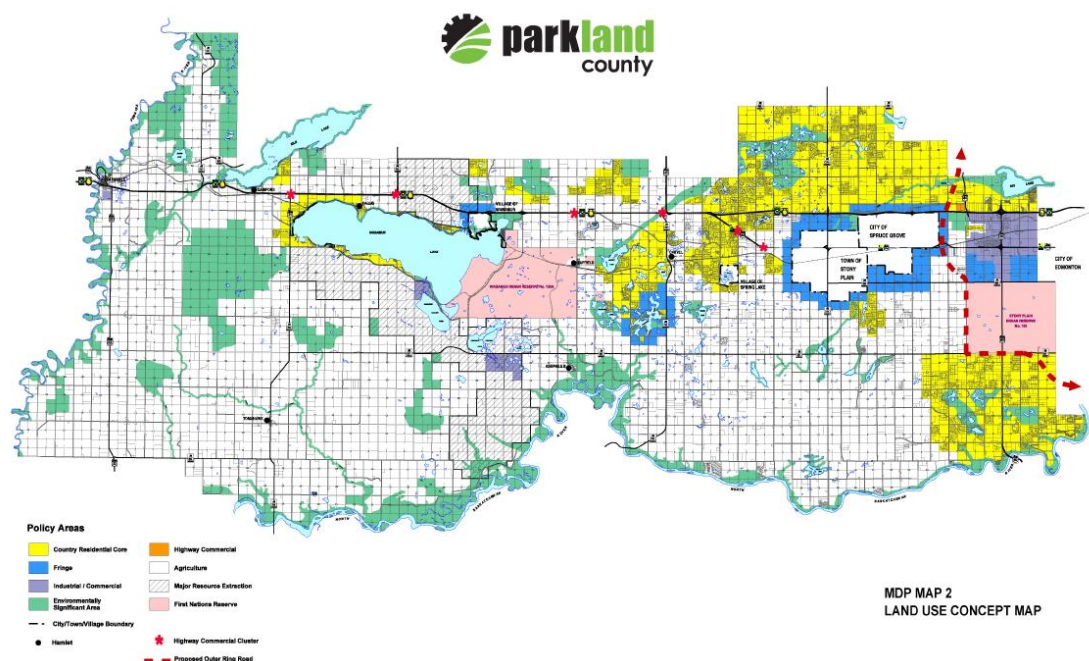
A country residential core area is designated, along with a 'country residential future' area—for development but to be staged later 'in order to delay intrusions into productive agricultural areas and the conversion of agricultural land to other uses.' The plan says these future lands may be studied to determine if some portions may revert to the agricultural designation.

The agricultural policies of the 1998 plan are to conserve agricultural land and encourage its appropriate use, unless it is designated for another use. Parkland County is to encourage a diversity of environmentally-compatible agriculture and that the land use bylaw will provide for a range of agriculture, associated agricultural subsidiary and complementary uses. It acknowledges that agricultural uses should not be restricted if they are in accordance with generally acceptable agricultural practices. Parkland County will seek to protect the viability of agricultural areas and conserve agricultural lands 'wherever possible' by directing non-agricultural uses to other areas, restricting subdivision and development that 'prematurely' fragments or diminishes agricultural land. However, Parkland County can approve non-agricultural uses on agricultural land if the benefits to Parkland County as a whole outweigh the benefits of the agricultural use, there is not a reasonably available non-agricultural site, and that the use would not unduly impact agricultural operations in the area.

The MDP policy is to allow the subdivision of a residential parcel from a quarter-section, the subdivision of a fragmented area, and additional dwellings where they are to be occupied by someone working in an agricultural pursuit.

The **2007 Municipal Development Plan** continues with some of the previous general policy trends and land use pattern such as continued support for country residential and industrial development but, significantly, includes a strategy that ‘allows for greater flexibility for subdivision in the Agricultural District and provision for small 40 acre agricultural holding parcels. While the MDP has a policy objective to ‘conserve agricultural lands for agriculture and related uses,’ the MDP now allows for the subdivision of each quarter section into four parcels—ranging from 4 40-acre parcels, to up to three 10-acre parcels and the remnant larger parcel. In addition, further multi-parcel residential subdivisions may be considered in the agricultural area within one mile of a similar use, within one mile of a paved road, provided it has a weighted Farmland Assessment Rating of 57% or less and is not in a fringe area or close to a confined feeding operation. The plan has a robust approach to the designation of environmental and fringe areas.

Map A2.8: Parkland County 2007 Plan



The 2015 Community Scan and Analysis report, as background to preparing a new plan, in its discussion of agricultural land supply, states:

There is a limited amount of CLI Class 1 and 2 soils in Parkland County, and much of the subject lands are located primarily in the eastern portion of the County, north and south of the boundaries of Stony Plain and Spruce Grove. There are also some CLI Class 1 and 2 soils west of Wabamun Lake.

In the County’s current MDP, there is a misalignment between the goal and associated objectives of Section 2 (Agricultural Lands). The goal identifies opportunities for non-agricultural uses within areas designated as Agriculture on Map 2 (Land Use Concept), yet the objectives speak to the conservation of agricultural lands and expansion of value-added agricultural uses.

The corresponding MDP policies direct the conditions for the subdivision of agricultural land for non-agricultural residential uses. Specifically, Policy 2.7 allows for the subdivision of three separate parcels in addition to the remnant for each quarter

section. This contributes to the loss in viability of the land for agricultural purposes, and the increase in value of the land due to land development speculation, resulting in the pricing out of agricultural uses from these areas. If the conservation of agricultural land is a priority for the County, revisiting this policy is necessary.

Policy 2.10 also encourages the consumption of lands designated as Agriculture for residential uses. It establishes that where multi-lot residential subdivisions have been approved, that these serve as a precedent when considering additional residential subdivisions. Even though the policy provides a threshold for soil quality when considering residential subdivisions, the policy does not result in the conservation of agricultural lands or support agricultural uses.

The Community Scan and Analysis report also makes a series of recommendations about agricultural land use planning, as follows:

- Consider adding new classifications so that the mining activity can be determined and differentiated.
- Consider redesignating those unabsorbed country residential lands of Class 1 and 2 soils back to agriculture.
- Consider amending the protection of agriculture lands to include Class 3 soils
- Consider reducing the number of residential parcels that can be subdivided out of a quarter section
- Convert its Digital FAR (Farmland Assessment Rating) into a GIS ready format.

The recommendations of this *Future of Agriculture* study are put forward to be seriously considered for inclusion in the preparation of the new Municipal Development plan now under preparation.

A2.11 Parkland County ASPs

Over the years, Parkland County has adopted several area structure plans that are consistent with the overall MDP policy directions are reflected in its existing and proposed future land use pattern.

The area structure plans do not cover all of Parkland County, but tend to be focused on areas of non-agricultural development. This includes primarily country residential (Glory Hills, Woodbend Graminia, Big Lake, Lake Isle, and Jackfish Lake), industrial (Acheson), and urban development (Entwistle).

Work was done previously to determine end use plans for the coal extraction areas (Highvale End Land Use ASP, Whitewood Future Land Use Study). With respect to the Whitewood area, the Environmental Conservation Master Plan (Phase 1 Background Technical Report) states *The Transalta Wabamun power plant at the Whitewood coal mine was fully retired on March 31, 2010, whereby the mine ceased coal processing... Reclamation has advanced progressively since 1962 and more than 95 per cent of the lease area has been reclaimed to a state equivalent or better than its original land use. The reclaimed land can support agriculture, woodlands, wildlife habitat and recreation but most of the land has been reclaimed for agricultural purposes or wildlife habitat.*

Highvale Mine, south of Wabamun Lake, is a TransAlta-owned surface coal mine. It is Canada's largest surface strip coal mine, covering more than 12,600 ha. TransAlta states, that since 1970, they have reclaimed 3,595 ac (1,455 ha) of the 14,495 (5,865 ha) of land that have been mined at Highvale to a state that is equivalent to or better than it was before our mining activities, or restore it for other uses. When complete, the reclaimed land supports a variety of land uses such as agriculture, woodlands, wildlife habitat, recreation and wetlands. Pit 9, the last to be done, is not scheduled to be fully mined and reclaimed until about 2060.

The Highvale Future Land Use Study (1997) states the goal to manage the study area in terms of sustainable land use, re-established drainage systems, transportation linkages, recreational

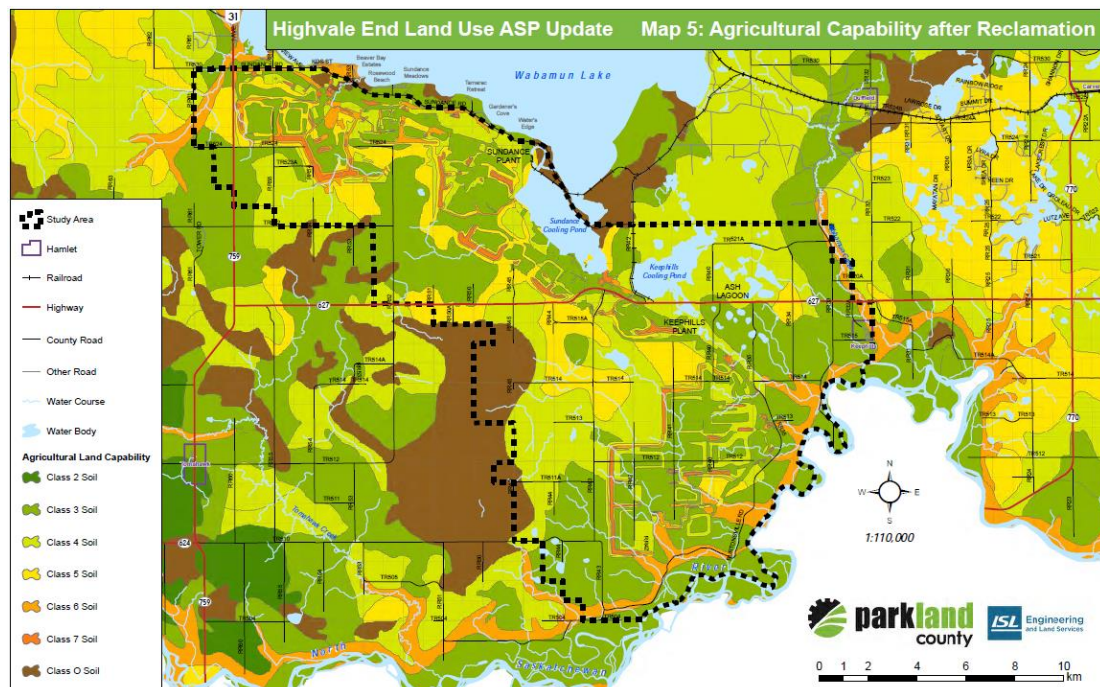
opportunities and subdivision of land. The plan states ‘while the overall end land use will in all probability be agriculture there are some opportunities that will allow other land uses to be established provided they meet the policies and development criteria established in this Area Structure Plan.’ Further, the study states ‘As most of the mined area will be subject to subsidence and re-contouring both as the land is reclaimed and as subsidence occurs over the next 20 to 30 years, it is proposed that reclaimed mine land be designated as an Agricultural Mixed Use District allowing a return to the agricultural activity.’ It is a policy to re-establish the original section and quarter section system of survey and subdivision within the area.

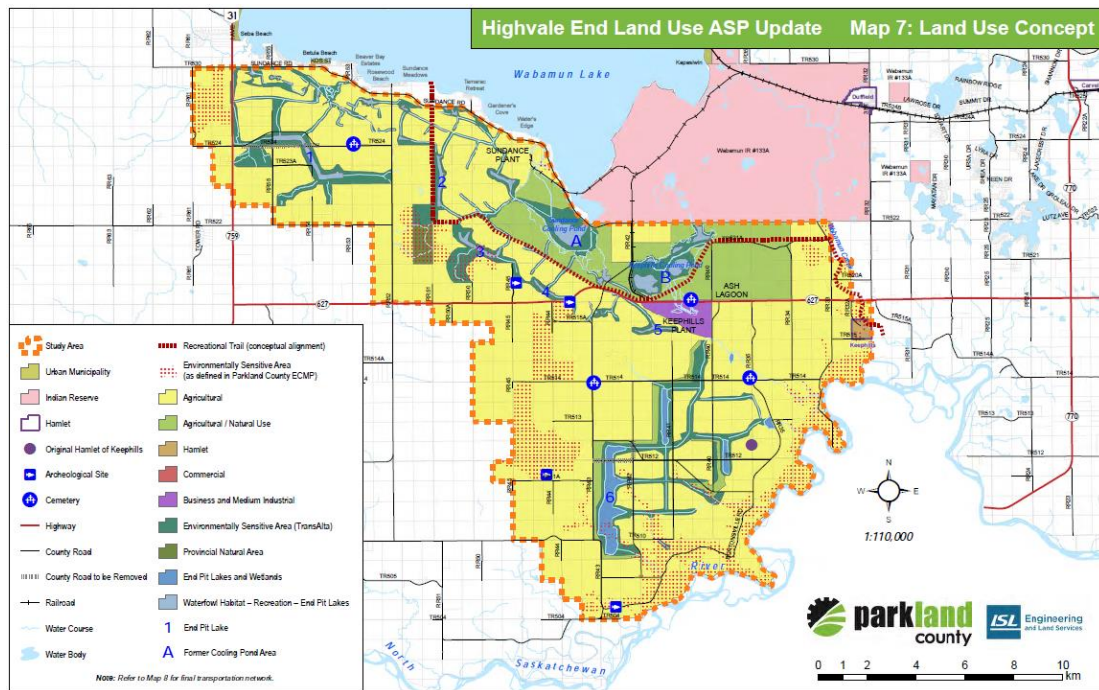
Parkland County has now prepared a draft new Highvale End Land Use Area Structure Plan. Due to the Government of Alberta’s provincial policy to phase out coal extraction by 2030, alternative planning and reclamation of the Highvale Mine may follow to meet this goal.

The purpose of the Highvale End Land Use ASP is to establish a framework for future land use planning for the area known as TransAlta’s Highvale Mine and surrounding lands, including the Hamlet of Keephills. The ASP provides a future land use concept for the area. The County will have jurisdiction over lands outside the Mine and Mine lands once a reclamation certificate is issued by the Alberta Energy Regulator (AER). Until this happens, the County cannot impose a timeline for reclamation or reclamation conditions. This is the responsibility of the AER.

However, The ASP preserves agricultural lands by designating lands with Canada Land Inventory (CLI) Class 1 to Class 4 agricultural capability for agricultural development and prohibiting country residential development. The following map shows agricultural capability proposed after reclamation and Map A2.10 shows the significant amount of land to be returned to agriculture in the long term.

Map A2.9: Highvale ASP Land Capability after Reclamation



Map A2.10: Highvale ASP Land Capability after Reclamation

A2.12 Employment and Industrial Strategy

The 2014 Employment and Industrial Strategy report makes several recommendations on industrial lands that may have some bearing on agricultural lands in Parkland County. The report states that, over the forecast period to 2044,

- Parkland County's industrial and employment lands are expected to accommodate 83% of total forecast employment growth, or 15,475 total jobs. Based on a review of market demand, an estimated 91% of that employment is expected to be accommodated in the Acheson area, with 6% and 1% accommodated in the Fifth Meridian and Entwistle areas respectively. An estimated 3% of total forecast employment will locate on industrial lands in the rural area.
- Based on the existing supply of developable vacant industrial land, Parkland County, as a whole, has an insufficient supply of industrial lands to meet long-term needs to 2044. Based on the land needs analysis, a minimum of 1,089 net acres (441 net hectares), 186 net acres (75 net hectares) and 19 net acres (8 net hectares) of additional vacant industrial land is required within Acheson, Fifth Meridian, and Entwistle, respectively, to accommodate forecast employment growth to 2044.
- The land needs analysis also identifies that there is demand for rural industrial land within the County totaling 130 net acres (53 net hectares) over the forecast period.
- Considering longer term vacancy adjustments and allowances for internal infrastructure (but not necessarily environmental take-outs), the estimate of land need rises to a minimum requirement of 1,977 gross acres (800 gross hectares) in the Acheson area, 338 gross acres (137 net hectares) in the Fifth Meridian area, 34 gross acres (14 gross hectares) in the Entwistle area, and 236 gross acres (96 gross hectares) in the rural area. The majority of additional demand is expected to be accommodated in reserve lands within the Acheson area. With a gross developable area of approximately 1,997 acres (808 gross hectares), Acheson will continue to play a key role in accommodating demand over the longer term. Outside of the Acheson area, the

municipality has strategic opportunities to accommodate additional employment and industrial lands in a number of other areas (e.g. Fifth Meridian, Entwistle, TransAlta lands, strategic rural transportation corridors), based on new policy or process approaches that build relationships to explore opportunities, or improve alignment of available lands with likely types of demand.

A2.13 Parkland County Land Use Bylaws

Up until its Land Use Bylaw in 1989, Parkland County had only interim development controls with minimal control over agricultural development. Development for agriculture, on parcels larger than 20 acres, was deemed approved unless it was within 125 feet of the centre line of a surveyed road.

The **1989 Land Use Bylaw** did not have a definition of ‘agriculture,’ but did have a definition of intensive livestock facility, which defined the minimum number of animals to be considered in either open feedlots or in confined buildings.

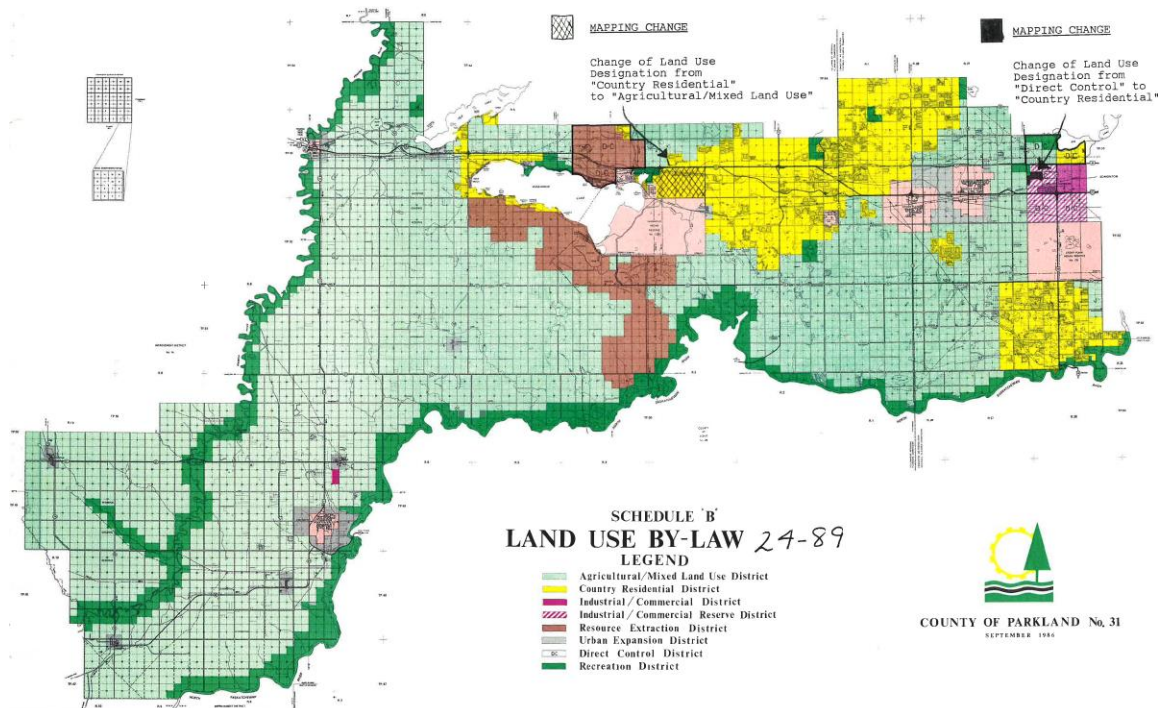
The Bylaw had an ‘Agricultural Mixed Land Use District.’ The primary purpose of it ‘is to permit farming and agricultural activities associated generally with the production of crops, livestock, dairy products and pastureland.’ It list permitted uses: cereal crop farming, forage crop farming, pasture and grazing, single family dwelling or mobile unit, and an apiary or intensive livestock facility where the lot is larger than 40 acres and hives are farther than 305 m from a multi-parcel subdivision. Permitted uses were classed as ‘deemed approvals.’ Discretionary uses included an extensive list of uses such as an abattoir, kennels, fur-bearing farm, commercial greenhouse, rabbit farm, some highway commercial uses in selected locations, golf courses, campgrounds, and mobile home parks. In addition, the Bylaw allows for a second dwelling unit on a parcel at least 32 ha provided it was to be occupied by a person occupied on the parcel full time for at least six months each year. Parcel sizes for discretionary uses were as required by the Municipal Planning Commission.

The Bylaw limited the ‘subdivision of better agricultural land, as defined in a Regional Plan affecting the land, shall be the maximum permissible in the said Regional Plan subject to the applicable provisions in the Subdivision Regulation. Subdivision of lands not defined as better agricultural land shall be at the discretion of Parkland County or in accordance with any Direct Control District or other statutory plan adopted for that area.’

The Bylaw also included a ‘Country Residential District.’ Primarily for residential uses, it also included discretionary approval for commercial greenhouses, tree farming, and market gardens, among other uses. The Bylaw also provided an ‘Urban Expansion District’ that had a limited range of uses, including cereal and forage crop farming. As well, the Bylaw had a range of commercial, industrial, and resource extraction districts.

By this time, the basics of Parkland County’s land use pattern was enshrined in the Land Use Bylaw—vast areas of agriculture, with specific areas for industrial at Acheson, the two major country residential areas, the environmentally sensitive areas along the rivers, and the resource extraction areas north and south of Wabamun Lake.

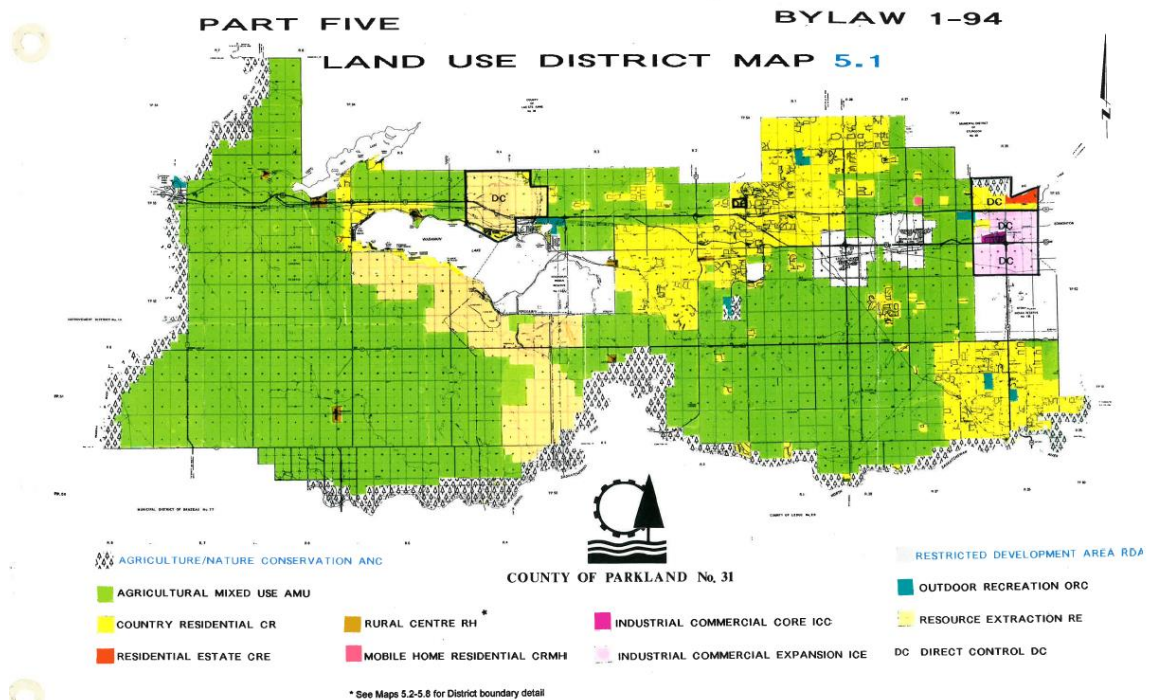
Map A2.11: Parkland County's 1989 Land Use Bylaw



The **1994 Land Use Bylaw** follows the same structure as its predecessor. It includes definitions for agricultural support services, small holdings agriculture (between 4 and 16 ha), and better agricultural land (as defined in the Regional Plans), extensive agriculture development, extensive livestock development, intensive agriculture use, intensive livestock development, etc. It also added in more regulations on animals, birds and livestock. Permitted and discretionary uses within the 'AMU-Agricultural Mixed Use District' were organized using the new definitions. A maximum of two 32 ha (80 ac) parcels may be created from a quarter section of better agricultural land and, on land not considered to be better agricultural land, four 16 ha (40 ac) parcels could be created. A maximum of one single residential parcel (between 1 ac and 3 ac) could be created from a quarter section of better agricultural land; two from a quarter of land not considered better agricultural land. The Municipal Planning Commission maintained discretion on parcel sizes for other uses. Lands districted for Country Residential retained permitted and discretionary agricultural uses. An additional country residential zone was included to allow a higher density of residential uses when it was at least partially serviced. The 'ANC-Agriculture/Nature Conservation District' was introduced to all compatible extensive agriculture and recreation uses while still protecting unique and sensitive environments—essentially the lands along the rivers.

The overall zoning pattern remained basically the same as the previous Bylaw:

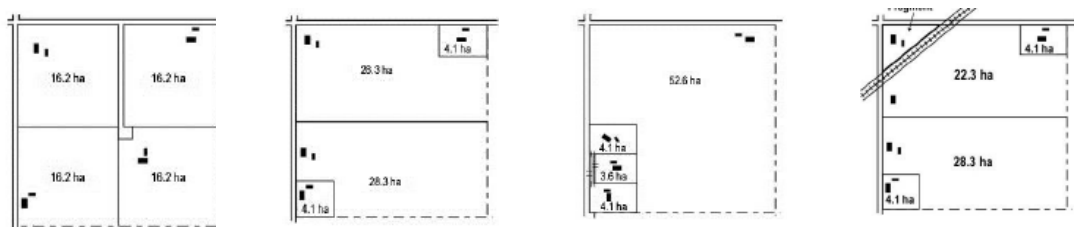
Map A2.12: Parkland County's 1994 Land Use Bylaw



The **2000 Land Use Bylaw** made changes such as the introduction of the 'AGR-Agriculture Restricted District' which has only relatively minor differences from the 'AGG-Agricultural General District.' Parkland County continues its policy of allowing some discretionary uses to specific land parcels only within the overall district.

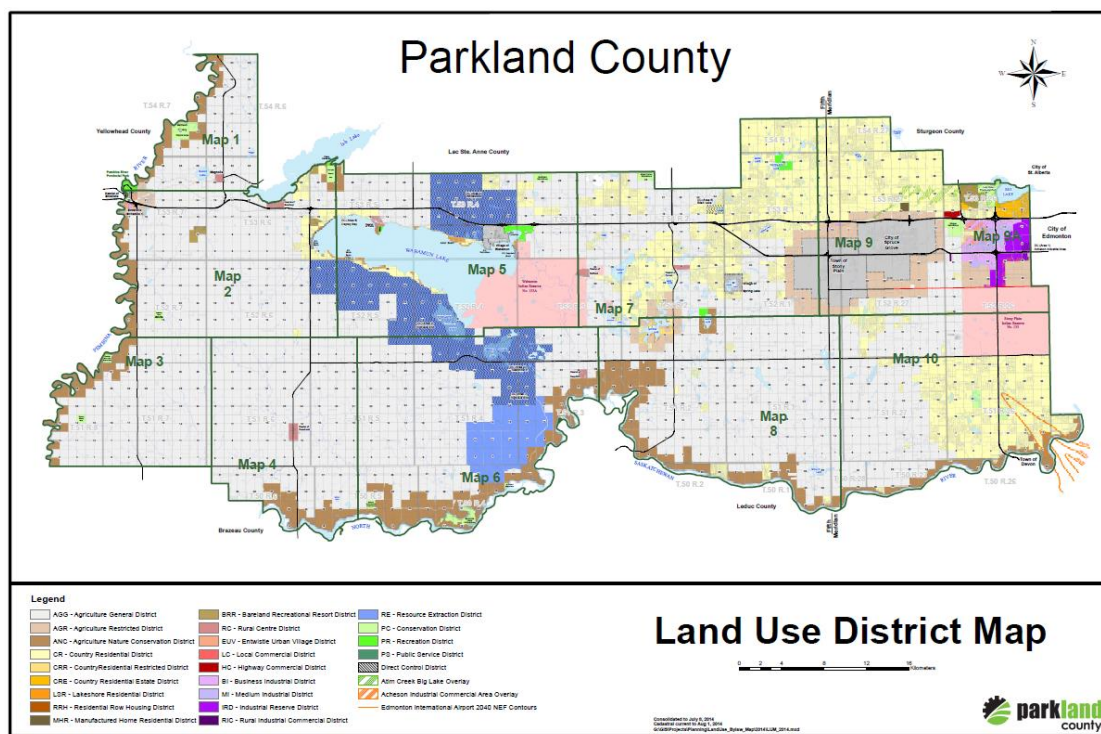
The **2009 Land Use Bylaw** does not introduce much significant change except for implementing the MDP policy to increase the number of lots that can be created in the AGG district. Essentially, this doubles the amount of subdivision that can occur in the agricultural areas of Parkland County. This allows twice the number of lots than could be created in agricultural areas, for example, as is the case in Strathcona County.

There can now be a maximum of three new subdivided parcels created, in addition to the remnant parcel (for a total of 4 titled areas), in a variety of formats: 4 40-acre parcels for extensive agriculture and extensive livestock; two residential parcels, with each being created out of an 80 acre parcel; or three new residential parcels of between 2.0 ac and 10 ac where at least two share a common approach unto a municipal road; as well as a parcel fragmented from the parent parcel by a creek or highway, etc. These subdivision patterns are illustrated in the following sketches from the Land Use Bylaw.



It should be noted that this level of subdivision is not provided for in the ANC (primarily adjacent to the rivers) and AGR (primarily around the urban communities and Acheson) districts that allow only one additional residential parcel per quarter section, otherwise to be retained in quarter sections.

Map A2.13: Parkland County's Current Land Use Bylaw



According to the 2015 Community Scan and Analysis Report, 62.1% of Parkland County is zoned Agriculture General, 3.1% is Agriculture Restricted, and 6.9% is Agriculture/Nature Conservation. Of the lands zoned for country residential, there are significant undeveloped lands that create a long term inventory for this type of use.

Parkland County Council passed a moratorium on redistricting lands from AGG (Agricultural General Lands) to CR (Country Residential). This will be reconsidered in conjunction with preparation of the new CSDP.

A2.14 Land Use Conversion and Subdivision

The Community Scan and Analysis Report stated, 'To date, only 4% of the County's Suitable Agricultural Land has been consumed by non-agricultural development.' Of the 4% consumed, 3.3% was for residential. However, it is important to note that the Community Scan and Analysis Report only included Classes 1 and 2, but **not** Class 3, as lands being Suitable Agricultural Land. The rationale put forward is that 'Parkland County's current MDP has an agricultural policy that states multi-lot country residential subdivisions may occur on lands with a FAR (Farmland Assessment Rating) of 57% or less. This rating translates to Class 1 and Class 2 within the CLI agricultural soil suitability classification system.'

Further, it states: 'An additional 7.3% of the County's Suitable Agricultural Land is threatened for conversion to non-agricultural development as a result of past planning decisions that gave these land owners development rights for uses other than agricultural activities.' The lands designated for non-residential which are not developed, accounts for 7.2%. In other words, the threat for agriculture is almost entirely from country residential, with just 0.1% designated for industrial use.

Table A2.1 of the Community Scan and Analysis Report documents the creation of new parcels by year by subdivision, their total area by year, and the average parcel size per year. This table is below.

Table A2.1: Land Absorption through Plan Registration by Year (with numbers of subdivision column added)

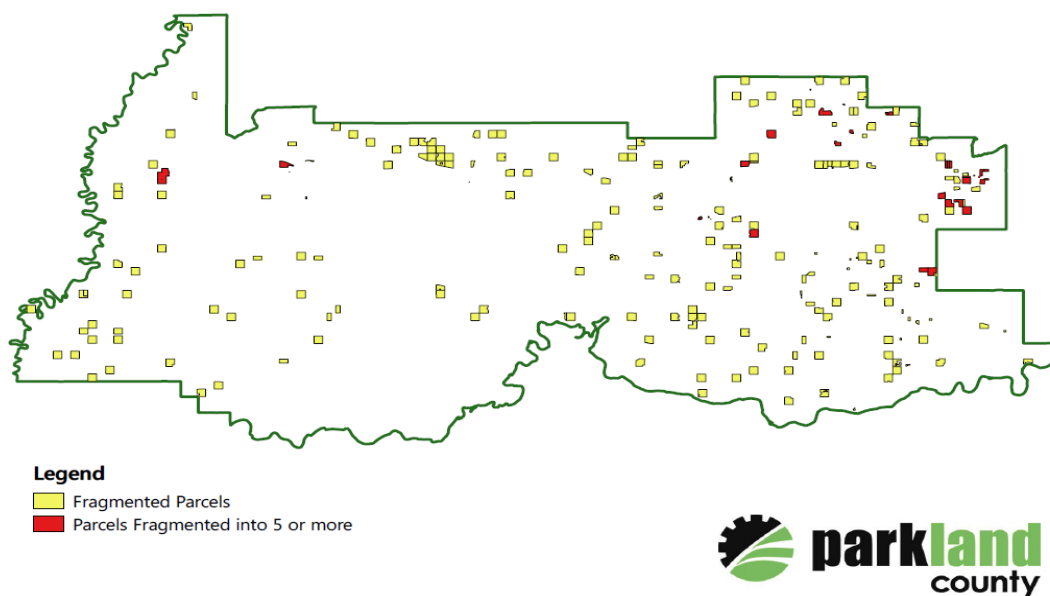
Year of Plan Registration	Subdivisions	Total Parcels	Total Area (ha)	Average Area (ha)
pre-1975		4,066	8,346.1	2.1
1975		444	1,164.4	2.6
1976		939	1,491.3	1.6
1977		765	1,629.8	2.1
1978		1,153	2,823.0	2.4
1979		670	1,060.2	1.6
1980		996	1,563.5	1.6
1981		571	749.0	1.3
1982		275	527.8	1.9
1983		121	296.1	2.4
1984		24	127.7	5.3
1985		18	141.3	7.9
1986		25	76.9	3.1
1987		16	124.6	7.8
1988		28	121.9	4.4
1989		39	250.3	6.4
1990		70	319.6	4.6
1991		63	446.5	7.1
1992		98	365.7	3.7
1993		62	513.6	8.3
1994		63	349.8	5.6
1995		183	945.3	5.2
1996		74	486.4	6.6
1997		116	307.0	2.6
1998		190	696.9	3.7
1999		157	451.9	2.9
2000	60	115	471.2	4.1
2001	69	212	691.1	3.3
2002	74	150	493.6	3.3
2003	86	342	520.0	1.5
2004	69	259	363.2	1.4
2005	78	171	471.2	2.8
2006	115	310	715.0	2.3
2007	125	218	623.2	2.9
2008	125	199	816.6	4.1

Year of Plan Registration	Subdivisions	Total Parcels	Total Area (ha)	Average Area (ha)
2009	73	300	1,220.7	4.1
2010	75	211	735.6	3.5
2011	56	393	1,054.3	2.7
2012	61	176	1,056.2	6.0
Total 1975 to 2012		10,216	26,262.4	2.6
Annual Average		269	691.1	2.6
2013		89	480.4	5.4

Before 2007, an owner could only take one parcel out of a quarter-section. After 2007, this was increased to three parcels (in addition to the remnant, marking for a total of four parcels per quarter section). It has been estimated by Parkland County that approximately 75% of the subdivisions in a year are AG zoned (with a combination of one parcel out, two-three parcels out, 80 splits or any combination).

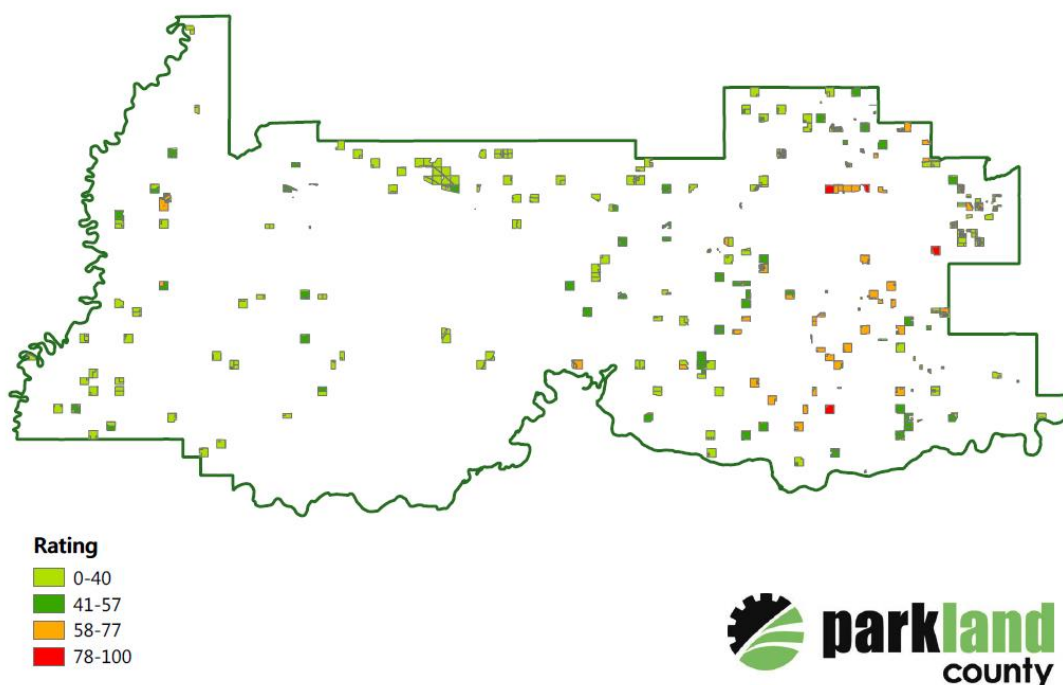
Map A2.14 shows all Parkland County highlights those quarter sections where subdivisions between the years of 2012 and 2015. These are further segmented into two categories: parcels fragmented into 4 subdivisions or less; and parcel fragmented into 5 subdivisions or more. There tends to be a higher degree of subdivision, particularly into more lots, in the eastern portion of Parkland County.

Map A2.14: Parcel Fragmentation 2012-2015



Map A2.15 shows the same subdivision parcels as in Map A2.12, but it is colour coded by FAR (Farmland Assessment Rating). This shows that a lot of the subdivision is occurring on better land both north and south of Stony Plain/Spruce Grove.

Map A2.15: Parcel Fragmentation 2012-2015, By FAR



A2.15 Parkland County Agricultural Governance

Parkland County is empowered by Alberta legislation to exercise the typical powers of municipalities such as preparing and adopting statutory plans and bylaws. With respect to its plans, Parkland County's plans must be consistent with the Capital Region Board's land use plan.

Under the provision of the Agricultural Service Board Act, Section 8(1), Parkland County Council has appointed an advisory committee with respect to any matter related to agriculture. The Agricultural and Rural Life Advisory Committee appointed under this section shall act in an advisory capacity to Parkland County's Agricultural Service Board. The Committee shall consist of one resident from each of the electoral divisions as well as up to two public members-at-large that may include youth members who shall be appointed by resolution of Council, along with the Chairperson and Vice-Chairperson of the Agricultural Service Board or his/her designate.

The Committee is to provide advice on issues and concerns arising from existing or proposed County agricultural and rural programs and policies; rural and agricultural development; implementation of Provincial and Federal legislation, policies, and guidelines related to the agricultural industry; mediate complaints related to agricultural practices.

Parkland County Council acts as the Agricultural Services Board.

The Alternative Land Use Services Partnership Advisory Committee serves as an advisory committee to the Mayor and Council. It is to provide advice and community input into the decision-making process that shapes how alternative land use services are delivered in Parkland County. The ALUS program is an incentive based program aimed at helping to assist farmers and landowners protect

environmentally sensitive land to allow the benefits of ecological services to be realized. It is aimed at programs like riparian enhancements, wetland restoration/ wildlife friendly fences, etc.

Parkland County has a Municipal Planning Commission that is to advise and assist the Council with regards to planning and development matters within Parkland County, act as the Development Authority pursuant to some provisions of the Land Use Bylaw, and act as the Subdivision Authority pursuant to the provisions of the Land Use Bylaw.

A2.16 Land Ownership

Outside of the Indian Reserves (IRs), Acheson, and the country residential areas, most land remains in a quarter section format, with a moderate amount of land consolidation. There are some large agriculture operations, such as the Tomahawk Cattle Ranch Ltd. The Province is a major landowner, particularly the large Jack Pine Provincial Grazing Reserve, and various parks, natural areas, and reserves. TransAlta has very extensive holdings north and south of Lake Wabamun related to its power plants and the former and current coal extraction areas. Parkland County also owns land in various locations, often as wildlife habitat.

A2.17 Land Use Structure

The land use structure of municipalities reflect a variety of influences from topography and soil types to planning policies, transportation and servicing systems, ownership and jurisdictional influences. Parkland County's pattern, both proposed and existing, while relatively complex, can be summarized into the following key components:

- It is primarily agriculture, except for areas developed or proposed for other uses.
- There are environmentally sensitive areas along the Pembina and North Saskatchewan Rivers and scattered throughout Parkland County based on localized physical features.
- There are two Indian Reserves—Stony Plain IR in the east and Wabamun IR at the east end of Wabamun Lake.
- There are four separate urban municipalities within the perimeter of Parkland County: the City of Spruce Grove, the Town of Stony Plain, the Village of Wabamun, and the Village of Spring Lake. There are also some smaller communities (hamlets): Entwistle, Tomahawk, Keepphills, Fallis, Gainford, and Duffield. There are five summer villages at Lake Wabamun: Point Alison, Lakeview, Kapasiwin Beach, Seba Beach, and Betula Beach.
- There are two major areas of country residential development—the area south of the Stony Plain Indian Reserve and the area north of Highway 16 and west of the Town of Stony Plain.
- Industrial development is primarily in Acheson, adjacent to the City of Edmonton between the Stony Plain Indian Reserve and Highway 16.
- There has been, and will be more, resource extraction around Wabamun Lake.

A2.18 Development Pressures

The Environmental Conservation Master Plan (Phase 1 Background Technical Report) has a succinct description of development pressures facing Parkland County. It states:

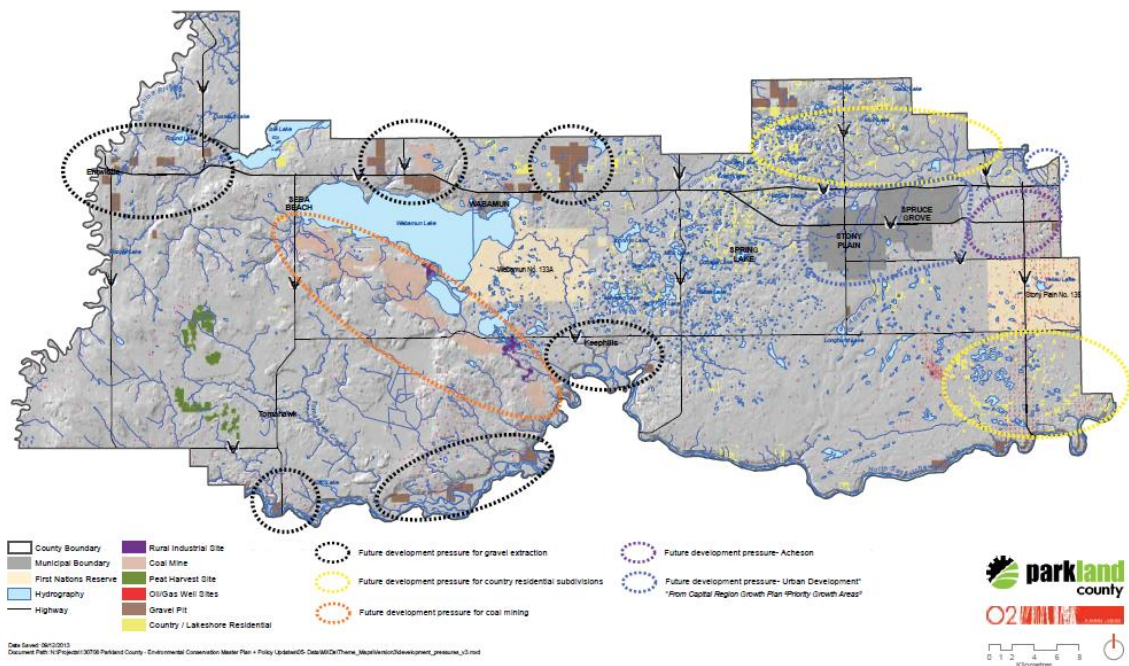
There are a variety of existing and future development pressures facing Parkland County. Population within the County proper is approximately 30,600 people, and has been growing steadily, with a 4.6% growth rate observed between 2006 and 2011 (Statistics Canada, 2011). According to recent population numbers approved by the Capital Region Board (2013), the County is projected to grow to 42,700 residents (low case scenario) to upwards of 50,000 (high case scenario) by 2044 (Capital Region Board, 2013).

In addition, urban municipalities embedded within Parkland County are experiencing extremely high growth rates, with population increases of 22% in the Town of Stony Plain and 34% in the City of Spruce Grove over 2006- 2011. Population growth drives development pressures tied to the balance of land uses within the County. Map 4: Development Pressures highlights specific areas of the County targeted for certain key development pressures. The key development pressures identified within Parkland County include:

- The Acheson Industrial Area
- Country residential and lakeshore developments
- Sand and Gravel extraction
- Peat harvesting
- Coal mines and power plants (outside the jurisdiction of Parkland County)
- Oil and gas developments
- Large livestock operations

These pressures are summarized on the following diagram from the Environmental Conservation Master Plan (Phase 1 Background Technical Report).

Map A2.16: Development Pressures in Parkland County



While this list above was identified from the perspective of pressure on the natural environment, they too have impacts on agriculture. The overall level of development from continuing country residential development (including the four parcels out policy and potential redistricting of lands with FAR less than 57% as per policy 2.10 of the MDP) creates more difficulty for agriculture. This concern is across Parkland County, although more intense in the eastern part of Parkland County closer to Edmonton/Spruce Grove/Stony Plain. Although several farms continue to operate in and around this area, the large areas of country residential in the eastern part of Parkland County, for all intents and purpose, spell the end of commercial farming there. The general message from farmers in the early stages of the consultation process is 'farming has a limited future.' Farmers are of two minds—they like the option as a means to generate dollars, but hate the increasing conflict with non-ag neighbours, traffic, vandalism etc.

There are significant conflicts between farmers and the urban industrial areas: Acheson in the east; in the areas of Spruce Grove and Stony Plain. The biggest issue is moving equipment. As farms grow in size, so does the need to move large equipment. This is becoming increasingly hazardous in these areas (people have no patience!!!). The consultation process revealed that farmers on or near a major highway are having more and more difficulty moving equipment.

There are many questions about the future of the mined/Transalta lands—large areas that are slow to be reclaimed, and some not to be reclaimed until 2060. Currently, there are complaints that they are large scale weed generators. And, there is the longer term question of eventual land use and how agriculture will be accommodated on these lands.

Appendix 3

Appendix 3: Stakeholder Input

A3.1 Introduction

This section presents the detailed input provided over the course of the consultation process that included personal interviews, focus groups and public meetings. In total we received input from approximately 150 individuals.

A3.2 The One-on-One Interviews

We interviewed 20 individuals representing the agriculture and food sector in Parkland County:

One-on-One Interviews

1. Duncan Martin, Parkland County
2. Gabriel Clark, Parkland County
3. Andy Haarsma, Crop Producer – canola, cereals
4. Allan and Kevin Shenfield, Dairy Producer
5. Gord Wilson, Acreage Owner, Horse Owner, former President of Canadian Thoroughbred Society, former President of Northlands
6. Ken Lewis, Lewis Farms – crop and livestock
7. Keith and Kevin Porter, Porter Farms – crops and livestock
8. Mark Cardinal, Agriculture Manager, Parkland County
9. Dave Haarsma, Wedgewood Farms (potatoes)
10. Pat Brennan, Former Councillor, Former Chair of Horse Race Alberta
11. Carla Rhyant, Rhyant Rock Farms and Executive Director of the West Central Forage Association. Also sheep producer
12. Gerry Taillieu, Tomahawk Ranch
13. Dwight Lutz, Crop Producer
14. Scott Jespersen, Crop Producer
15. Dave Schoor, ISL
16. Tom Kurlovich, Viterra
17. Margurite Thiessen, Alberta Agriculture & Forestry
18. Vanessa Heit, Parkland County
19. Tom Keop/Scott Kovatch, Parkland County
20. Bill Leonard, National Capital Commission
21. Stan Topola, Agriterra
22. Spruce Grove Farmers Market – site visit and informal conversations with several vendors
23. Stony Plain Farmers Market – site visit and informal conversations with several vendors.

Overall the above list of individuals comprised a mix of producers, Parkland County staff, agribusiness personal and other individuals working in or very familiar with the sector.

All the interviews were done in person. The interviews were conducted in a structured manner but flexible enough to allow subjects of particular interest or relevance to the interview to be discussed in more detail. Generally speaking, our lines of inquiry fell into six main areas:

1. What is the current state of agriculture in Parkland County?
2. What do you see as opportunities that are of interest or unique to Parkland County?
3. What are the constraints or issues facing agriculture in Parkland County?
4. What does the ‘future of agriculture’ look to you?
5. What are some of the issues or questions that need to be considered?

6. What other comments or suggestions do you have specific to agriculture in Parkland County or to the Council?

With respect to these questions/lines of inquiries, we present a sampling of the quotations provided by the interviewees. Given the consistency of the remarks within each of the lines of inquiry, it is our opinion that the views reflected by these quotations are indeed representative of the larger populations within the industry and involved in the Parkland County agri-food sector.

State of Agriculture in Parkland County

- *In the past agriculture was everywhere in Parkland County. Now we have a lot of subdivisions.*
- *Farming has changed—in the past Moms & Dads would be working at home on the farm—this is not the case anymore. You either have large scale farms or small specialty operations. And the farmers are getting older.*
- *Agriculture is a hidden gem in this County—the productive capacity is very high. There are great soils in the eastern part of Parkland County—opportunities to diversify with specialty crops.*
- *Agriculture—no one knows what it is! No one knows anything about agriculture.*
- *I don't think agriculture is respected within Parkland County. The top priorities seem to be power generation and acreage development. Agriculture comes in as number 3.*
- *Agriculture for Council is down the list: the first priority is commercial development—Acheson; then acreages and residential development; followed by agriculture.*
- *Too many subdivided quarters—I would rather see one quarter divided 16 ways (each with 10 acres), than four quarters with 4 parcels each. We need to limit where subdivisions are located—can we look at transferring development rights to concentrate development?*
- *Parkland County has had successful cattle operations—there is a good foundation here but with the current drought, numbers may drop further.*
- *The country residential neighbours see us as a 'Howdy Doody Ranch! We don't get any respect.' (spoken by a highly respected and long established dairy farmer).*
- *The Country Residential area is large—this has taken some agricultural land out of play including grazing areas that could be pastured.*
- *Farming close to city is a problem—moving equipment; traffic; people have no patience. It is a like farming in no-man's land—no one makes a commitment.*
- *Too much good land is being developed.*
- *Agriculture is very significant in Parkland County—full of cattle, crops, potatoes. But it is just assumed!*
- *Parkland County has some of the more progressive producers in the region—a strong interest in environmental stewardship. It has a large area of good soils—mostly east of Highway 770.*
- *There are lots of horses here—we are so close to the City. Also lots of acreages with 4 or 5 horses—it's a quiet place.*
- *There are no real obstacles to farm in Parkland County but there is nothing set up for innovation or advancement either. It is very status quo or laissez faire on the part of Parkland County.*
- *I don't see Parkland County giving agriculture much of a priority. The tax dollars from agriculture is small—their focus is on industry and residential growth.*
- *The four parcels out is changing west Parkland County—we're seeing more people but not farmers.*
- *In the eastern part of Parkland County, we are getting more complaints about dust.*
- *More complaints.... dust manure, smells.*
- *I see a growing population, while the farmers get bigger and the number of farmers decline. Younger people don't want to farm.*

- Farmers did not want subdivisions until they want subdivisions. Now more people on gravel roads—they want paved roads. More traffic, more complaints.
- The future of agriculture??? It's too late—this study should have been done years ago. There are too many subdivisions—it is difficult to farm between the subdivisions. And Parkland County does not care—they just want tax money from lots and subdivisions.
- In 2001 I had a strong pro-farming/save the farm viewpoint. Now I don't see a future.
- Farming in Parkland County—we are endangered species.
- The size of farms has really changed. Every year the olds guys are leaving and the young guys who are left get bigger and bigger. Now 10,000 acres is not a big deal. Family farms are being incorporated and becoming much more business-like. Also their marketing is much more advanced and much more informed than ever.
- Farming in Parkland County is following the general trends—fewer; bigger; more direct seeding; a shift from beef to grain farming in the west part of Parkland County.
- Parkland County has more small farms in the west. But overall, farms are getting bigger—you see fewer but larger farms. And small independent dealers can't survive. Not long ago, a combine cost \$100,000—now it costs \$400,000.

Opportunities For or In Parkland County

- Parkland County is a good crop producing area—it matches any other county in the region. Also very good for cow-calf and grazing.
- There is now recognition that agriculture is a contributor to the environmental goods & services. There are two programs provided by ALUS that support these both financially and with information.
- Parkland County is well suited for cattle production in the west; crops in the east. Also there are opportunities in eco-tourism – the river is a jewel plus Stony Plain has great streetscapes and a great place to just slow down.
- The grey wooded soils are ideal for grazing and cattle. There is a need to work with Trans Alta to develop pasture on the reclaimed areas – this requires fencing. But they seem to be very slow.
- Commodity prices are good – people can make money and there are good hedging tools that can be used now.
- We need to leave agricultural land as agricultural land!
- Whole Foods is coming to Edmonton – they will be looking for local organic suppliers.
- There is a place for horse based tourism – people who want to have a 'horse' experience without having to own one.
- There are opportunities to deliver programs or support farmer member organizations such as the West Central Forage Association.
- There is a lot wasted or underused land because of the power plants. Is there a way of working with Trans Alta? Could those sites be a place for greenhouses using the waste heat?
- We could develop areas for people to ride horses – from 199 St. to the Devon Bridge along the river. This would attract a lot of people.
- We could have lots of gardens to supply Edmonton. We tried a garden but no more – we were too busy.
- Parkland County should focus on increasing the awareness and the importance of agriculture. Get people to understand what farmers are doing? Can this help with the road rage—I don't know?
- With the power plants and the waste heat, why not a greenhouse industry?
- People like the idea of Farmers' Markets. But how much are they willing to pay? And how much are they willing to go out of there way?

- Are there opportunities to attract value added processing at Acheson? Parkland Packers has shut down, is there an opportunity to restart this?
- Parkland County could support more agricultural research—like some counties in NE Alberta.
- With proper management, Parkland County could support a lot more beef cows and calves.
- Education regarding land management is key.
- There are a lot of opportunities for cattle – ideal grazing everywhere in the west. The eastern part of Parkland County is well suited for horticulture and grains.
- The horse industry is real tough industry – hard to make money. We are not like Calgary with lots of high paid executives looking to spend their money.
- Perhaps the Alberta Communities Co-operative Association could find a solution for Parkland Packers.
- There are many U-Pick and berry operations in Parkland County—perhaps the idea of a Parkland County Food Festival combined with an agri-tour.

Challenges Facing Farmers and/or Agriculture in Parkland County

- Land is a problem. The four parcels policy drives up the price. Everyone's price expectations including in the west has gone up making it difficult to afford land for farming. The current policy is driving out the agricultural community – very few original land owners/farmers are left.
- Any changes in land use policy will be a real problem. A lot of farmers are looking at their land and the ability to sub-divide as their retirement package.
- Most farmers like the four parcels out policy – it gives them a chance to get some money out of their operation.
- A lot of farmland is being lost. But the current subdivision policy is an incentive that farmers can't resist. And you lose farmers. Every time a farmer goes, we lose a customer.
- It is becoming more difficult for farmers to grow – those who want to go from 2,000 acres to 4,000 or 8,000 are having problems finding the land base.
- The more residents – the more conflicts! This is a result of the four parcel policy. Plus a lot more quads, motorbikes and vandalism.
- Land fractioning is a constraint. In my area (south east), almost all the quarters are split. Acreages are too big to mow (with a lawn mower) and too small to farm.
- We need to make sure farming is worthwhile – namely people able to make a living.
- Development and parcelling is a concern – it is reducing the local agriculture base. There are also issues with access from roads into fields. (Spoken by a grain/oilseed buyer).
- Farmers and city folk/country residents are in two different worlds. The urban world does not understand farming – so many misconceptions and misinformation like the fear of GMO's.
- Overall there is a need for succession planning (a lot of older farmers with no one following them); lack of local processing – with Parkland Packers closing; and very little value added activity.
- The thinking within Parkland County agriculture department is very old school – only focused on large scale 'traditional' agriculture – mostly beef and canola. But we have a million people nearby! And a lot of high quality land in the eastern part of the City that could be used to develop a Farm to Plate program.
- A lot of horse owner/operators don't qualify for any programs because they don't meet the minimum size criteria (over \$10,000 in annual farm receipts).
- We have an issue of weeds and invasive species – weeds as a result of the mined areas and weeds brought in by construction equipment.
- The four parcels out policy is the biggest issue. And traffic is an issue – I get the finger waved at me quite regularly. I do not feel respected.

- The four parcel policy has totally increased the value of the land – for pure farmers, this is a huge disadvantage. For those who are not pure farmers – this is a huge advantage. Also great for those who know how and want to do this. I don't want to).
- There is no voice for agriculture in Parkland County. I am not aware of the Rural Advisory Committee and what they do.
- The only voice is the Advisory Committee to the Agriculture Services Board. And they have trouble filling these positions. Overall I would say that no-one on Council really knows agriculture.
- The price of land is \$6,000 per acre – you can't grow barley on that!
- Agriculture has been forgotten.
- We farm close to Spruce Grove – they are brutal when it comes to weed control (i.e. the lack of weed control).
- Growing potatoes is intensive agriculture – we have more and more problems with traffic, spraying, public concerns etc.
- ATV's are a real nuisance – people running around our fields cause a lot of damage.
- Life on acreage is not the same as living down town. They are not living next to a 7-11. People moving out here don't seem to understand that. Education and awareness is key!
- Do farmers speak with forked tongues when it comes to land and subdivisions? Absolutely!!
- Trans Alta lets the weeds build up. Also they let their lands be overgrazed. This land needs to be better cared for.
- Lot of issues resulting from the encroachment of subdivisions – dust, complaints about spraying, traffic, combines at night, road bans....etc.
- Access to good land is key. This can be a challenge with less farmland available (spoken by a farmer who rents land and has a required rotation program).
- The power/mining companies are very unilateral with their decision making. Their staff keeps changing; farmers have a hard time dealing with them or securing long term leases. Also water could be a big problem. And the weeds are horribly invasive.
- The mine is a community killer. It is also so slow to reclaim land. Their rental policies seem uncertain and transitory – you get land for a year and then someone else gets it. These lands have also become a massive seed bank for weeds.

The Future of Agriculture: What will it look like?

- In the future, I would like to see what is in place today—commercial farms, maybe more smaller specialized farms and more agri-tourism like the Corn Maize.
- The trends will continue—fewer, bigger, more automated, bigger equipment. The size of the equipment and what can be done without the operator is mind boggling.
- We could see more local food producers but this will need irrigation and the infrastructure. But it is very competitive and not easy
- Equestrian will be there; potatoes will do well. Cattle will do well but be in fewer hands. More land will be owned by syndicates.
- You are going to see a lot fewer farmers—a lot more precision farming using automation and robotics.
- We would like to see our dairy farm continue—keep the operation going for the next generations.
- Agriculture into the future is going to be more and more difficult. In 50 to 100 years all this land will be absorbed for development. (spoken by a farmer in the eastern part of Parkland County).
- More produce? Don't know—it is hard for locals to compete since it so cheap from Mexico and California due to low wages, the labour required etc. You can't find that here.

- People want (and like) Farmers Markets. But there are lots of seasonal limitations and very competitive retailers.
- I don't see much of a future—that's why I sold my dairy.
- Overall agriculture as an industry is strong—not like the oil business which goes up and down. Is there an opportunity to attract an oil seed crushing plant?
- See more larger farms. But some small speciality farms—they will be one-offs.

Questions/Issues to be asked or considered

- We used to have distinct communities (Spruce Grove and Stony Plain). Now they are almost all together. And the only place they can grow is to the south where the best soils are.
- What defines rural? Some say Parkland County is rural. Others say it is not rural.
- Could Parkland County play more of an education or awareness role re: agriculture? Help re-build the respect for farmers?
- How do you build community when farmers are leaving? Agriculture is community and the land policy is driving out the community.
- What can we do that keeps agricultural alive—make sure that agriculture has a place in Parkland County?
- Equine/horses? No one has a finger on these guys and what could happen here.
- Is there a way of offering programs such as ALUS to country residential owners? There is interest within this group.
- Is there a way to provide incentives or tax credits or rebates back to farmers to keep them in agriculture and not sell their land for development?

Other comments

- Zoning such a large area for Country Residential (CR) is stupidity.
- Agriculture is competing against big dollars!
- Parkland County needs to be more diligent with what is actually subdivided—avoid low spots, sloughs and good agricultural land.
- The government should provide clear land use guidelines. Plus there is a need for water particularly in the mined areas where the water table has changed.
- The maximum area for subdivision from a quarter should be 10 acres. That would still leave 150 acres available for farming.
- Class 1, 2 and 3 soils should be marked and preserved for agriculture.
- People want to be able to farm—we need strong Land Use Bylaws—preserve Class 1, 2, and 3 and grazing areas.
- Stay off of highly productive land—black soils and good forage areas!
- There seems to be lots of political will to preserve wetlands and environmentally sensitive areas – why not agricultural lands?
- The four parcel policy is too late to be changed—the value is built into the quarter. But the parcelling should take place on land that is not good for agriculture.
- We grow potatoes – Parkland County is very good when it comes to spraying weeds in the ditches—they know how sensitive the crop. Parkland County has some good people on top of spray issues.
- We are such a minority – real estate to Parkland County is much more important than agriculture.
- There is a need for a greater voice for agriculture. I know little about the Advisory Committee—my concern is that the voices being heard are the niche players who might have too much influence. Or the committee members are not movers and shakers.

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- *There is no voice for agriculture.*
 - *Generally Parkland County is viewed as weed enforcers or inspectors—not much more than this.*
 - *Governments are notorious for being rudderless.*
 - *Parkland County needs to revisit the subdivision policy—if we were to consider locations today, I am not sure we would be here.*



A3.3 Summary of Input from Other Meetings and Interviews

The following series of meetings and interviews were conducted:

1. *The Agricultural and Rural Advisory Committee.*
2. *Three Focus Group Interviews—two with commercial farmers—one in Tomahawk; one in Stony Plain; and one with the equine sector at Stony Plain.*
3. *Interviews with 9 speciality/value added businesses.*

For each group, we present two sets of tables: A Summary Table followed by the Detailed Comments Table.

Table A3.1 Summary: Agricultural and Rural Life Advisory Committee including the ALUS Committee (20 attendees)

Area of Discussion	Summary of Comments
Challenges	<ul style="list-style-type: none"> ▪ Very concerned about development pressures, the growth of industry and residents including the impacts of subdivisions, land fragmentation, loss of farm land ▪ Concerns with cost of land, aging of farmers and where the next generation of farmers will come from ▪ Need for continuing education and support for farmers ▪ Lack of education, knowledge, support for agriculture from the public
Ideal Future	<ul style="list-style-type: none"> ▪ Long term land use policies that preserves agricultural land (urban growth boundaries that are clear ▪ More diversity—crops as well as age of farmers (young farmers) markets, services, value added processing ▪ Well balanced County—industrial in high traffic areas; farms on good quality lands; protected environmentally sensitive lands ▪ Strong relationship (appreciation) between public and farmers
Unique Opportunities	<ul style="list-style-type: none"> ▪ Market gardens serving local food opportunities ▪ Diversified field crops; grazing lands ▪ More farm gate sales; value added opportunities
Issues Requiring Clarity or Direction	<ul style="list-style-type: none"> ▪ Establish land use policies to protect farm land and limit subdivisions ▪ How to move equipment safely? ▪ Establish new opportunities, diversification, new markets
Other Comments	<ul style="list-style-type: none"> ▪ The impacts of subdividing good agricultural land into smaller parcels (as well as the increased urban-rural conflicts arising from a growing non-farm population in the countryside). The challenges facing young farmers to enter farming—due mostly to the cost of land ▪ The pressures of urbanization and growth in the industrial areas – this is pushing farmers out ▪ The need to find a ‘balance’ between agriculture and development ▪ New or enhanced revenue opportunities for agriculture
Summary	Concerned about development pressures; growth of industry; conflicts between farmers and rural non-farm residents. Also acknowledge the difficulty for new entrants largely due to high land costs. Would like to see stronger land use policies; more diversity; a more balanced approach to development; a stronger relationship between the community and farmers.

Table A3.2 Detailed Comments: Agricultural and Rural Life Advisory Committee including the ALUS Committee

Area of Discussion	Key Comments
Most Significant Challenges	<ul style="list-style-type: none"> ▪ The encroachment of the City of Edmonton, industrial parks and the mining areas in the Keephills area ▪ Education – people need to be made aware current situation and give correct information ▪ Water supply in the mined out areas for ranchers ▪ Chemical applications of various kinds (both positive and negative) ▪ Access to processing and travel times and the costs involved ▪ High input costs ▪ Fragmentation ▪ Planning for agriculture – need to consider subdivision constraints; population growth pressures; land zoning for agriculture; tools and incentives; economic development facilitation and promotion ▪ Competition for land amongst various industries and demands ▪ Lack of new entrants/continuation through generations ▪ Degradation of land quality ▪ Land fractioning – acreages are too small; first parcel out splits up properties ▪ Aging farmers – how is the next generation going to take over? ▪ Loss of environmental sensitive areas – need to find a balance ▪ Urban growth ▪ Identifying opportunities/lack of experience ▪ Development – industrial, residential, mining, sub-dividing ▪ Cost of land ▪ Fragmentation (subdivision) ▪ A myopic view of agriculture: green revolution farming as the only way to go ▪ Subdivision of prime agricultural land ▪ Not enough prime/County support to keep Ag lands as Ag + support for local producers ▪ Lack of education of general public – food comes from farms not Wal-Mart ▪ Subdivision approvals ▪ Provincial government involvement. Need support to change some regulations ▪ Young people (lack of) seeing farming or agriculture as a viable career option ▪ Residential growth must be stopped on high quality land ▪ (Lack of) processing facilities for meat but also value added processing for produce and meat ▪ Aging farm base; cost of farm land; cost to start up ▪ Development pressures ▪ Access to processing facilities ▪ Regulations that accommodate for diversity in the types and size of agricultural operations ▪ Subdivision of land

	<ul style="list-style-type: none"> ▪ Increased population ▪ Increased industrial growth ▪ Price of land where the best soils are the places next to the growth areas (Stony; Spruce)
Picture of the Future	<ul style="list-style-type: none"> ▪ More prime agricultural lands have been reclaimed ▪ More agricultural diversity – crops; fields of diversified crops grown by mother nature (not high inputs) ▪ Residential corridor along the Yellowhead (without the Agriculture Plan) ▪ 80 acre ag. Parcels intermingled with Parkland County eco-conservation ▪ Value added processing areas ▪ Livestock grazing on productive grassland with grass up to their bellies ▪ Markets and services throughout Parkland County ▪ Defined land use zones for agriculture that act as de facto urban growth boundaries ▪ Agriculture & food is the focus of economic development with officers/department in the Capital Region ▪ Agriculture is defined and promoted as a land use & commercial/industrial zoning is #1 in rural and urban areas ▪ Diversity of producer age, products, size ▪ Lack of ‘idle’ productive land (not buy a quarter and leave unused which is a large fire hazard) ▪ TransAlta land reclaimed PROPERLY – back into ag production to a variety of producers ▪ Land trust for conservation/large tracks of ag land with ecological zones. ▪ Processing and value added that is accessible to producers ▪ Proximity to Edmonton provides a huge opportunity for local market access ▪ Greater education for producers to improve management practices ▪ Agriculture (in the future) would have a strong local connection with non-agricultural residents buying directly from the farm ▪ Implementation of agricultural practices that incorporate and identify natural systems on the land rather than trying to ‘break’ the land ▪ On the east side of Parkland County, development has not reduced the acreages to farm; on the west side- a healthier and more robust forage based ag industry ▪ Greater diversification throughout Parkland County (what was once unique is now fairly common) ▪ A mix of viable large and small agricultural operations ▪ A robust and supported value added industry ▪ Continued viability of the agricultural sector ▪ ‘Diverse Agriculture – in terms of types of uses/products and land sizes ▪ County imitative programs – to keep ag producers and ag land as ag ▪ Agri-tourism and education – people know where there food is coming from and respect it

	<ul style="list-style-type: none"> ▪ Diverse array of farm size as well as wide variety in types of farms ▪ An easy to navigate place where you can find where you can purchase local foods – eggs, beef, etc. ▪ Subdivision numbers staying the same ▪ Young families on the farm without having full time jobs off the farm to pay for the land ▪ A well balanced county – industrial in high traffic areas; farms on good quality land, environmentally sensitive areas protected ▪ Young people staying on the land both because they can afford it and make a living ▪ A wide variety of crops + speciality crops, livestock and exotic animals – basically diversity – increase the money paid per acre. Also with value added products ▪ An agricultural community that consists of large operations supplying global markets with primary products ▪ Smaller operations supply local and niche markets ▪ Land for agriculture is designated as such under the MDP and no other uses are permitted for this land ▪ A strong relationship between farmers and the general public; education and access to food produced in Parkland County ▪ A vibrant year round market open 7 days. ▪ Happy farmers ▪ Balance between farms ‘green’ mixed with homes and industry ▪ Fresh grown local food available wherever I go at a fair price
Unique Opportunities	<ul style="list-style-type: none"> ▪ Farm gate sales ▪ Speciality crops? ▪ Market gardening in appropriate areas ▪ Ranch land to the west half of Parkland County ▪ Cropland in the better soil class zones – diversity is a strength ▪ Grass produced livestock – no big feedlots ▪ Processing plants for crop & livestock ▪ Agri-tourism ▪ Stop or greatly reduce 1st parcel outs and further subdivision of land ▪ Implement strict top soil removal & deposition bylaws ▪ Parkland County’s fruit/berry and horticulture producers maximize agricultural economic development opportunities ▪ Eco-certification opportunities for agriculture and food products and services ▪ Mixed farming practices on our diverse landscape ▪ While land prices may be high compared to other areas in the province, the productivity to price ratio be reasonable ▪ Educate producers – there are many successful and intelligent producers. Continue to provide education and applicable information to producers through co-operative efforts of the many groups already thriving in Parkland County ▪ Access to large urban market with broad ethnic diversity ▪ Good quality land suited to primary production ▪ More value added – how can Parkland County support improving value added opportunities ▪ Supporting the next generation of farmers/education

	<ul style="list-style-type: none"> ▪ There is a large local market ▪ Proximity to a large population allows for growth in farm gate sales and for more positive interaction between rural and urban lifestyles ▪ Our climate allows for fairly rapid rejuvenation of soils ▪ Direct farm gate sales ▪ Agri-tourism and food hubs ▪ A competitive advantage derived from environmental responsible production techniques ▪ Diversification of crop types – speciality food crops ▪ Agri-tourism development ▪ Proximity to Edmonton (large population) ▪ Agri-tourism targeted to Edmontonians – farm gate sales; destination farming ▪ Good soil (for the most part) ▪ Look into speciality areas for both crops and livestock ▪ Look at new and unique ways to market produce and/or meat – farmers markets; virtual markets; co-ops ▪ Look at utilizing areas of poor land for revenue producing – greenhouses, recreation (tourism) areas. Etc. Utilize waste heat out of the power plants for greenhouses etc. ▪ Small acreage operations that can supply local (County; City of Edmonton; Province) ▪ Demand for primary & value added products ▪ Access to a large population ▪ Opportunities for processing facilities to locate and service the local producers ▪ The nearby opportunity to sell to many people; CSA or local deliveries ▪ Proximity to urban areas ▪ Summer fair/events/Farmers Markets ▪ West part of Parkland County has less growth and more land – preserve farmland in that direction?
Top Issues that Require Clarity, Direction or Policy	<ul style="list-style-type: none"> ▪ Movement of equipment on roads ▪ Chemical application – what has it done? ▪ Need a soil use bylaw to oversee stripping and grading ▪ Cooperative movement to open up Parkland Packers – don't smother them with regulations ▪ Agriculture food system policies ▪ Public consultation that are targeted to include both ag and non-ag. ▪ Agriculture as an industry has the greatest ability to coexist and improve the environment ▪ If agriculture is important to Parkland County, it needs to preserve and improve agricultural land, policies and steps need to begin. (otherwise 10 years from now, we have the same discussion). ▪ Make sure to include groups such as ALUS and WCFA who are already successful in improving agriculture ▪ Land use – limit fractioning; limit subdivisions to only poor land ▪ Industrial reclamation (mines) – what about water? ▪ On farm businesses opportunities – make this possible

	<ul style="list-style-type: none"> ▪ What kind of support should Parkland County be giving to producers? ▪ Support young farmers and new farms ▪ Eliminate the competition between farming and development (current this drives the price of land up) ▪ Support agricultural innovation and niche markets. ▪ Council support + 'buy-in' to support Ag producers ▪ No development of any kind on high quality farm land – must have policy/MDP changes ▪ Study to determine processing needs and processing opportunities ▪ Establish markets to assist producers to sell their products (farmers markets, co-op, whatever) ▪ Talk to farm youth – why are they leaving and what would it take to stay? ▪ Investigate best practices in other areas. ▪ Areas where agriculture is the only acceptable use ▪ Producers/ag operations need to be identified as the businesses that they are rather than be treated as a land use ▪ Support agriculture as a business and integrate it into business development strategies ▪ How do we protect farm land ▪ Do we allow Ag land to be subdivided? ▪ Policies for Ag (balance growth)
Other Comments	<ul style="list-style-type: none"> ▪ In summary, the Agricultural and Rural Advisory Committee expressed the following concerns: ▪ The impacts of subdividing good agricultural land into smaller parcels (as well as the increased urban-rural conflicts arising from a growing non-farm population in the countryside. Note: specific to the 4 parcels out per quarter, the comment was made that the 'developers are cashing in, not the farmers!') ▪ The challenges facing young farmers to enter farming – due mostly to the cost of land ▪ The need to recognize and value the ecological benefits of farmland ▪ The pressures of urbanization and growth in the industrial areas – this is pushing farmers out. ▪ The need to find a 'balance' between agriculture and development ▪ New or enhanced revenue opportunities from agriculture or agri-business ▪ Ensuring that agriculture lands and riparian areas are maintained and/or improved ▪ Land reclamation on minded lands – when will this take place and will it be made available for agriculture ▪ The continuing need for education and the supply of information to farmers (West-Central Forage Association was cited as a good example of how a producer focused organization can be an effective vehicle).

A3.4 Focus Group Interviews

The three groups were comprised of a producer group in west Parkland (Tomahawk); a producer group in east Parkland (Stony Plain); and an equine group based in the Stony Plain area. A total of 27 individuals participated (average of 9 per group) in an open format in response to a similar set of questions to the individual interviews. Particular attention was paid to identifying both similarities and differences arising across the groups.

Table A3.3 Summary: Commercial Farm Sector – Tomahawk

Area of Discussion	Summary of Comments
Challenges	<ul style="list-style-type: none"> ▪ Trend to fewer large full time farmers in turn leads to fewer services, local markets, local dealerships, a declining farm community ▪ Increased acreages/subdivisions reduces available land for farming – increased traffic, difficulties in moving equipment, more weeds, higher land prices ▪ Also significant vandalism and theft on farm properties
Ideal Future	<ul style="list-style-type: none"> ▪ See fewer larger farms – increasingly automated; continuing loss of farm community ▪ Also more niche small farms with direct sales – few (or no) middle sized farms ▪ More and more automation enabling farmers to get larger and no longer dependent upon hired labour which is hard and harder to secure
Opportunities	<ul style="list-style-type: none"> ▪ Niche artisan farms that are small – market direct ▪ West Parkland County is ideal for grazing cattle but numbers are down and fencing/pens are gone. Will cattle numbers come back?
Issues Requiring Clarity or Direction	<ul style="list-style-type: none"> ▪ Education for public to appreciate agriculture (food producers) ▪ Incentives for start-up value added operations ▪ Zoning policies that are friendly to further processing ▪ Land use policy that minimizes rural living within mainstream agriculture
Other Comments	<ul style="list-style-type: none"> ▪ A general acceptance that mainstream agriculture is on the way out. Only a few large farms will be left. ▪ Some small speciality enterprises will emerge. ▪ Farmers are now so few, and have little or no voice politically
Summary	See agriculture in decline; fewer farmers, loss of community, fewer services, more non-farm residents. Land for farming is becoming unaffordable; increased safety concerns due to traffic; vandalism is a concern; mining lands – a seed bank for weeds. In the future, see the trend to fewer larger farms continue; west Parkland County is ideal for grazing; some niche operations will emerge; more conflicts with non-farm residents.

Commercial Farm Group – Tomahawk

1. Jeff Androshuk,
2. Adrian Vanderwell,
3. Lawrence Strocher,
4. Trevor Weiss,
5. Dean Harrison

6. Frank Maddock
7. David Banks
8. Eric Vanderwell

Table A3.4 Detailed Comments: Commercial Farm Sector – Tomahawk

Area of Discussion	Key Comments
Most Significant Challenges	<ul style="list-style-type: none"> ▪ Significant vandalism and theft with no convictions (non-responsive police); crime ▪ Roads that are not designed for big modern farm equipment/moving equipment ▪ Need for common road regulations across all counties in the province (different rules by different jurisdictions). ▪ Too much sub-dividing – sends the wrong message. ▪ Encroachment of acreages and subdivisions – leads to weed problems and raises land prices (hard for farmers to compete); loss of land to non-farm uses (acreages/gravel). ▪ Segmentation of land by subdivisions ▪ Surface Rights ▪ Lands held by Trans Alta – what is going to happen? These lands are also a major source of weeds ▪ Distance from key suppliers – parts, dealers are getting few and farther away; markets and services are quite distant ▪ Lack of local markets – too concentrated, hard to access; no place to market cattle; machinery dealer are farther and farther away
Picture of the Future	<ul style="list-style-type: none"> ▪ Wide diversity of sizes of operations – small operations with direct sales plus large mainstream operations ▪ Mix of agriculture and recreation ▪ Would like to see farm families being able to make a living on a section of land but this is never going to happen again ▪ Fewer and fewer farmers. Once the farming community had a 100 people to farm an area of land. Now you only need 2? ▪ More and more automation – GPS; self-driving vehicles ▪ See more smaller niche/artisan type farms ▪ You will either see bigger farms or small ones – no room for the middle sized farmer ▪ In areas of good land, you'll see 'mega' farms – big guys who will rent the land with equipment all powered by automation
Unique Opportunities	<ul style="list-style-type: none"> ▪ Niche markets – organic products ▪ Opportunities for natural habitat ▪ The west part of Parkland County is ideal grazing area. But the infrastructure (fences, pens etc.) is gone. A lot of people got out of cattle after BSE ▪ Opportunities for enhanced grazing
Top Issues that Require Clarity, Direction or Policy	<ul style="list-style-type: none"> ▪ Education for the public to appreciate agriculture ▪ Incentives for new start-up operations/more incentives for value added agricultural facilities and businesses. ▪ Zoning policies that are friendly to further processing etc. Make it easier for them to operate

	<ul style="list-style-type: none"> ▪ Land use – need to minimize the desire for rural living vs. mainstream agriculture ▪ Uniform regulations for all counties for trucking ▪ More support for groups that are supporting agriculture within Parkland County such as the West Central Forage Association ▪ Reclamation of mining lands needs to be a higher priority – hold Transalta accountable. Turn their land into an area for quads! ▪ More enforcement re: weed and pest control ▪ Can Parkland County allow for the zoning for an abattoir?
Other Comments	<ul style="list-style-type: none"> ▪ The Tomahawk group expressed a number of concerns about the long term future of agriculture. The comments included: ▪ The handful of full time farmers that are left in the western area of Parkland County (fewer larger farms) and many other farmers taking off-farm employment. ‘You have to get bigger or you can’t compete!’ ▪ The high level of vandalism and theft that is taking place (originating from Drayton Valley) and the non-response from police ▪ The general lack of respect non-farm people have for farmers – both in terms of how they farm (use of chemicals) and slowing traffic when moving equipment ▪ Increasing number of acreages. To quote: ‘a good quarter is turned into 4 pieces of junk – all weeds and no production.’ ▪ Dangers in moving equipment ▪ A sense the farmers are such a small minority that they have little or no voice politically ▪ If you call Parkland County office, it is hard to get answers – you get the run around – I needed a wider access to get into my field. ▪ With the many acreages, there are too many weeds – the weed inspectors are not doing a good job

Table A3.5 Summary: Commercial Farm Sector – Spruce Grove

Area of Discussion	Summary of Comments
Challenges	<ul style="list-style-type: none"> ▪ The growth of acreages/subdivisions restrict the ability to farm – reducing available land; increased traffic; increased land prices; land parcels are too big to look after but too small to farm ▪ Roads (narrow and high) and traffic make moving equipment increasingly dangerous ▪ The lack of understanding/appreciation for agriculture by Council and public at large ▪ Inevitability of being displaced because of urban growth in the eastern part of Parkland County
Ideal Future	<ul style="list-style-type: none"> ▪ Farming (and Class 1 & 2) farmland is protected ▪ More public appreciation, education and awareness ▪ Growth in small specialized operations supplying local food demand in the nearby large urban area ▪ Several farmers see little or no future for big farms in the eastern part of Parkland County due to inevitable urban growth
Opportunities	<ul style="list-style-type: none"> ▪ Proximity to Edmonton creates opportunities for market gardens, berry farms, potatoes, vegetables, sod farming

	<ul style="list-style-type: none"> ▪ Parkland County well suited to a wide range of speciality crops – pulses, lentils, corn. Well located on rail line
Issues Requiring Clarity or Direction	<ul style="list-style-type: none"> ▪ Improve road safety ▪ Reduce lot size and impacts of subdivisions – save agricultural land ▪ Education programs targeted at school age children
Other Comments	<p>Overall this group remains passionate about agriculture but have increasing difficulties seeing a viable future in the eastern part of Parkland County due to expansion on several fronts: Edmonton; Spruce Grove; Stony Plain; Acheson Industrial Park; transportation corridors. Other concerns include:</p> <ul style="list-style-type: none"> ▪ Traffic and the dangers with moving farm equipment ▪ The availability of land to farm as operations grow in size ▪ Cost of land making farming unaffordable
Summary	<p>Major concerns with development on two (or three sides) - the more development, the bigger the headaches! Major concerns with traffic, moving equipment safely, vandalism, trespassing! Lack of appreciation from Council and public. See a limited future agriculture; some see no future; inevitable urban growth; some specialty operations (market gardens; U-pick) will grow to meet local food demand; need for more public appreciation, education & awareness.</p>

Commercial Farm Group – Spruce Grove

1. Curtis Webber
2. Gary Tappauf
3. David Henning
4. John Hrasko
5. Melissa Haarsma
6. Darren Frank
7. Gilbert Jespersen
8. Kevin Schenfield
9. Graham Jespersen
10. Alan Wild

Table A3.6 Detailed Comments: Commercial Farm Sector – Spruce Grove

Area of Discussion	Key Comments
Most Significant Challenges	<ul style="list-style-type: none"> ▪ Acreage people restrict what we can do as farmers ▪ Continually making fields smaller by allowing one now three subdivisions per quarter ▪ Fragmentation of farmland into smaller parcels – more acreages restrict what we can do? ▪ County is encouraging this (subdivisions) – we should not allow 5 or 10 acre parcels ▪ Agricultural land is considered a holding zone for development – it should not be this way. ▪ The number of people living in proximity to the farm/amount of traffic/too many non-farm residents

	<ul style="list-style-type: none"> ▪ Urban encroachment with no consideration for the quality of land – it is destroyed for ever ▪ Our ability to expand (whether purchasing or renting land) due to the expansion of acreage development ▪ Too many big land parcels are being underused - they are too big to cut lawn but too small to farm ▪ Our biggest issue? The land parcels for subdivision are too big – these are not being looked after – it’s not good for anyone. ▪ How can we expand when everything around us is zoned country residential? ▪ Everything we used to farm is under pavement ▪ Traffic and traffic noise ▪ Acreage prices puts land prices out of reach for farmers ▪ Availability of land that is farmable ▪ Road maintenance and consideration for the importance of agriculture ▪ Moving equipment down the road/roads are narrow and unsafe ▪ Dangerous to move around – unsafe; impatient drivers ▪ The transportation of farm equipment is extremely difficult ▪ Acreage owners do not understand or appreciate what good the farmers do. ▪ Require permits, permission to do anything on your land ▪ Introduction of weeds (kochia, scentless, chamomile) due to road construction equipment ▪ Illegal dumping of garbage on our land ▪ The dust from Acheson is killing us ▪ County Councils lack of policy regarding agriculture – they have no concept of what is going on ▪ Our Ag. Service Board does little to help agriculture ▪ We are 1% of the population – we are low on the totem pole
Picture of the Future	<ul style="list-style-type: none"> ▪ Farmers would be respected ▪ Farming becomes the first and foremost use of land ▪ Land freeze of Class 1 & 2 lands ▪ Zoning areas throughout Parkland County to agriculture (permanently) ▪ Would like to see Parkland County like Fraser Valley (where agricultural land is frozen) ▪ There would be value added industries in our Industrial Parks i.e. biodiesel, pasta plant etc.; more finished product ▪ Gov’t would pay for every student to attend a farm school – 1 week per year ▪ See more small agriculture holdings – berry farms, vegetables, operations to service Famers’ Markets ▪ More acreages, more people, more development ▪ Land is too pricey to farm ▪ My crystal ball is cloudy – I don’t see a picture. ▪ As far as I am concerned, keep the public out of the country ▪ It’s time to leave – get out of Dodge!! ▪ We can’t stop Edmonton, Spruce Grove and Stony Plain from growing! But why not? Toronto has not annexed more land since 1980 and they have four times the population

	<ul style="list-style-type: none"> Edmonton is the same size as London, England which has 16 times the population! Why doesn't it grow up!
Unique Opportunities	<ul style="list-style-type: none"> Close to urban centres for speciality crops and intensive livestock Good location to large market Market gardens, potatoes, sod farming, intensive rotations Value added. Finished products being processed Specialty crops, pulses, canola, corn? The markets and railways are here Lifestyle – our location near a big city is an advantage. My kids like farming here for that reason
Top Issues that Require Clarity, Direction or Policy	<ul style="list-style-type: none"> What can be done about the roads for safety? Keep the country roads as gravel. Right to farm/no more rules to restrict us Political will of county, province and federal government to support agriculture and save agricultural land Work with school system to set up educational programs on the farm – currently we have a class that spends 1 week at our place. The learning is incredible. We need to work with Parkland County and then young people so they know where their food comes from Is it possible to allow two residents on the same farm yard? A lot of people would like their other family/parents to move onto the property. Currently you can't get permits or subdivide to allow for this.
Other Comments	<ul style="list-style-type: none"> The Stony Plain group expressed many concerns about farming in the shadow of urban development which includes expanding Edmonton, Spruce Grove, Stony Plain, the Acheson Industrial Park as well as expanded transportation corridors. The following comments were made: Crossing 4 lane highways is becoming very dangerous. Some of the overpasses are very narrow for the equipment There are more and more small holdings , making it more difficult to farm Parkland County seems more interested in developing acreages to generate taxes – not farming! I don't think Parkland County has any idea what a real farm is and what it requires. Do I need a permit for a pole shed? Moving equipment is getting harder – no shoulders; higher roads; impatient drivers We farm in 5 counties – Parkland County is the most difficult. It has the highest taxes and staff don't understand the workings or needs of an intensive livestock operation There are more and more subdivisions. This is both a blessing and a curse. It drives the price of land up (this is good if you want to sell or cash in; but this makes it difficult to farm. Expansion is getting difficult – more traffic; dealing with people; the price of land Once a road is paved, it gets really dangerous. We would rather see Parkland County stick with gravel roads.

	<ul style="list-style-type: none"> ▪ We farm close to the Edmonton line – for us the farming in this area is over. Not a case of if but when we move. ▪ Overall, we don't not have a plan for agricultural land – we don't do anything – we have a wasteful land use plan. ▪ Overall, agriculture has not been considered in county planning. ▪ Stop looking at agriculture as only being 1% of the population but look at it as representing 33% of the employment/economy in Parkland County. ▪ Don't forget agriculture – it is important. We will need 60% more food by 2050. And 1 out of every 8 jobs is related to agriculture & food ▪ The Agriculture Department is the 'end of the hall' – it is the bottom of the barrel
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Table A3.7 Summary: Equine Sector

Area of Discussion	Summary of Comments
Challenges	<ul style="list-style-type: none"> ▪ A strong sense the horse sector is not well known or appreciated by Parkland County Council and administration ▪ Lack of public facilities and a public trail system ▪ Lack of unified voice (or critical mass) within the sector
Ideal Future	<ul style="list-style-type: none"> ▪ A well-developed trail system and/or a park designated specifically for horses ▪ A Public Arena with both indoor and outdoor facilities capable of staging a wide range of events and differing horse interests ▪ Parkland County being known as a destination for horse – riding, boarding, recreation
Opportunities	<ul style="list-style-type: none"> ▪ New residents, increased business if a dedicated public horse facility or public trail system were to be developed ▪ A wide variety of events and shows ▪ Parkland County has many conveniences being close to the City but in the country – the best of both worlds – an ideal location for boarding or keeping horses
Issues Requiring Clarity or Direction	<ul style="list-style-type: none"> ▪ Interest and commitment from Parkland County to address opportunities for the horse sector ▪ Recognize the economic (and community) impact that a horse industry can bring ▪ Organize a voice (structure) that can provide input and give direction on behalf of the horse sector
Other Comments	Overall this group was very enthusiastic about what Parkland County can offer and what can be done to support a thriving horse sector. Generally the group participants expressed the view that equine sector as an under-realized opportunity both in economic as well as recreational terms. There is a strong sense that Parkland County has overlooked the sector and a plan to establish a dedicated show facility and/or a comprehensive trails system will contribute to a thriving equine industry and enrich the community
Summary	Horse/equine sector is not well known or appreciated; lack of public facilities - indoor and outdoor; sector is very fragmented - no coherent structure or voice. In the future, see opportunity for

	Parkland to become a centre for equine activities, events, recreation; need for an event centre and/or extensive trail system or outdoor equine park; potential for business; enhance community life and character.
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Equine Group – Stony Plain

1. Larry Niblock
2. Kevin David
3. Nadia Nixon
4. Corrie Lewis
5. Colin Kuehnemuth
6. Jean Kuehnemuth
7. Artye Darline
8. Cindy Hanas
9. Gail Haldane

Table A3.8 Detailed Comments: Equine Sector

Area of Discussion	Key Comments
Most Significant Challenges	<ul style="list-style-type: none"> ▪ Parkland County needs to identify that the horse industry contributes to Parkland County and a reason why people move to Parkland County. Parkland County has got by without having to do anything for the horse industry ▪ Lack money, land and the will of Parkland County to do something for the horse sector ▪ Access to the river system is a challenge ▪ Lack of political will to do something ▪ Equine sector does not have a unified voice or a lack of voice ▪ More and more development (restricts access to the North Saskatchewan River) ▪ Parkland County is more interested in serving residents in Spruce Grove and Edmonton – not people with horses
Picture of the Future	<ul style="list-style-type: none"> ▪ An 'Evergreen Park' (Grande Prairie) on reclaimed Trans Alta land ▪ A 'Horse Park' with trails, obstacles etc./expanded trail facility ▪ A Public Arena with both indoor and outdoor facility (like Thorsby)/public indoor arena for equestrian activities; public arena for timed events and horse shows – combination of indoor and outdoor facilities plus a race track for chuck wagons, quarter horses ▪ Marked public trails that provide access to the river including staging areas that can accommodate more than 4 units. ▪ 30-50 miles of park equine trails with hills, water, sand (no horse shoes required)/designated public trails marked and maintained and advertised in Parkland County – new sand at other places for riding. Note: we have requests from time to time for occasional winter riding ▪ Public trails along the North Saskatchewan River for trail riders ▪ Great staging area, camping facilities, a park suitable for various disciplines

	<ul style="list-style-type: none"> ▪ 2-3 facilities with camping for people and horses that is centrally located, low cost and affordable ▪ Facilities where different disciplines – performance, show jumping, gymkhana ▪ Areas in Parkland County for trail rides with staging areas, maps where people want to ride ▪ Public trails that are marked and maintained with parking spaces at the trail head, picnic facilities, outhouses, camping areas
Unique Opportunities	<ul style="list-style-type: none"> ▪ More people would move to Parkland County if a major facility was available for use like a Whitemud Equine Centre ▪ Ability to host events for all equine groups – jumping, roping etc. ▪ Opportunity for more business that would drive income ▪ Income from more events/camping ▪ An active horse sector with facilities would attract people to Parkland County – also driven employment ▪ Annual horse shows – 4H; performance; jumping, eventing ▪ A venue for all disciplines and events – jumping, gymkhana, eventing, dressage, trail riding, pony club, mounted games. Also for public education, horse industry ▪ Camping facilities for trail riding ▪ Agricultural fair/Ag days ▪ Drawing people in with specific events ▪ Recognition/showcase Parkland County ▪ Arena events create employment opportunity ▪ Trail events and pleasure riding in the River Valley – a trail system from Devon to Fort Saskatchewan
Top Issues that Require Clarity, Direction or Policy	<ul style="list-style-type: none"> ▪ The horse industry is here – we need to be heard. We live here. ▪ Zoning – how does a remote control race track next to horses and acreages get approved? ▪ Lack of direction; recognition of needs from County. ▪ Recognize the presence and impact of the horse industry in Parkland County ▪ Knowledge of the potential that exists ▪ Need an advocate to voice issues and speak to the positives
Other Comments	<ul style="list-style-type: none"> ▪ Overall this group was very enthusiastic about what Parkland County can offer and what can be done to support a thriving horse sector. Comments included: ▪ Parkland County has a lot of ‘open’ countryside, and an outstanding river valley ▪ It has many conveniences being close to the City but in the country – the best of both worlds – an ideal location for boarding or keeping horses ▪ Good pasture for horses, water and good footing ▪ ▪ However there are limitations such as: ▪ We have an equine sector in spite of Parkland County – there is no facility like Thorsby (Leduc County) or Evergreen Park (Grand Prairie). Note: Drayton Valley has a well-developed trail system along both sides of the Pembina River ▪ Limited access and/or public trails along the river

	<ul style="list-style-type: none">▪ The Chickakoo area is not well suited for horse – trail is stony and limited staging area (can only accommodate 4 trailers)▪
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We interviewed nine speciality operations ranging from an agri-tourism destination (the Corn Maize) to a number of berry, vegetable and greenhouse operations. We also interviewed a honey producer and two nurseries. The purpose of these interviews was to gain insight to the opportunities and challenges facing value added operations in Parkland County.

Table A3.9 Summary: Specialty Value Added Sector

Area of Discussion	Summary of Comments
Advantages of Parkland County	<ul style="list-style-type: none"> ▪ Very strong affirmation of the locational benefits of Parkland County– near to a major urban centre; excellent transportation access – highways; railways ▪ Excellent land for specialty production – gardens, seed potatoes ▪ County is viewed as favourable and supportive of value added/specialty operations and rural businesses
Disadvantages	<ul style="list-style-type: none"> ▪ Few complaints or criticisms ▪ Some issues or concerns with permit requirements ▪ Lack of high speed internet access ▪ Growing concerns about impact subdivisions, increased traffic, impact on agriculture at large. Some operations are concerned that the sites on which they are now operating will be sold for development
Opportunities	<ul style="list-style-type: none"> ▪ Agri-tourism given the large nearby urban market ▪ More local food/berry operations but recognize the work required ▪ Establish an irrigation district drawing water from the North Saskatchewan River – this would make for a clear commitment to support agriculture and food production ▪ Excellent location for new value added business – County can market this
Constraints	<ul style="list-style-type: none"> ▪ Impact of subdivisions on agriculture over the long term ▪ Lack of education – people know so little about food and what it takes to run a successful business ▪ Increased traffic and associated dangers
Issues Requiring Clarity or Direction	<ul style="list-style-type: none"> ▪ What is the plan for agriculture? Don't forget agriculture! ▪ Re-think the current subdivision policy and protecting agricultural land
Summary	Generally this group speaks favourably about Parkland County as a great location and an administration that is easy to work with. This group would like to see a clear future for agriculture and the assurance that agriculture is a high priority for Parkland County. See opportunities in local food, agri-tourism; demand for rural 'experience.'

Specialty/Value Added Operations

1. The Corn Maize – Jesse Kray
2. TPRL Honey – Tim Townsend
3. Parkland County Seed Cleaning Co-op – Blair Peregrym
4. NBW Greenhouses – Nellie and Rob Hagtegaal
5. Cannor Nurseries – Deborah Bodine
6. Dunvegan Gardens – Brock Fraser
7. Spruce Berry Farm – Carol Jones
8. Sandhills Potatoes – Tony Kirkwood
9. Shaken Hive Honey – Roy Bohn
10. Home Grown Foods – Tim Wilson
11. Roy's Raspberries –

Table A3.10 Detailed Comments: Specialty Value Added Sector

Area of Discussion	Key Comments
Background	<ul style="list-style-type: none"> ▪ Corn Maize – established 15 years ago; busy season is a period of 8 to 10 weeks (mid-August to late October) ▪ TPRL Honey – started when young; in this location for 25 years ago. All product is being exported ▪ Stony Plain Seed – started in 1954; has 220 shareholders and is now the largest business of its kind in Alberta. Has expanded beyond seed cleaning to exporting commodities (feed to Japan) ▪ NBW Greenhouses – started in 1997; market direct and at various Farmers Markets. Sees more people interested in where food comes from and who is growing it. ▪ Cannor Nurseries – purchased operation about 20 years ago ▪ Dunvegan Gardens – established in 2002 ▪ Spruce Berry Farm – established 2006 ▪ Sandyhill Potatoes – third generation operation
Advantages of Parkland County	<ul style="list-style-type: none"> ▪ Location viz. Highway 60 – close to Edmonton (spoken by an agri-tourist destination operator) ▪ Good land – we have never had a bad crop ▪ Proximity to Edmonton – we are close to the railways for shipping to the west coast; also close to suppliers ▪ Parkland County has been very good to work with ▪ Close to Edmonton – rail yards, highways to B.C. Parkland County is very good area – our location is ideal ▪ We are well located – close to Edmonton and the main highways. We also have beautiful soil ▪ Location is very good – with the opening of the Henday, more people from Edmonton do business with us ▪ Location; taxes are better than if we were in the city; Parkland County likes our kind of operation ▪ Great location – we have the potential to serve 1 million customers ▪ This area is prime agricultural land - #1 and #2 soils. We used to be called the Greenbelt. Ideal for potatoes and the location is ideal for seed potatoes – removed from the major production areas in southern Alberta (for disease management)
Disadvantages of Parkland County	<ul style="list-style-type: none"> ▪ Access from a provincial highway is a problem; no signs allowed on provincial road but not issues with County ▪ There was a very restrictive by-law limiting where we could locate our hives but that has been changed. ▪ More and more subdivisions – more and more traffic. More people – the more complaints about bees. ▪ In the past, agriculture was forgotten – but current Council is ‘way more agriculturally minded!’ ▪ I have had issues with irrigation and where we run our pipes – Parkland County has been challenging to work with. Also finding manpower and getting people to work ▪ Getting permits for water from our dugout has been an issue; allowing soil to be hauled here has been an issue as well. In both cases the first response is ‘No!’

	<ul style="list-style-type: none"> ▪ Internet access is limiting – we are lucky to have a satellite operator/service nearby ▪ Road bans can be very disruptive and costly ▪ Some concerns about the residential development – how will it affect us? More customers on one hand; more pressure to move on the other. ▪ Most of our issues (environment, roads, signs) are with the Province not Parkland County ▪ Our concerns are with a new pipeline coming through our property – this will affect us ▪ Too many subdivisions – this is not for us. There are so many acreages – roads are being paved.
Opportunities	<ul style="list-style-type: none"> ▪ Agri-tourism is starting to begin; aware of Tri-Region initiative (Parkland County, Spruce Grove, Stony Plain) but not that involved; we would be happy to be part of a Parkland County Agri-tour if this happens ▪ Would like to see more speciality operations but the price of land is high; labour is a problem to find and afford; marketing is always a challenge. Vegetable growers often pay the lowest wages ▪ There are opportunities to attract more agri-food/value added business. Parkland County needs to focus on its advantages – not lead. Businesses need to decide for themselves ▪ Parkland County has beautiful soils – a great place to grow a wide range of crops and vegetables ▪ If Parkland County were to establish an irrigation district, this would be a powerful action signifying the importance of agriculture – our climate is getting drier and water is an issue. ▪ Agriculture is important to the community and building community – for many young people, it is their first job ▪ We see a growing interest in local food. But what do we have to offer re: current supplies? Labour is an issue. ▪ People love to get out – take strawberries. They love to come and pick – not to feed the family but for the experience ▪ The opportunities for local food are endless – a lot of young people are coming out. ▪ Put in irrigation!! This would send a powerful message – we are not far from the river and you could have a whole area that intensifies production – potatoes, vegetables, field crops, livestock
Constraints/Pressures	<ul style="list-style-type: none"> ▪ See tensions between farming and development; not sure how long we will be here – all the land is likely to be developed. It is tough to compete against the developers ▪ The ability to sell lots for retiring farmers may be a good idea for retiring farmers but I don't like it. I won't let my employees go north of Highway 16 – it is too dangerous. ▪ Subdivisions are a real problem – creates traffic problems; safety. Farmers are re-thinking their future. ▪ Where do we grow? ▪ Lack of education – people know so little about food. And no education for those who want to grow it or start a business ▪ Our business is very labour intensive – time for young people to take over – we are ready to retire. But people know so little and

	<p>the work ethic of today's youth is not aligned with what it makes an operation like this successful</p> <ul style="list-style-type: none"> ▪ Need central collection and distribution to make local food work ▪ Increased traffic – we can't drive without getting the finger ▪ This is a farming community but we have lost this – the area (development) has gone too far
Top Issues that Require Clarity, Direction or Policy	<ul style="list-style-type: none"> ▪ Overall, we are a happy business – no issues with Parkland County. But there is a need to protect agricultural land – if this is not done, it will be lost ▪ Don't forget agriculture!! That is what built this County – we need to know that we have a place! (This Council is good) ▪ Parkland County has to re-think where they allow subdivisions ▪ The big question that we need to face: how do we keep our farmers here? Every time a farmer leaves, you lose a business – and the businesses that serve that farmer loses a customer. ▪ Parkland County needs to limit subdivisions on prime farmland – it is being stripped and beautiful farmland is being mutilated. ▪ Keep more farmland available – protect it ▪ What is Parkland County doing with respect to land reclamation in the mined areas? ▪ Make irrigation available or easier to set up – an Irrigation District would be fantastic ▪ Agriculture needs to be a higher priority for Parkland County ▪ County opposition to the proposed minimum wage bill would be appreciated – this will affect a lot of small businesses like ours ▪ Any efforts to grow value added will require an inter-governmental approach. Parkland can play a coordination role ▪ With more subdivisions, it is harder to find land to farm ▪ Need someone from Parkland County that understands this type of agriculture – no one has ever visited ▪ What is the plan for agriculture – we need to have a future and be able to plan as well!
Other Comments	<ul style="list-style-type: none"> ▪ 'People love coming out and experiencing the country – in September and October, they love that country experience ▪ The previous Council ignored agriculture – this Council sees our business as an asset to Parkland County ▪ Be prepared for change ▪ Any decisions that Council makes must take into account the impacts at the broader level. For example, the more subdivisions, the more fragmentation, the more traffic, the more farmers start thinking about relocating ▪ A lot of people think they are going to make a million dollars growing vegetables – then they find out how much work it is and it's not that way at all ▪ Small business needs water, communications (high speed ▪ I don't want to limit someone's opportunity to sell land at high prices. But we need a wiser land use policy ▪ Any support for promotion or marketing that features Parkland County as a source of local food would be welcomed ▪ We just as soon not see roads being paved – more pavement means more traffic , more people, more danger in moving equipment

A3.5 Public Consultation Round 1

The preceding review and interview findings provided the basis to develop a draft vision and guiding principles for the **Future of Agriculture**. This was prepared in advance for the public meetings. Note: The vision and principles can be found in Chapter 6.o.

The first round of public consultation consisted of three open houses as follows:

Date:	Location	Number of Attendees
October 25, 2015	Tomahawk District & Sports Agra Centre	5
October 26, 2015	Blueberry Community Hall	8
November 2, 2015	Woodbend Community Hall	17
Total Attendees		30

The first part of the meetings was an open house with posters. This was followed by a presentation and subsequent facilitated discussion. The following themes emerged:

1. **Farming today is a business:** in effect a big business requiring lots of land; a business-like approach run by business owners; the ability to grow; the ability to produce ever increasing volumes due to narrowing margins. In this regard, there will be fewer and fewer full time farmers. Those who are left will be farming large acreages, use large equipment; will be moving equipment from farm to farm and in some cases, considerable distances. The days of ever seeing the country side full of families and each family farming a quarter, two quarters or even a section are over.

Several people commented that farming has changed so much over the past few years. For example, “You could once make a living on a half section. Now you need at least three sections.” It was also commented that in view of the investment required “successful farms are inter-generational farms.”

2. **Land and land use policy:** the long term availability of land for farming is regarded as the number one issue determining the future of agriculture in Parkland County. Crop farmers need large acreages with large fields to accommodate large equipment and enable operational efficiency—thus encroachments by subdivisions and non-farm rural residents are regarded as problematic. Livestock producers (dairy in particular) require large areas to grow forages and the ability to spread manure without complaints from neighbours. Further they require a minimum distance from residents to accommodate the expansion of facilities, thus any new subdivision in the vicinity of a growing operation poses a potential threat to the ability to expand as well as increased nuisance complaints from nearby residents who complain about noise, smell, sprays, dust, equipment on the road.

There is general agreement among the attendees that changes to the land use policy will be challenging. Many farmers are expecting to be able to ‘capture value/capitalize’ from the sale of subdivisions for retirement. Other farmers in east Parkland County see the continued consumption of agricultural land for development as inevitable and are looking to sell and in turn buy lands in more distant counties. Several have already begun this process.

Other suggestions include limiting the size of subdivided parcels (2 acres) and ‘siting’ the parcels in such a way as to maximize the remaining land for farming; developing a land use policy that limits the level of speculation that in turn drives up the price of land making it unaffordable for farming; and limit the degree of parceling—keep these as few and as small as possible. The worst case scenario is 4 parcels of 40 acres—none of which is kept in agriculture. In effect, this form of subdivision creates an agricultural wasteland.

The subject of Transferring Development Credits was viewed as interesting but potentially complex and difficult to make work.

3. **The focus on economic development, infrastructure and entrepreneurship is regarded as more suited to emerging operations or businesses who are responding to local food opportunities:** Supporting small enterprises that can increase the food producing capacity within the County will in turn create a demand for production from the larger farmers. For example, a thriving equine sector needs hay which bigger farmers can supply. Or a local beef processing plant could stimulate a Parkland County packing, feeding and cow-calf rearing sector.
4. **Leadership and the facilitation of leadership will be a big challenge:** one attendee privately commented, “Welcome to the apathy of agriculture!” One such group is the West Central Forage Association; however, it is facing funding/financing challenges.
5. **Scope of what Parkland County can do:** one farmer at the Tomahawk meeting summarized the discussion as follows:

Most of the forces impacting agriculture are beyond the influence of the County—prices; markets; demand and supply factors; people wanting to buy land; investors in land; prices of land.

The County needs to be very realistic and focus on some small things such as:

- a. providing a place or service for us to dispose of chemical containers and plastic (silage covers).
 - b. maintaining approaches or access/entry ways to fields (critically important).
 - c. maintaining weed control on sites that are not being properly managed.
 - d. policing and reducing the level of vandalism and trespassing which is considerable.
 - e. Provide weigh scales to enable farmers to know exactly what loads are being carried and be better able to abide by road bans or weight reductions.
6. **Importance of education:** many attendees spoke about the need for education and how Parkland County could assist in creating awareness of and appreciation for farming. There is a prevailing sense that the public is so “uninformed” when it comes to agriculture. To quote, “Instead of giving the farmer the finger because of a traffic delay, why not appreciate the farmer for producing the food that you eat?”

Discussion on the proposed Vision for Agriculture in Parkland County was limited. Full time farmers have their own vision (let us run our farms; let us grow; stay out of our way; etc.) and regard the vision as more suitable for emerging operations. Several younger attendees commented privately that they found the ‘vision’ to be exciting and appreciated Parkland County for undertaking the Future of Agriculture study.

At the public meetings, attendees were given the opportunity to do ‘dotmocracy’ with a first and second choice on the four general principles (see Section 6.5), with the following results 2 points for first choice, 1 point for second choice) see next page:

Table A3.11 ‘Dotmocracy’ on Proposed Principles

Principle	Tomahawk		Blueberry		Woodbend		Total		Total Points
	#1	#2	#1	#2	#1	#2	#1	#2	
Integrated Approach	0	2	0	4	7	6	7	12	26
Supportive Land Use Policies	4	0	7	0	6	6	17	6	40
Entrepreneurial Culture	0	0	0	0	0	1	0	1	1
Fostering Local Leadership	0	2	0	3	1	4	3	7	13

The conclusion of this was a general theme of focusing on land use, but as part of an integrated approach that develops leadership. Tomahawk and Blueberry were similar; Woodbend stressed the advantages of an integrated approach.



A3.6 Public Consultation Round 2

In view of the low attendance in Round 1, a second round of public consultation was conducted in April 2016. Three public meetings were held as follows:

Date:	Location	Number of Attendees
April 25, 2016	Woodbend Community Hall	24
April 25, 2016	Magnolia Community Hall	9
April 28, 2016	Blueberry Community Hall	14
Total Attendees		47

The format of the meeting was similar to those held previously. The first part of the meetings was an open house with posters and maps. This was followed by a presentation and subsequent facilitated discussion. The following themes emerged:

1. **A Vision for Agriculture in Parkland County:** the proposed vision received support across all groups, specifically with respect to the attributes associated with diversity, creativity and entrepreneurship. Special mention was made that agriculture means more than ‘big farms’ and needs to recognize the wide range of enterprises that are taking place on smaller operations. Furthermore, while the local food movement is slowly emerging, there is a growing sense that this sector will become increasingly important into the future. Agriculture also needs to be recognized as a contributor to environmental sustainability. Finally, the reference to respond to “new opportunities in the Capital Region” is less relevant to producers who are supplying markets elsewhere—the case with a vegetable producer supplying customers to the west of Parkland County. Also commodity producers (oilseeds, cereals and cattle) who market provincially or beyond, do not have an association with the Capital Region.

Overall, the attendees responded positively to the proposed vision:

“The vision is good.”

“There are many pieces to digest: the vibrancy, the creativity, the entrepreneurship—it makes some sense.”

“Local food initiatives may be slow to emerge, but they are coming and need to be seriously supported.”

“The vision is what we need... It meets the needs of all residents involved in the various forms of agriculture and food production.”

But there were also some provisos and suggestions:

“Without action, it does not mean anything. We’re anticipating some things that might help agriculture.”

“Is it too restrictive? We don’t produce for the Capital Region – our produce goes west.”

“Environmental protection should be an important part of agriculture.”

2. **Supporting agriculture requires an integrated approach:** this principle was regarded as foundational and appears to be well accepted. Overall there was little comment or objection to the principle. Most of the discussion focused on the remaining principles. It is perhaps fair to say that the experience with an agriculture plan or participation in an agriculture planning process is new for most participants. Thus, having several initiatives working together to advance agriculture appears to “make sense.”
3. **Land Use and Land Use Policy:** the subject of land use generated the most discussion across all three groups and is considered to be the most important area requiring attention. Generally speaking, there appears to be strong support to limit development on agricultural land, particularly prime agricultural land. These views were expressed in several ways:
 - Directing development to areas of poorer soils and keeping the best soils for agriculture.
 - Limiting the number of subdivisions per quarter.
 - Maintaining the current level of subdivisions (three parcels), but limiting their size and locating them in such a manner to minimize their impact on the lands still available for farming.

- Maintaining large tracts of land for cropping or grazing but allowing for agricultural areas where numerous smaller operations could ‘cluster’ in response to emerging opportunities.

There was also general agreement that “one size (or policy) does not fit all.” In other words, there is considerable diversity across Parkland County, even within regions where good soils are more prevalent.

Changes in land use policy will be challenging. Some farmers rely on their ability to subdivide three parcels as a way of affording the purchases. Others commented that the price of land would not be as high if subdivisions were limited to one parcel out. Overall, there was agreement that subdividing a quarter into four forty acre parcels was inefficient and problematic leaving properties that are too large to manage as country residential and too small to farm. To this end, there is support for demarking ‘agricultural priority’ areas wherein land policies are such that agriculture is the clear priority in that area and every effort is made to ensure that any development is done in such a way as to minimize the impact or disruption on agriculture.

The issue of land use generated the most discussion and with differing points of view. Many of the attendees support policies that protect agriculture and/or direct development to areas that have less productive soils:

“Why not put development on the bad soil and farm the best soils. Don’t subdivide the best soils!”

“There is support for protecting agricultural land by restricting subdivisions.”

“Four parcels of 40 acres each are the worst. No wants to rent them and people don’t know what they can use them for.”

“Leave the big tracts of land for agriculture.”

“A cluster area for special farming – would it be a good idea to have an area for smaller parcels?”

“One size fits all doesn’t work. You need to look at subdivisions on a case by case basis – there are pockets of poor land even within the Class 1,2 areas.”

“I like the idea of keeping some large parcels for agriculture or woodlots etc. but have the ability to subdivide in different ways depending on the circumstances.”

“Supportive land use policy is the most important principle. The County Administration must investigate all possible avenues for agricultural land protection.”

“All agricultural land free of subdivisions is extremely important.”

“We must retain the good soils for crop production. Too much good soil is being used for acreages.”

“Protect agricultural land though smaller agricultural parcels would be fine.”

Others do not want to see changes or have differing views:

“For farmers to expand and pay the price asked for a quarter section, they want three parcels out to pay for the cost of that quarter.” To which another attendee replied: “If small parcels were not allowed, the price would drop – the quarter is only priced that high because of its subdivision potential.”

“There are a lot of guys that own one, two or three quarters that have not made money for years – they should be allowed to subdivide.”

“If you lost half your (beef) cow production, you don’t need so much land for agriculture.”

“Large scale production systems are by and large not ecologically viable in the long term. There is an imminent shift away from fossil fuel reliance.”

4. **Building and Supporting an Entrepreneurial Culture:** overall, there is support for this principle particularly with attendees who are involved or interested in new businesses pertaining to local food, market gardening, organic production, horticulture, permaculture, the equine sector and agri-tourism. Several suggested the opportunity (and the need) to engage with local schools for the purpose of educating students with the objective to expose them to the wide ranging opportunities that are possible within the agri-food sector. Another suggested the idea of a “Dragons Den” where young people/entrepreneurs could interact with farmers with resources and experience.
5. **Fostering Leadership:** the need for leadership and ‘education’ received general support over the course of the discussions. Clearly, leadership is not a case of “one approach that fits all”. Rather, the type of and need for leadership varies across differing interest groups and sectors. Generally, full time farmers are busy running their operations – they are very experienced and require leadership or advocacy on issues impacting their ability to farm, expand, move equipment, safety etc. Those individuals involved in emerging or new enterprises require leadership with respect to building businesses, marketing and/or specific infrastructure requirements. Or, those involved in the equine sector require facilitated approaches that bring together the differing players who have never before come together to explore what could be done to build or feature this sector within Parkland County.

All the attendees were asked to fill out comment sheets or surveys. Most chose not to but we did receive eleven responses (see Table 4.6). The table illustrates that the majority of comments are supportive of three initiatives presented in the draft plan: (1) land use policies for more protection of agricultural land including setting up differing regions with the County; (2) supporting entrepreneurship; and (3) an advocacy group to promote leadership and promote the interests of the agriculture sector.

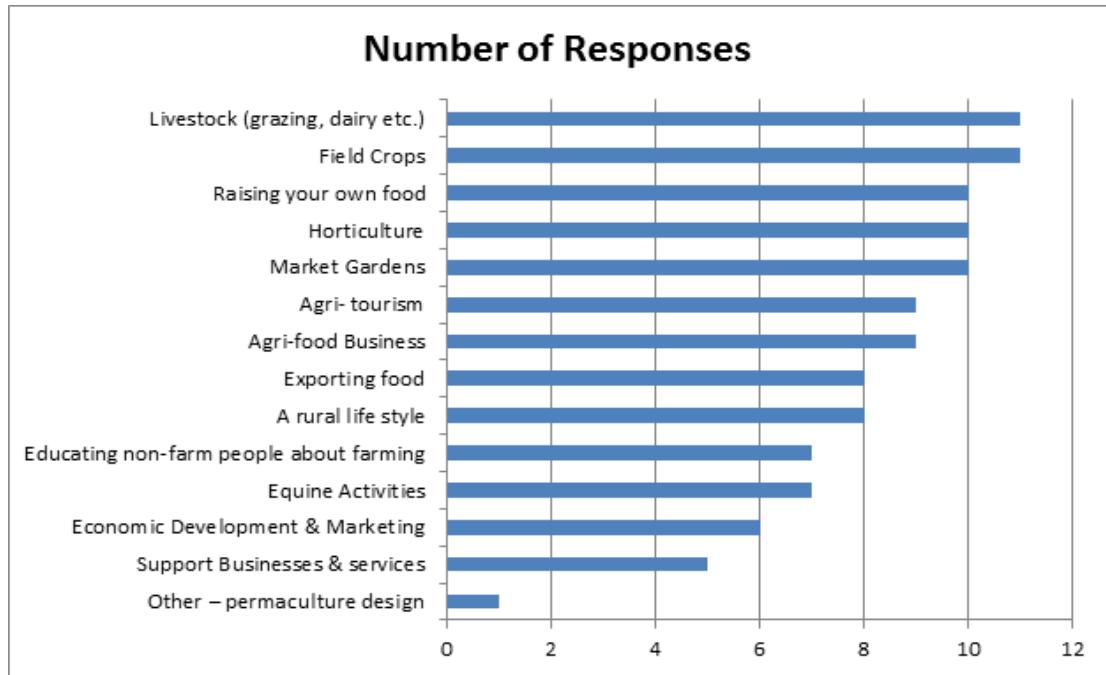
Table A3.12 Public Meeting Survey Responses

Question	Positive	Negative
Would you support County initiatives to foster agriculture through: <ul style="list-style-type: none"> ▪ Land use policies to protect agricultural land ▪ Economic development strategies ▪ Improvements to infrastructure 	9 10 3	2
Should Parkland County consider additional land uses policies for more protection of agricultural land?	9	2
Should Parkland County consider setting up differing regions within the County where differing agricultural land policies can be applied?	10	
Should Parkland County support entrepreneurship to develop value added opportunities?	10	
Do you think Parkland County should create and support an entrepreneurial business culture for the development of diversified progressive agriculture opportunities?	10	
Do you think there is a role for an advocacy group to promote leadership and promote the interests of the agriculture sector in Parkland County?	9	1

Total Respondents	11
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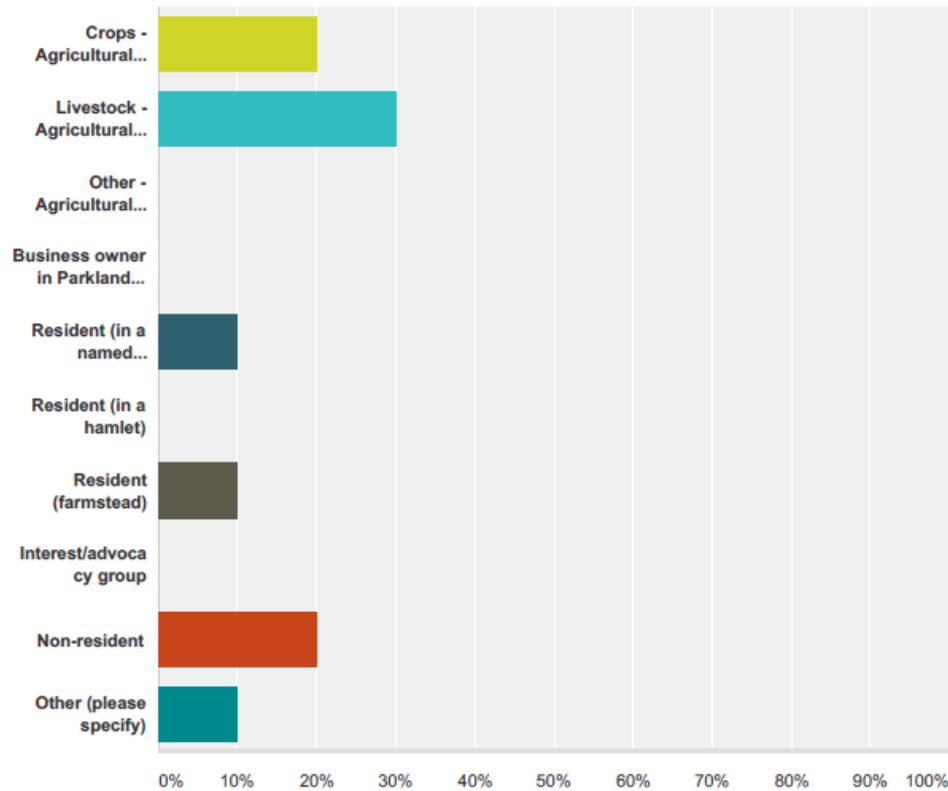
Attendees were asked to comment on a definition of agriculture and what activities should be included. The responses (see Table 4.7) illustrate that most respondents subscribe to a broad definition and are inclusive of multiple facets led by livestock, field crops, raising your own food, horticulture, market gardens and agri-tourism.

Figure A3.13 Public Meeting Input on the Definition of Agriculture

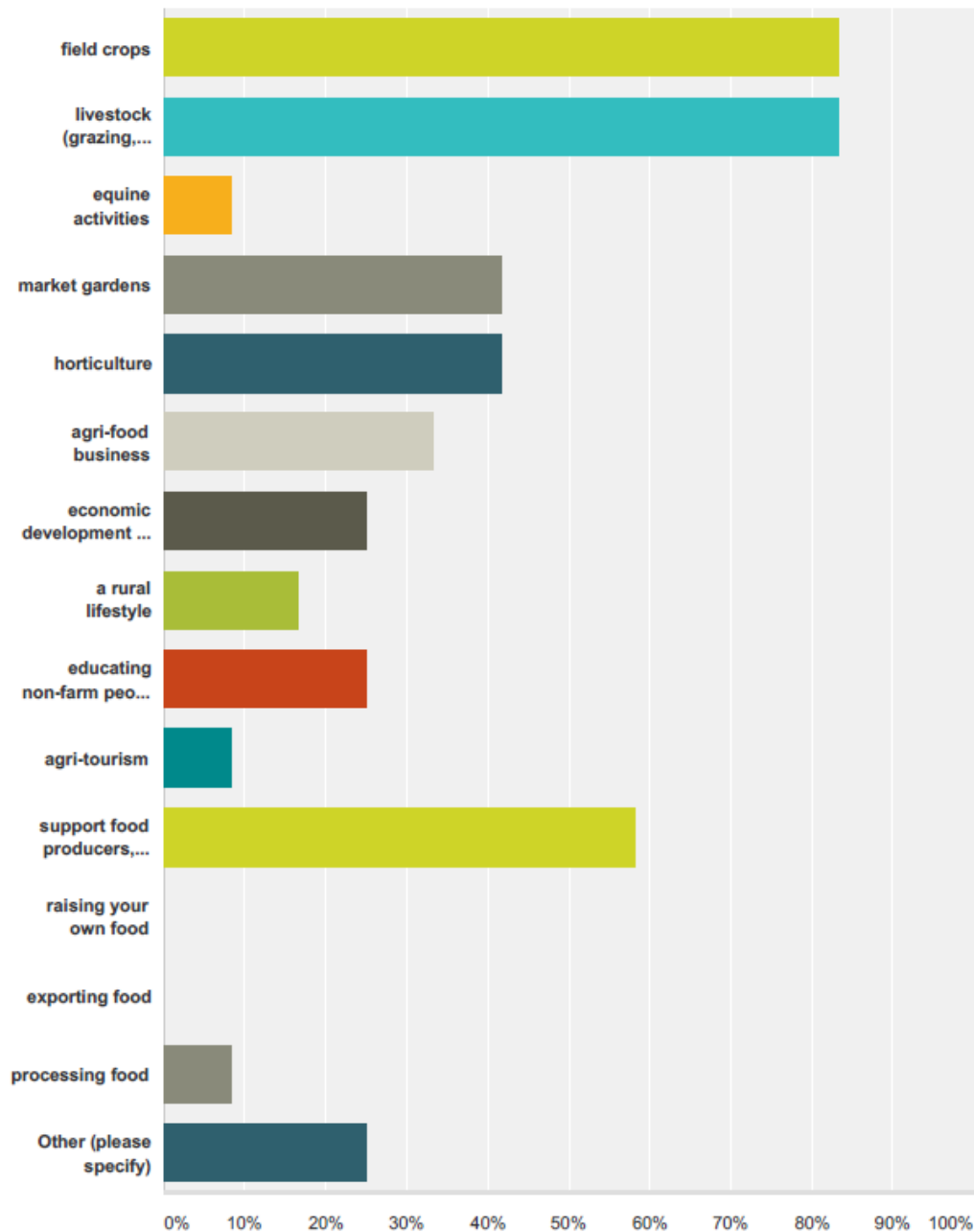


A3.7 Survey Results

A draft of the proposed agriculture strategy was posted on the website, along with a request to complete a questionnaire with a series of questions about it. The opportunity had been advertised along with the public meetings. Only 12 people responded to the on-line survey, primarily those from the agriculture sector, but also some non-farm residents. It should be noted that this was not a scientific survey—a small sample size by self-selected responders. Some were completed before and some completed after the Round 2 public meetings. The responders identified themselves as the following:

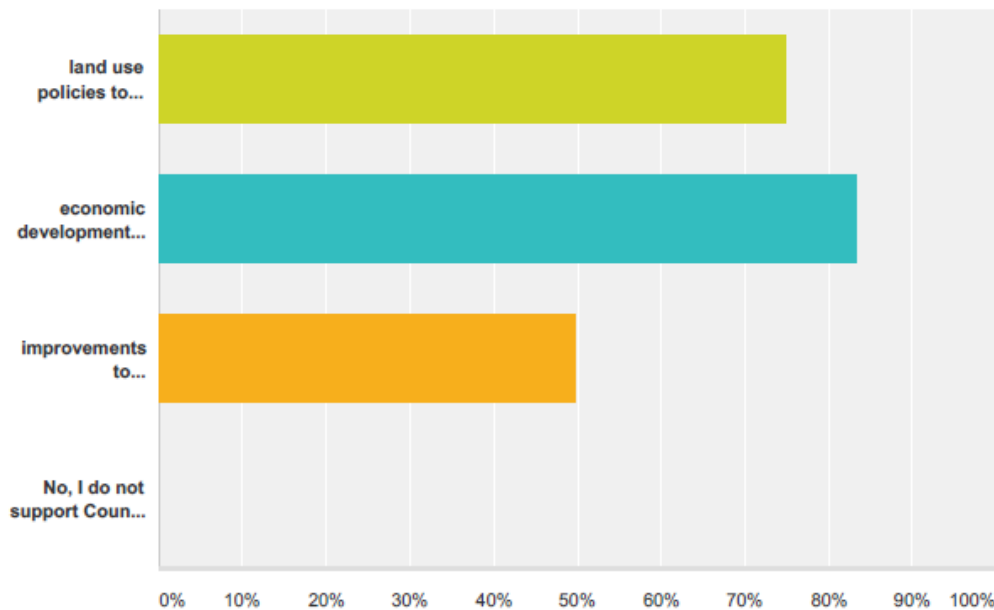


Question 1: Which of the following activities should be included in a definition of agriculture for Parkland County? Please check your top 5.



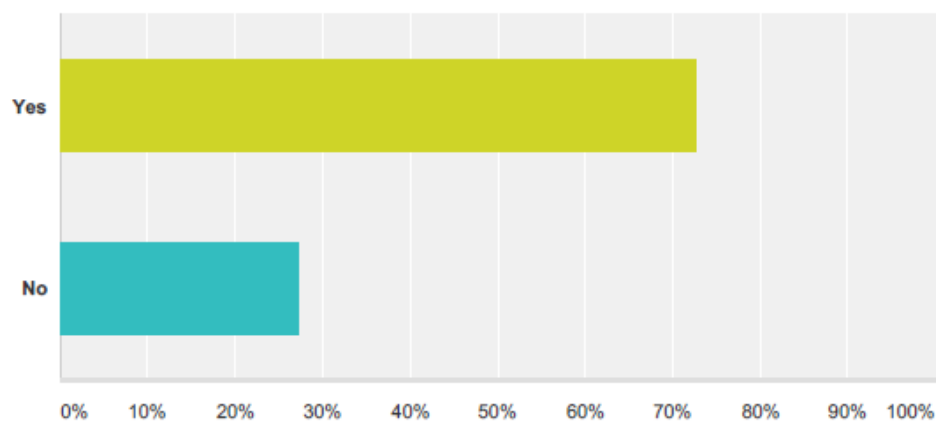
Traditional farming (i.e., field crops and livestock were felt to be the most obvious component of agriculture in Parkland County. There was less support, but still significant, for supporting businesses, market gardening and horticulture. A narrower view of agriculture was shown by less favourable response to such topics as equine, agri-food business, a rural lifestyle, with little or no support for raising your own food, exporting food, etc.

Question 2: Would you support County initiatives to foster agriculture in the County through...?



All respondents indicated support for County initiatives, with strong support—83% for economic development and 75% for land use policies to protect agricultural land. Improvements to infrastructure received less support.

Question 3: Should Parkland County consider additional land use policies for more protection of agricultural land by limiting subdivision of agricultural land and reducing the conversion of agricultural land to other uses?



Almost three-quarters of the respondents indicated support for stronger land use policies. **Question 4 asked for explanation of answers.** Some examples, as follows, reflect the typical opinions expressed at the public meetings:

“The county may need to protect some lands to ensure that the county is an attractive place to live. The land is an important part of what the county is and some of it may need to be protected.”

“I have difficulty with the long term benefits of inefficient urban sprawl. The economics don't add up for the urban or rural municipalities. In contrast, agriculture that is responsibly implemented and enabled can provide multiple values including food production and other various ecosystem services such as biodiversity and rural character.

“I think the current policy is equitable, capitalization of property in this area is inevitable. The current policy allows for quarter sections to be broke up enough to be economically viable for ag if subdivisions are allowed.”

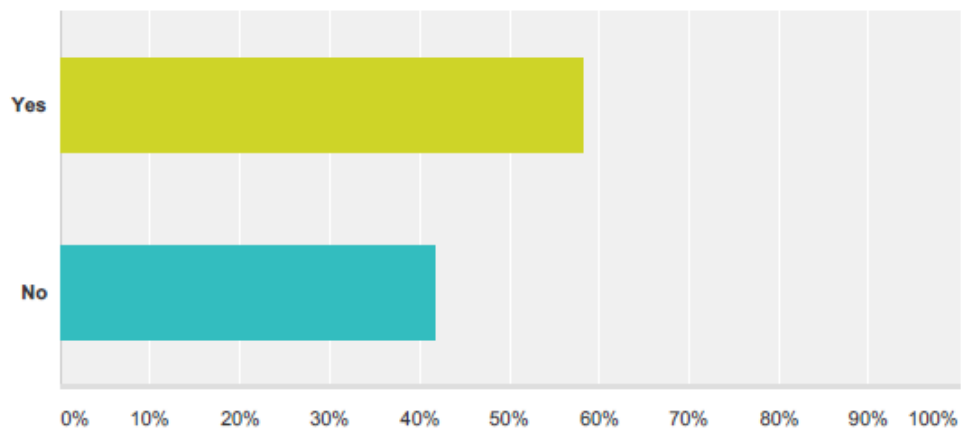
“I see this all over the county - land zoned agricultural can still have 4 titles per quarter - the quarter is then divided into 4 pieces and that land is taken out of agricultural production - it is used for 4 horses and a couple of dogs.”

“A policy like this would have different effects on county residents, both good and bad. I see a lot of waste land in Subdivisions, which leads to weeds and fire hazards. The traffic that increases on the roads with new subdivisions is a concern. Also that a lot of subdivision owners do not understand their farming neighbours (i.e. letting their dogs run free, not understanding why machinery is running at late hours, etc.) so the idea of educating people about agriculture is a very good plan. A concern against this policy is for people that have land to sell that are using their land value as a retirement plan. Land owners can make more with selling land for subdivisions than selling the land for agricultural property.”

“Much of the agricultural land is already fragmented or has become rural residential so limiting subdivision of the few existing will not help. It is too late for that and many people are relying on the current value of that land for other entrepreneur activities or their retirement.”

“We have way too many subdivisions, gravel pits, town growth out of control, commercial developments that are out of control, airports that just pop up, golf courses out of control, just a lack of control on Parkland County's taking over farm land. It might be good to map out your existing resources, soil maps, market demand, geographic and demographic information, labour, transportation and look at where land use fits for certain type of uses, etc. Example of how Sacramento flipped how they look at land use planning to ensure local food system growth and sustainability. The tools they developed to help them plan for example where a food hub business makes most sense, etc., were interesting.”

Question 5: Should Parkland County consider setting up different regions within the County where differing agricultural land use policies could be applied?



There was less support for the setting up of different regions than the support for stronger land use policies in the previous question. One explanation was that there wasn't much explanation about where these policies might apply. **Question 6 asked for explanation on why the particular answer was chosen.** Here are the typical answers, based on a notion of treating everyone the same or responding to unique circumstances, the latter which is the favoured approach.

“Yes, some areas are more conducive to different cropping systems, pasture, grains, and vegetable/potato.”

“Yes. The strong diversity within the County's agriculture industry provides all the reason needed.”

“No. Equitable policies must be maintained county wide.”

“It should be considered for areas that have good farm land. Some areas are borderline but I see a lot of good arable land that is being paved over or subdivided. A complete waste of a resource.”

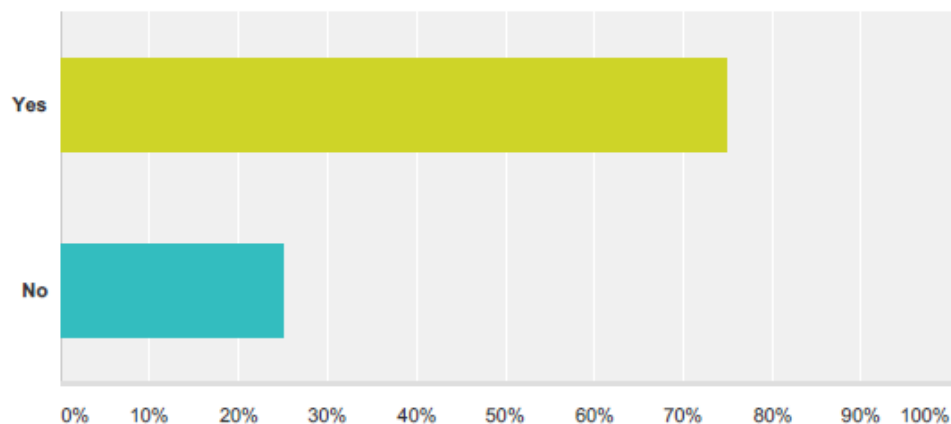
“This question requires more information for me to understand what affect it would have on farmers.”

“Private land is purchased for varying reasons. Less and less young people are interested in farming or see a future in farming. As a result, such policies would unnecessarily financially penalize residents who have owned land for years.”

“They don't care now why would a different region correct the problem, mixed farms have worked for thousands of years together.”

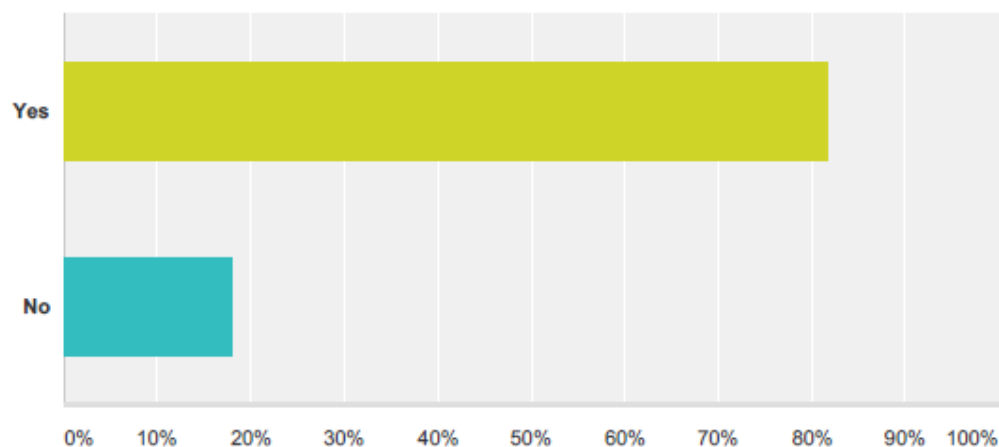
“Similar to answer prior about mapping out where things best are suited for development and growth”

Question 7: Do you think Parkland County should support entrepreneurship (and entrepreneurs) to develop value added opportunities in the agriculture sector??



The support for economic development and entrepreneurial initiatives for the value-added sector was viewed favourably by respondents.

Question 8: Do you think Parkland County should create and support an entrepreneurial business culture for the development of diversified progressive agriculture opportunities?



This received a similar response to the related Question 7. **Question 9 asked how Parkland County could support this endeavor.**

“Connect various producers to either develop market opportunities or specialty crop processing.”

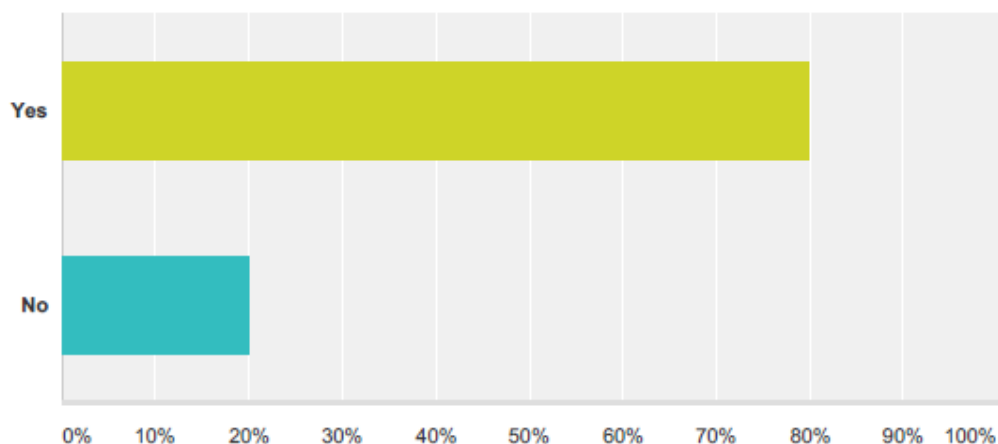
“This county has missed and neglected this opportunity so many times; it is not surprising they would ask the question. First create a governance model for this idea then look to the organizations that do research and innovate and the people to add value to these ideas need your support to create the next level of value. Example West Central Forage Association, U of A. The county needs people with passion and ability to finish the job for this to be successful.”

“I believe education and sharing of ideas for entrepreneurship needs a support system, so a site like this, where people can share ideas, is a good starting block.”

“Reduce the bureaucracy, delays, in obtaining development approval. Perhaps consider a reduction in business tax for the first 5 years.”

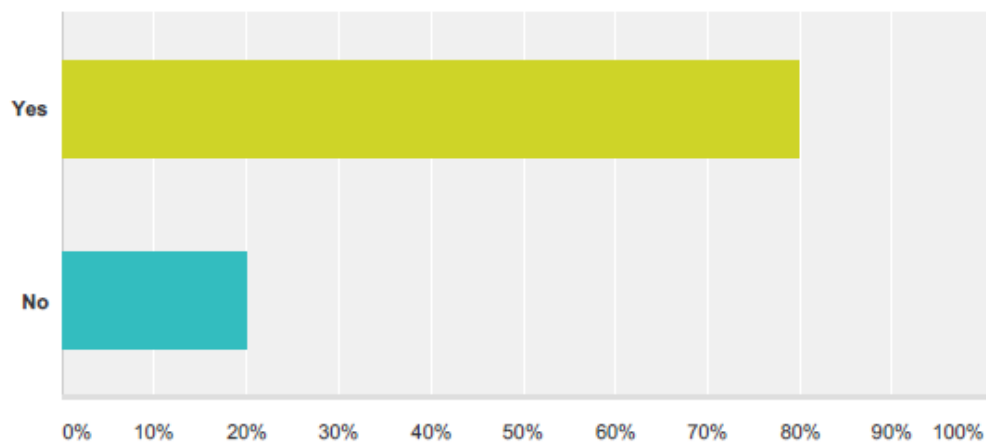
“Depends on the overall picture and what works best in different situations.”

Question 10: Do you think there is a role for an advocacy group to promote leadership and promote the interests of the agriculture sector in Parkland County?



There was relatively strong support for this initiative by respondents.

Question 11: A proposed vision for the future of agriculture in Parkland County is for “A vibrant agriculture and food community characterized by its diversity, creativity and entrepreneurship, focused on sustainability as well as new opportunities in the Capital Region.” Does this represent your view of the future?



Again, strong support by respondents for the vision. Question 12 asked for an explanation on choice of answer of comments on how the vision could be improved.

“The word “sustainability” needs indicators/markers for people to strive towards. People define “sustainably” differently. Sustainability is a benchmark for operational success, effectiveness, and enhancement. Once a statement like this is adopted a level of governance should support it with a code of practice. The rest of the statement will then prove to have meaning. It would also define gaps in the counties policies and services.”

“I think people need to be educated about where their food comes from - I have actually had people tell me that their food comes from Safeway- as long as government, all levels, doesn’t get too involved in policy. Farmers are the quintessential entrepreneurs.”

“This vision does not limit growth in agriculture to just large land owners. Everyone in the county has an opportunity to get involved in some aspect of agriculture with the right education and leadership.”

“Sounds really smooth - and general enough. There will always be room for improvement.”

“These farms represent generations of work and husbandry. I have no interest, particularly after Bill 6, in pursuing agri-tourism. The costs now and the risks are too high for small farms if they employ even one employee as they have to be OHS compliant and those costs are potentially crippling for small farms.”

“Put farmers in control of what should be promoted and implemented. They do not need a bunch of laymen telling them what to do.”

Question 13: This was an opportunity to provide any further comments, ideas or advice.

“I am a strong supporter of land use policy changes supported by a TDC program to allow for the development value to be realized by both producers and prospective developers.”

“Thank you for letting farmers provide input. When I first saw the advertisement for these Open Houses I was worried that the County would just be another level of government that wanted to implement some new limits on farmers and our ownership of land. I am impressed with the thought and concern for agriculture that is going into this plan.”

“Now is not the time to begin creating an agricultural land reserve in the County. There is too much fragmentation to make that viable now.”

“Slow down on the growth of Parkland County, just rushing ahead to keep up with rampant growth solves no problem only creates more problems. We are not the employment capital of Canada.”

Appendix 4

Appendix 4: Ag Enhancement Tools

A4.1 Introduction

As part of the research for this and other agriculture master planning processes in the Capital Region as well as preparation of a Working Paper for the Edmonton Capital Region Board on agricultural land, the consultants documented the following best practices for agricultural land preservation and potential tools to enhance agriculture.

A4.2 Best Practices of Agriculture Land Preservation

Policies and practices throughout Canada and the U.S.A. range from the full on 'land freeze' approach to a range of policies that promote or support of agriculture including the market trading of development rights (or credits). An overview of differing approaches by municipalities or provinces/states is presented in the following sub-sections. These are listed as a continuum starting with a 'land freeze' approach to a more general approach.

The Land Freeze Approach

- **British Columbia Agriculture Land Reserve:** enacted by provincial legislation in response to growing concerns that the small area of agricultural land mostly based in the lower mainland (Fraser Valley) was at risk. The process began in 1972. By 1976 the policy was fully implemented with a total of 4.7 million hectares contained within the Reserve. Despite several boundary changes and moving lands both in and out of the Reserve, it remains approximately the same size (5% of the province, but most of the remaining agricultural lands). It is controlled by a provincially appointed commission to (1) to preserve agricultural land; (2) to encourage farming in collaboration with other communities of interest; and (3) to encourage local governments, First Nations, the government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws and policies. It allows farmers to operate businesses with a minimal amount of interference as compensation for the land freeze allowing on-farm businesses, roadside stands and bed and breakfast operations.

- **Ontario Greenbelt:** enacted by provincial legislation in 2005 and is similar to the BC approach. The Greenbelt encompasses a large horseshoe shaped area approximately 720,000 hectares in size, that begins northeast of Toronto and swings around Lake Ontario to include the Niagara Peninsula including the tender fruit and wine growing regions between the Niagara escarpment and the lake itself. The primary purpose of the plan is to identify where urbanization should not occur by providing permanent protection to the agricultural land base and the ecological features occurring on this landscape which includes the Niagara Escarpment and the Oak Ridges Moraine. The legislation was strongly resisted by the farming community who regarded this policy as severely restricting their land sale options. While development within the greenbelt has slowed considerably, there are some signs of a 'leapfrog effect' – namely increased development both to the north and to the west of the defined area. A 10 year review of the Greenbelt Plan, its impacts and effectiveness, is currently underway.

Note: Both of these approaches required provincial legislation.

Municipal Land Preservation Approaches

- **Lancaster County, Pennsylvania:** located approximately 50 miles west of Philadelphia, Lancaster County is considered a leader in land preservation policies and the support of agriculture. It is the heart of Amish country with a very strong cultural and historical heritage for which there is strong public support to preserve and protect agricultural land. Within this context, Lancaster County has adopted a multi-dimensional approach which includes growth boundaries, agricultural zoning and

the purchase and transfer of development rights. The County has established clear goals which are executed through local comprehensive plans, a county led Agriculture Preserve Board (APB) and a nonprofit land trust known as the Lancaster Farmland Trust (LFT).

All participation is voluntary. When purchasing development rights, the APB ranks the lands of farmers using a system called Land Evaluation and Site Assessment (LESA) – a measure comprised of both quantitative and qualitative variables comprising four categories: soils; development potential; farmland potential and clustering potential. Overall the county has been able to direct urban development onto less productive lands. Just recently, the County exceeded the 100,000 acre threshold of protected lands under the purchase of development rights program. The program is funded in part by state tobacco taxes.

• **Montgomery County, Maryland:** located just north of Washington D.C. and subject to enormous development pressure. Since 1964, the county began efforts to focus development along existing transportation corridors and allow the remaining rural areas to stay in agricultural production. In the 1973, the county established a Rural Zone which allowed a density of one unit per five acres which initially stimulated development. Thus in 1980, the County brought forward a new Master Plan that created an 93,000 acre Agriculture Reserve with a transferable development rights (TDR) program. This plan reduced the density to one unit per 25 acres. The reserve became the sending area while receiving areas were located along transportation corridors where roads and schools were already located. Montgomery County made the TDR the primary source for developers to obtain the required density requirements in the receiving areas. Montgomery was the first county to implement the development transfer system. The success of this program can be compared to neighbouring Fredrick County, Maryland where scattered sprawling development has overtaken the countryside.

• **Washington County, Maryland:** efforts to preserve valuable farmland began in 1978 with the Maryland Agricultural Land Preservation Program (MALPP). Since that time, the land preservation effort has expanded to a total of 8 programs. To date, more than 25,000 acres have been permanently protected, with another 18,000 acres under temporary protection in 10-year Agricultural Districts. As a goal, Washington County intends to permanently preserve 50,000 acres of agricultural land and open space through its various easement programs.

Agriculture Master Plans

• **Whatcom County, Washington:** Whatcom County has recognized the unintended consequences of prioritizing multiple comprehensive planning goals when they compete with one another when it comes to on-the-ground implementation. The County's stated goal is to keep an agricultural base of at least 100,000 acres as the minimum needed to sustain agriculture's supporting infrastructure of supplies, equipment, services, and expertise. Further, they recognize it is also necessary to maintain large contiguous areas to efficiently produce and process commercial agricultural products. It has programs for both transfer and purchase of development rights. It is also pursuing performance indicators to measure plan implementation. In addition, the County is reviewing all land designations – both lands within Agriculture Zones that should no longer be designated as such and lands in Rural Zones to determine if they should be designated agriculture.

• **California:** California established the first agricultural lands trust in the US–the Marin Agricultural Land Trust in 1980. By 2002, there were 34 easement programs with a farmland focus. Despite tax incentives to easement donors, land trusts with funding that enables them to purchase easements from farmers have been most successful. Farmers may be receptive to selling easements that reduce market value in return for a lump sum that may be used to pay off debt or allow retirement. Many land trusts get public funding especially from county level agencies. The most successful local land trusts represent the principal vehicle for organizing local conservation. A county supporting a

farmland preservation program would tend to be prosperous with an active local food movement, and experiencing growth pressures.

Another study conducted by the American Farmland Trust on land use in California identified “ranchettes” (non-farm residences on very large rural lots) to be a troublesome and is actually reducing population density in some areas. According to the study, the problems caused by this form of development are several fold: inefficient conversion of land; impacting agricultural production both in terms of driving up the price of land as well as curtailing or modifying routine agricultural practices.”

- **Rocky View County:** recently developed an Agriculture Master Plan which identifies the need for flexibility specific to land use, the development of agricultural or rural related business as well as opportunities in local food/value added and the equine sector given the proximity of Calgary which effectively lies in the centre of Rocky View.

- **Southern Alberta Land Trust Society:** This is a charitable non-profit society, incorporated in 1998, with a mandate to protect environmental, productive, scenic and cultural values of southern Alberta's grasslands, woodlands, and wetlands. They have about 30 conservation easements protecting about 12,000 acres of native rangeland.

- **MD of Bighorn, Alberta:** There are no comprehensive Transfer of Development Credits programs in Canada designed to conserve rural, agricultural or environmentally significant landscapes. . The MD of Bighorn has been working on a potential TDC initiative since about 2007. A developer that owned both the sending and receiving lands was promoting it and they've been amending plans over time to facilitate it. However, it has not proceeded because of two issues: (1) a need for provincial regulations/policy and (2) Council is not sure that they want to be involved by taking over the responsibility to enforce the agricultural conservation easement as they have had issues in the past over some environmental protection easements.

A4.3 Potential Agriculture Enhancement Tools

The following is a list of policies and/or tools that can be applied to the preservation of land and the support of agriculture. Some tools may require provincial leadership and input; some can be used by the Capital Region alone This section introduces the range of tools that are used or are contemplated in other North American jurisdictions. Not all of them are possible to use as provincial legislation does not provide for some of them, etc.

- **Freeze lands for agriculture:** establish permanent boundaries around agricultural areas, such as the BC Agriculture Land Reserve (some would call it a land ‘freeze’) are typically only implemented by provincial or state authorities. Alberta, when it designated RDAs in the early 1970s, did a similar thing for transportation corridors. The same objectives are accomplished in Alberta, by municipalities, through strict adherence to a zoning scheme, but this is subject to obvious direct political pressures at the municipal level. It is easier to change a municipal land use bylaw than a provincial statute, regulation or a CRB policy.

- **Establish a long-term growth area boundary:** several US states, such as Tennessee and Oregon, require that urban growth boundaries be defined in the context of overall ‘smart growth’. One area has purchased lands in order to create an old style ‘greenbelt.’ In Pennsylvania, the Preserve Board pursues a policy that is unique in the United States: a strategic effort to purchase development rights on farms fairly close to development to help create urban growth boundaries’ and ‘village growth boundaries’ which will restrict sprawl onto productive farmland. These types of policies typically require strong community support.

- **Major project review:** several jurisdictions require that projects, particularly at the state or provincial level, must take the loss of farmland into account. BC, in fact, requires all provincial

departments and projects to comply with the requirements of the Agriculture Land Reserve. In Pennsylvania, the state department of agriculture reviews the projects of all state agencies that might involve the conversion of farmland to other uses. In other states, executive orders direct state agencies to withhold funding from projects that would result in farmland conversion. Prior to the Greenbelt Act in Ontario (2005), Halton and Peel Counties required an Agricultural Impact Assessment – a detailed assessment of the environmental as well as the local economic and community impact of a proposed re-zoning from agricultural lands.

- **Acquisition of agricultural conservation easements (buying development rights):** programs have been developed in the US for state and local governments to purchase agricultural conservation easements. It is usually based on the difference between the value as agricultural land and for development. Funds may come from bonds, various taxes, check off contributions, credit card affinity plans, and in the US from federal programs, etc. Donations can be made to qualified public or non-profit organizations to accept interest in property that is less than fee simple for the purposes of land preservation. Grantors usually retain other property rights (use for agriculture, access control) except for development. This is common in the US. Often tax benefits are given to the grantor. Conservation easements are used in the Capital Region (Strathcona) for protecting environmentally sensitive lands as a trade-off for subdivision approval. It could also be used for agriculture lands. Precluding development but allowing density transfer might reduce land value, while still allowing some equity to be captured by the farmer, potentially fostering intergenerational transfer and continued farming.

- **Mitigation & compensation procedures:** King County, Washington requires the re-conversion of land back to agricultural land when allowing the development of other land ('no net loss'- this is common in dealing with fish habitat). This is also used by the BC Agriculture Land Reserve Commission to justify adjusting agricultural reserve boundaries- land can be pro-rated as to quality in moving it in or out of the Agricultural Land Reserve. Similarly, subdivision may be allowed if it is offset by consolidation of fragmented land elsewhere.

- **Transfer of development credits (TDC):** this technique has been used frequently for historical preservation. If you don't develop on one site (i.e., permanently preserve agricultural land), you can trade that density to another site. This assumes there are sites to trade density to (i.e., the base level is low enough). These systems are usually complex to determine fairly and administer reasonably given the complexities of a metropolitan land market. Some US jurisdictions have 'publicly funded' TDR banks that trade in development rights.

- **Cluster development:** Surrey uses cluster zoning to protect trees—it was instituted by downzoning and bonusing back. This form of development is usually suggested for environmental reasons (such as allowing more effective rural sewage systems) but it could also be used for preserving agricultural lands or creating buffers if agriculture can be maintained. In the case of 'rural cluster zoning' in which large farmland tracts are subdivided into home sites but most of the tract is retained for farm use, the question, naturally is, what is the agricultural productivity of the remaining lands given the proximity to residential development and its urban influences? From the other perspective, will clustering provide the rural lifestyle sought by many?

- **Zoning for agriculture:** many American commentators call for zoning land for agriculture in the context of a long-term plan, while limiting or restricting competing or conflicting uses. The major difficulty with zoning as a tool for land preservation is that it is enacted at the municipal level, where it can be changed in response to local pressure, especially that favouring economic development and higher taxes. Downzoning to agriculture would likely reduce land values. Zoning can also be used to allow supplementary uses, such as home businesses, B&Bs, or on property farm sales, that may contribute secondary farm revenue or income. This, especially in a metropolitan setting, may contribute to economic viability. Zoning should also ensure the provision of the services that agriculture requires- opportunities for local processing, etc.

• **Limit or stop fragmentation & parcelization:** there are two major concerns with parcelization (or fragmentation) of the agricultural land base through the zoning and subdivision processes. The first is that land may be cut up so that any one parcel no longer provides the area necessary for a viable or efficient operation. Historically, in many areas of Alberta, this was viewed as either a quarter section (in some cases this is 80 acres). The reality is that extensive agricultural operations are either larger (say, a few thousand acres) or are smaller more intensive operations. The second concern is the increase in the non-agricultural population in the rural areas as more residential parcels are created. This leads to additional conflicts in the rural area between the two populations. Alberta has traditionally allowed a first parcel out to allow the retiring family to remain on the old homestead, but over time this just introduces new non-agricultural residents in the agricultural area.

• **Right to farm legislation:** Some provinces and states limit the ability of municipalities to impose restrictions on agriculture. In some jurisdictions, this right to farm legislation can be quite liberating for agriculture, even if it is restricted to ‘commonly accepted practices.’ In BC, municipalities are only empowered to control certain aspects of agriculture without special application for ministerial approval. Many jurisdictions do not allow agriculture pursuits to be the subject of nuisance lawsuits provided generally accepted agricultural practices are used, etc. Some municipalities have different standards, etc. for agricultural areas or do not impose nuisance bylaws in agricultural areas, etc.

• **Avoiding land use conflicts:** potential conflict arises from the intermixing of agriculture and non-agricultural residents. For one group, the countryside is a place for business, for the other group, it is a setting for what they hope to be a bucolic lifestyle. Some forms of agriculture may be offensive to some neighbours. The conflicts can come from rutting elk, electronic warblers, cannons to frighten birds, manure odours, or tractor noise, etc., at various times of the day or night. However, sometimes the shoe is on the other foot. Increased rural populations may impede farm traffic, add dogs chasing cattle, prevent crop spraying, increase trespassing and vandalism, etc. Conflicts between agriculture and non-agriculture can be reduced in a variety of ways. First, planning and zoning can reduce the interface between the two. In areas like BC where there is a relatively permanent boundary between agricultural and non-agricultural uses, a lot of effort has been placed on subdivision design and buffering to reduce conflict. This includes fencing, buffer strips, or separation of urban and farm traffic, etc.

• **Resolving land use conflicts:** mediation or arbitration mechanisms may be used when conflicts develop. For example, British Columbia established a Farm Practices Board with new means to resolve complaints related to farm operations.

• **Tax programs:** these programs may address the tax burden placed on agriculture. In the US, these include differential taxation, also called use-value assessment (taxing on the income that can be received as a farm property, rather than on market value that may be established on the basis of future conversion to other uses). Some argue that this brings taxes in line with rural services. This may increase farm profitability, but also may subsidize land speculators. Objectors refer them to ‘tax expenditures,’ i.e., a subsidy. Some US states allow tax credits that offset municipal property taxes. In Michigan, this requires the landowner to enter into an agreement to limit development. At least two states attempt to discourage land speculation by putting a special capital gains tax on it. In Alberta, agricultural land enjoys a favourable property tax regime. On the other hand, so does residential property. Should tax policies be refined to ensure lands are agriculturally productive?

• **Public education about agriculture:** people should understand the contributions that agriculture makes to the environment and character of the community. They should know what to expect in agricultural areas- noise, smell, pesticides, etc. This is sometimes part of a ‘right to farm’ program. Signs are typically placed in agricultural areas to watch for slow moving farm equipment, animals on the road, etc. Public communication has been tried elsewhere with certain success. Some communities, such as Surrey, Kelowna and Vernon have regular farm tours to build community

understanding and support. Education, for both the agricultural and non-agricultural communities, may be beneficial in reducing conflicts.

- **Advocacy by an Agricultural Institute or a Food Policy Council:** the agricultural community could form its own lobby/interest group (like the Surrey Farmers Institute or the recently formed Edmonton Food Policy Council) to influence local government and others to be more supportive of agricultural interests. This could include convening and participating in conferences, partnerships, conducting research, sitting on local committees, working with the media and officials, communicating with the public, holding promotional events or fairs, being involved in planning processes, etc.

- **Economic development:** another method of advocacy is to have municipal economic development staff focusing on agricultural endeavors. There are numerous marketing opportunities for agriculture from proximity regions to an expanding metropolitan area. There may be increased access to labour (if there are transportation systems in place, especially public transit). In the metropolitan setting, there are greater opportunities for secondary off-farm income for the farm family. There are a broad range of potential initiatives. These could include incorporating agricultural business strategies into local economic development plans, promoting diversification, product development, assisting in preparing farm business plans, loan programs to buy and improve operations, promotion of direct marketing (through roadside stands, pick-your-own operations, nurseries, agri-tourism, grower cooperatives, municipal brochures and maps showing locations, signage, farmers markets, marketing direct to restaurants and food retailers, and community supported agriculture where consumers pay for a share of the harvest at the beginning of the year, etc.).

Appendix 5: Selected Agriculture Statistics

Parkland County and Alberta Agricultural Statistics

Where "n/a" - data are confidential for statistical purposes or unavailable

Physical attributes group	Parkland County				Province of Alberta		
	1996	2001	2006	2011	2001	2006	2011
Total Area of Farms, acres	482,786	475,926	455,677	401,863	52,058,898	52,127,857	52,706,563
Number of Farms	1,196	1,144	979	782	53,652	49,431	43,234
Average Farm Size, acres	404	416	465	514	970	1,055	1,219
Total Land in Crops (acres)	219,423	227,729	206,235	180,512	24,038,861	23,775,509	24,102,289
Summerfallow (acres)	8,288	11,541	9,464	3,640	3,053,214	2,239,633	1,263,051
Total Pasture Land (acres)	198,685	192,768	180,556	173,840	22,016,574	22,273,008	21,823,780
All Other Land (including Christmas trees)	56,390	43,888	59,422	17,754	2,950,249	3,839,707	3,309,714
Farm Size							
< 10 acres	61	55	35	30	1,118	1,063	879
10-239 acres	592	588	515	412	17,472	16,633	14,585
240-399 acres	181	164	114	91	7,299	6,386	5,395
400 to 759 acres	201	171	149	105	9,586	8,188	6,911
760 to 1119 acres	76	81	67	55	5,625	4,807	3,997
Over 1120 acres	85	85	99	89	12,552	12,354	11,467
Farm Type							
Dairy	46	21	15	10	776	605	485
Cattle	503	514	418	219	22,939	20,494	12,022
Hog	16	8	4	-	848	598	193
Poultry and Egg	16	9	8	9	446	416	339
Wheat	13	16	12	4	3,718	2,809	2,083
Grain (except wheat)	102	87	86	102	9,327	9,753	10,609
Hay and Field Crops (except grain and oilseed)	85	97	70	157	4,725	4,486	7,948
Fruit and tree nut farming	6	5	9	8	73	227	151
Vegetables	3	1	4	15	70	286	277
Miscellaneous and other (includes equine)	250	262	245	258	10,730	9,757	9,127
Total Classified	1,044	1,020	871	782	53,652	49,431	43,234
Farms with Vegetables							
Farms with Fruits, Berries and Nuts	17	20	25	20	509	508	445
Farms with Nursery Products	32	27	25	19	545	593	532
Farms with Greenhouse Products	29	30	29	22	586	573	502
	30	28	21	23	569	522	441

Physical attributes group (cont.)	Parkland County				Province of Alberta			
	1996	2001	2006	2011	1996	2001	2006	2011
Crop Acres								
Total Wheat	17,647	25,547	24,711	20,976	7,324,846	6,852,596	6,467,628	6,703,703
Oats	23,785	15,698	17,656	12,106	1,386,179	1,364,674	1,269,229	891,580
Barley	59,629	39,851	33,582	28,335	5,775,824	4,902,090	4,094,689	3,610,111
Mixed Grains	2,478	3,675	4,406	1,317	226,374	404,174	373,005	201,511
Canola	16,618	19,738	31,659	36,667	3,151,296	2,660,509	4,068,511	6,071,744
Potatoes	1,793	1,576	2,739	2,642	31,488	58,341	54,759	53,440
Dry Field Peas	2,343	2,623	808	n/a	286,037	608,217	587,263	706,726
Alfalfa	56,636	77,454	56,227	52,070	2,997,653	3,915,607	3,935,022	3,657,114
All Other Hay	36,780	39,303	30,242	20,802	1,755,512	2,279,767	2,060,967	1,466,557
Total Vegetables	56	37	185	47	13,743	14,194	13,193	10,716
Total Fruit, Berries, Nuts	125	127	154	104	1,684	2,517	2,934	2,610
Area of Nursery Products	238	271	365	376	6,160	6,642	8,955	9,755
Greenhouse Areas (Square Feet)	177,422	169,797	127,744	197,465	8,097,513	11,029,753	12,582,590	12,861,869
Total Dairy Cows	2,759	1,781	1,426	1,661	102,830	84,044	78,875	80,694
Total Beef Cows	31,985	31,471	28,343	17,601	2,016,889	2,099,288	2,035,841	1,530,391
Total Cattle and Calves	79,886	79,084	68,709	45,353	5,942,257	6,615,201	6,369,116	5,104,605
Total Pigs	9,481	3,312	1,700	n/a	1,729,810	2,027,533	2,052,067	1,397,534
Total Sheep	3,993	5,531	4,597	10,422	259,817	307,302	222,340	202,903
Horses/Ponies	3,413	3,840	4,697	3,923	149,960	159,962	155,533	139,410
Goats	808	1,101	818	736	32,960	42,270	29,113	28,920
Bison	n/a	1,948	1,332	1,360	22,782	79,731	97,366	57,483
Colonies of Bees	8,353	11,908	12,832	11,742	170,288	209,821	230,894	235,951
Total Hens/Chickens	n/a	188,461	114,022	n/a	9,485,635	12,175,246	11,757,860	11,956,949

Financial attributes group	Parkland County				Province of Alberta		
	1996	2001	2006	2011	2001	2006	2011
Number of Farms	1,196	1,144	979	782	53,652	49,431	43,234
Under \$25,000	712	621	544	425	19,654	18,511	15,569
\$25,000 to \$49,999	171	176	152	114	8,335	7,170	6,051
\$50,000 to \$99,999	139	157	120	74	8,526	7,448	5,934
\$100,000 and Over	174	190	163	169	17,137	16,302	15,680
Average Gross Farm Receipts per Farm, \$'000	67	72	87	125	185	200	265
Net Farm Operating Income, \$'000	8	10	8	16	19	22	40
Farm Operating Expenses, \$'000	58	65	79	109	166	178	225
Farm Capital							
Total Farm Capital, \$'mln	666	897	1,219	1,466	55,256	71,781	95,572
Less than \$499,000	857	658	361	150	24,373	16,173	8,697
\$500,000 to \$1 million	199	263	328	258	13,774	13,776	11,966
Over \$1million	140	223	290	374	15,505	19,482	22,571

Operator Profile attributes group	Parkland County				Province of Alberta		
	1996	2001	2006	2011	2001	2006	2011
Number of Farmers, operators		1665	1,460	1,145	76,195	71,660	62,050
Sole Proprietorship, farms		667	574	469	30,409	27,815	24,459
Partnership, farms		365	300	199	16,147	13,920	10,947
Corporation, farms		111	103	111	6,857	7,411	7,592
Other, farms		1	2	3	239	285	236
Age of Farmers:							
Under 35		165	95	45	8,900	6,290	4,550
35-54		880	710	495	40,430	35,935	26,720
Over 54 (55+)		615	655	600	26,875	29,440	30,785
Paid Agricultural Labour (# weeks)							
Year Round		12,160	7,628	8,813	805,212	709,025	657,073
Seasonal or Temporary		4,286	4,157	4,539	279,640	250,206	241,379
Total Paid Labour		16,446	11,785	13,352	1,084,852	959,231	898,452
Farm Work and Non-Farm Work							
Operators Reporting No Paid Non-Farm Work		720	590	490	38,720	32,560	29,805
Operators Reporting Paid Non-Farm Work		945	870	655	37,475	39,100	32,245
Operators With Average Hours of Farm Work per Week							
Less than 20 hours		535	500	385	18,965	20,465	19,660
20-40 hours		530	450	400	21,935	19,970	18,905
More than 40 hours		605	525	355	35,290	31,225	23,480
Operators With Paid Hours of Non-Farm Work per Week							
Less than 20 hours		145	130	120	7,380	7,560	5,860
20-40 hours		355	335	275	14,750	14,190	13,520
More than 40 hours		445	405	260	15,345	17,355	12,865

Parkland County in comparison with other Counties: 2011

Where "n/a" - data are confidential for statistical purposes or unavailable

	Parkland	Sturgeon	Lamont	Strathcona	Leduc	Rockyview	Lethbridge	Alberta
Physical attributes group								
Total Area of Farms (Acres)	401,863	481,583	595,608	220,184	589,978	967,828	705,508	52,706,563
Number of Farms	782	823	753	658	1,255	1,271	933	43,234
Average Farm Size (Acres)	514	585	791	335	470	761	756	1,219
Total Land in Crops (Acres, without summerfallow)	180,512	362,846	371,871	150,138	373,077	503,427	514,337	24,102,289
Average Gross Farm Sales per Farm, \$'000	125	226	155	138	130	212	1,134	265
Average Capital per Farm, \$'000	1,874	2,635	1,665	2,081	2,024	4,185	3,389	2,211
Total Gross Sales (all farms), \$'000	97,975	185,794	116,938	90,895	162,680	269,454	1,058,080	11,436,181
Farm Size, number of reporting farms								
< 10 acres	30	30	12	34	34	27	47	879
10-239 acres	412	402	289	447	601	670	415	14,585
240-399 acres	91	96	121	66	191	150	117	5,395
400 to 759 acres	105	124	130	52	240	121	133	6,911
760 to 1119 acres	55	51	79	21	78	81	76	3,997
Over 1120 acres	89	120	122	38	111	222	145	11,467
Farm Type (based on NAICS)								
Dairy	10	7	2	5	57	5	55	485
Cattle	219	132	132	106	258	355	230	12,022
Hog	-	6	-	-	4	1	11	193
Poultry and Egg	9	23	2	6	12	5	24	339
Hay and Field Crops (except grain and oilseed)	157	127	109	155	246	225	98	7,948
Wheat	4	32	54	22	48	35	88	2,083
Grain (except wheat)	102	263	314	103	291	219	237	10,609
Vegetables	15	12	4	4	11	5	11	277
Fruit and tree nut farming	8	10	2	8	8	2	4	151
Miscellaneous and other	118	107	89	108	185	179	116	5,132
Equine	140	104	45	141	135	240	59	3,995
Total Classified	782	823	753	658	1,255	1,271	933	43,234
Farms with Vegetables								
Farms with Vegetables	20	18	8	7	14	7	21	445
Farms with Fruits, Berries and Nuts	19	25	9	16	28	12	14	532
Farms with Nursery Products	22	26	7	32	34	40	11	502
Farms with Greenhouse Products	23	18	7	23	13	18	9	441

	Parkland	Sturgeon	Lamont	Strathcona	Leduc	Rockyview	Lethbridge	Alberta
Crop Acres								
Total Wheat	20,976	97,666	98,972	43,456	74,621	111,214	157,045	6,703,703
Oats	12,106	12,318	14,089		17,982	10,663	6,027	891,580
Barley	28,335	44,883	58,110	13,602	58,694	134,726	115,228	3,610,111
Mixed Grains	1,317	2,244	2,109	1,147	2,616	11,157	n/a	201,511
Canola	36,667	130,518	137,199	48,540	95,746	112,343	101,032	6,071,744
Potatoes	2,642	1,294	n/a	n/a	357	572	1,366	53,440
Dry Field Peas	n/a	8,400	7,870	4,357	4,247	3,244	16,045	706,726
Alfalfa	52,070	40,459	36,821	22,264	88,495	76,567	41,233	3,657,114
All Other Hay	20,802	20,784	15,323	8,706	25,649	32,828	20,731	1,466,557
Total Vegetables	47	89	17	76	159	n/a	807	10,716
Total Fruit, Berries, Nuts	104	191	55	57	163	48	64	2,610
Area of Nursery Products	376	909	146	406	800	1,065	401	9,755
Greenhouse Areas (Square Feet)	197,465	344,904	116,230	500,756	117,685	280,988	719,058	12,861,869
Livestock Inventory								
Total Dairy Cows	1,661	1,719	232	587	5,706	700	8,840	80,694
Total Beef Cows	17,601	9,293	14,954	5,127	21,137	41,780	16,066	1,530,391
Total Cattle and Calves	45,353	27,184	35,703	14,781	60,388	134,798	427,602	5,104,605
Total Pigs	n/a	16,979	n/a	n/a	16,274	17,182	65,673	1,397,534
Total Sheep	10,422	3,187	460	1,126	2,688	4,463	13,853	202,903
Horses/Ponies	3,923	2,444	1,182	2,859	3,702	6,078	1,876	139,410
Goats	736	718	699	150	1,329	397	3,606	28,920
Bison	1,360	654	1,521	130	683	n/a	n/a	57,483
Colonies of Bees	11,742	11,111	4,243	897	n/a	286		235,951
Total Hens/Chickens	n/a	1,270,204	23,794	n/a	193,486	172,633	1,329,855	11,956,949

Financial attributes group

	Parkland	Sturgeon	Lamont	Strathcona	Leduc	Rockyview	Lethbridge	Alberta
Gross Farm Receipts								
Number of Farms	782	823	753	658	1,255	1,271	933	43,234
Under \$25,000	425	351	304	401	565	582	212	15,569
\$25,000 to \$49,999	114	103	122	72	194	168	94	6,051
\$50,000 to \$99,999	74	91	97	52	175	168	123	5,934
\$100,000 and Over	169	278	230	133	321	353	504	15,680
Average Gross Farm Receipts per Farm, \$'000	125	226	155	138	130	212	1,134	265
Net Farm Operating Income, \$'000	16	40	23	22	19	26	89	40
Farm Operating Expenses, \$'000	109	186	132	116	111	186	1,045	225
Farm Capital								
Total Farm Capital, \$'mln	1,466	2,168	1,254	1,369	2,540	5,319	3,162	95,572
Less than \$499,000, farms	150	125	210	111	201	96	119	8,697
\$500,000 to \$1 million, farms	258	247	234	244	361	256	209	11,966
Over \$1million, farms	374	451	309	303	693		605	22,571

Operator Profile attributes group

Number of Farmers, operators	1,145	1,190	1,010	990	1,850	1,850	1,315	62,050
Sole Proprietorship, farms	469	479	516	378	726	702	426	24,459
Partnership, farms	199	200	157	180	357	325	179	10,947
Corporation, farms	111	143	78	99	172	241	322	7,592
Other, farms	3	1	2	1	-	3	6	236
Age of Farmers:								
Under 35	50	60	60	45	105	90	125	4,550
35-54	495	500	375	385	770	730	650	26,720
Over 54 (55+)	600	640	575	560	975	1,025	535	30,785
Paid Agricultural Labour (# weeks)								
Year Round	8,813	15,463	4,579	8,590	13,378	19,320	50,563	657,073
Seasonal or Temporary	4,539	7,117	2,257	6,979	4,319	6,273	8,226	241,379
Total Paid Labour	13,352	22,580	6,836	15,569	17,697	25,593	58,789	898,452
Farm Work and Non-Farm Work								
Operators Reporting No Paid Non-Farm Work	490	520	470	420	810	885	730	29,805
Operators Reporting Paid Non-Farm Work	655	675	540	565	1,035	965	580	32,245
Operators With Average Hours of Farm Work per Week								
Less than 20 hours	385	470	310	460	645	735	425	19,660
20-40 hours	400	350	360	325	590	570	310	18,905
More than 40 hours	355	385	340	205	620	545	580	23,480
Operators With Paid Hours of Non-Farm Work per Week								
Less than 20 hours	120	110	75	90	180	160	125	5,860
20-40 hours	275	300	230	260	455	400	230	13,520
More than 40 hours	260	265	235	215	400	405	225	12,865

Appendix 6

Appendix 6: Lancaster Scoring System

Land Evaluation Site Assessment (LESA) Criteria

Adopted January 15, 2015

This system is intended to be used as a guide for the Board of Trustees and the Land Preservation Committee to assist in deciding the dollar amount to offer a landowner for a conservation easement. It is not intended to rank properties against one another. There are four categories totaling 100 points and a bonus category totaling 10 points.

I. 30 points SOILS – this score measures the soil productivity of a property by analyzing the soil composition – prime agricultural soils and soils of statewide importance.

A. ≥ 80% Class I and II prime soils	30 points
B. ≥ 60% Class I and II prime soils	25 points
C. ≥ 50% Class I, II, III and IV soils	20 points
D. ≥ 40% Class I, II, III and IV soils	15 points

II. 25 points DEVELOPMENT PRESSURE – prioritization to those properties under the most development pressure.

A. Proximity to the edge of a Designated Growth Area or a zoning designation is not compatible with agriculture.	
Adjacent	20 points
Within ½ mile	15 points
Within 1 mile	5 points
B. Number of feet of road frontage	
Frontage exceeding 2,000 feet	5 points
Frontage of 500-1999 feet	2 points

III. 35 points FARM VIABILITY –the capability of a property for agricultural use based on size, available land for production and proximity to preserved properties.

A. Size of Property	
75 acres or greater	10 points
50-74 acres	8 points
25-49	5 points
B. Percentage of tillable cropland and pasture	
75% or greater tillable cropland and pasture	5 points
50-74% tillable cropland and pasture	3 points
25-49% tillable cropland and pasture	2 points

C. Proximity to protected lands or applications for preservation

Adjacent to one or more parcels	20 points
Within ½ mile of one or more parcels	10 points
Within 1 mile of one or more parcels	5 points

IV. 10 points WATER – a property’s geographical location to headwaters of a watershed and the length of stream frontage present on the property.

A. Located in the headwaters	5 points
B. Linear feet of stream frontage	
i. Frontage exceeding 2000 feet	5 points
ii. Frontage of 500-1,999 feet	3 points

V. 10 points BONUS CATEGORY – are unique or subjective factors which the Trust believes adds value to the property. The combined allocation of bonus points may not exceed 10 points.

i. Geographically located in a strategic area or first property to preserve in the region (no preserved properties with 1 mile radius)	2 points
ii. Size of property exceeds 100 acres	3 points
iii. Located in a Natural Heritage Area	3 points
iv. Historical significance (structures, individuals, groups)	2 points
v. Opportunity for large scale flood plain restoration	3 points
vi. Located in a source water protection area	3 points
vii. Document and fully implemented conservation plan	4 points
viii. Special fundraising opportunities, provides opportunities to leverage other funding	3 points
ix. Has preserved or is preserving more than one property	3 points
x. As a special circumstances arise	LPC/Board discretion